

# Genotype: AOD B03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

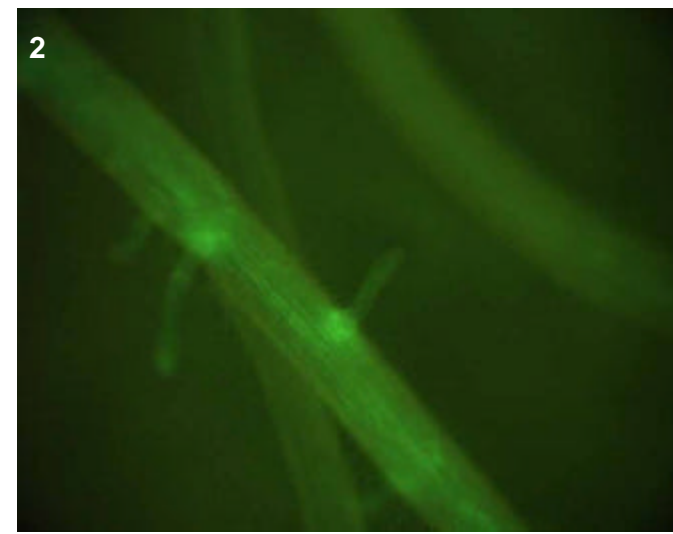
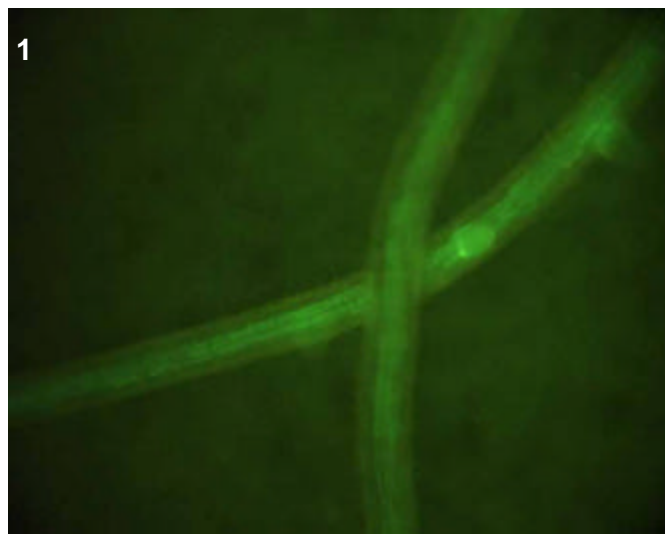
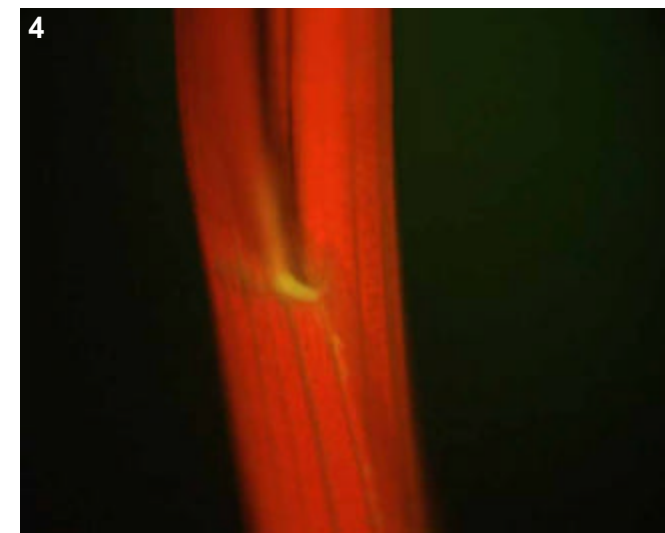
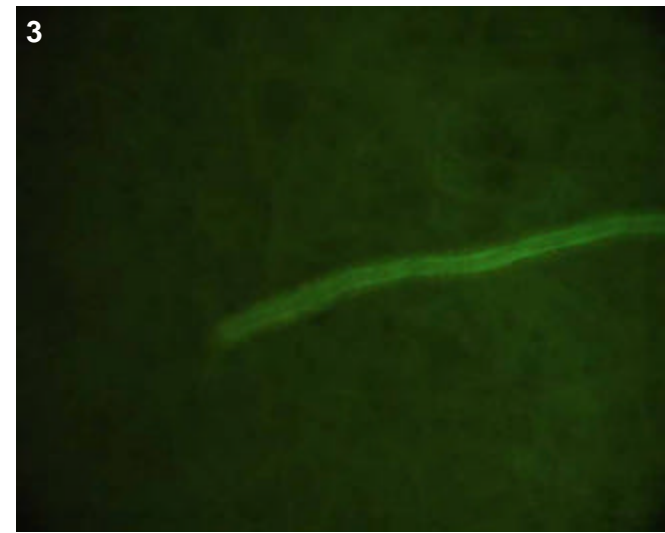
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 70



### T0 comments

### T1 seed comments

### T1 seedling comments

The root vascular expression appears brighter in the mature root.

# Genotype: AOD G07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling:

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 112

## T0 comments

## T1 seed comments

## T1 seedling comments

This one could be very interesting, as it appears that only the quiescent center near root tip is bright. However, more seeds need to be screened to verify this.

# Genotype: AOE H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

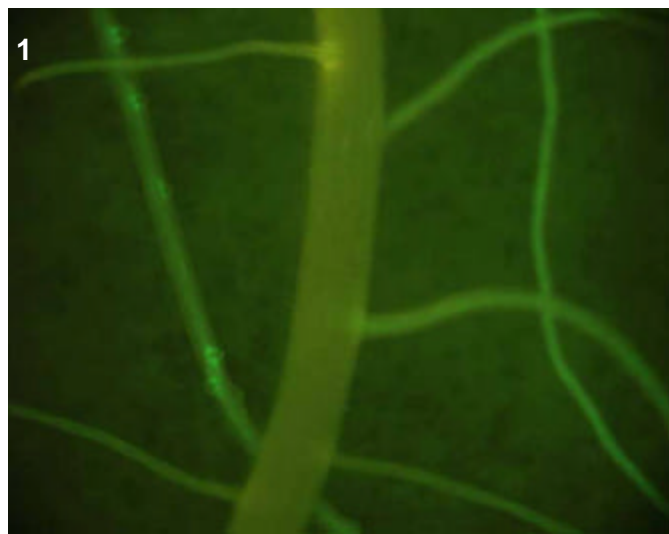
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 19



### T0 comments

### T1 seed comments

### T1 seedling comments

Bright expression in the lateral roots.

# Genotype: AOG A06

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant: 1-3  
T1 seed/seedling: 4-6  
T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis

Constitutive

**T1 Mature**

T0 pattern verified:

T0 pattern verified plus:

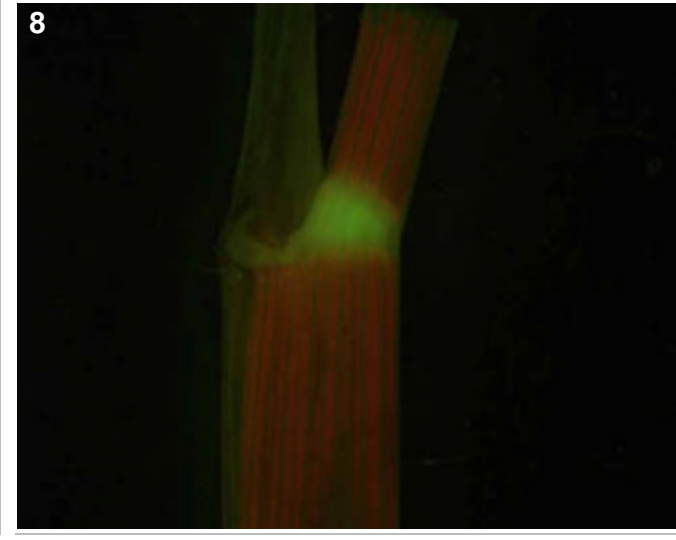
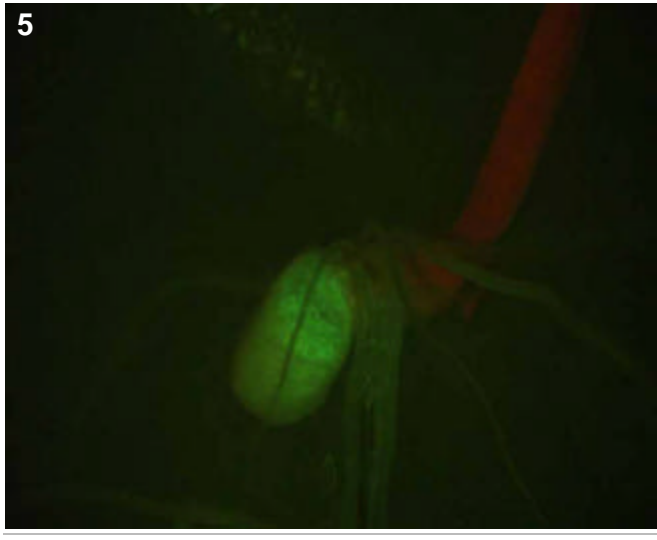
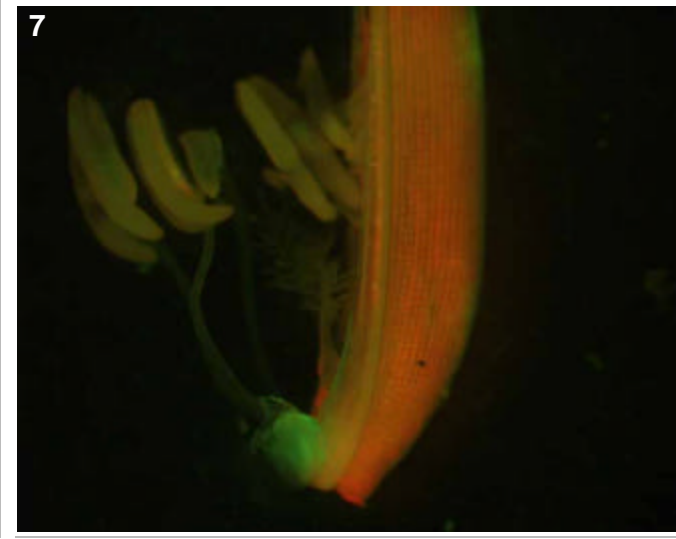
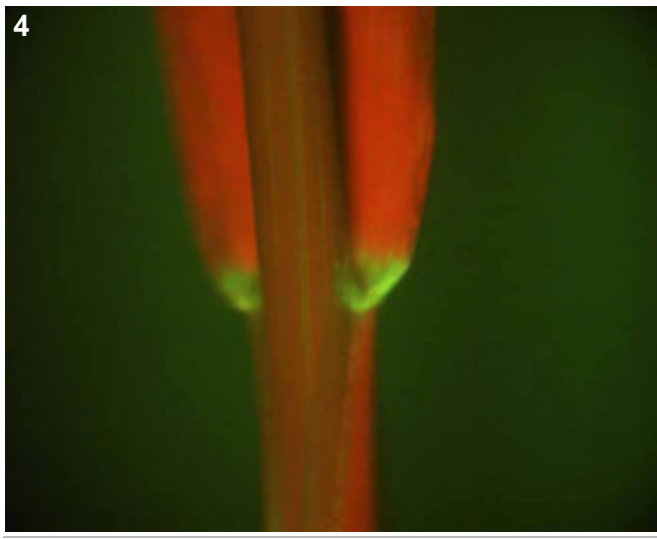
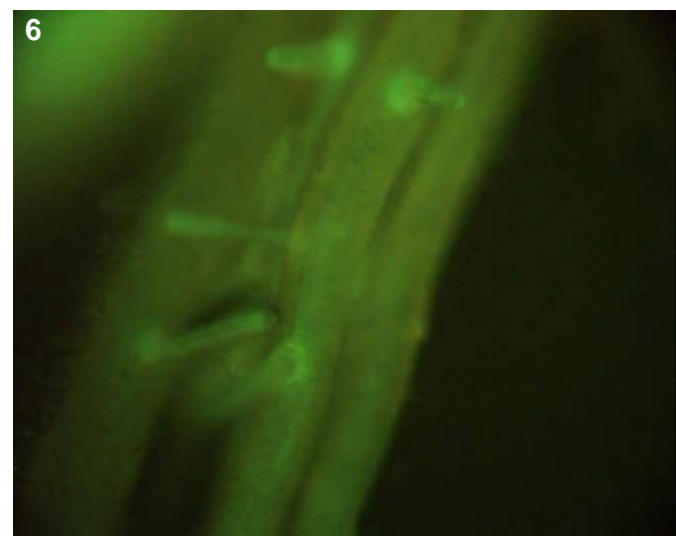
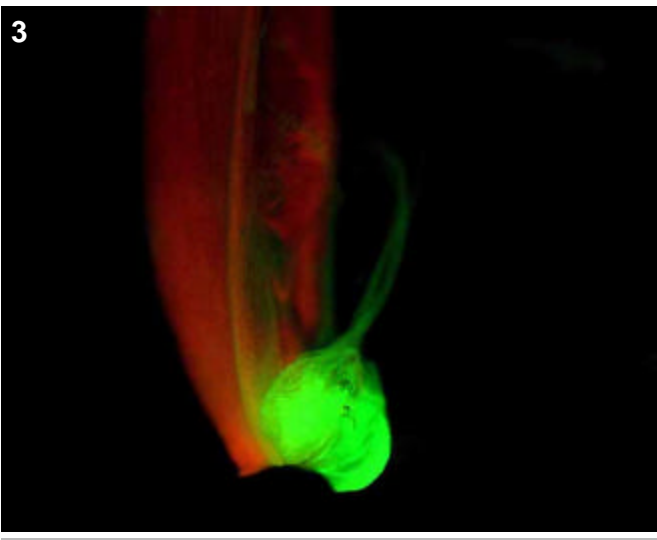
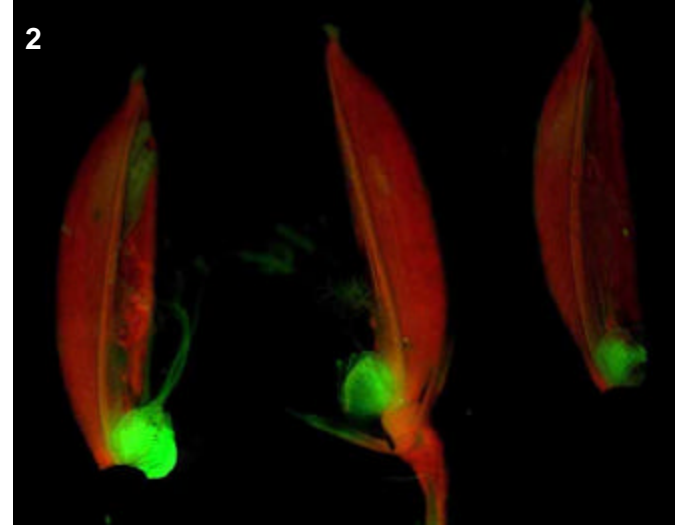
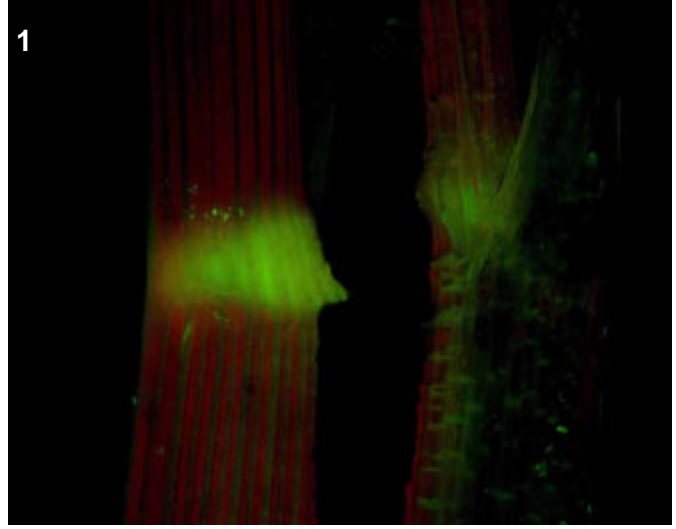
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 166



**T0 comments**  
Expression moderate in collar and sheath vascular but bright in lodicules of flower

**T1 seed comments**

**T1 seedling comments**  
Collar and vascular of shoot, vascular in young lateral roots as well. Digesting endosperm, it appears, also bright.

# Genotype: AOG F06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

Only saw collar and sheath vascular expression

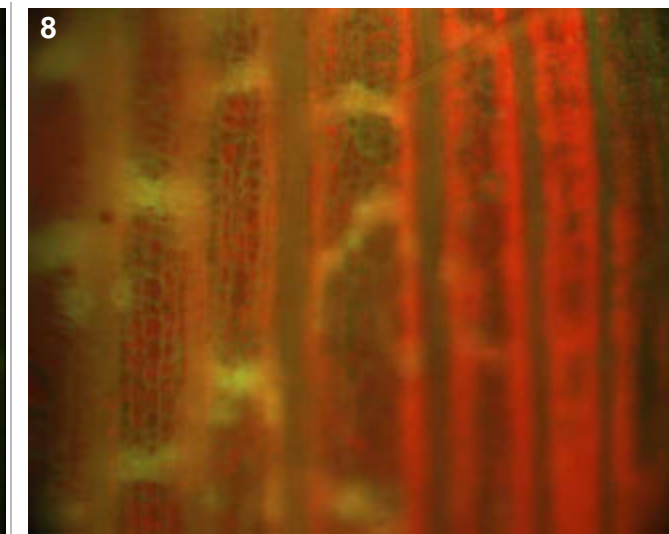
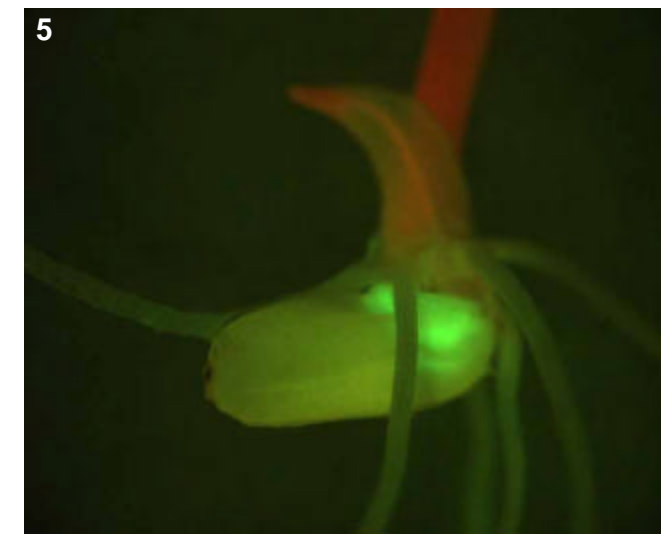
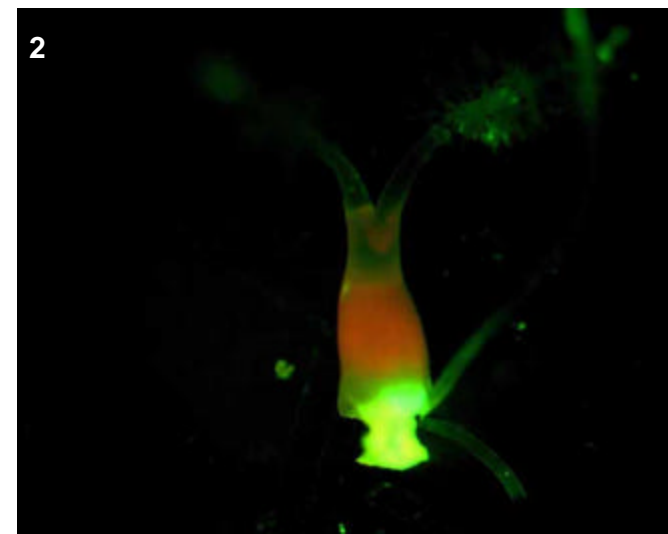
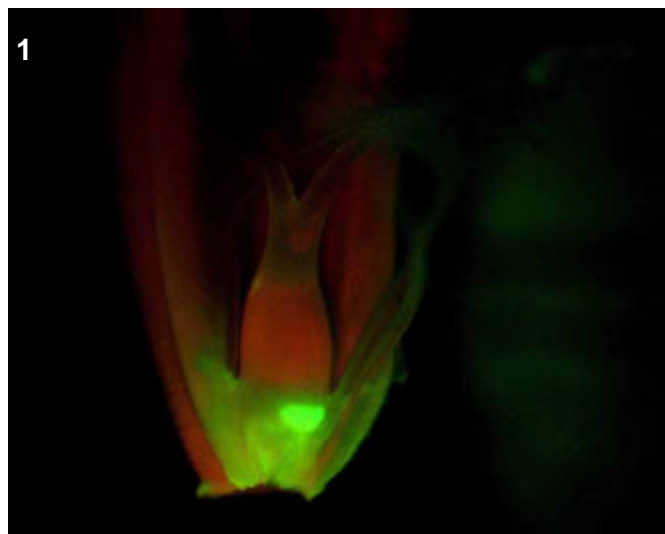
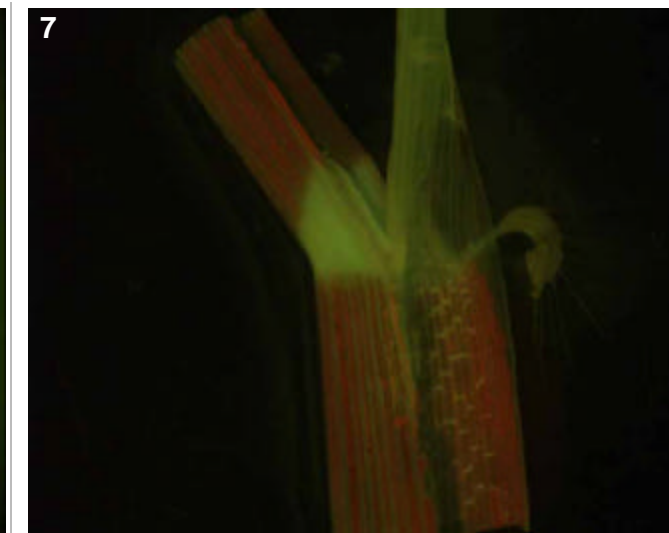
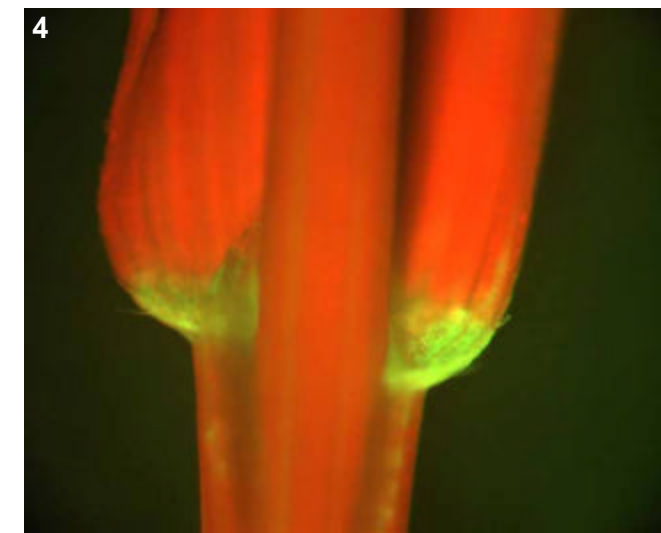
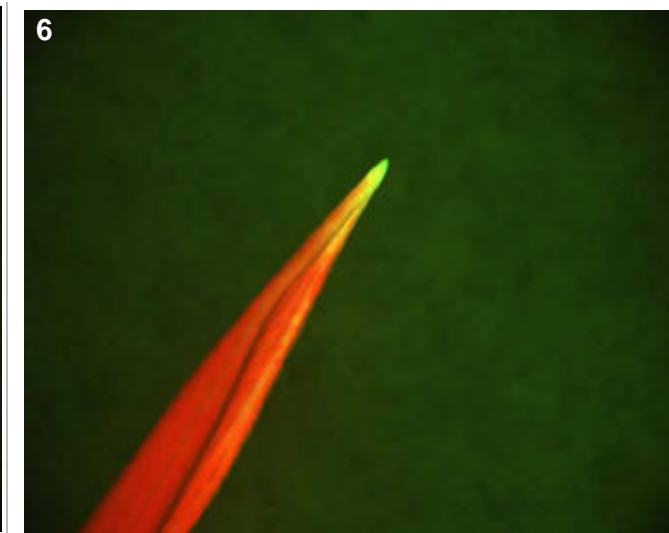
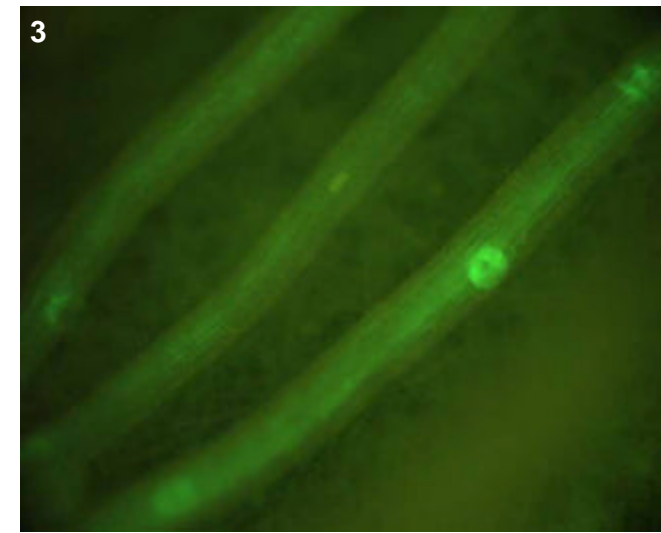
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced: 79



### T0 comments

The base of the pistil is GFP bright, upon closer inspection I discovered that it is the small piece of leafy tissue that the pistil sits on that is glowing, as well as the rachilla?

### T1 seed comments

4/5 seeds show expression.

### T1 seedling comments

Vascular in crown and lateral roots. Seedlings all show digesting endosperm pattern as well. Expression in shoot ranges from nothing to collar and tips of leaves.

# Genotype: AOH A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

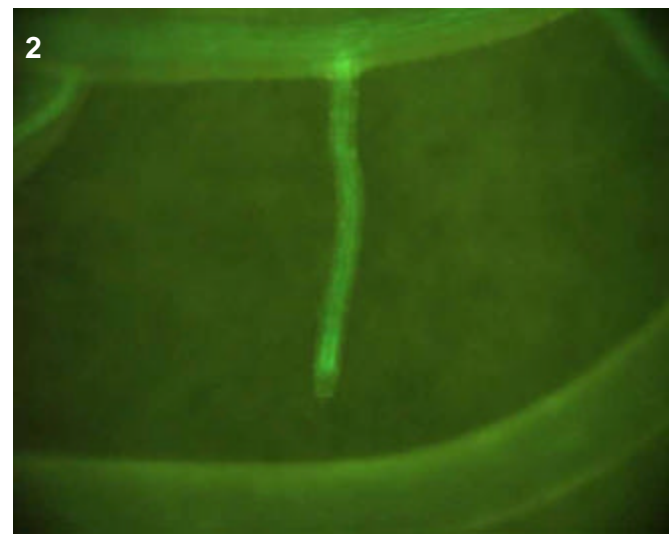
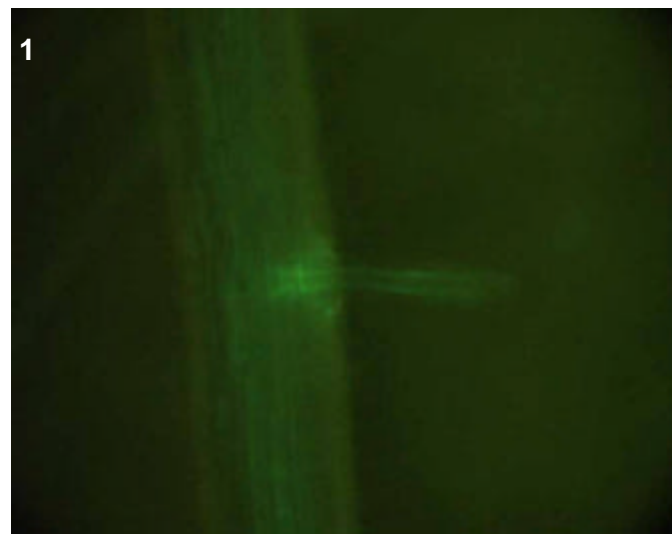
**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

YES

**Number T2 seed produced:** 57



### T0 comments

### T1 seed comments

### T1 seedling comments

Expression in the crown and lateral roots, especially bright in the vascular. The root cap appears to have no expression.

# Genotype: AOH B03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:  
Again, no expression in the shoot of adult plants.

T0 pattern verified plus:

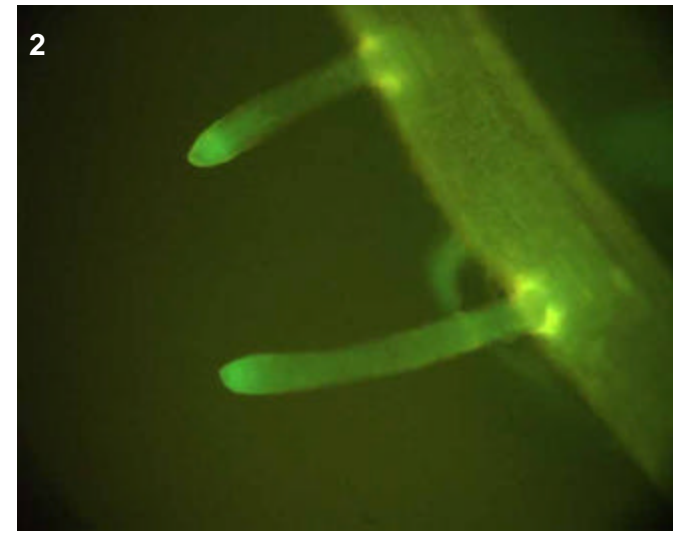
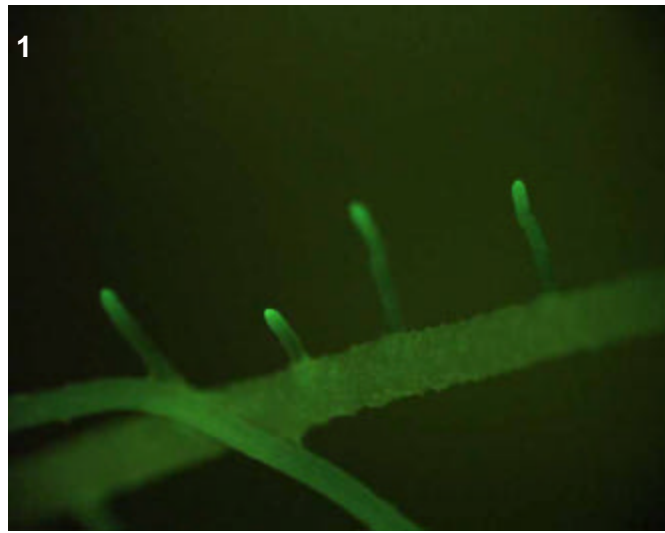
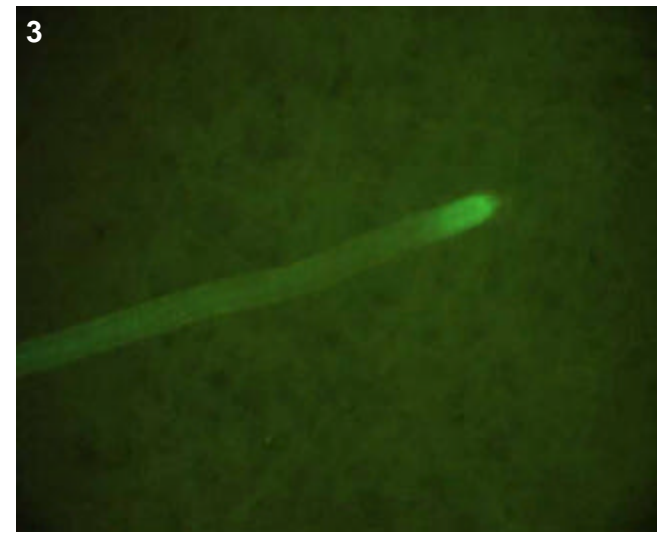
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 126



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression specific to the root. Bright in the tip of crown and lateral roots. Although brighter in tips, it looks like quite general expression throughout the root. Perhaps an epidermal pattern?

# Genotype: AOH B05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

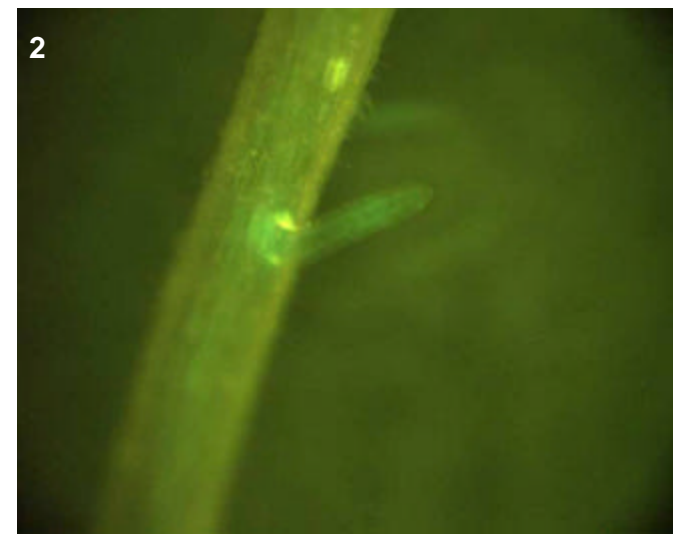
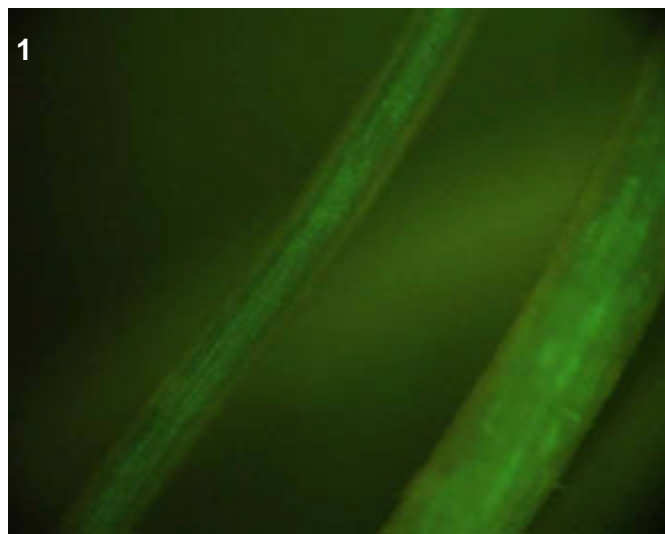
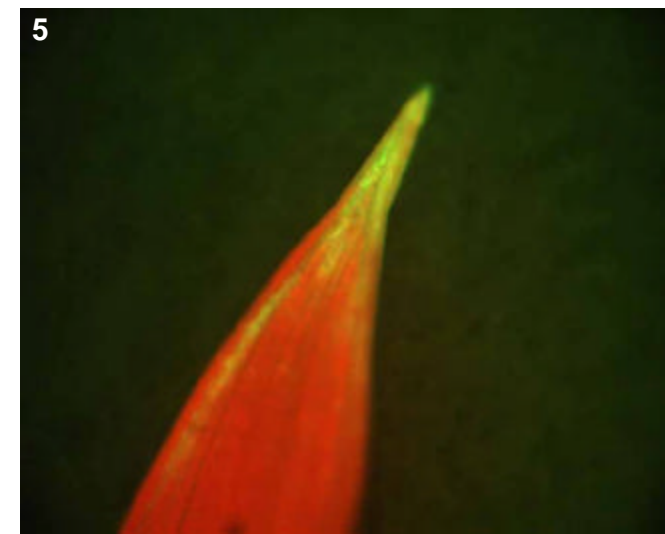
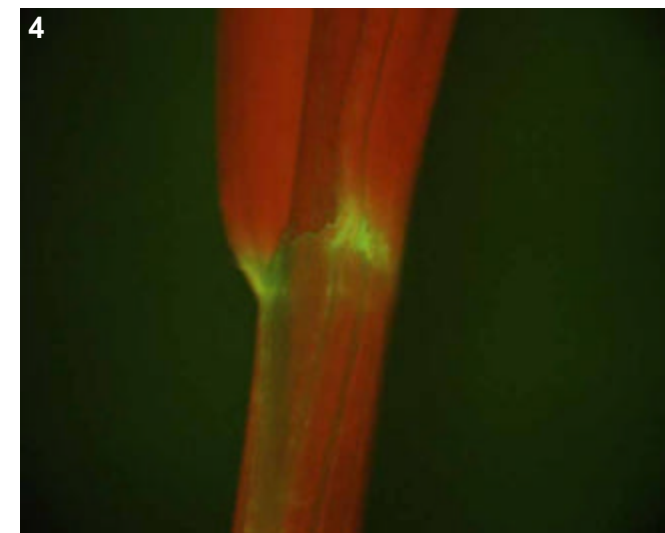
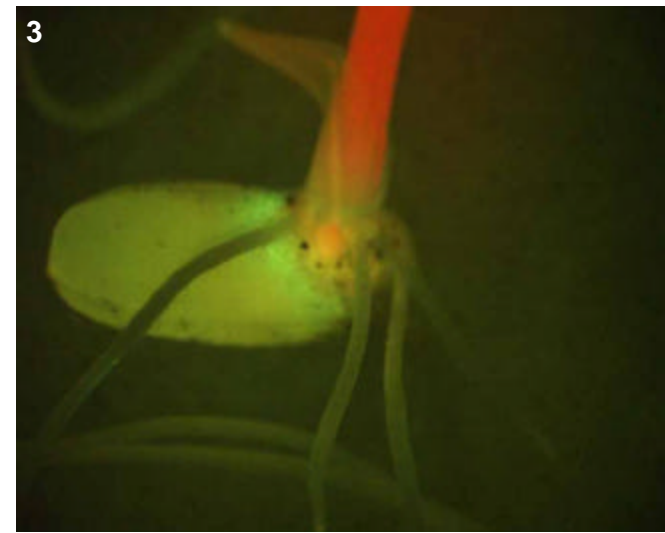
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 139



## T0 comments

## T1 seed comments

## T1 seedling comments

In roots, expression bright in the mature portions of crown roots, less bright in lateral roots. Activity in endosperm as well. Only 1 of 3 seedlings shows the shoot patterns depicted above, so it may not be as stable or long-lasting as the root and endosperm GFP.



# Genotype: AOH C04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

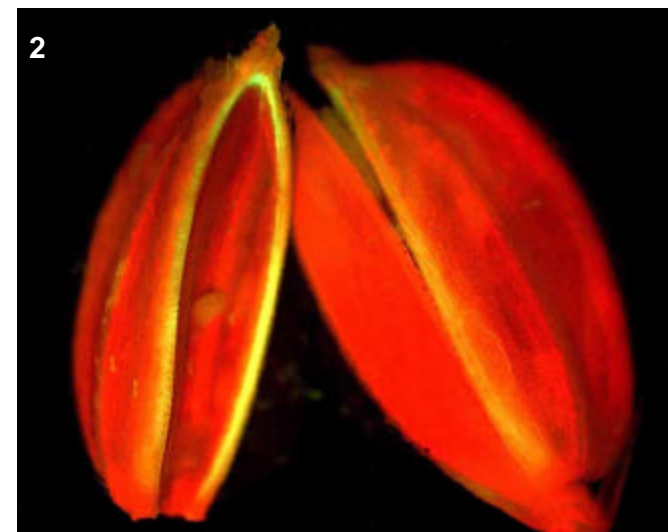
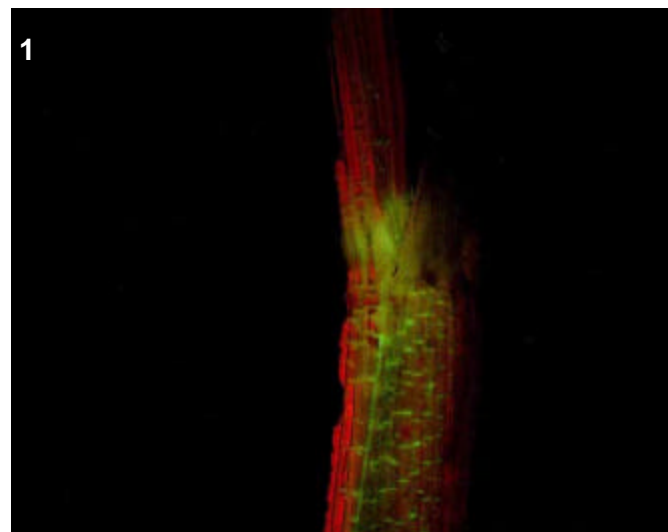
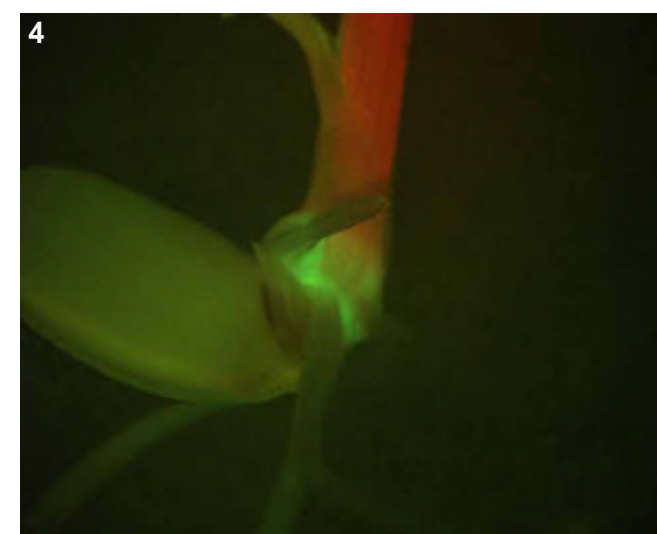
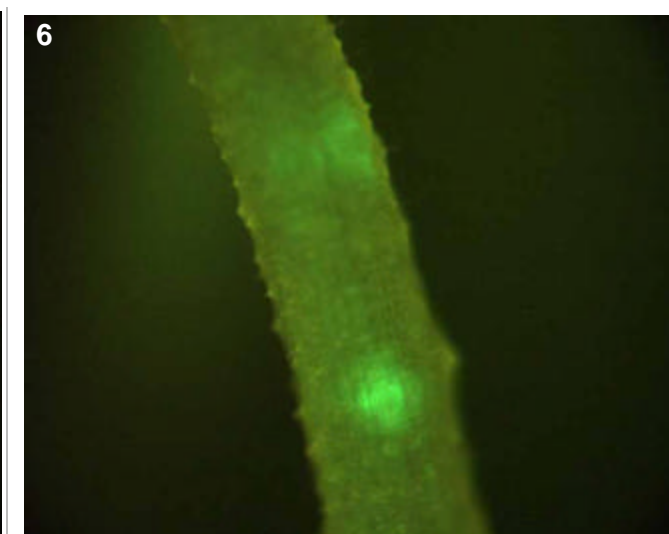
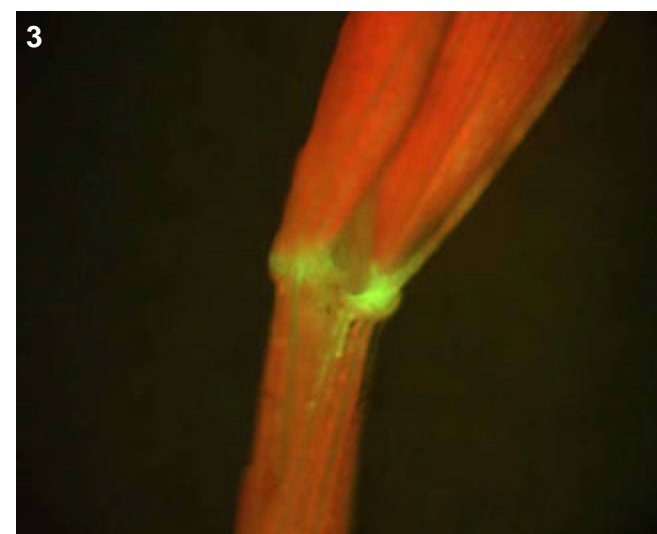
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 6



### T0 comments

Moderate expression in collar and sheath vascular, strong expression in floral vascular.

### T1 seed comments

1/5 seeds showed faint expression in scutellum.

### T1 seedling comments

The base of the seedling shoot is bright, perhaps the mesocotyl? Shoot expression in addition to bright lateral roots.

# Genotype: AOH H01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

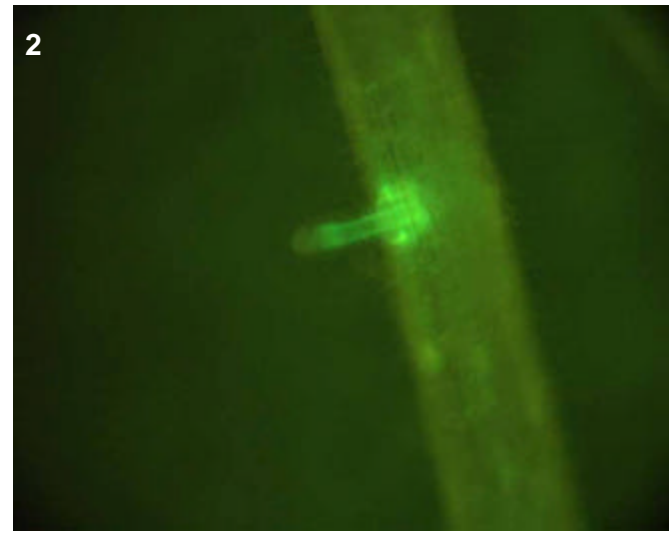
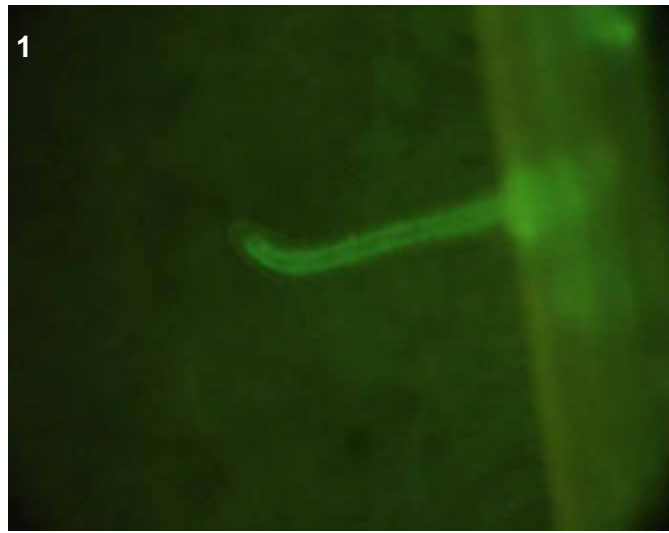
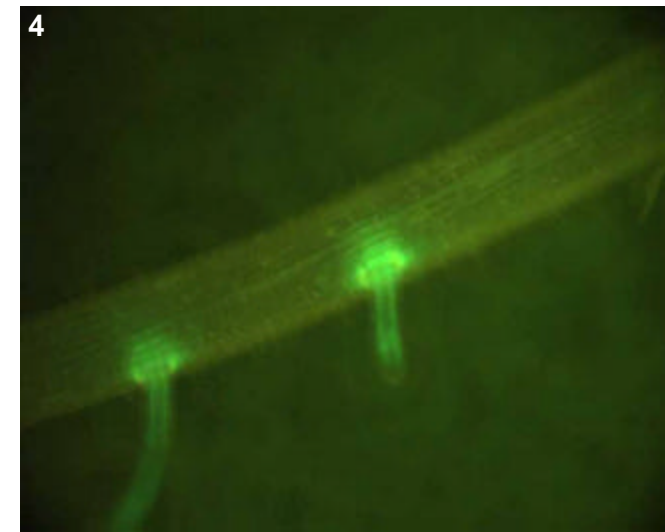
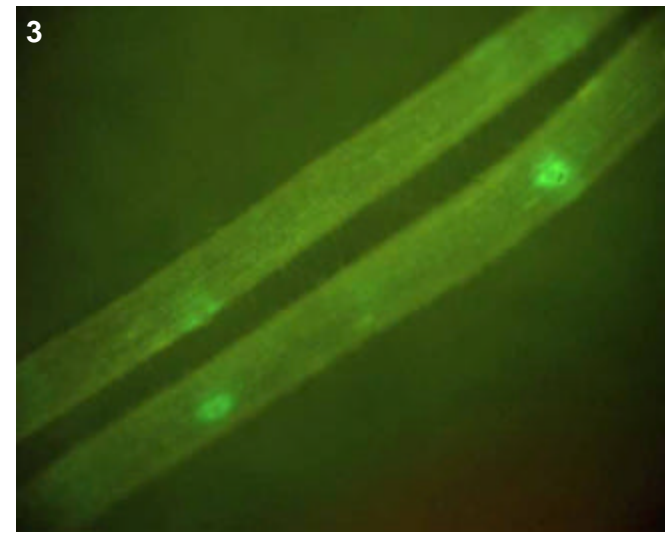
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 52



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression specific to the lateral roots: GFP around lateral root emergence and in the vascular of lateral root. Clearly no activity in the root cap.

# Genotype: AOH H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

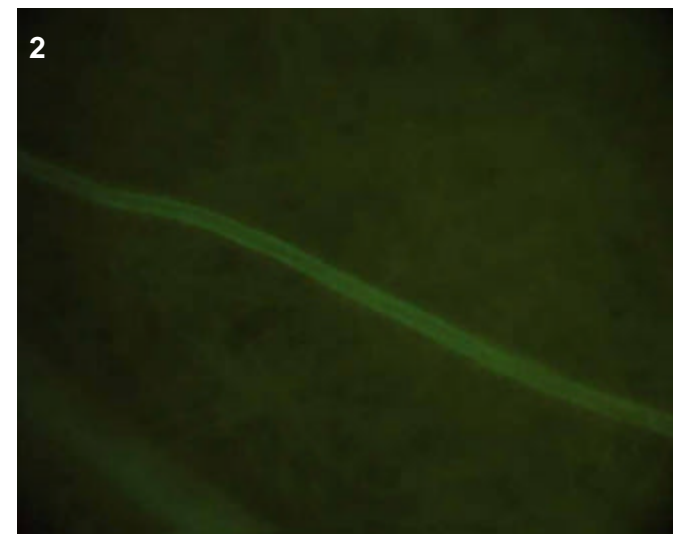
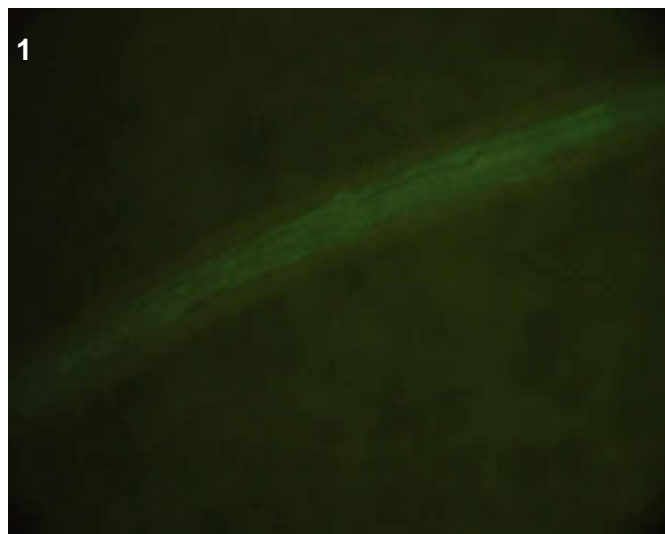
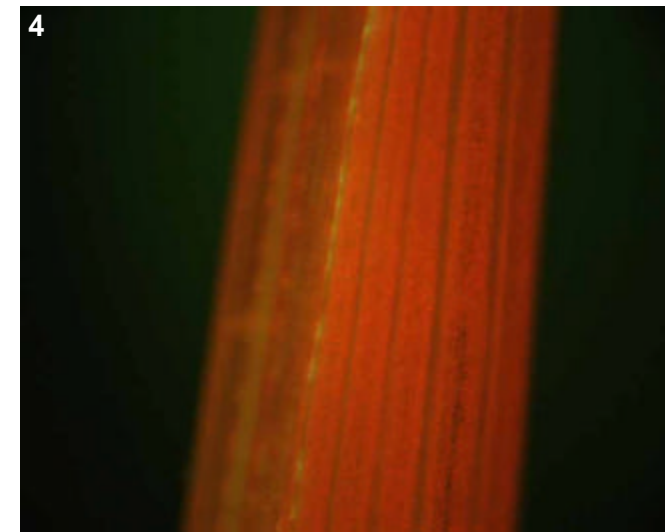
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 126



## T0 comments

## T1 seed comments

## T1 seedling comments

Mostly a root vascular line, with some activity in the tips of leaves. Faint expression also observed in the scutellum region of seed.

# Genotype: AOI B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

Bright collar and sheath vascular

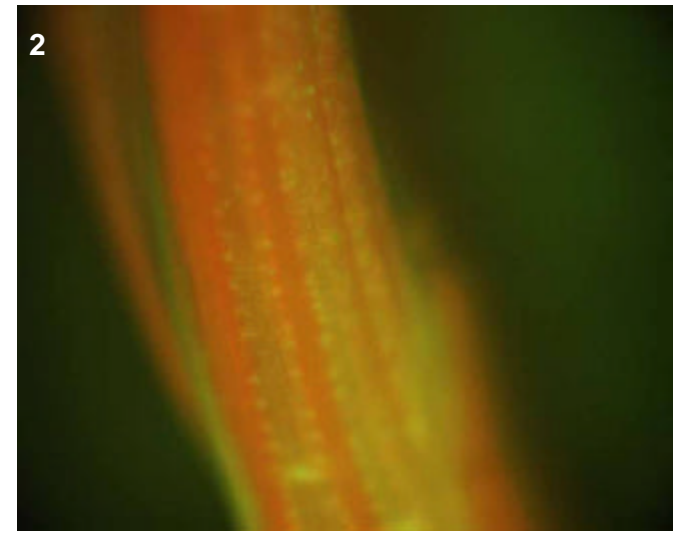
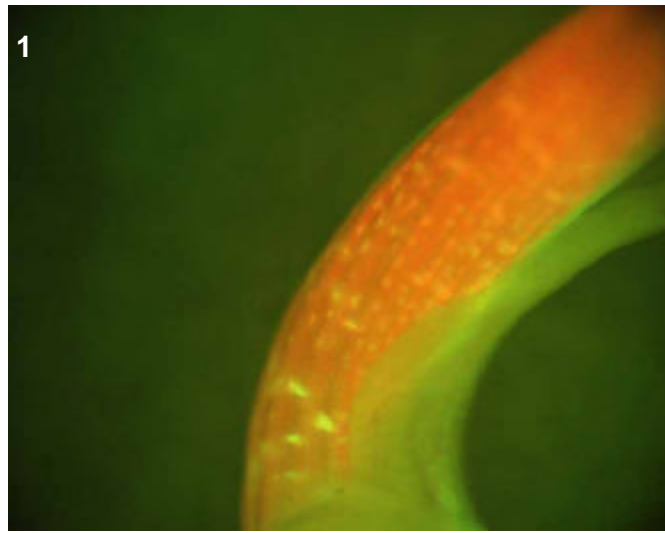
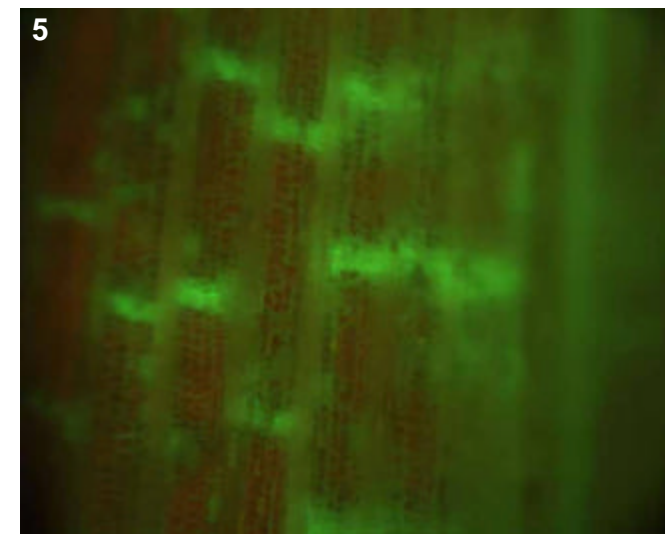
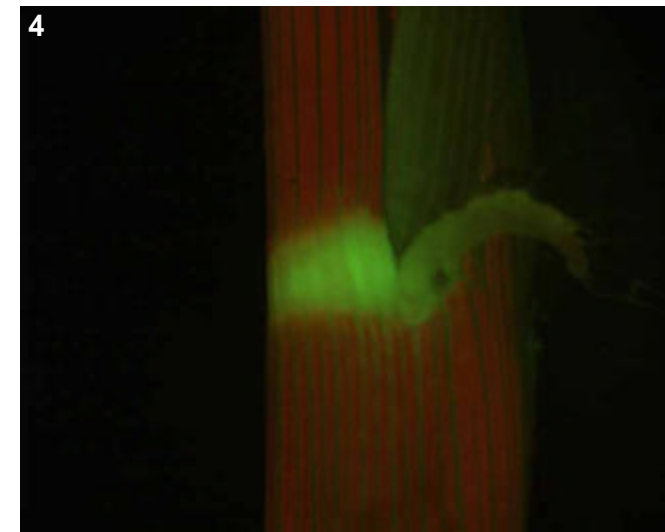
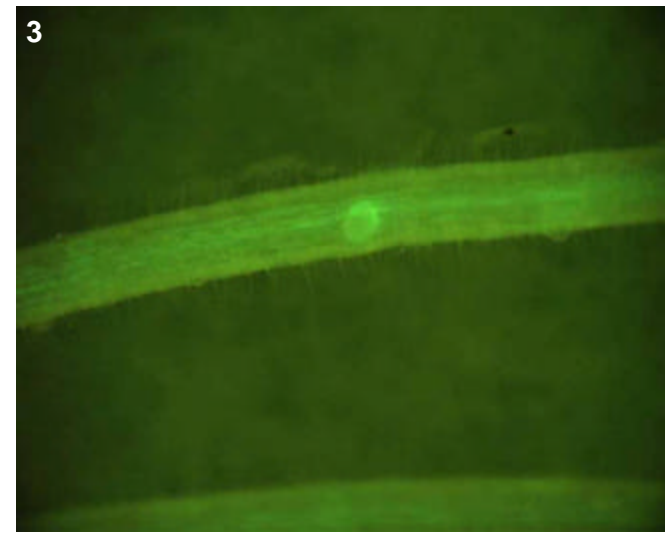
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 111



## T0 comments

## T1 seed comments

2/5 show expression.

## T1 seedling comments

Interesting pattern on the shoot, not sure what the line of dots is in second pic. I think this may be an overall vascular line, with brighter expression in the shoot.

# Genotype: AOI E10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

Collar and sheath vascular expression

No GFP detected

**T1 in greenhouse?**

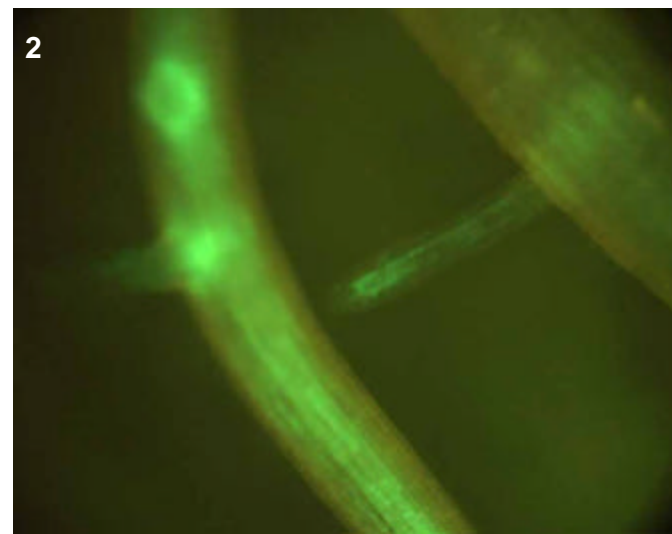
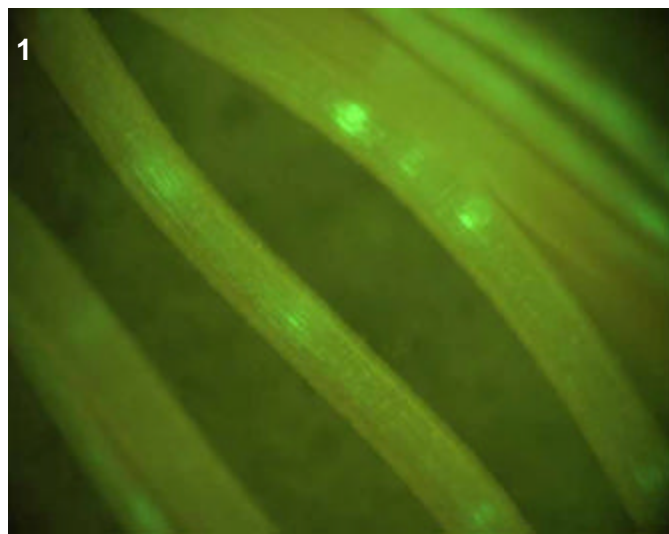
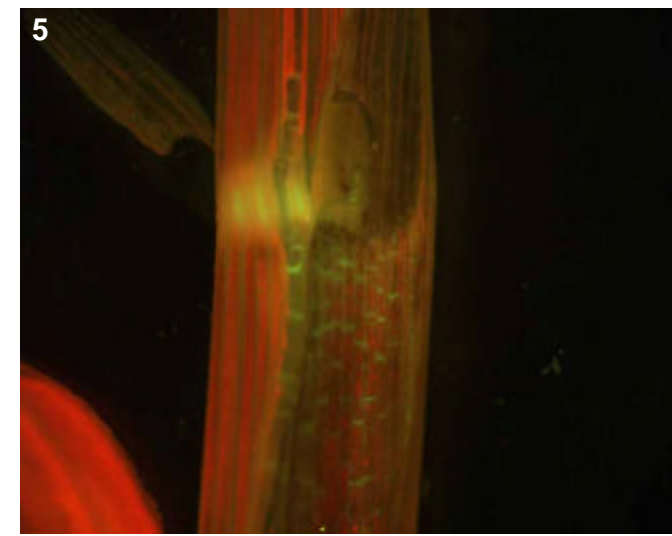
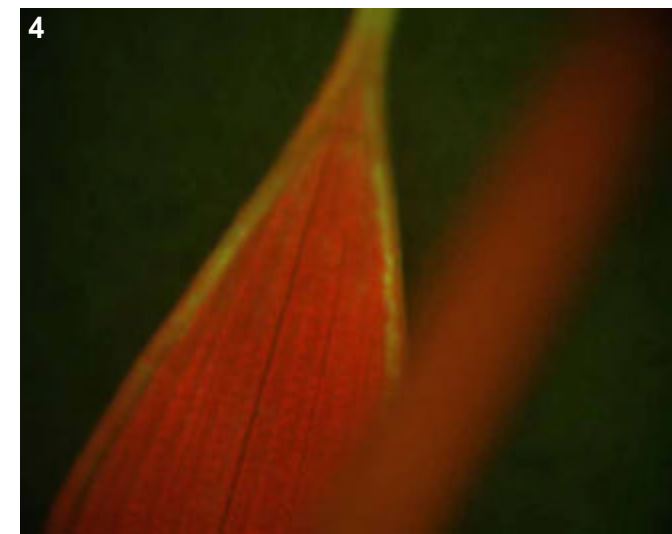
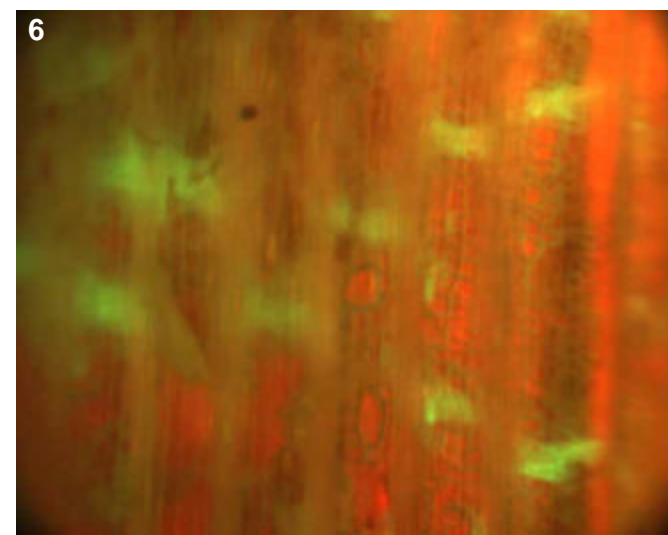
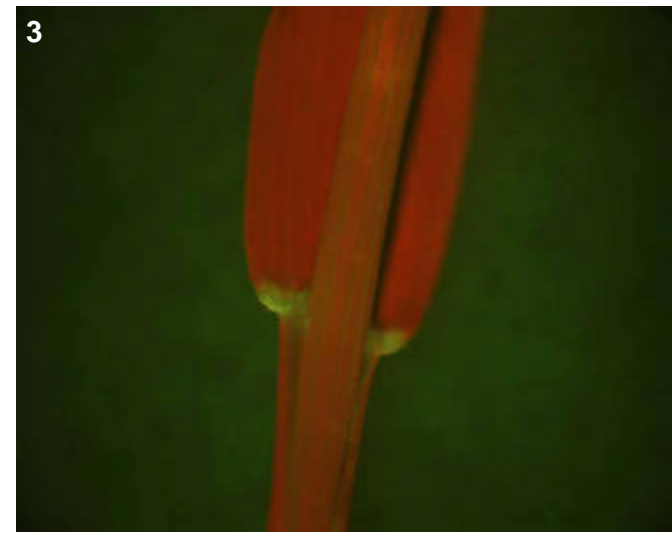
YES, 1 GFP+ plant

**Confocal?**

YES

**Number T2 seed produced:**

181



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: AOJ C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

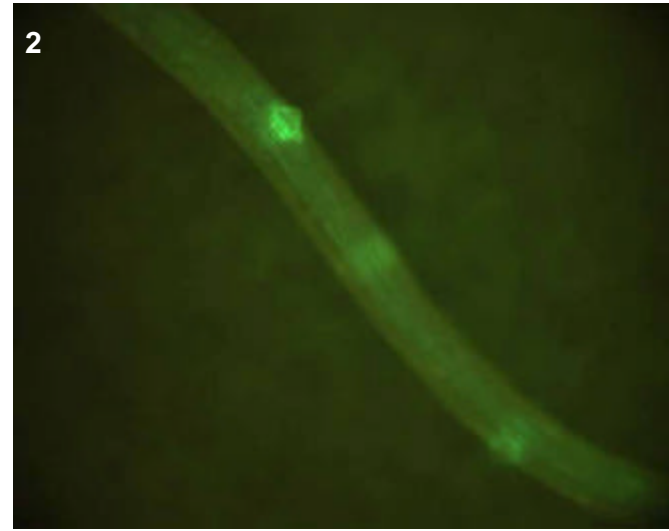
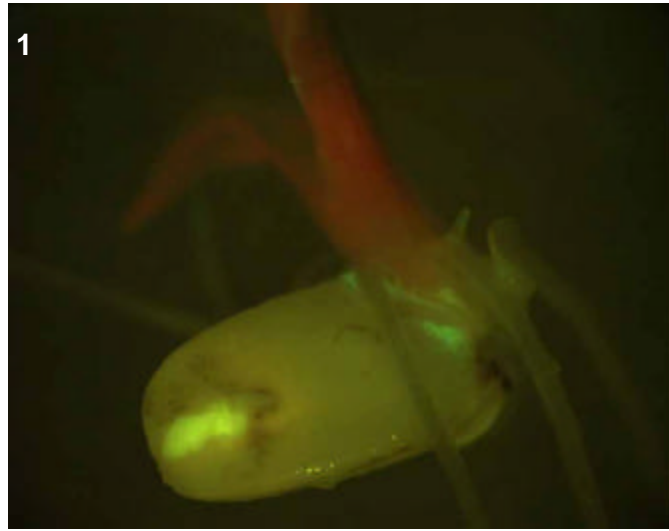
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 230



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: AOK F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

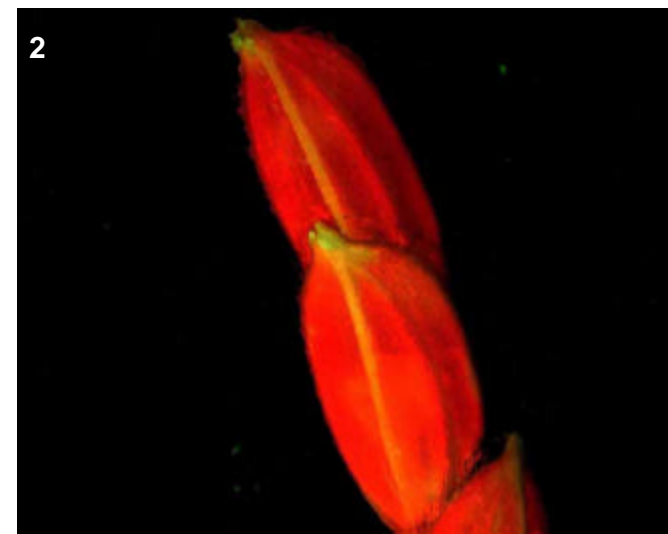
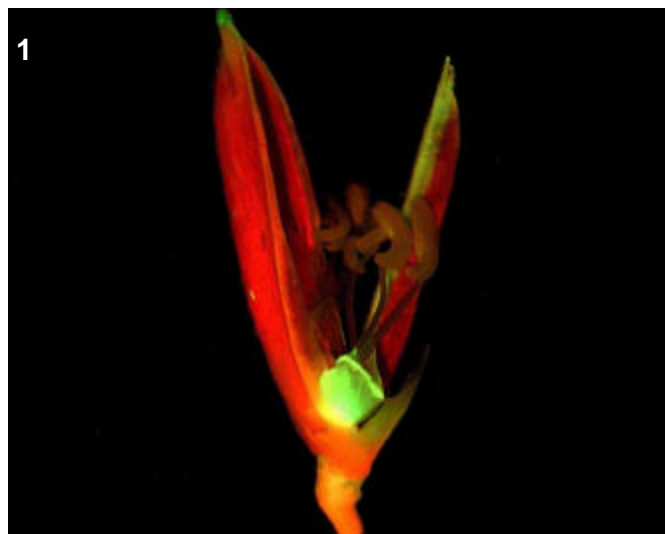
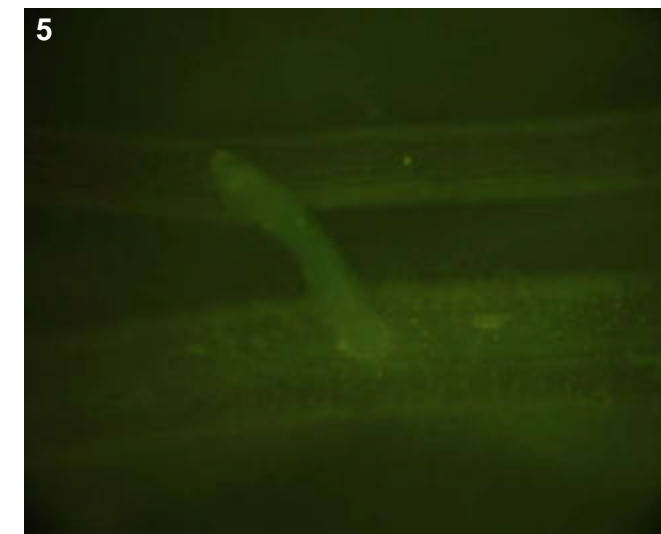
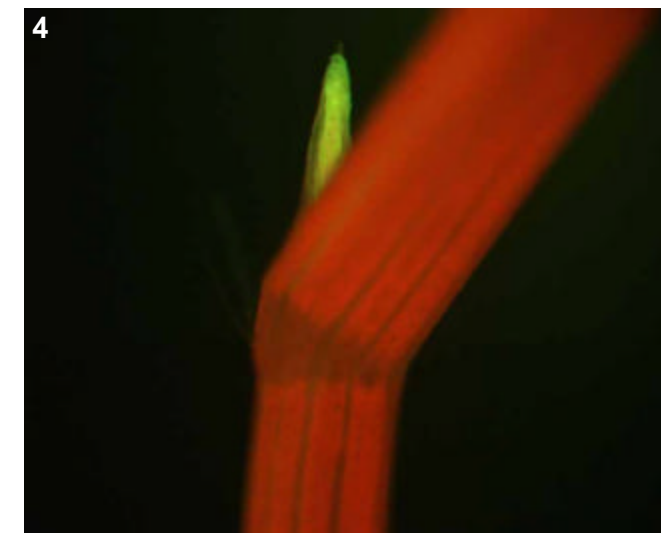
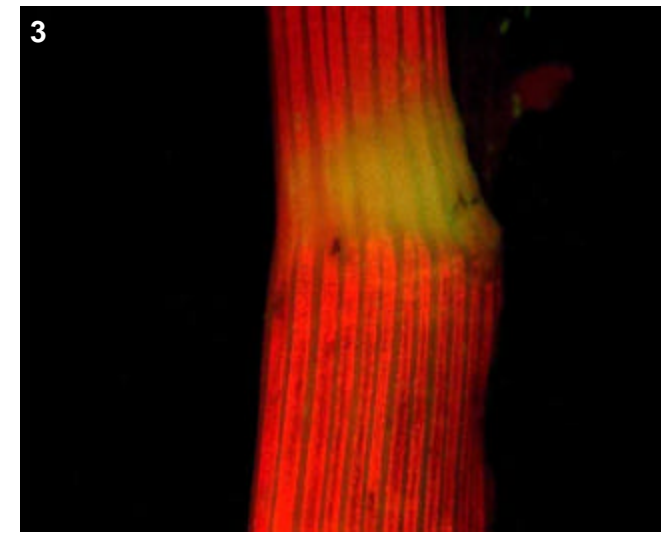
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 5



## T0 comments

Fairly weak expression in collar, strong expression in floral vascular and in lodicules

## T1 seed comments

## T1 seedling comments

Looks like just tips of leaves of seedlings as well as very faint root vascular

# Genotype: AOL A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

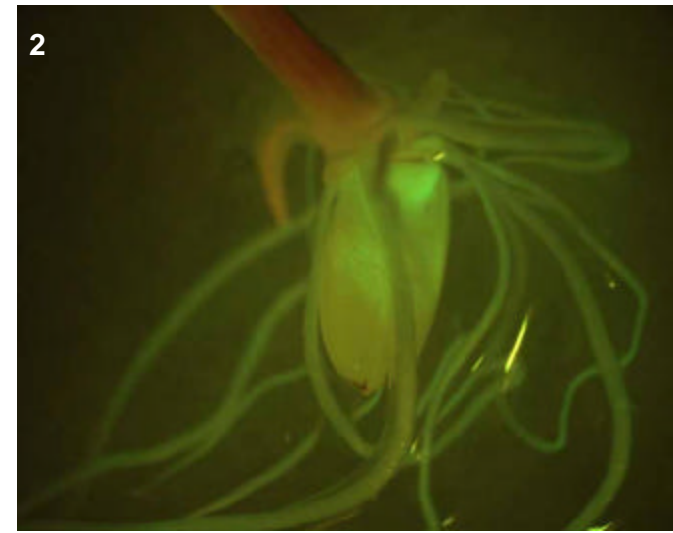
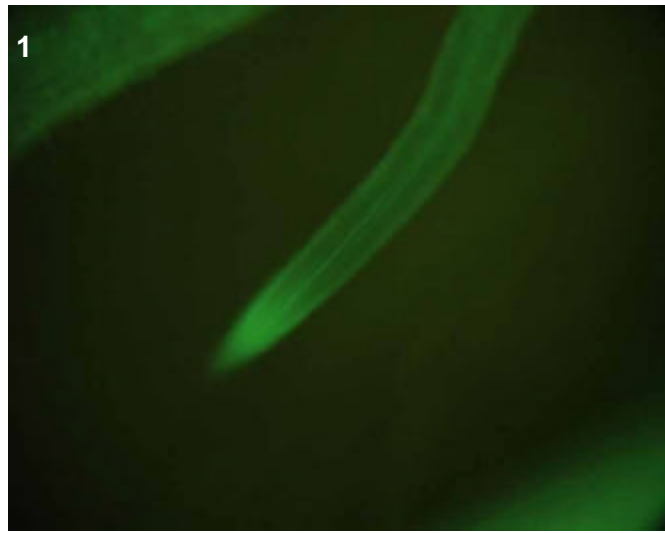
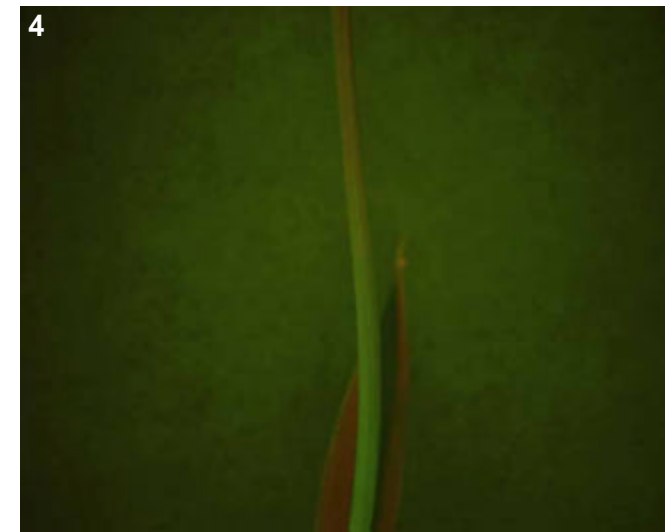
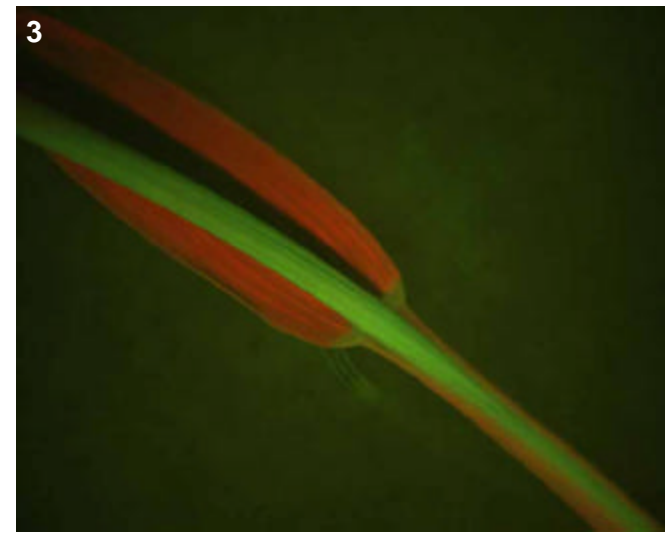
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 87



## T0 comments

## T1 seed comments

4/5 seeds show expression.

## T1 seedling comments

General expression throughout roots, but brightest in the tips. Interesting plants because no lateral roots, perhaps a phenotype? Bright expression in mature leaf that dies out towards the younger portion (see the two last pics).



# Genotype: AOL C09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

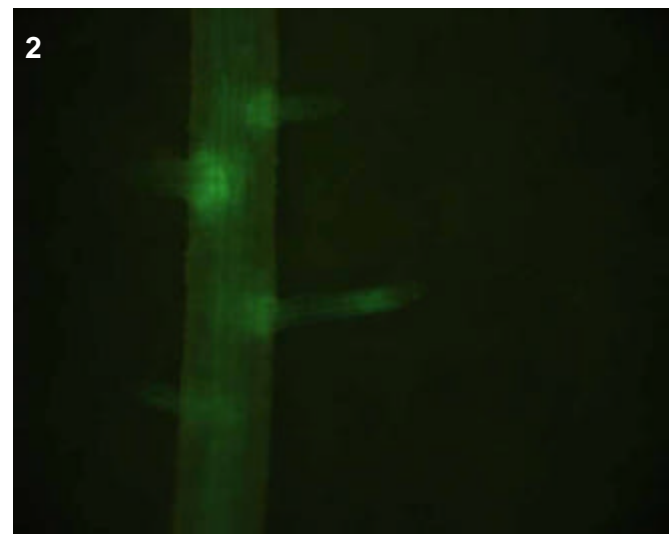
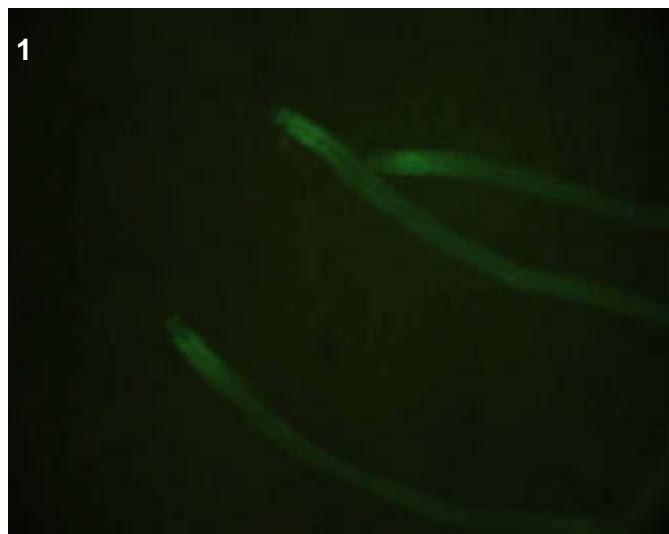
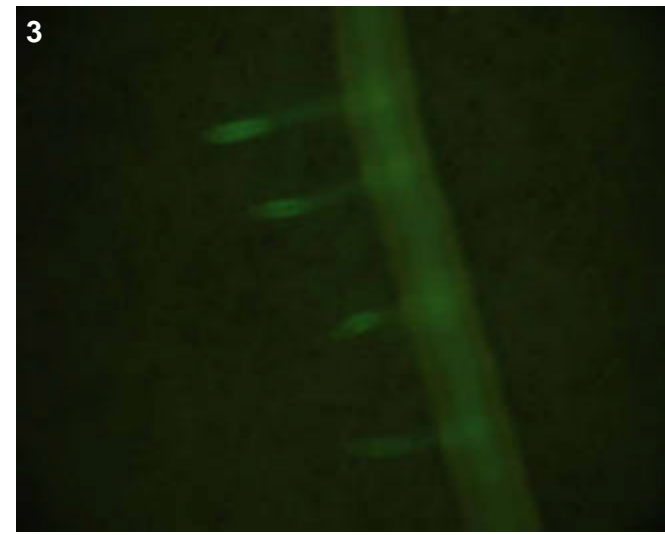
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 25



## T0 comments

## T1 seed comments

## T1 seedling comments

Root vascular expression especially bright in tips and base of laterals. Faint expression in shoot--in the collar and leaf tips.

# Genotype: AOL D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

Virtually no collar but bright sheath and leaf vascular.

No GFP detected

**T1 in greenhouse?**

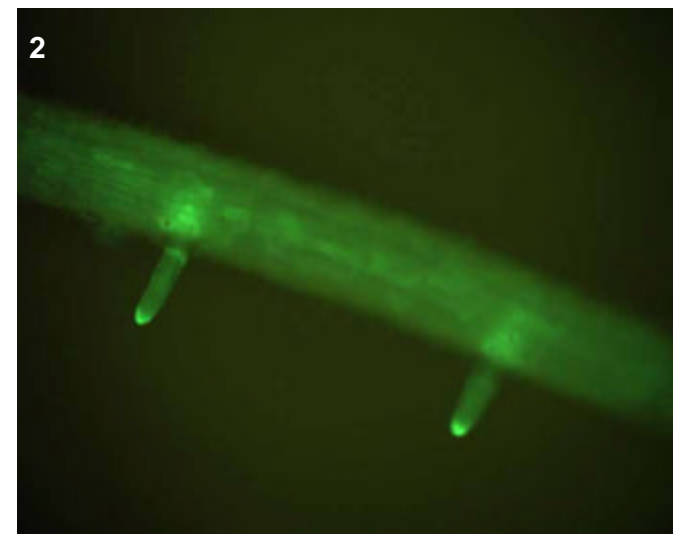
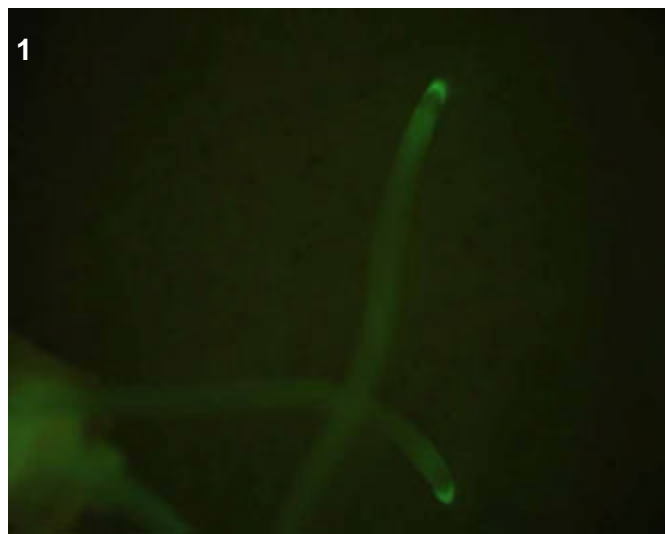
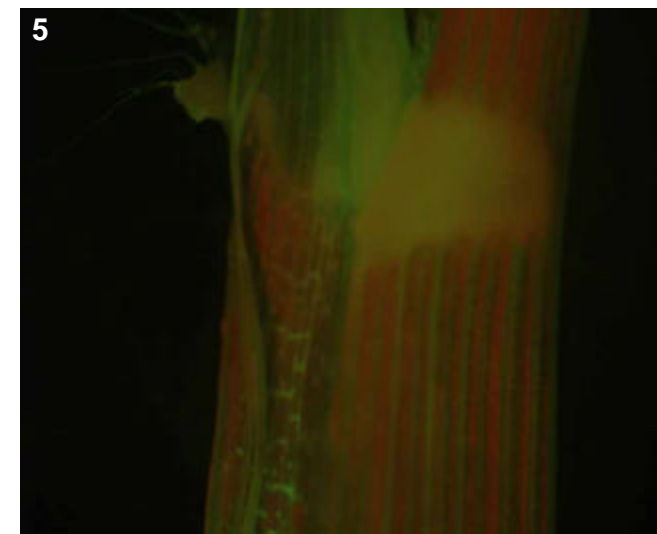
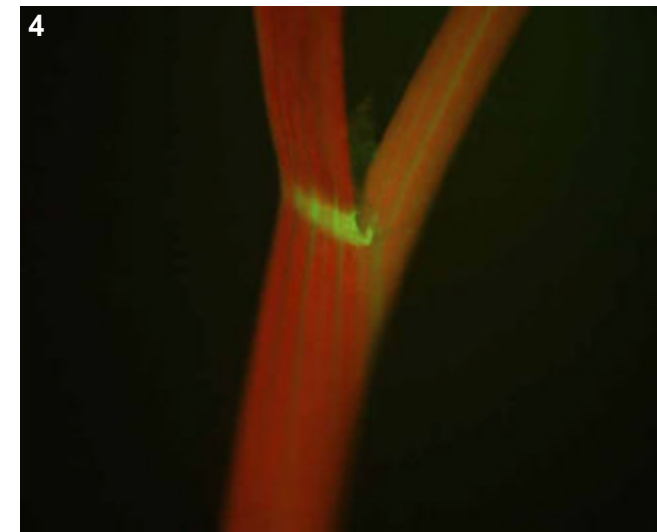
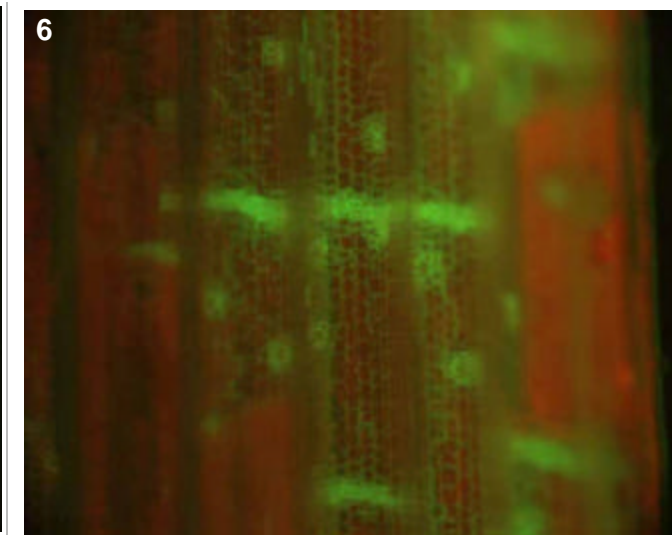
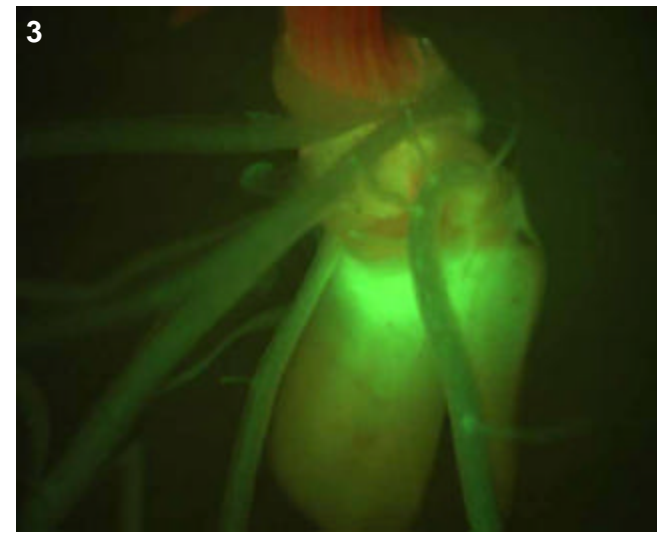
YES, 2 GFP+ plants

**Confocal?**

YES

**Number T2 seed produced:**

150



## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

Very bright expression in the root cap.

# Genotype: AOL E08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

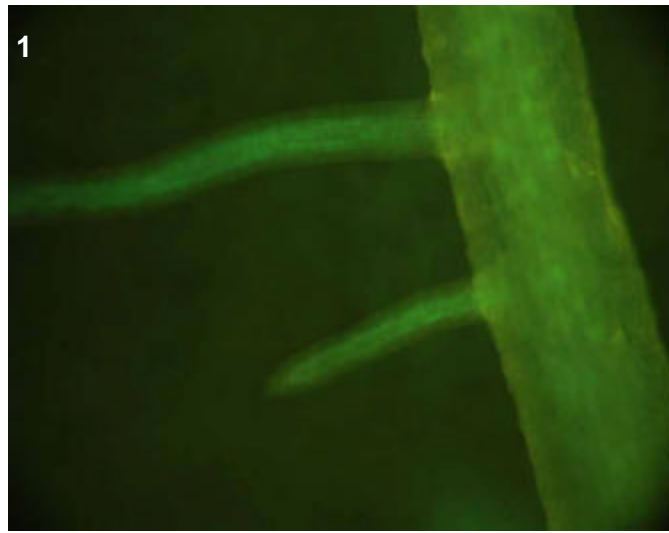
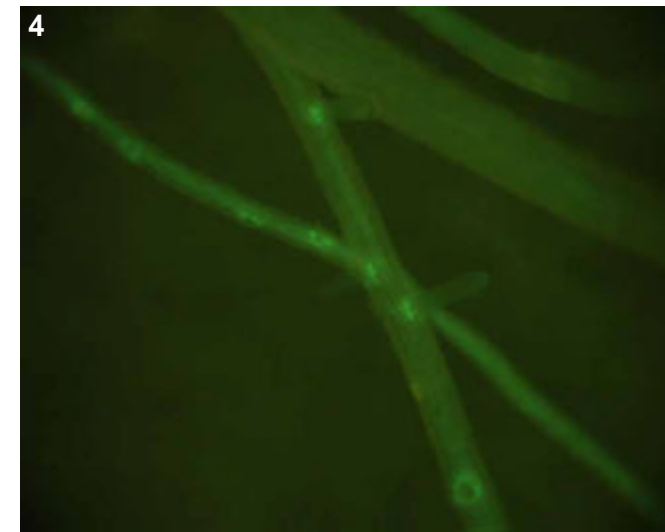
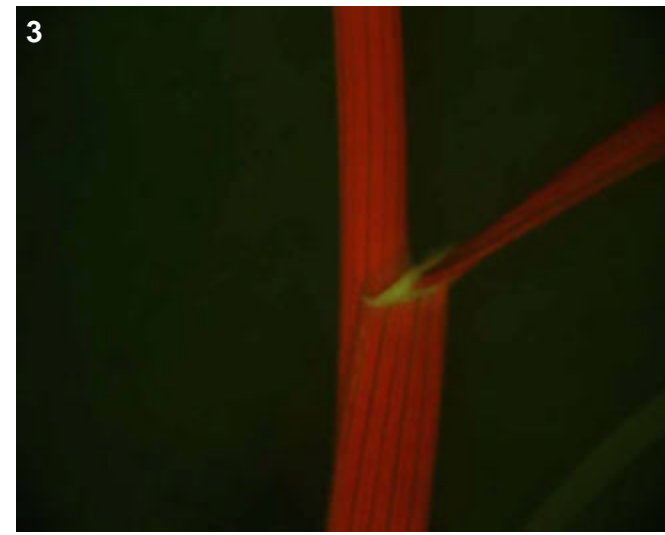
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 15



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: AOL G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

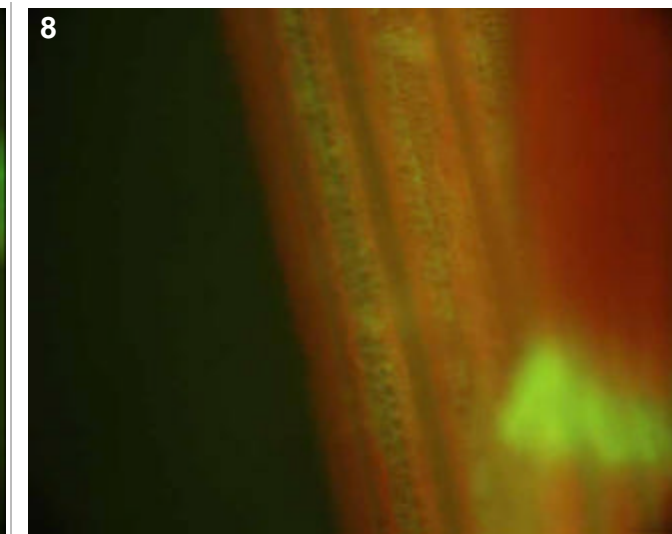
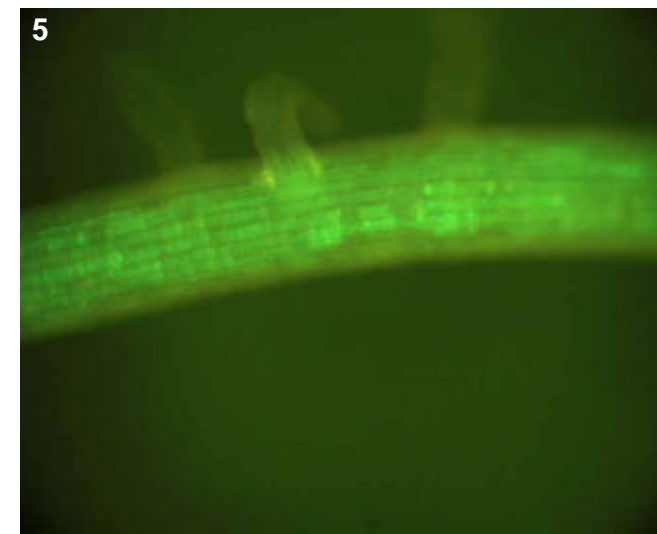
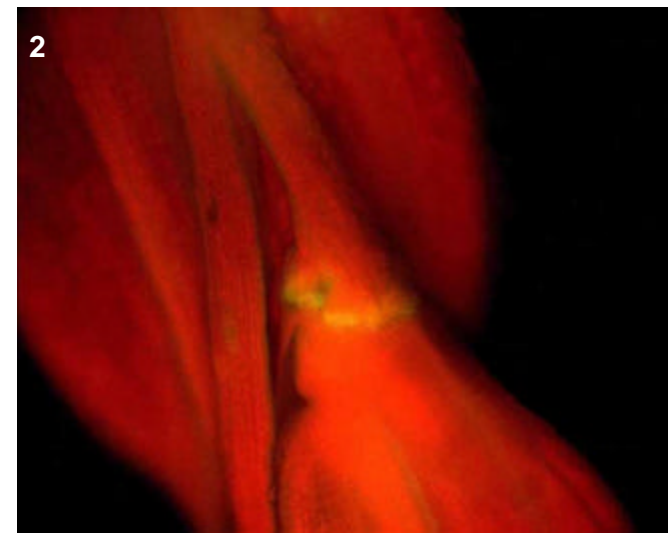
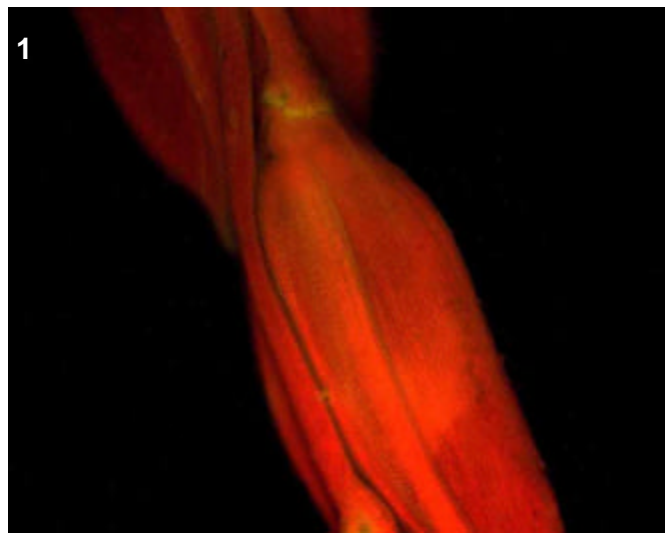
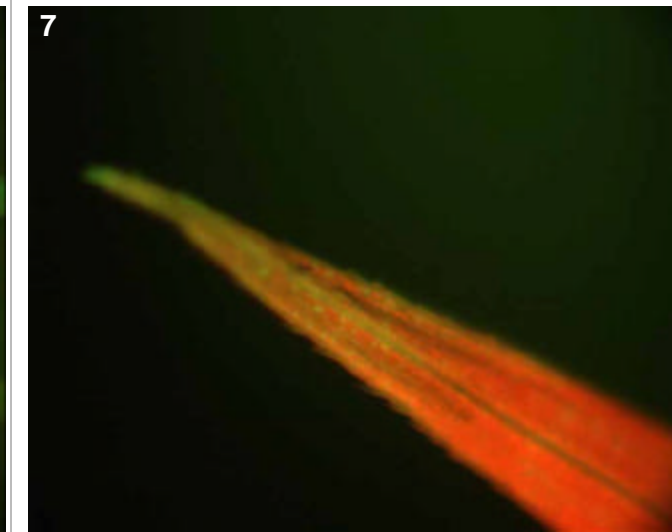
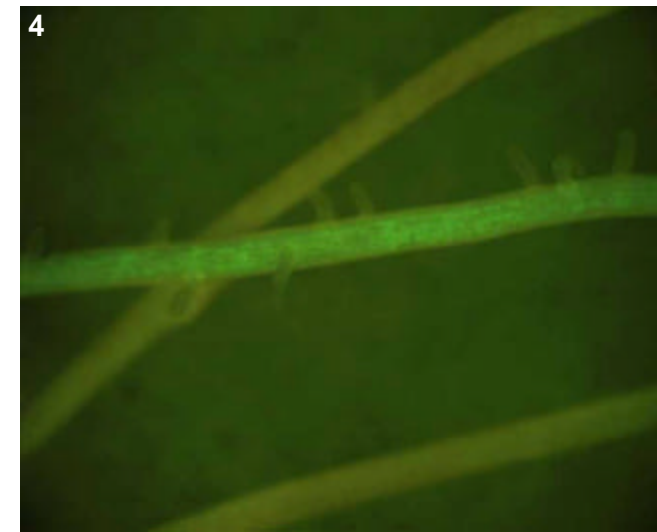
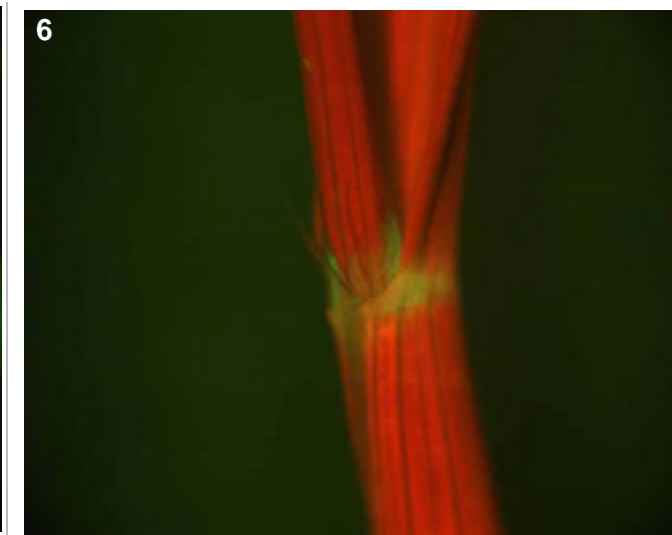
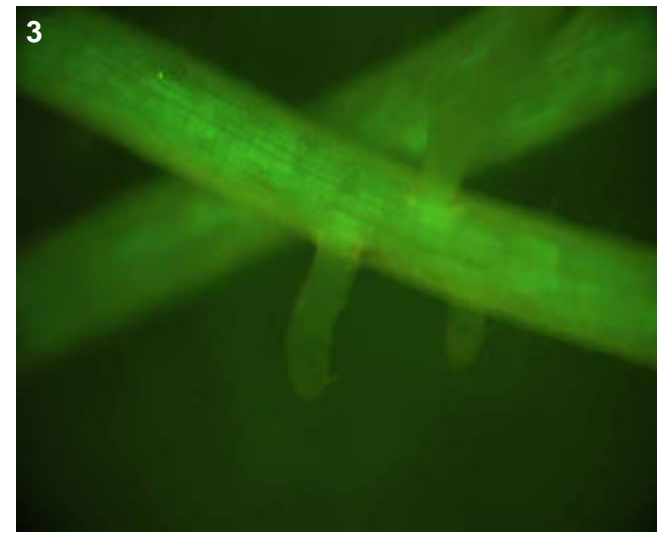
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 24



### T0 comments

A small, yet bright, band of expression at the junction of the pedicel to the flower

### T1 seed comments

### T1 seedling comments

Interesting root expression, mostly in old portions of crown roots. Nothing in lat roots. Also bright collar, leaf tips and general in sheath mesophyll.

# Genotype: AOM D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

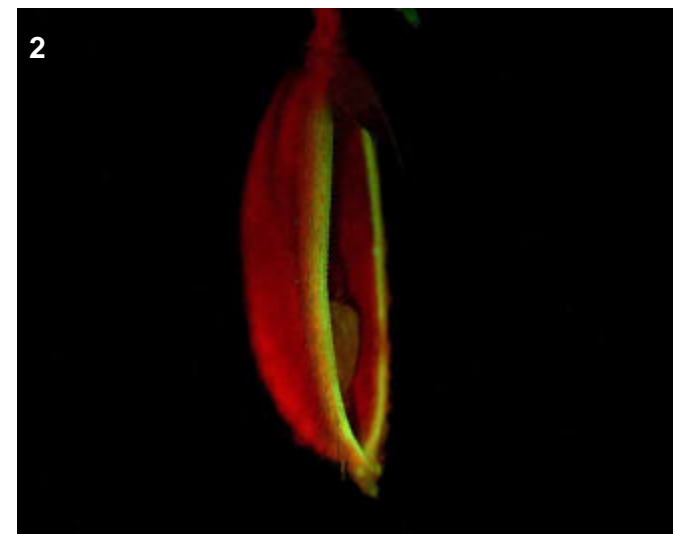
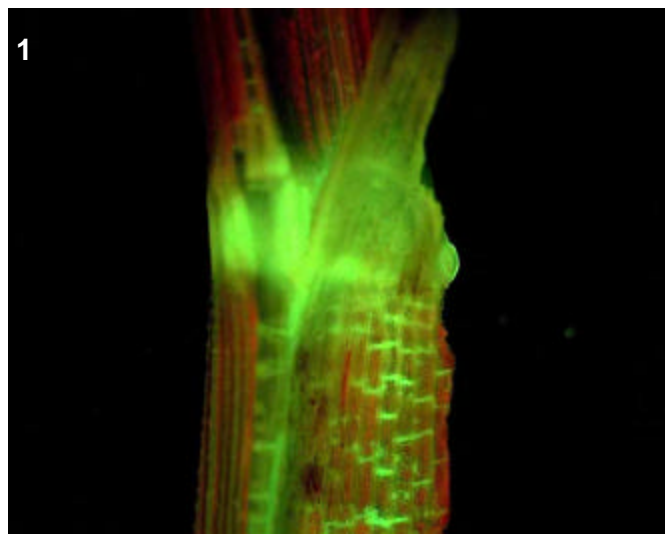
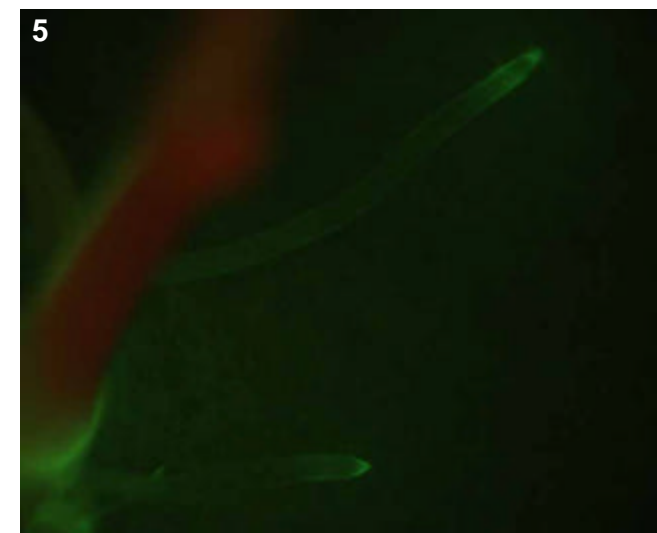
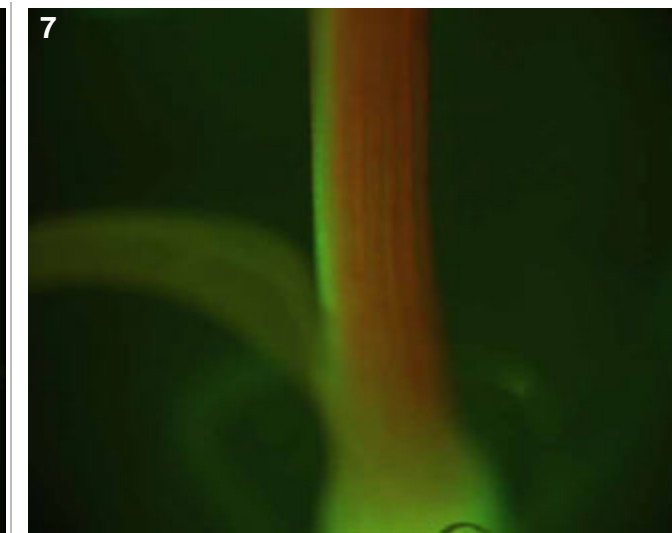
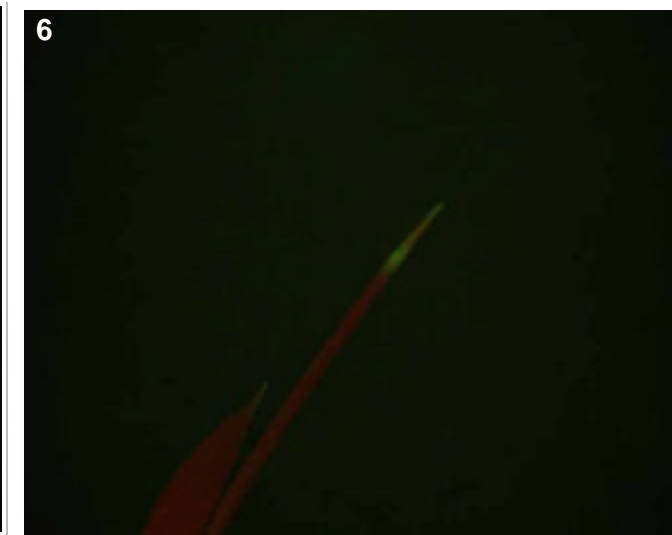
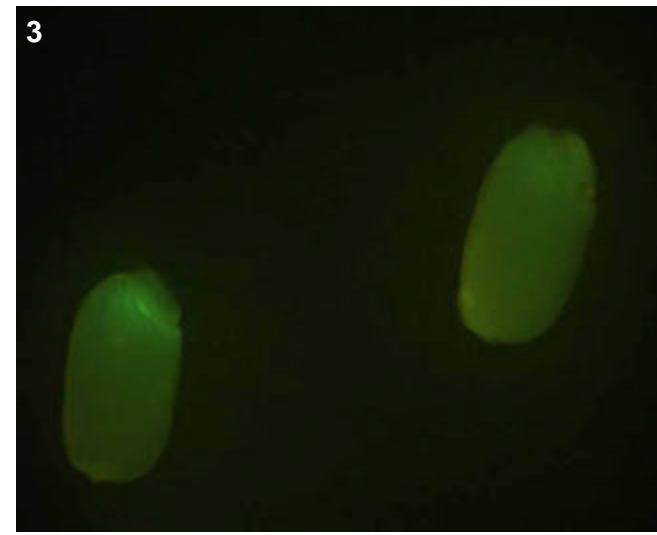
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

Number T2 seed produced: 13



### T0 comments

A bright vascular line. Expression in collar and surrounding vascular, as well as bright in floral vascular.

### T1 seed comments

2/5 seeds show bright embryo expression

### T1 seedling comments

Very bright roots, especially in the cap. Also bright endosperm and activity in the leaf tips and base of the plant.

# Genotype: AOM D03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

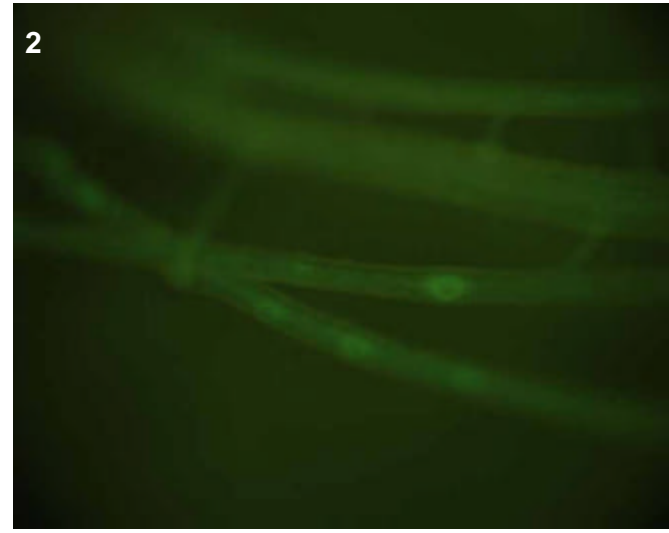
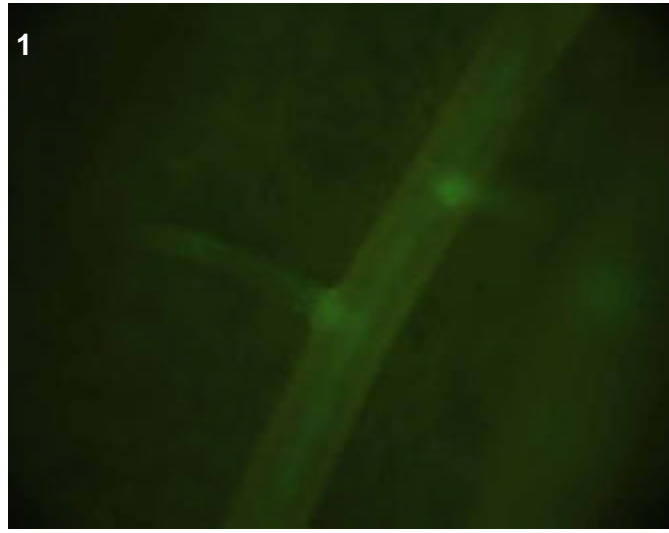
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 71



## T0 comments

## T1 seed comments

## T1 seedling comments

A root-specific line.

# Genotype: AOM E11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

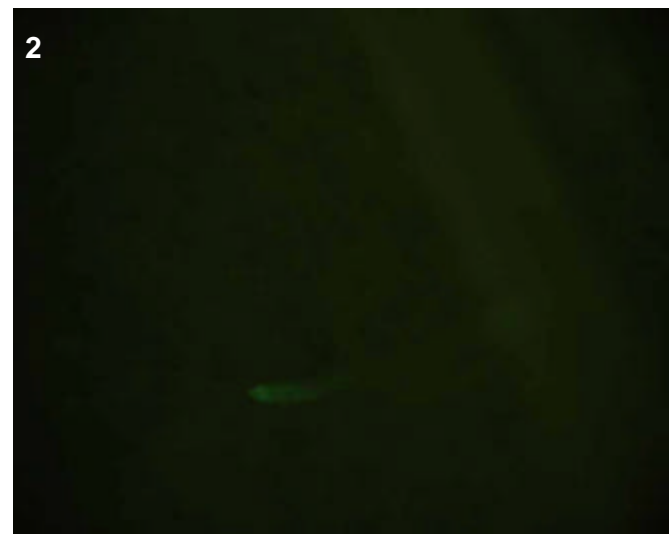
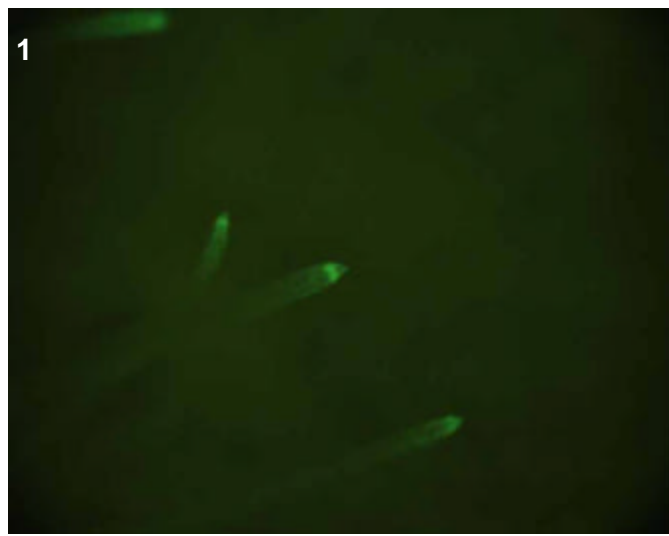
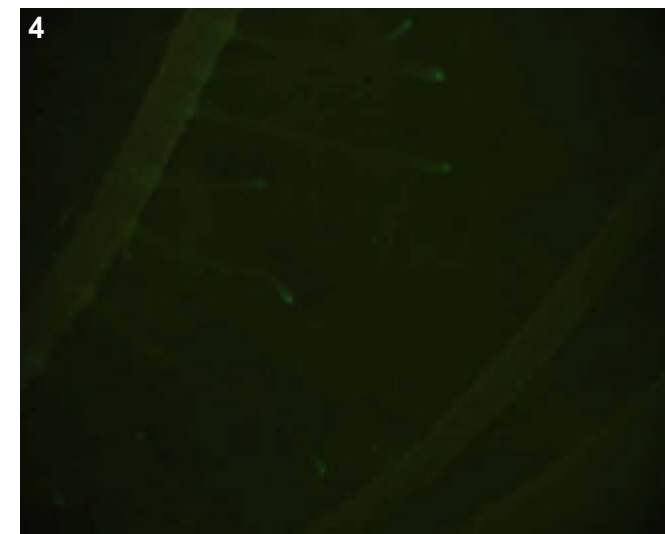
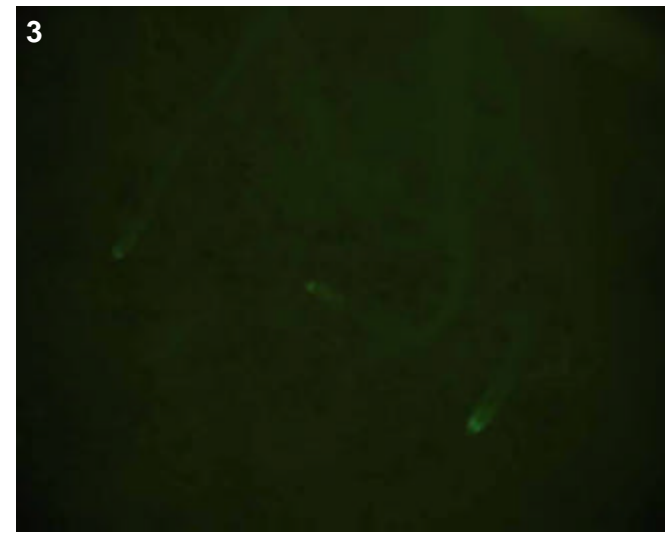
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 53



## T0 comments

## T1 seed comments

## T1 seedling comments

Fantastic root specific line, only the root apex and young portion of the vascular tissue. No expression in older parts of root, or anywhere else in plant. Confocal this one.

# Genotype: AOM H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

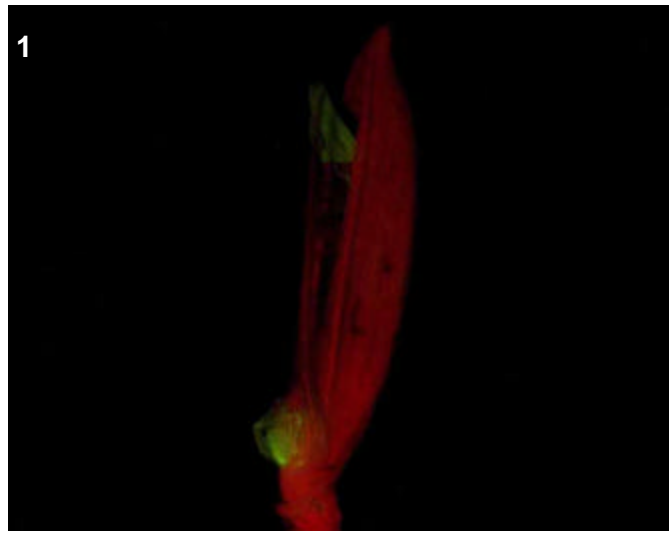
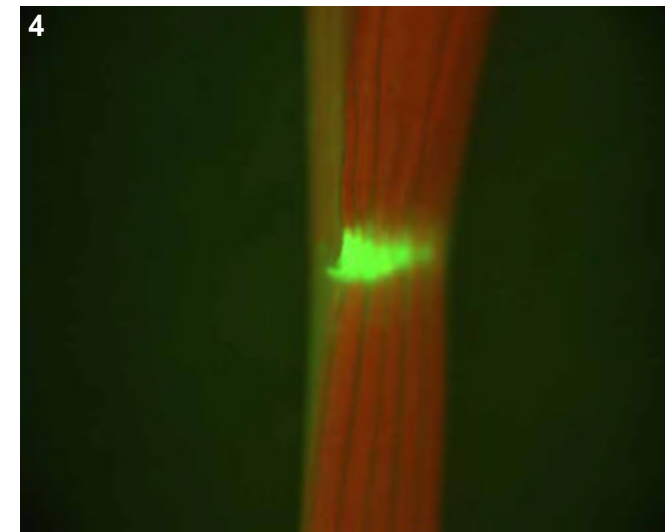
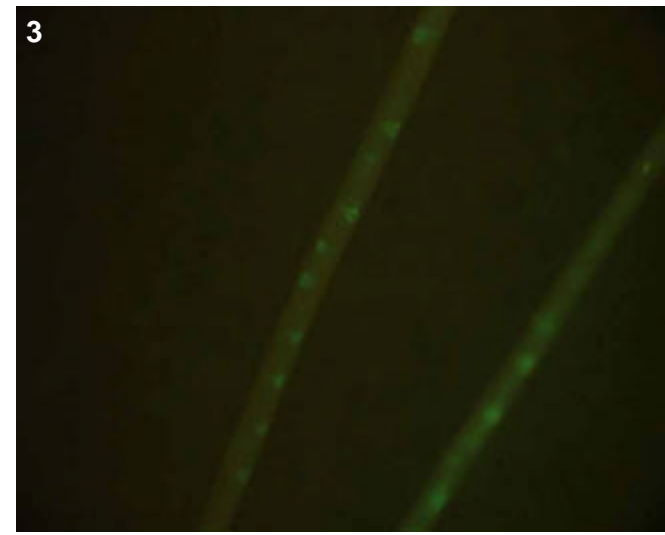
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 118



## T0 comments

Moderate expression in anther and lodicules, perhaps very faint expression in sheath (is this pic in the right place?).

## T1 seed comments

## T1 seedling comments



# Genotype: AON D07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

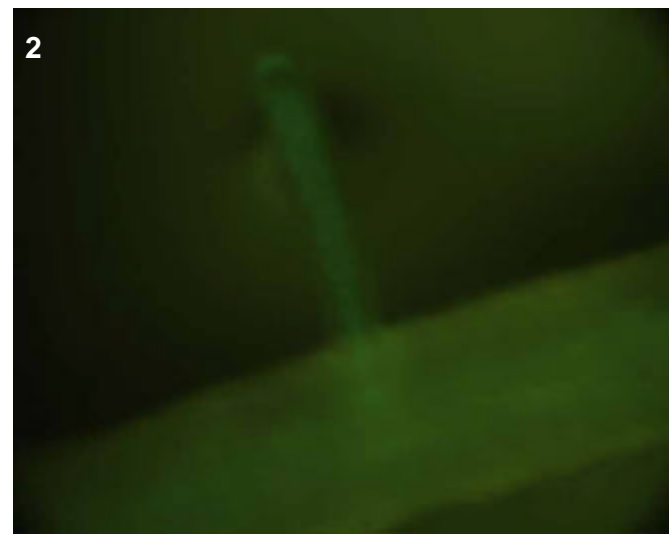
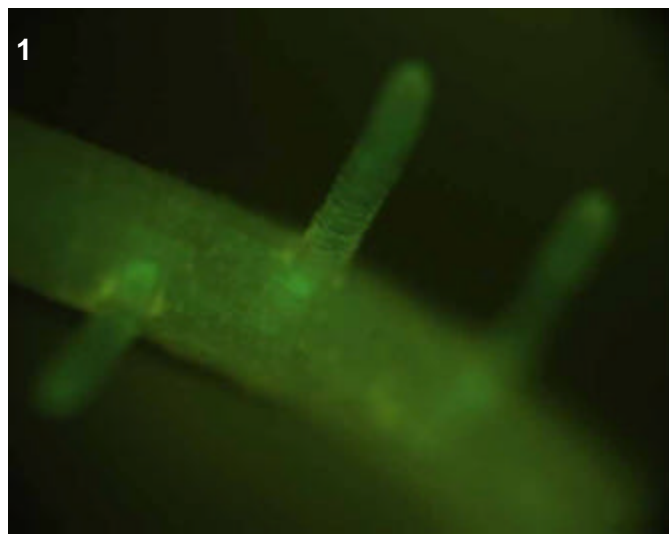
YES, 1 GFP+ plant

**Confocal?**

WIP

**Number T2 seed produced:**

244



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression in lateral roots, perhaps shoot vascular as well.

# Genotype: AON E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:  
Again, no expression in adult plants.

T0 pattern verified plus:

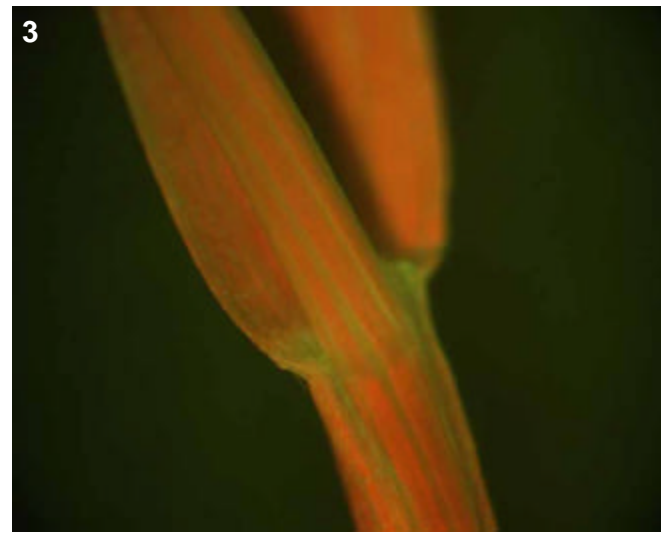
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 153



## T0 comments

## T1 seed comments

4/5 seed show expression.

## T1 seedling comments

# Genotype: AON F06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

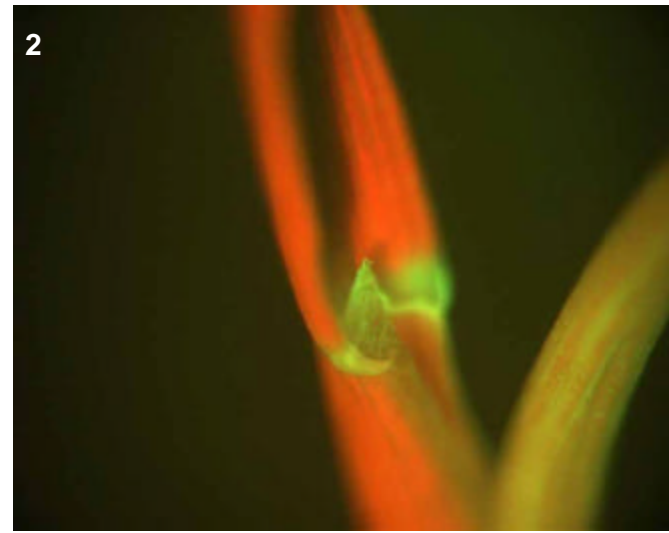
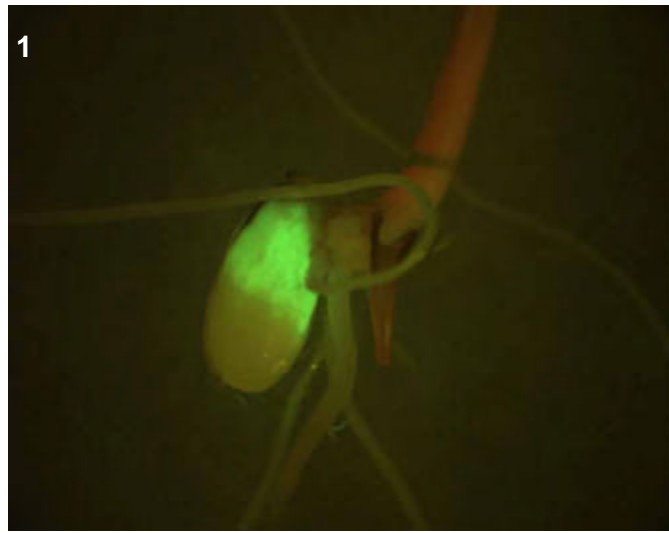
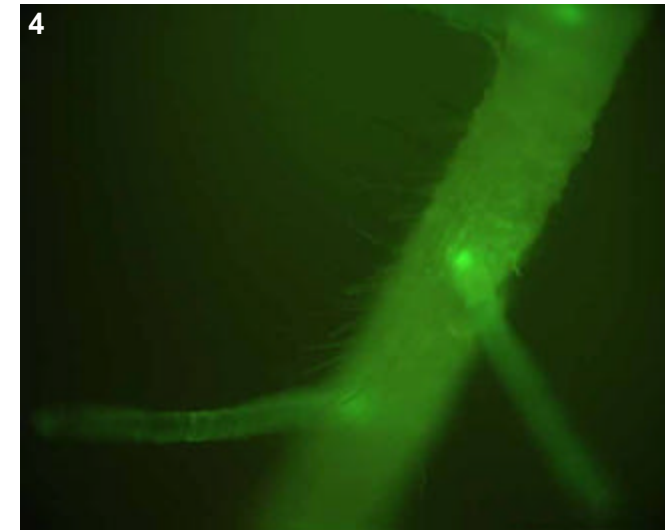
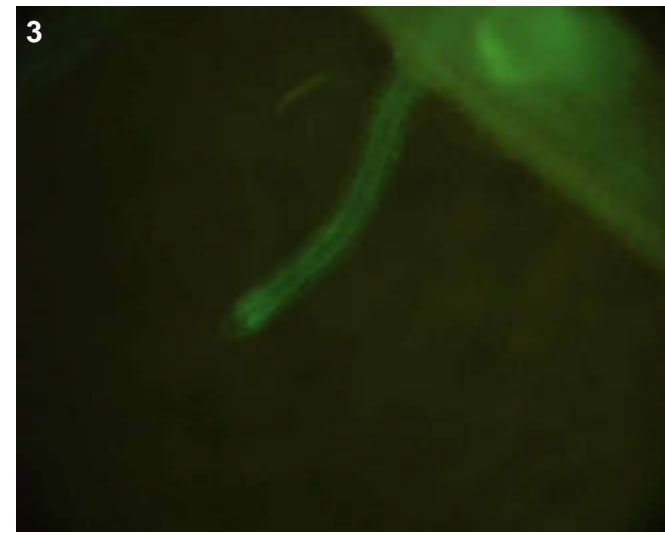
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 139



## T0 comments

perhaps expression in sheath, but sheath too diseased to really tell

## T1 seed comments

## T1 seedling comments

Bright expression in digesting endosperm. Expression in lateral roots is brightest at base of emergence and in the tip.

# Genotype: AON F09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

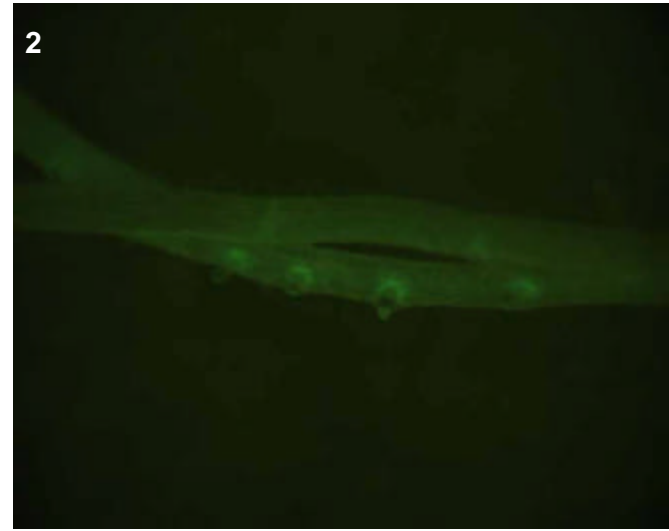
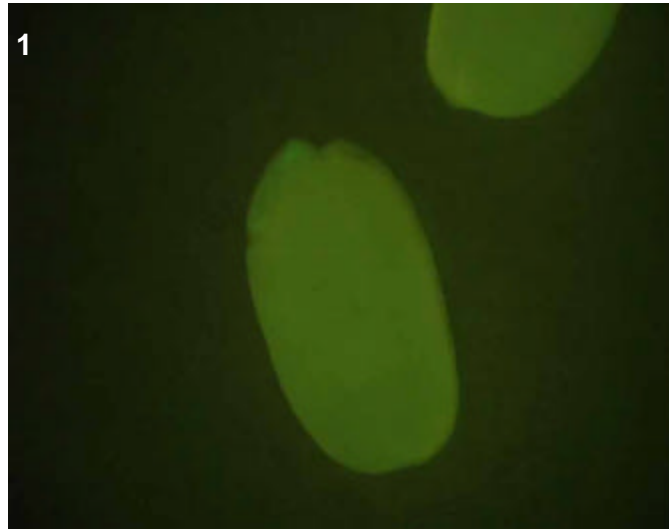
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?** YES

**Number T2 seed produced:** 31



## T0 comments

## T1 seed comments

1/5 shows expression

## T1 seedling comments

Bright where the lat roots emerge only. A root-specific line.

# Genotype: AON G03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

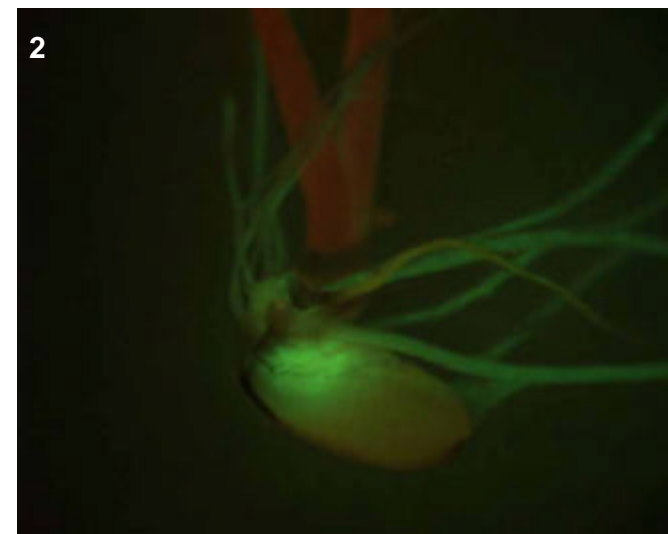
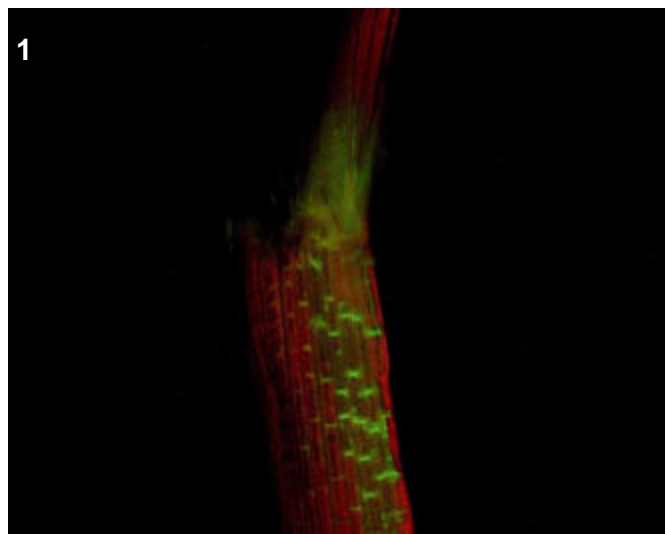
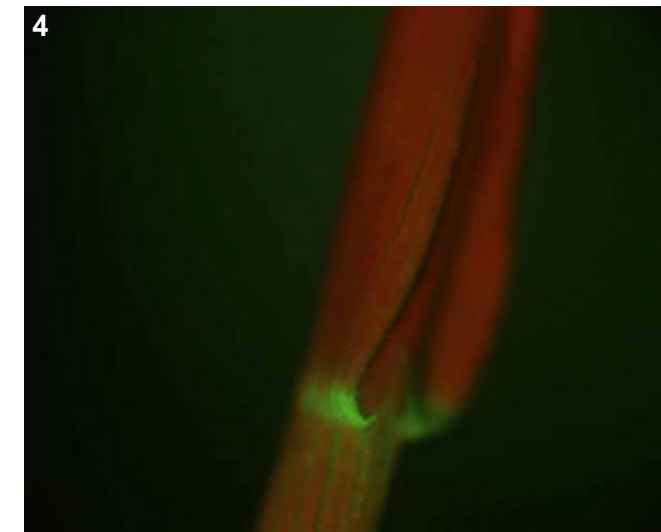
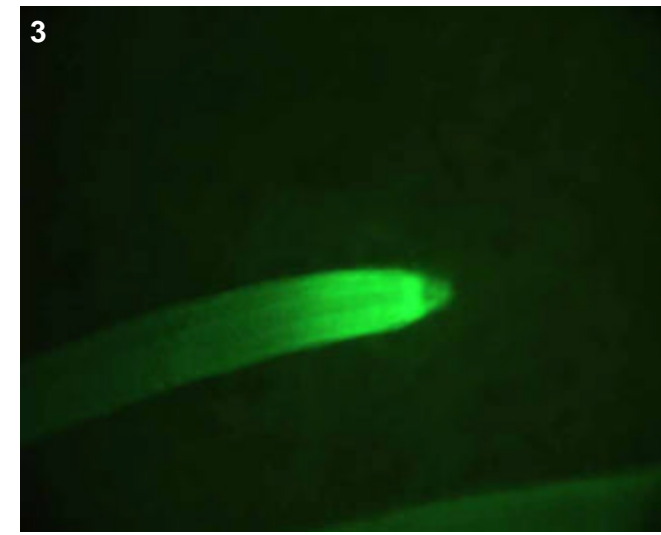
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 22



## T0 comments

Moderate expression in collar, and sheath vascular. Perhaps expression in floral vascular.

## T1 seed comments

## T1 seedling comments

Few lateral roots observed, perhaps a phenotype?

# Genotype: AOO F11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

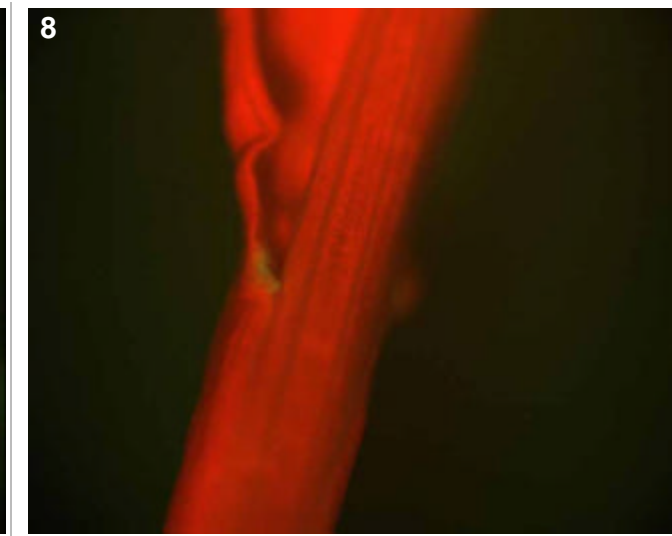
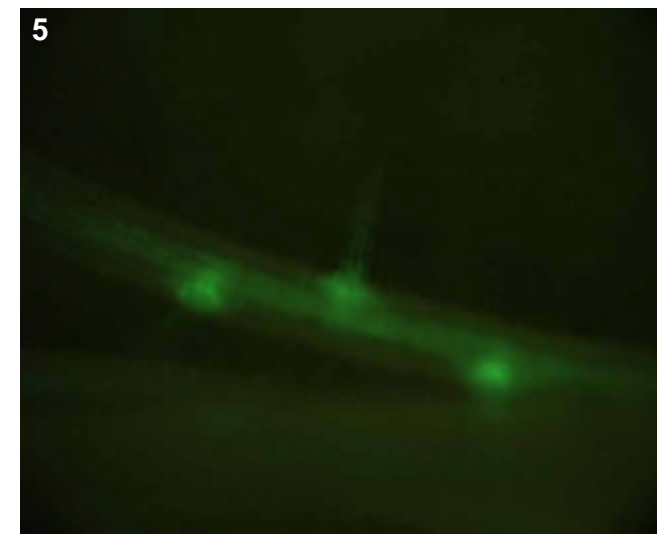
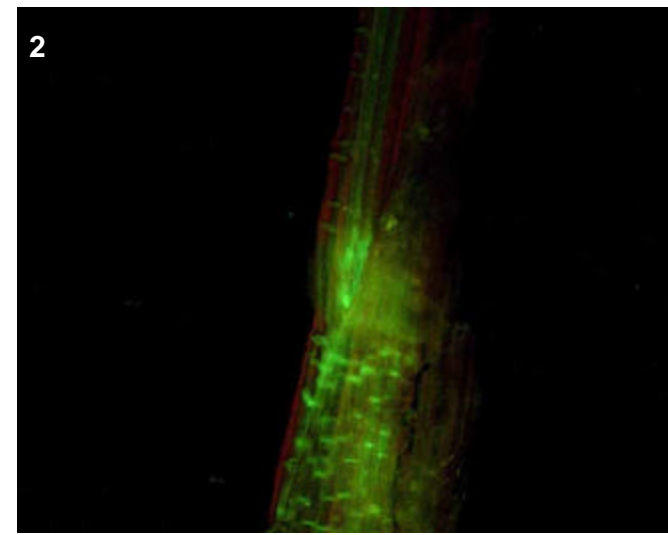
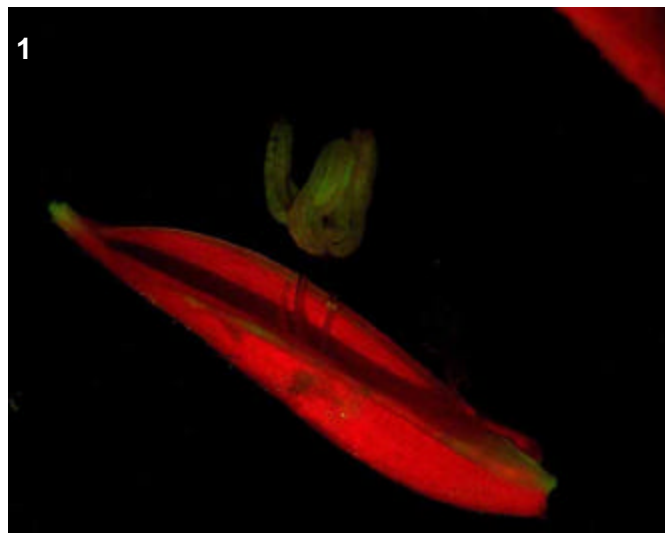
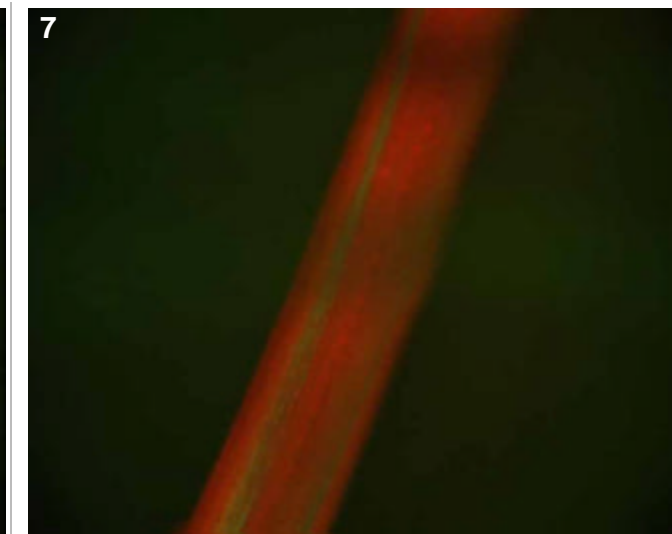
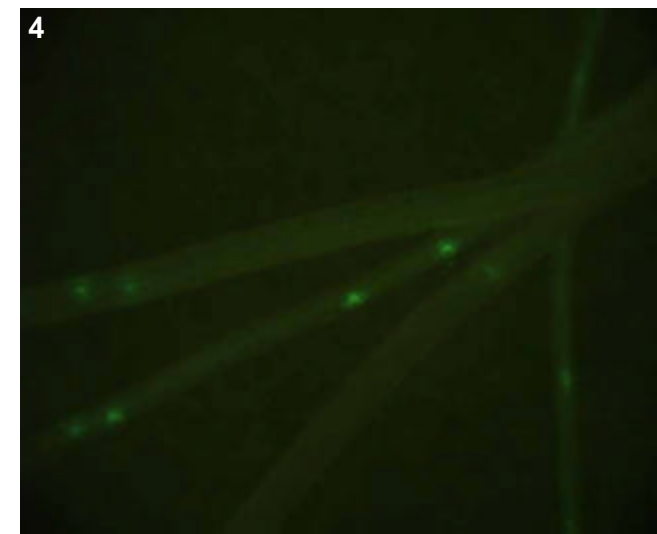
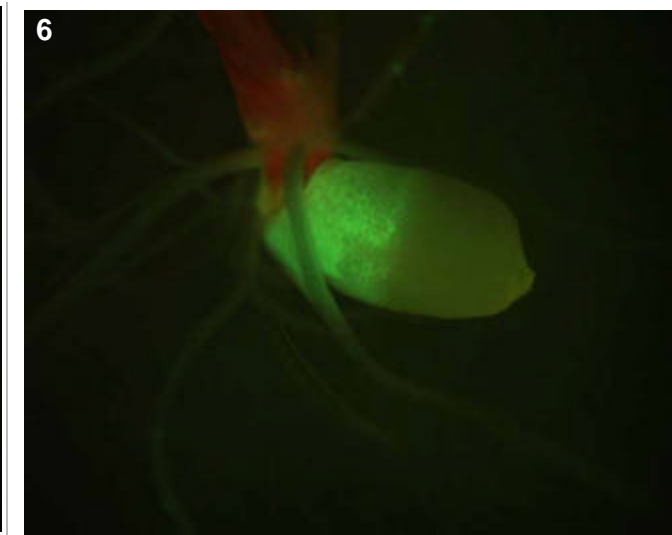
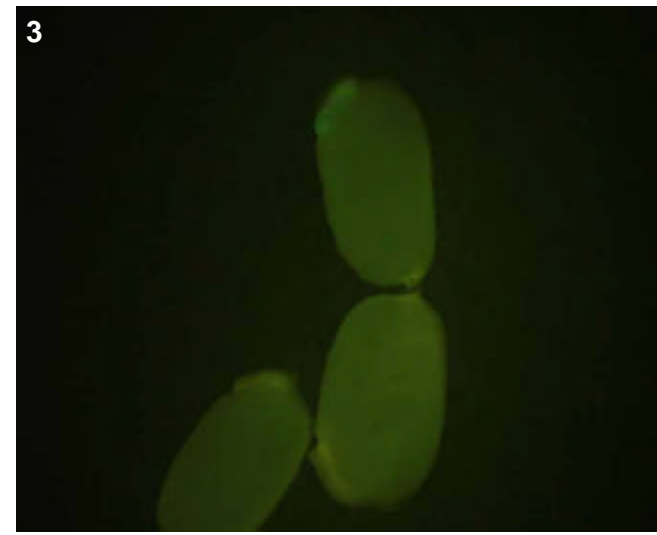
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



### T0 comments

Expression in collar and surrounding vascular tissue, also in floral tip and moderately in anthers

### T1 seed comments

1/5 seed showed bright expression

### T1 seedling comments

Very bright at lateral root emergence. Also crown and lat vascular. Not much in the shoot except around the edge of first leaf and very faint collar expression.

# Genotype: AOO H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

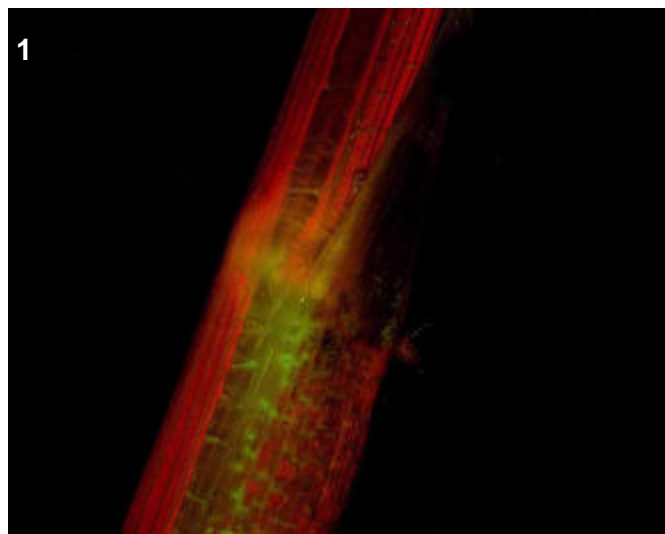
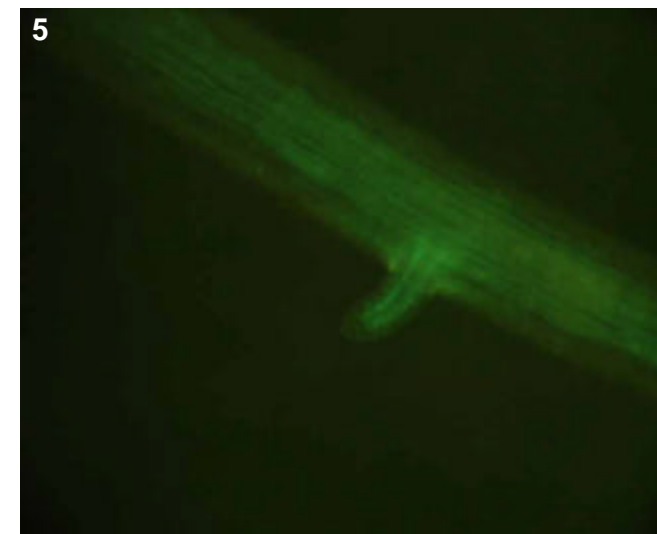
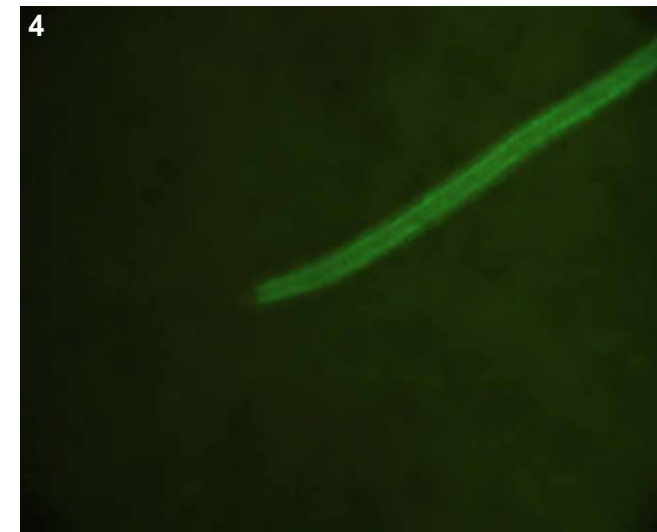
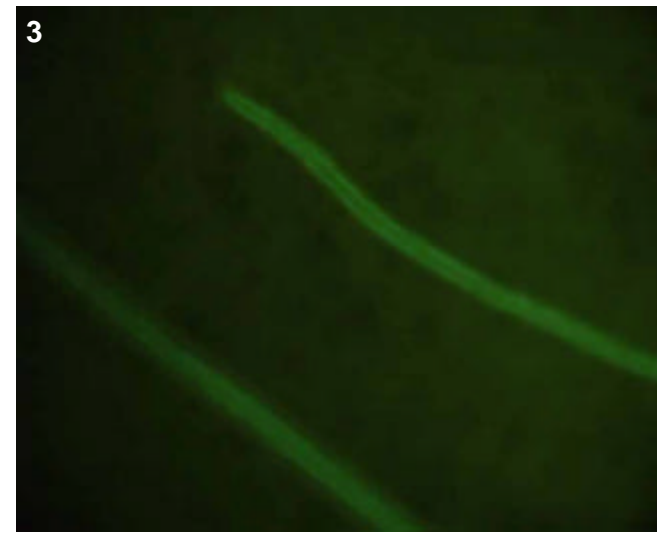
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 33



### T0 comments

Fairly weak expression in collar and vascular tissue in close proximity.

### T1 seed comments

### T1 seedling comments

No shoot expression in the seedlings, just very bright roots.

# Genotype: AOP A11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

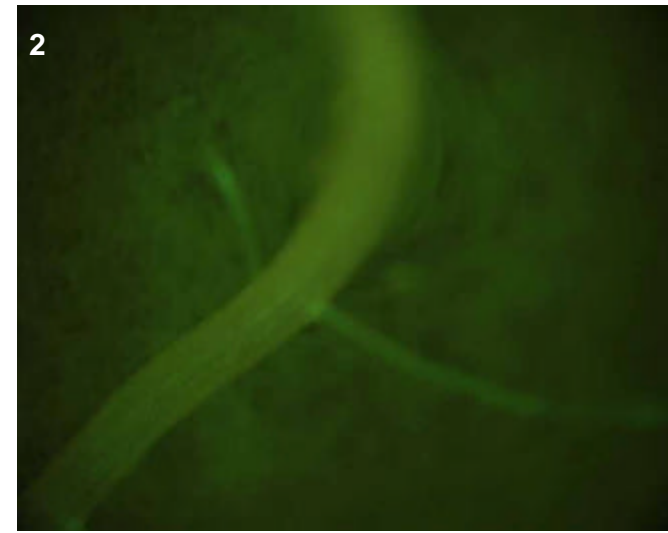
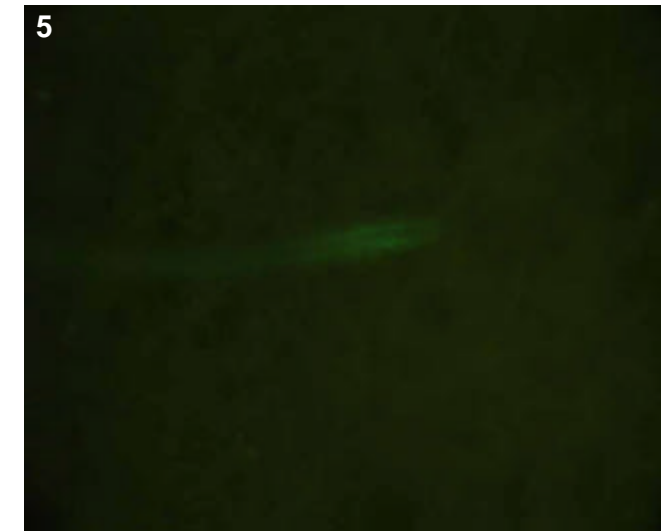
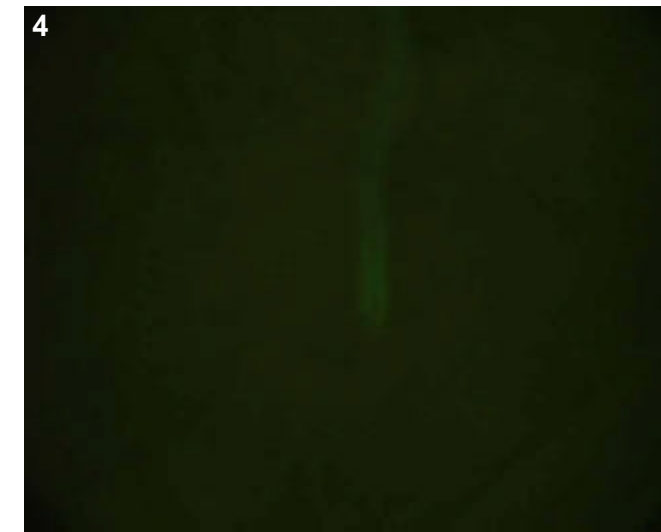
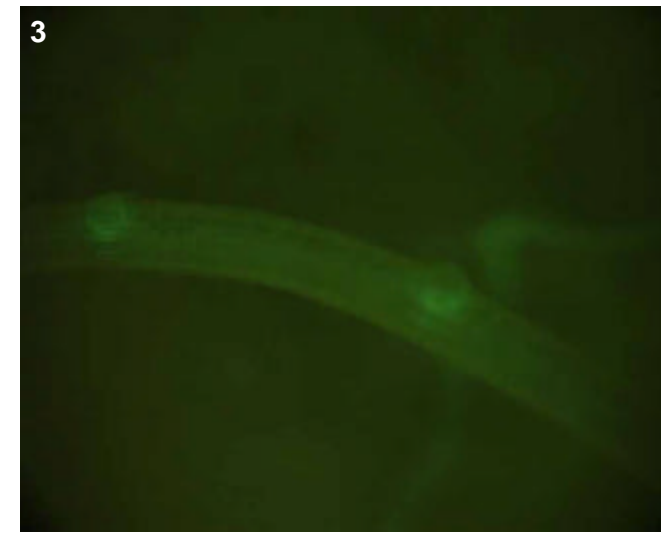
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**  YES

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

Nice root expression, in the lateral roots only and looks specific to just one tissue type, perhaps the pericycle or endodermis? Also some collar and leaf tip expression.



# Genotype: AOP A12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

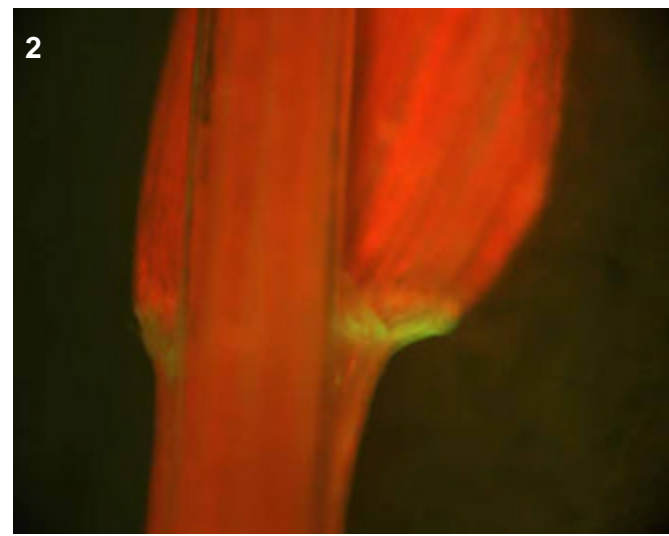
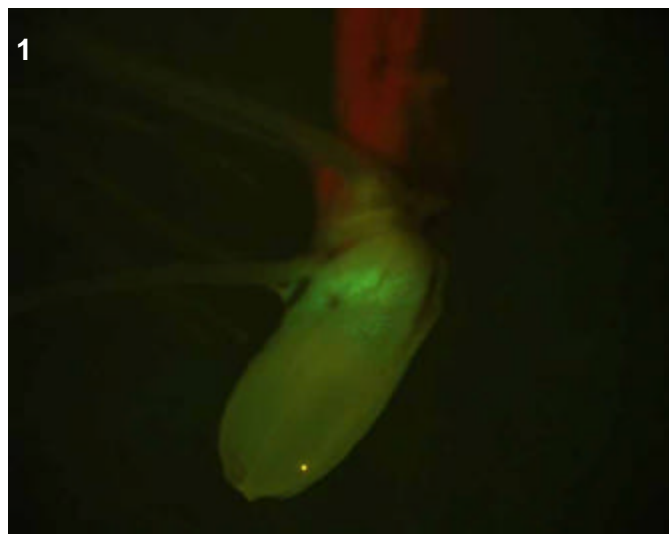
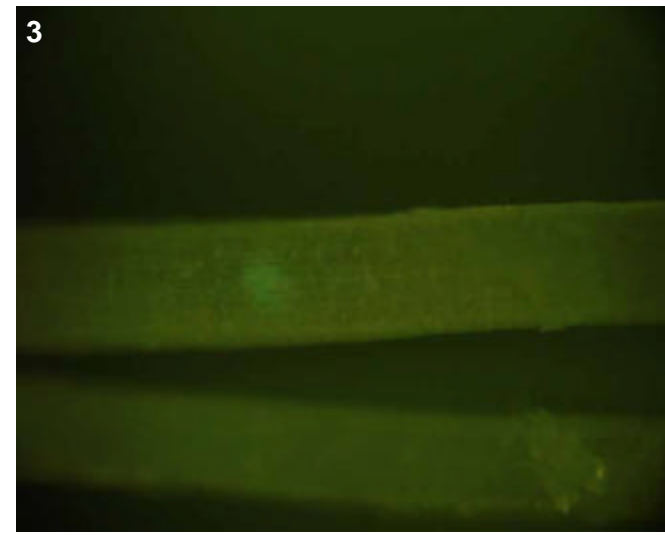
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 2



## T0 comments

## T1 seed comments

## T1 seedling comments

Bad germination, but in the one plant that grew there is expression in endosperm, shoot vascular, collar and emerging lat roots.

# Genotype: AOP C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

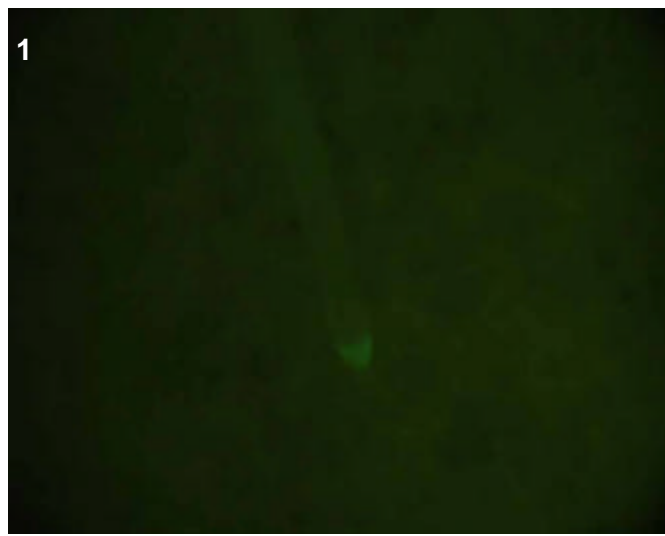
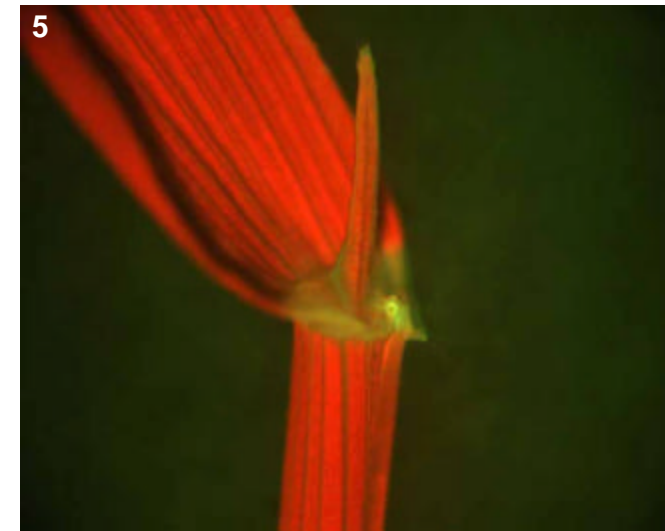
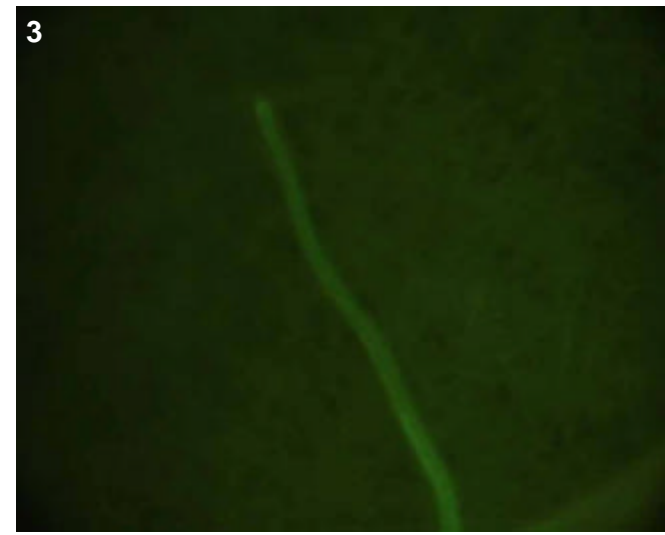
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?** YES

**Number T2 seed produced:** 265



## T0 comments

## T1 seed comments

## T1 seedling comments

Most root expression in the lateral root base and tip.

# Genotype: AOP D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

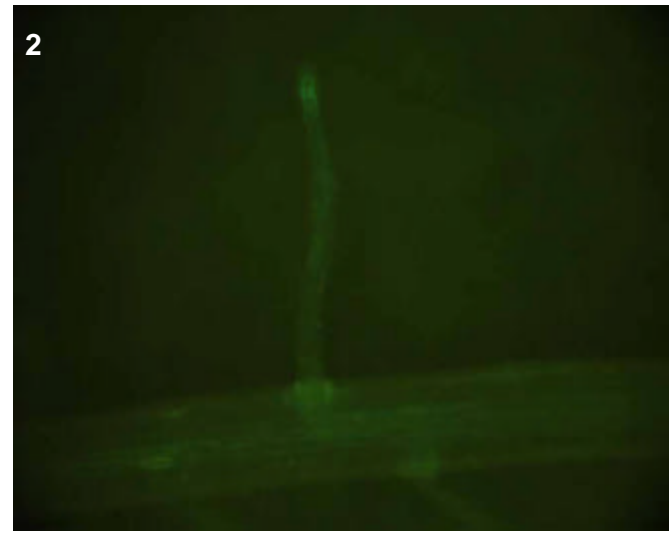
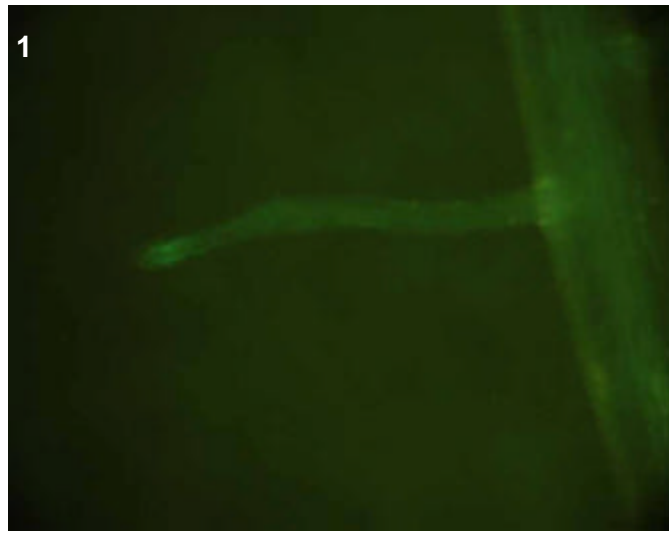
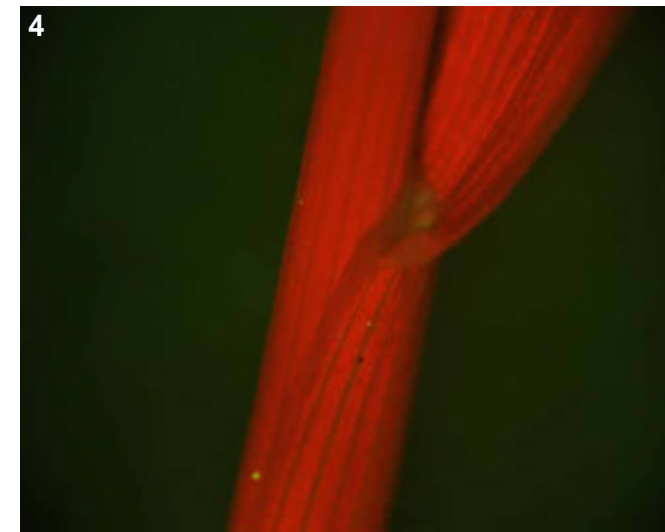
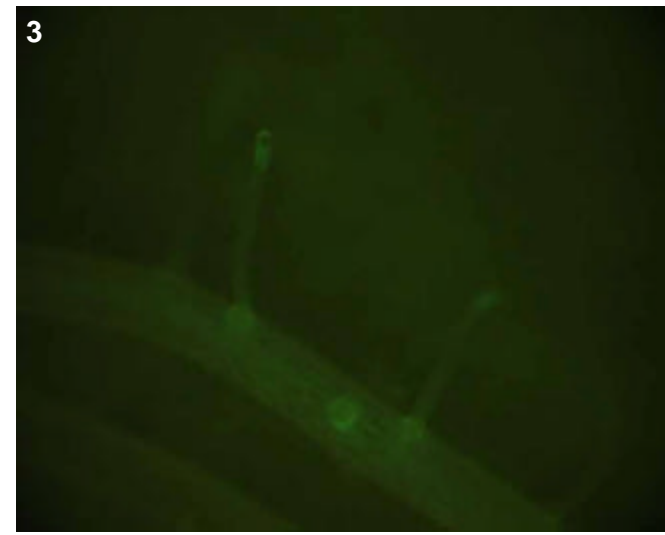
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 71



## T0 comments

## T1 seed comments

## T1 seedling comments

Brighter expression in the roots, much more faint expression in shoot.

# Genotype: AOP E06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

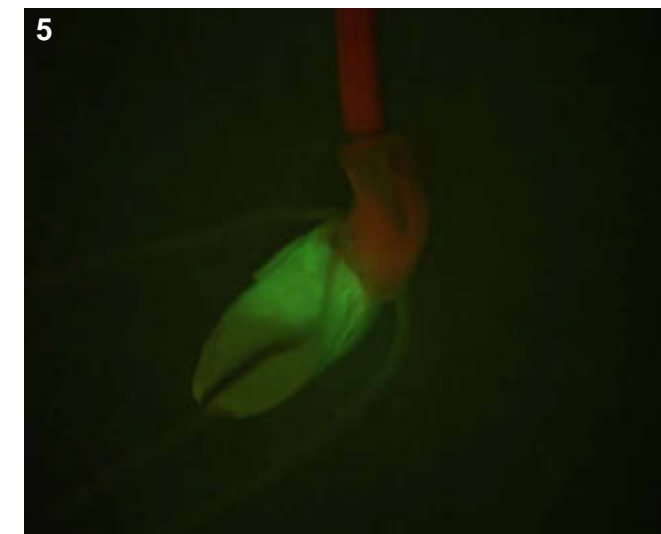
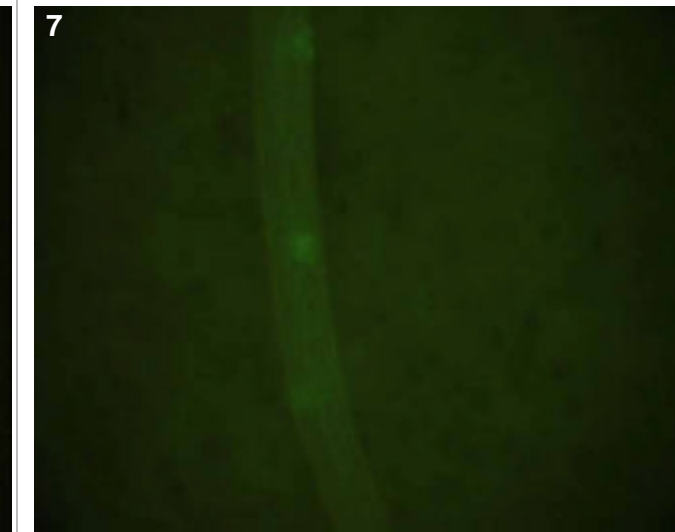
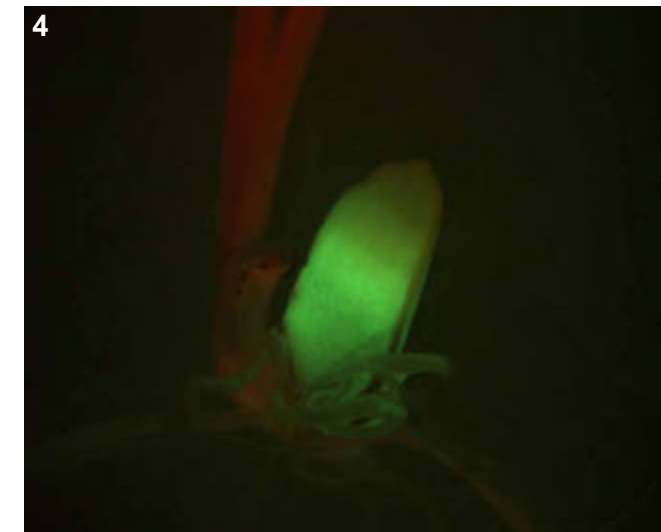
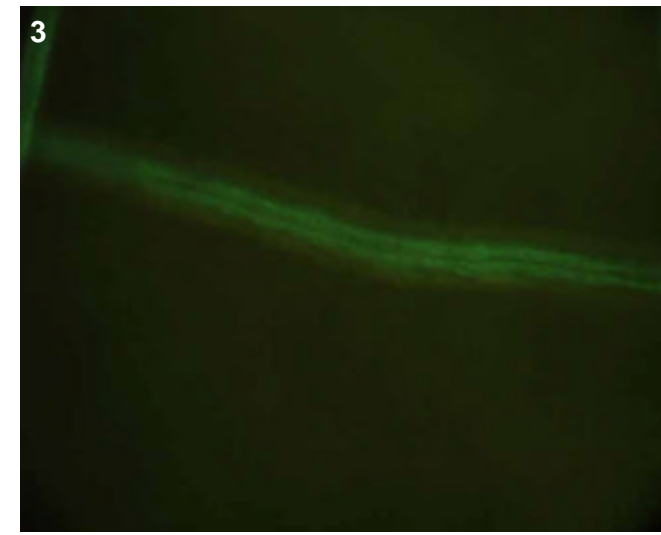
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 159



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression specific to roots and the endosperm. This line was accidentally grown again and the endosperm/root pattern was observed again. A good line for confocal I think.

# Genotype: AOP F09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

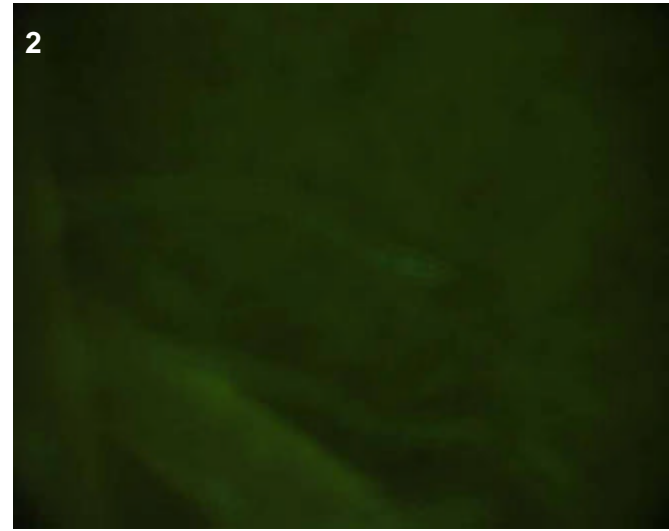
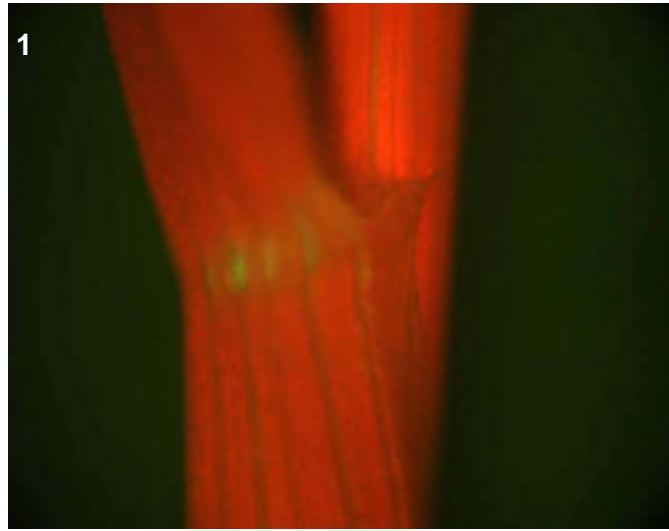
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 5



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint but what looks like quite specific expression in the lateral roots, good for confocal analysis. Medium collar expression as well. This line has poor germination, only one plant grew.

# Genotype: AOP H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-10  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

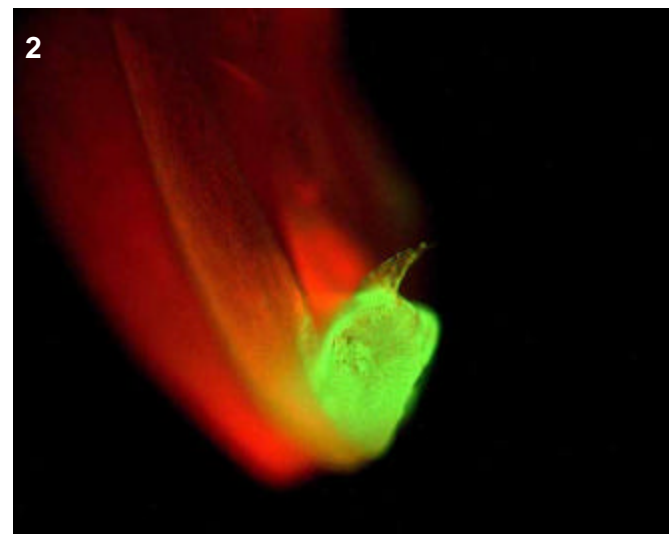
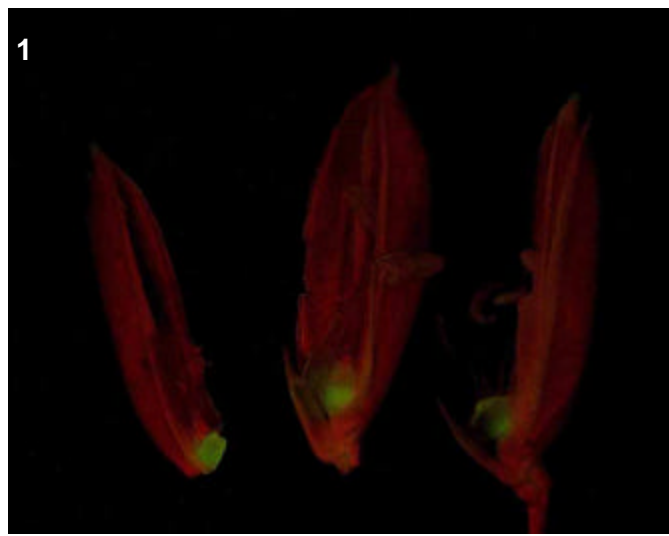
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 58



### T0 comments

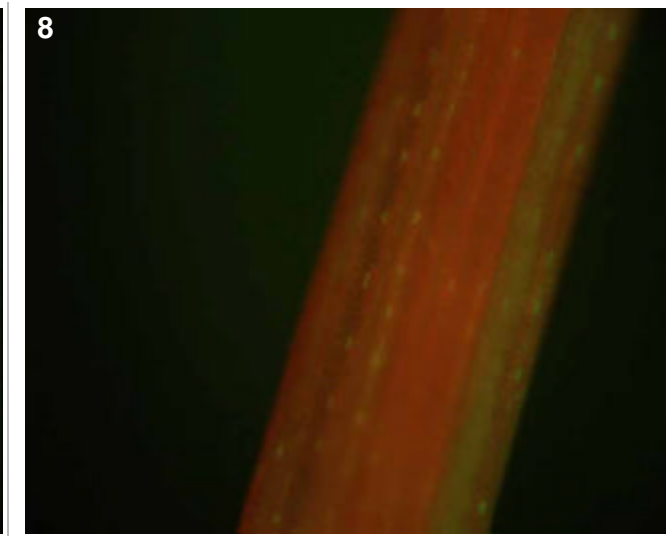
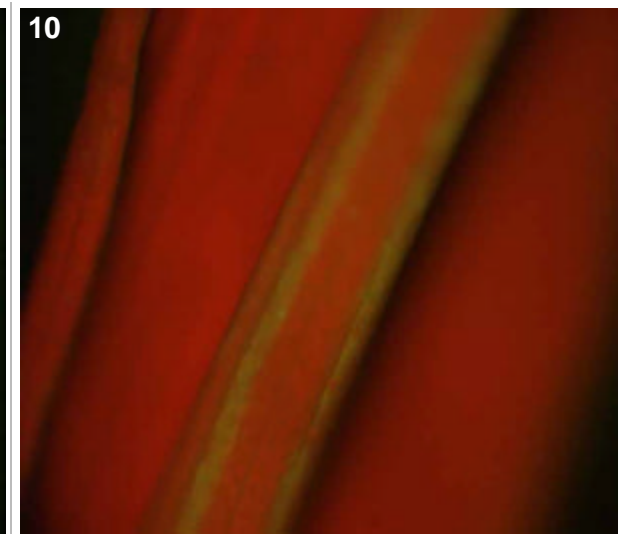
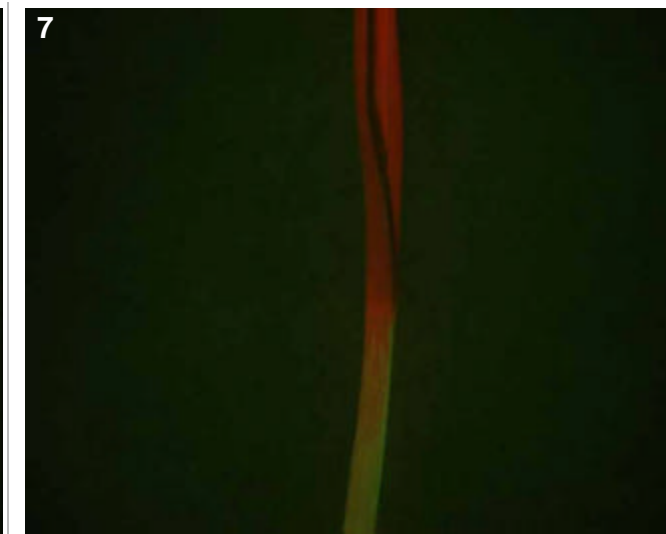
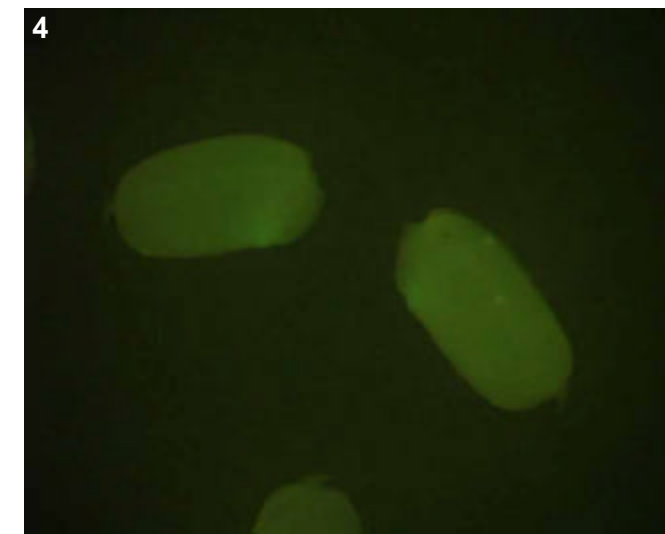
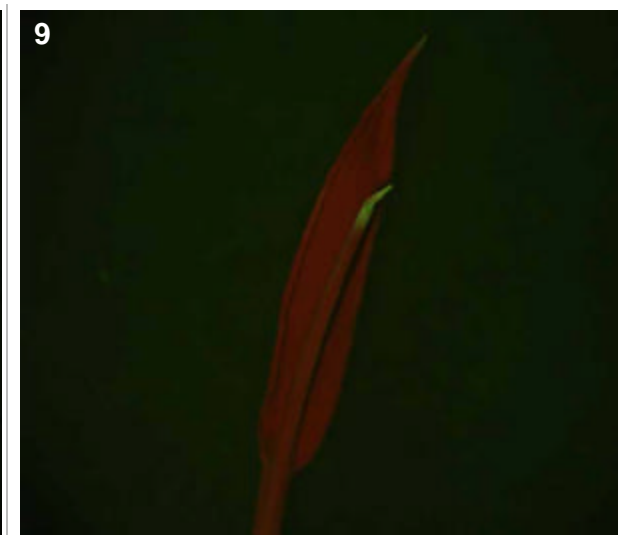
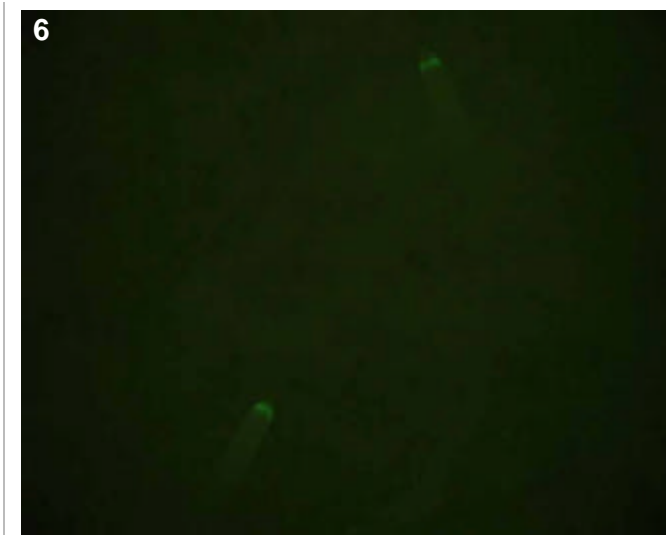
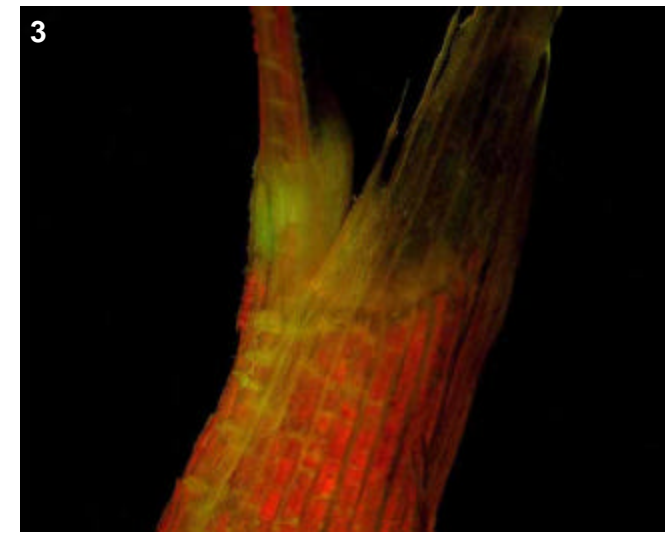
Expression concentrated in the collar, not much into surrounding vascular tissue. Also bright expression in lodicules

### T1 seed comments

Expression faint in either the scutellum or embryo, for 3/5 seeds

### T1 seedling comments

A fantastic root line because expression appears very specific to the root apex region, no where else. Bring many for confocal, may be variable. In shoot, strong expression in young leath and sheath tissues--mesophyll and stomata. Tips of leaves bright too.



# Genotype: AOP H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

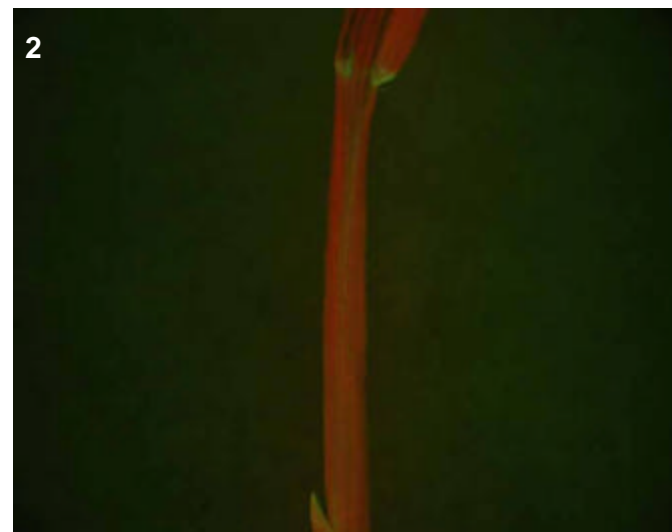
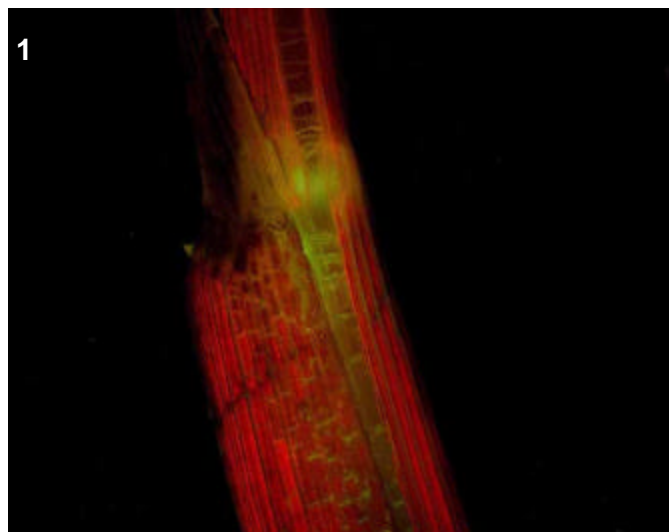
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 40



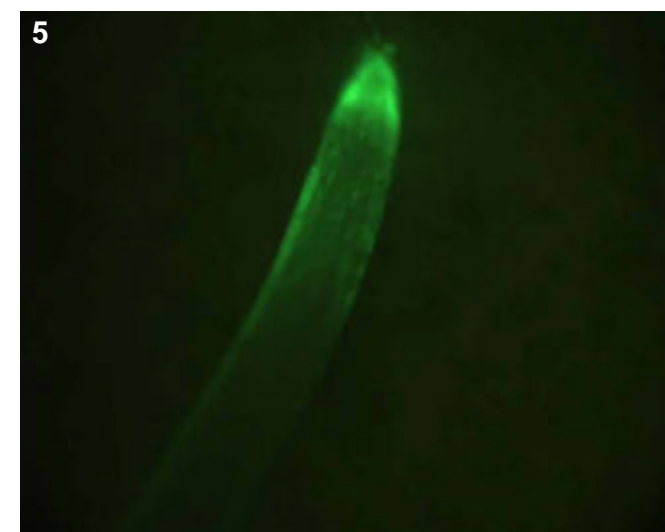
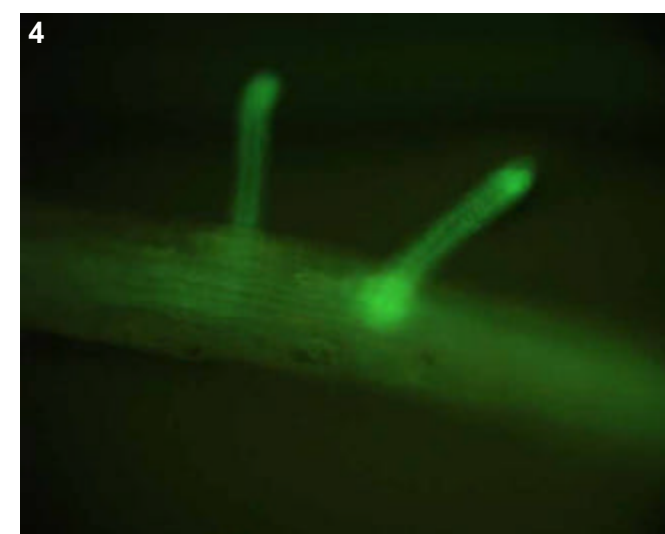
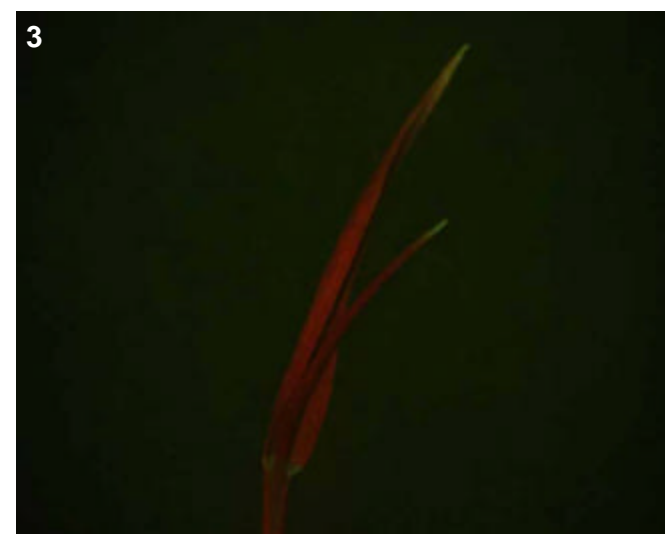
### T0 comments

Moderate expression in collar and immediate vascular tissue of sheath

### T1 seed comments

### T1 seedling comments

Expression strong in vascular of root and shoot.



# Genotype: AOQ C11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

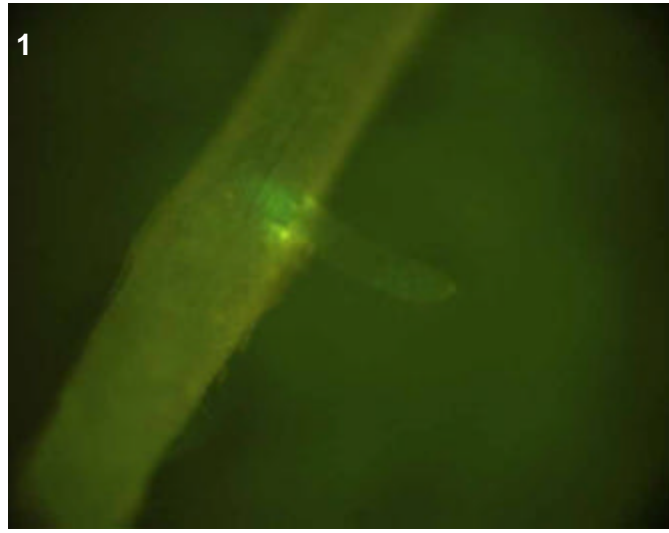
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 21



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint root expression, only at the base of emerging lateral roots. Perhaps faint vascular activity in the outer-edge of coleoptile as well? Perhaps a good line for confocal study.



# Genotype: AOQ F01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-3  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

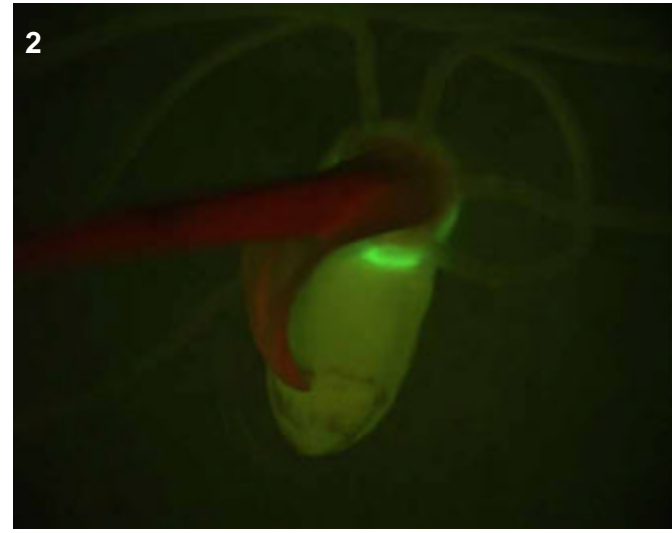
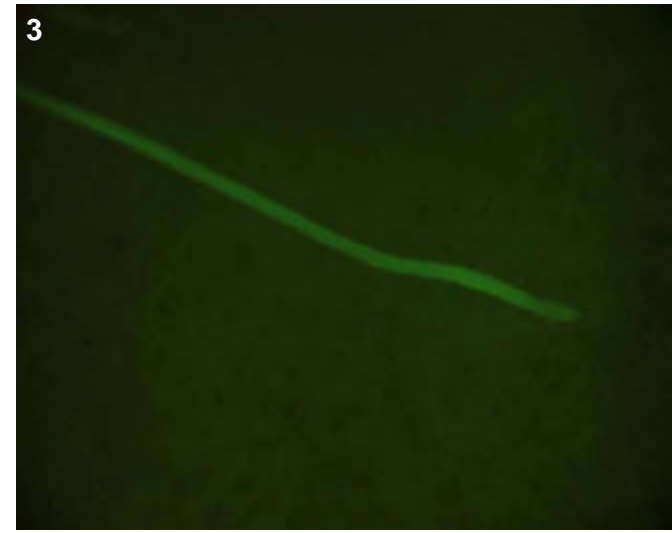
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 14



## T0 comments

## T1 seed comments

## T1 seedling comments

Two GFP+ plants, one with long bright lateral roots, crown roots have no expression. Perhaps the other plant not mature enough to have lats. The plant with no expression in root did have bright scutellum/endosperm, however.

# Genotype: AOR C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint expression in lateral roots only, difficult to photograph. A root-specific line, could be interesting for confocal.

# Genotype: AOR C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

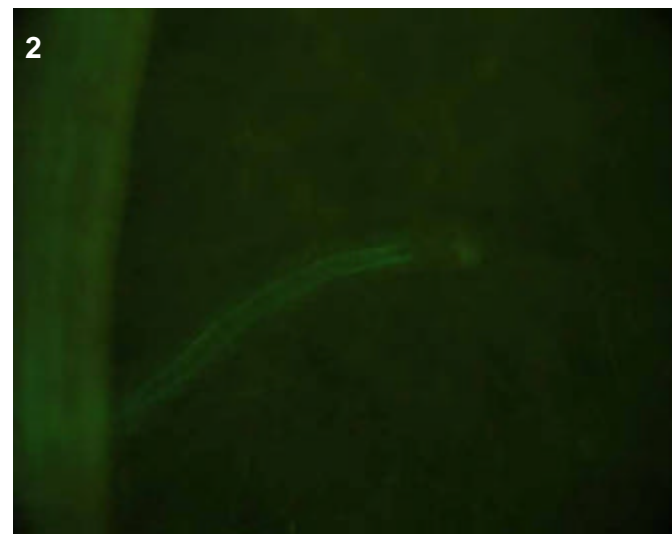
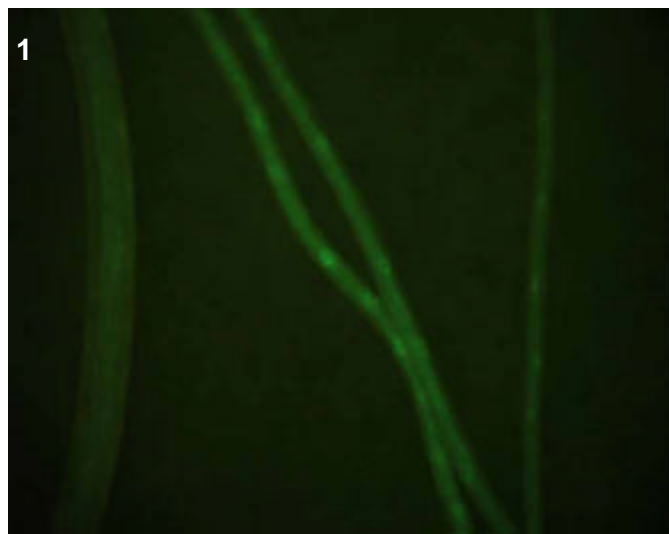
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

A root-specific line. Bright crowns and lats. Confocal on lats could be very interesting.

NOTE: Both of the seedlings died after transfer to greenhouse, no T2 seed produced.

# Genotype: AOR D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

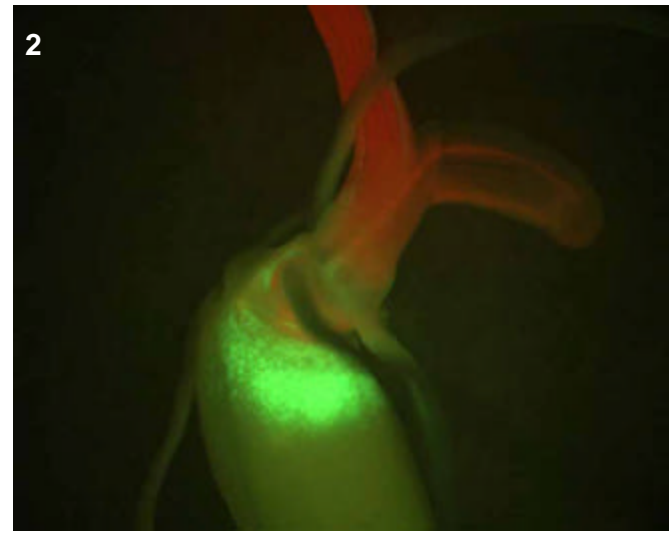
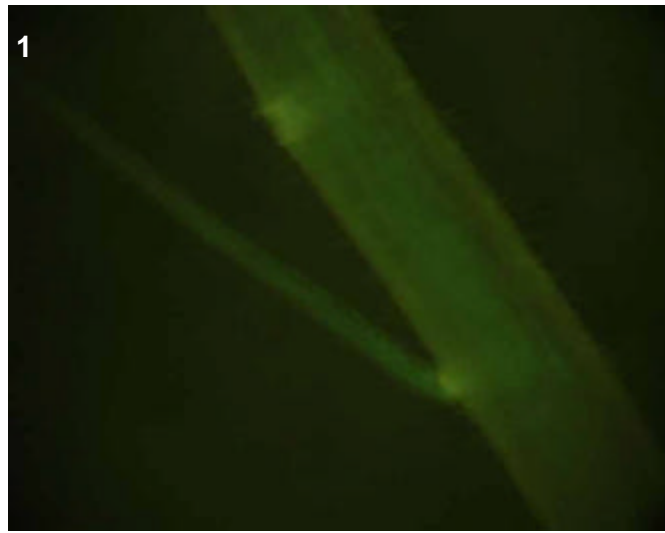
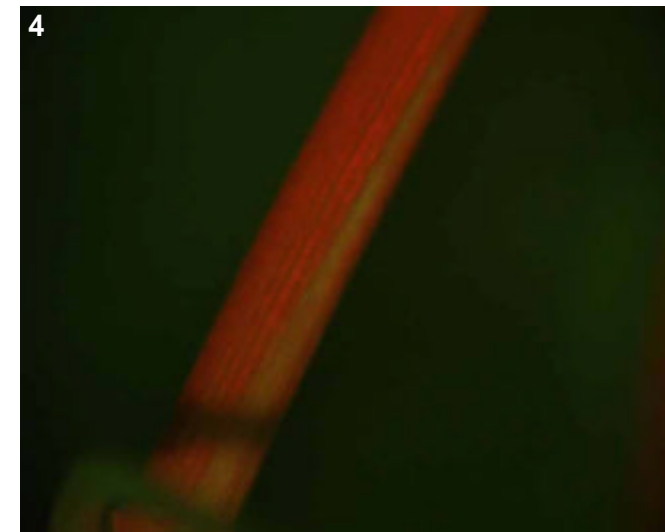
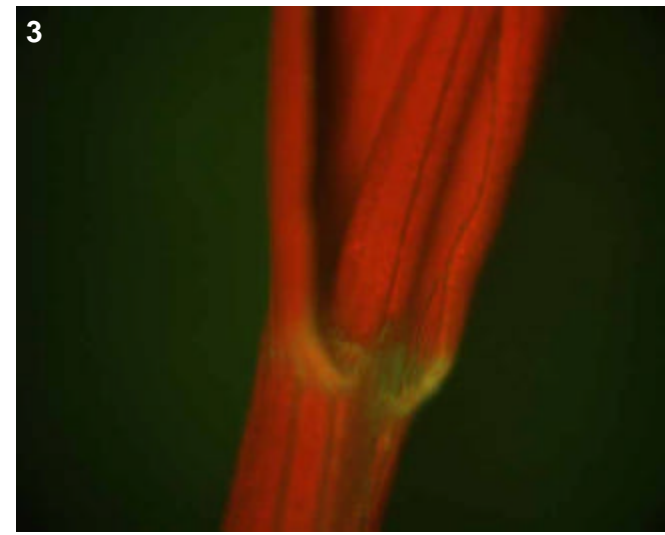
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 76



## T0 comments

## T1 seed comments

## T1 seedling comments

Brightest expression in endosperm. General expression through lats and crowns. Faint expression in collar and around edges of first leaf.

# Genotype: AOR D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

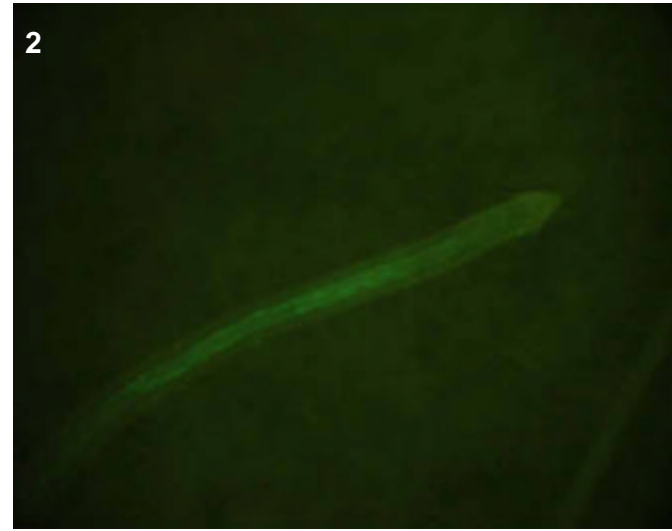
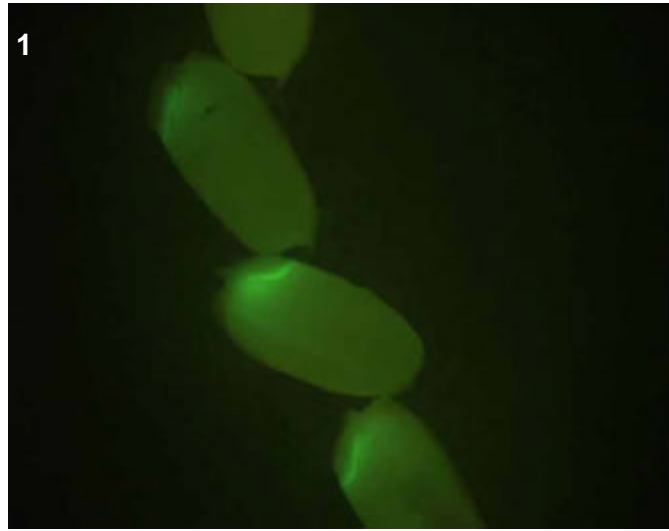
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse? YES, 2 GFP+ plants

Confocal?

Number T2 seed produced: 50



## T0 comments

## T1 seed comments

5/5 show bright expression in scutellum

## T1 seedling comments

A lateral root-specific line, could be great for confocal. Expression is very faint.

# Genotype: AOR D09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

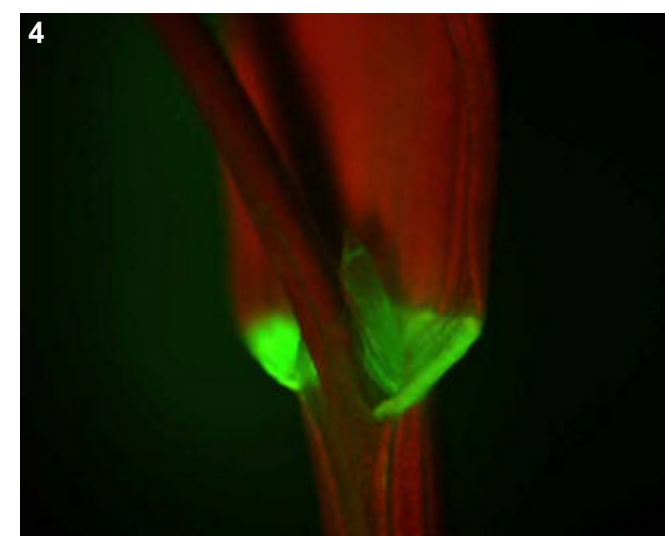
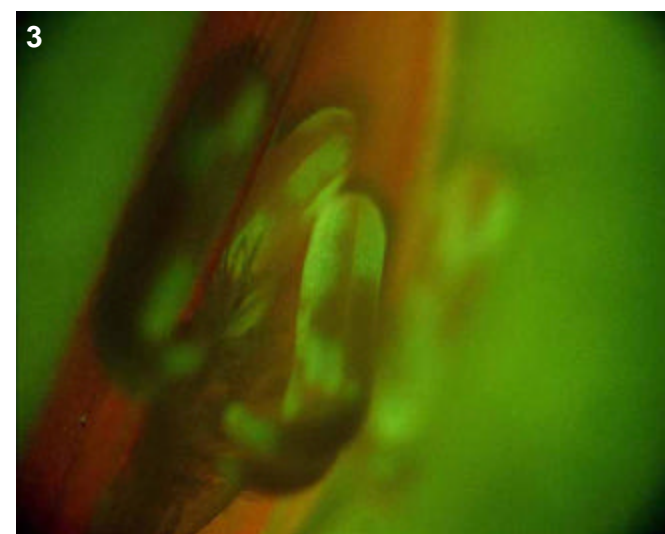
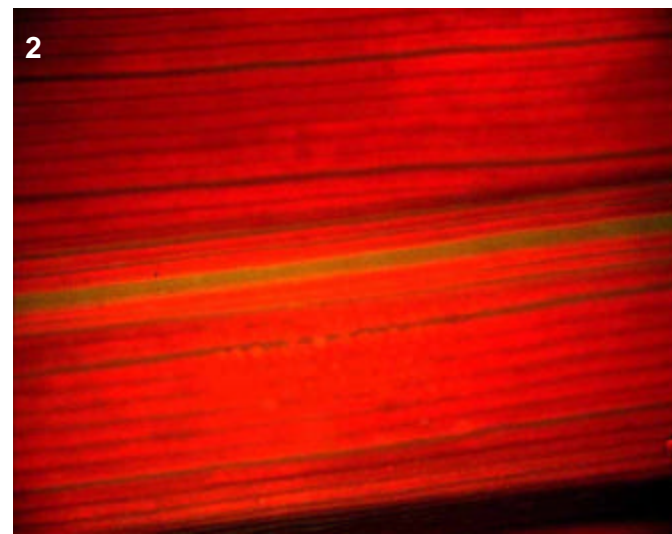
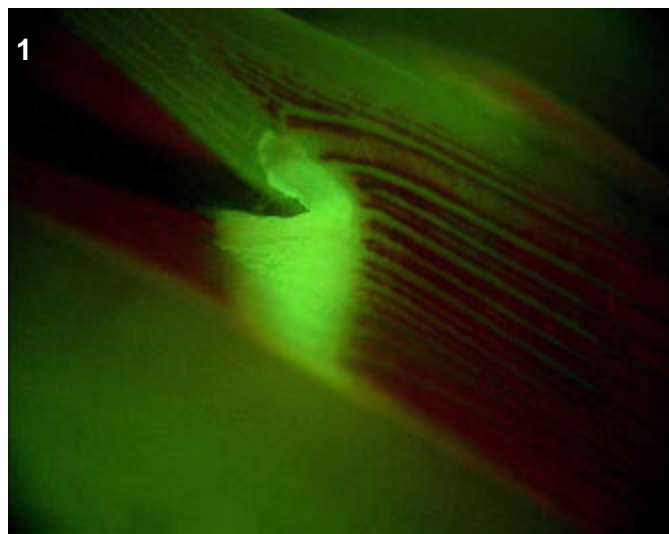
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 341



### T0 comments

Very strong expression in collar and surrounding vascular of both leaf and sheath, as well as patchy expression in anthers.

### T1 seed comments

### T1 seedling comments

Seedlings (3/5) shows expression in collar and around lateral roots.

# Genotype: AOR E05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

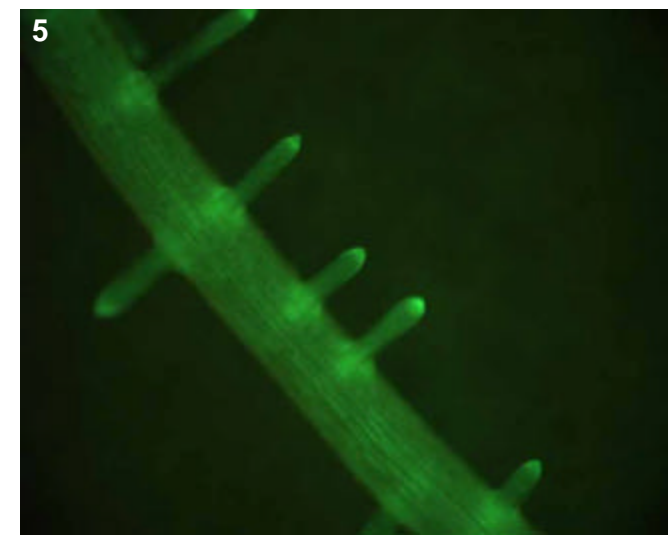
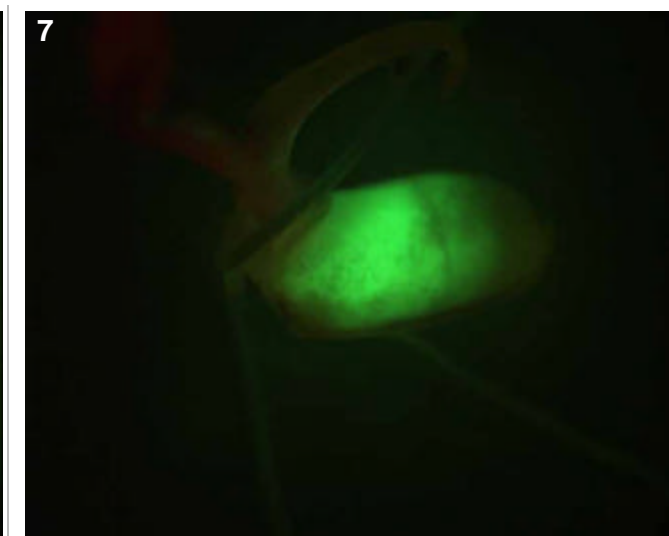
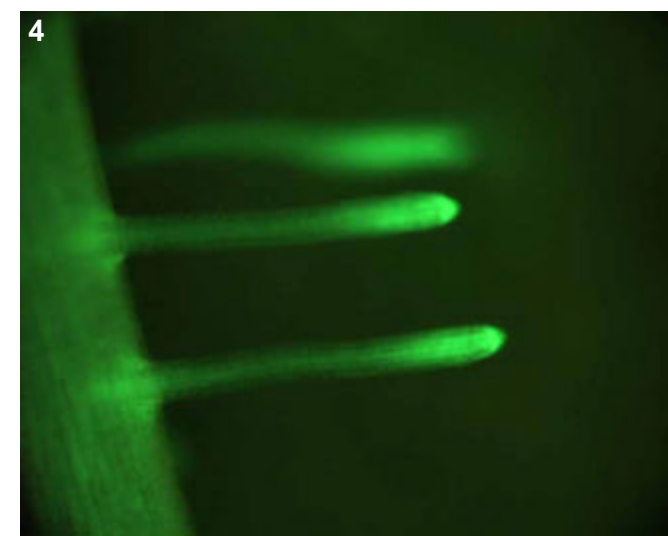
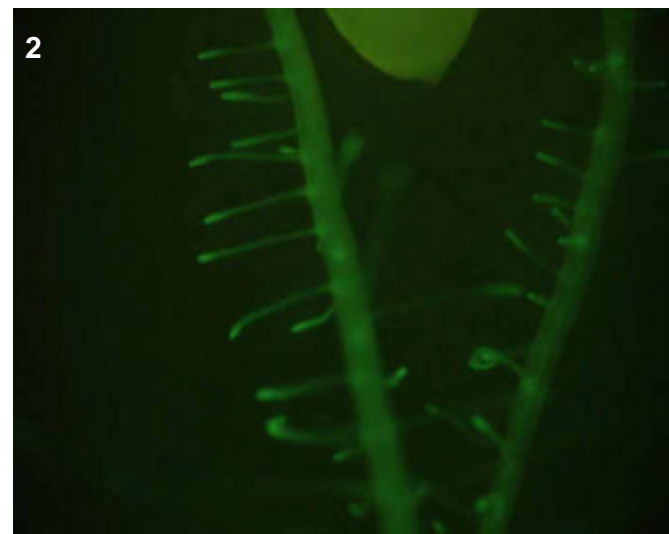
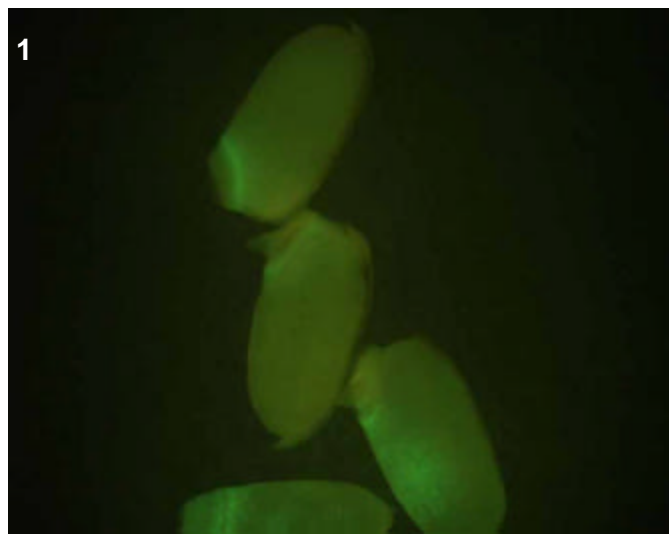
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

All 5 seeds have expression in scutellum region, while only 2 have scattered expression in aleurone.

## T1 seedling comments

Extremely bright roots, note the concentrated expression towards tip and cap. Also very bright endosperm, though nothing in the shoot.

# Genotype: AOR E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

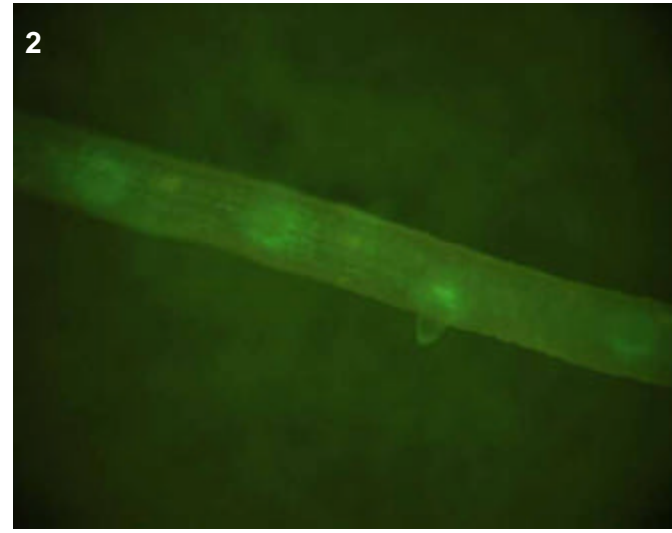
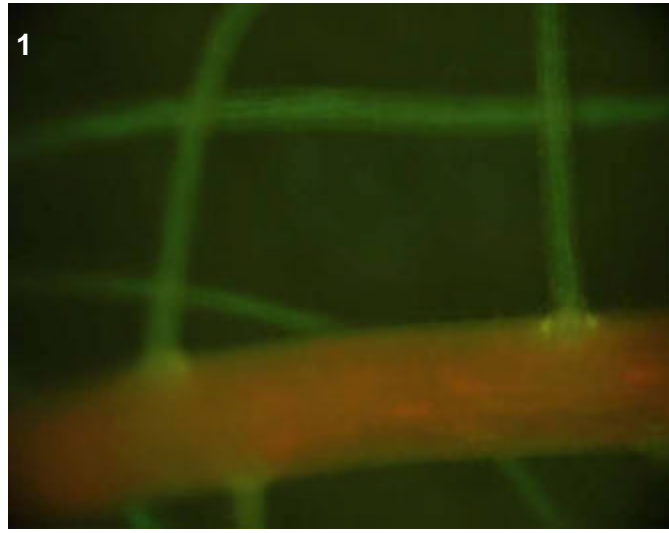
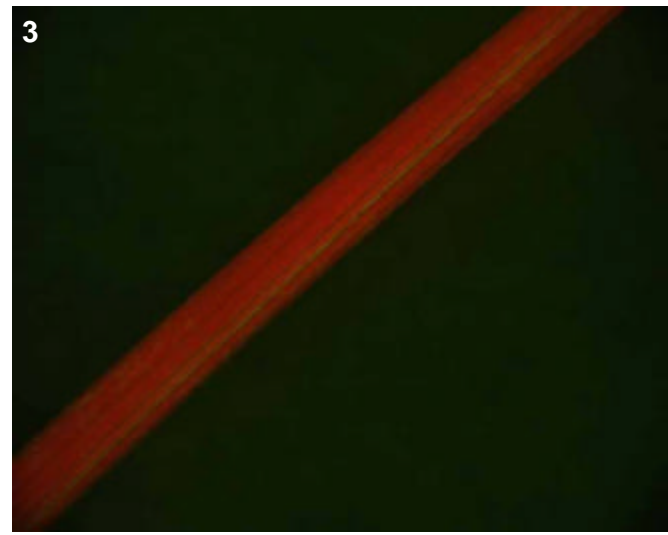
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 16



### T0 comments

### T1 seed comments

### T1 seedling comments

Medium vascular expression in roots, not much in the shoot other than edges of leaf.



# Genotype: AOR F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

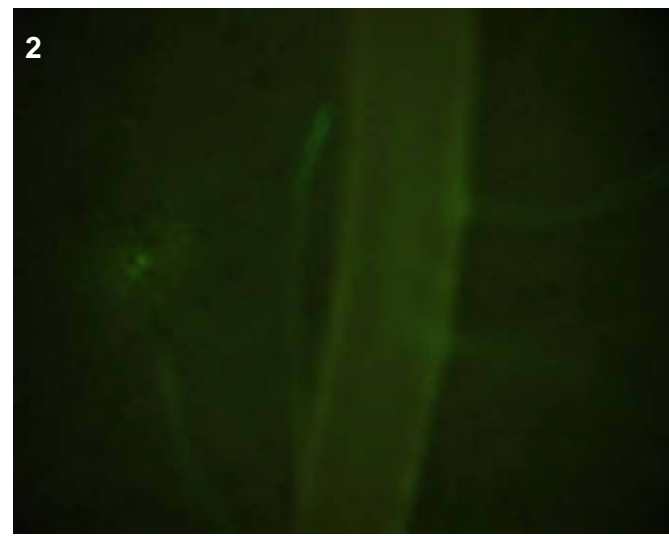
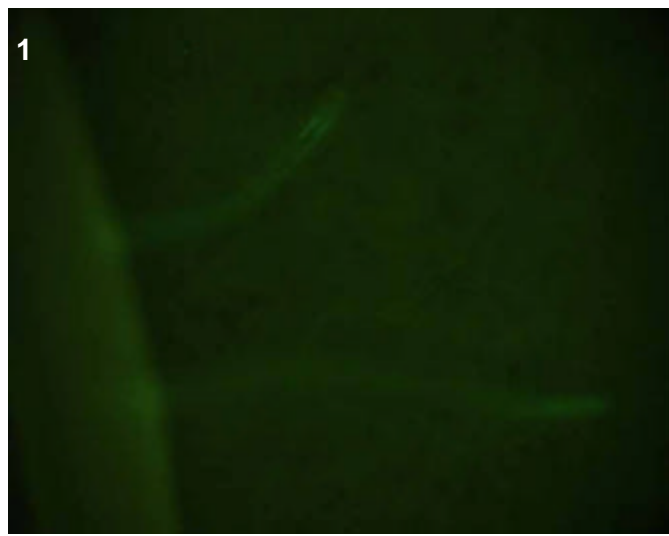
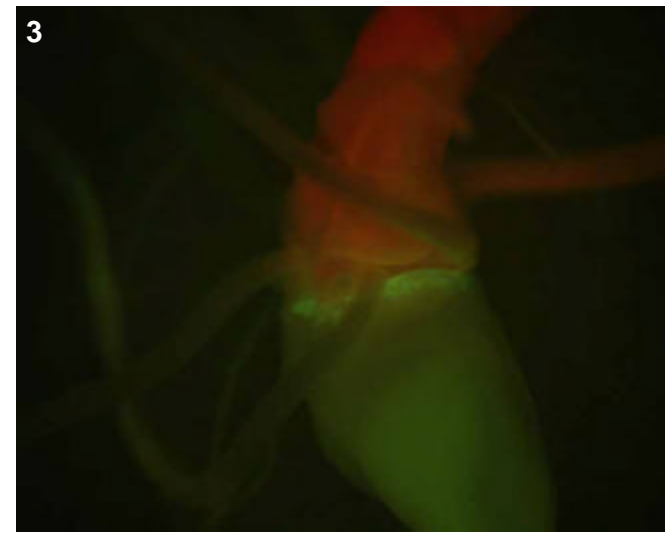
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 23



## T0 comments

## T1 seed comments

## T1 seedling comments

Could be good for confocal, faint expression specific to the lateral roots. A bit of expression in the endosperm as well.

# Genotype: AOR F10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

Bright collar and sheath vascular. No flowers examined.

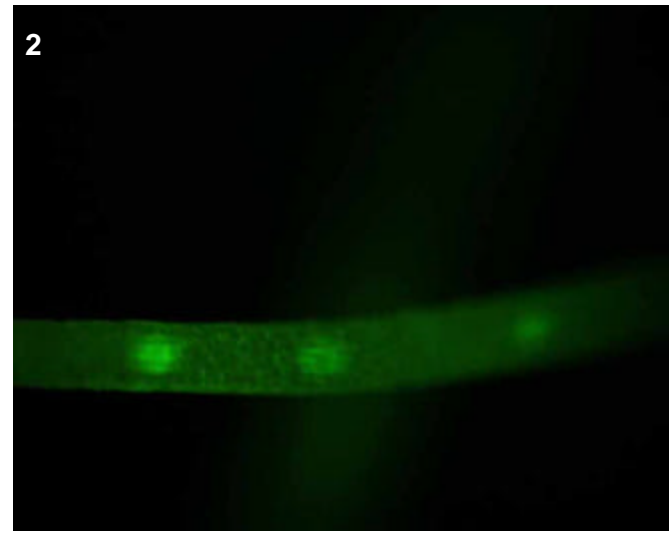
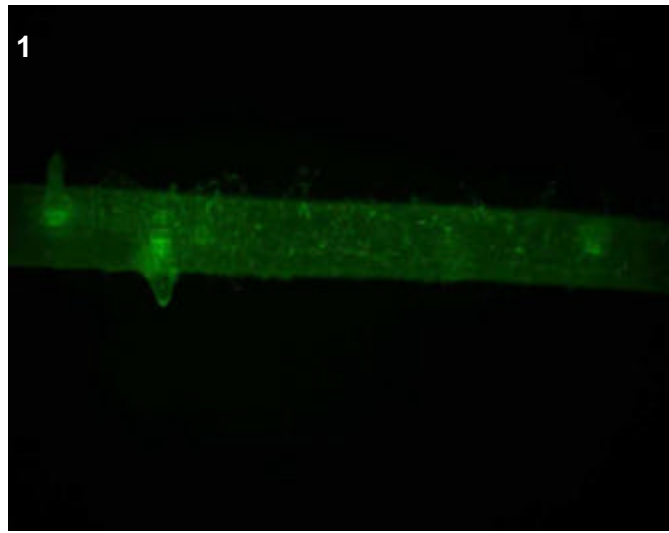
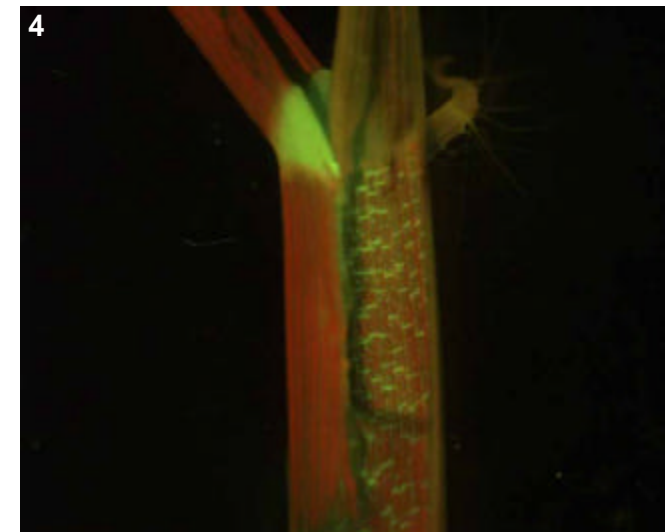
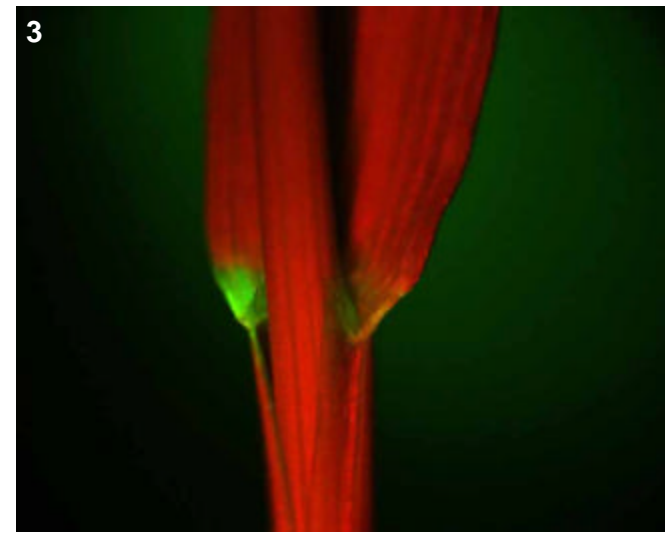
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 48



## T0 comments

## T1 seed comments

## T1 seedling comments

Seedlings (2/5) showed these bright spots in the seminal roots where lateral roots are emerging. Also expression in collar region of shoot.

# Genotype: AOR F11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

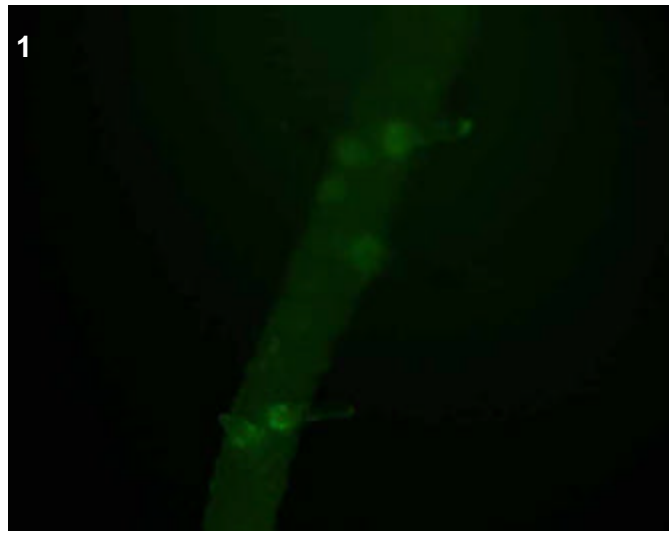
No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

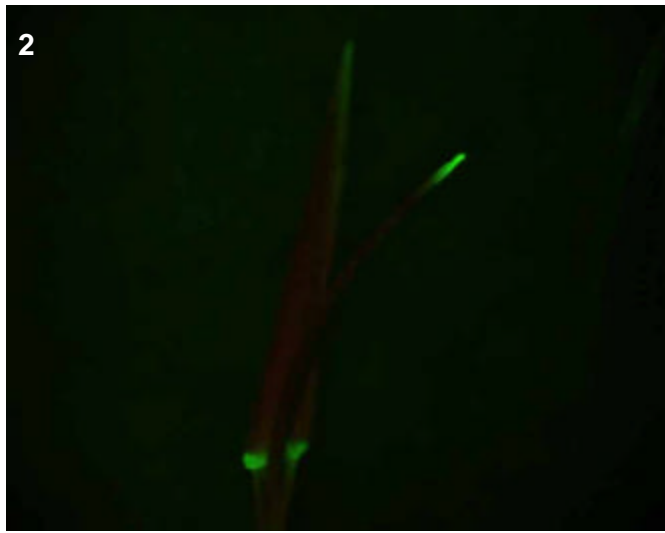
**Confocal?**

**Number T2 seed produced:** 270

1



2



### T0 comments

Possible sheath and vascular GFP activity in the adult plant (no pics taken).

### T1 seed comments

### T1 seedling comments

Seedling (1/5) shows GFP around emerging lateral roots, and expression in the collar and tip of second leaf.

# Genotype: AOR G04

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant: 1  
T1 seed/seedling: 2-8  
T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Embryo

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis  
 Constitutive

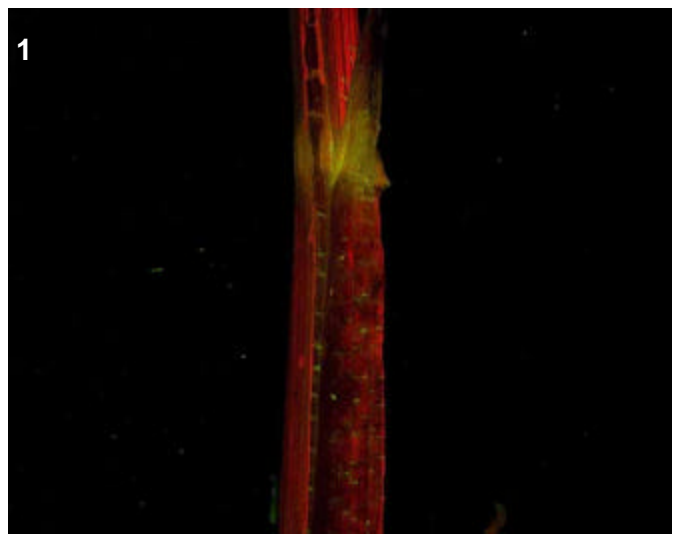
**T1 Mature**

T0 pattern verified:  
 T0 pattern verified plus:  
 New pattern:  
 No GFP detected

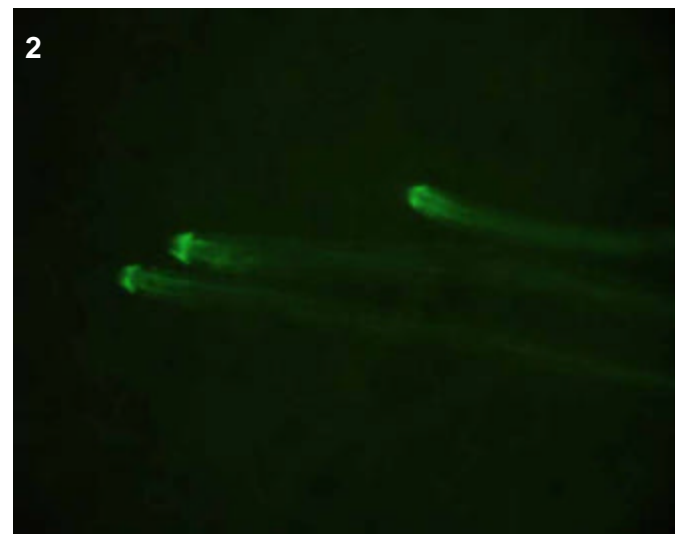
**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 1

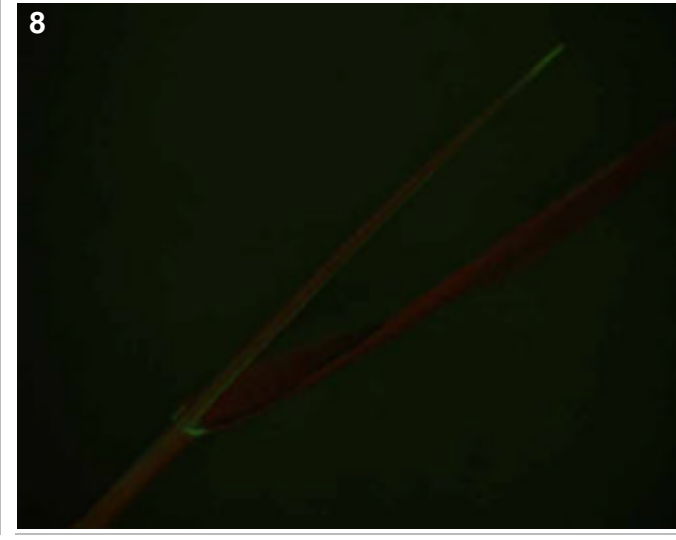
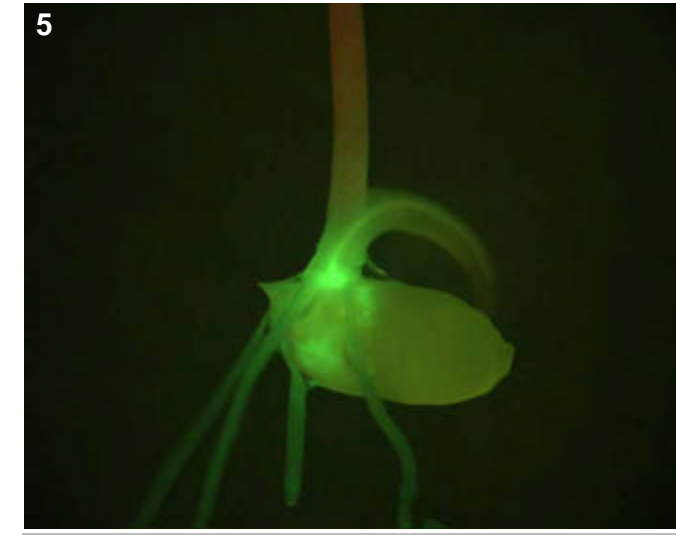
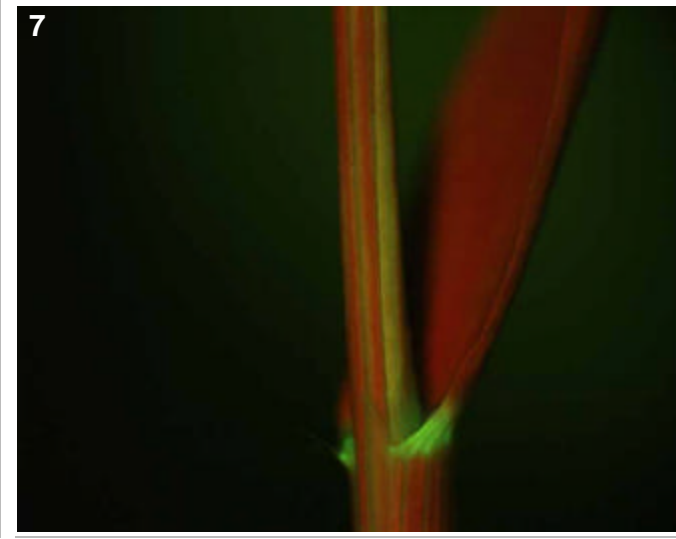
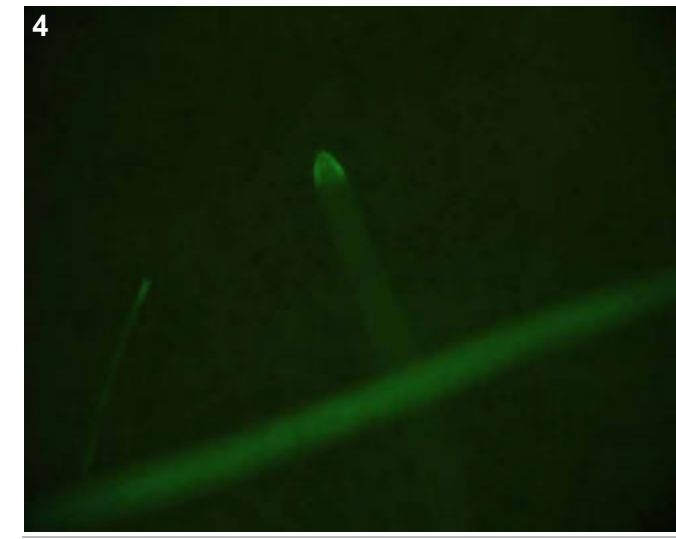
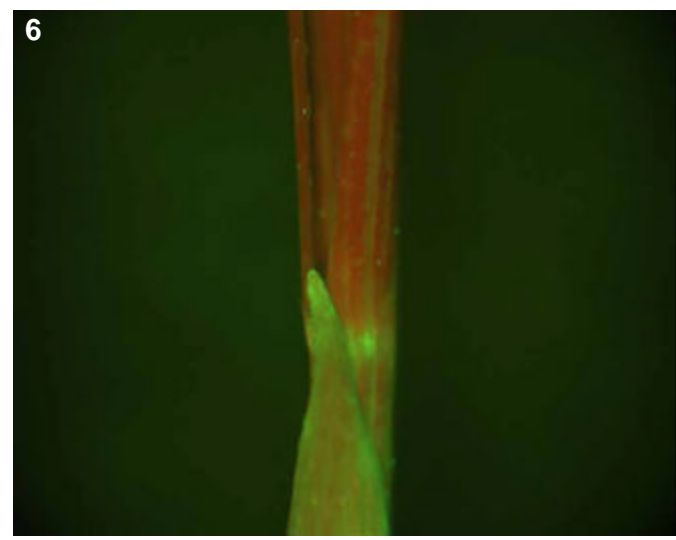
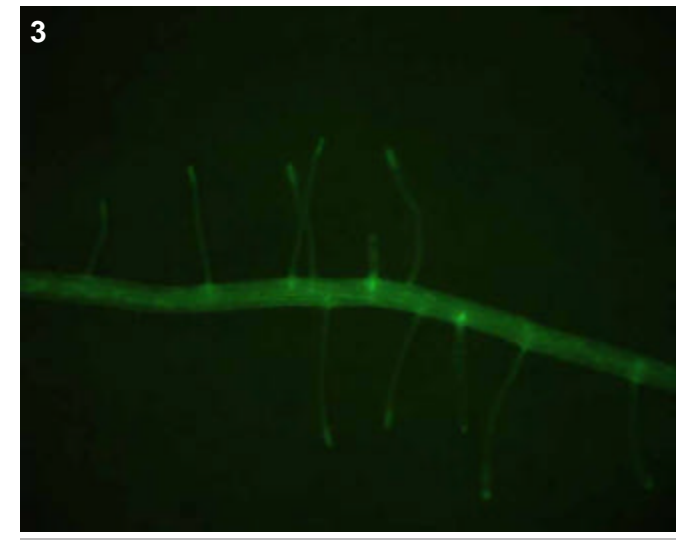


**T0 comments**  
Rather weak, narrow band of expression at collar.



**T1 seed comments**

**T1 seedling comments**  
Very bright roots, note the concentrated expression in root cap region. Also very bright shoot--base, collar, leaf tissue, sheath tissue, and tips of leaves. Possibly nice for confocal?



# Genotype: AOR G08

### Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

### Expression

- None
- Bright
- Medium
- Weak
- Unsure

### Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

### T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

### T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

### T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

### T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

### T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

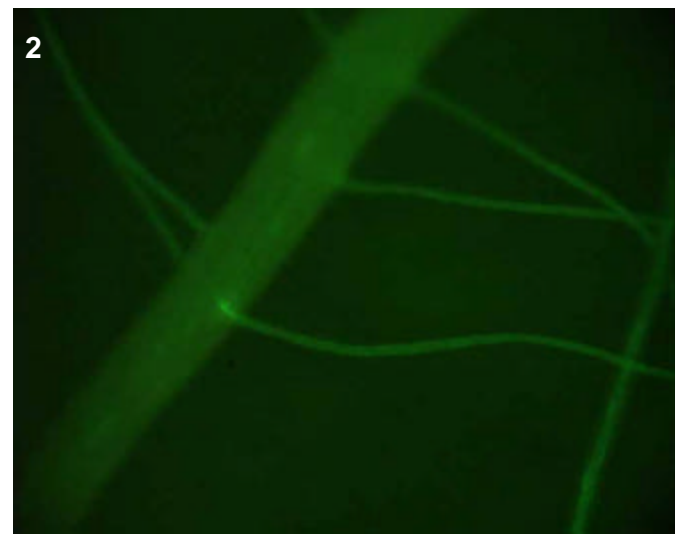
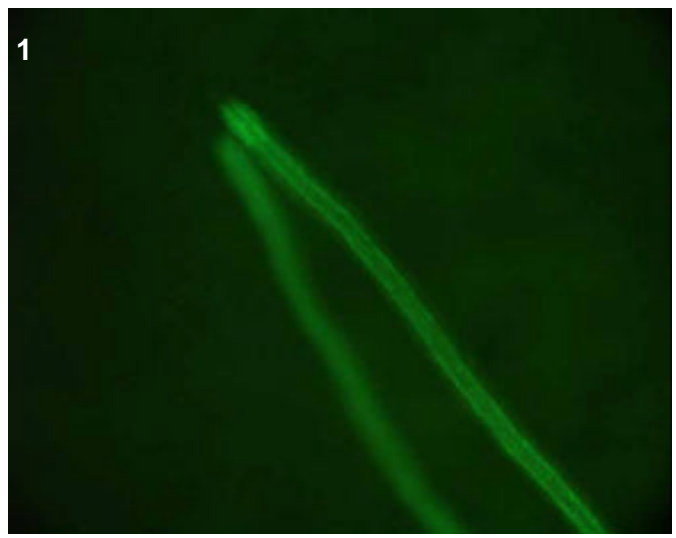
### T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:  
Bright collar, leaf/sheath vascular, floral trichomes and lodicules.
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

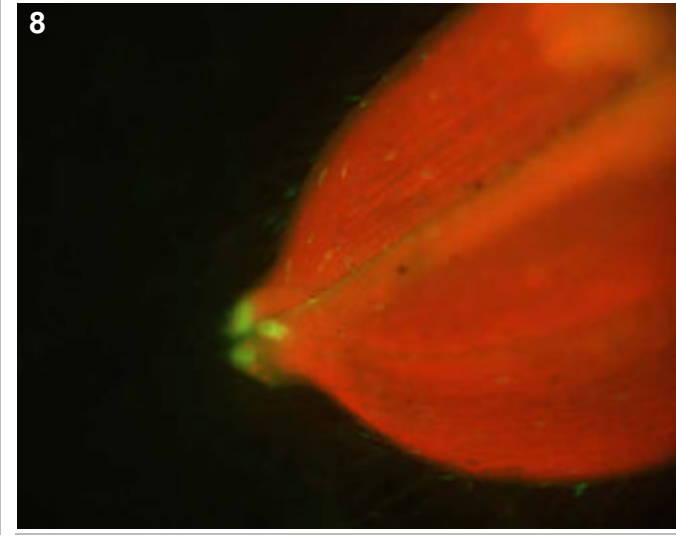
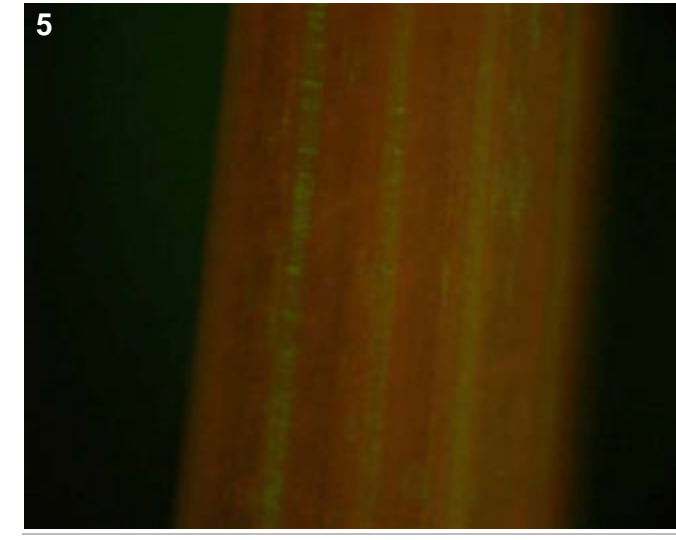
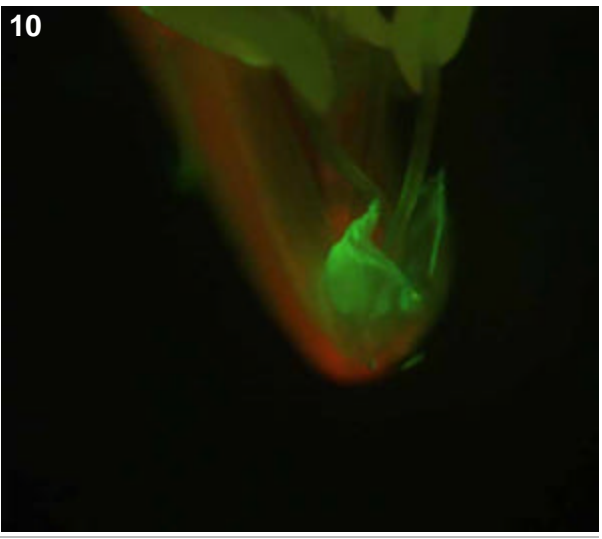
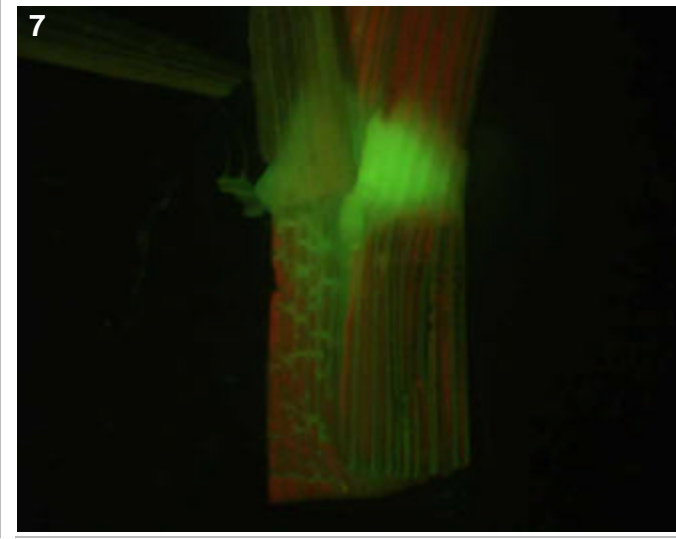
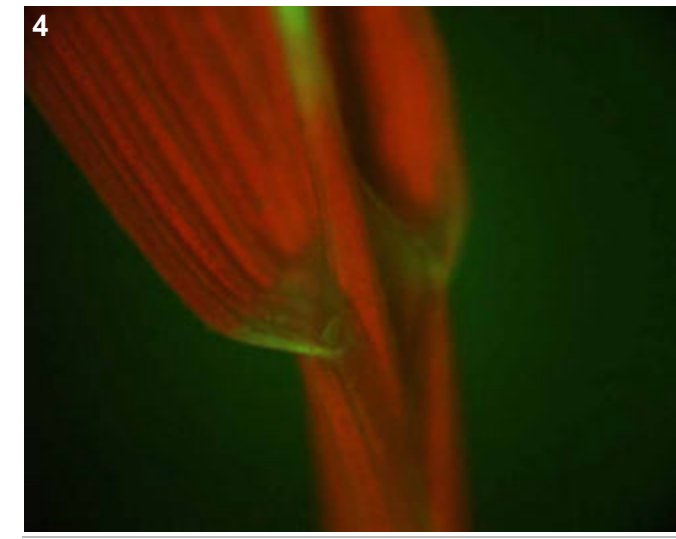
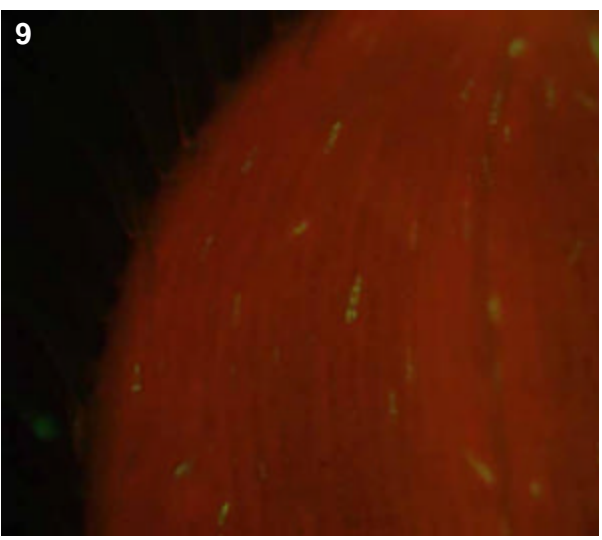
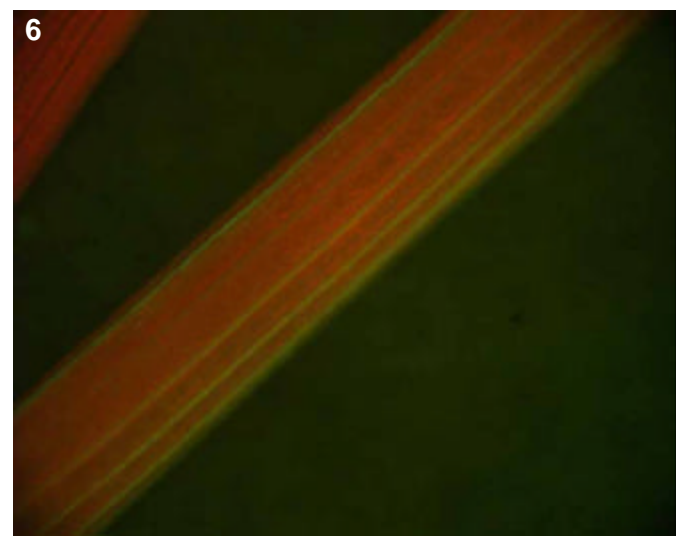
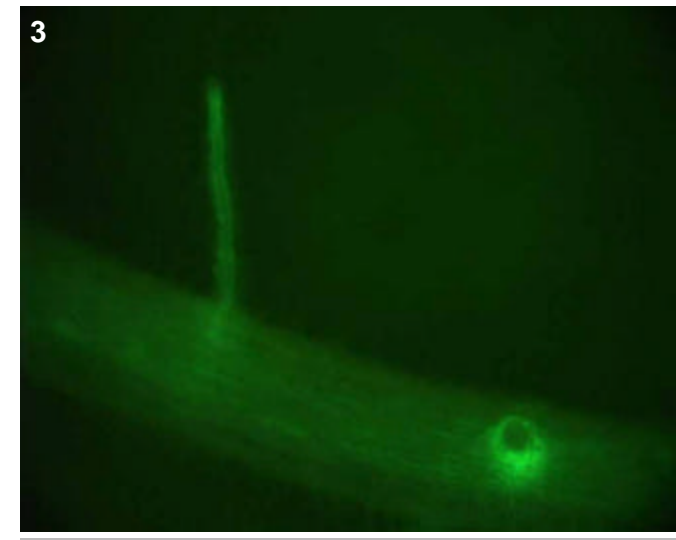
**Number T2 seed produced:** 122



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
Appears to be a vascular line.



# Genotype: AOR H02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

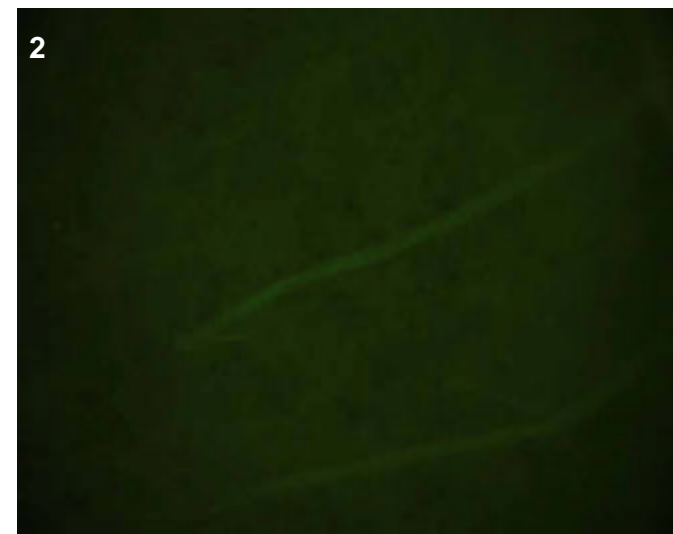
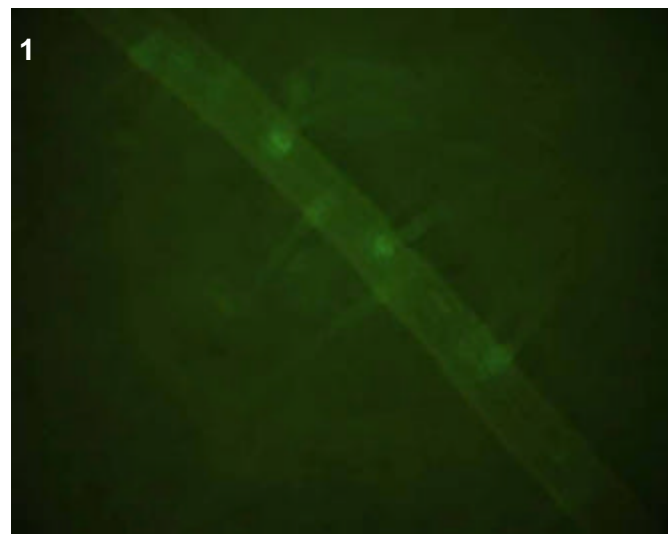
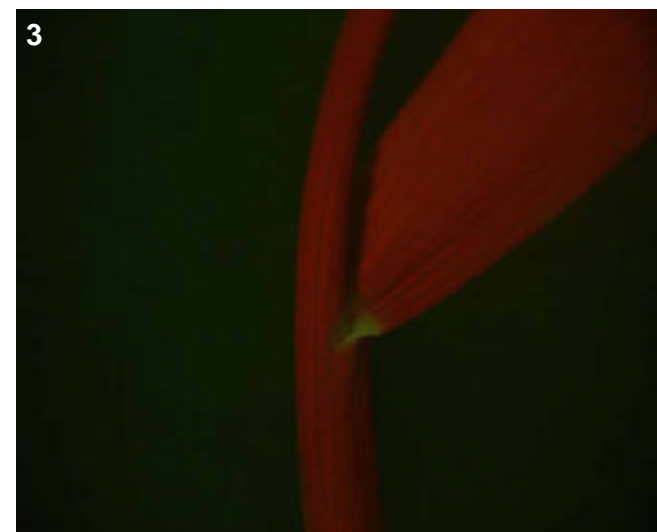
YES, 1 GFP+ plant

**Confocal?**

YES

**Number T2 seed produced:**

19



### T0 comments

### T1 seed comments

### T1 seedling comments

Very faint expression towards the base of lateral roots. Bright collar as well.

# Genotype: AOS A05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

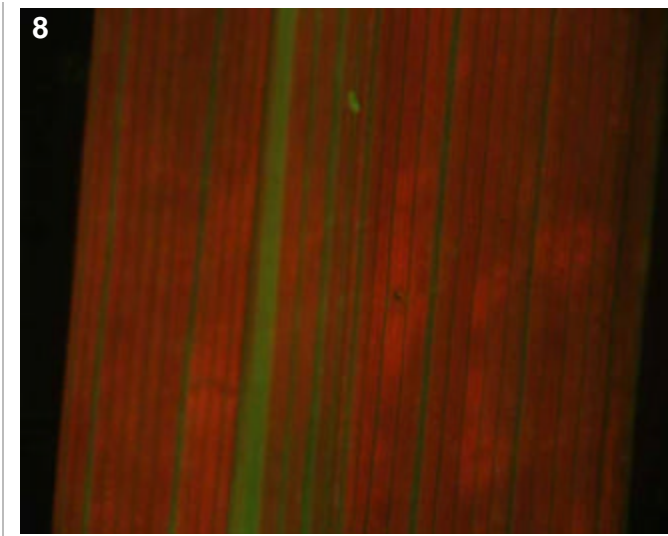
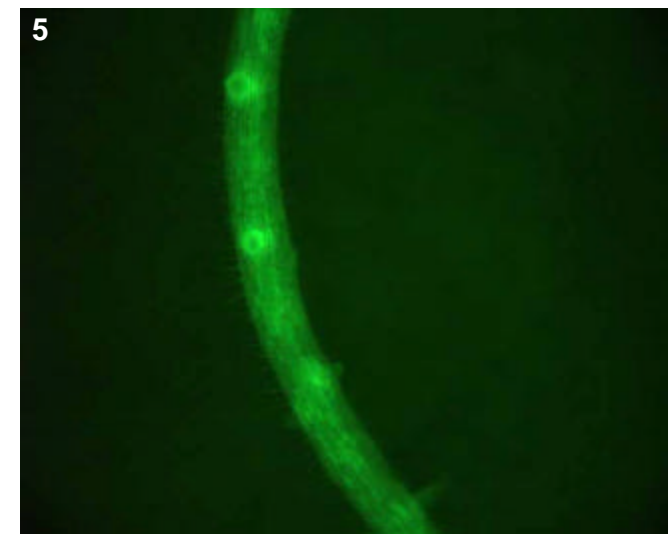
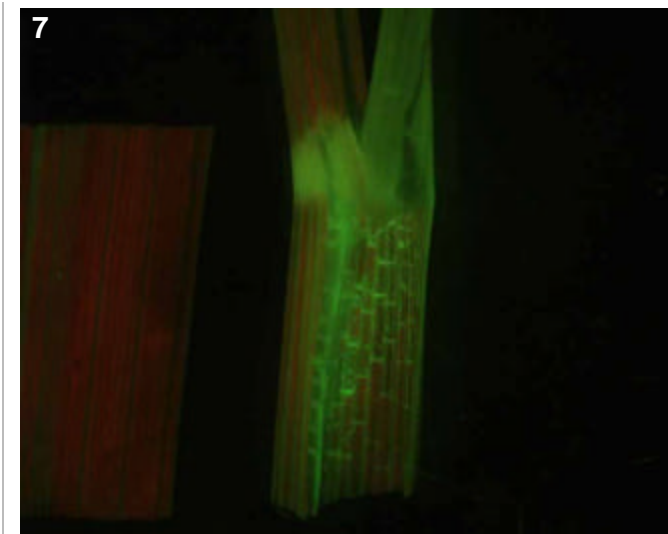
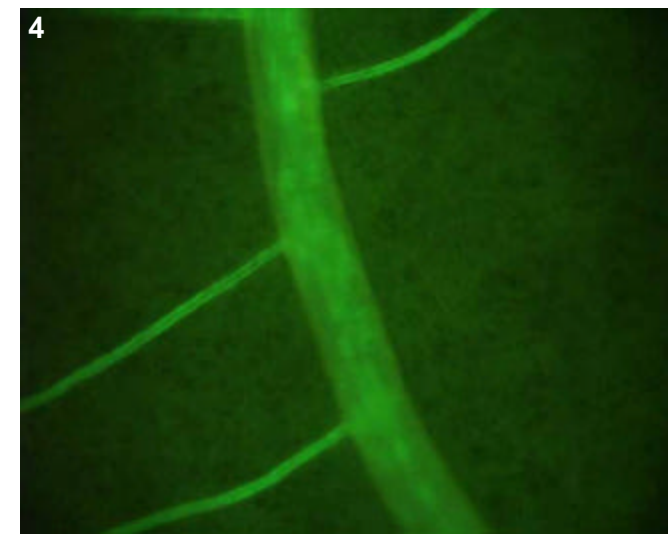
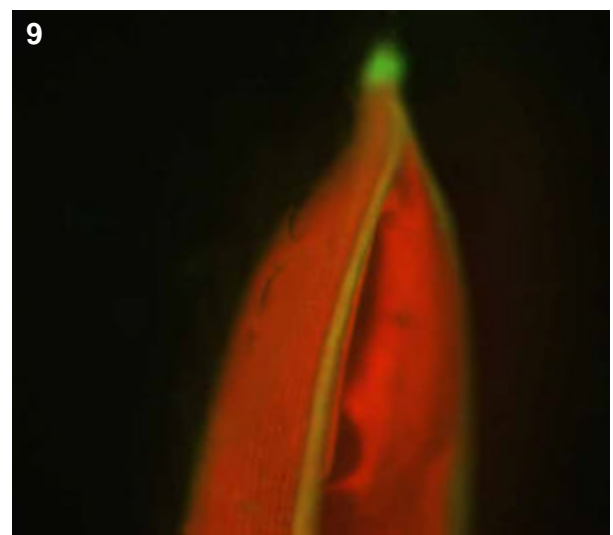
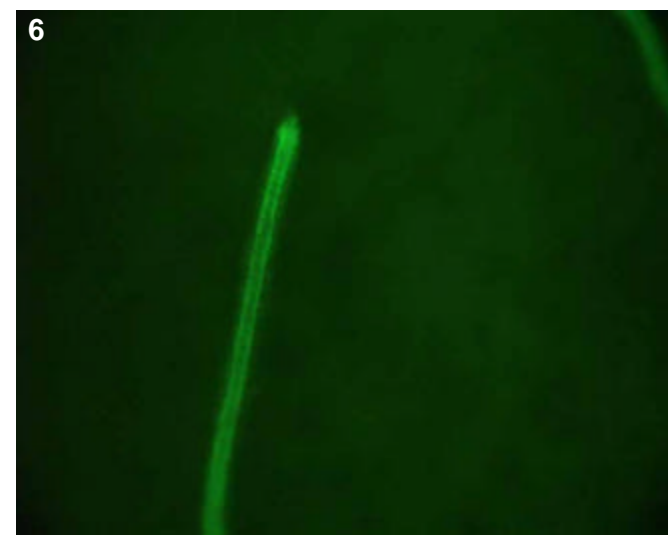
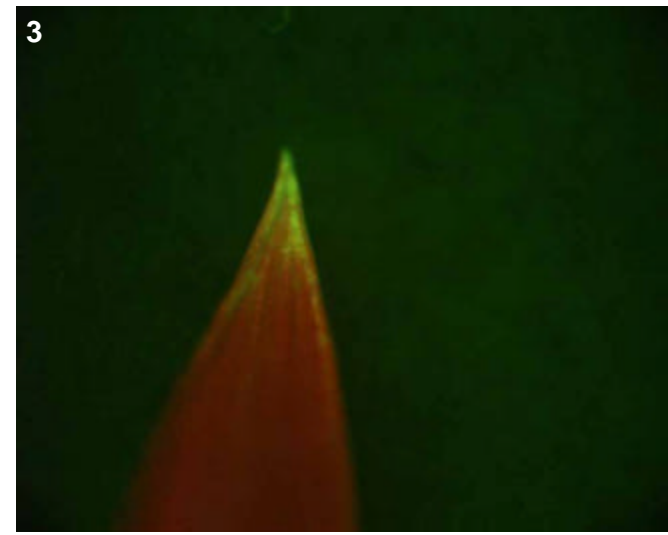
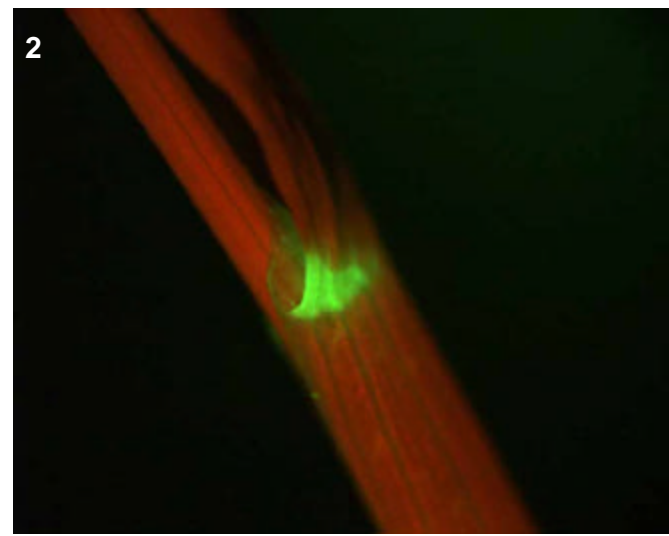
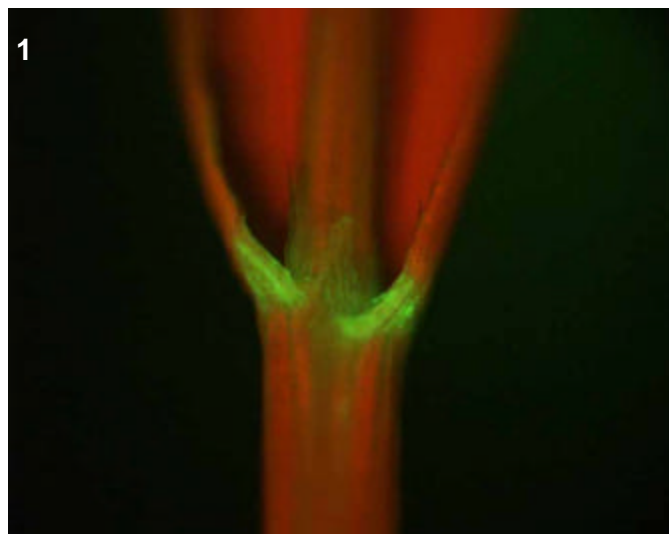
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:  
Extremely bright collar and vascular of sheath/leaf/flower. Flower tips too. Good for Julian?
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 111



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
Bright vascular line, both in root and shoot. Appears to be no expression in the root cap.

# Genotype: AOS A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

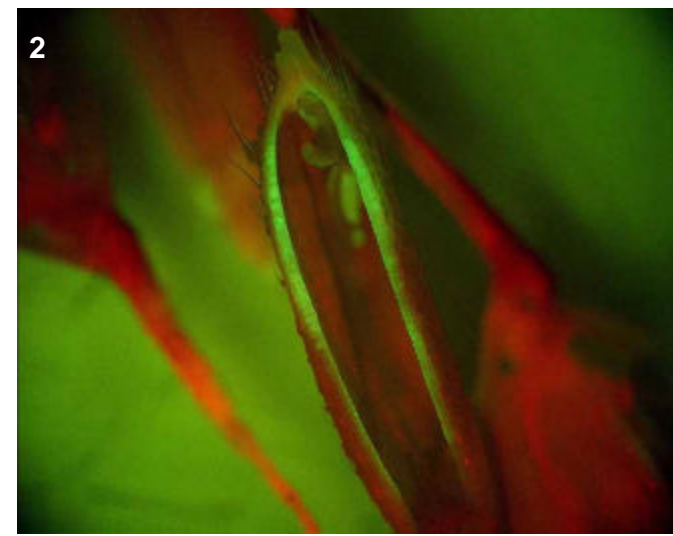
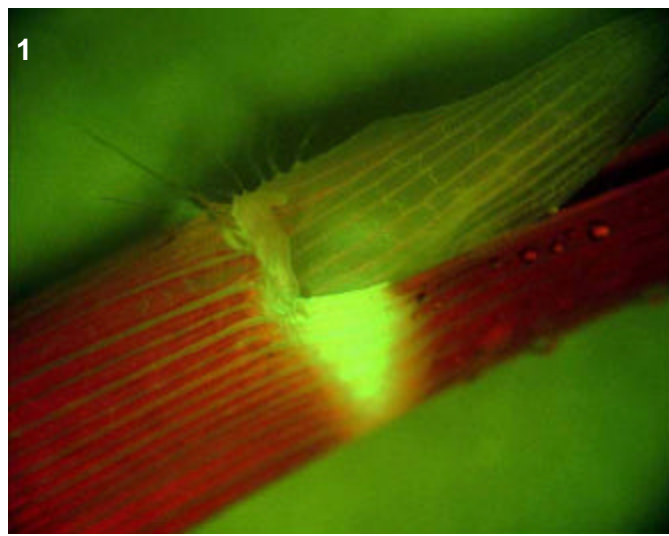
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 75



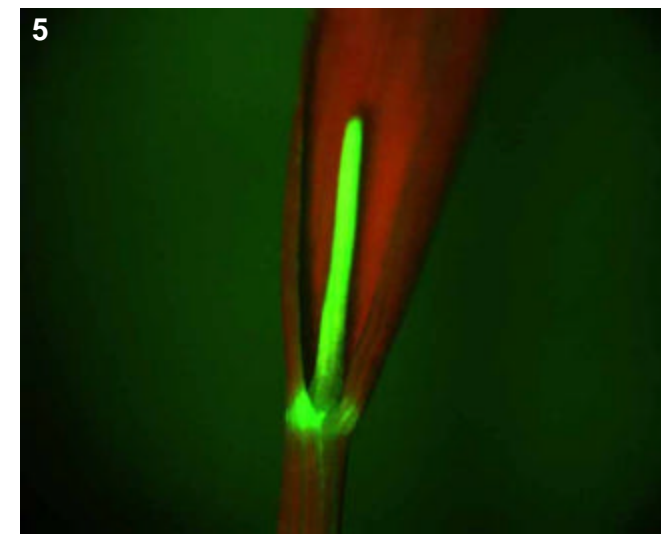
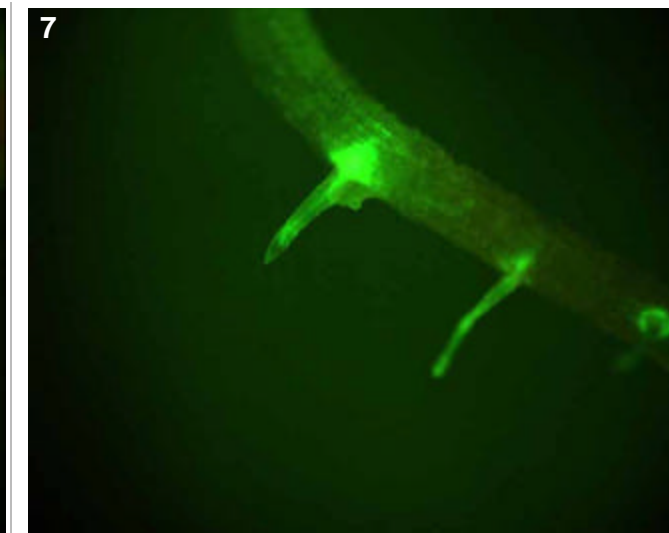
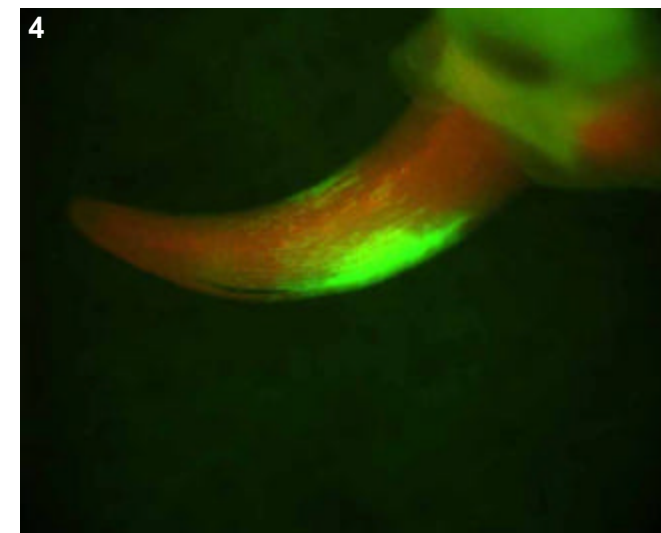
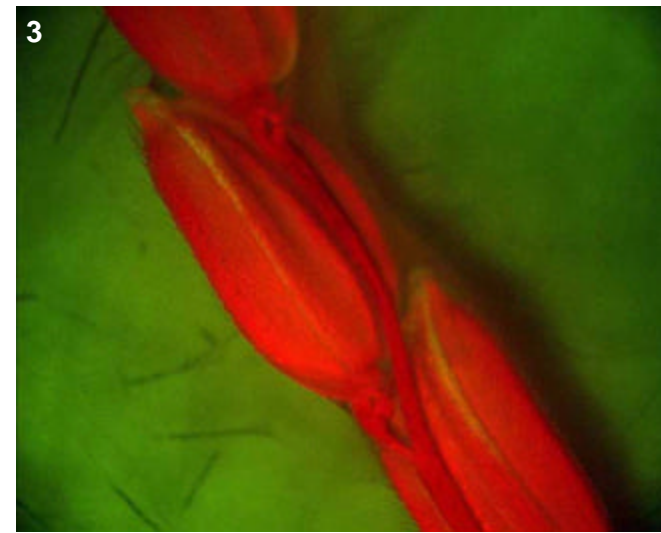
### T0 comments

A bright vascular line. Expression in the collar and surrounding sheath vascular, and in the floral vascular. Also moderate expression in the anthers.

### T1 seed comments

### T1 seedling comments

Four days post-germination, bright vascular expression in coleoptile and lateral roots (two of five seedlings). One week post-germination, shoot and root vascular, with expression concentrated around lateral roots.





# Genotype: AOS C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

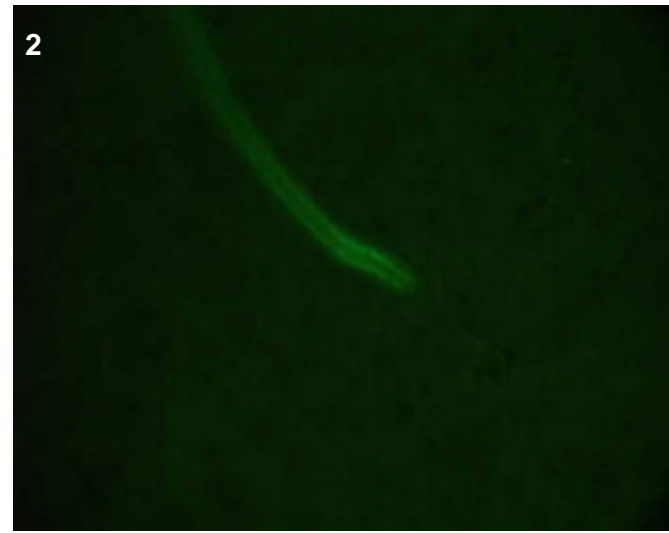
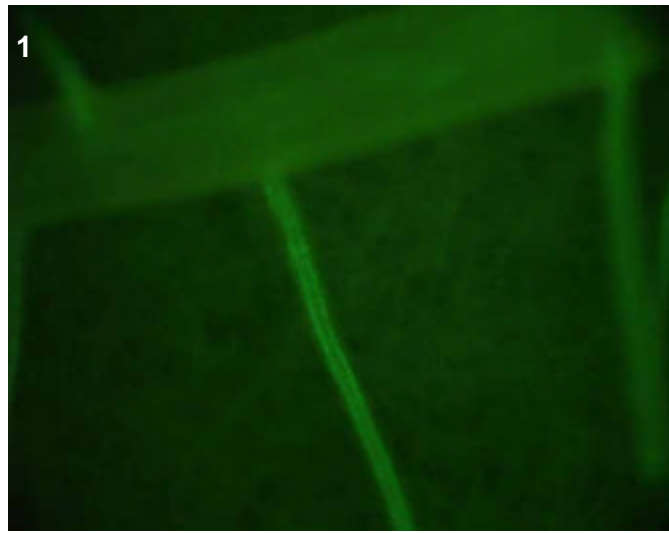
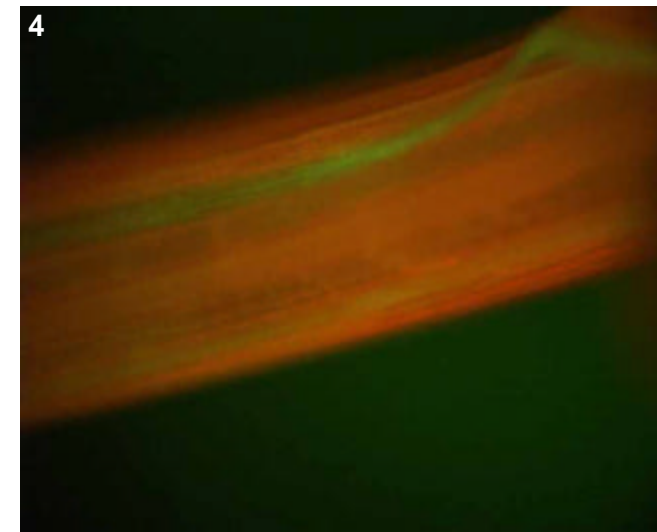
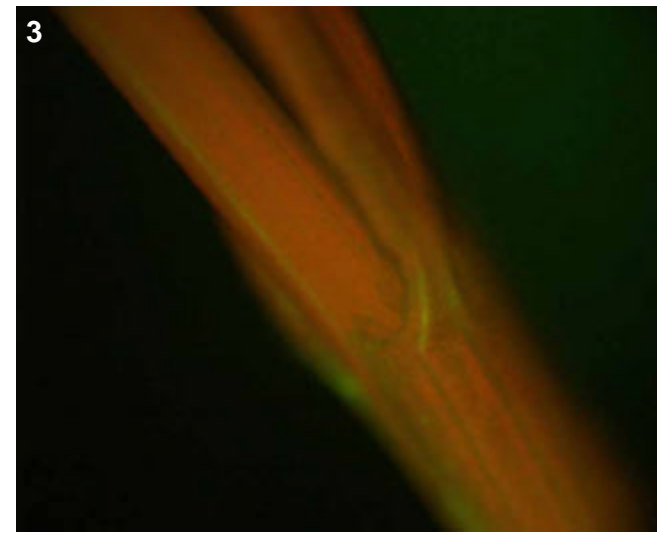
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: AOS E06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

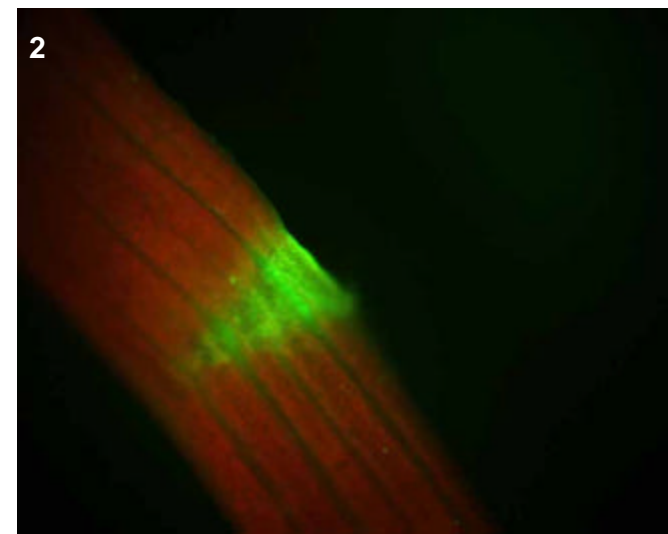
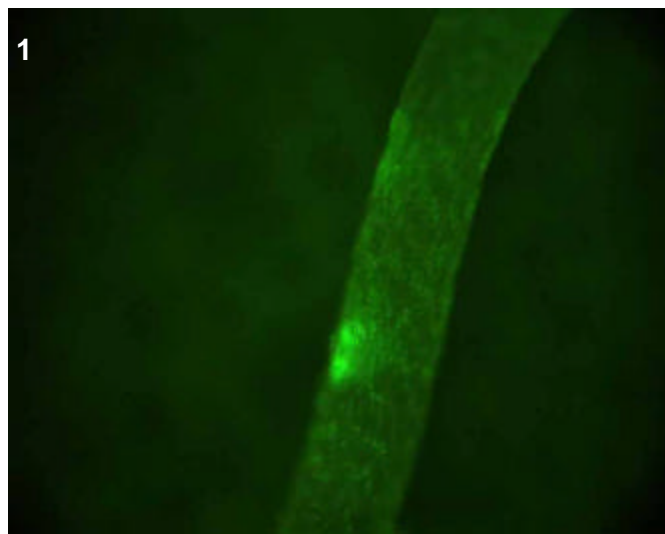
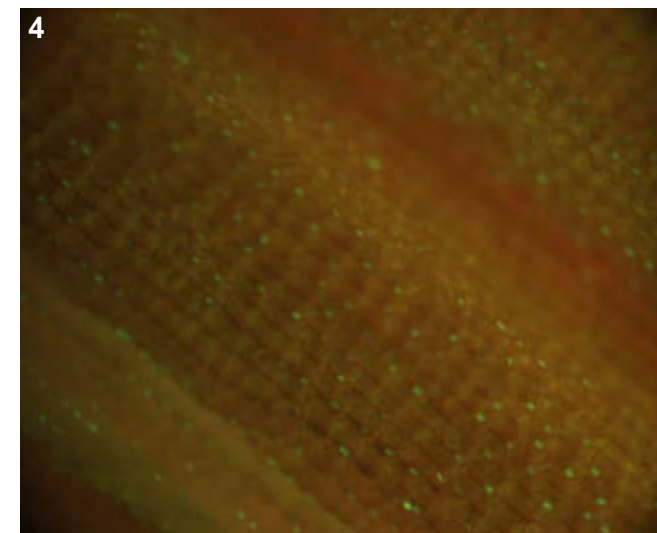
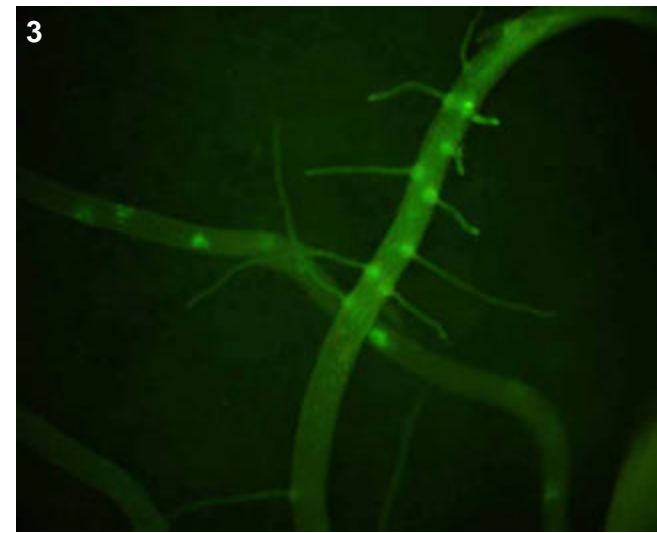
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 151



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression bright in lateral roots and more faint in the collar. Last picture is from a plant grown in hydroponic system, the stomata and perhaps even the mesophyll in general of the flower is bright GFP.

# Genotype: AOS F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

Bright collar and sheath vascular. Bright carpel base.

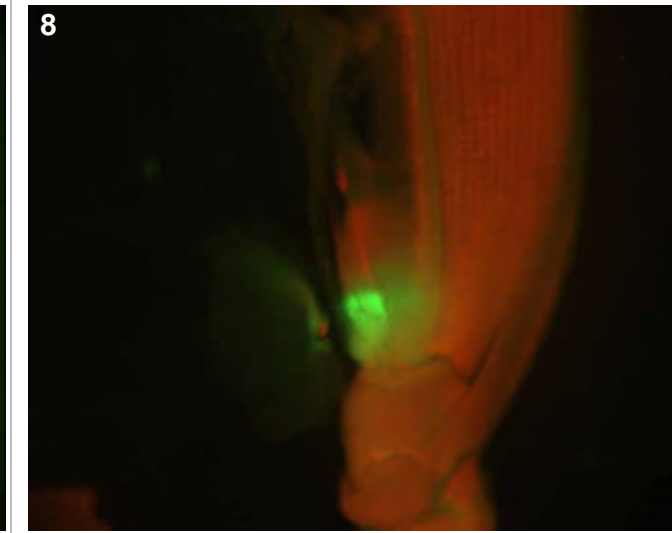
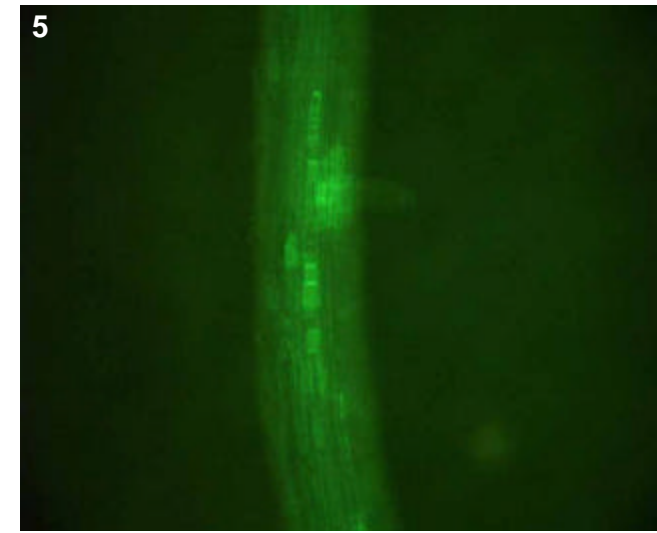
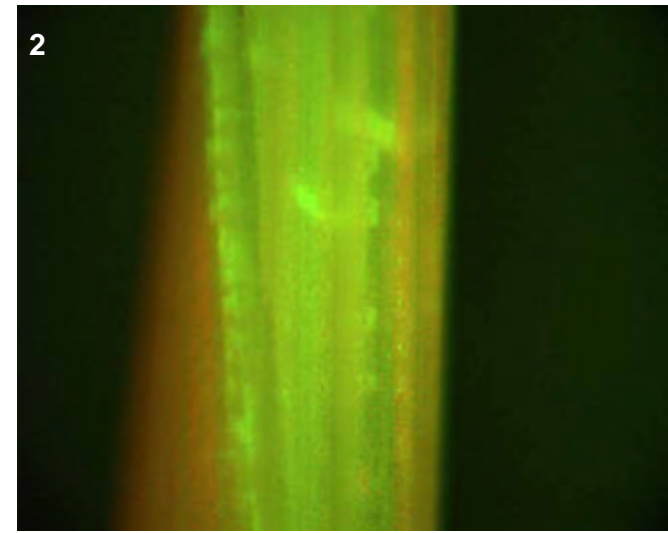
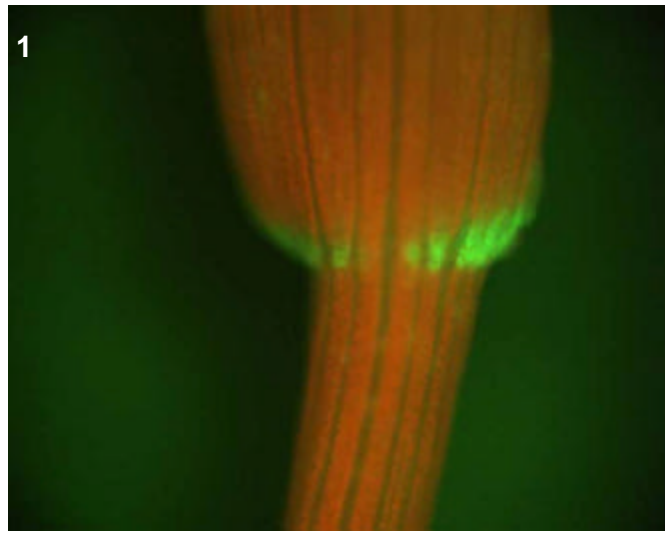
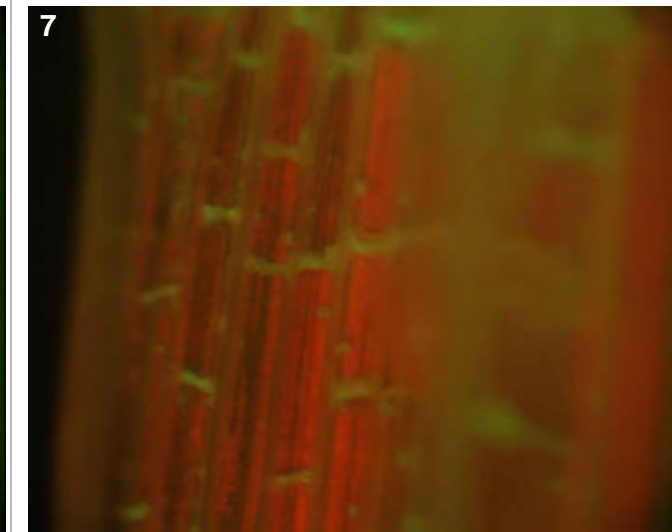
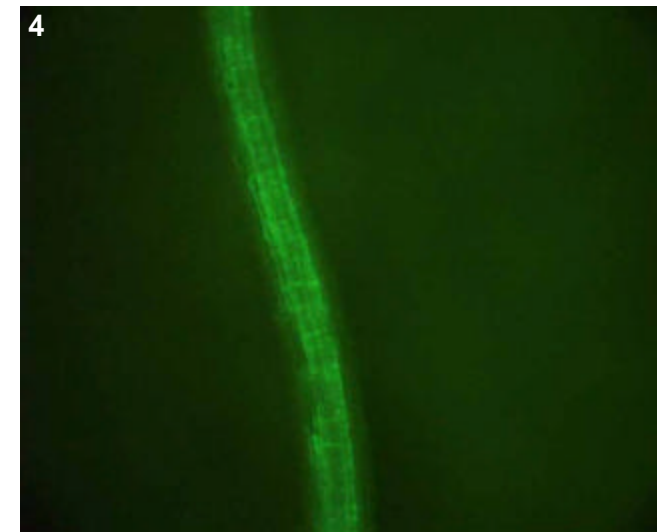
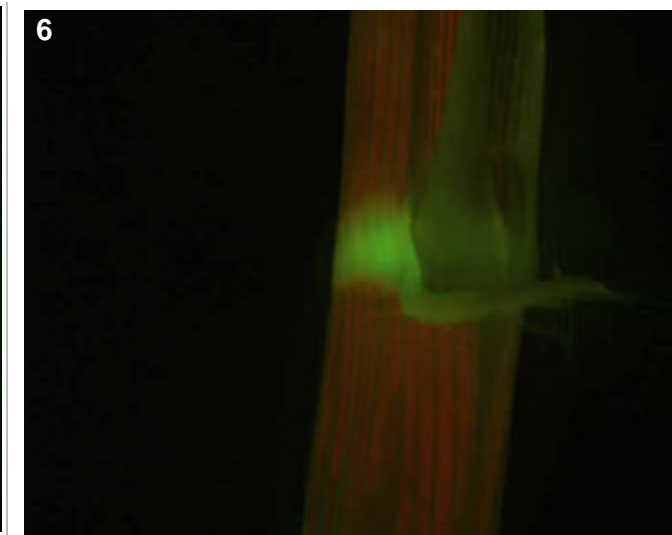
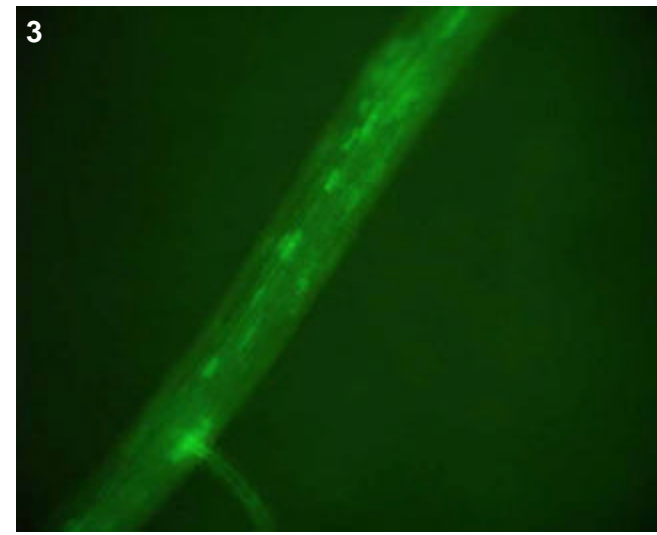
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 194



## T0 comments

## T1 seed comments

## T1 seedling comments

Moderate vascular activity in shoot, but brighter in the root. Some type of cell tagged in the mature root that gives a random sprinkling of GFP cells rather than a more defined pattern, dies out at root tip. Also looks like vascular expression in the emerging lateral roots.

# Genotype: AOS G02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 was not examined for this line, but there was no expression in adult T1

T0 pattern verified plus:

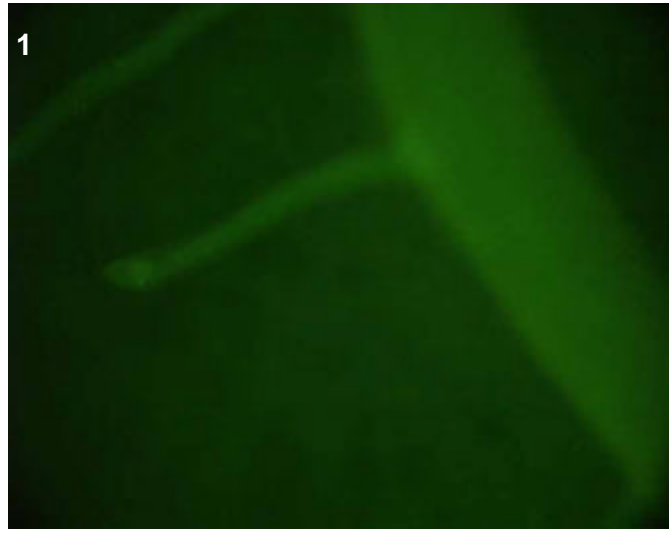
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 70



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint expression in lateral roots detected.

# Genotype: AOS G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

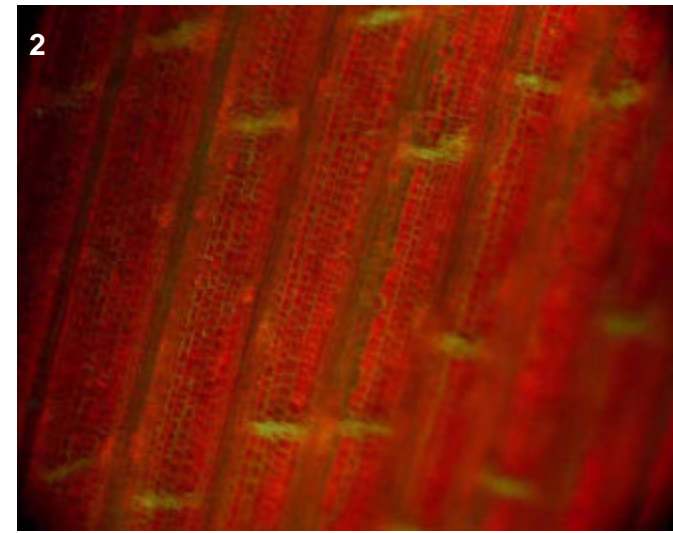
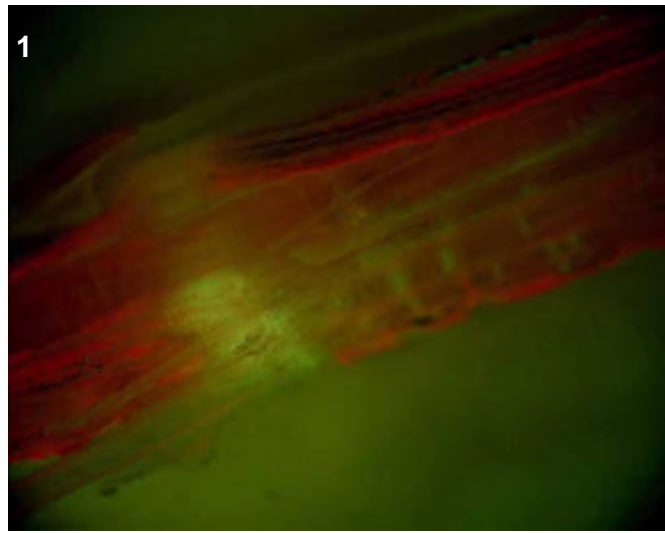
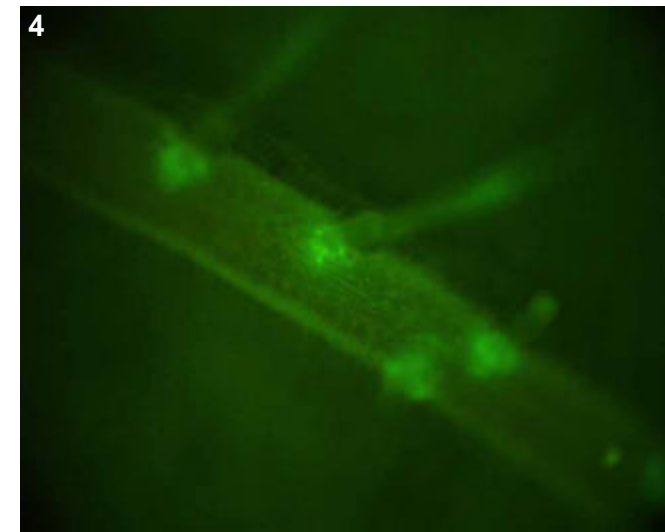
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 55



## T0 comments

A partial tetraploid. Collar and surrounding vascular expression as well as patchy expression in the anthers.

## T1 seed comments

## T1 seedling comments

Expression in the shoot (tips of leaves, scattered stomata) and in root.

# Genotype: AOS G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:  
T0 was not examined, but there was no expression in adult T1.

T0 pattern verified plus:

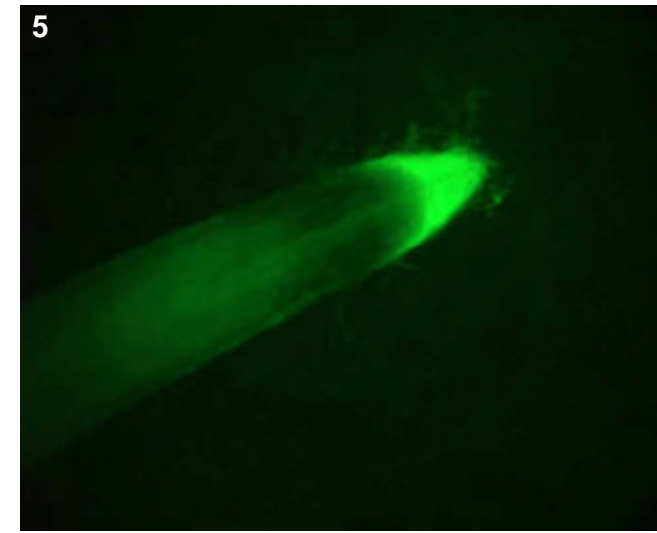
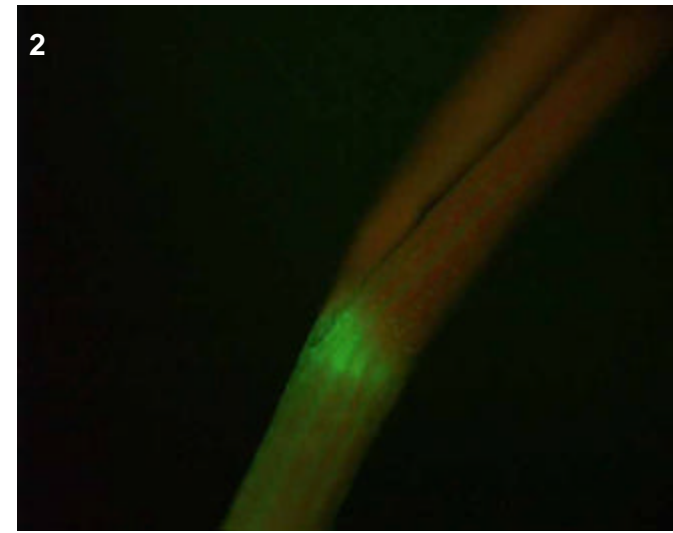
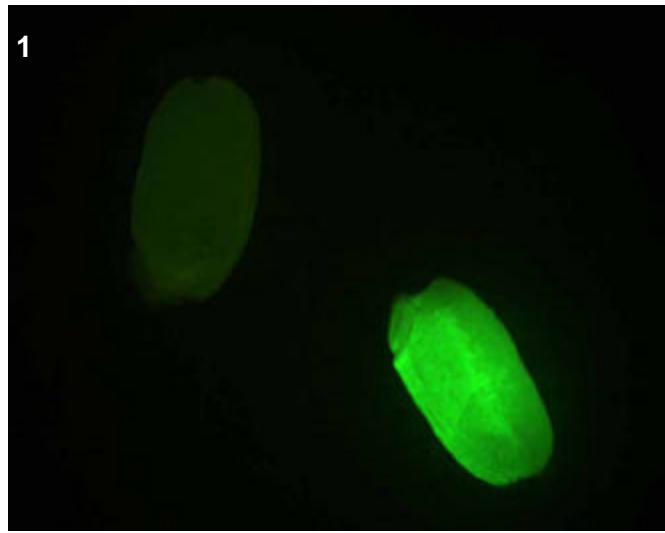
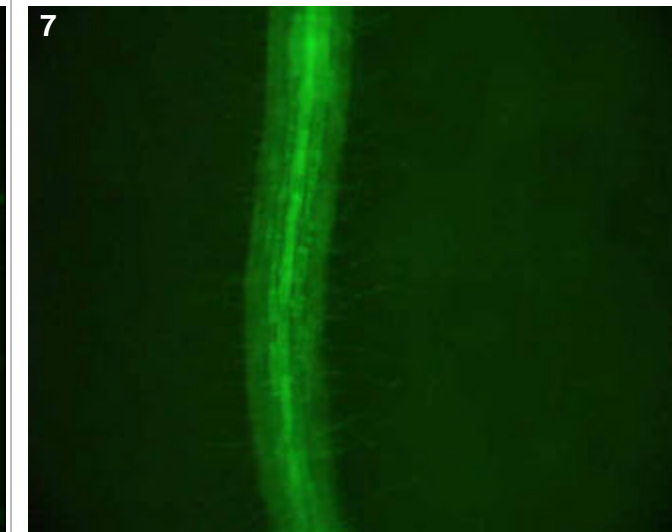
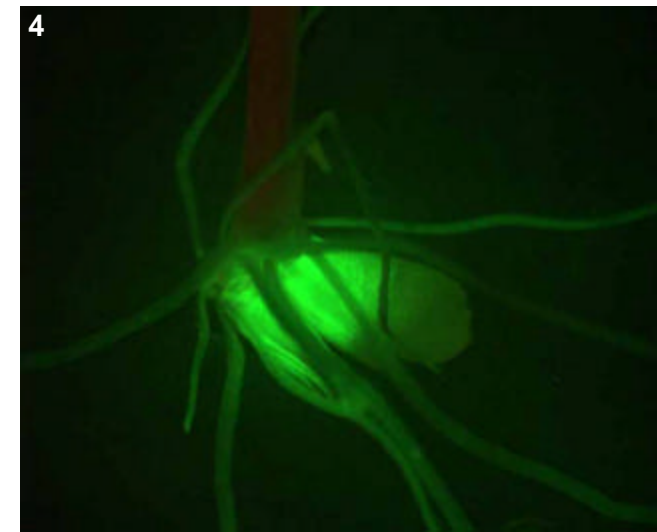
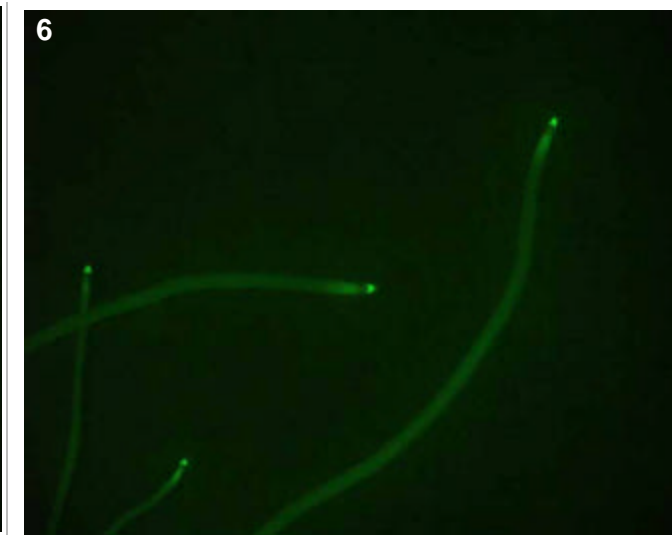
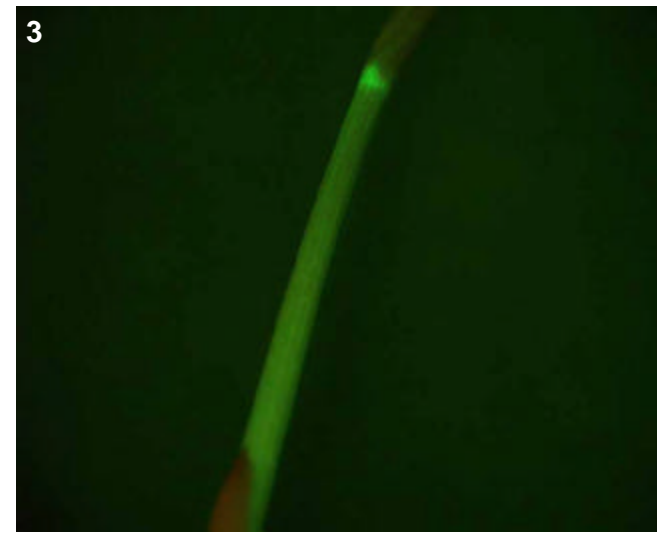
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 296



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: AOT C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

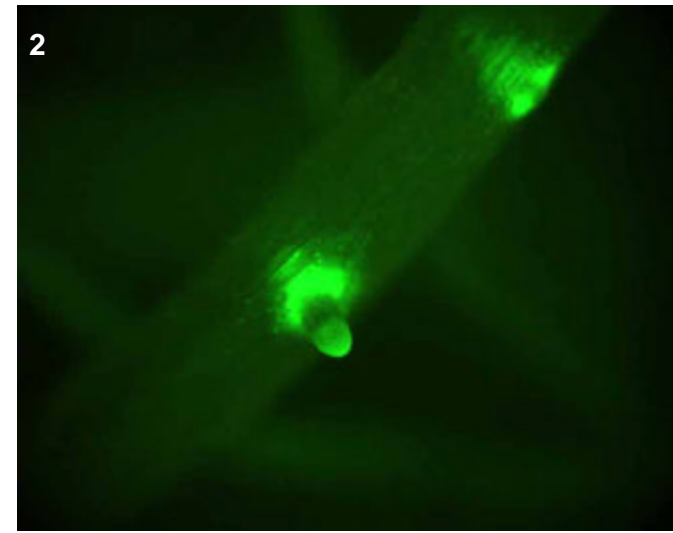
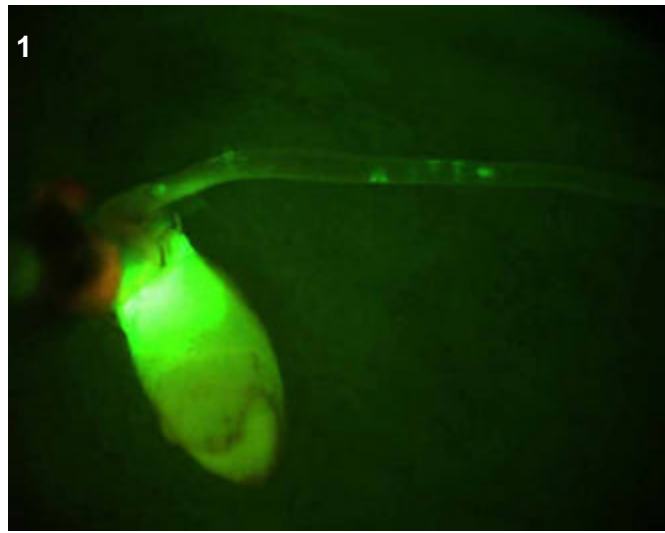
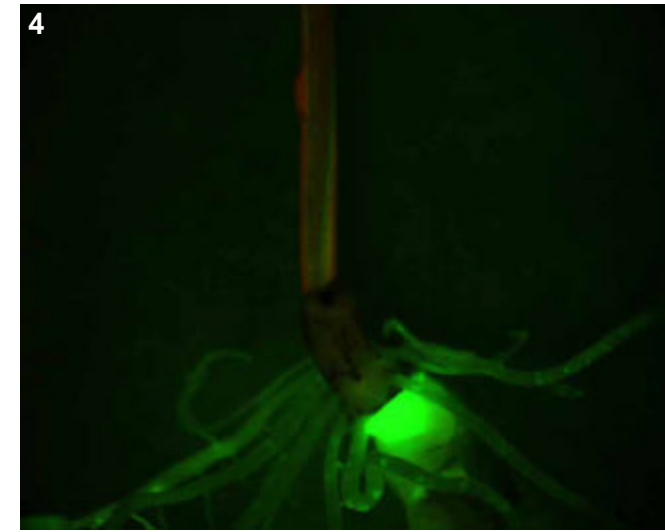
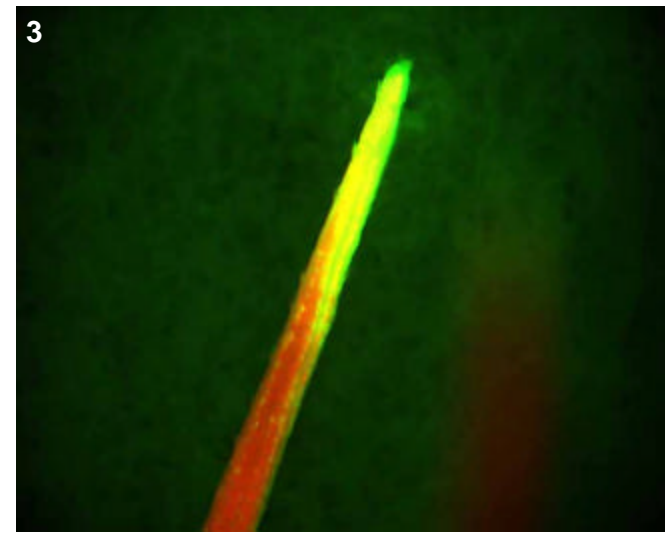
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 55



## T0 comments

## T1 seed comments

Scutellum expression (4/5).

## T1 seedling comments

Expression in the shoot vascular and leaf tips. Also expression in roots, particularly at base of lateral roots.

# Genotype: AOT F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

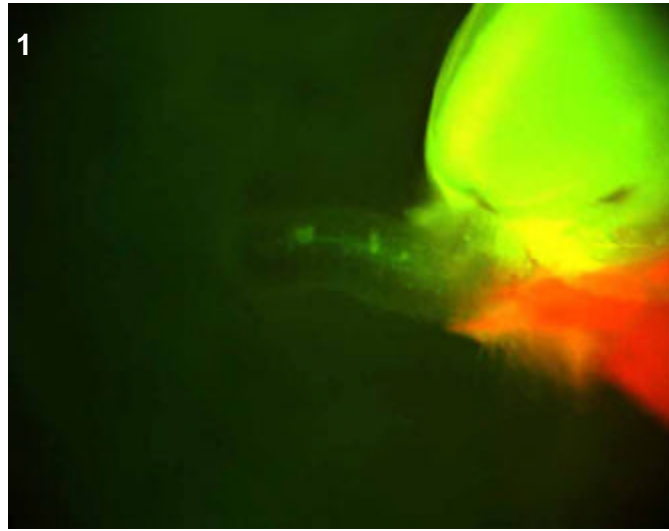
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?
- Confocal?
- Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

May be faint root vascular in young roots (observed in 1/5 seedlings).



# Genotype: AOT G01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

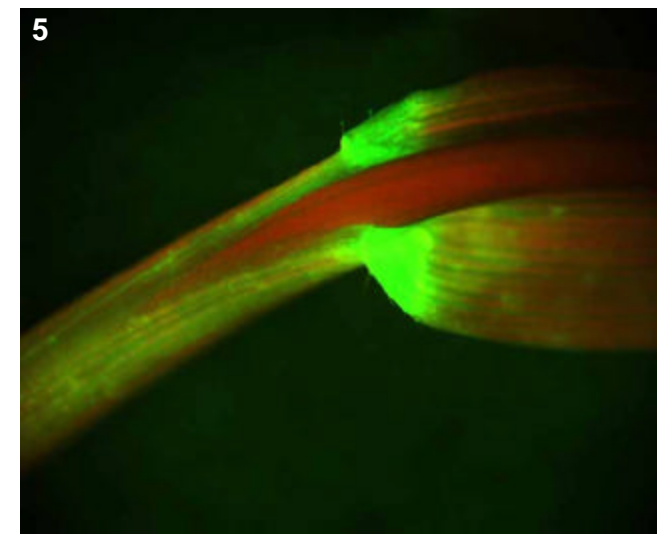
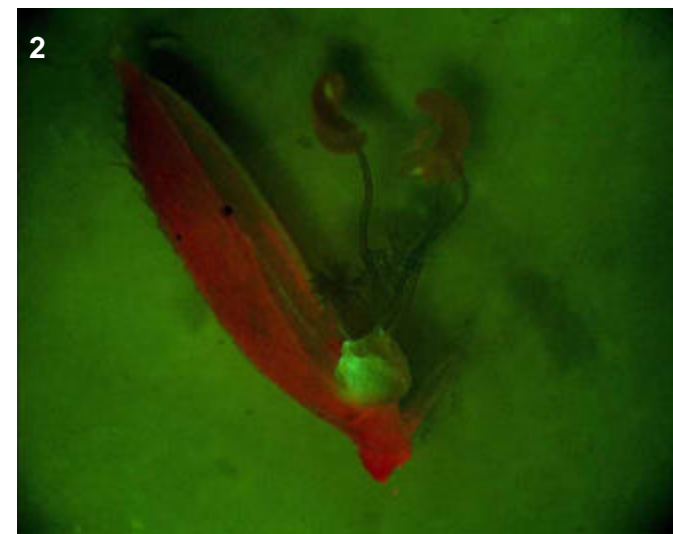
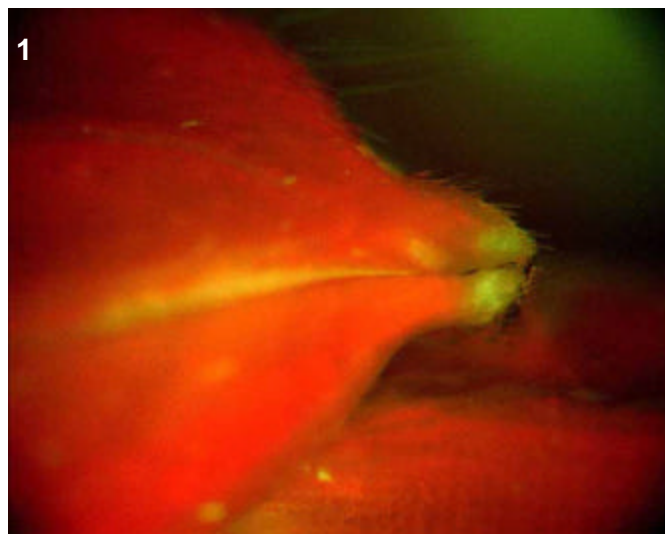
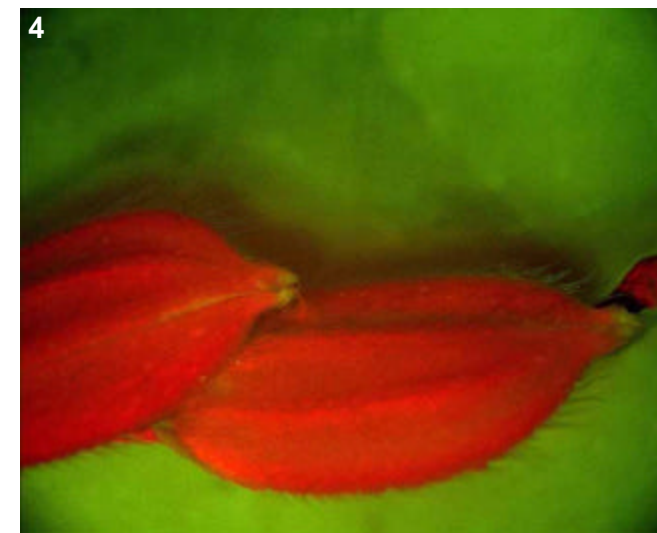
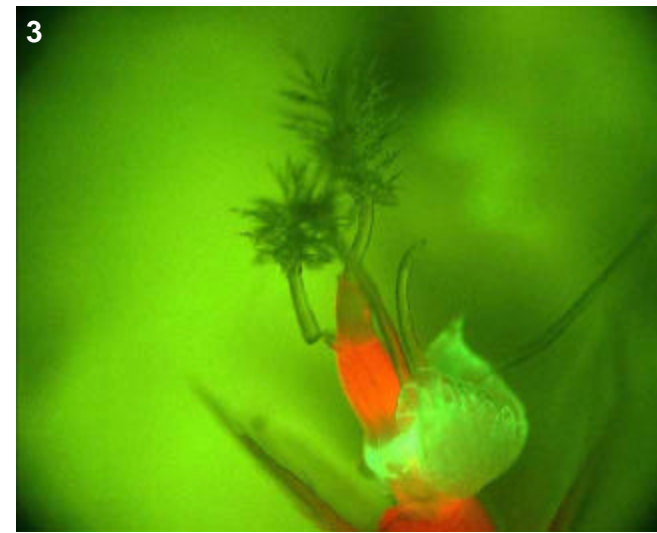
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 90



### T0 comments

Bright GFP observed at tips of all three flowers, and in the rachilla/loxicule region. Also some patchy expression seen in the anthers.

### T1 seed comments

Scutellum expression observed (1/5).

### T1 seedling comments

Seedlings show bright expression in the collar, shoot vascular, root vascular and lateral roots.

# Genotype: AOT G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-5  
 T1 mature plant: 6-11

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

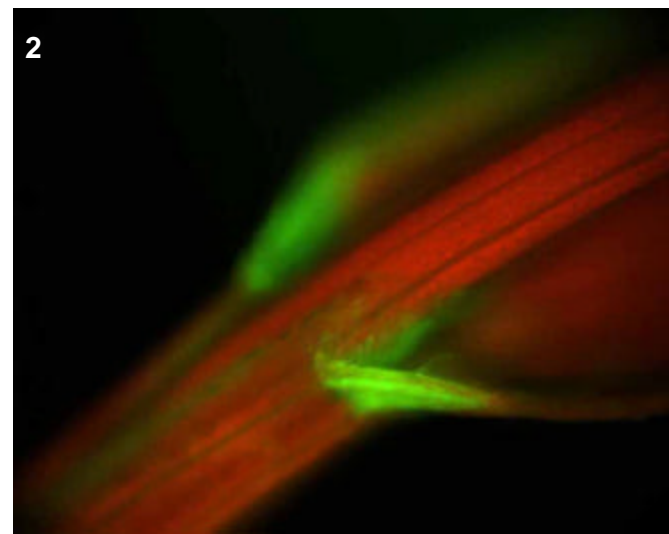
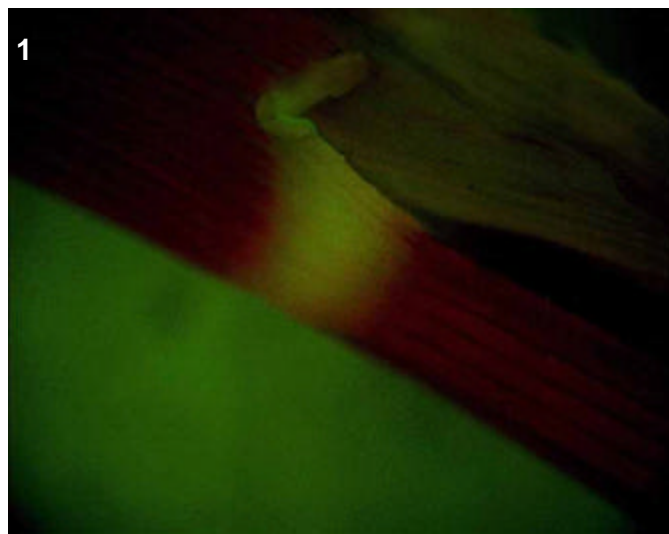
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:  
Collar and sheath vascular, floral vascular and patchy anther.
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

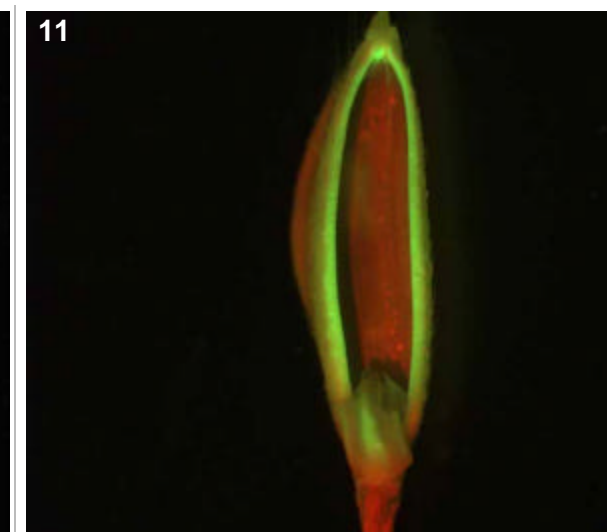
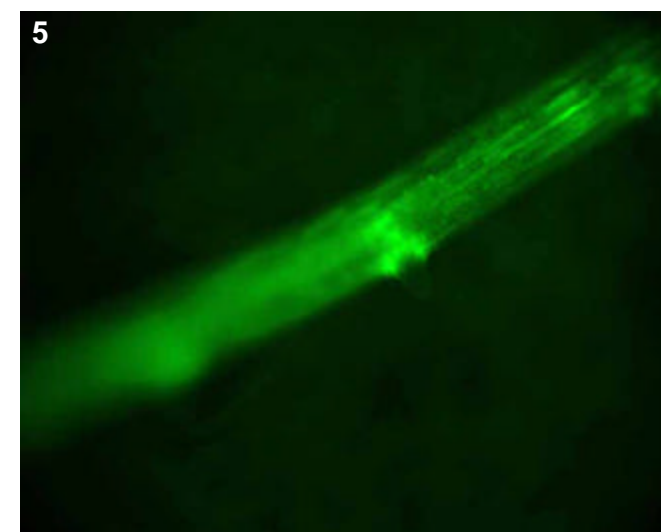
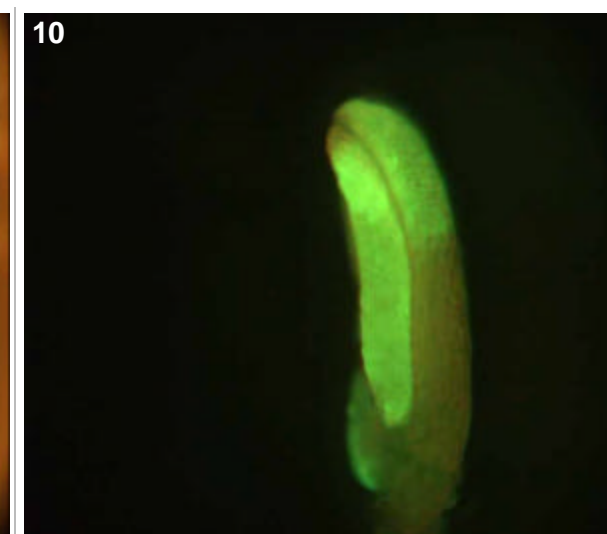
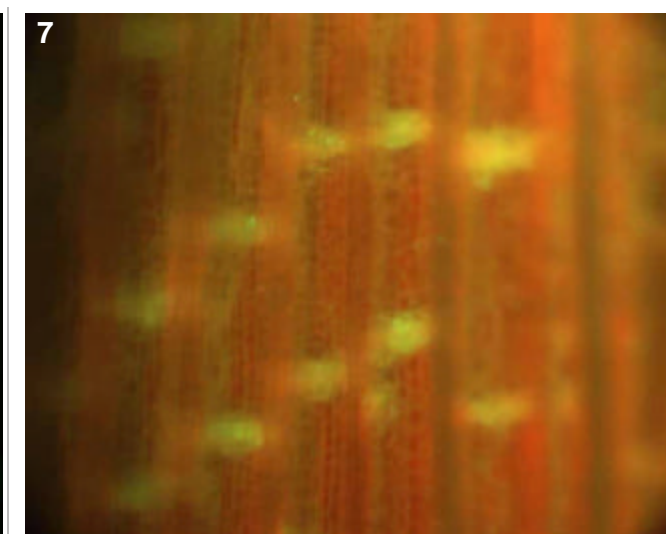
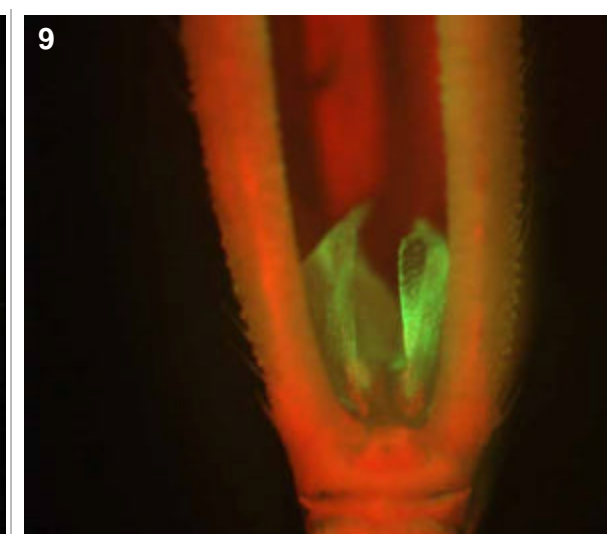
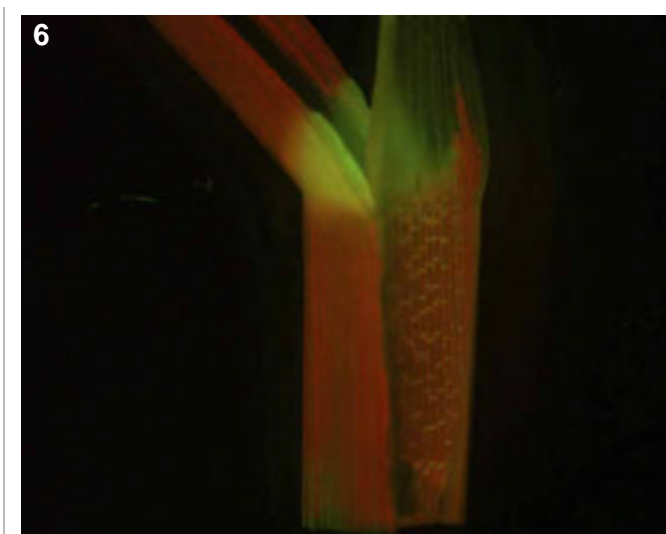
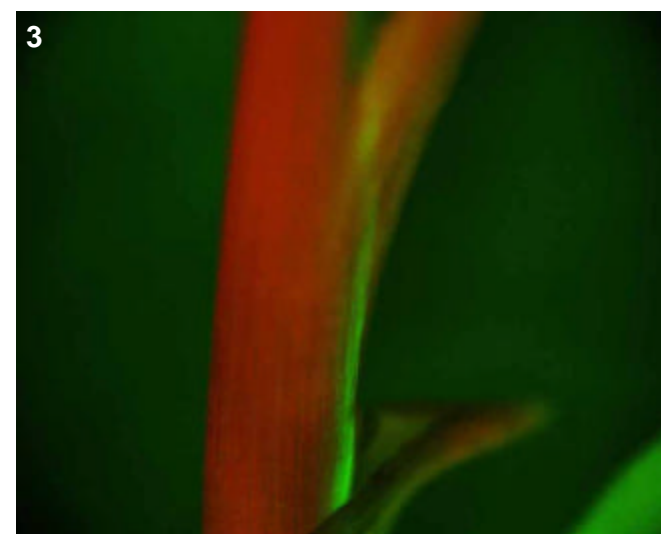
**Number T2 seed produced:** 60



**T0 comments**  
 Moderate GFP in the collar.

**T1 seed comments**  
 GFP observed in scutellum (1/5)

**T1 seedling comments**  
 Expression in both shoot and root vascular, as well as in collar.



# Genotype: AOT G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

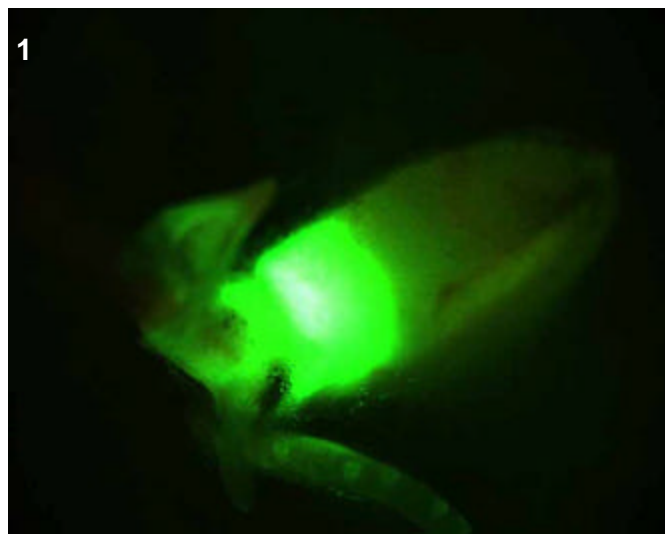
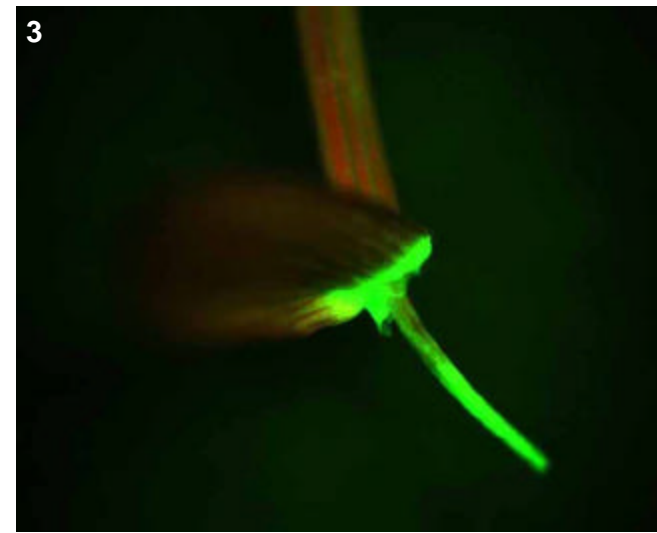
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 112



### T0 comments

Small spikelets on the T0 greenhouse plant.

### T1 seed comments

2/5 seeds have expression.

### T1 seedling comments

Expression in shoot vascular as well as root in general, very bright lateral roots.

# Genotype: AOT H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

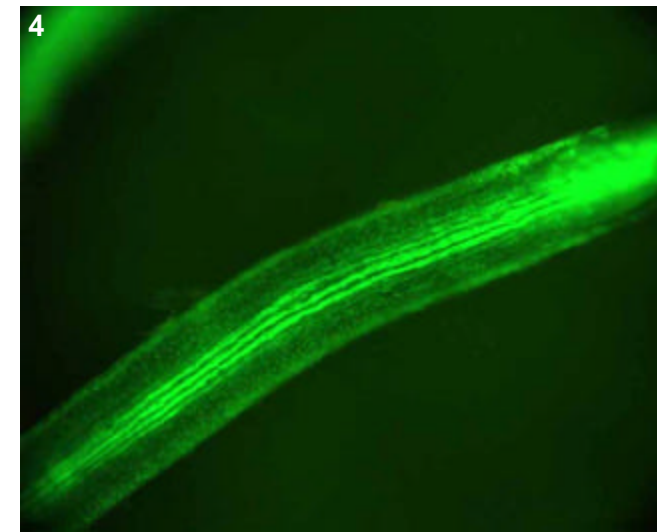
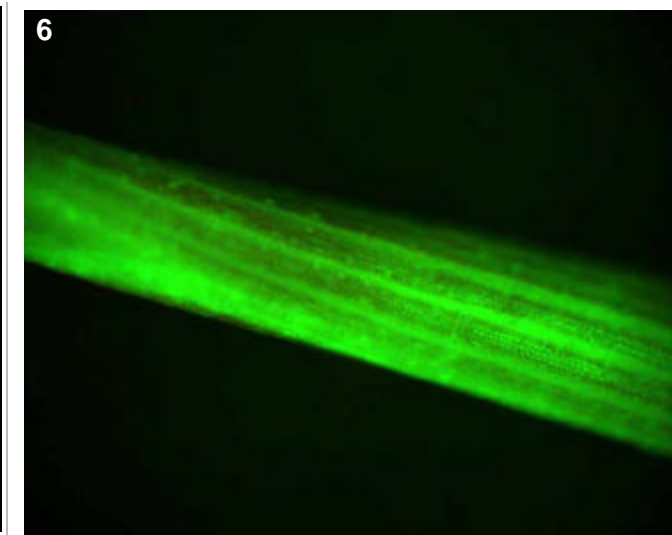
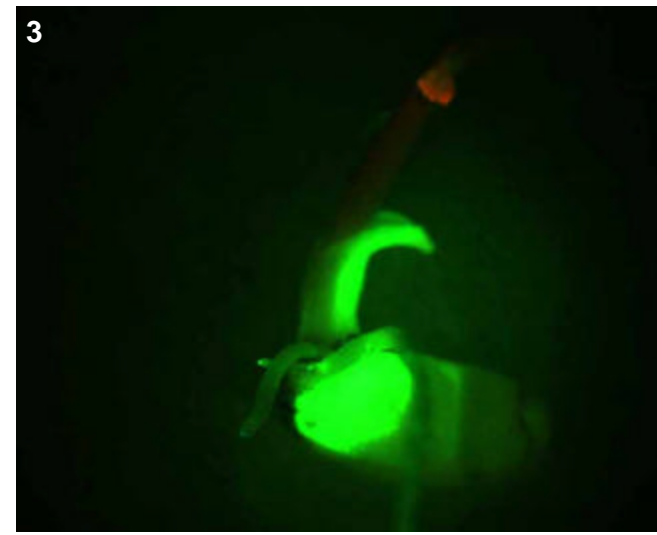
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 124



## T0 comments

## T1 seed comments

## T1 seedling comments

Strong expression in the scutellum, coleoptile, root and shoot vascular.

# Genotype: AOU A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

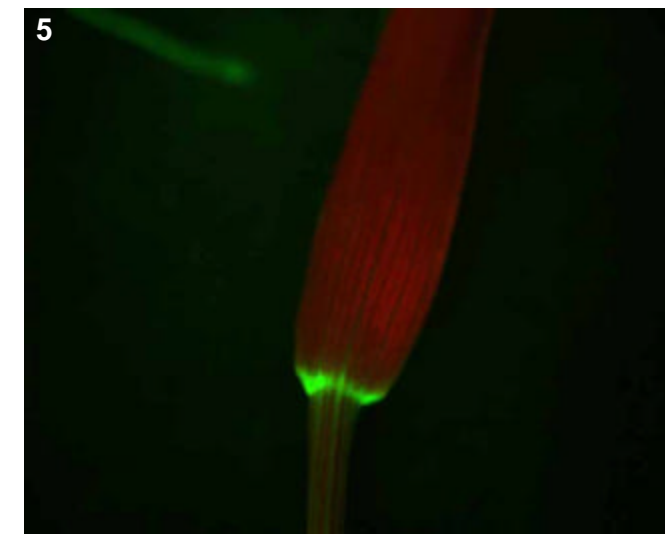
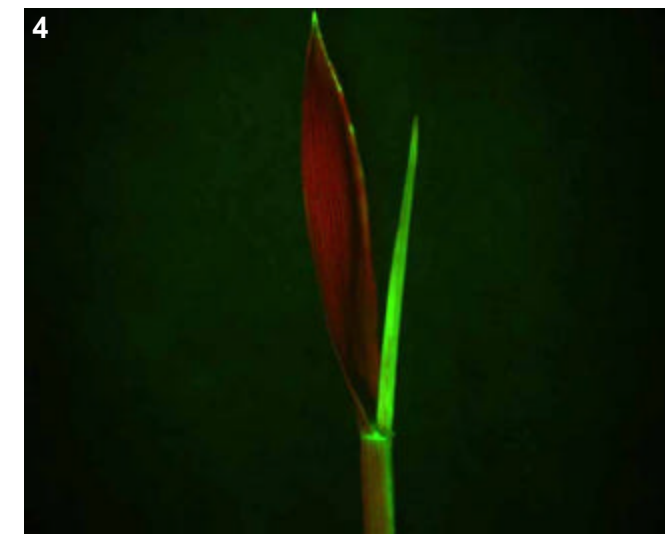
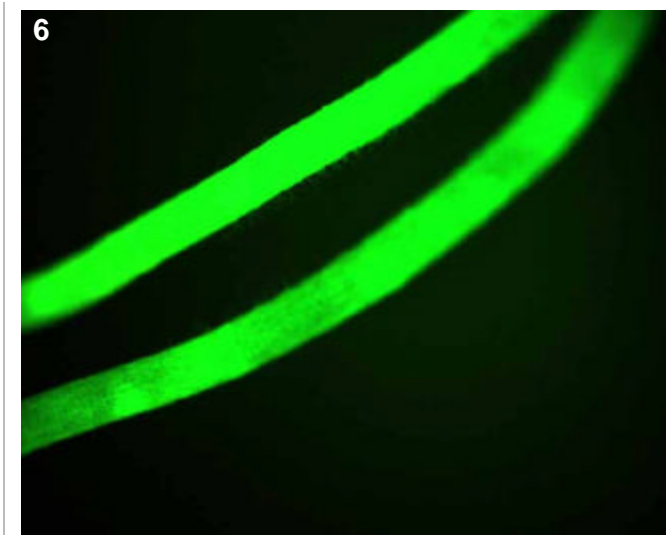
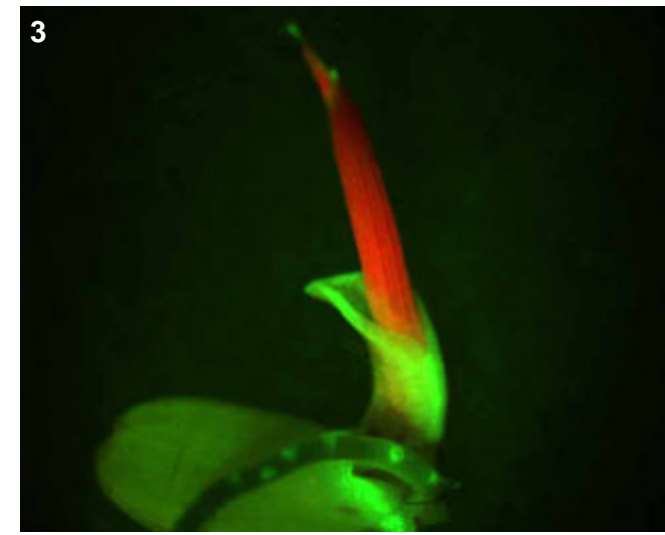
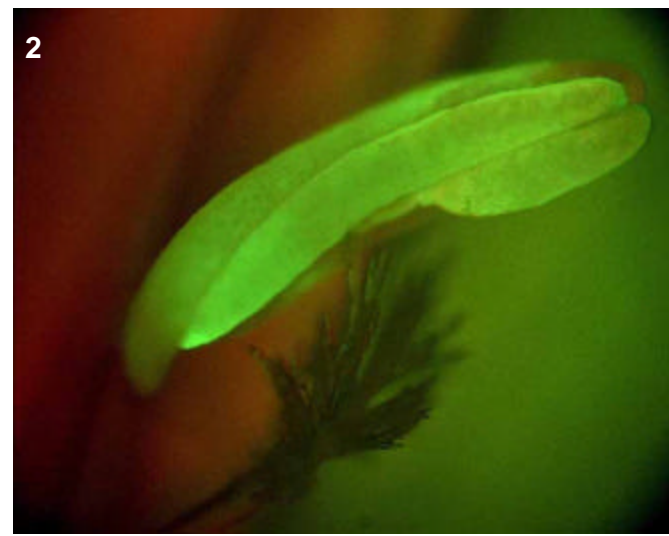
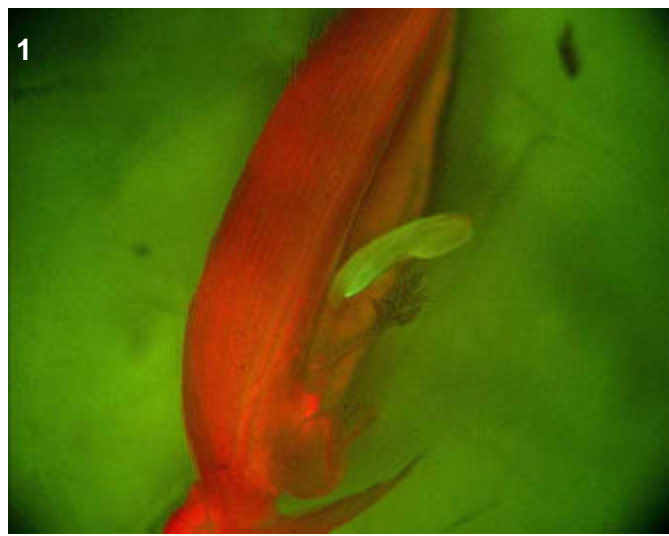
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 4



### T0 comments

Most anthers showed this GFP expression throughout the entire organ. Seems less bright yet more continuous than the other anther-specific lines.

### T1 seed comments

Four of five seeds had expression.

### T1 seedling comments

Four days after germination, expression in many places such as leaf vascular, coleoptile, general root and lateral roots, and scutellum. One week post-germination, still very bright expression everywhere, emerging second leaf is almost entirely GFP positive.

# Genotype: AOU C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

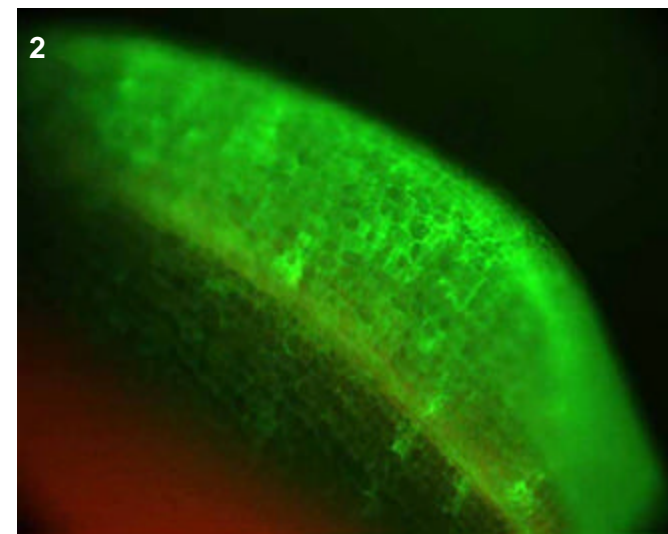
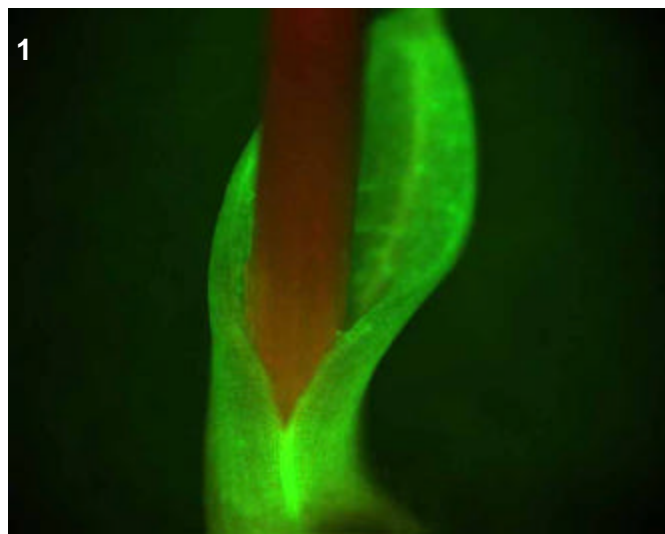
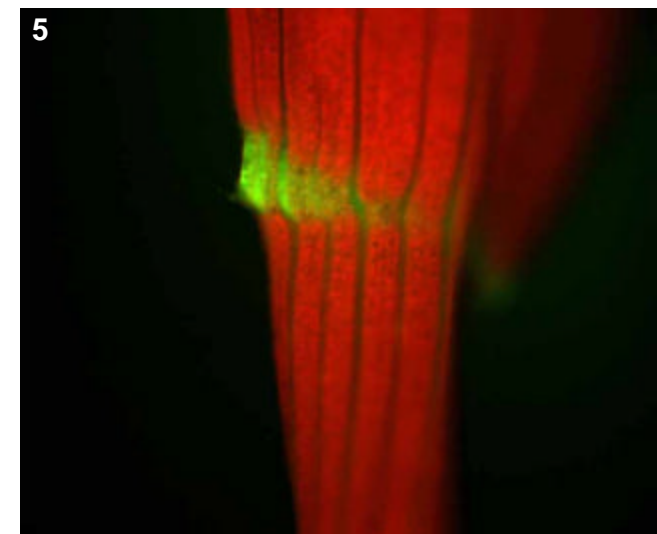
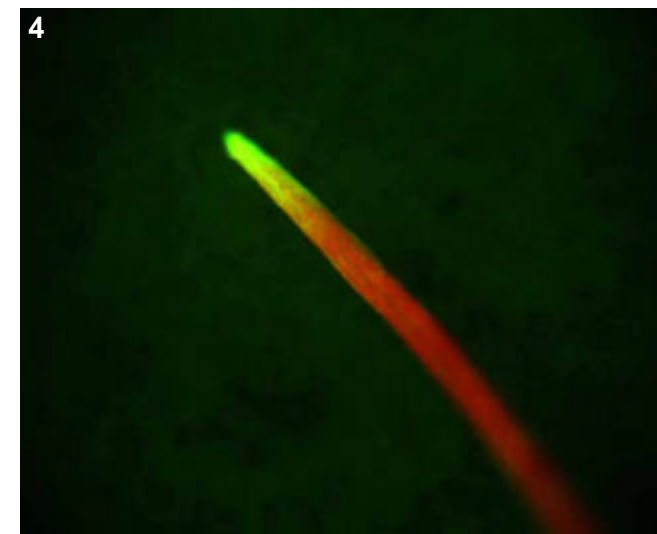
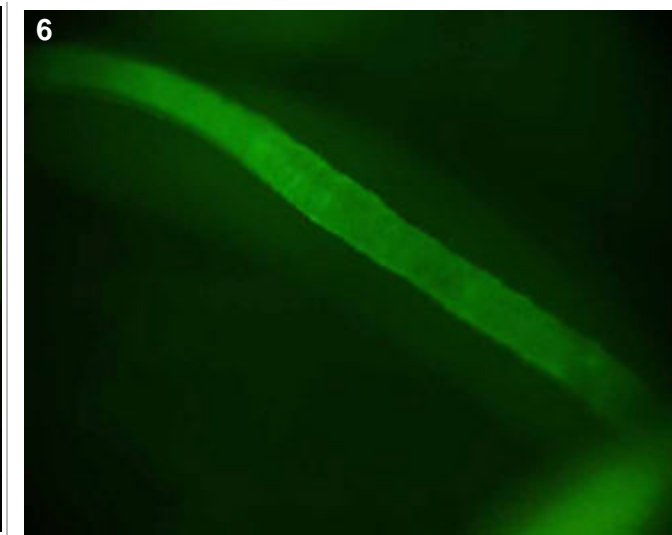
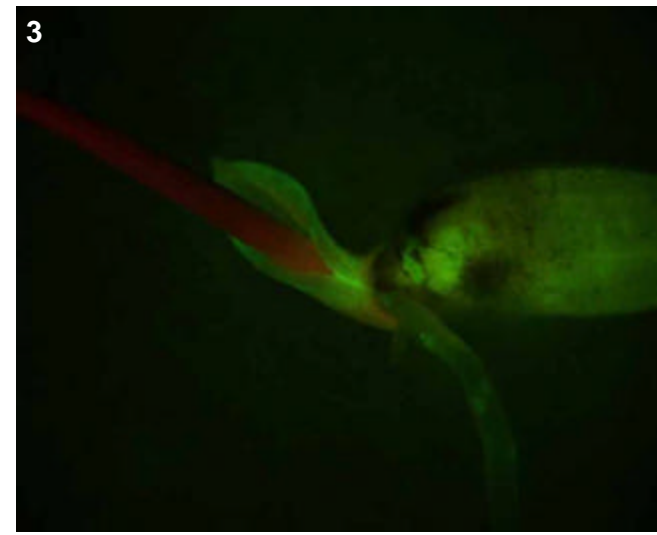
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 24



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression at four days (2 of 5 seedlings) is in the base of emerging lateral roots and very bright in the coleoptile, too early to tell if expression in primary leaf as well. One week post-germination, expression in many places: root in general, endosperm, collar and tip of new leaf.

# Genotype: AOU D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

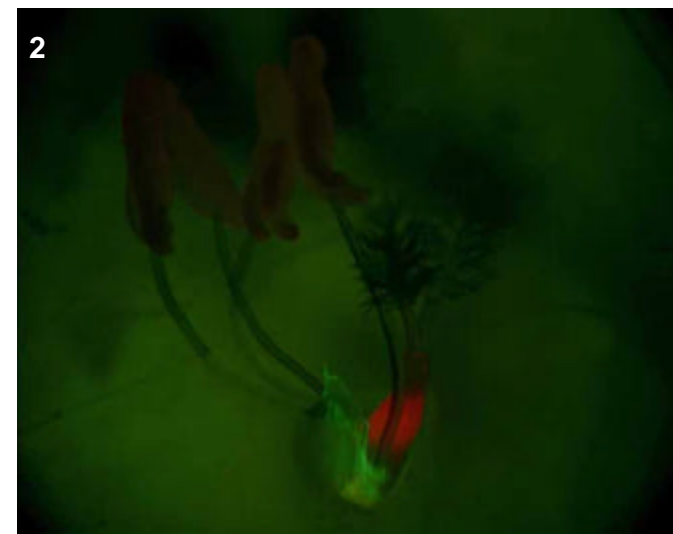
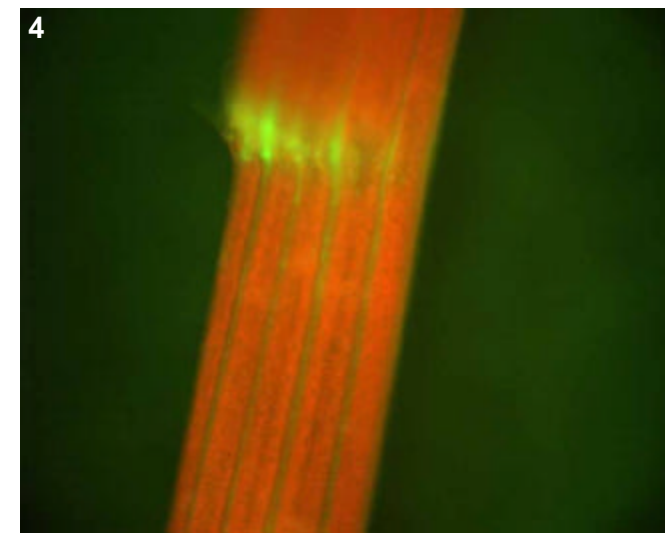
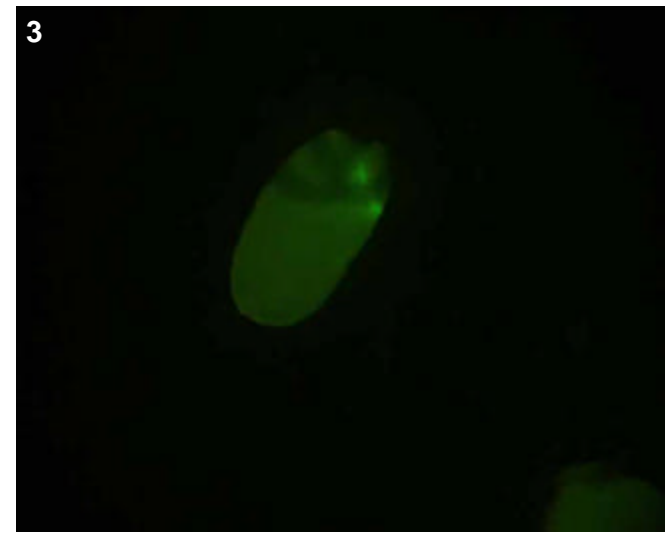
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 39



### T0 comments

Expression is bright, consistent and in the lodicules of flower.

### T1 seed comments

### T1 seedling comments

Expression noted in collar and lateral roots.

# Genotype: AOU E01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant: 4-5

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

Fairly faint collar and sheath vascular.

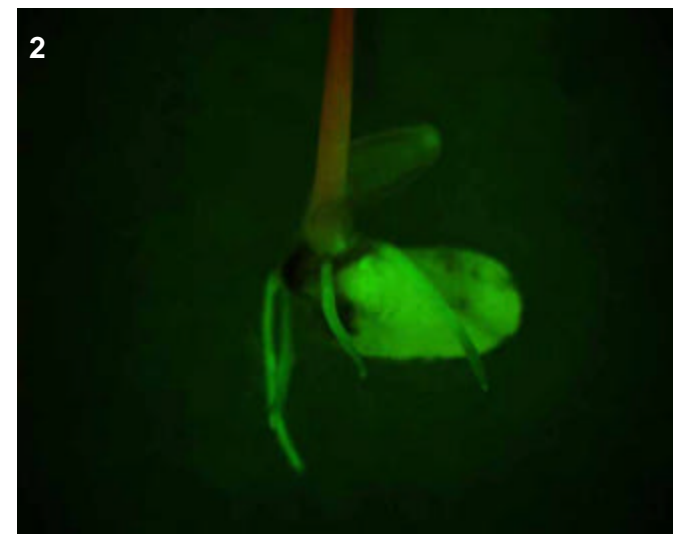
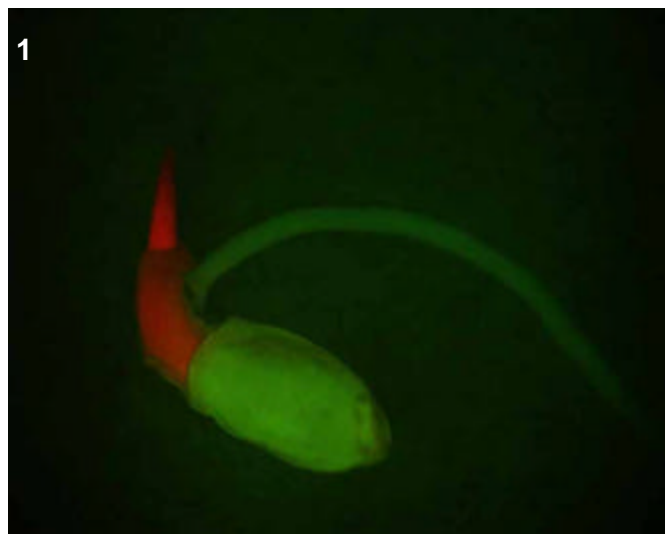
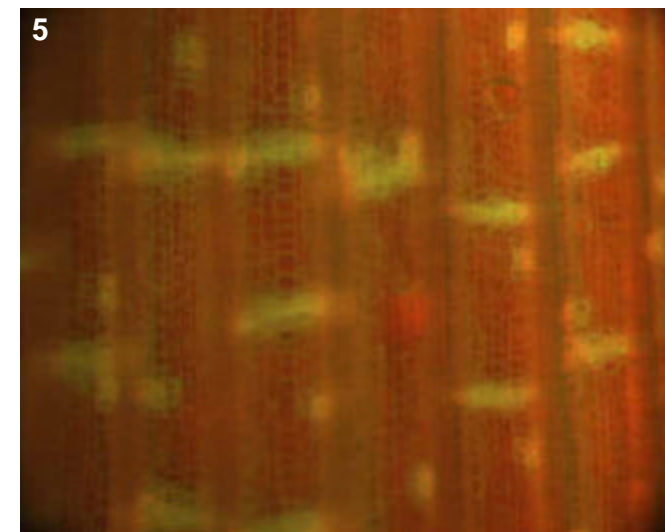
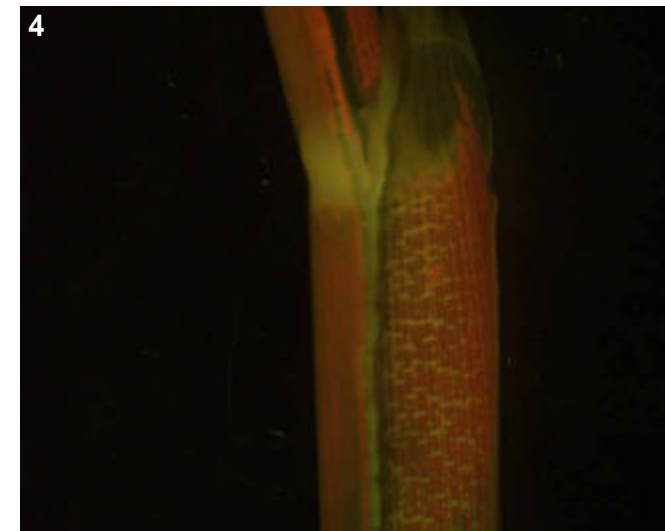
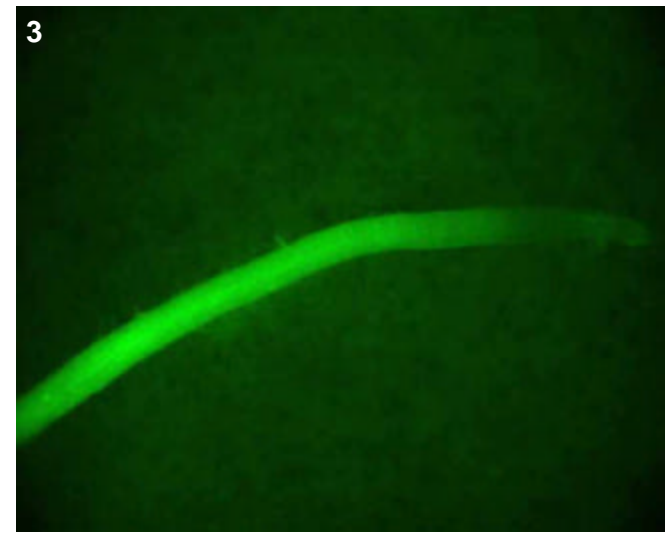
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 140



## T0 comments

## T1 seed comments

## T1 seedling comments

At four days, interesting pattern detected in 2/5 seedlings: expression specific to the radicle ONLY, and only the mature portion. After 1 week only appears to be faint shoot vascular near base of seedling as well. Expression is still almost entirely specific to root.



# Genotype: AOU E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:  
Again, no expression in adult T1
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?  
YES, 3 GFP+ plants
- Confocal?
- Number T2 seed produced:** 123

## T0 comments

## T1 seed comments

4/5 seeds have expression.

## T1 seedling comments

Perhaps faint expression in lateral roots.

# Genotype: AOU F04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

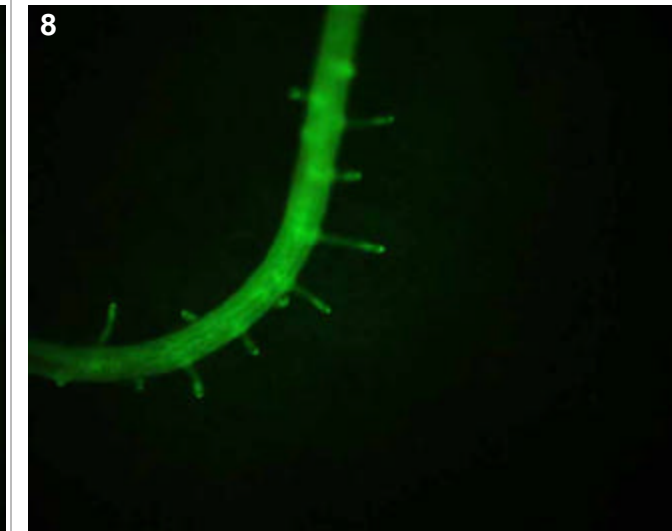
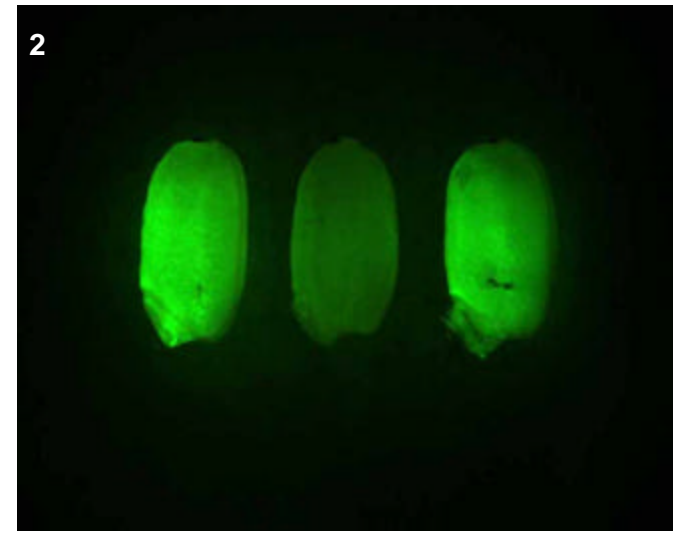
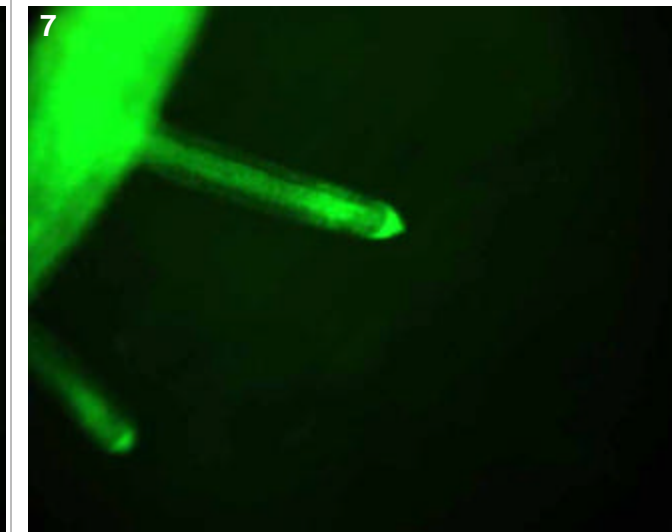
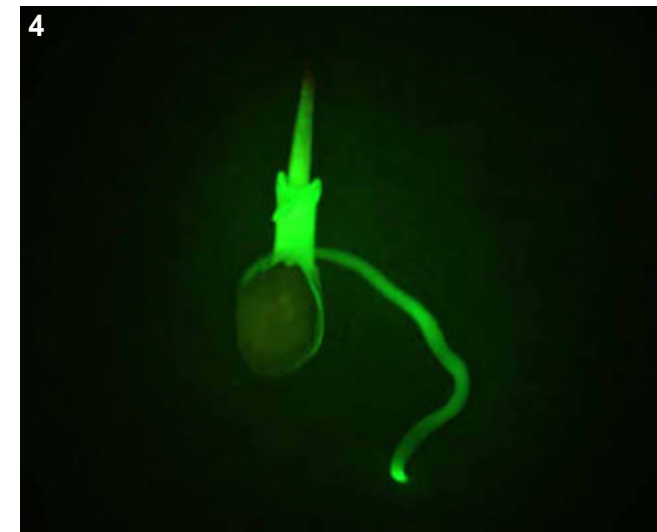
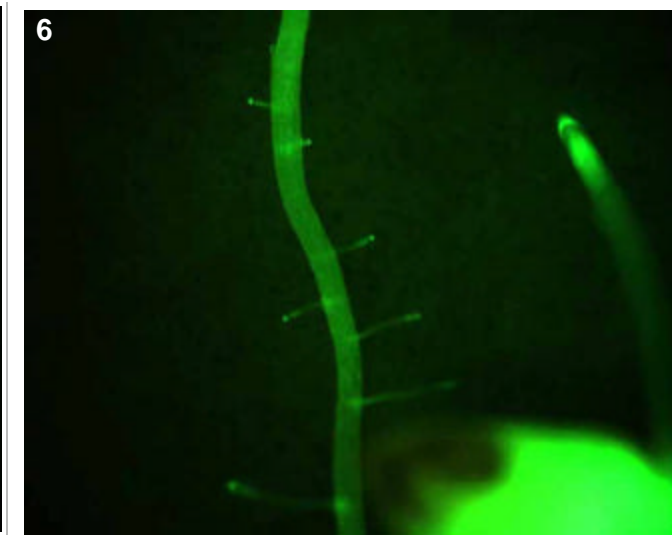
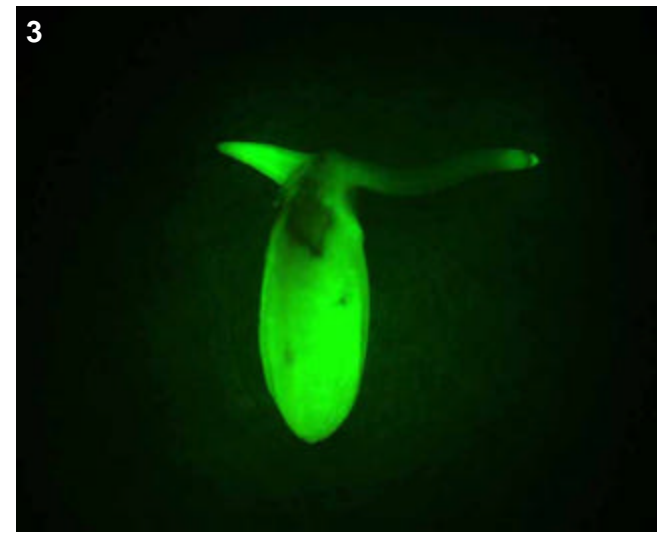
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 224



### T0 comments

### T1 seed comments

Entire seed shows expression (4/5 seeds)

### T1 seedling comments

Note the bright expression in root cap. This line is very bright and appears to be constitutive.

# Genotype: AOU H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

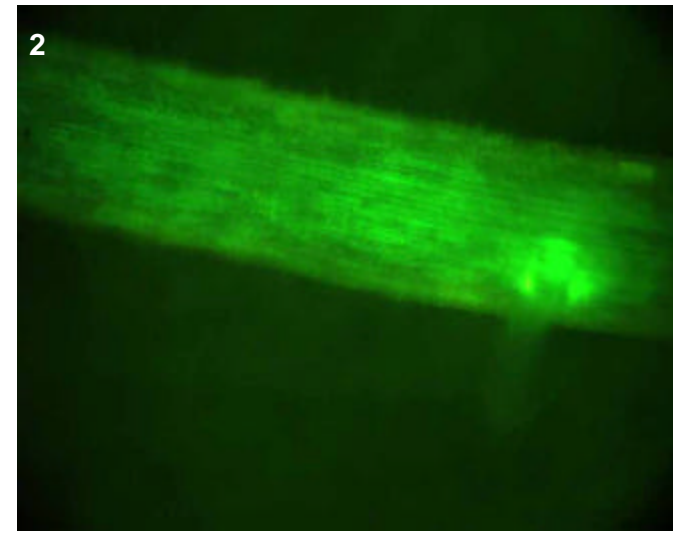
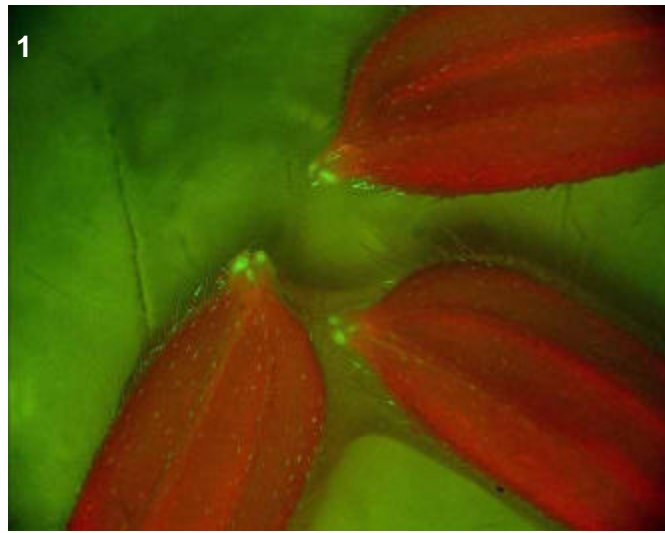
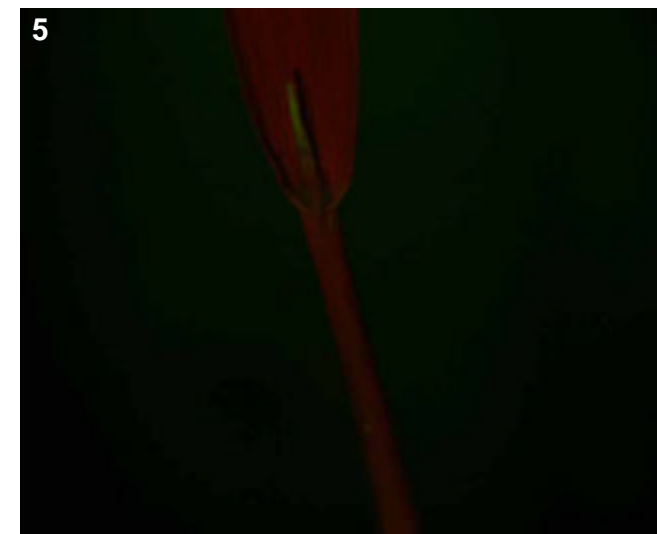
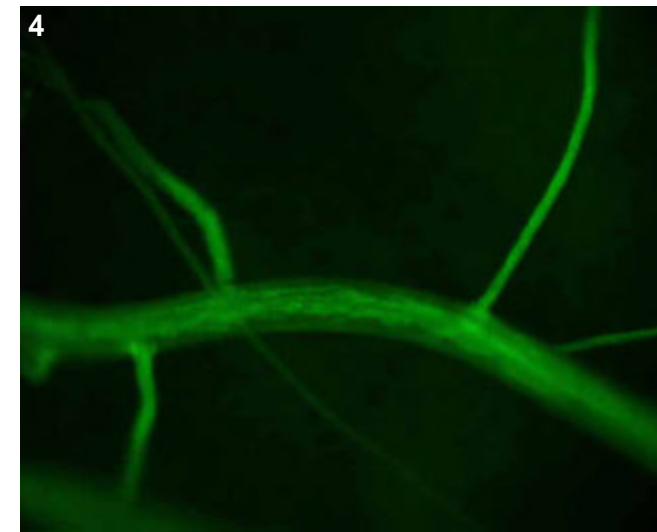
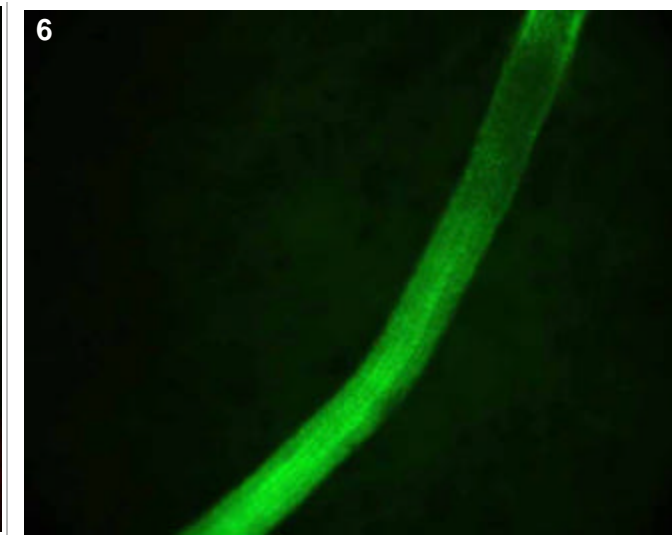
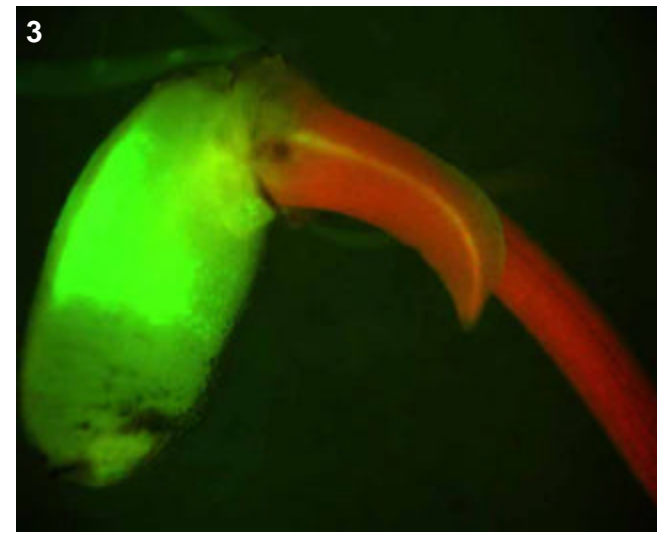
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



### T0 comments

The flowers show 3 distinct spots at the top of flower (indicative of vascular activity?). Also GFP in trichomes on lemma and palea.

### T1 seed comments

### T1 seedling comments

Four days post-germination (3/5 seedlings) expression noted in vascular of coleoptile, and in general throughout the radicle with expression concentrated around lateral roots. Root expression same after one week, but now more faint expression also detected in collar and tips of new leaf.

# Genotype: AOV A05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

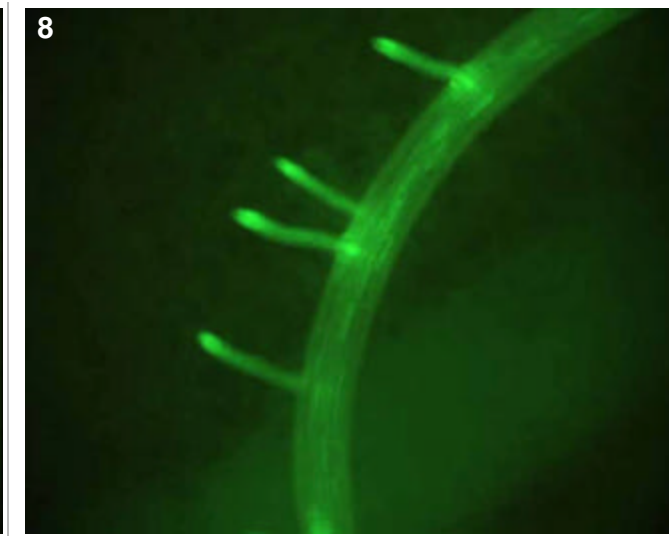
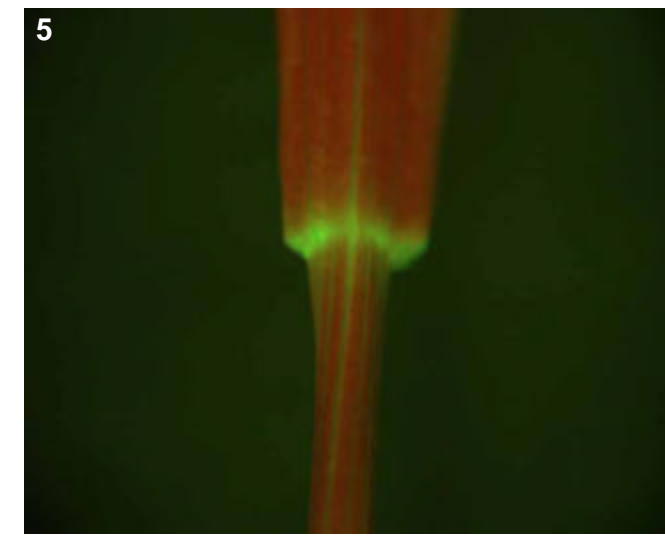
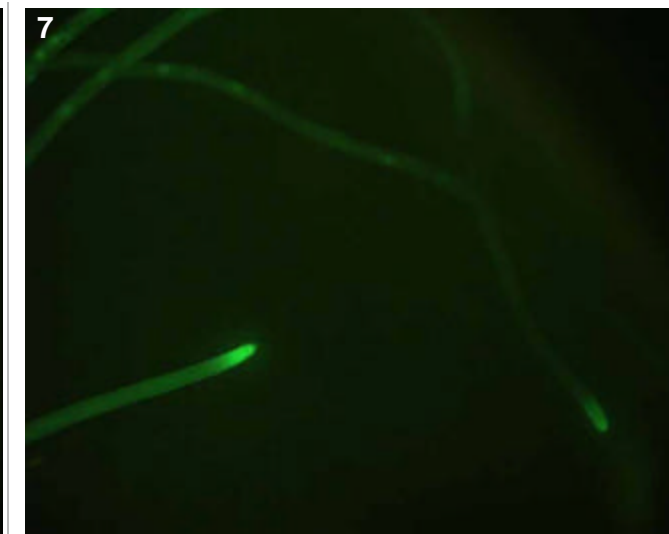
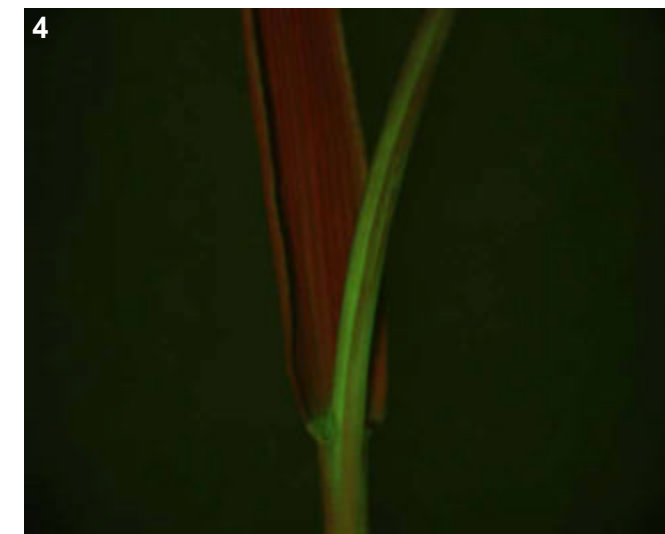
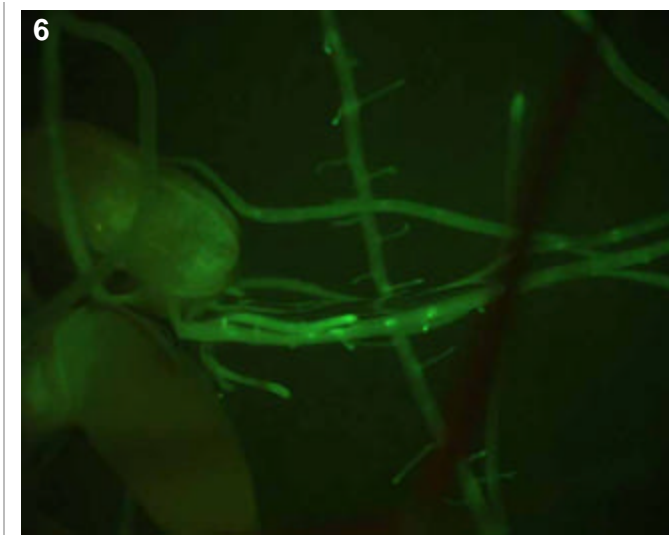
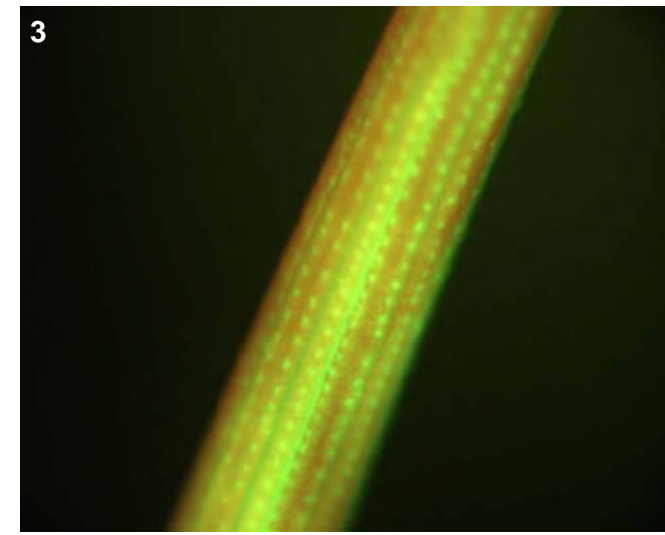
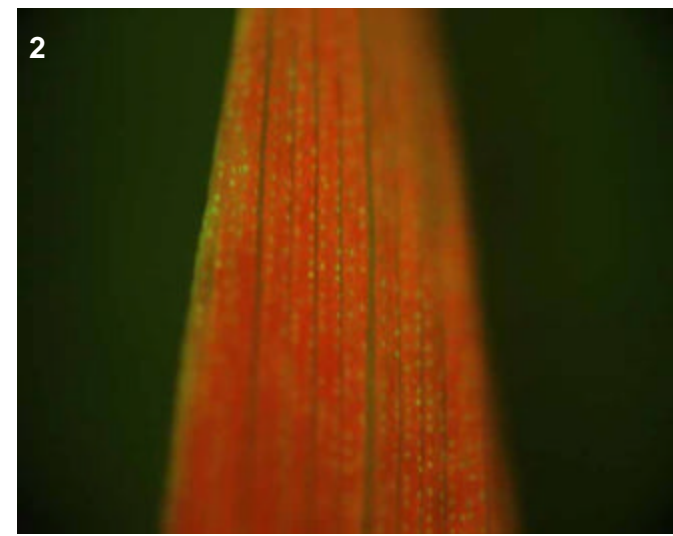
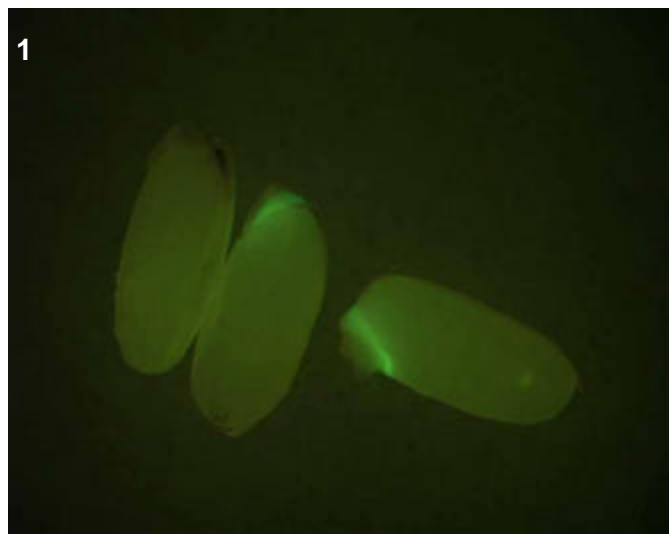
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 43



## T0 comments

## T1 seed comments

4/5 seeds show bright expression in the scutellum.

## T1 seedling comments

Note the bright stomata in pictures 2 and 3.

# Genotype: AOV B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

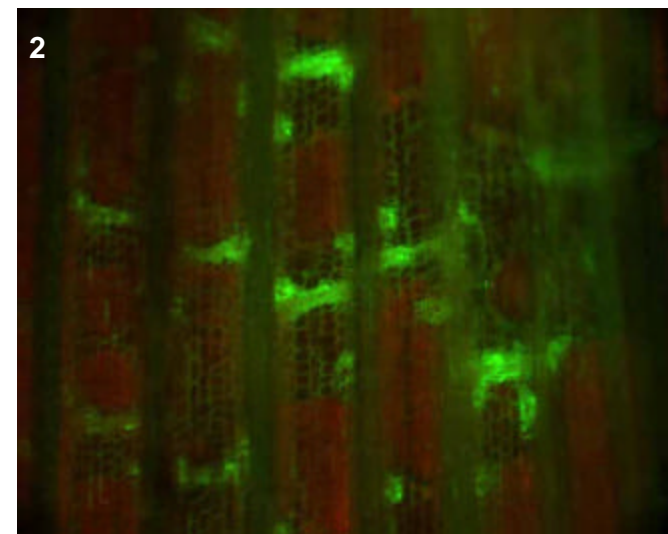
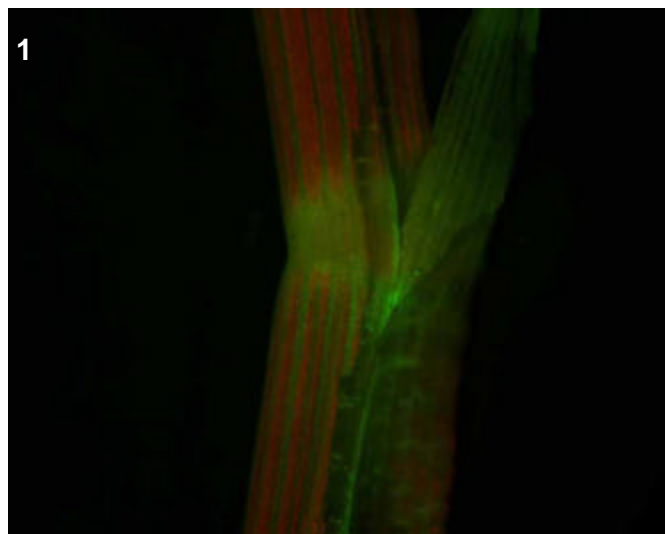
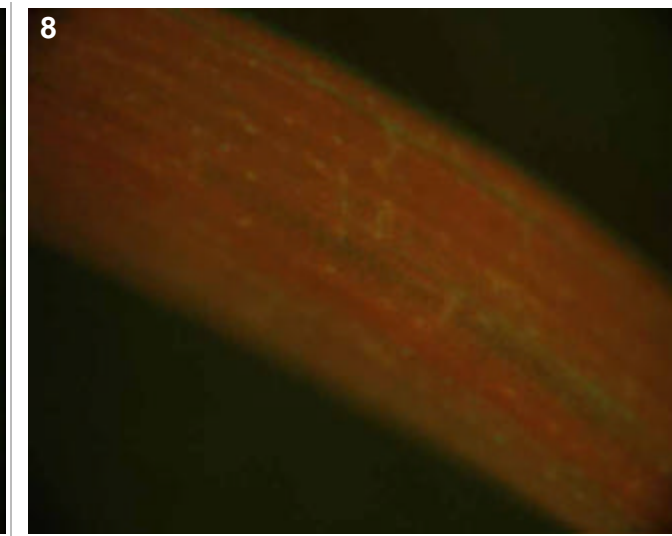
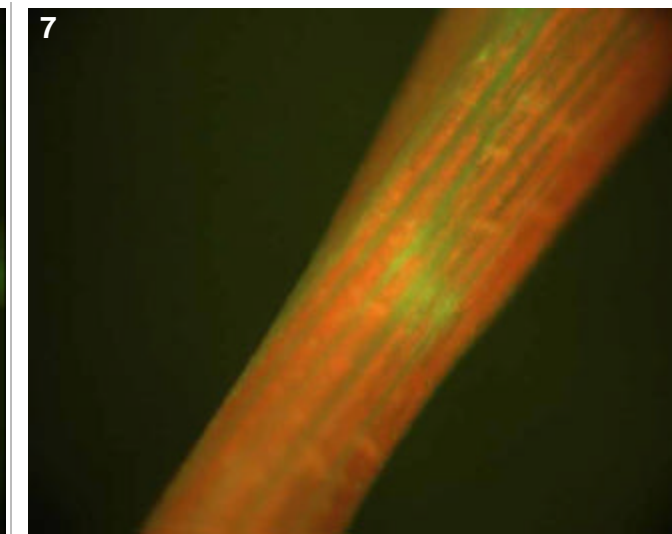
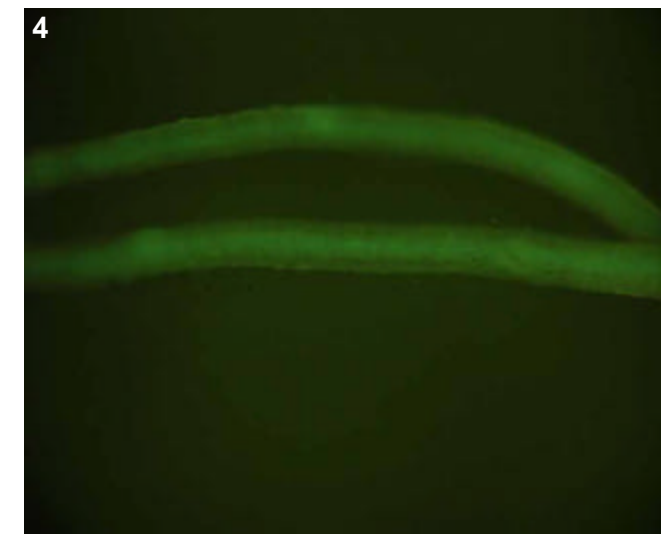
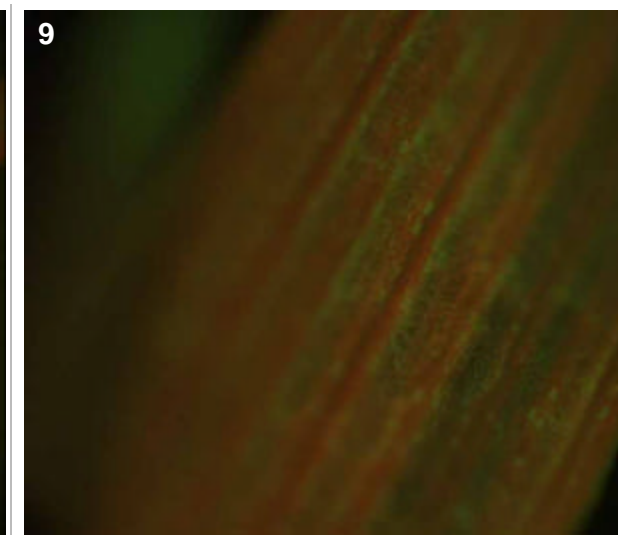
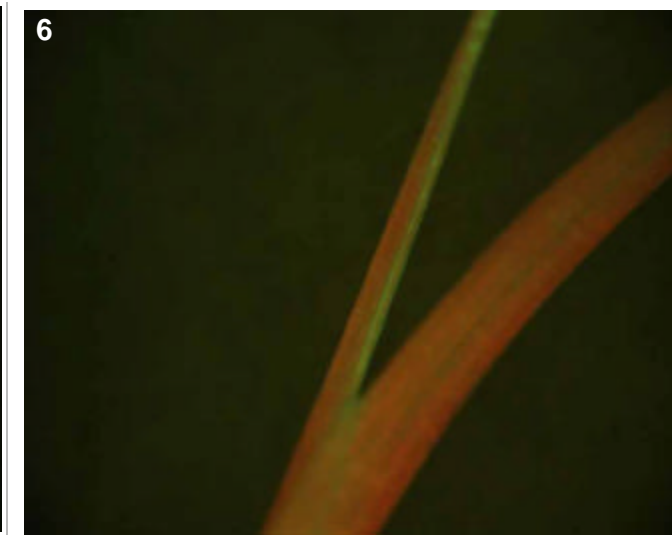
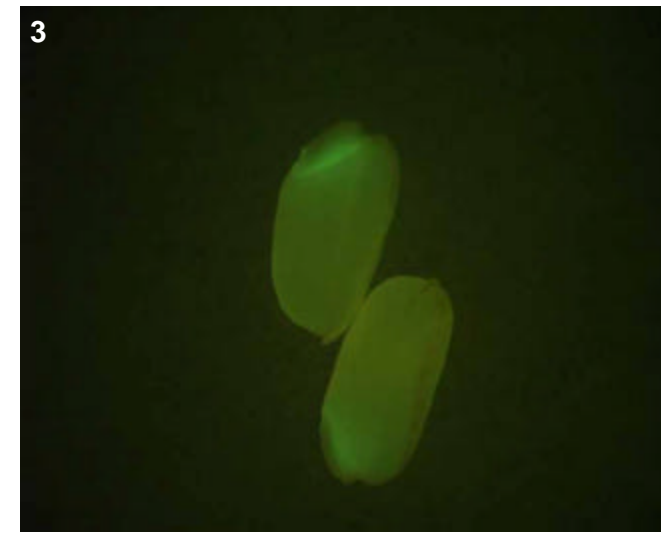
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 15



## T0 comments

Expression only in the sheath vascular, not the collar.

## T1 seed comments

3/5 seeds show bright expression in scutellum.

## T1 seedling comments

Seedlings germinated badly, and only one sick plant screened after 2 weeks growth. Strange morphology, with strong GFP in root and shoot vascular as well as mesophyll of sheath.

# Genotype: AOV C04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

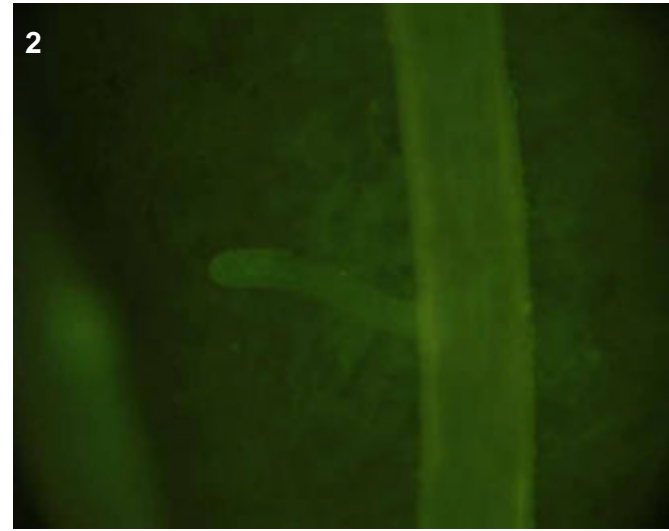
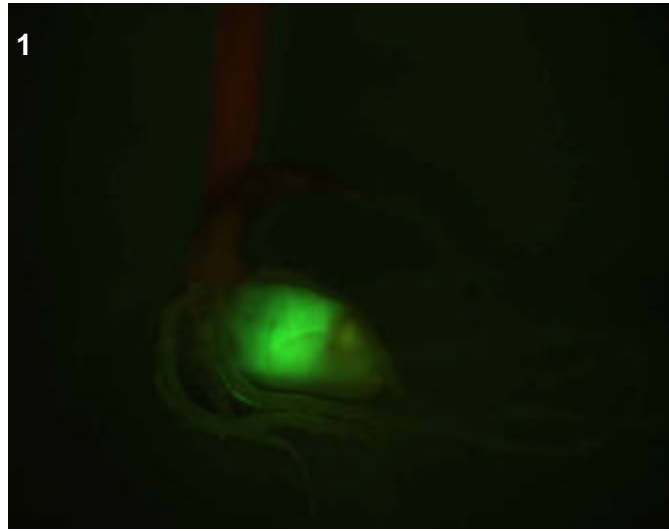
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 1



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright digesting endosperm, as well as faint root vascular.

# Genotype: AOV D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

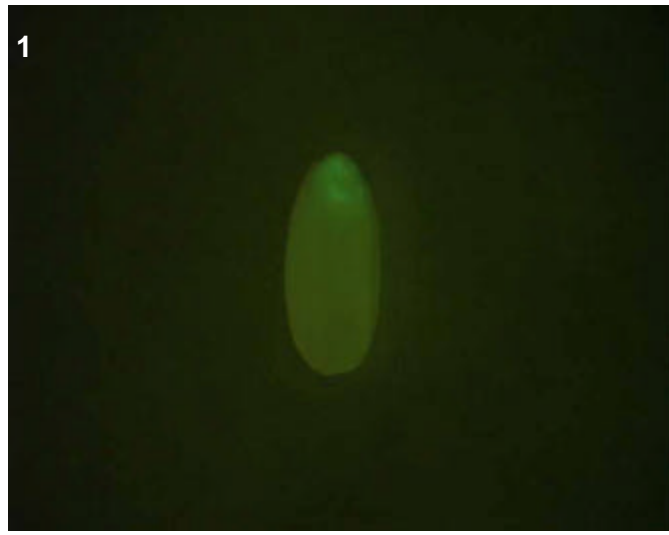
**T1 in greenhouse?**

YES, 1 GFP+ plant

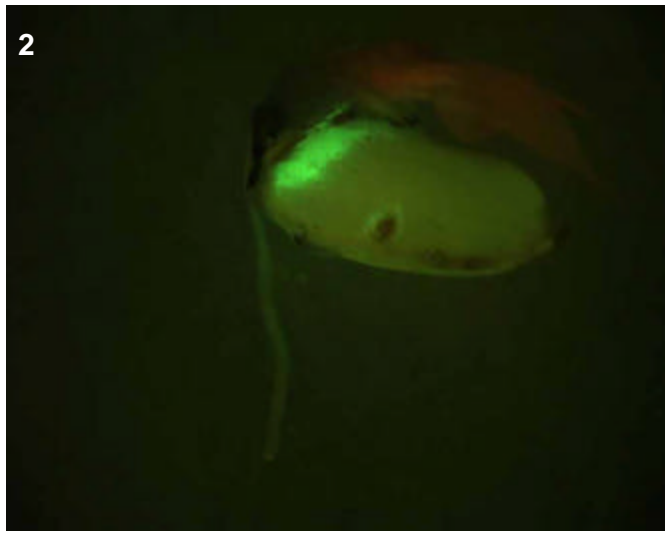
**Confocal?**

**Number T2 seed produced:** 0

1



2



## T0 comments

## T1 seed comments

3/5 seeds show bright expression in the embryo.

## T1 seedling comments

Seedlings grew poorly, and only one very sick plant after 2 weeks growth. Bright in endosperm and the root in general.

# Genotype: AOV H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

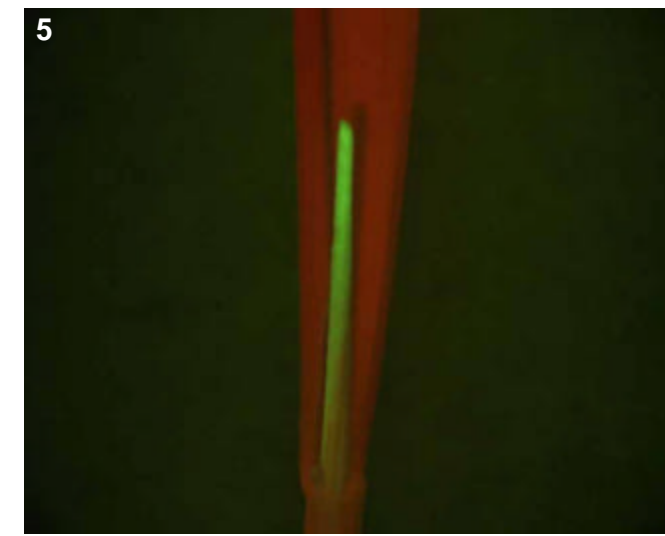
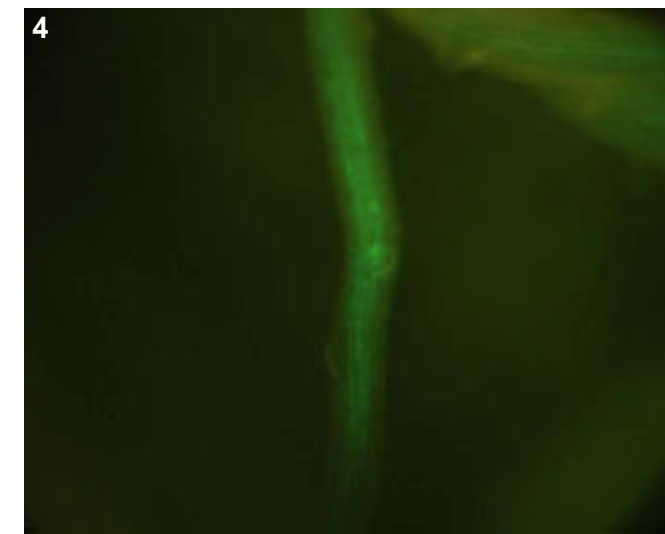
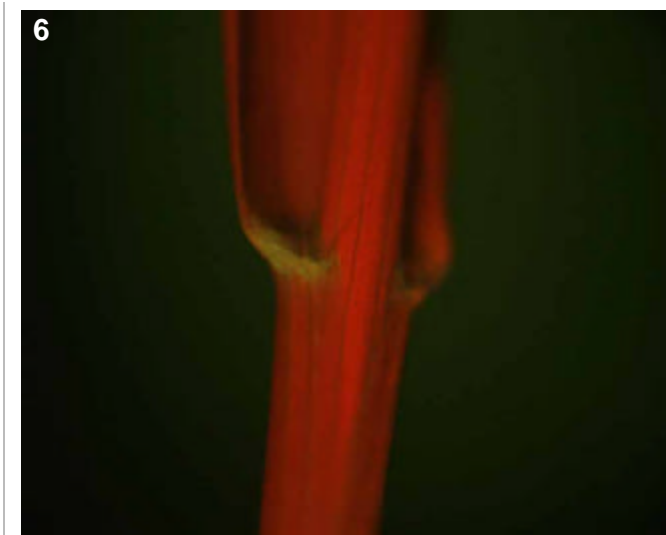
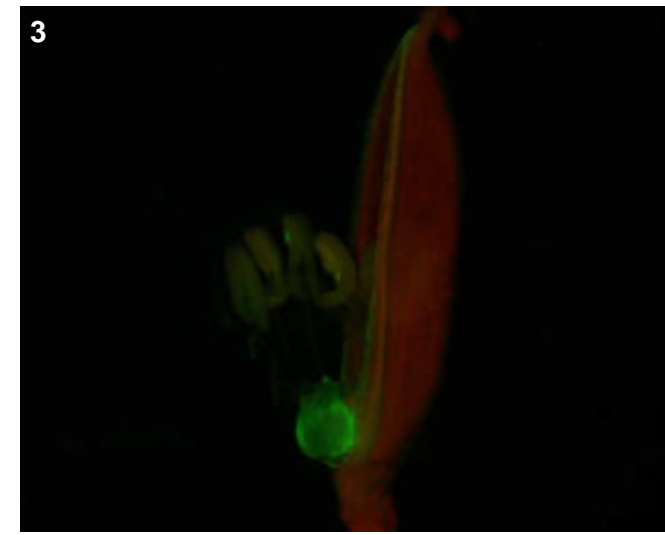
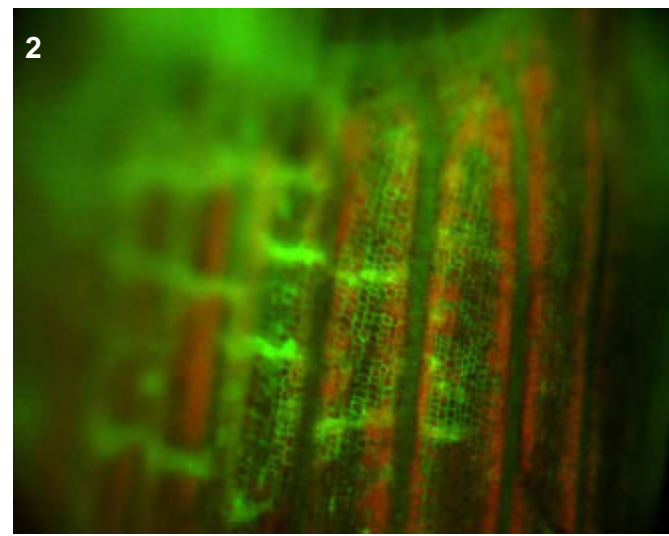
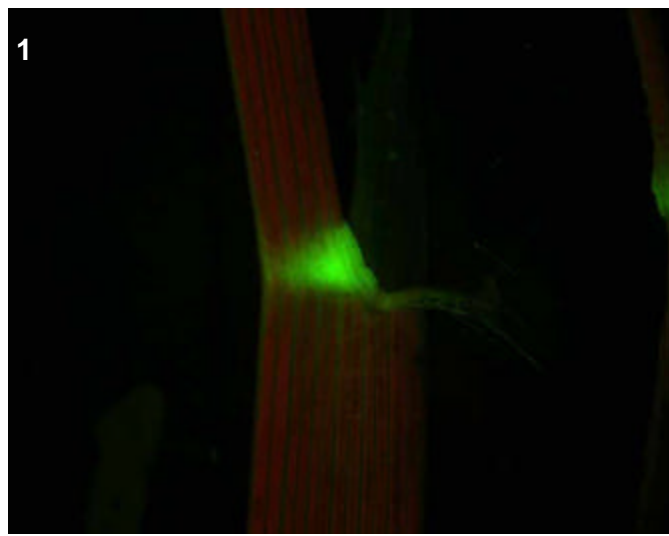
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 11



### T0 comments

Expression bright in collar, sheath vascular and lodicules.

### T1 seed comments

### T1 seedling comments

Two plants were GFP+ in the lateral roots (root vascular). Interesting in that it was only in the older portions of the root. Good for confocal? One of the plants had expression in collar, while the other had a very bright emerging second leaf.



# Genotype: AOW C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

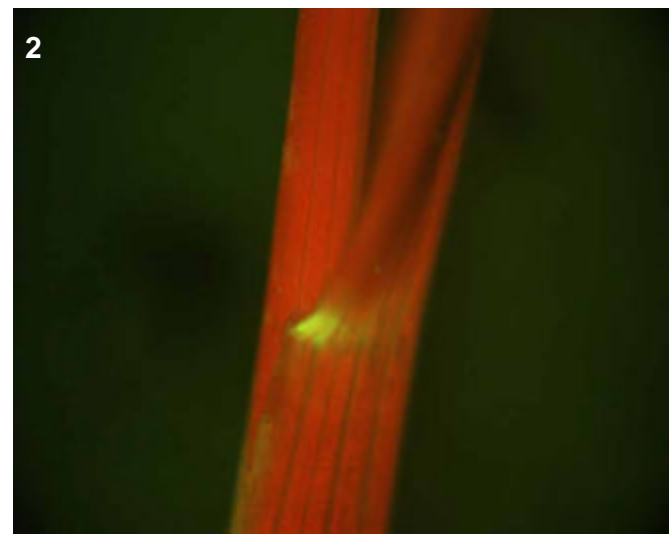
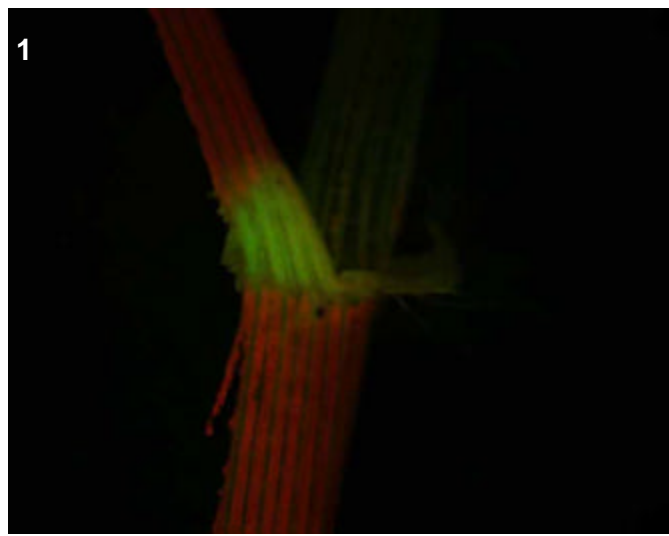
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 50



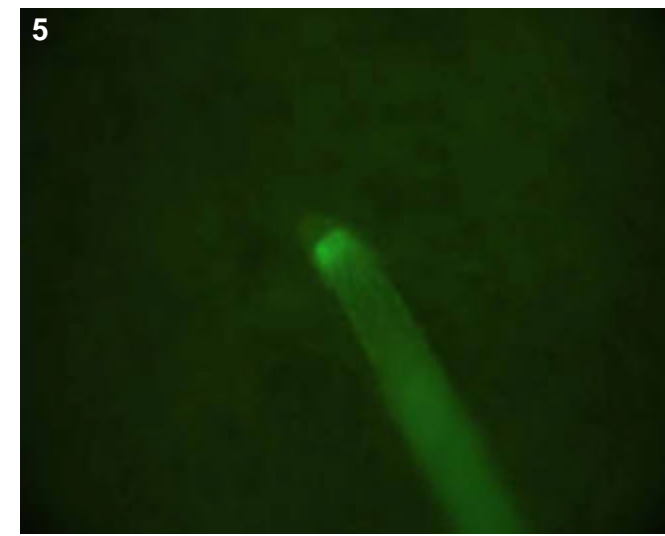
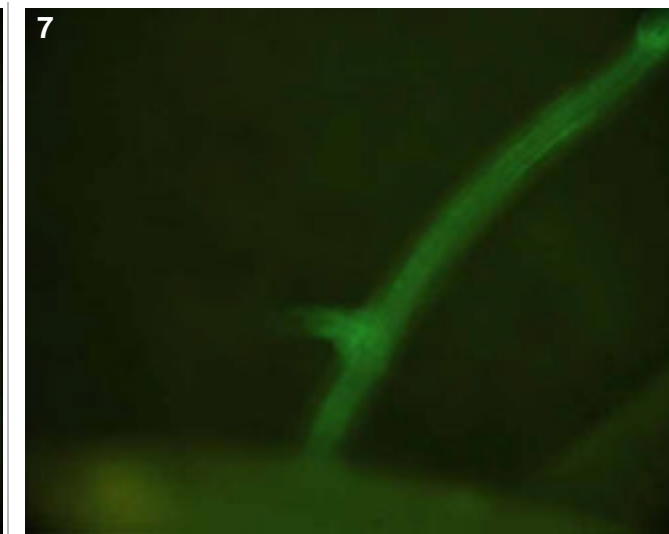
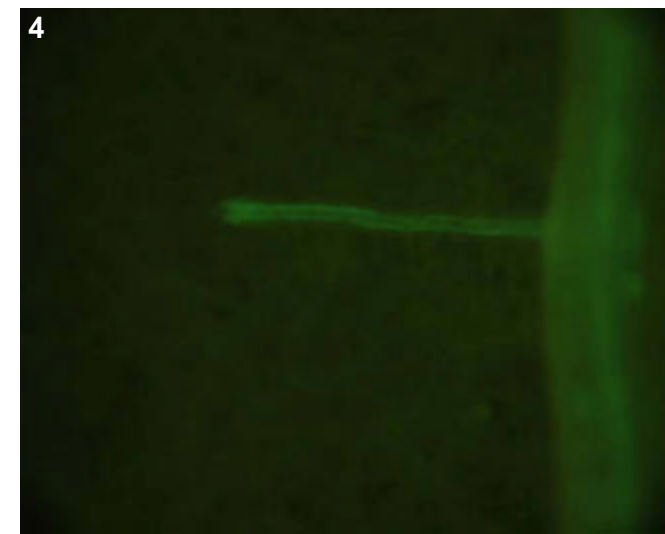
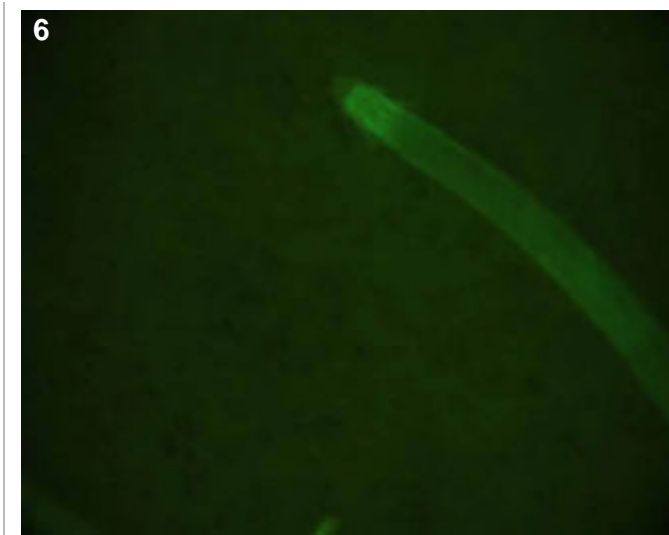
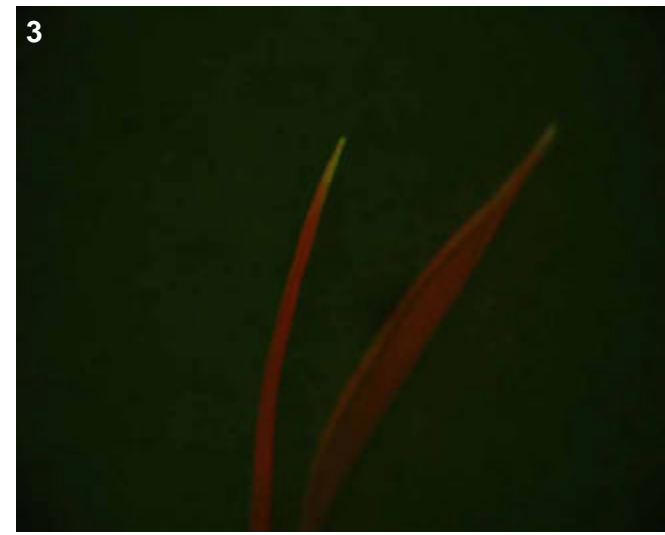
### T0 comments

Faint expression in the collar, concentrated where ligule emerges from the collar.

### T1 seed comments

### T1 seedling comments

Interesting root expression, because bright at apex. Very bright root vascular, especially in laterals. Also bright collar and tips of leaves, maybe shoot vascular.



# Genotype: AOW E08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

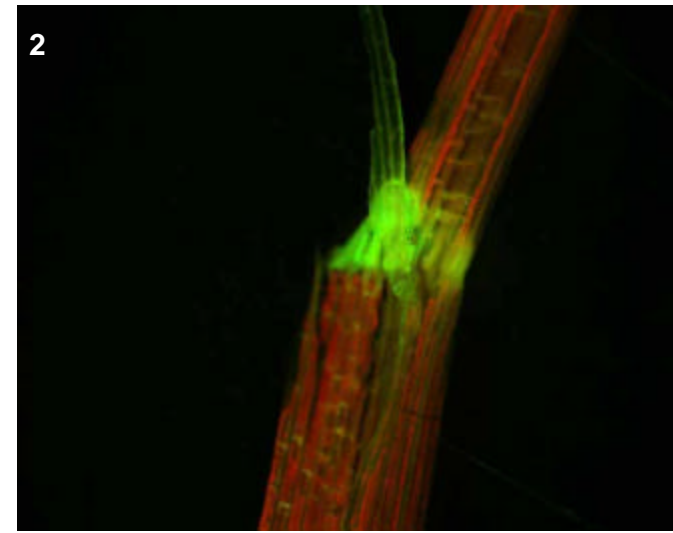
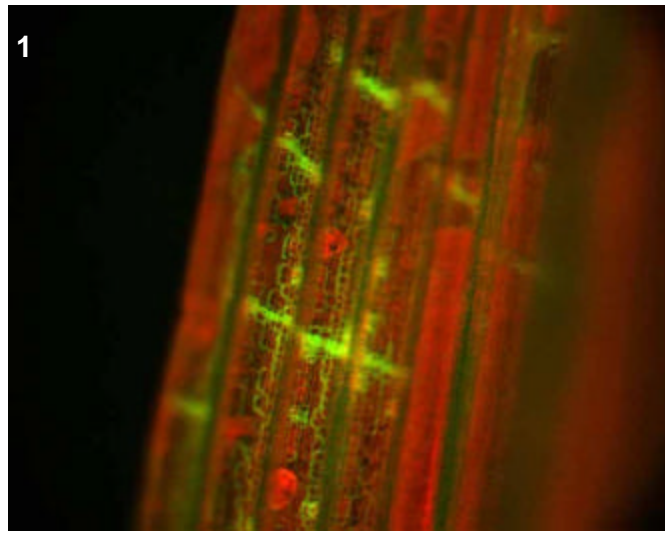
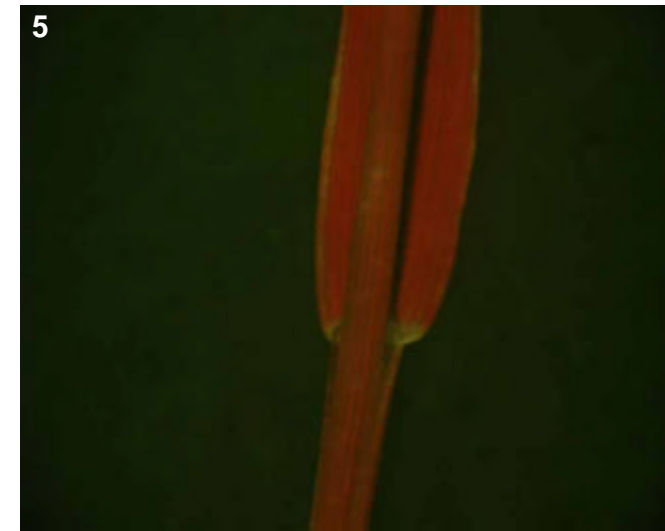
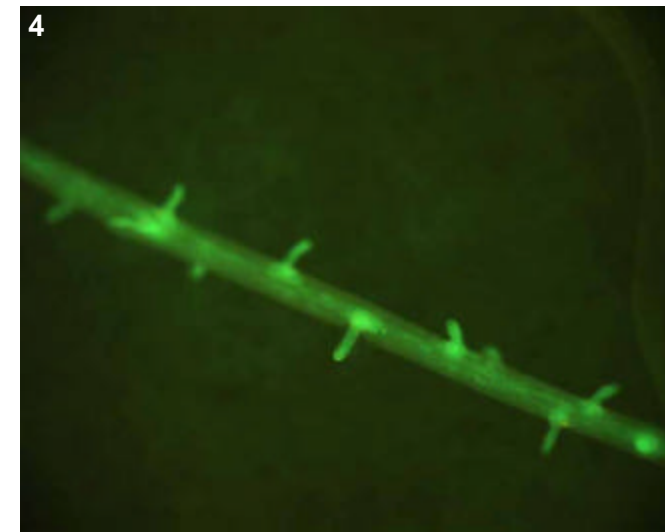
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 4



## T0 comments

Strong expression in collar, moderate expression in the sheath vascular.

## T1 seed comments

## T1 seedling comments

Strong expression in root vascular. More faint expression in collar and edges of leaves.

# Genotype: AOW G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 5-10  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

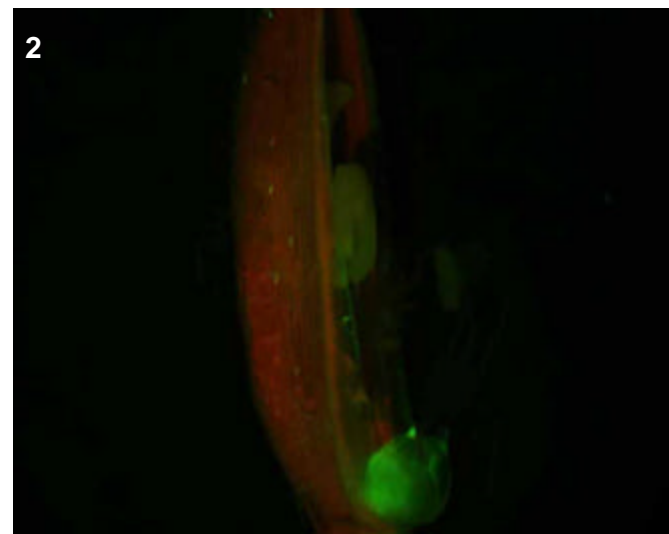
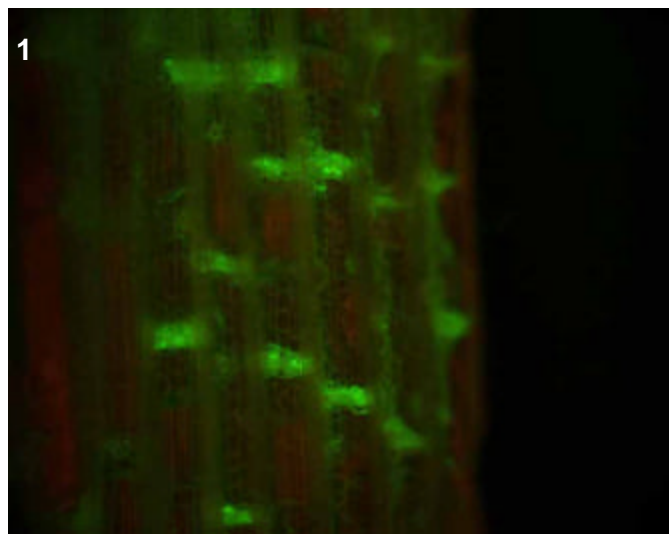
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 4



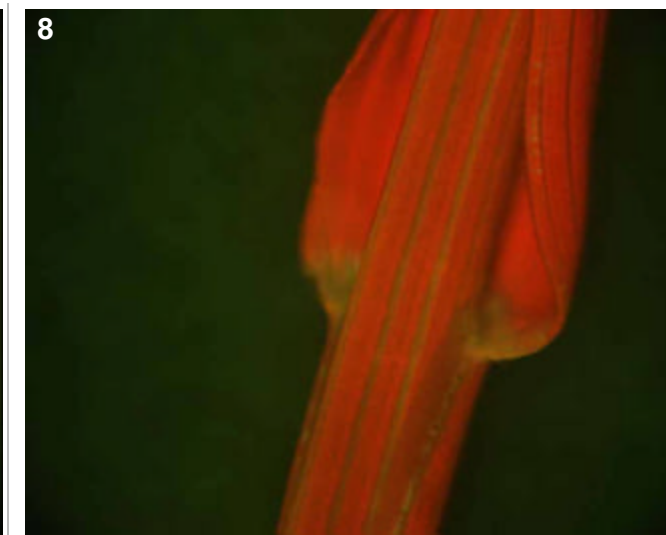
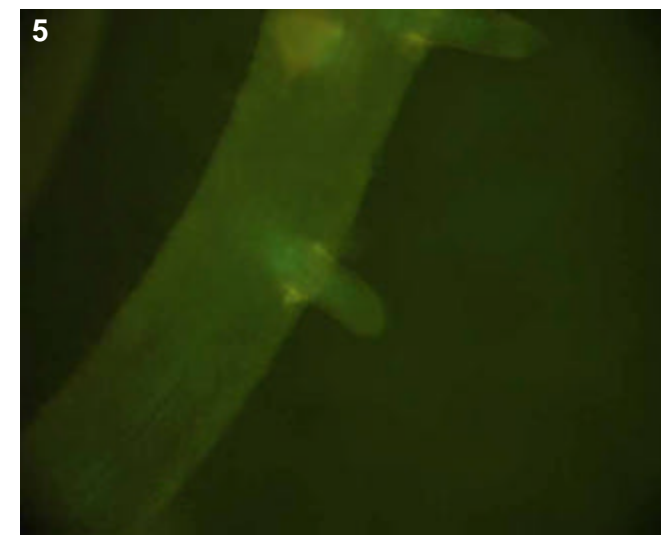
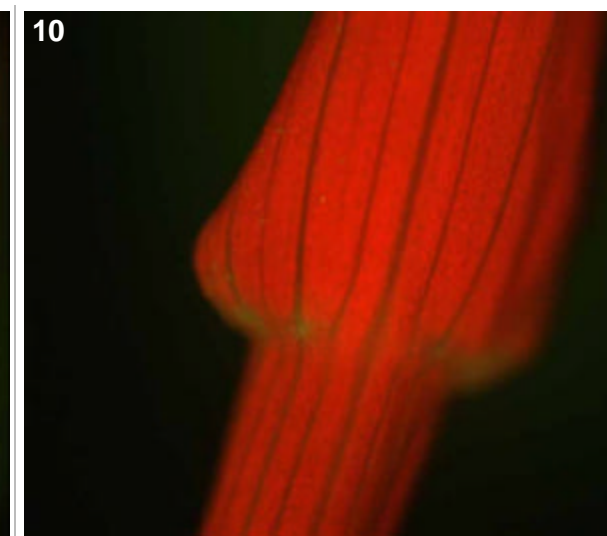
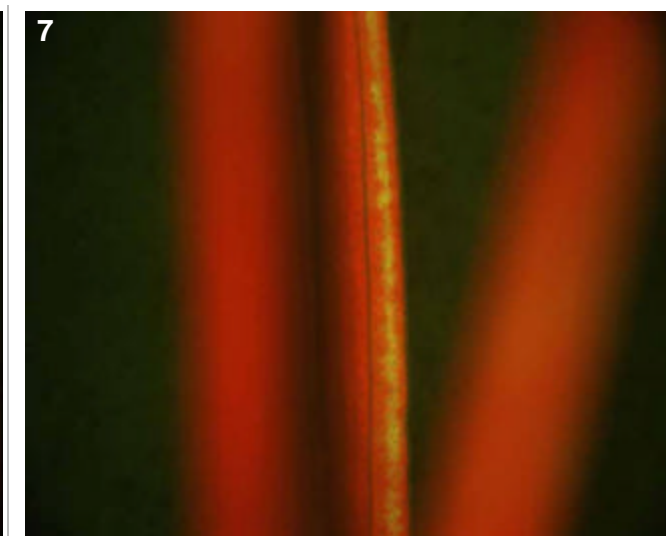
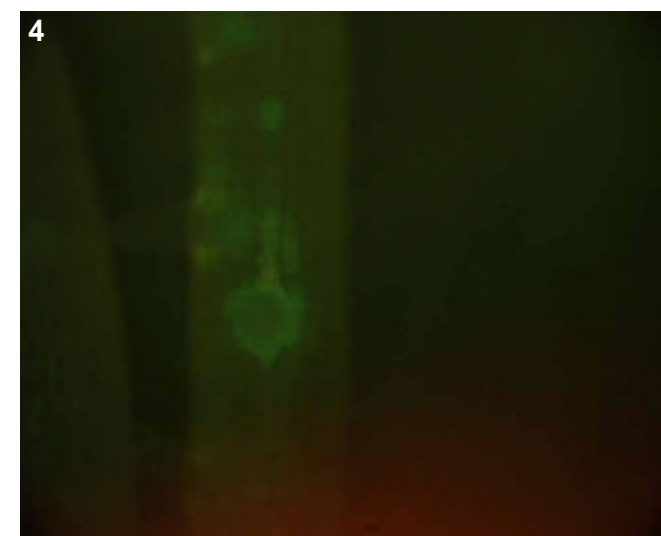
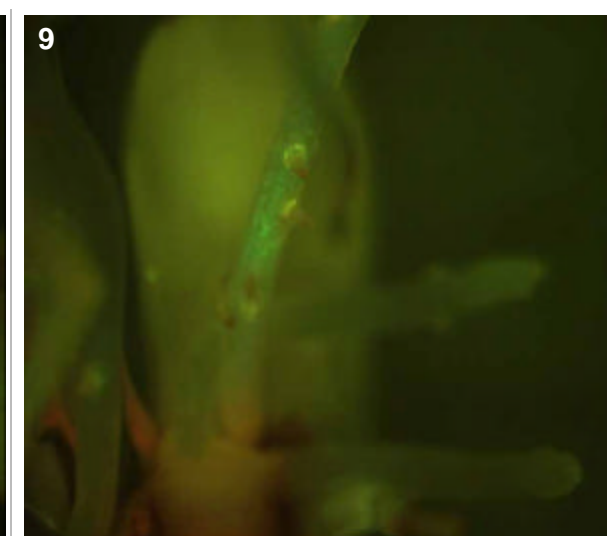
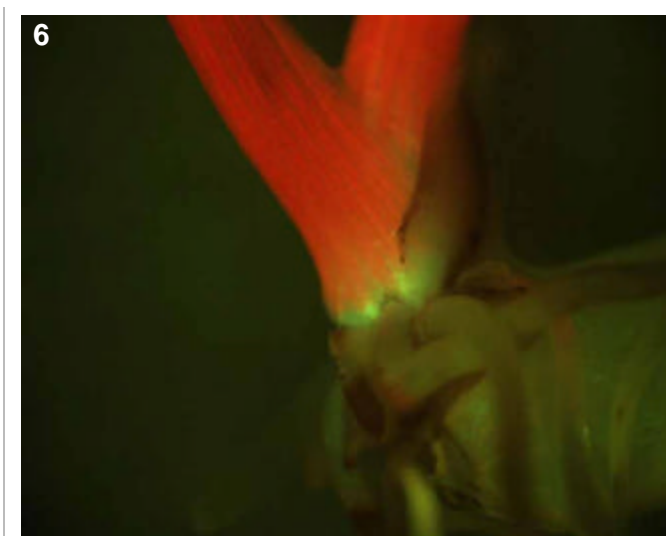
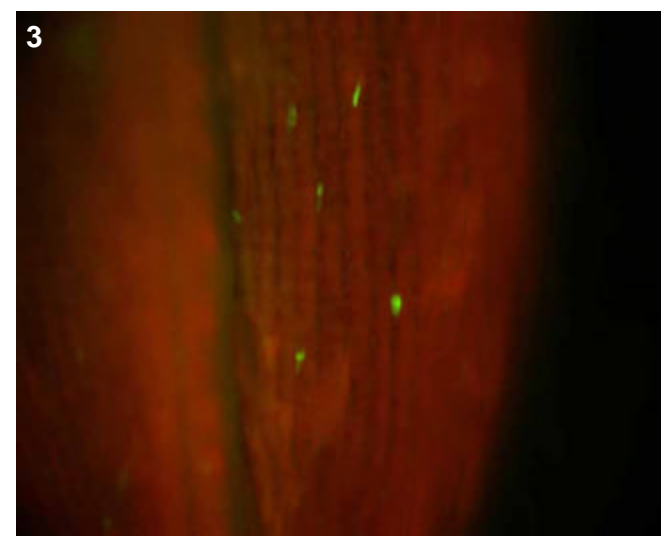
### T0 comments

Strong expression in sheath vascular, lodicules and trichomes of flower.

### T1 seed comments

### T1 seedling comments

Root expression mostly in older parts of crowns and at the base of laterals. Bright shoot vascular, collar, leaf edges as well as the base of seedlings where new crown roots emerge.



# Genotype: AOX B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

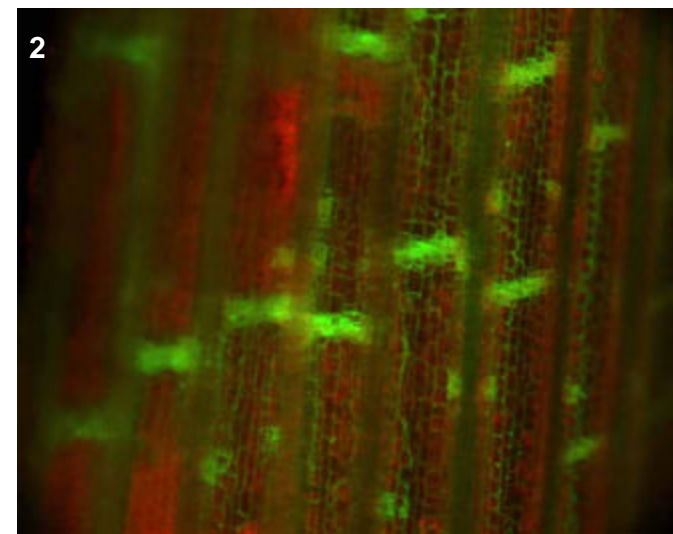
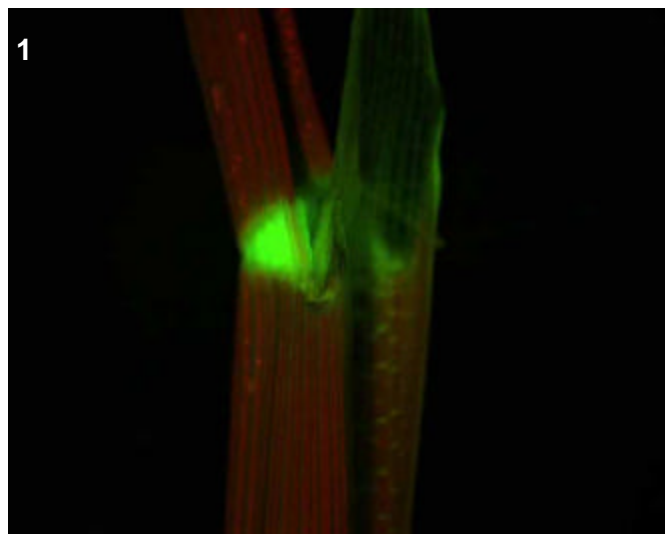
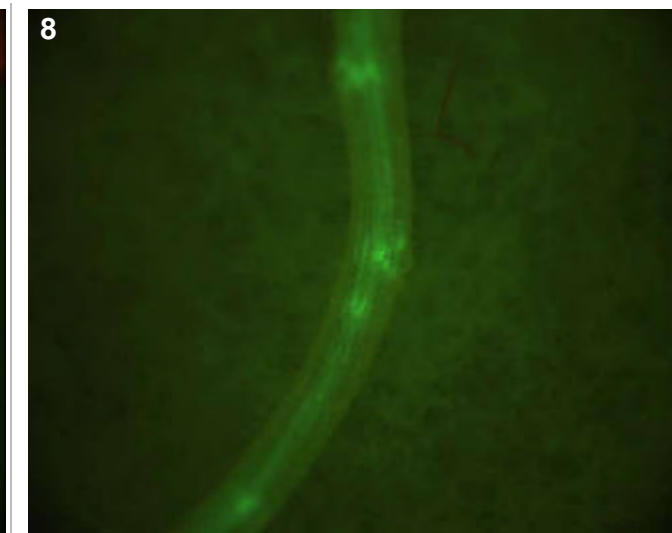
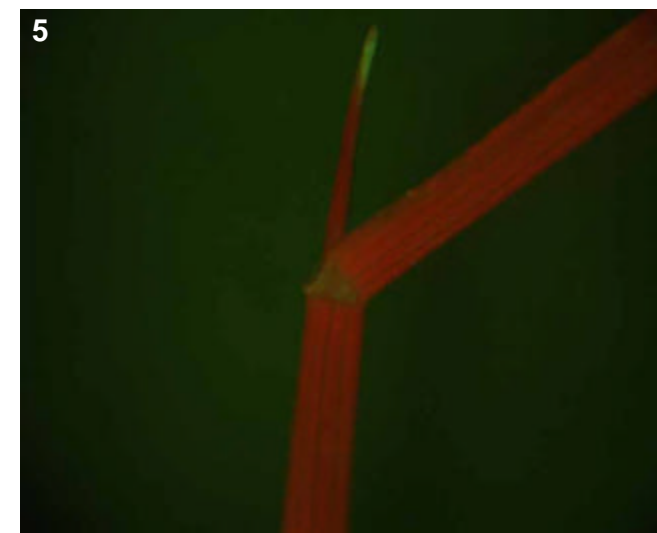
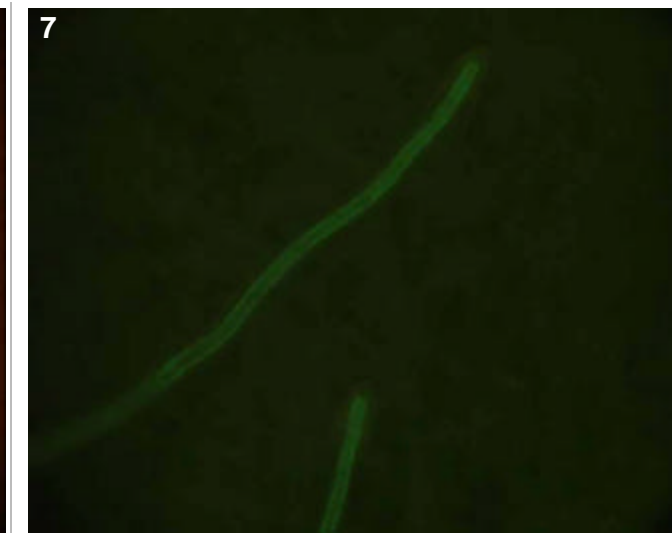
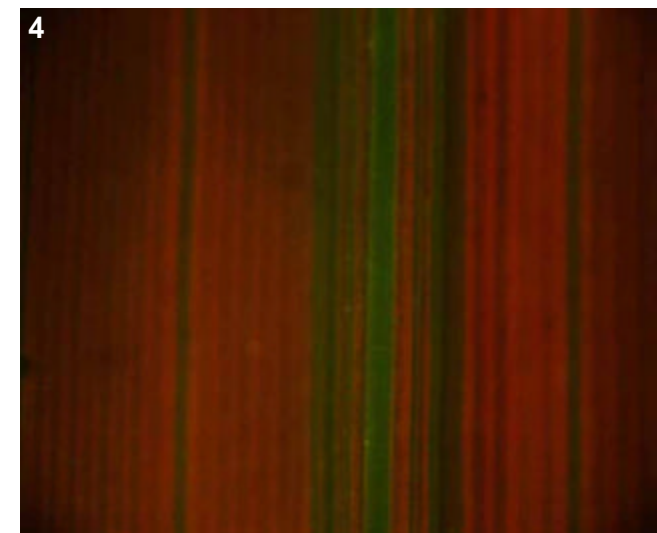
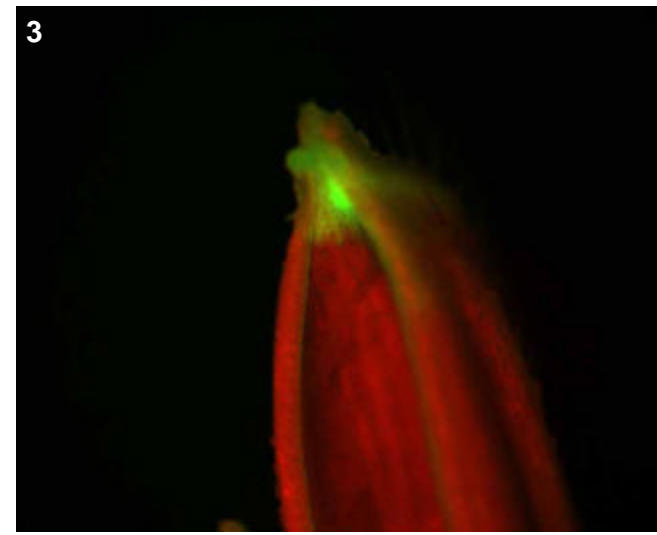
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?** YES

**Number T2 seed produced:** 0



### T0 comments

Very strong vascular line: bright collar, sheath and leaf vascular. Faint expression in lodicules but no pic taken.

### T1 seed comments

### T1 seedling comments

A great vascular line, looks to be very specific to the vascular cylinder. Confocal will clarify. Also faint collar and more brightly in tips of leaves. Bad germination of seed so take several for confocal.

# Genotype: AOX D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

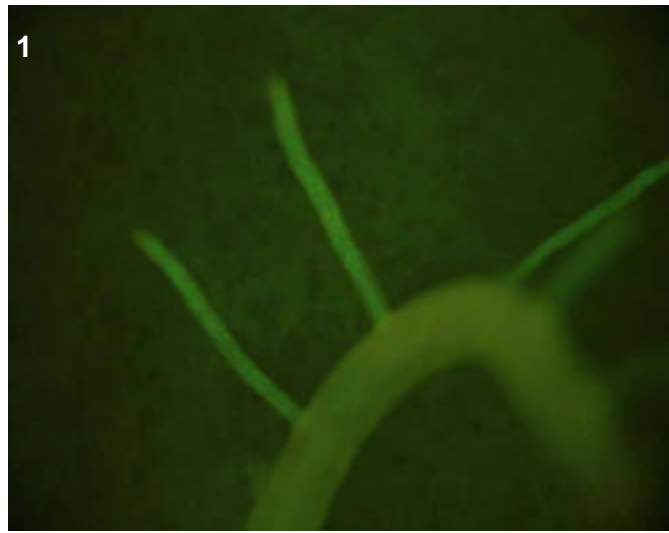
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 10



## T0 comments

## T1 seed comments

## T1 seedling comments

A root-specific line, vascular in lats and crowns.

# Genotype: AOX E05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

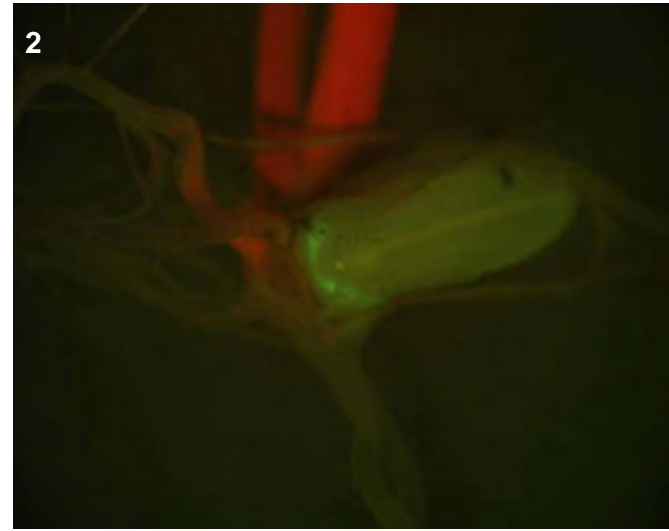
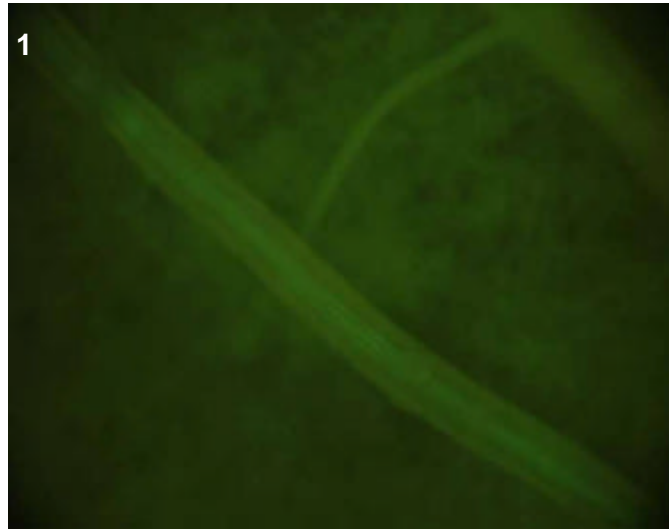
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Moderate expression in vascular of lats and crowns. Also bright expression in region of scutellum of digesting seed.

# Genotype: AOX E06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

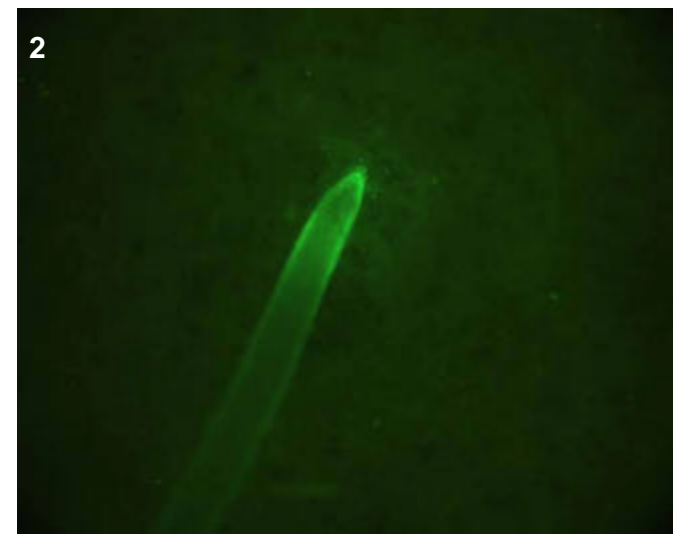
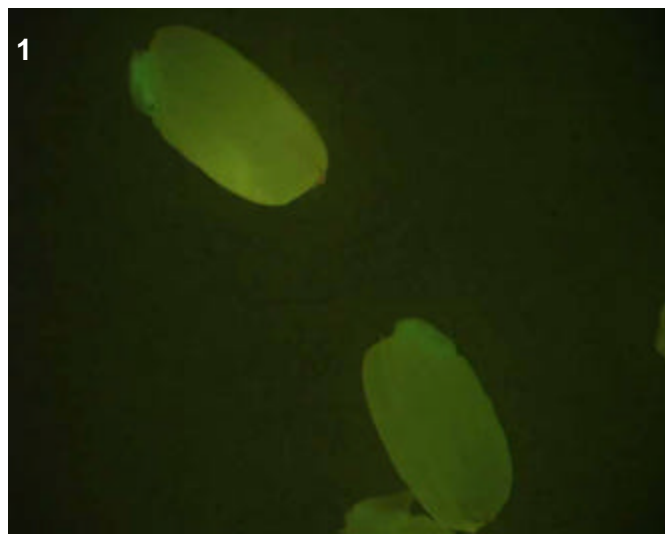
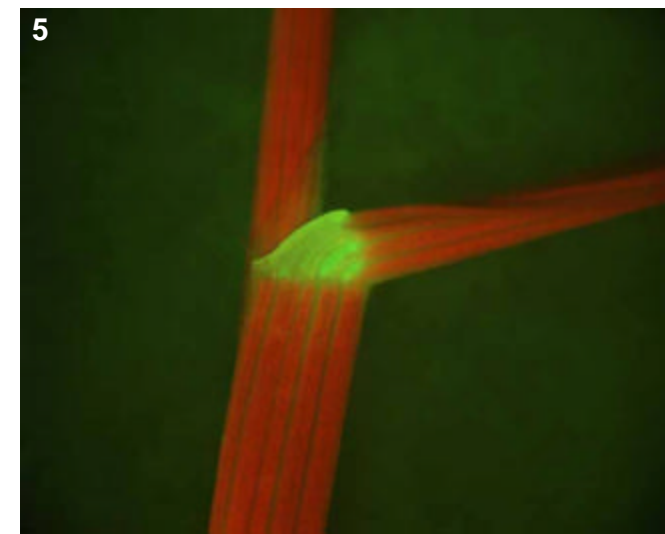
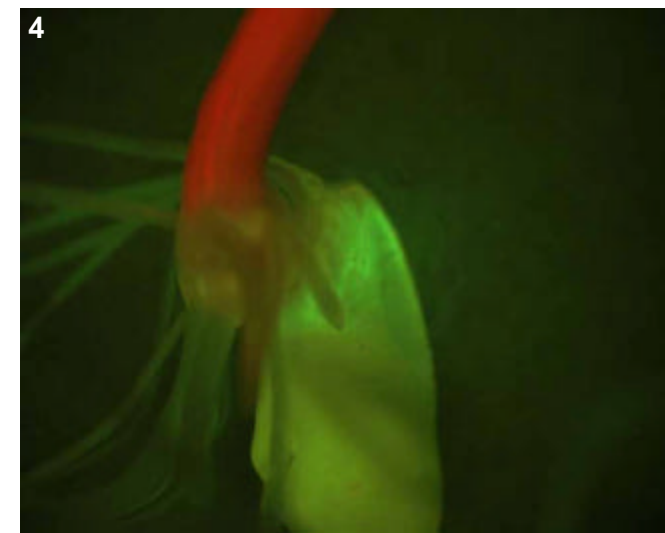
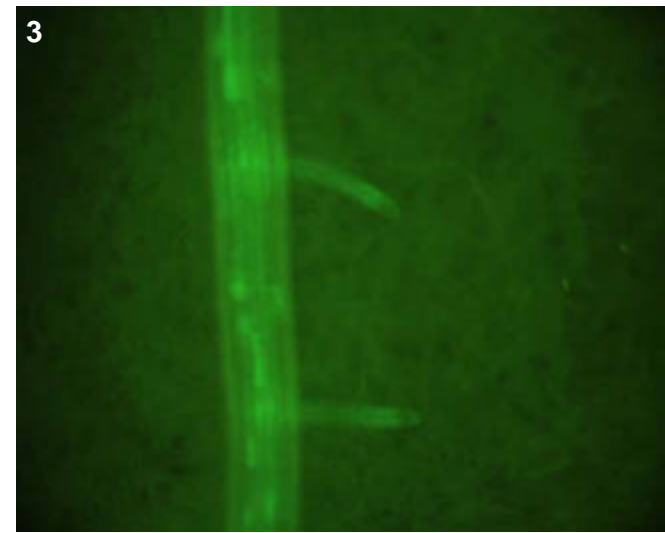
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

2/5 seeds show bright expression.

## T1 seedling comments

Bright root vascular line with more GFP at tips. Also bright collar, endosperm and perhaps shoot vascular.

# Genotype: AOY A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3  
 T1 mature plant: 4-6

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

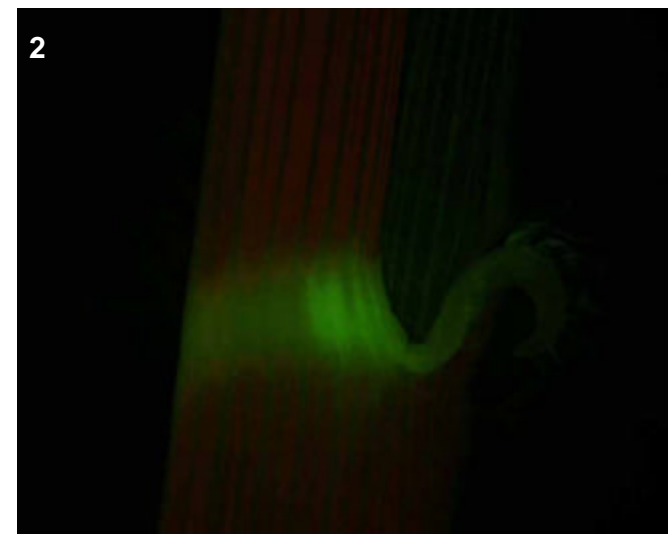
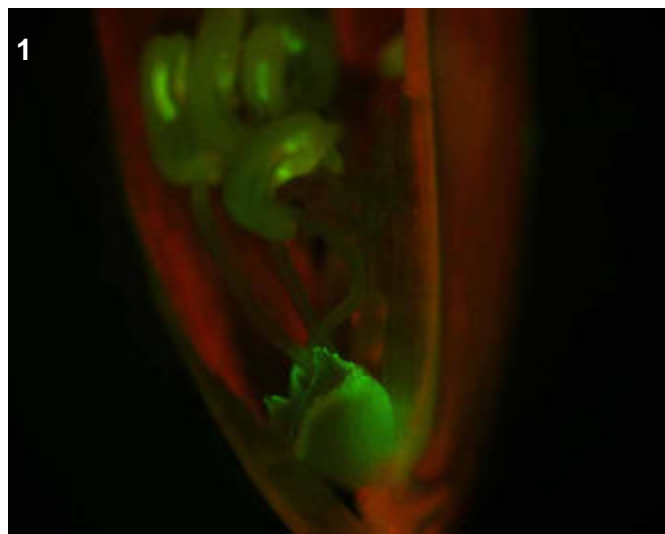
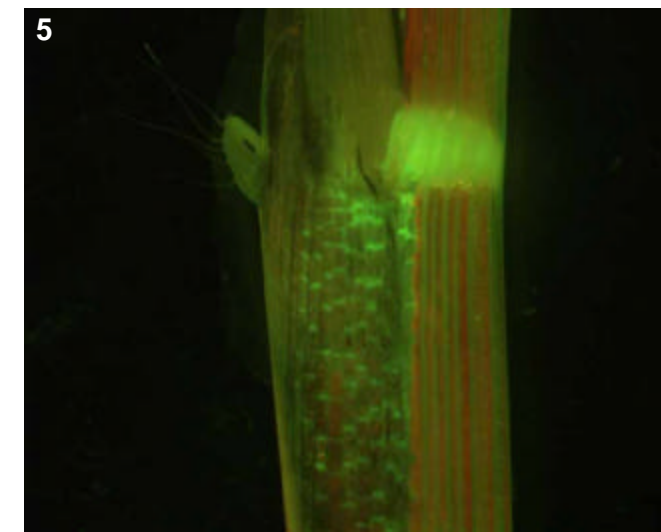
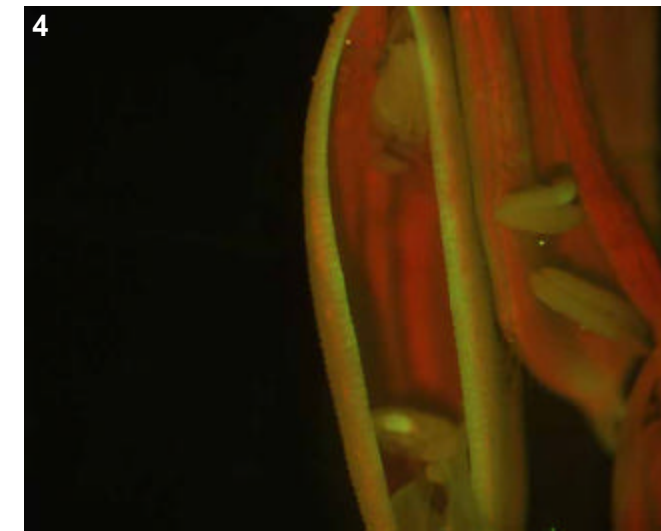
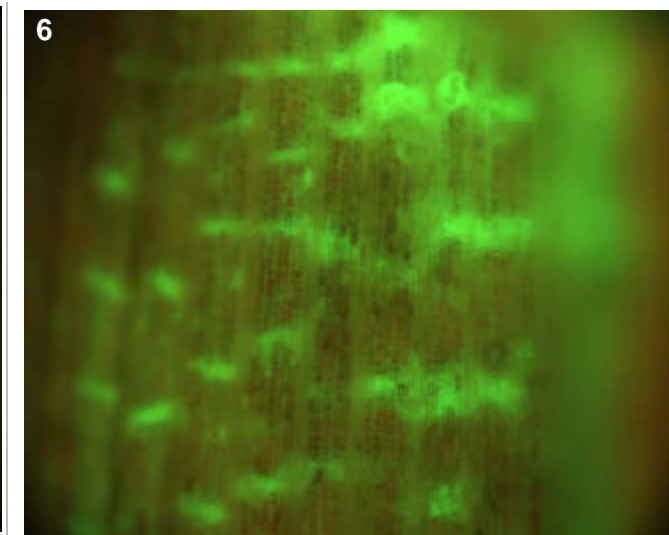
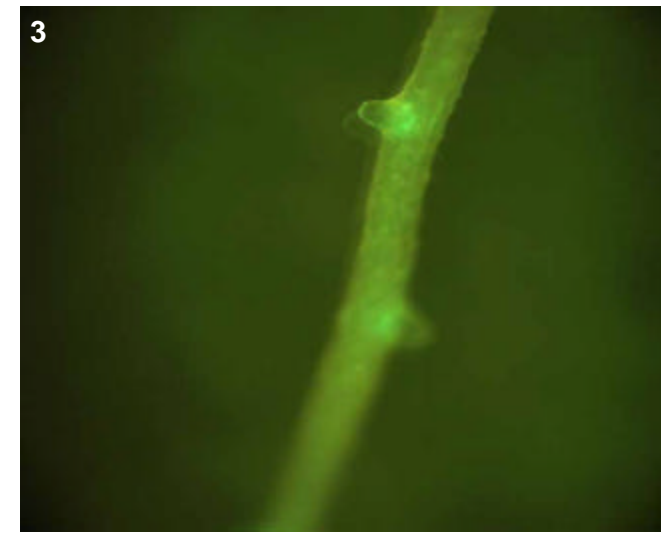
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:  
Collar and sheath vascular, as well as faint floral vascular.
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 146



### T0 comments

Weak expression in collar, no expression in the surrounding vascular tissues. Some lodicule expression mostly near the tips of the organ.

### T1 seed comments

### T1 seedling comments



# Genotype: AOY A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

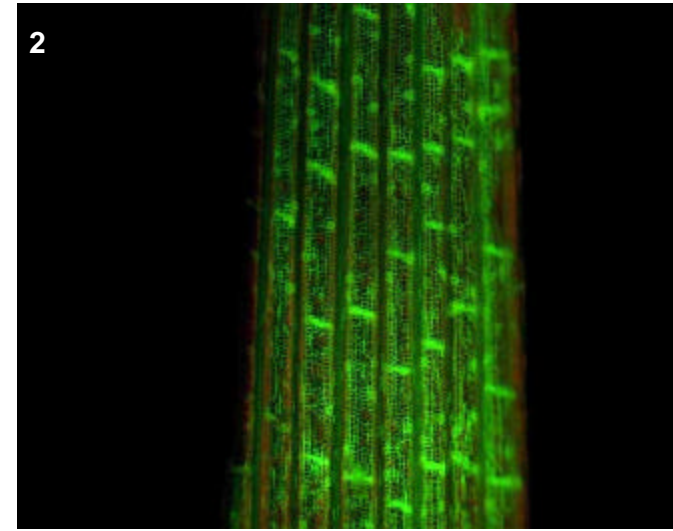
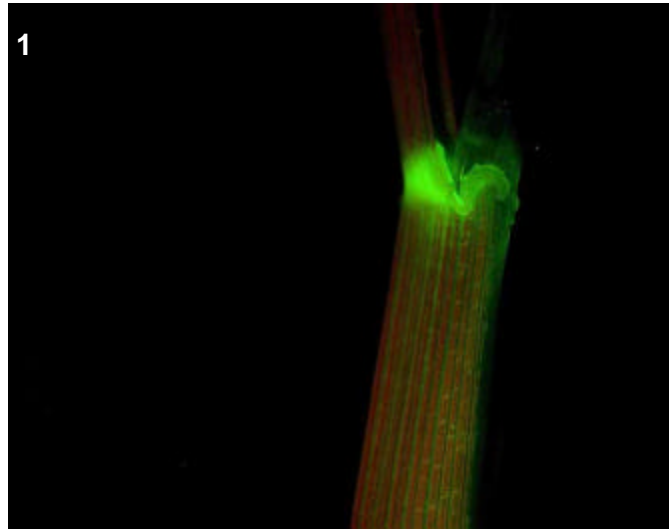
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 13



### T0 comments

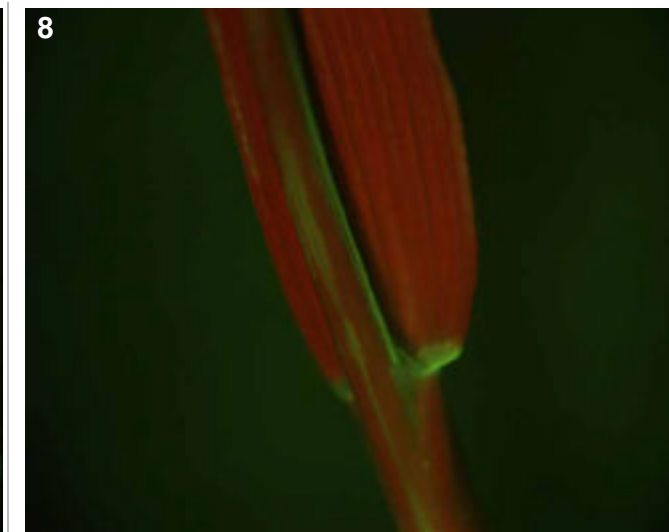
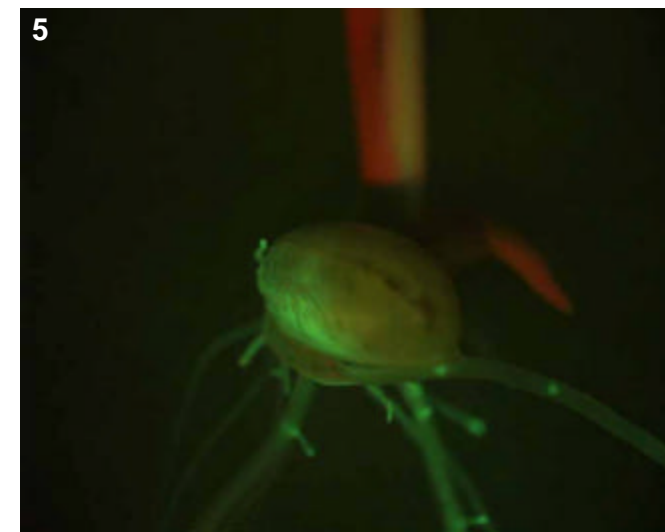
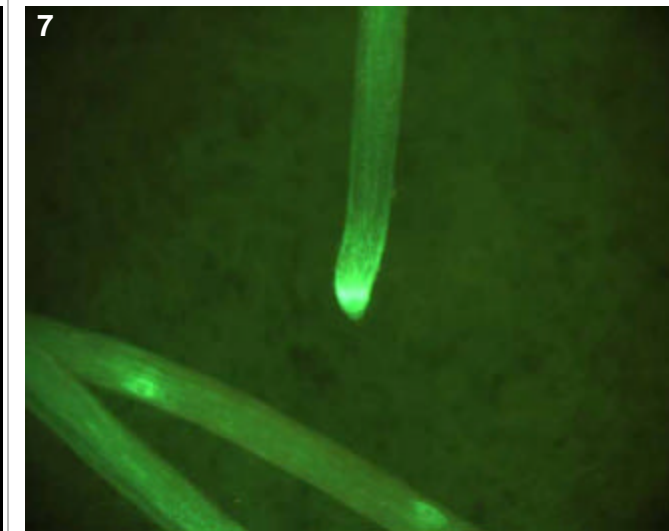
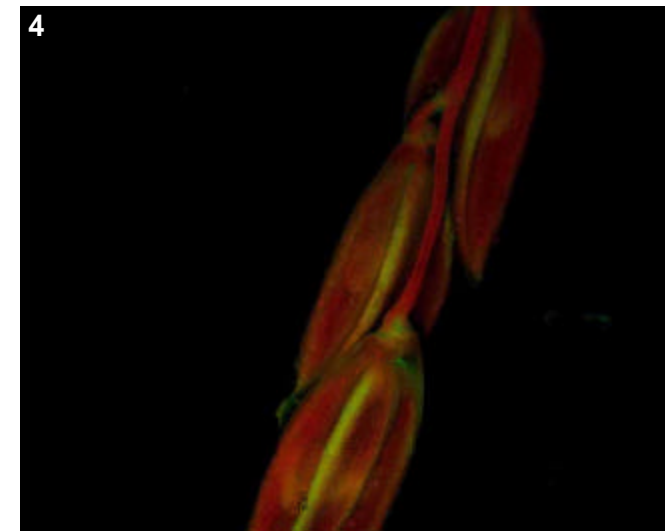
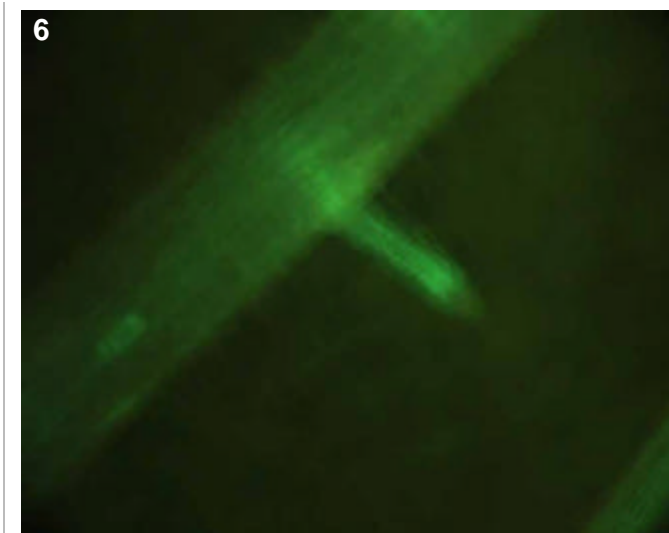
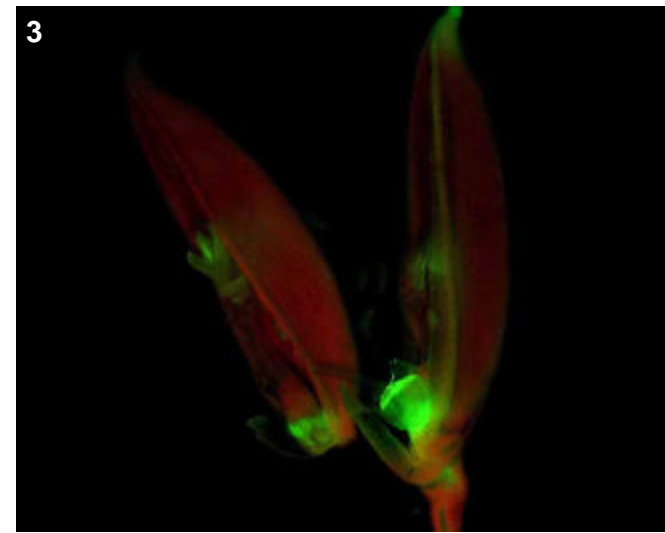
Expression in collar and sheath vascular. Also lodicules and floral vascular.

### T1 seed comments

2/5 seeds showed bright expression in the embryo.

### T1 seedling comments

Bright root and shoot vascular expression.



# Genotype: AOY C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- In this case there was no T0 screen, but appears to be no adult expression.

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 33

## T0 comments

## T1 seed comments

## T1 seedling comments

Expression in the older portion of roots, very difficult to photograph so none taken.

# Genotype: AOY H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

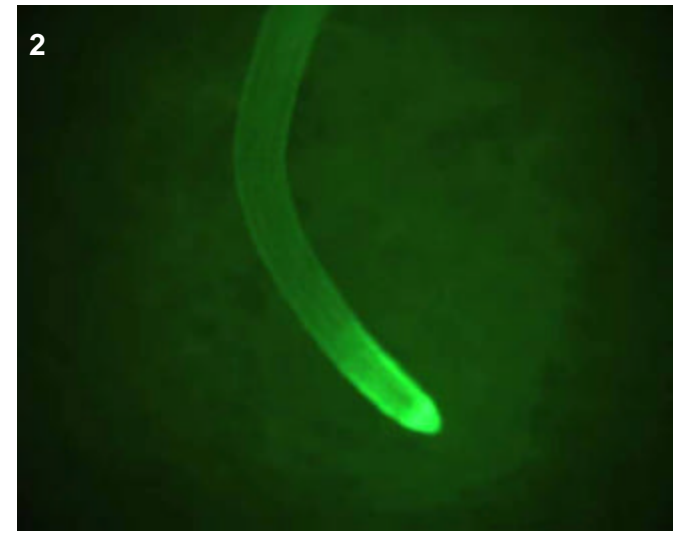
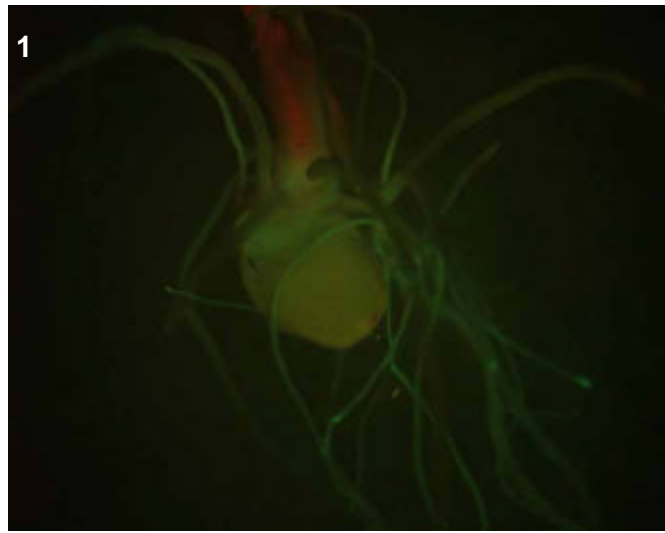
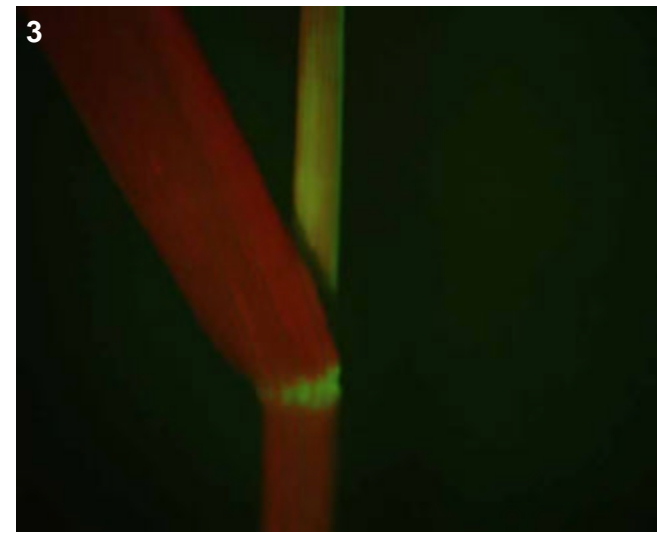
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 26



## T0 comments

## T1 seed comments

2/5 seeds showed expression.

## T1 seedling comments

Looks to be epidermal in the roots visible in pic 1, and the crown root in pic 2.

# Genotype: AOZ A06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

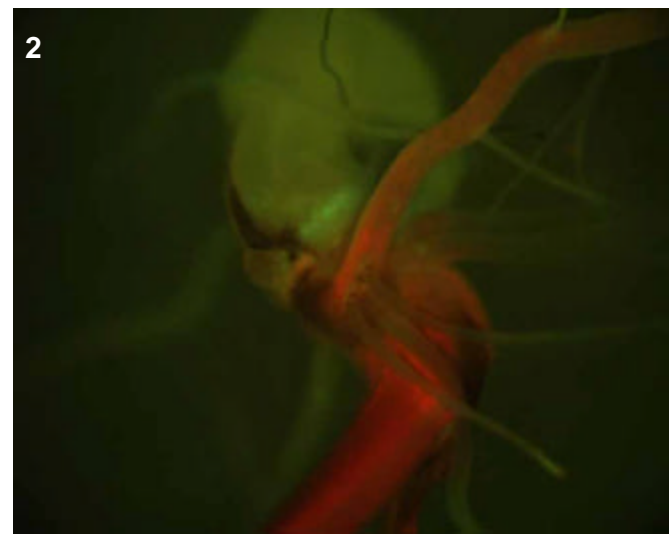
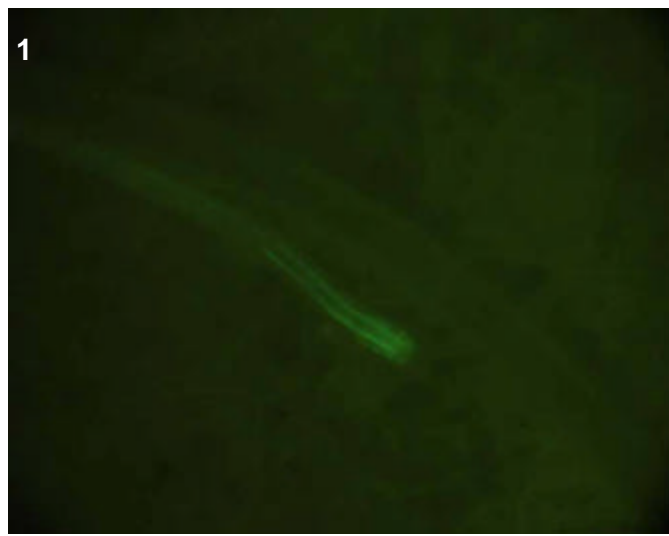
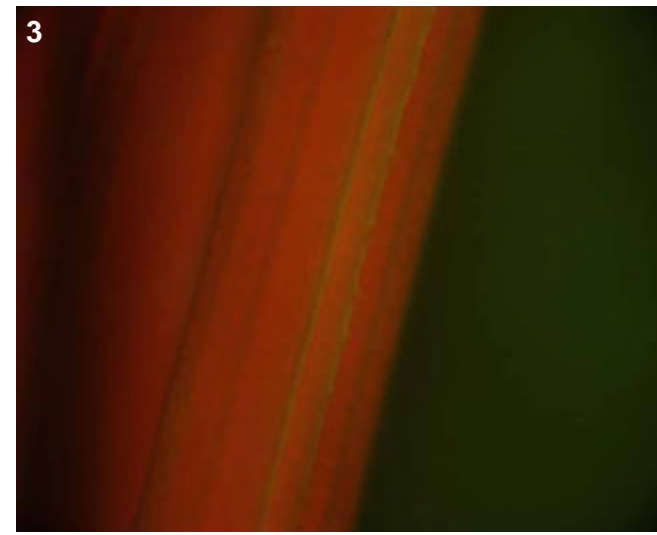
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?** YES

**Number T2 seed produced:** 64



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: AOZ D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

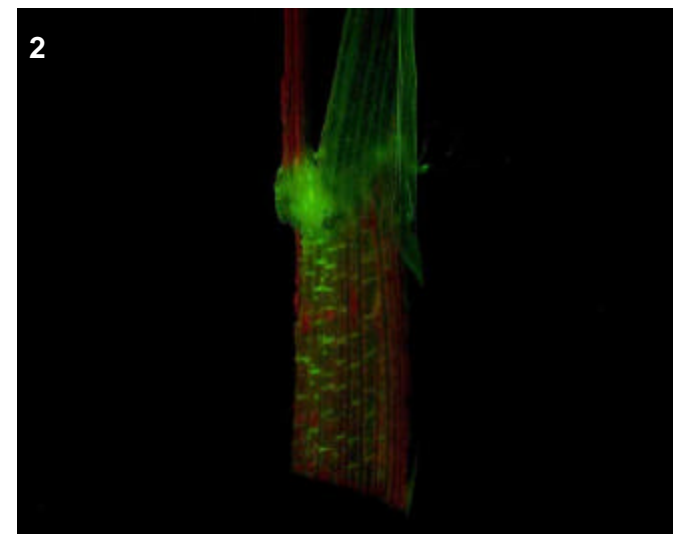
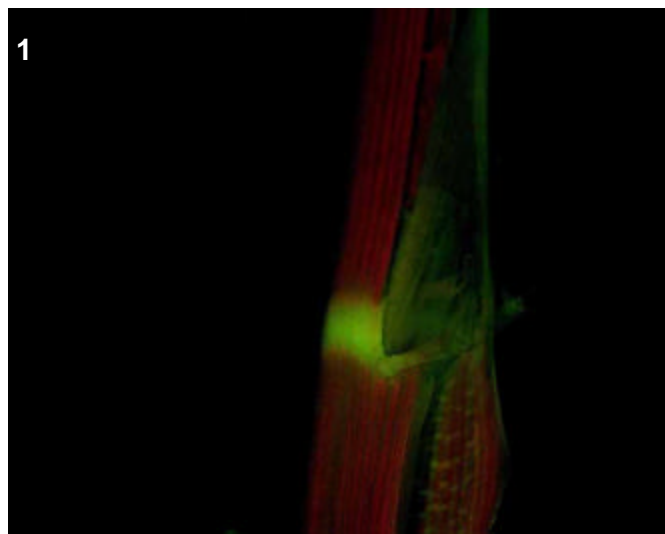
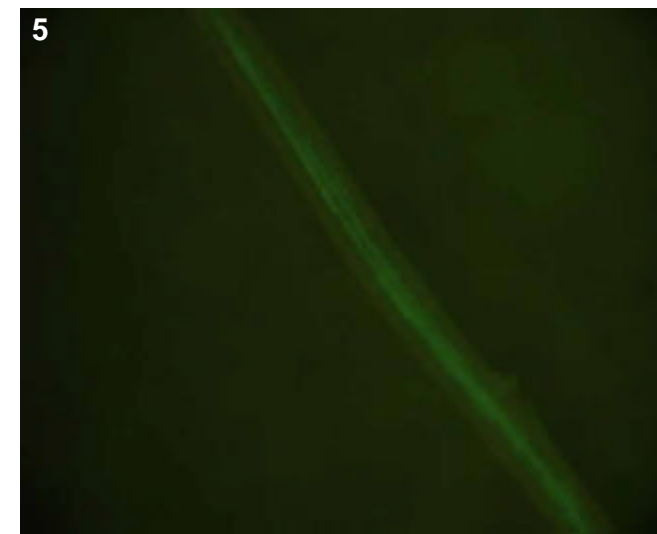
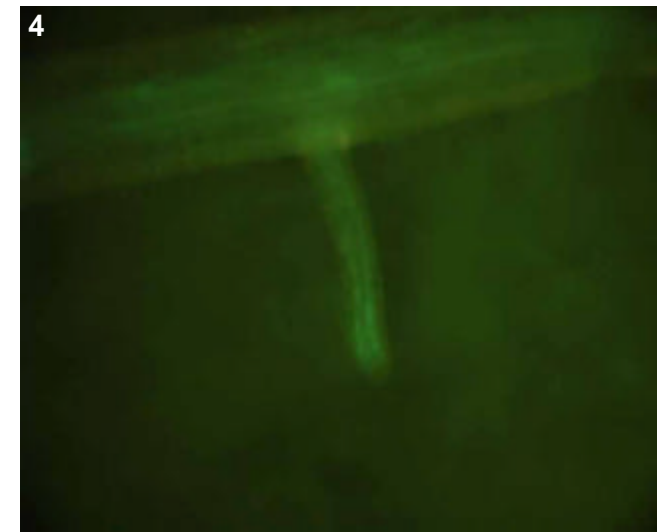
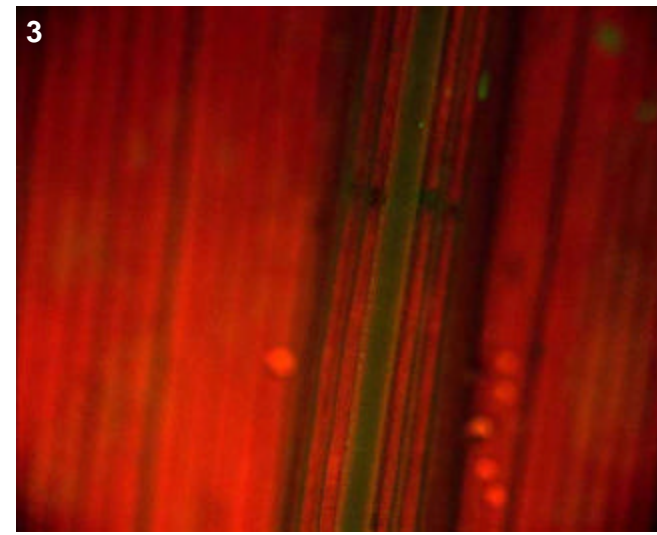
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 35



## T0 comments

Strong expression in collar, and vascular of sheath and leaf. Perhaps faint expression in lodicules of older flowers.

## T1 seed comments

## T1 seedling comments

Expression bright in roots, but not shoots, of seedlings.

# Genotype: APA B03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

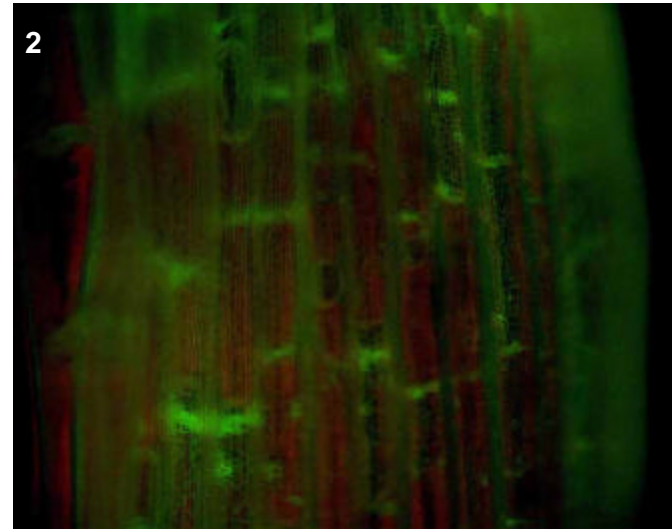
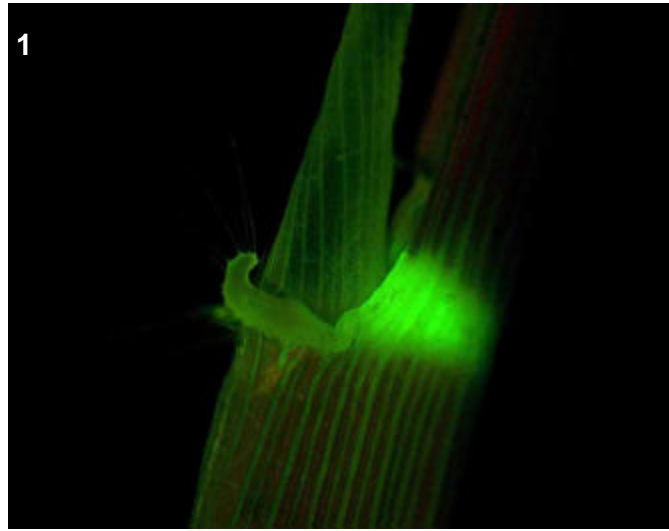
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
 YES, 3 GFP+ plants    Confocal?

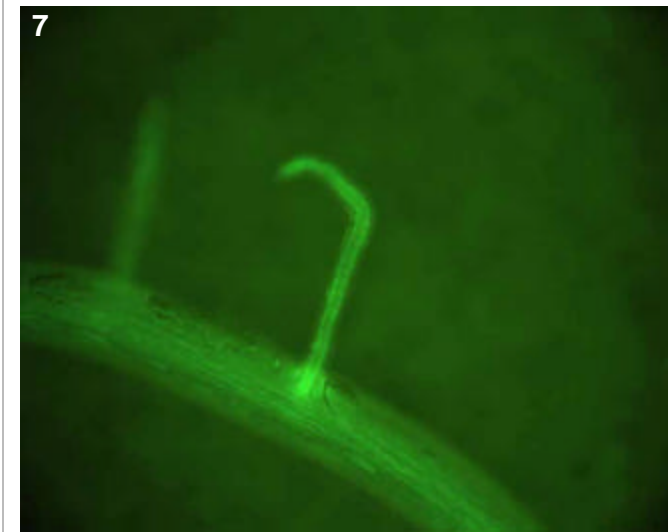
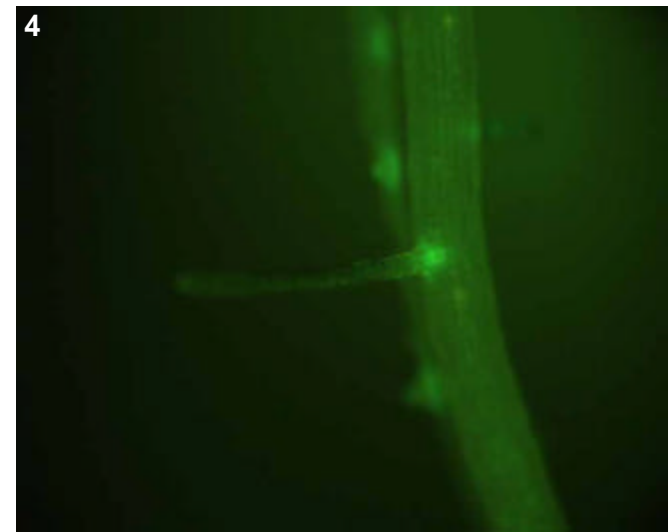
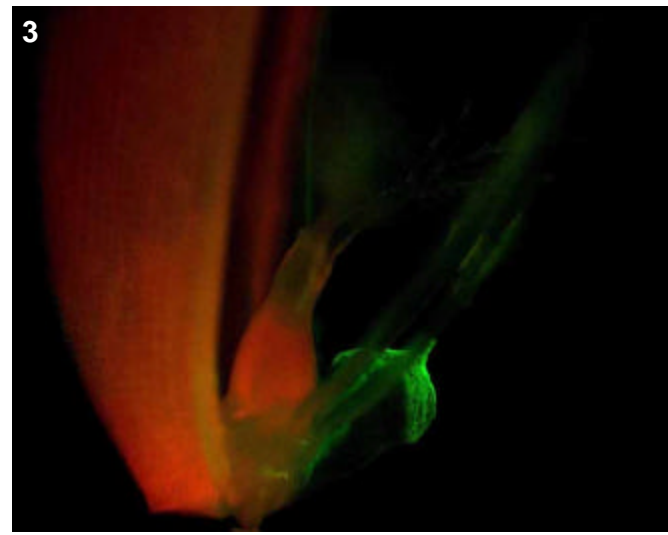
Number T2 seed produced: 90



**T0 comments**  
 Expression in collar and sheath vascular, as well as lodicules.

**T1 seed comments**

**T1 seedling comments**  
 Shoot vascular expression but collar shows no GFP.



# Genotype: APA D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

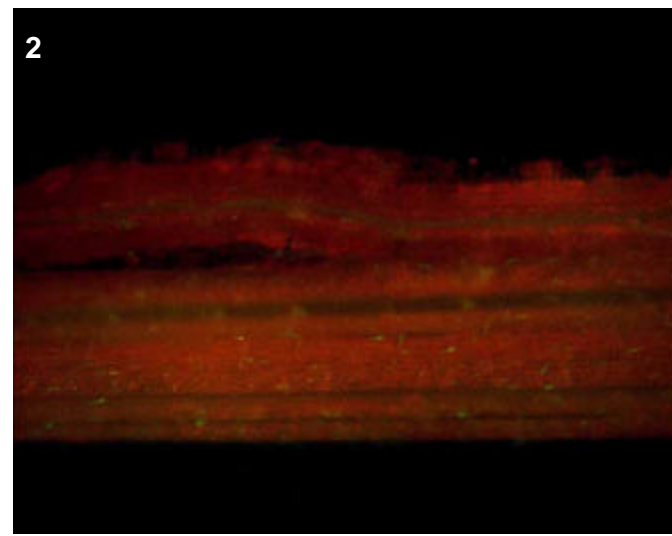
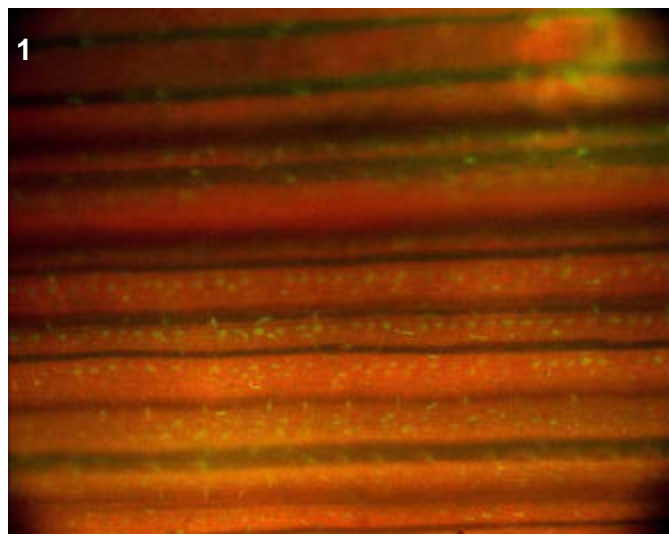
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 164



### T0 comments

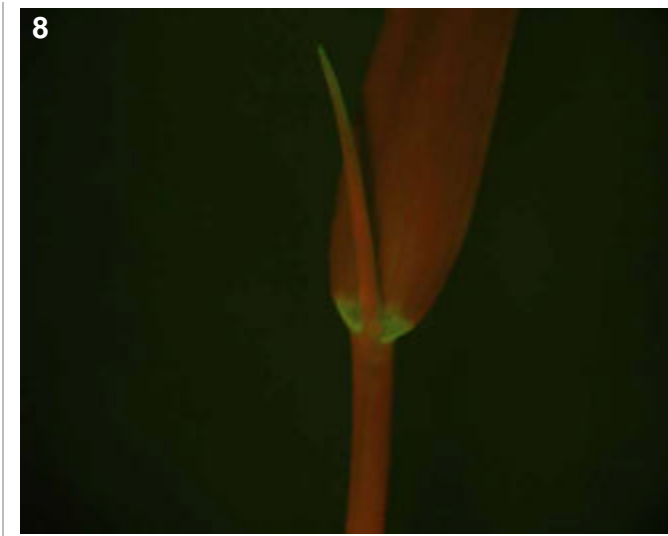
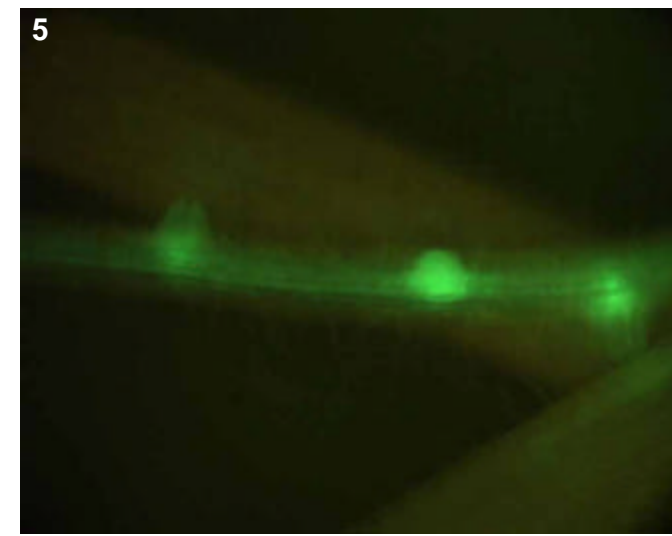
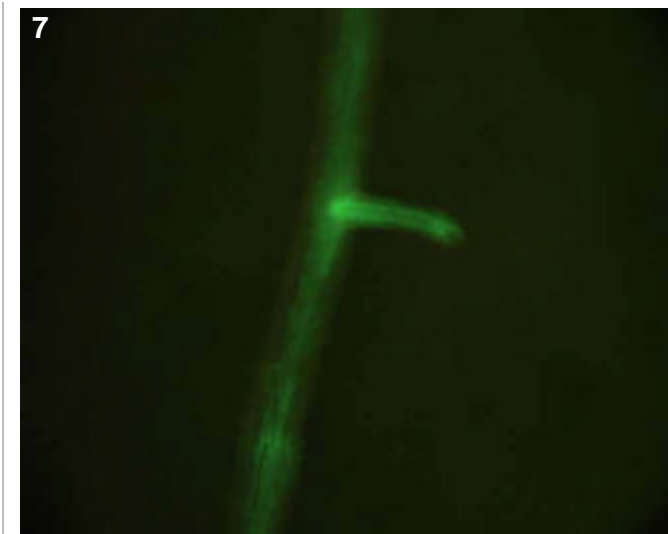
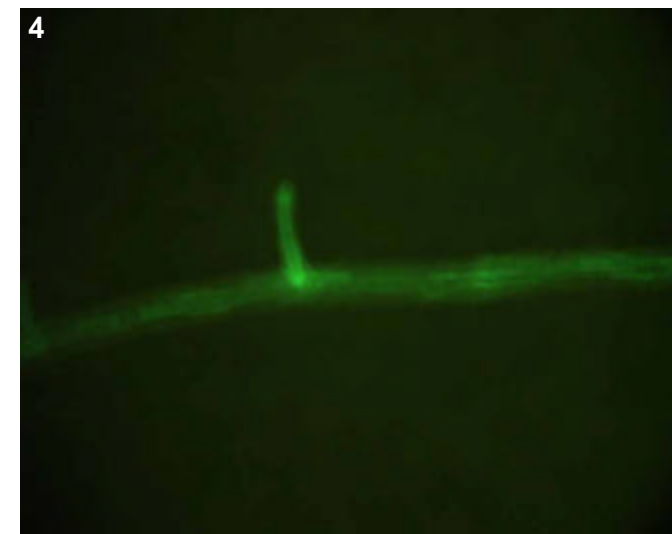
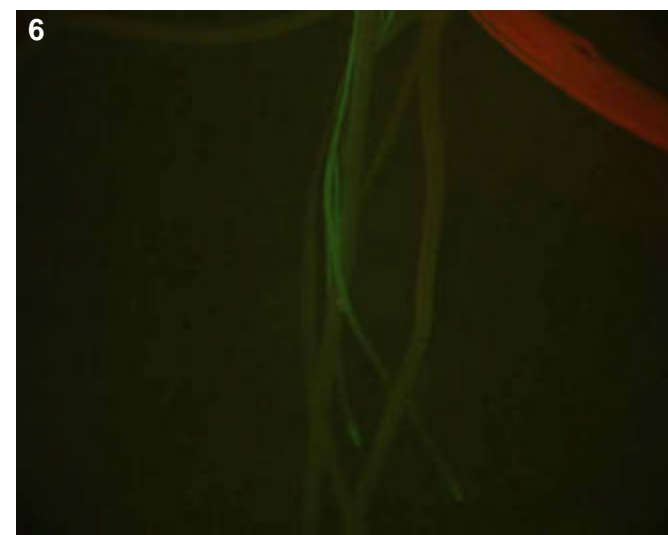
Expression interesting because only in the trichomes/stomata of leaf and the floral stem (the rachis?).

### T1 seed comments

2/5 seeds show bright expression in scutellum.

### T1 seedling comments

Very bright lateral roots. Lateral roots are interesting because in general they are extremely long and few in number. Could be a phenotype?



# Genotype: APA D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

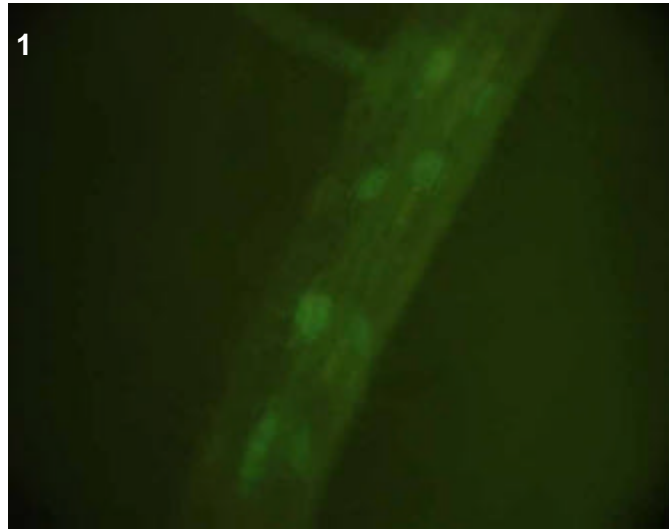
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 21



## T0 comments

## T1 seed comments

## T1 seedling comments

Strange, apparently random pattern of GFP positive cells in the mature portions of the crown roots, perhaps caused by cortical cells protruding through the epidermis?



# Genotype: APA D11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-4  
 T1 mature plant: 5-6

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

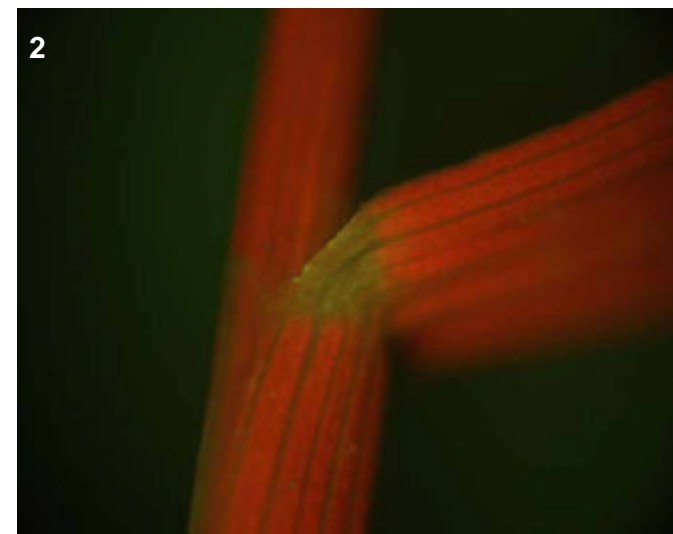
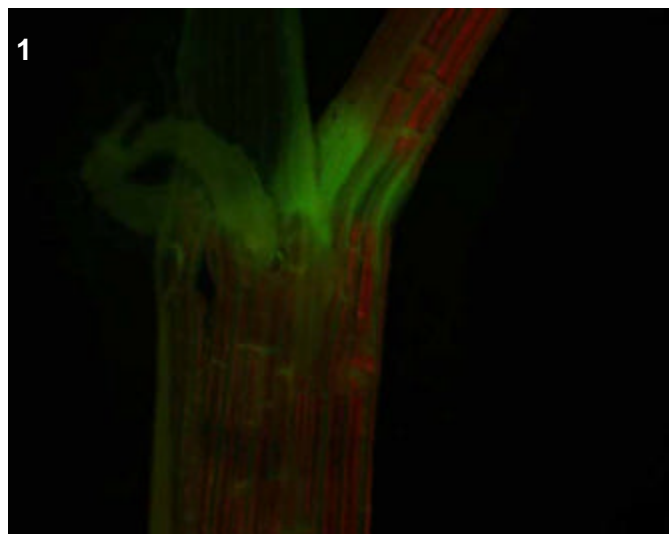
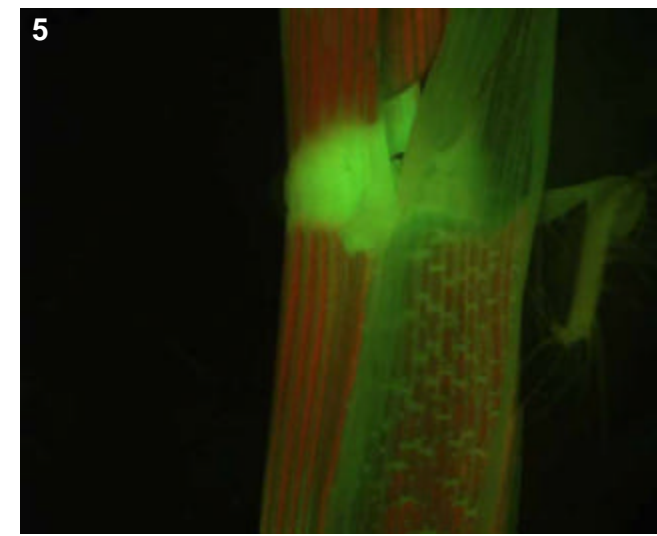
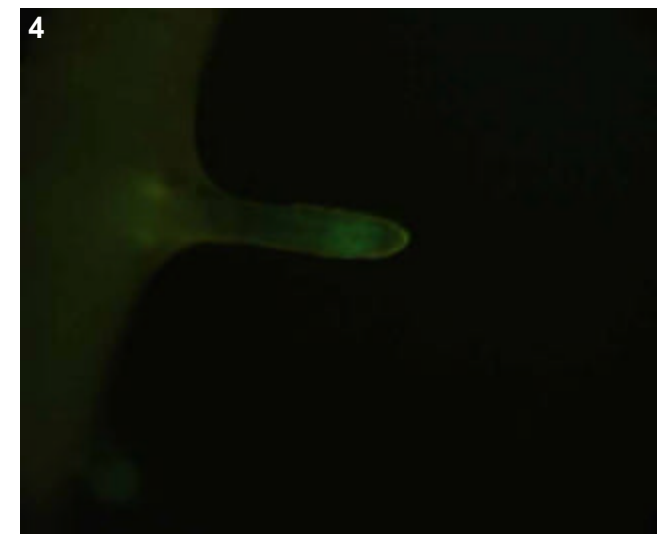
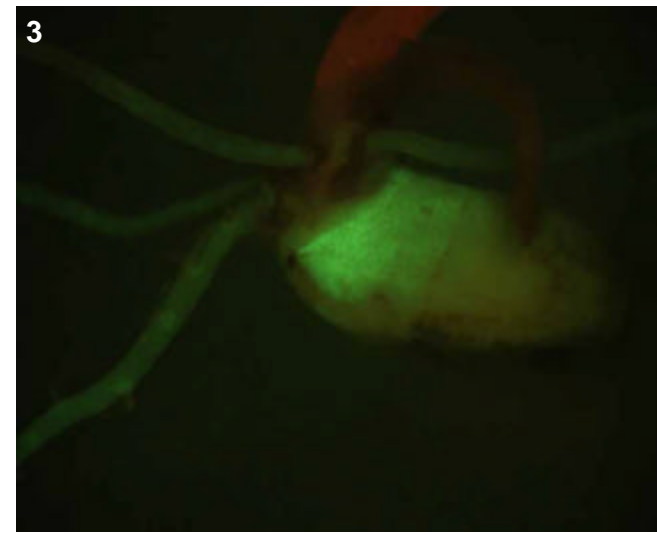
T0 pattern verified plus:  
 Bright collar and leaf/sheath vascular.  
 Also lodicule expression.

New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants **Confocal?** YES

**Number T2 seed produced:** 25



### T0 comments

Moderate expression in collar only.

### T1 seed comments

### T1 seedling comments

As in the T0, expression in the collar is moderate to faint. However, bright expression in the roots, especially laterals.

# Genotype: APA E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

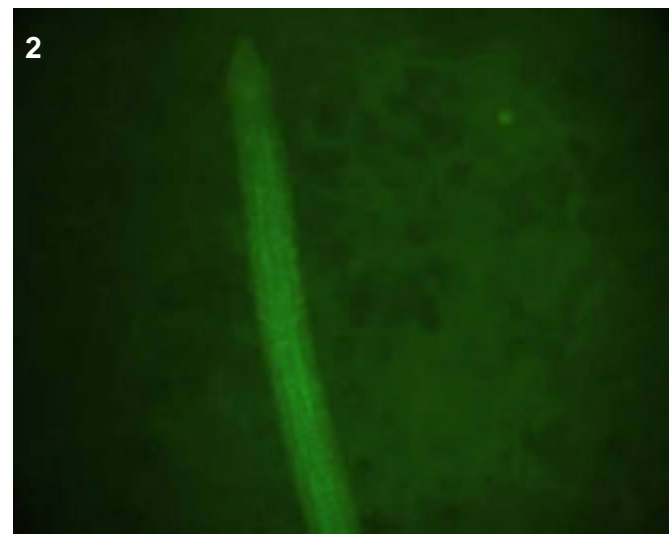
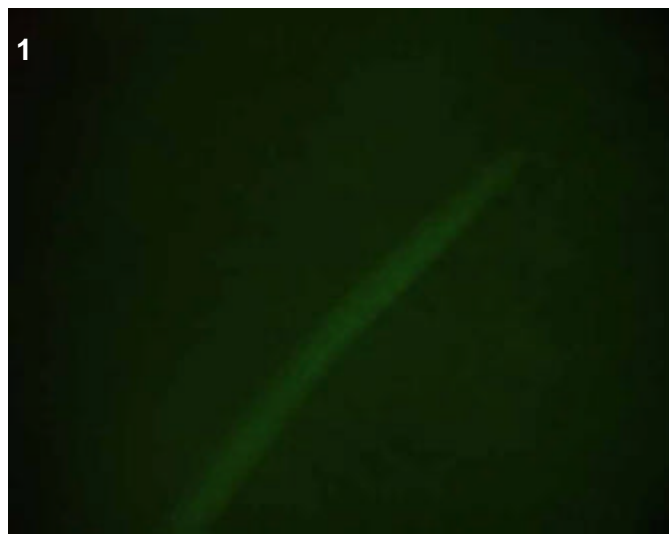
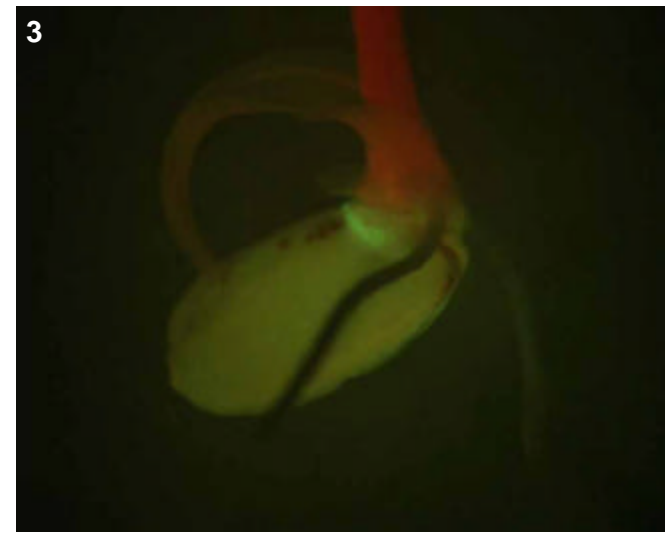
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Rather general expression in the root.

# Genotype: APA H01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

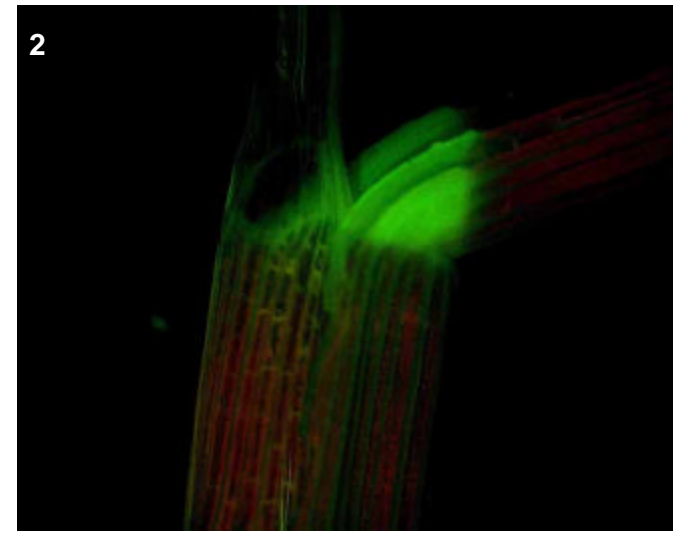
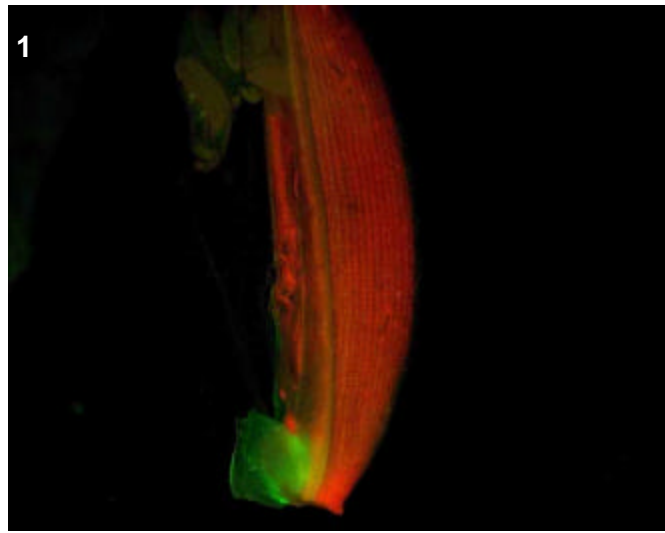
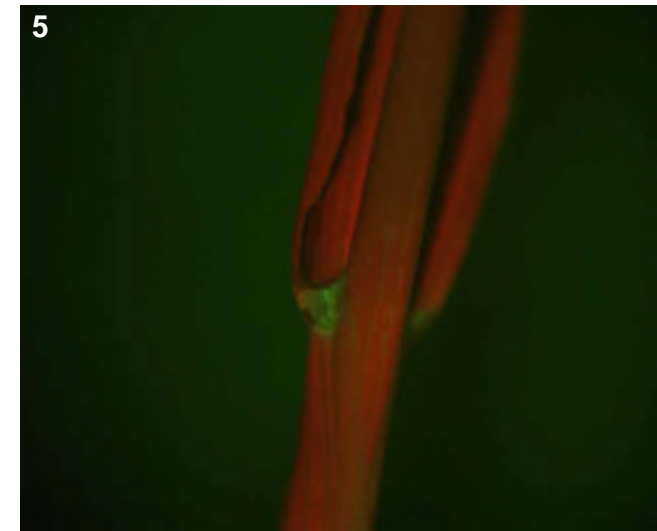
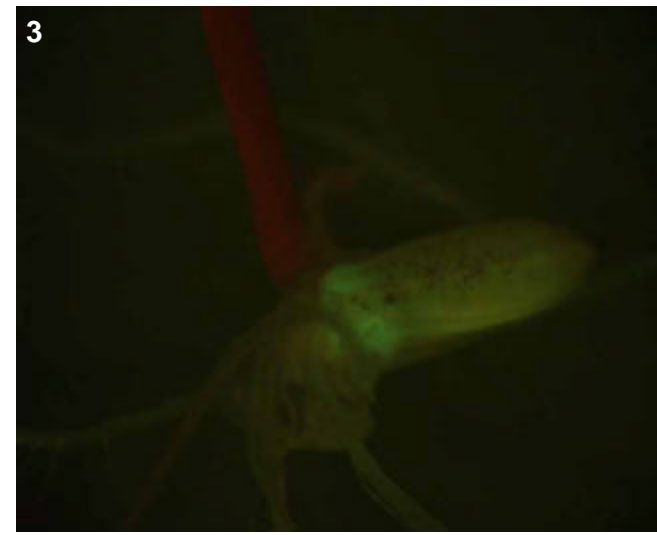
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 57



## T0 comments

Bright expression in collar, sheath vascular and lodicules.

## T1 seed comments

## T1 seedling comments

# Genotype: APA H12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

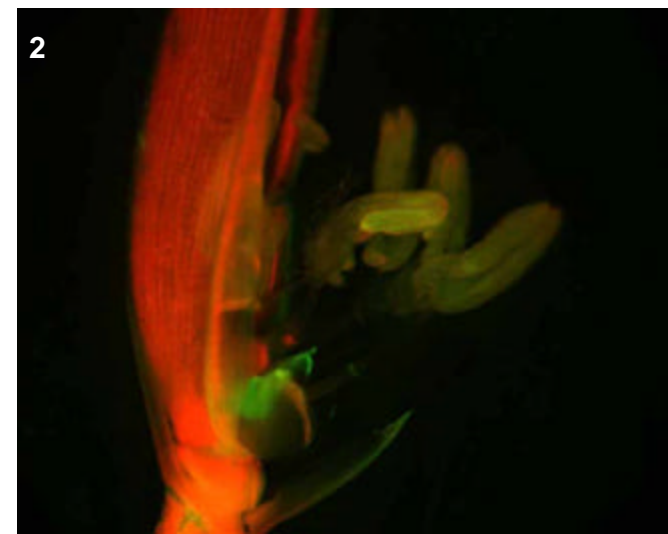
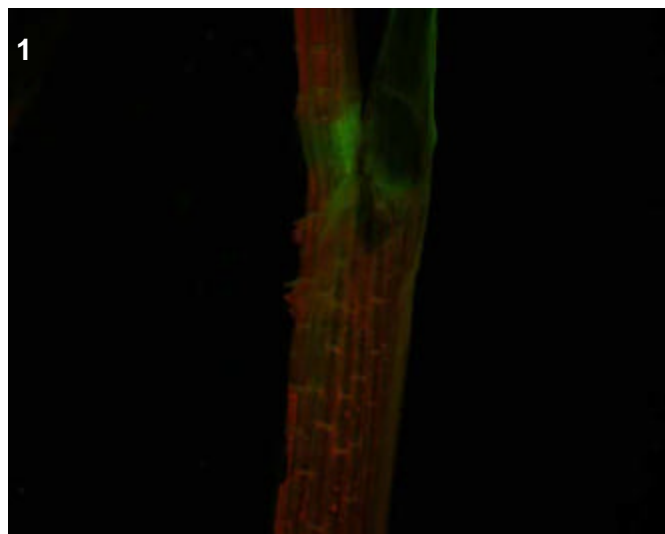
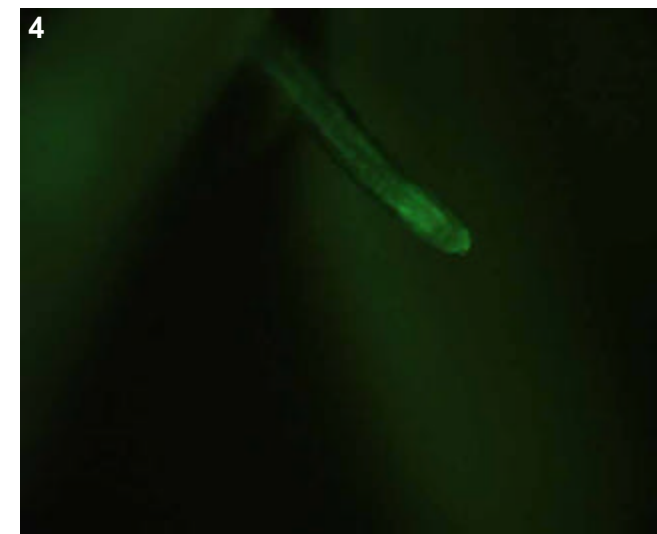
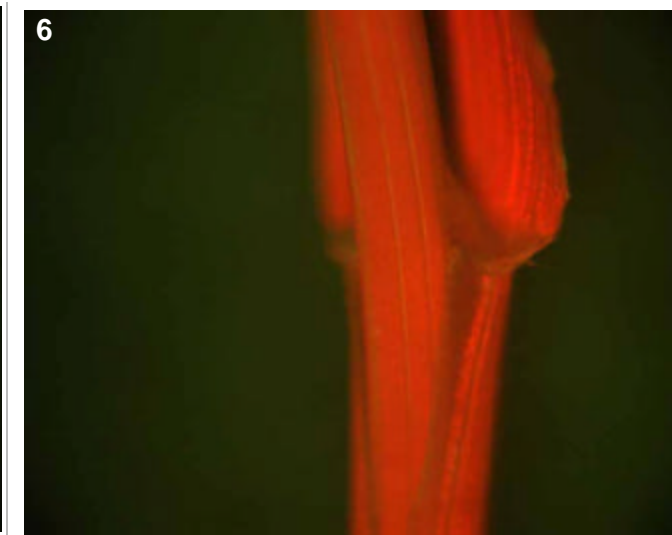
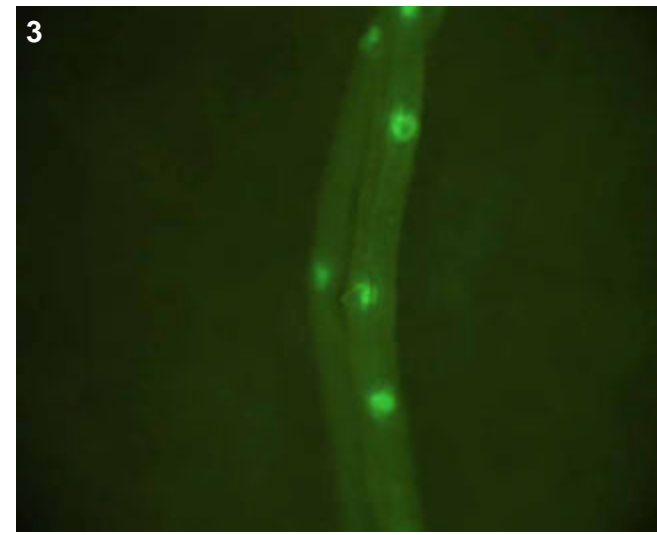
YES, 1 GFP+ plant

**Confocal?**

YES

**Number T2 seed produced:**

48



## T0 comments

## T1 seed comments

3/5 seeds show bright expression in embryo.

## T1 seedling comments

In roots, expression specific to the emerging lateral roots. Perhaps some vascular activity in the shoot and endosperm.

# Genotype: APB B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-5  
 T1 seed/seedling: 6-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

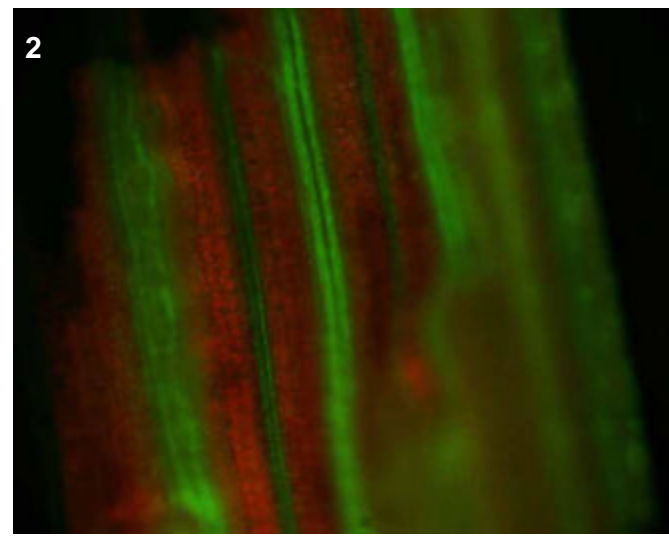
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 125



### T0 comments

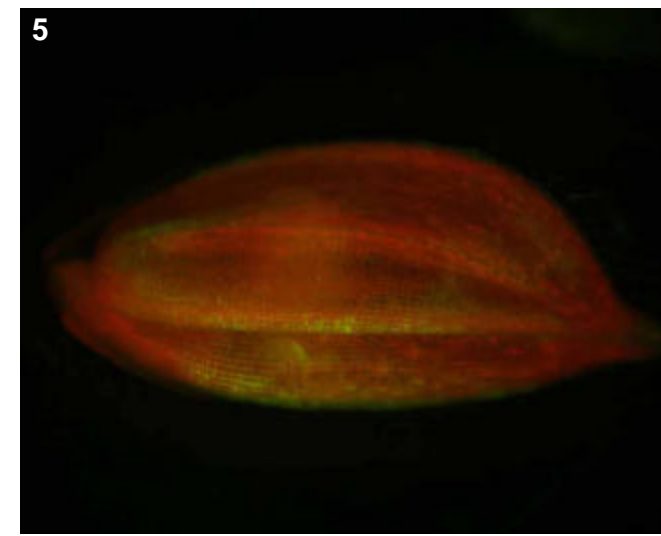
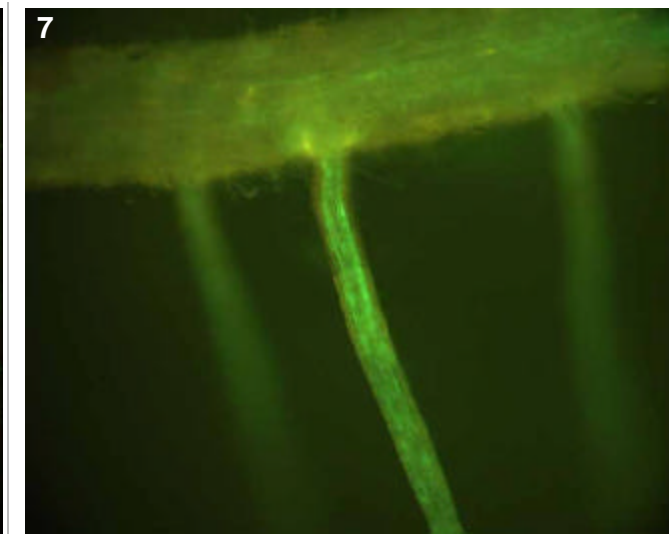
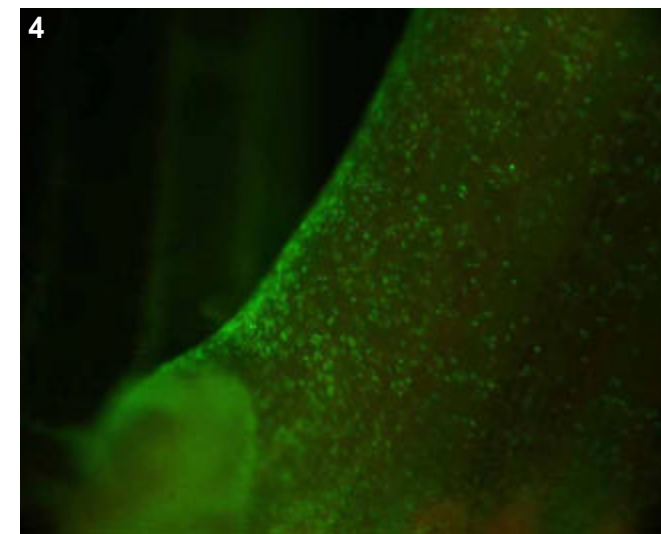
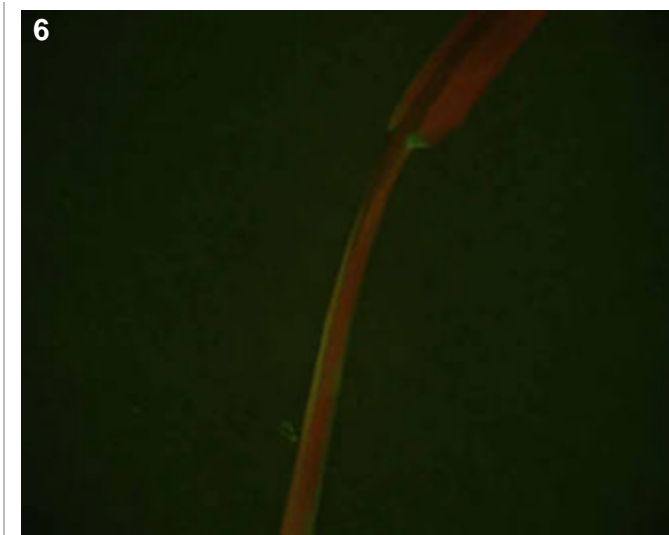
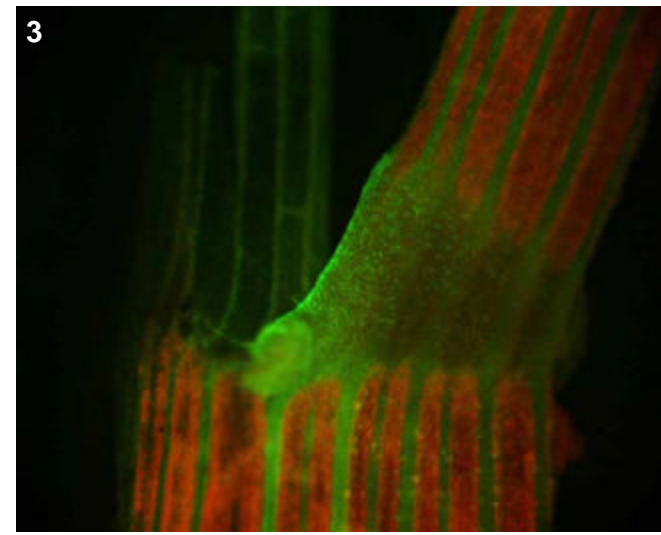
Interesting pattern on the collar. Looks like cells on the surface brightly lit up? Very strong vascular in sheath and leaf surrounding the collar. Also what looks like general expression in the flower.

### T1 seed comments

3/5 seeds show bright expression in the scutellum.

### T1 seedling comments

Same interesting T0 pattern on collar noted in the T1--described as perhaps the mesophyll of the sheath also GFP positive. Collar bright, as well as something in the seed. Lateral roots show vascular expression.



# Genotype: APB C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:  
 Collar expression too.

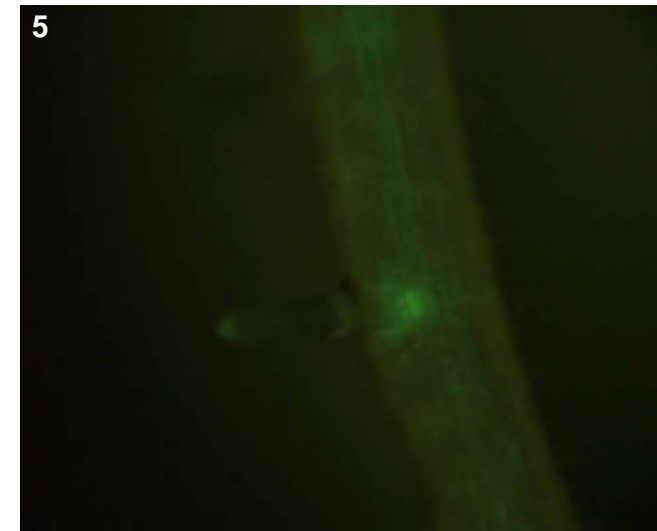
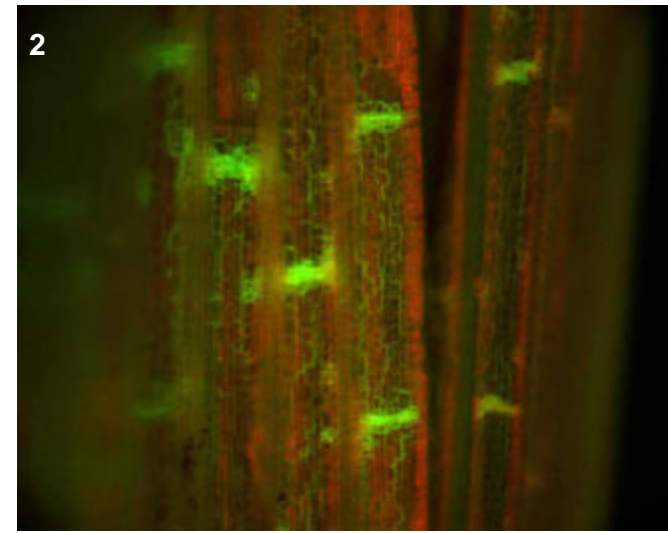
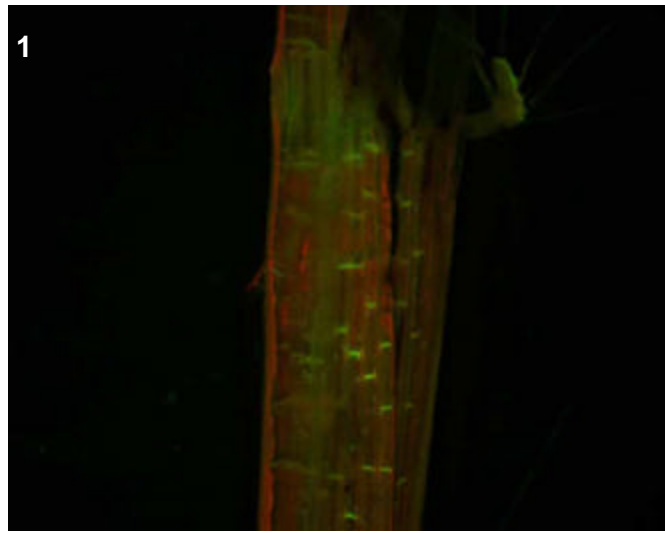
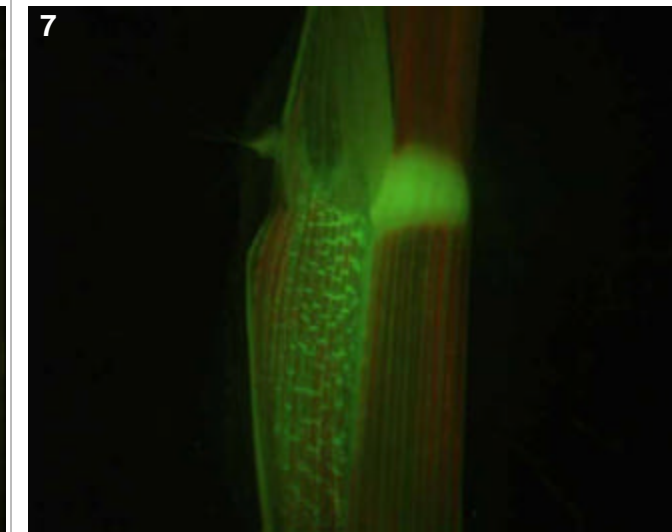
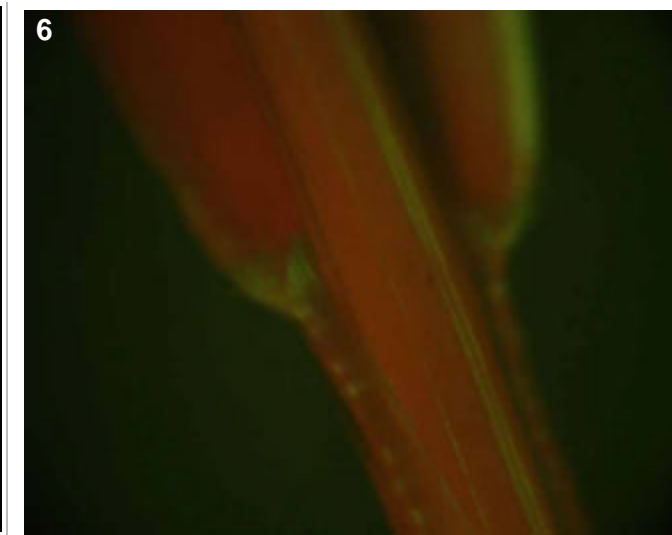
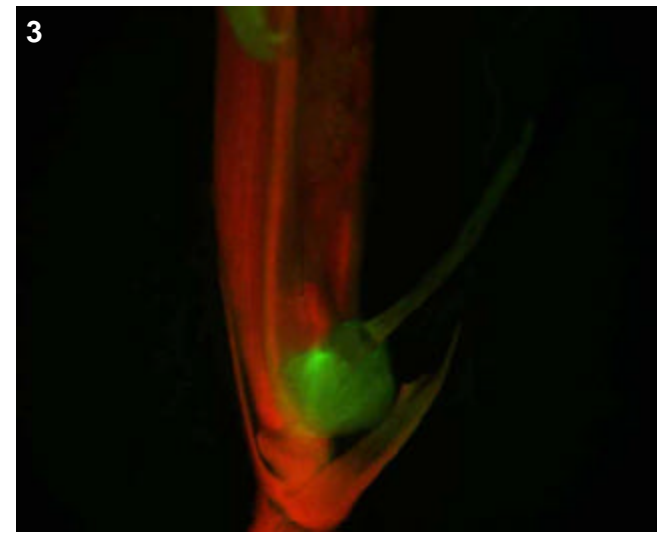
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 197



### T0 comments

No expression in the collar but moderate expression in the sheath vascular and lodicules.

### T1 seed comments

### T1 seedling comments

Strong vascular in T1 as well.

# Genotype: APB D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

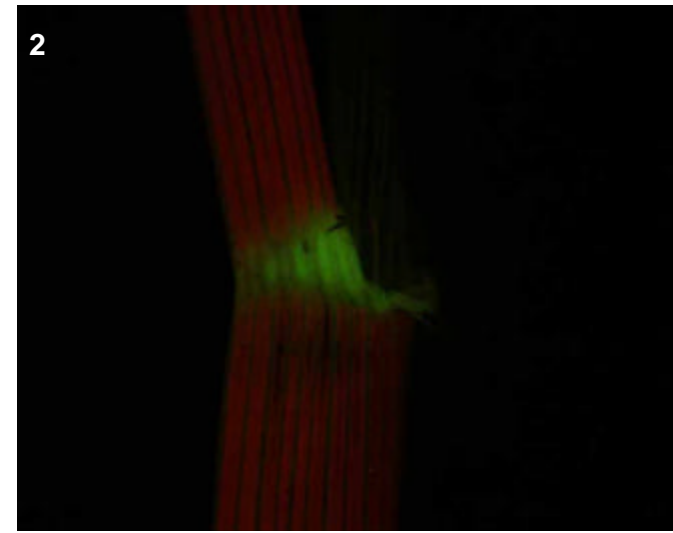
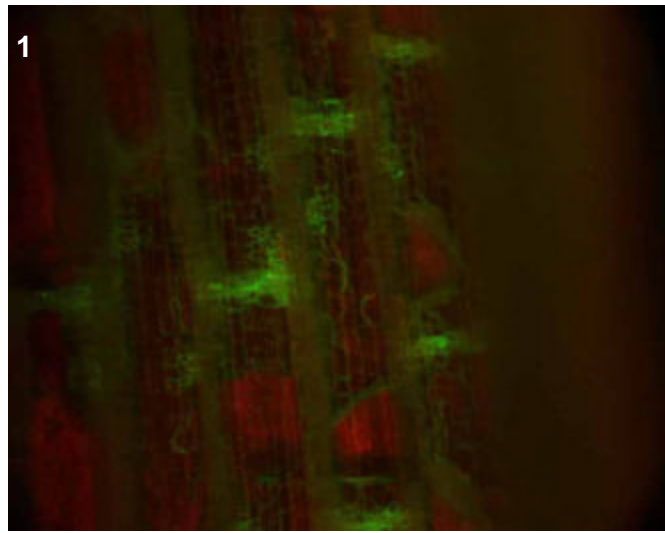
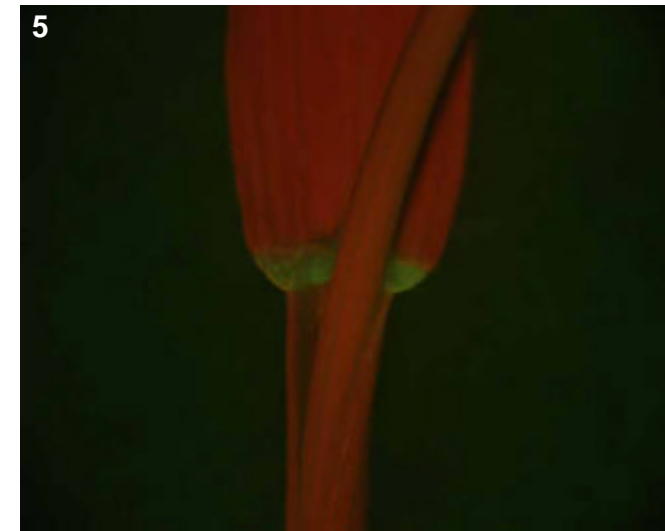
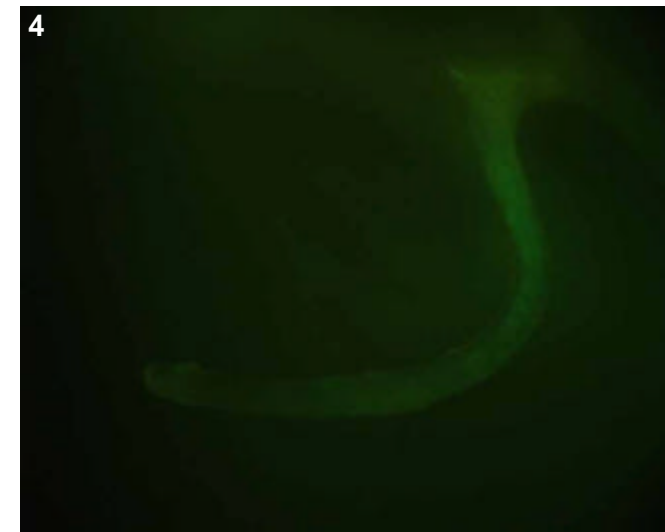
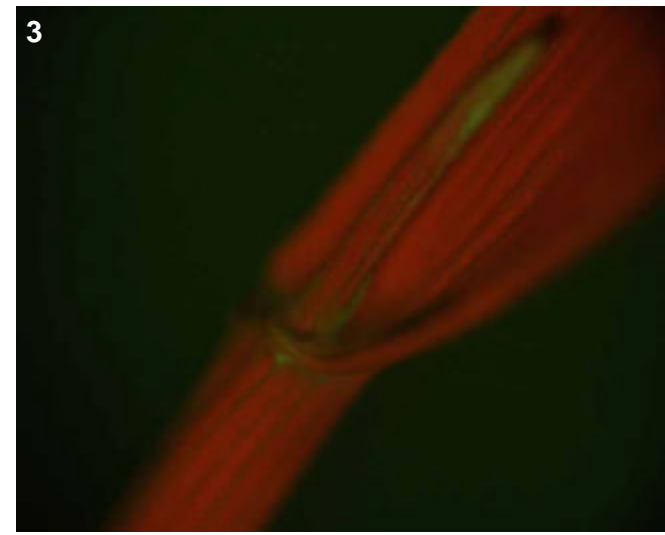
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 169



### T0 comments

Strong expression in the collar, weak in the sheath vascular.

### T1 seed comments

### T1 seedling comments

Shoot expression is definite, the root expression is not positive from the pic.

# Genotype: APB D07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

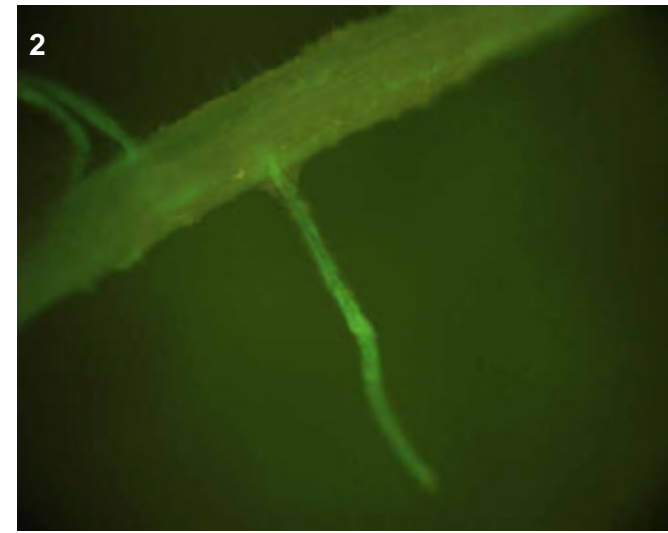
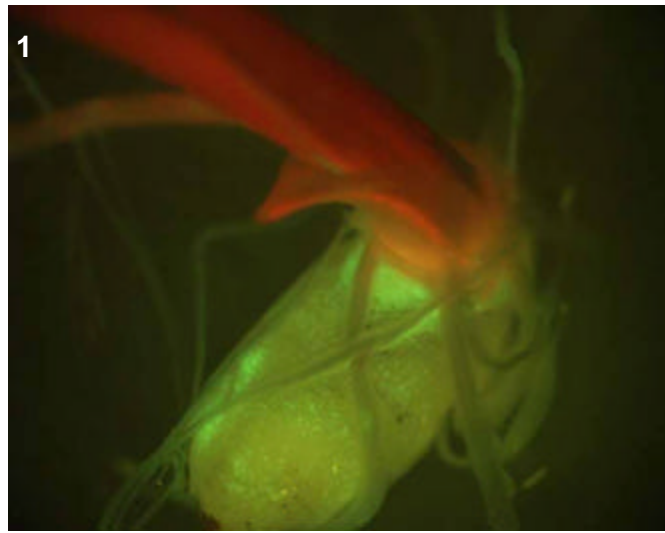
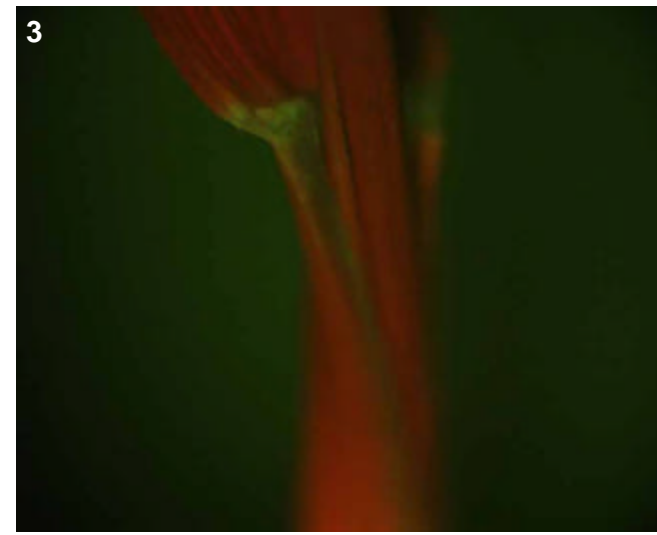
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 28



## T0 comments

## T1 seed comments

2/5 seeds show expression.

## T1 seedling comments



# Genotype: APB E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

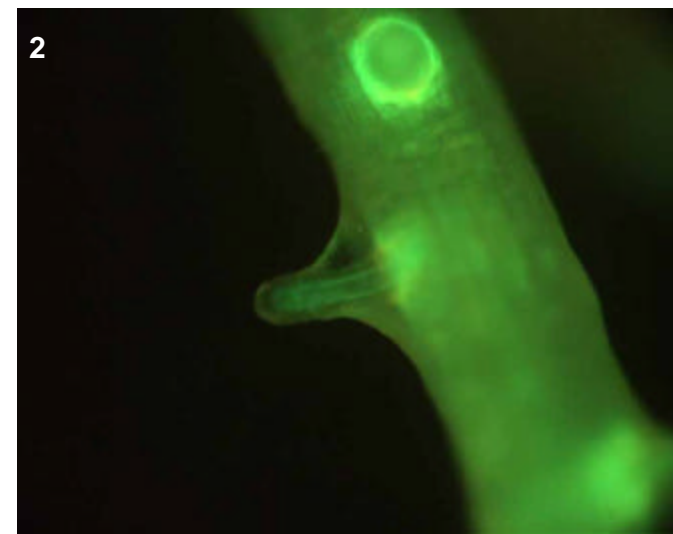
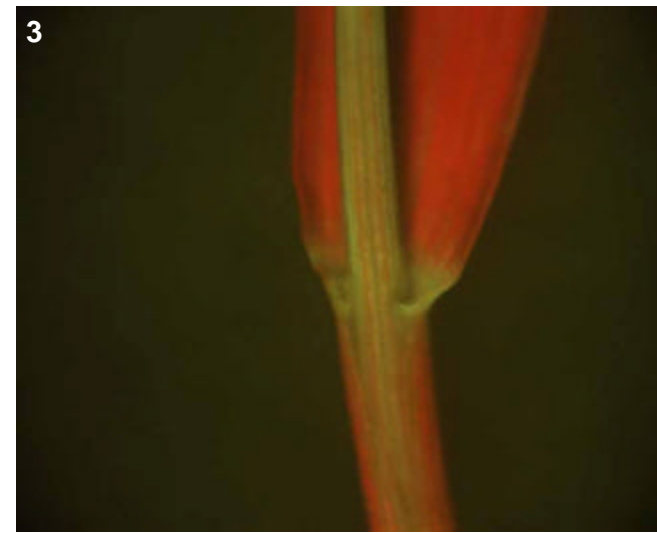
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 22



## T0 comments

## T1 seed comments

3/5 seeds show expression.

## T1 seedling comments

# Genotype: APB F09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

Expression mainly in the collar, however, there is some sheath vascular

New pattern:

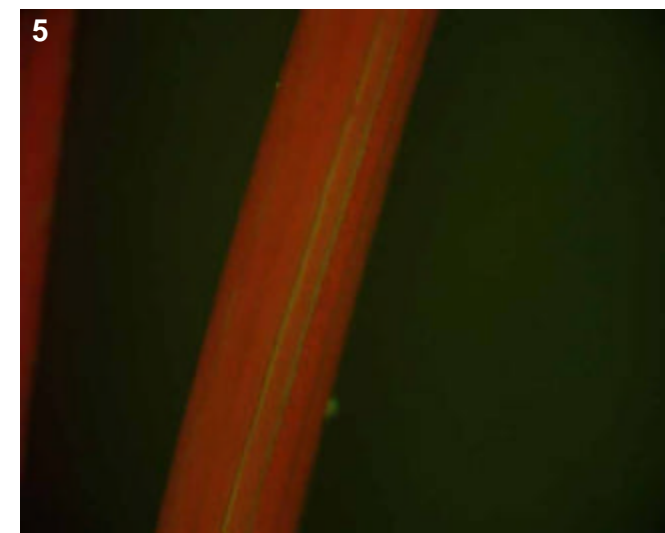
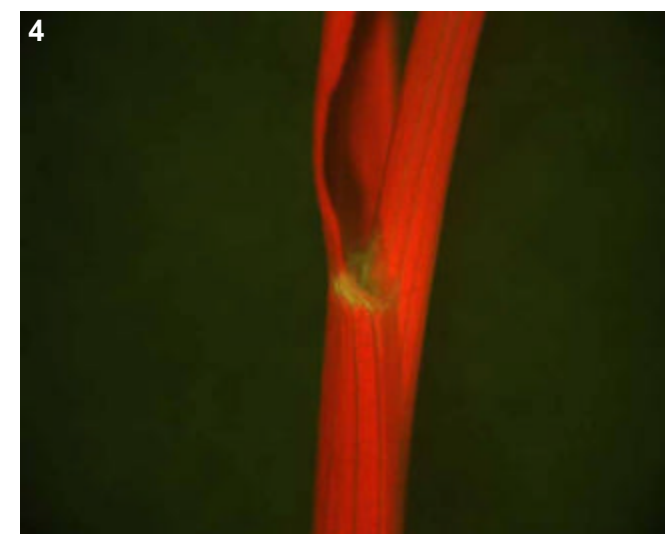
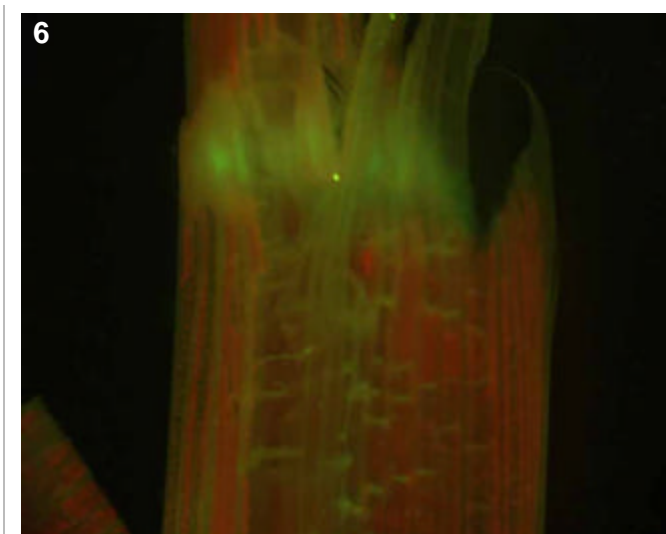
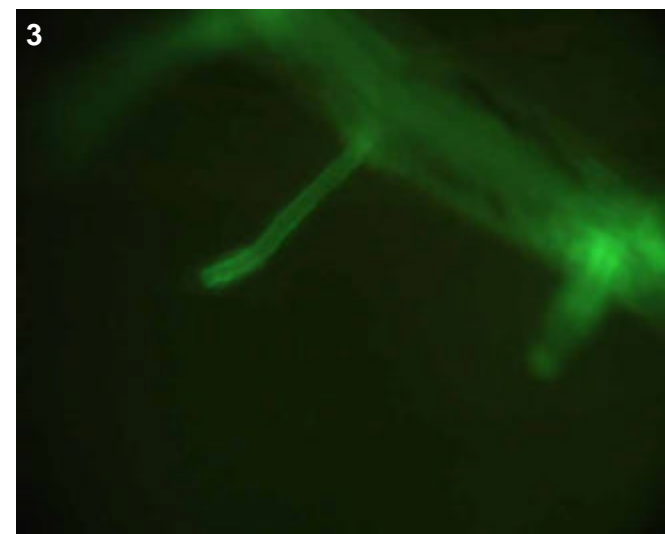
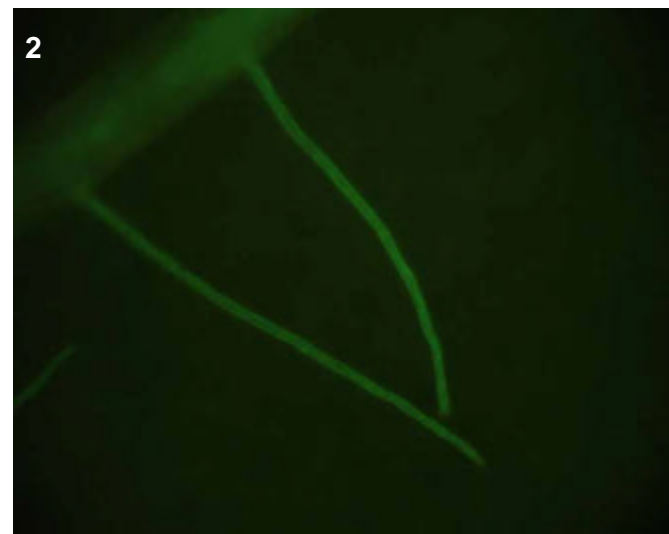
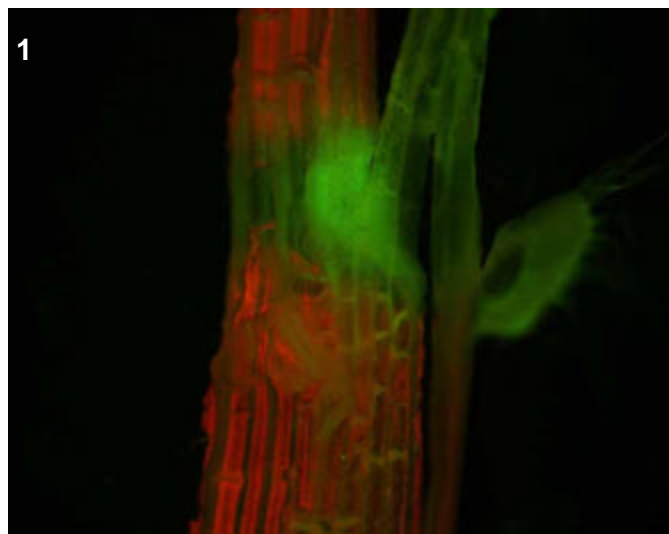
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced: 86



### T0 comments

Expression only in the collar.

### T1 seed comments

### T1 seedling comments

Very bright lateral roots. Crown roots also show expression but not as bright as lats. Collar bright as well as what appears to be leaf vascular.

# Genotype: APB F10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

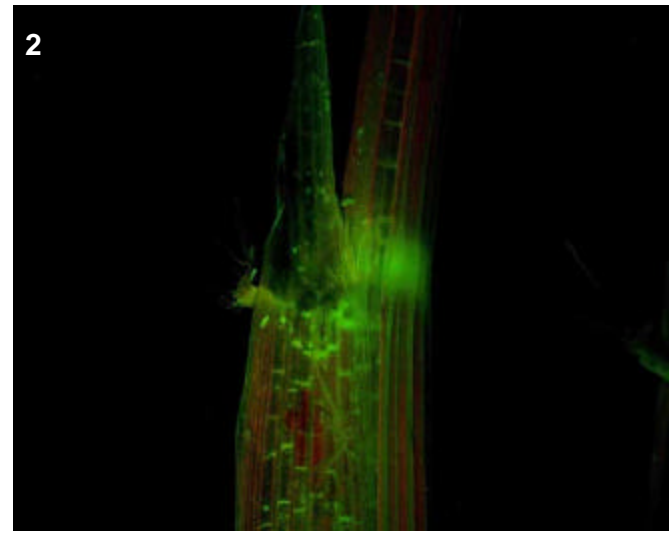
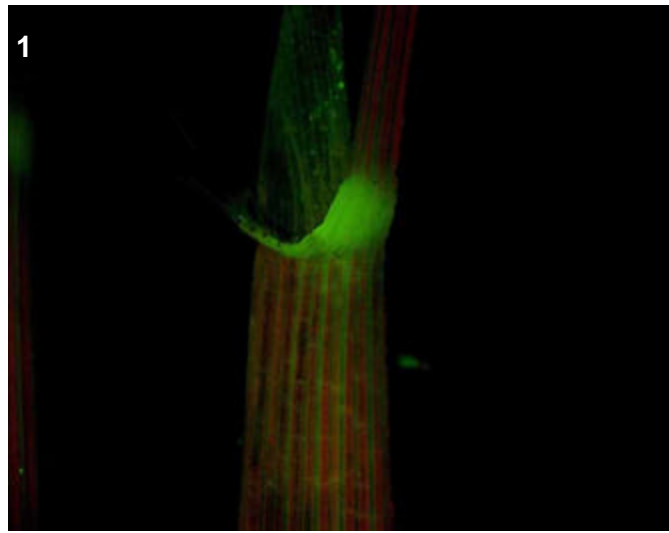
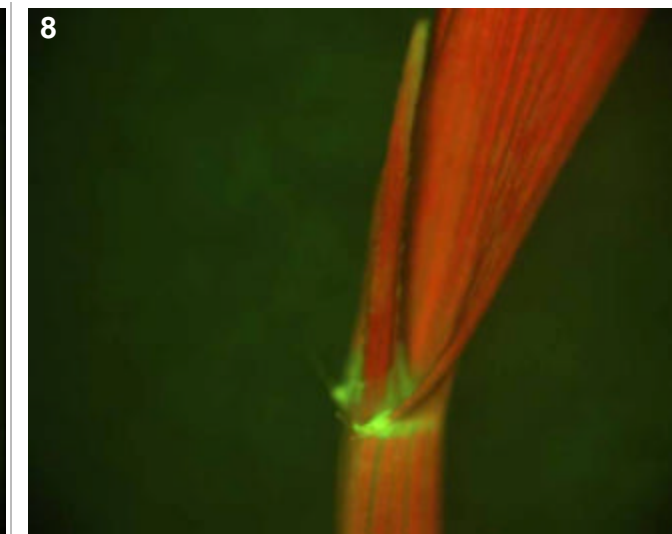
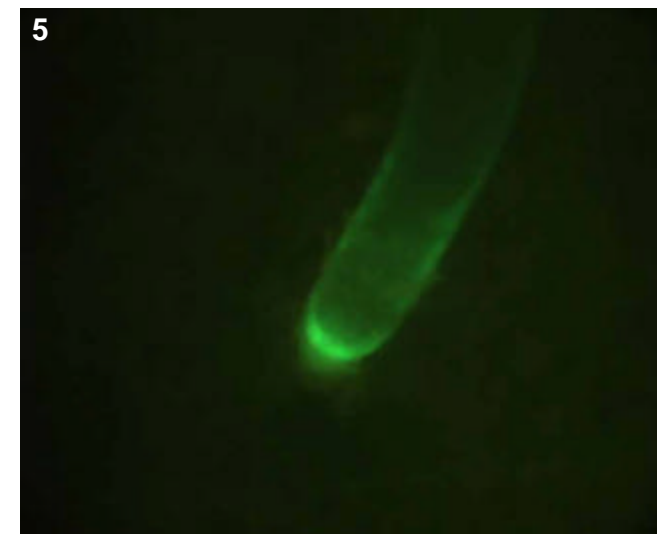
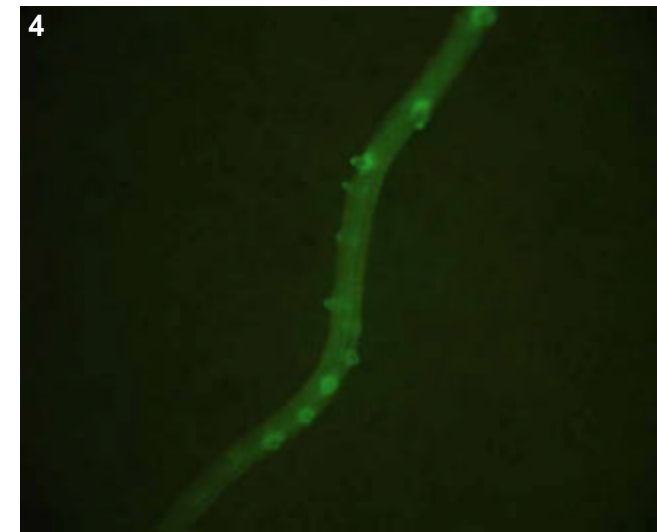
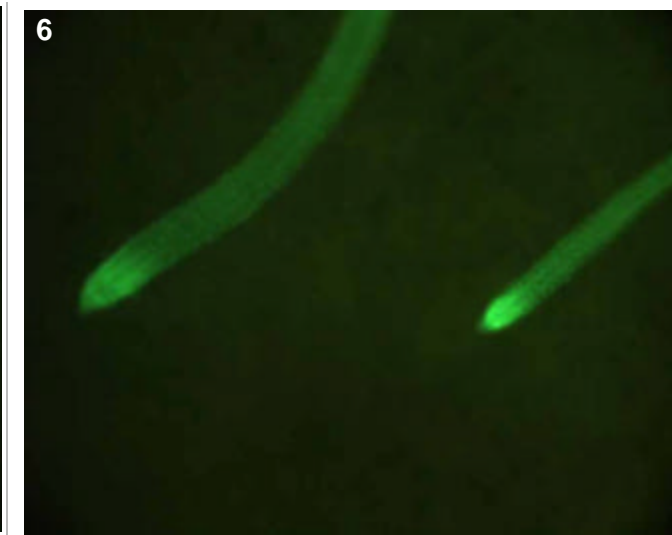
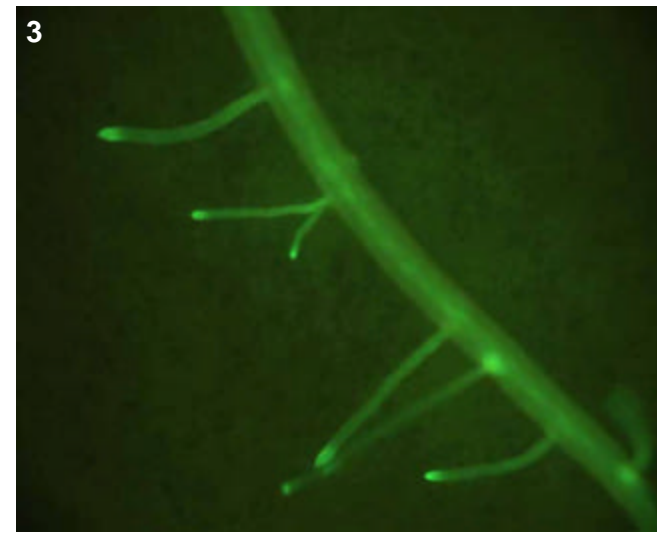
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?** YES

**Number T2 seed produced:** 45



## T0 comments

Expression in the collar and surrounding vascular of sheath and leaf.

## T1 seed comments

## T1 seedling comments

Bright roots, especially in the tips in what I think is the root apex.

# Genotype: APB F11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

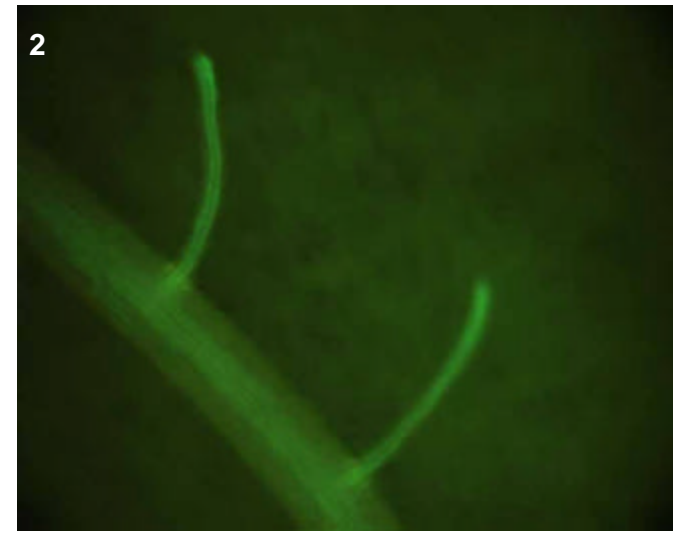
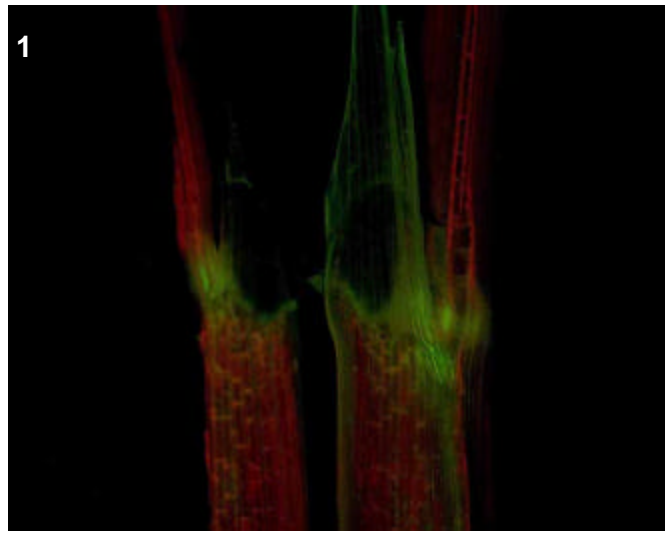
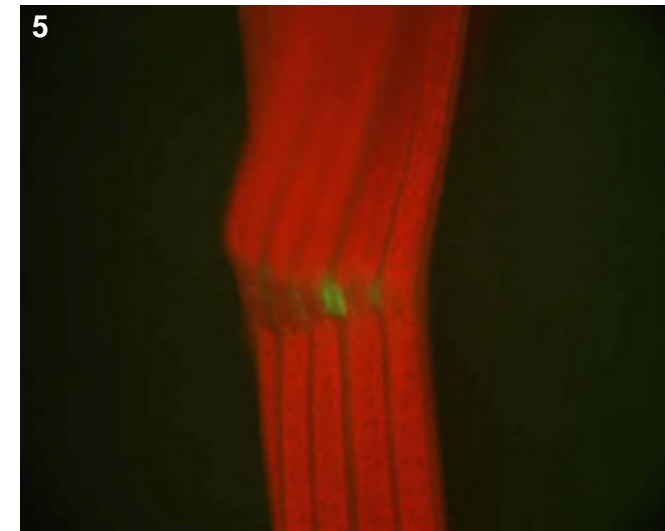
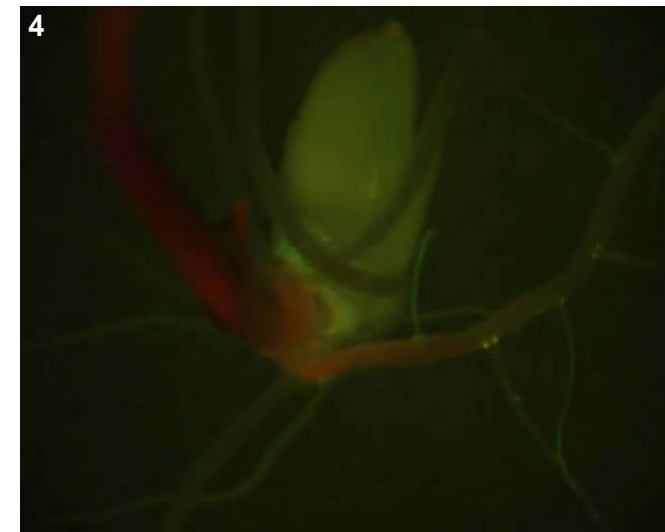
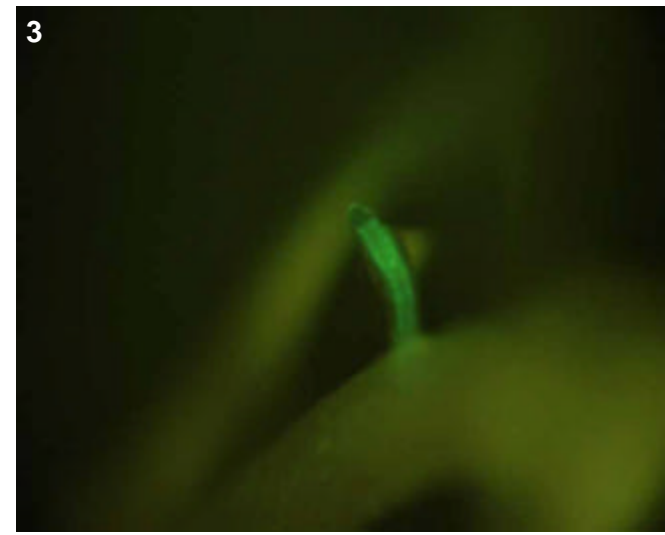
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 20



### T0 comments

Weak expression in the collar and surrounding vascular of sheath.

### T1 seed comments

Faint scutellum expression in 3/5 seeds.

### T1 seedling comments

Weak expression in the collar. Bright roots, especially in the laterals.

# Genotype: APB H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

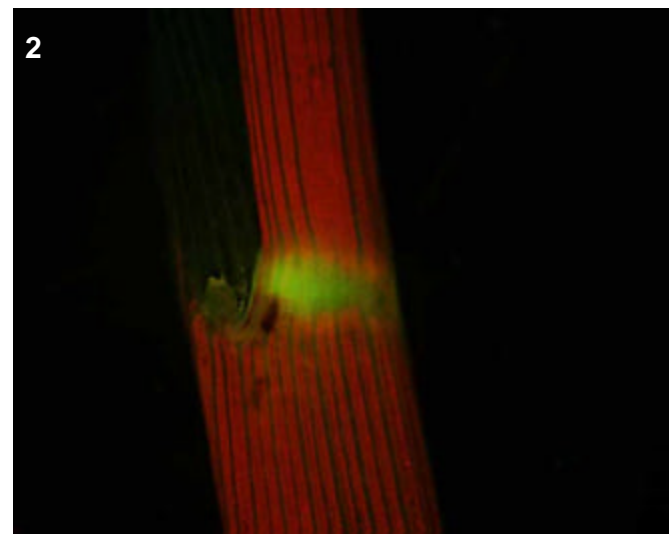
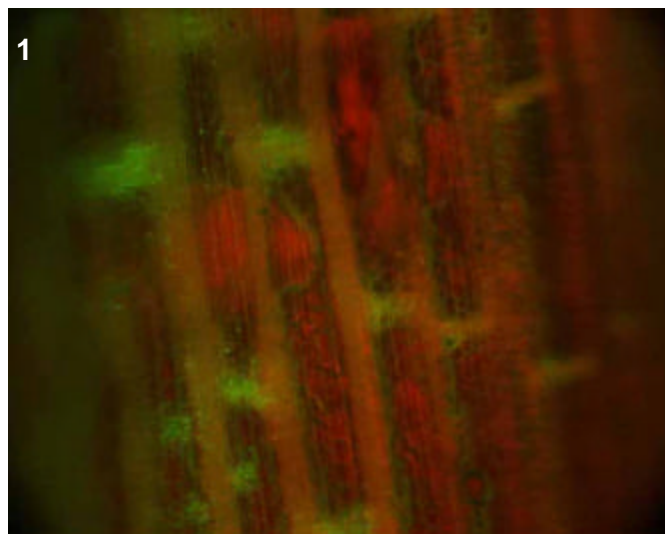
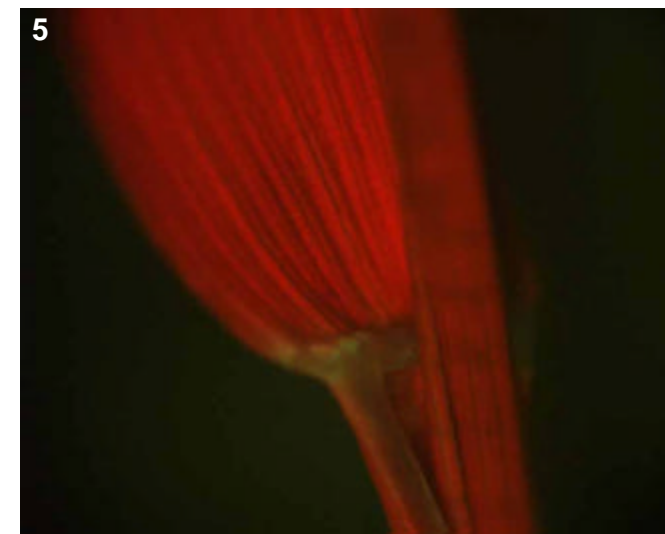
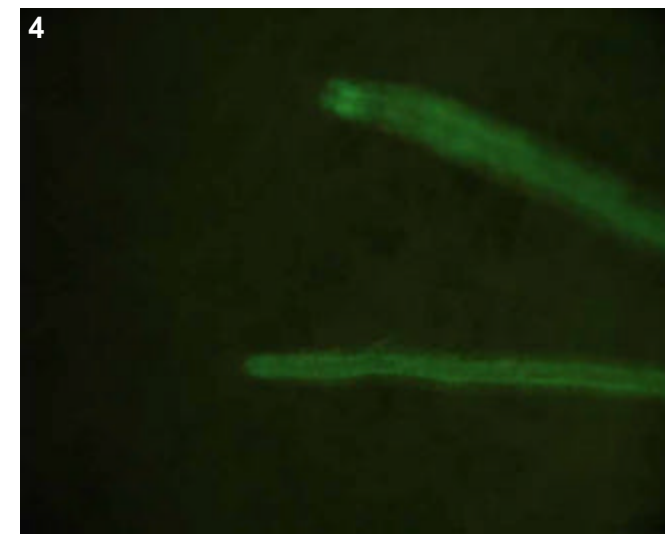
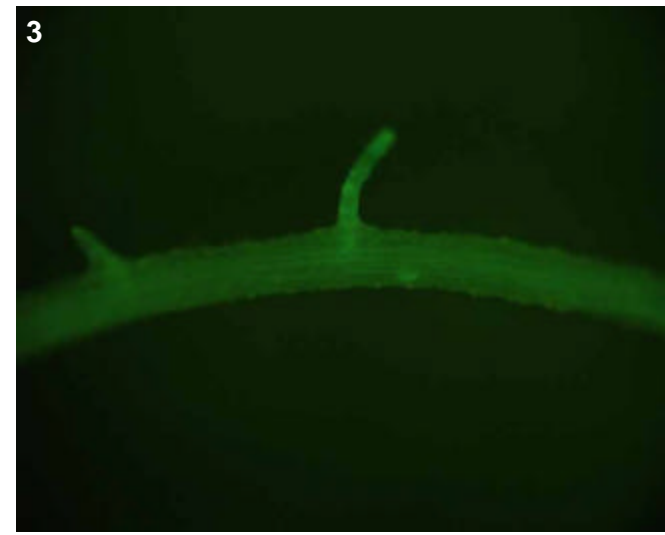
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 92



### T0 comments

Moderate expression in the collar, weak in the sheath vascular.

### T1 seed comments

### T1 seedling comments

Moderate expression in collar. Vascular expression in the roots.

# Genotype: APC A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

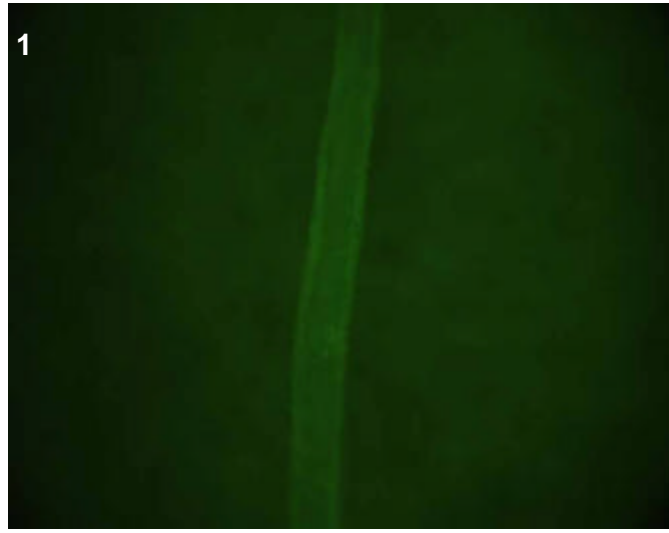
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: APC C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

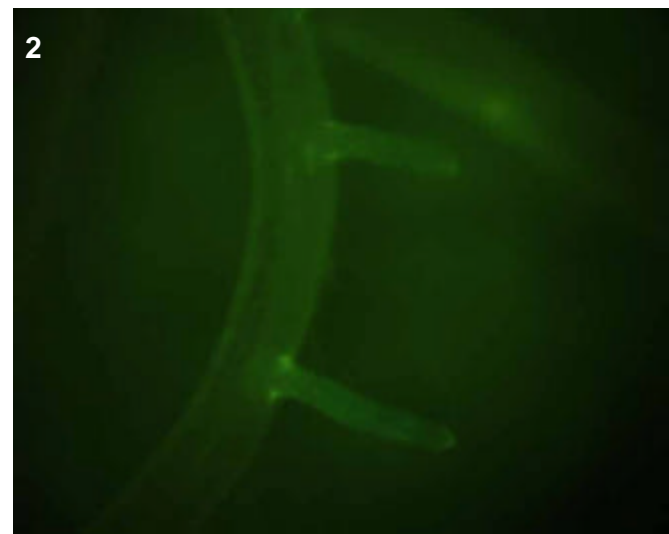
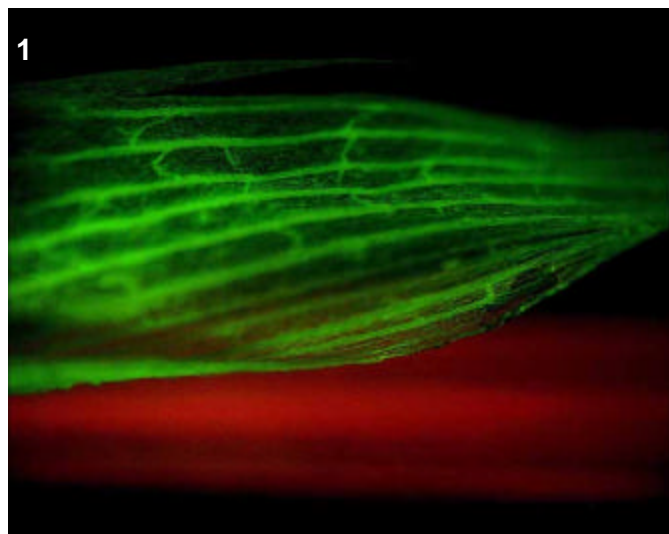
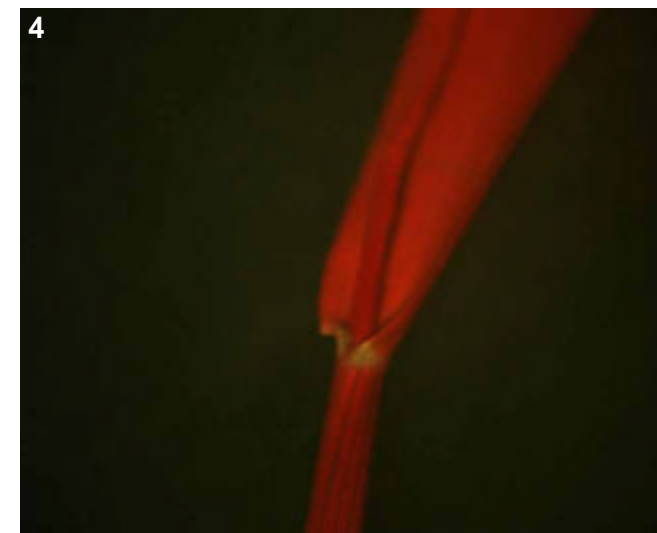
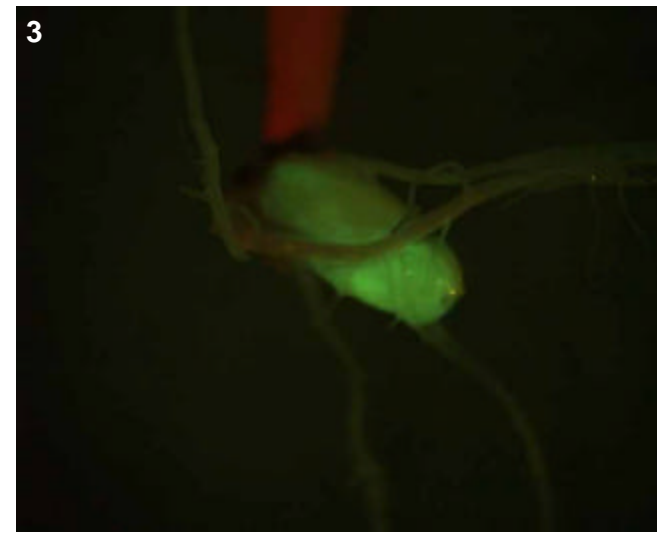
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 73



## T0 comments

Interesting line because expression appears to be strictly limited to the ligule found just above the collar.

## T1 seed comments

2/5 seeds showed bright expression in both the scutellum/embryo regions.

## T1 seedling comments

# Genotype: APC D07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

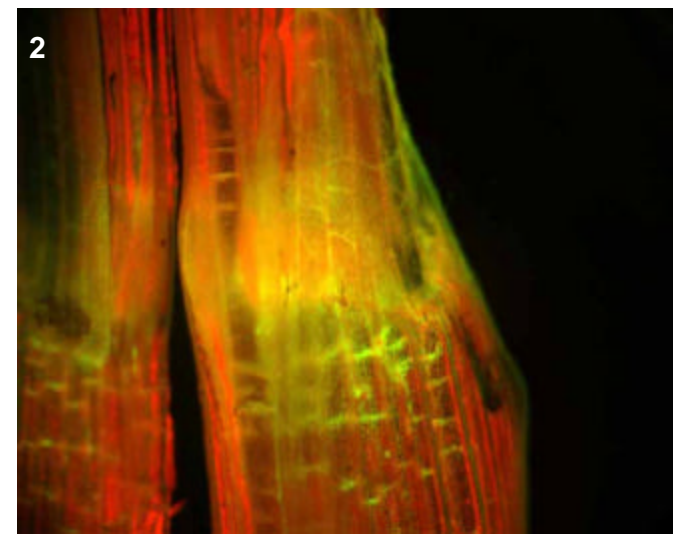
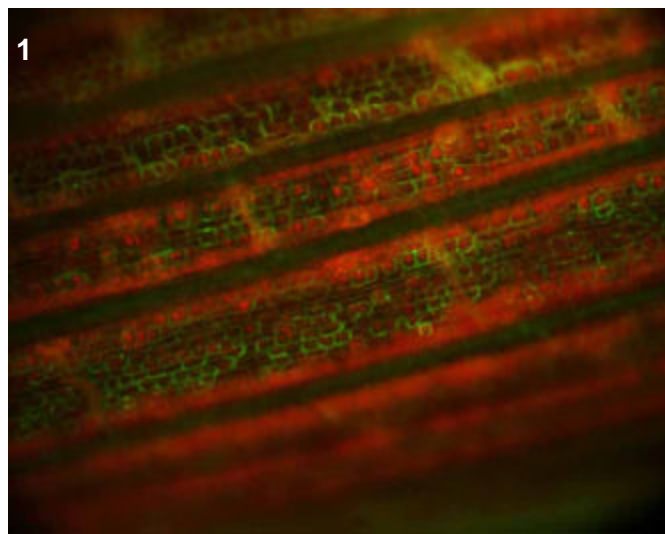
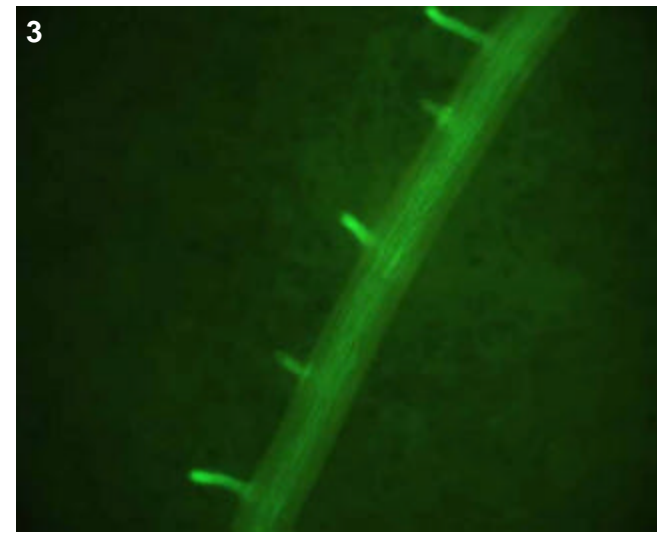
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 150



### T0 comments

Expression in the collar and in the sheath vascular. Expression in sheath vascular is a bit unusual in that the horizontal vascular bundles are not bright, rather it is more just surrounding the cells in the sheath vascular.

### T1 seed comments

3/5 seeds show medium expression in the scutellum.

### T1 seedling comments



# Genotype: APC E01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

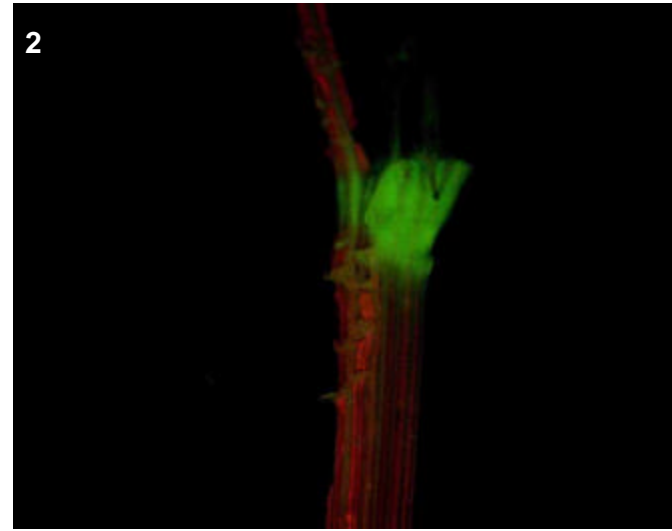
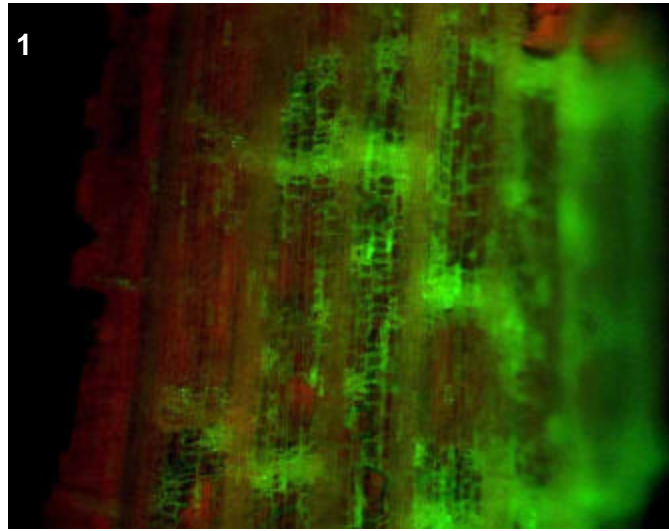
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 44



### T0 comments

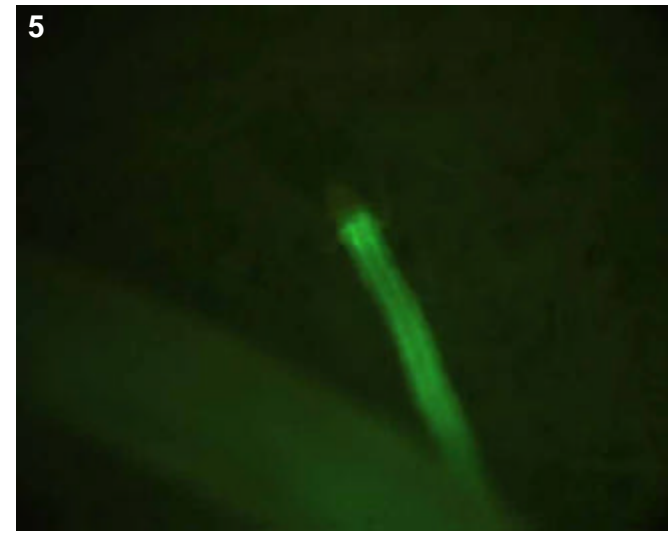
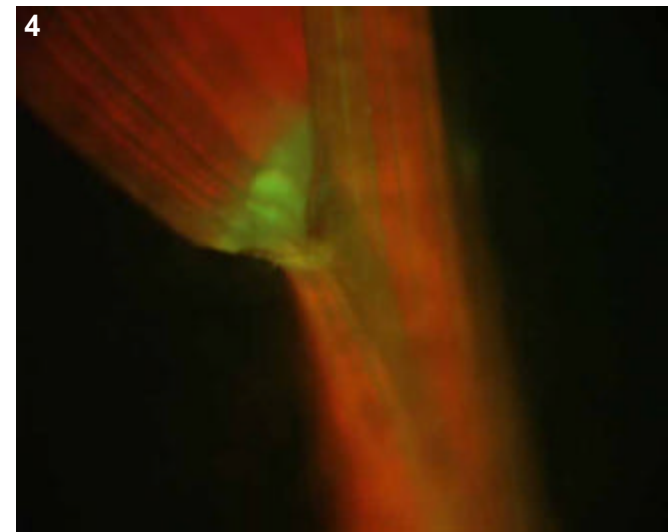
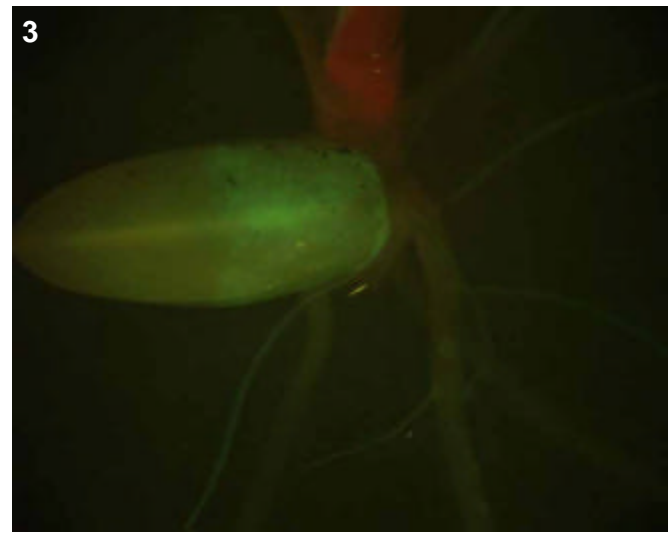
Bright collar and sheath vascular. Note a few horizontal elements in the sheath vascular.

### T1 seed comments

3/5 seeds show bright expression in scutellum.

### T1 seedling comments

Appears to be a strong vascular line, both in the root and shoot.



# Genotype: APD A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:** 62

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Interesting vascular expression in roots, very faint and looks to be most active in regions above the root cap. GFP observed near the tips of laterals and crown roots.

# Genotype: APD C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

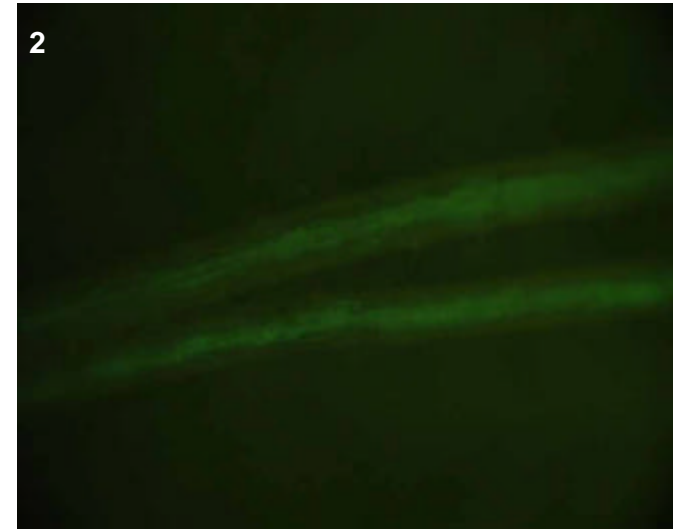
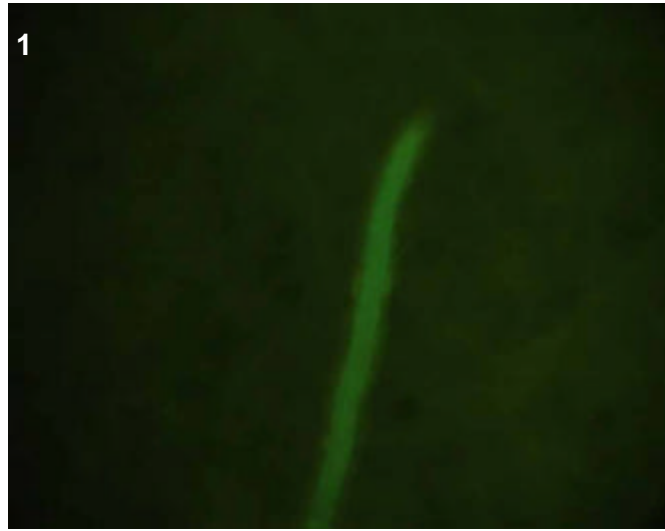
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 5



## T0 comments

## T1 seed comments

## T1 seedling comments

Moderate vascular expression in only the root.

# Genotype: APD E05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

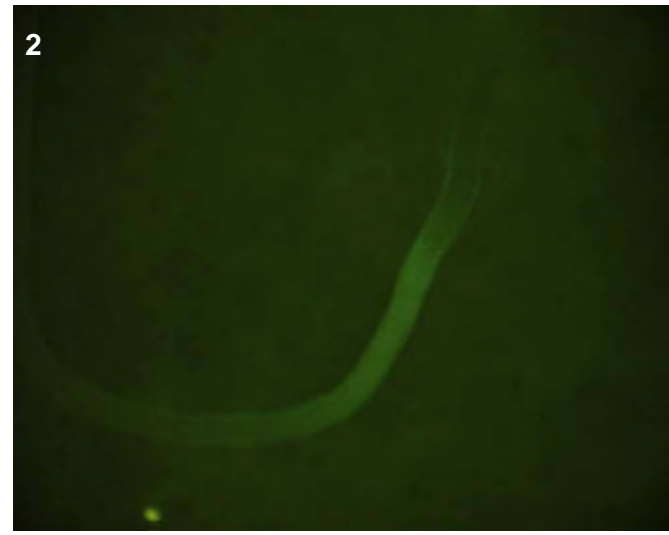
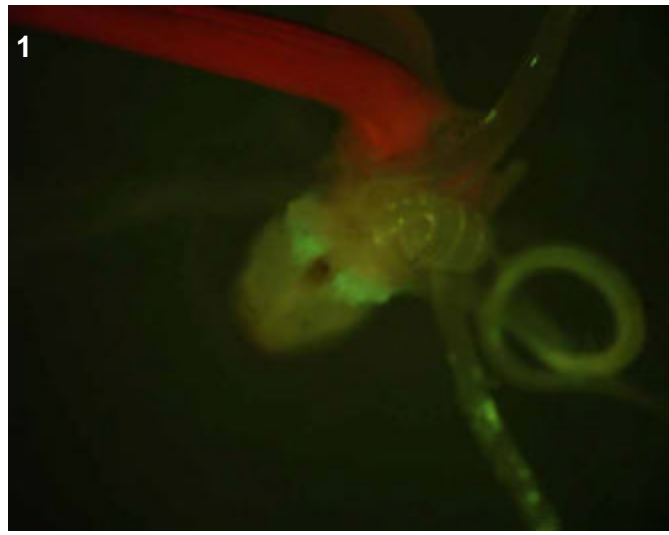
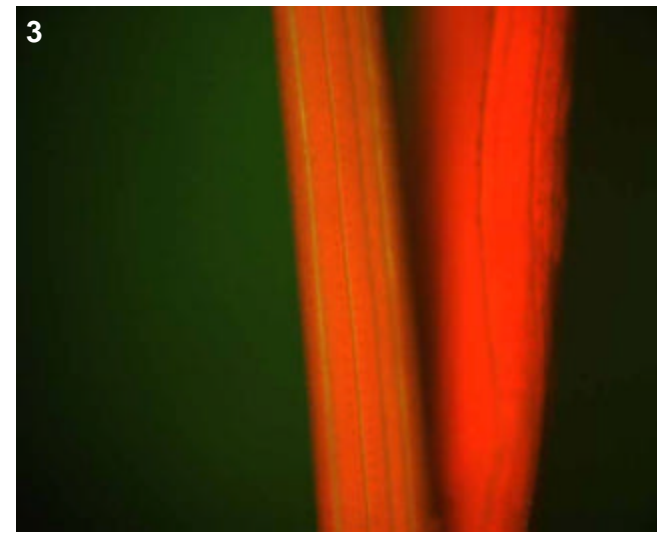
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 26



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: APD F12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

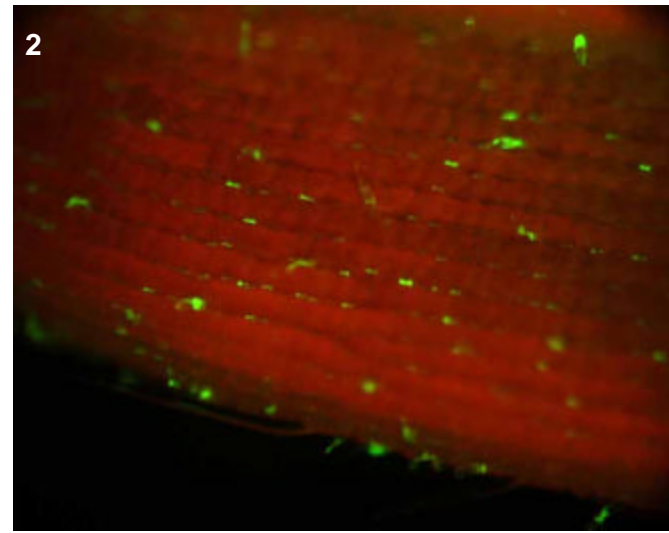
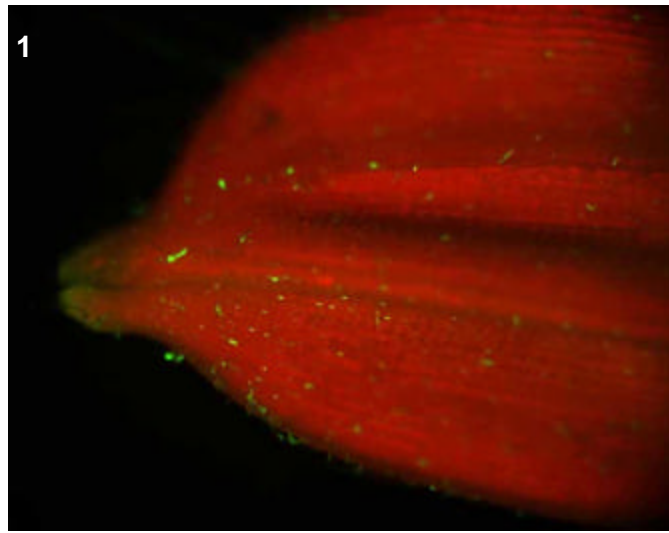
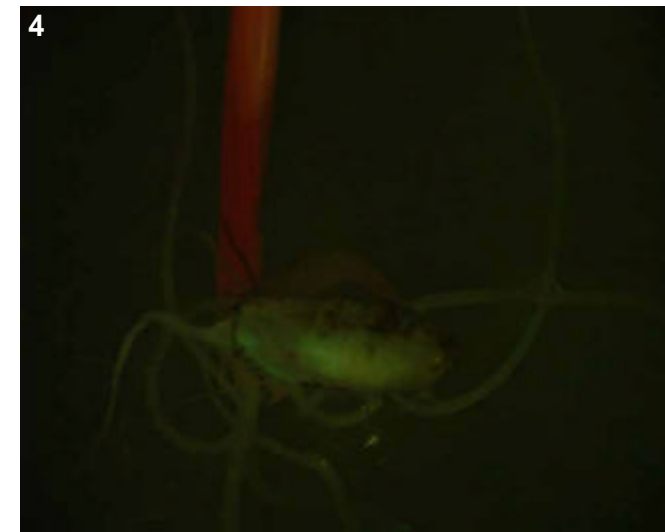
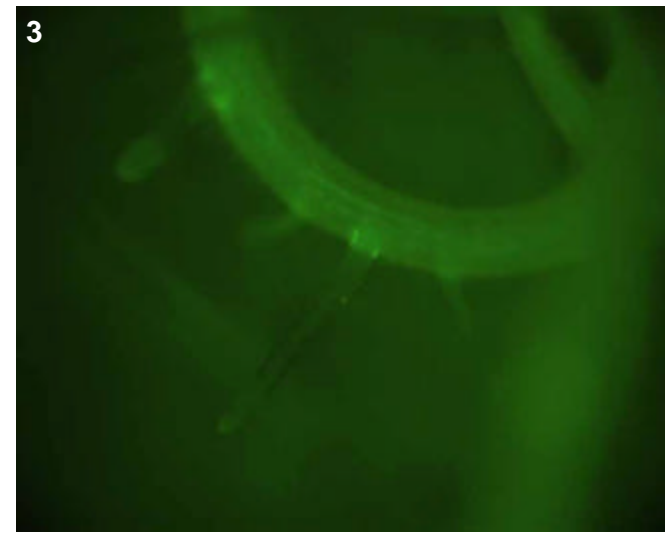
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 89



### T0 comments

Expression in the floral trichomes and stomata.

### T1 seed comments

### T1 seedling comments

# Genotype: APE G02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

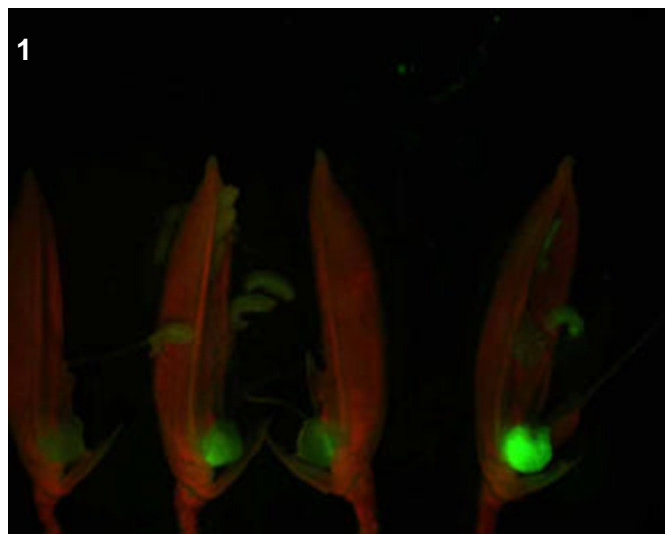
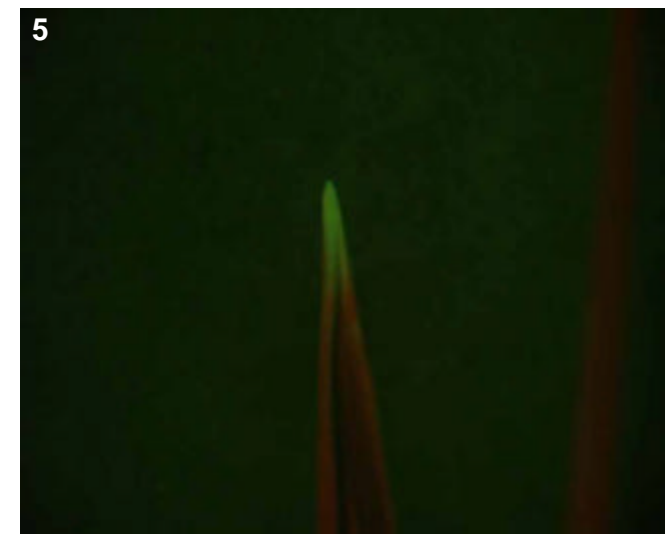
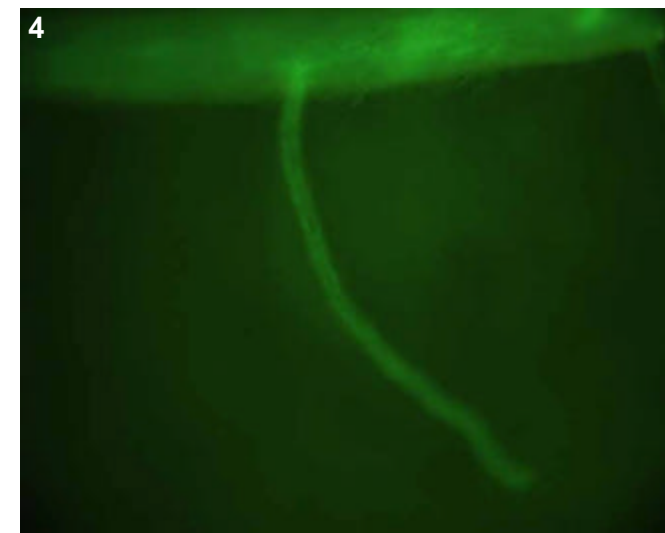
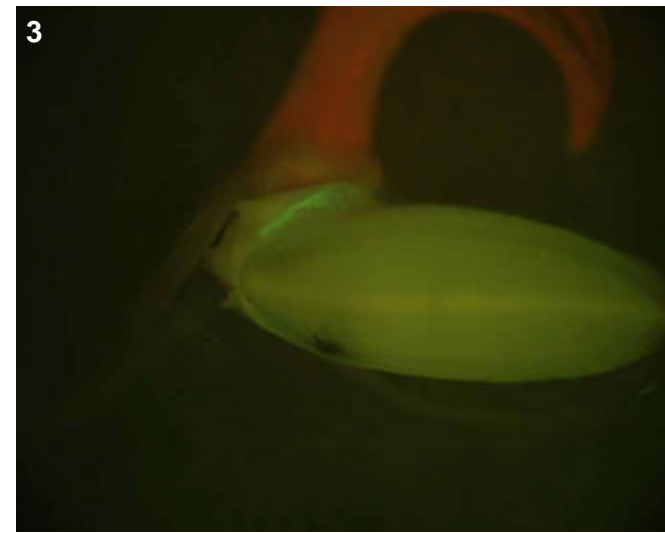
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 63



### T0 comments

Interesting lodicule-specific line, because the intensity of expression increases in the more mature flowers. In left picture, flowers are arranged left to right in order of increasing maturity.

### T1 seed comments

### T1 seedling comments

# Genotype: AQV E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

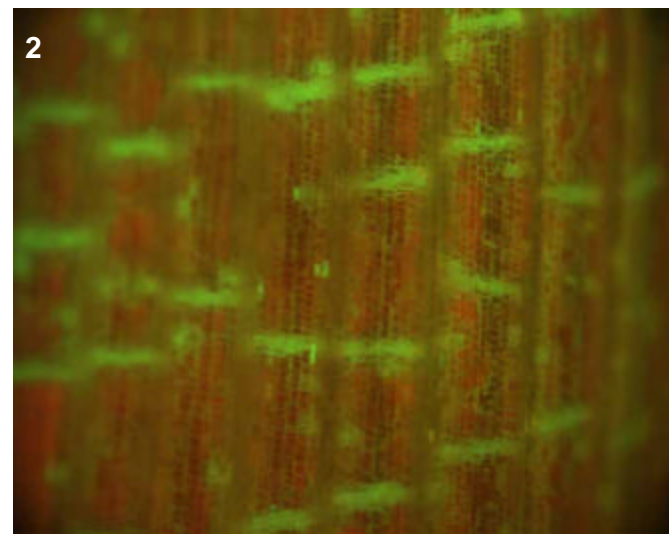
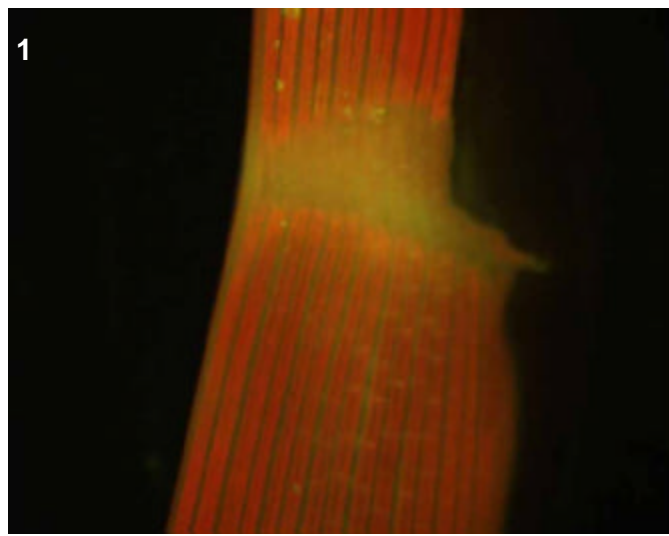
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



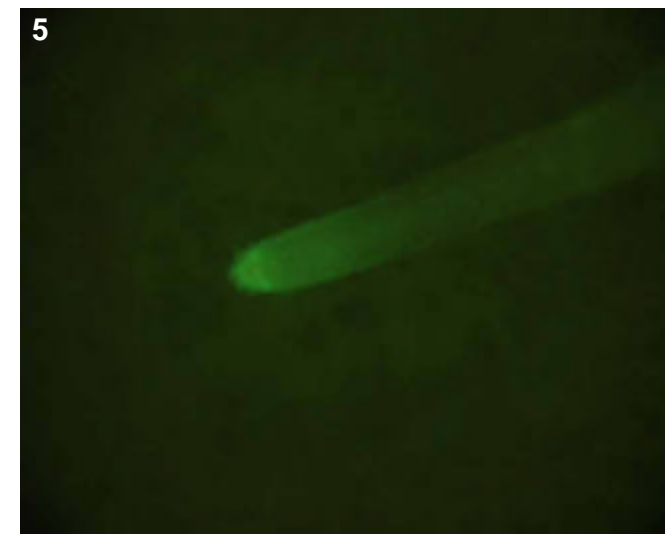
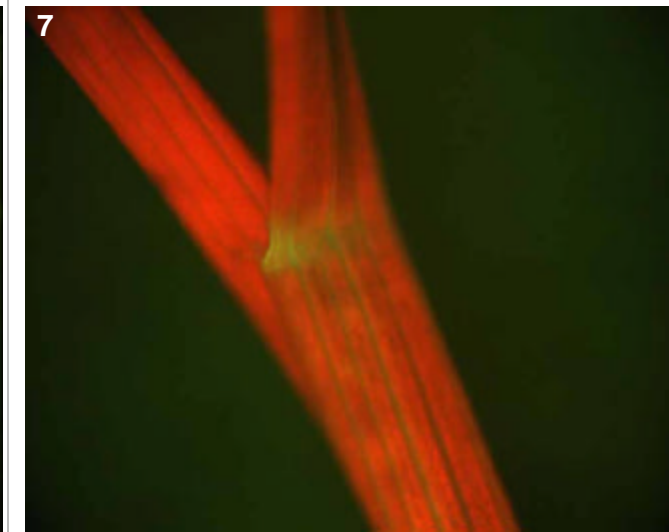
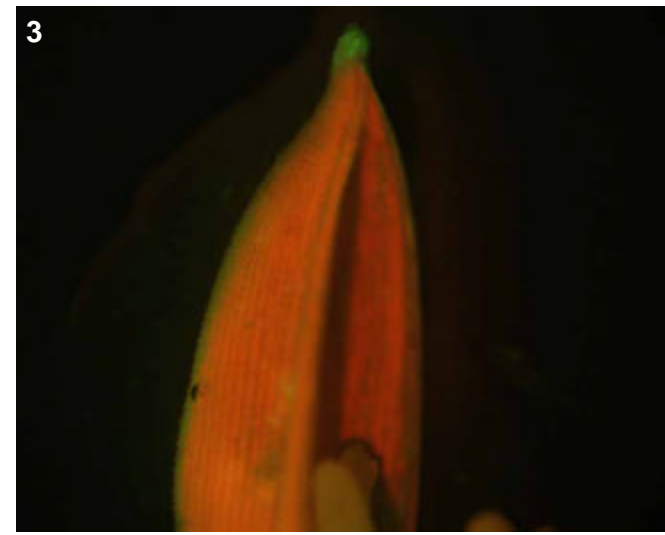
### T0 comments

Medium collar expression and sheath vascular. GFP in tips of flower as well.

### T1 seed comments

### T1 seedling comments

Most expression in vascular of roots. Sometimes a bright root cap of crown roots (pic 5), but variable. Expression in collar quite faint.



# Genotype: AQW A01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

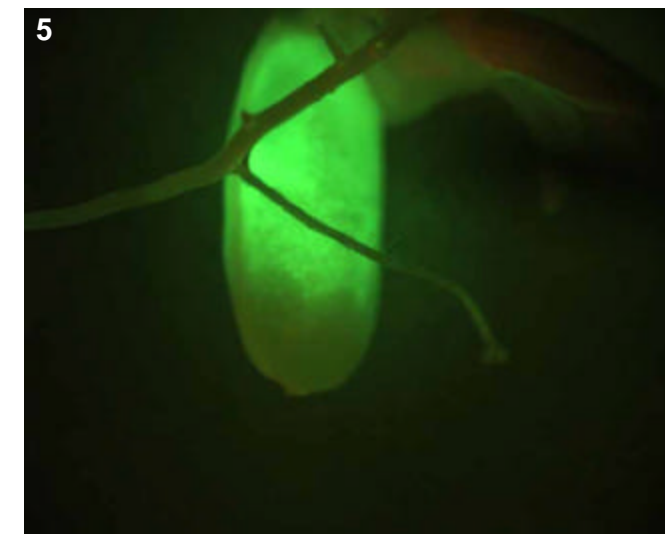
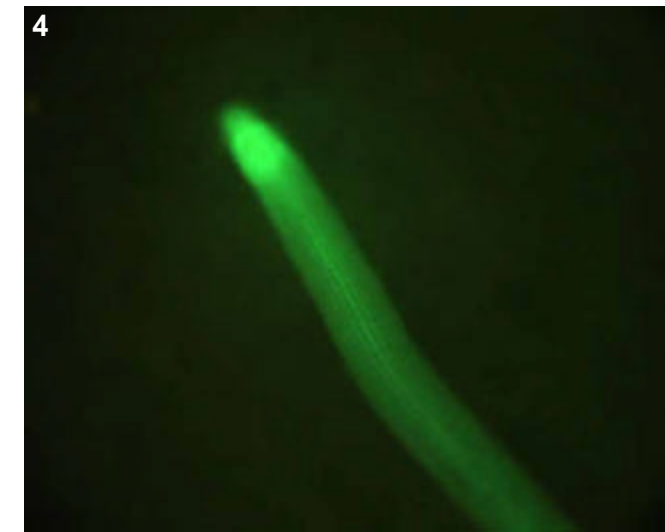
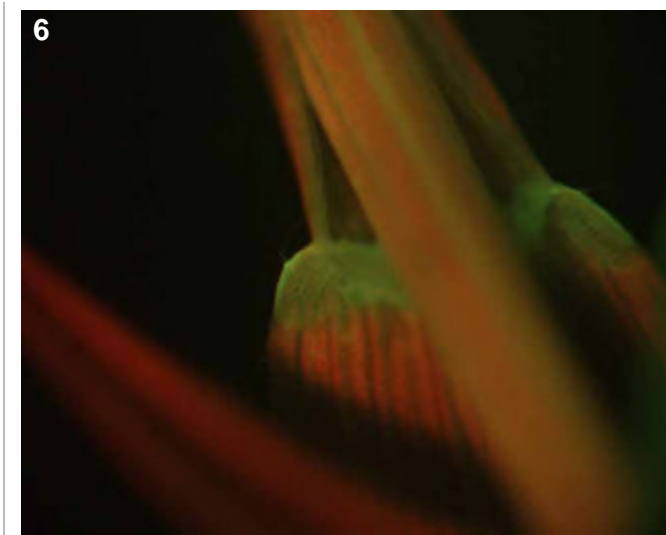
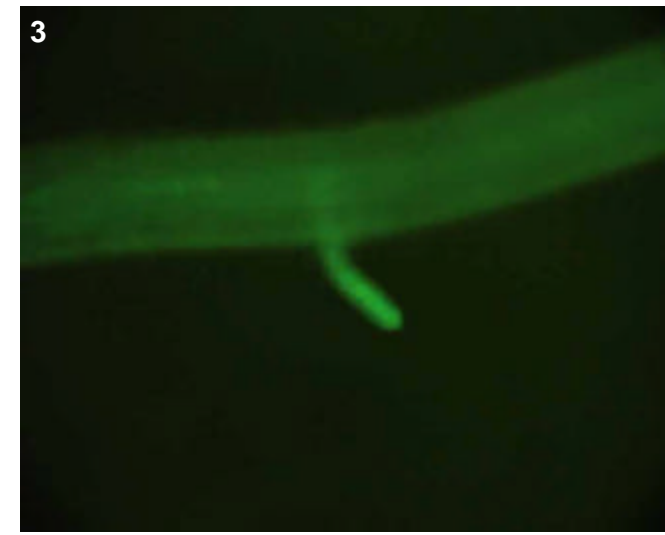
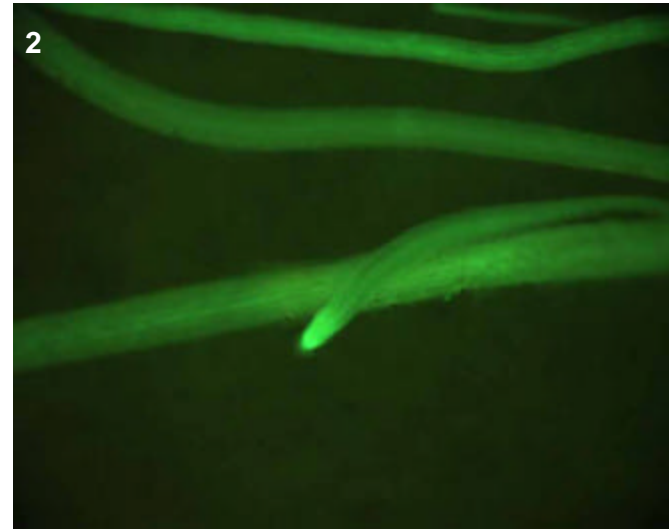
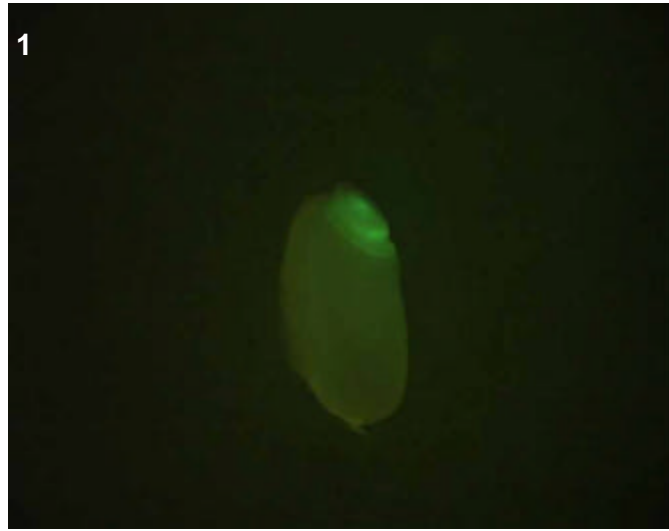
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 33



## T0 comments

## T1 seed comments

3/5 seeds show this pattern, perhaps it is the coleorhiza but too early to tell.

## T1 seedling comments

Bright, perhaps epidermal, expression in crowns and lats. More bright near root cap. Also shoot expression in collar and shoot vascular.



# Genotype: AQW A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

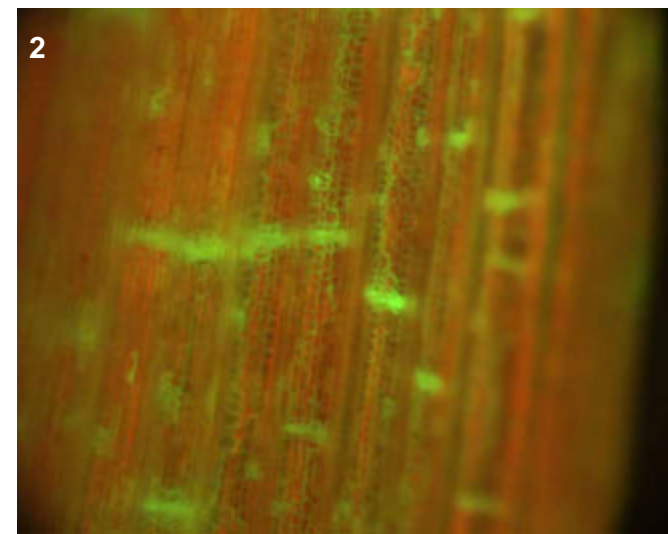
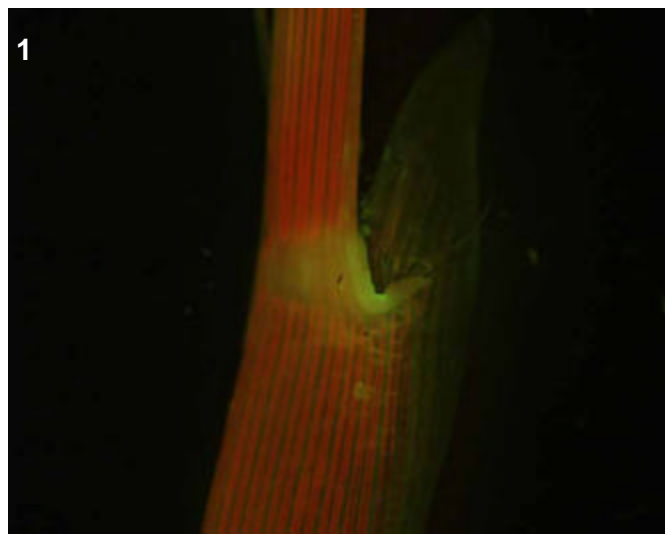
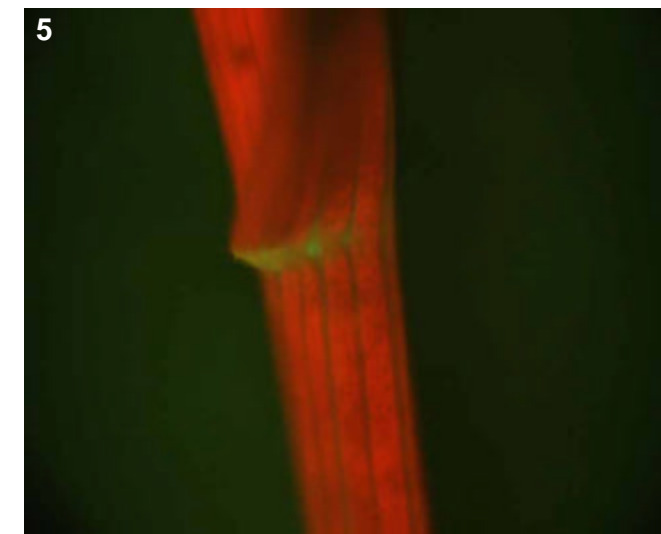
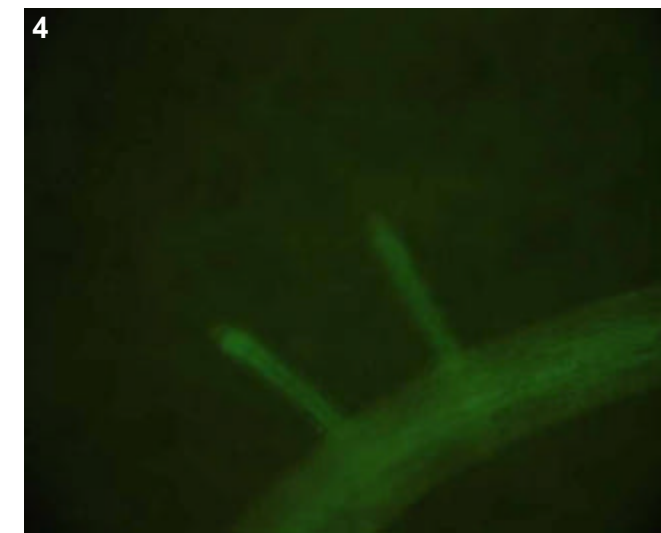
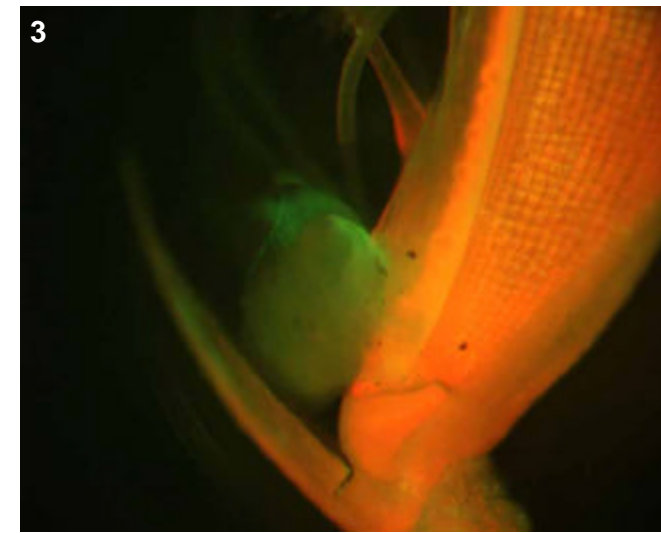
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 4



## T0 comments

Expression in collar is limited to where the ligule emerges. In lodicules, limited to the upper part of lodicules.

## T1 seed comments

## T1 seedling comments

# Genotype: AQW A11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

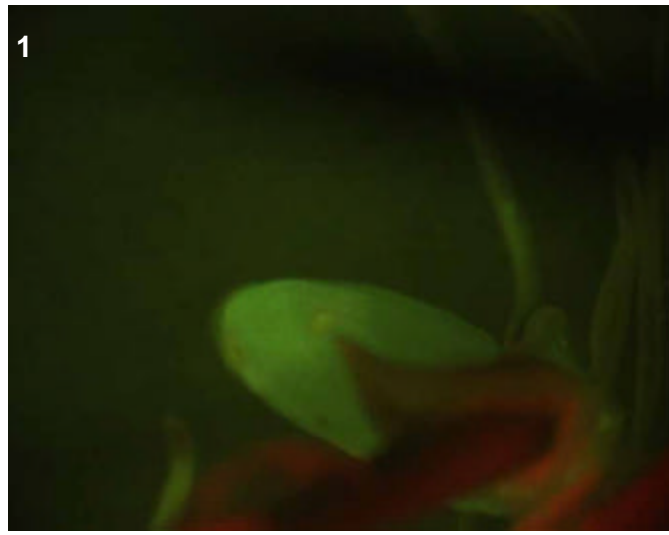
No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

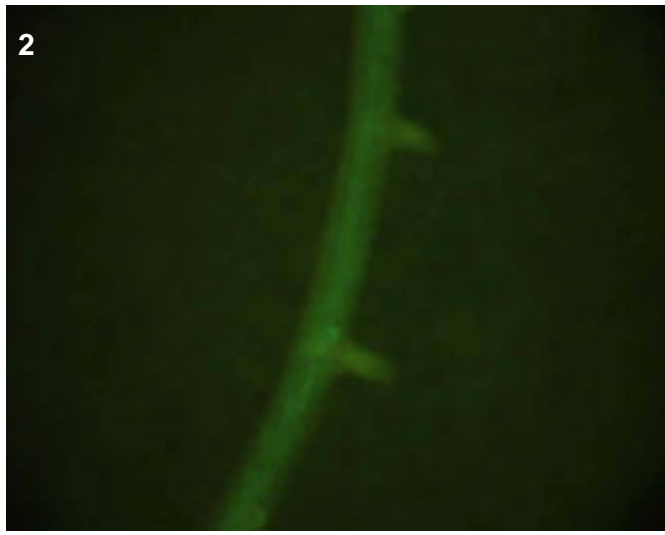
**Confocal?**

**Number T2 seed produced:** 0

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Either vascular, or just general expression, in crown and lateral roots.

# Genotype: AQW B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

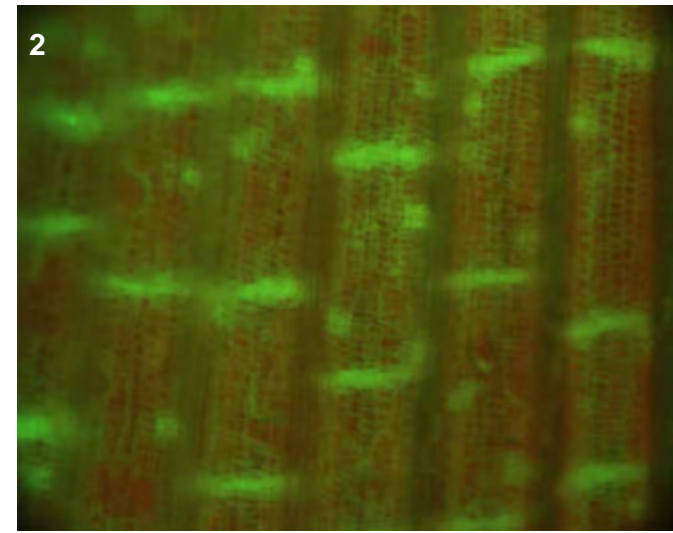
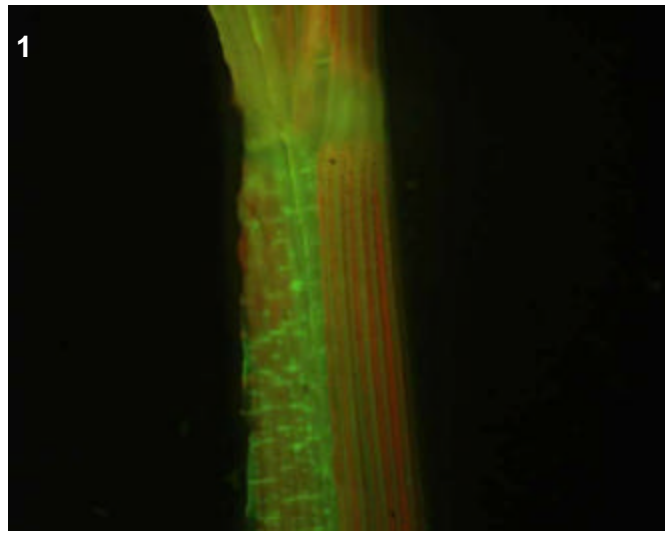
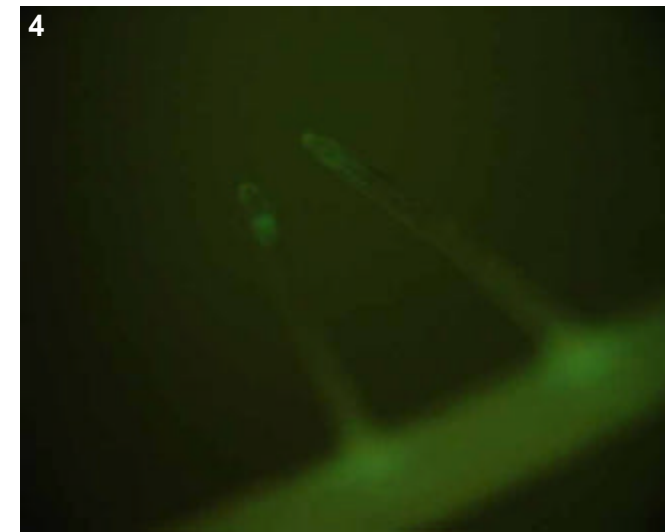
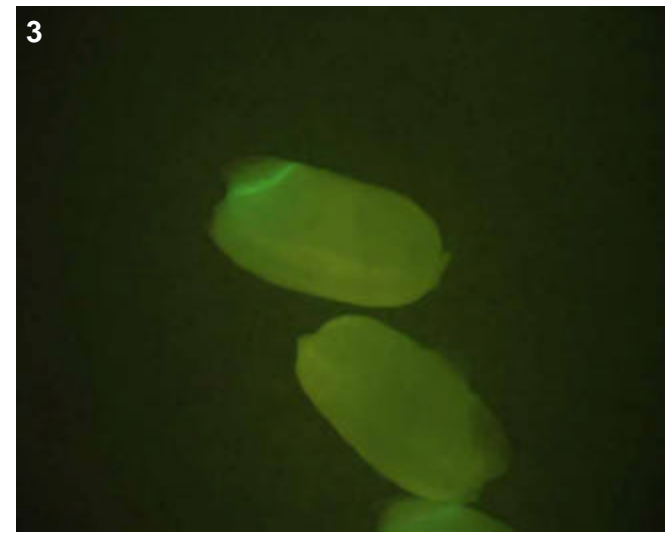
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?** YES

**Number T2 seed produced:** 3



## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

Picture 4 shows the interesting pattern observed in the roots, with expression observed in the elongation zone and emergence of lateral roots. Should confocal this one.

# Genotype: AQW C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

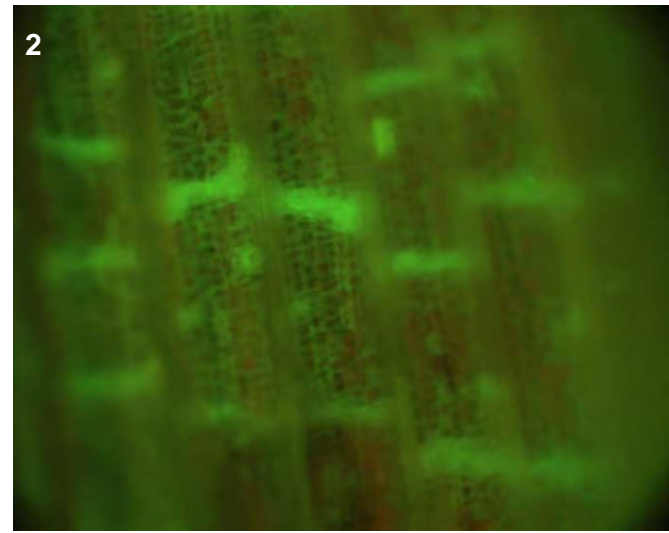
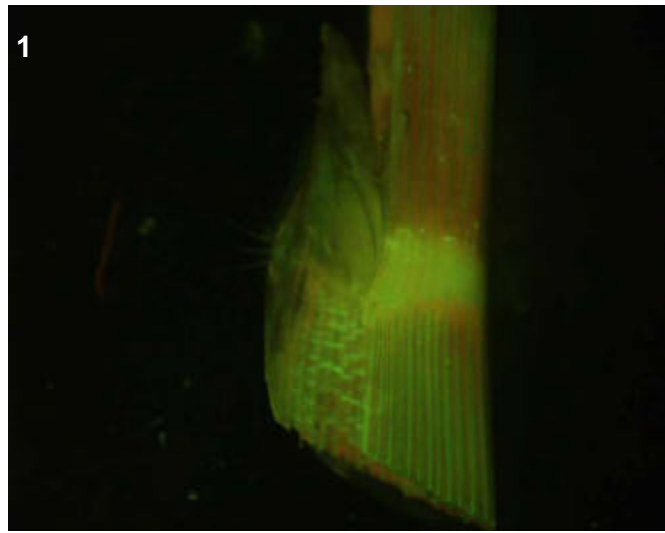
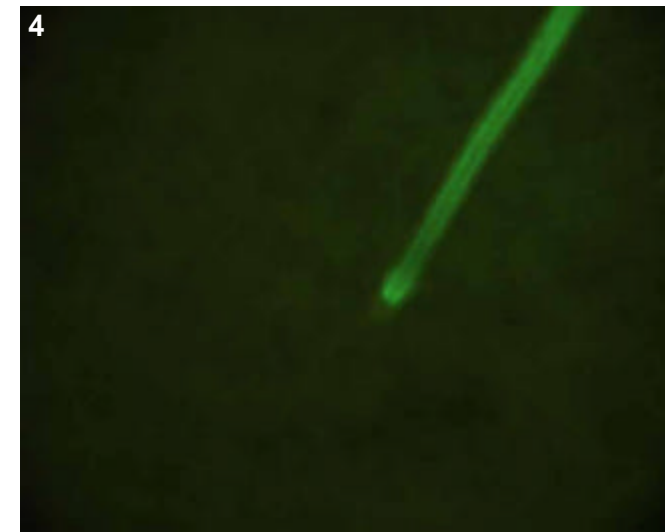
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 1



## T0 comments

## T1 seed comments

## T1 seedling comments

Mostly expression in the lateral roots--looks like could be cortical expression (see pic 4)? Should do confocal.

# Genotype: AQW D07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

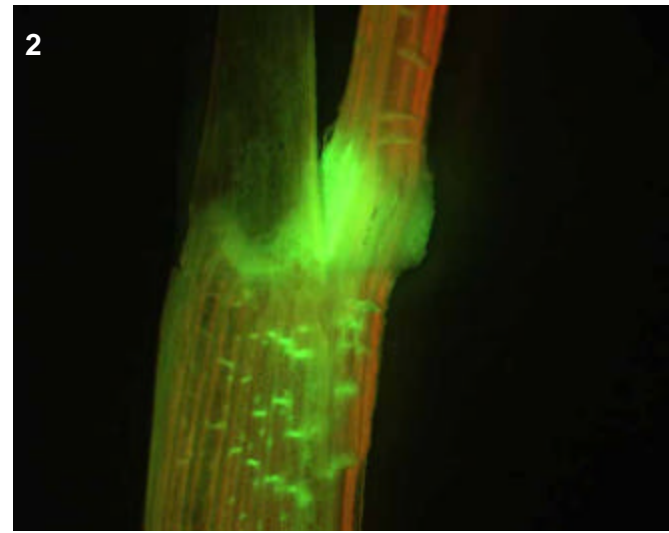
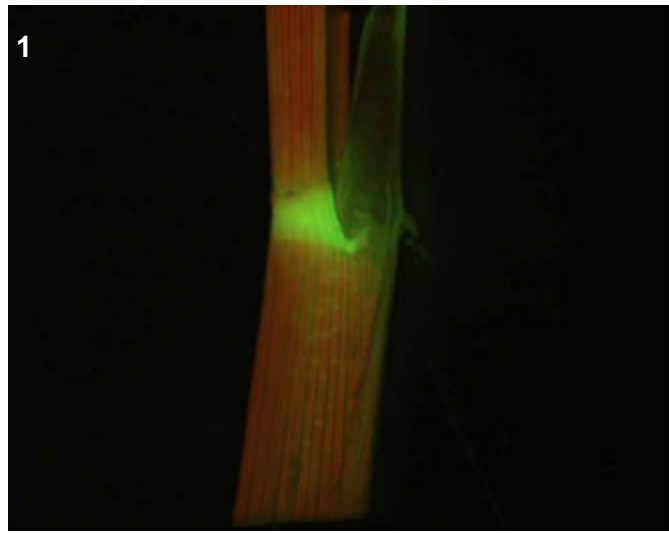
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
 YES, 3 GFP+ plants

Confocal?

Number T2 seed produced: 8



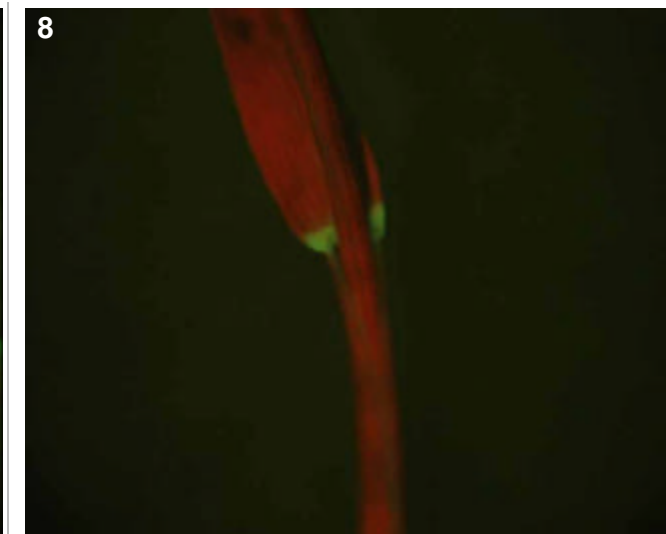
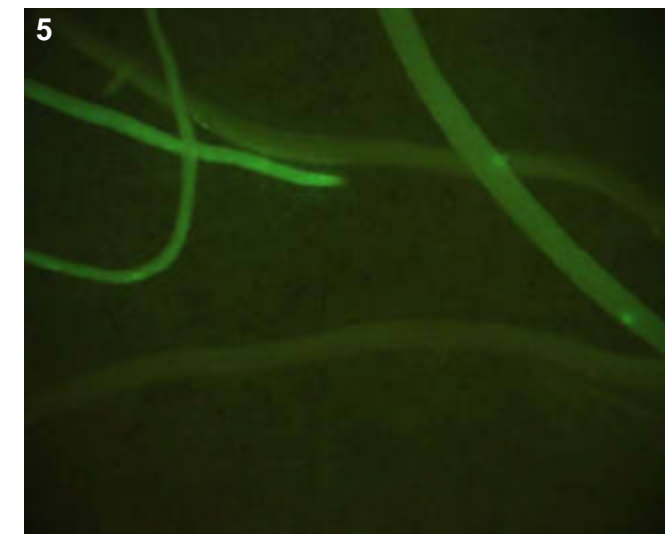
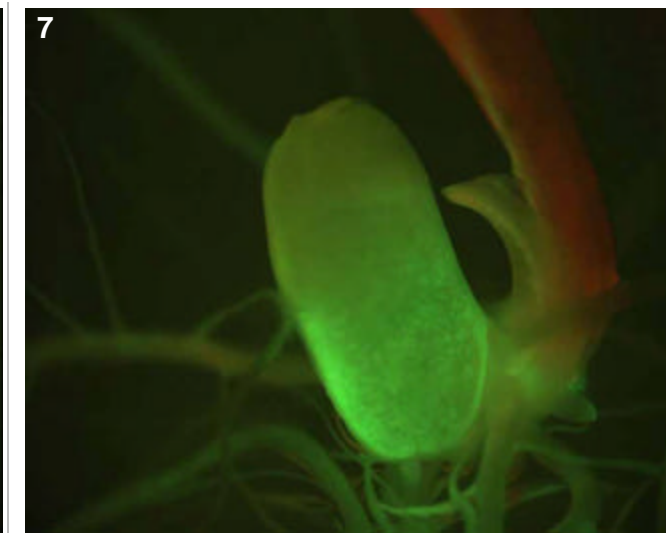
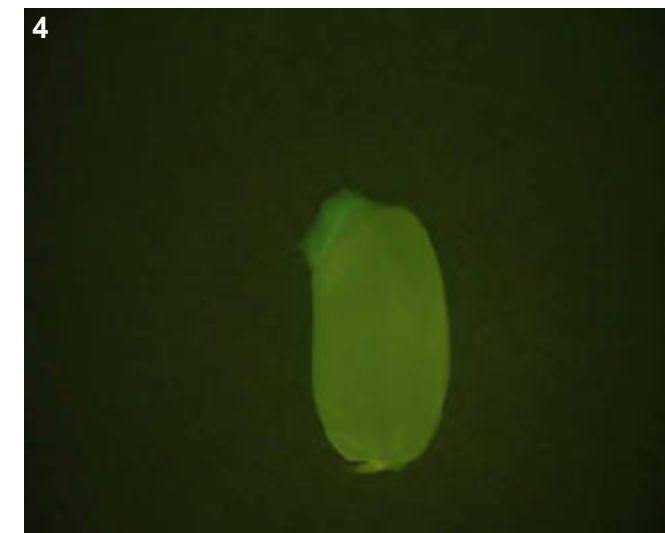
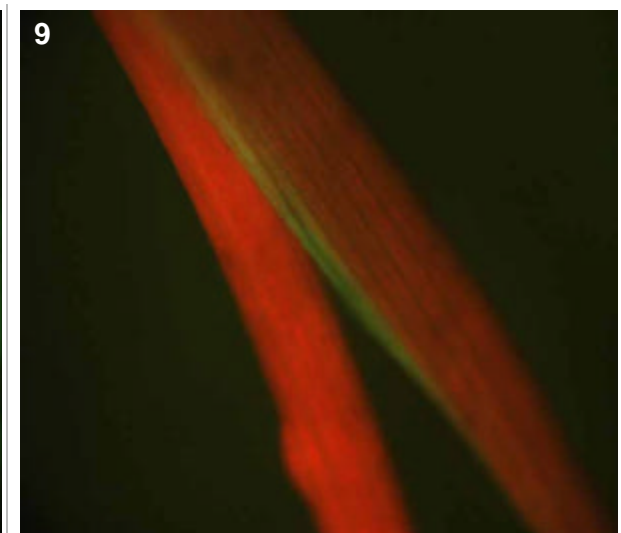
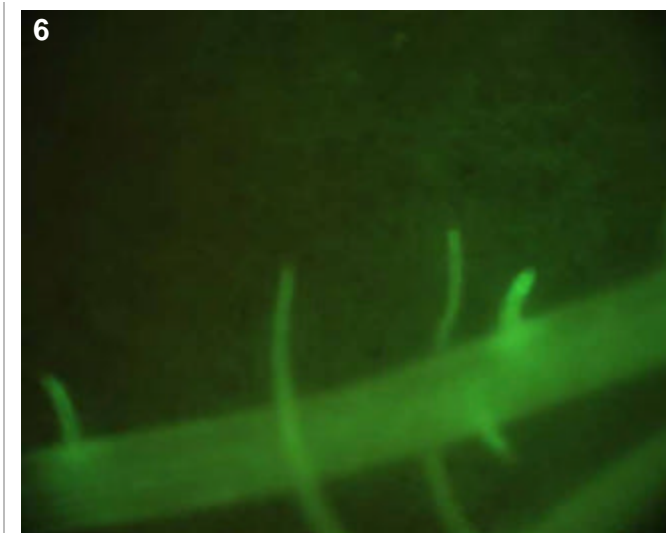
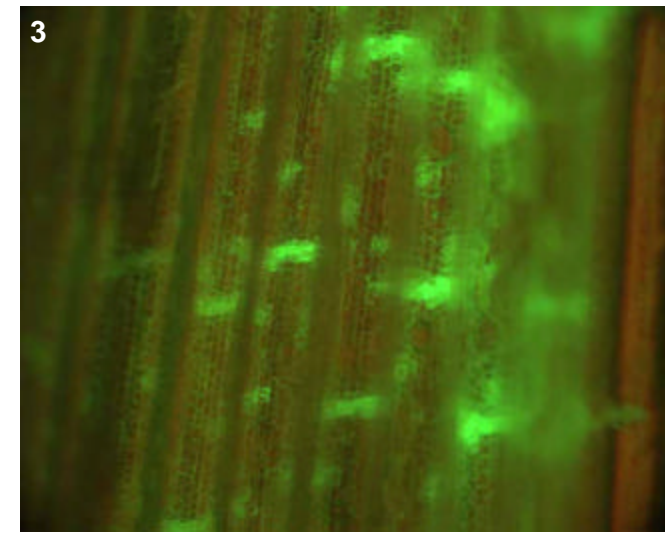
### T0 comments

Very bright expression.

### T1 seed comments

2/5 had expression in the embryo, or perhaps this is the coleorhiza

### T1 seedling comments



# Genotype: AQW D09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-3  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

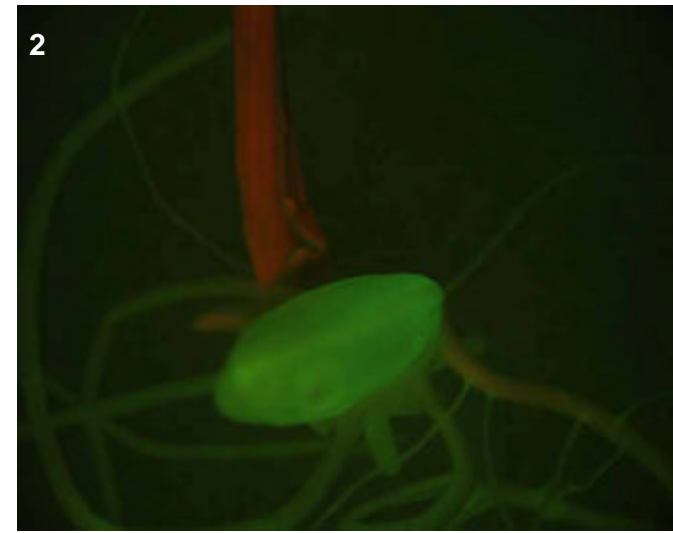
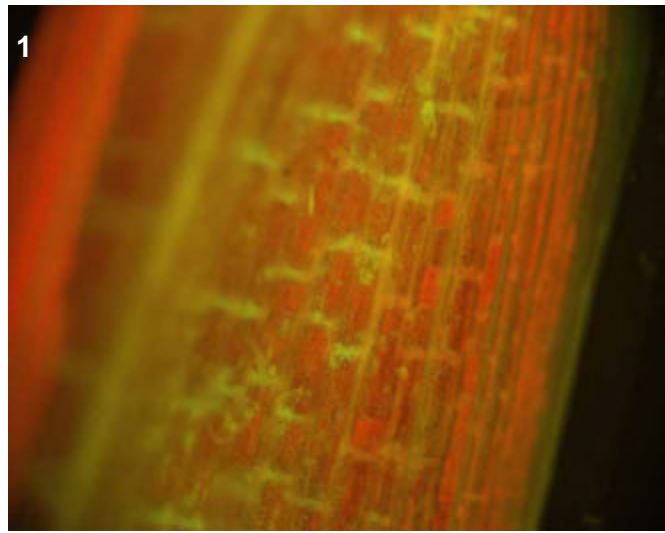
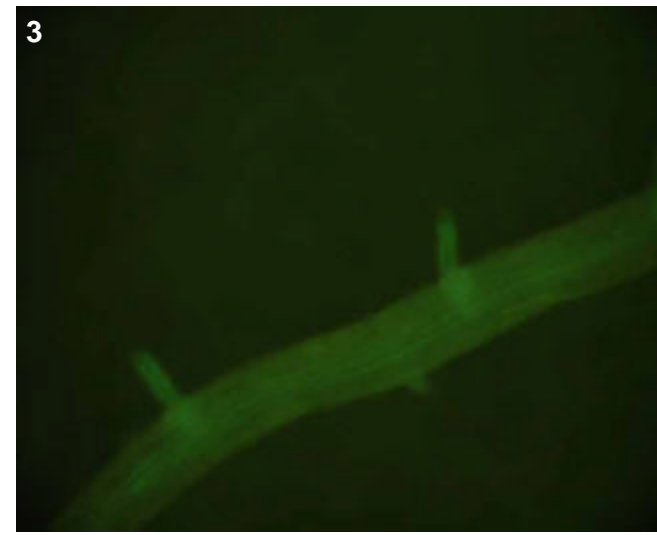
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 3



### T0 comments

Sheath vascular, but no collar.

### T1 seed comments

### T1 seedling comments

Bright lateral roots.

# Genotype: AQW G03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

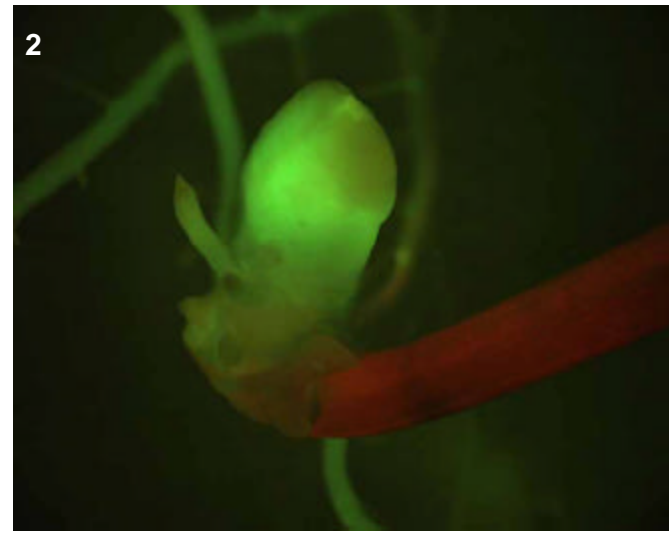
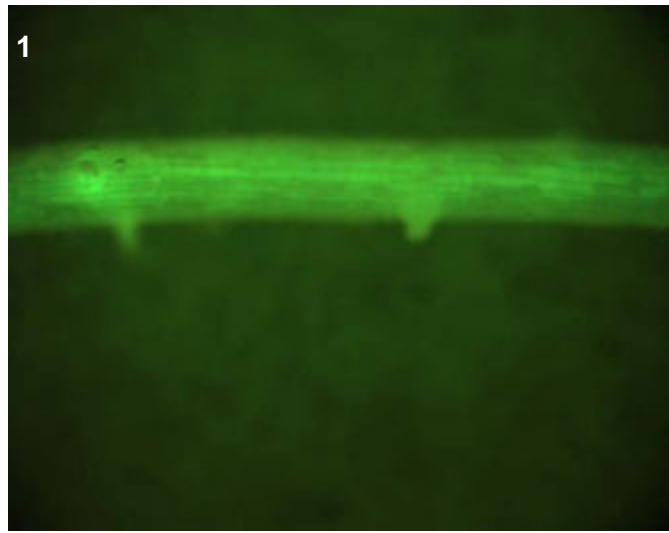
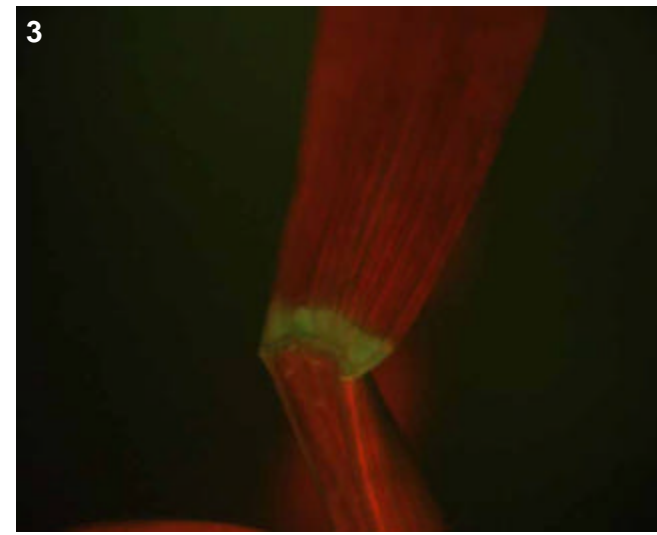
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 1



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: AQW G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

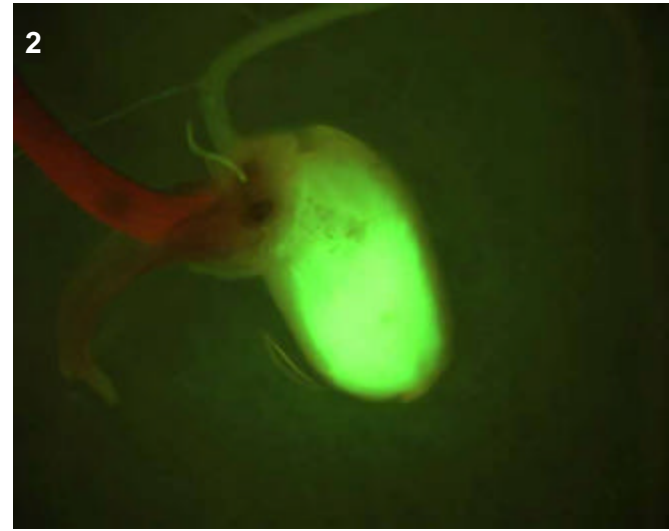
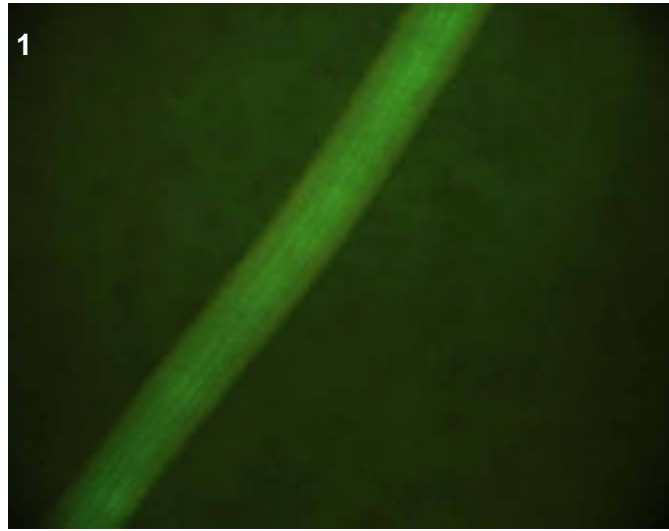
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 14



## T0 comments

## T1 seed comments

Perhaps faint expression in the embryo

## T1 seedling comments

Expression was bright, and quite general, in the crown roots. Endosperm ranged from medium expression to very bright (pic 2).



# Genotype: AQW H05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

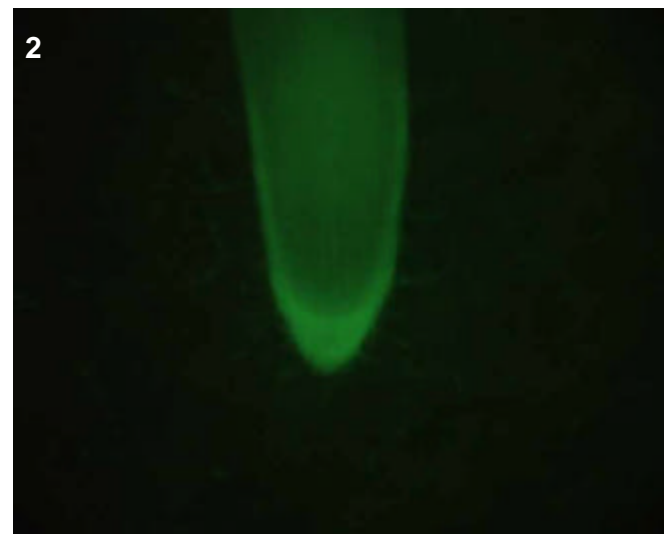
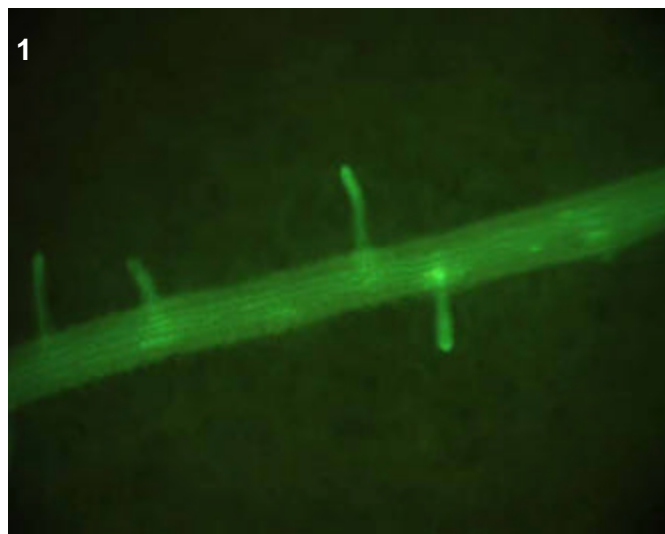
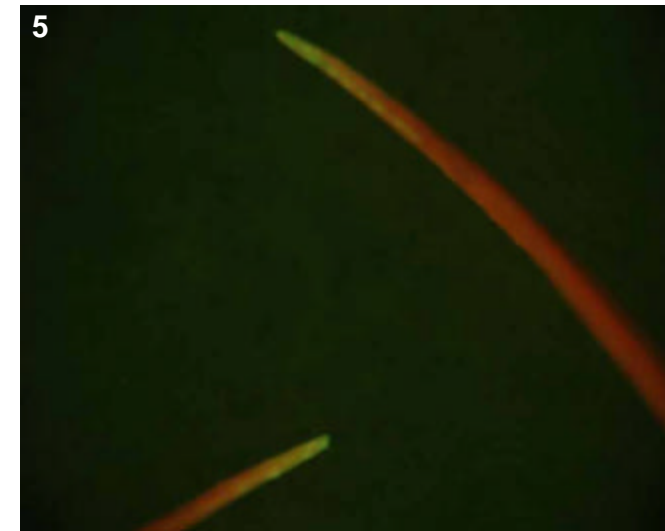
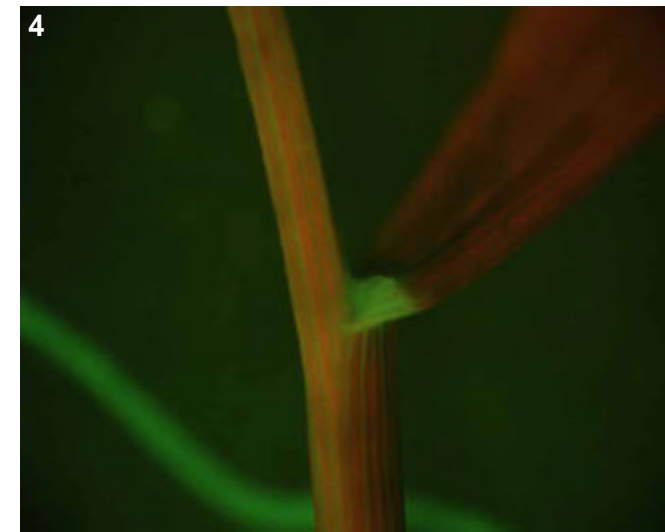
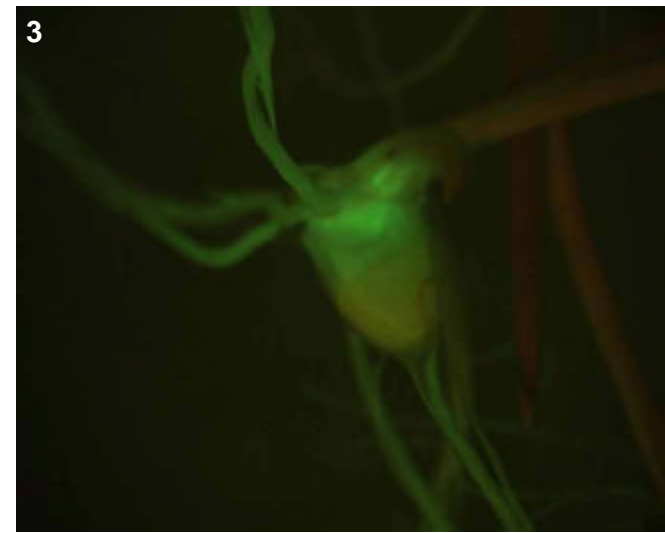
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 9



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks like bright vascular in root and shoot

# Genotype: AQX A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

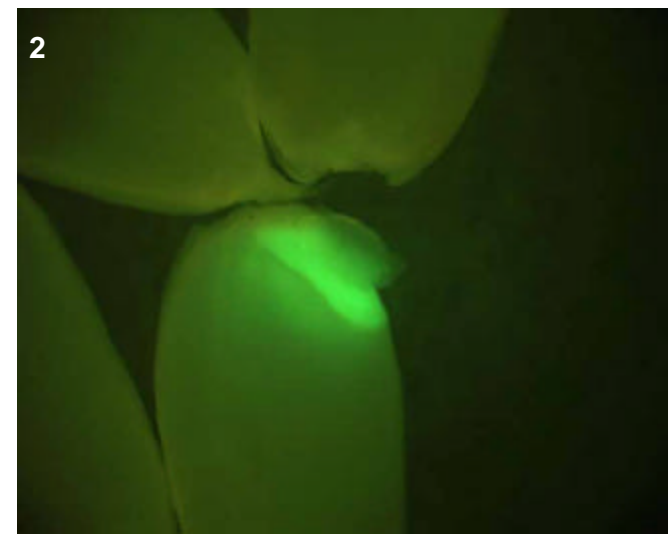
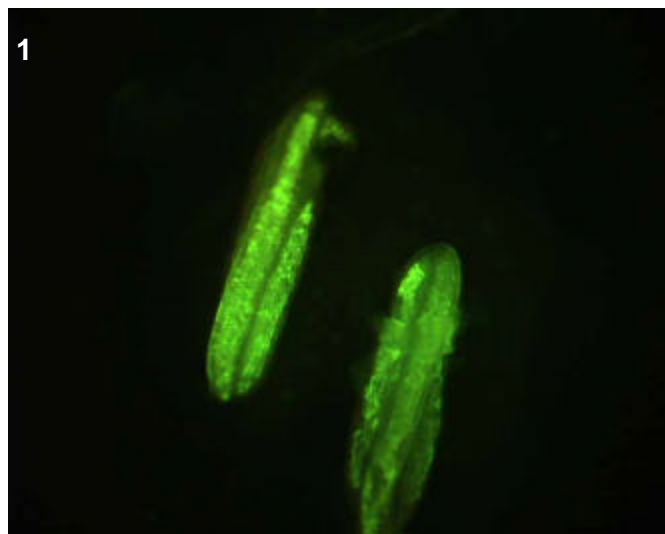
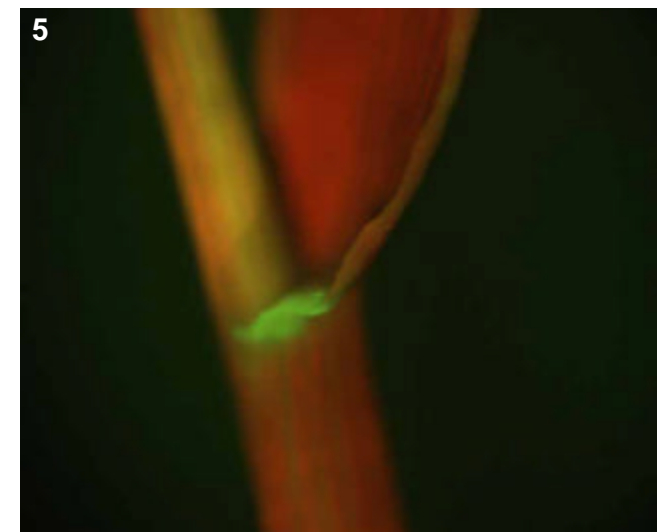
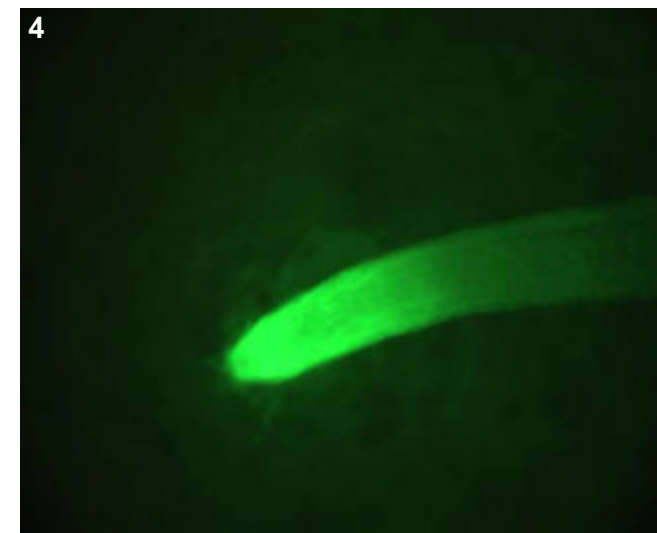
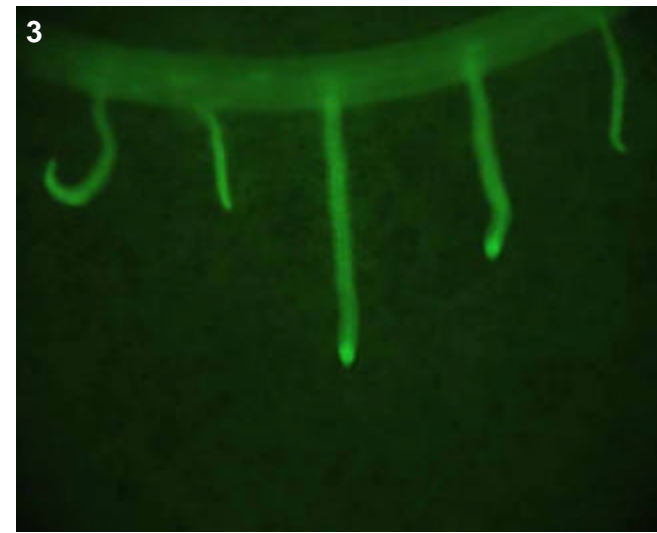
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 41



### T0 comments

anther wall only

### T1 seed comments

2/5 seeds showed bright embryo expression

### T1 seedling comments

Root expression could be interesting--note the extremely bright lat root tips. Epidermal?

# Genotype: AQX D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

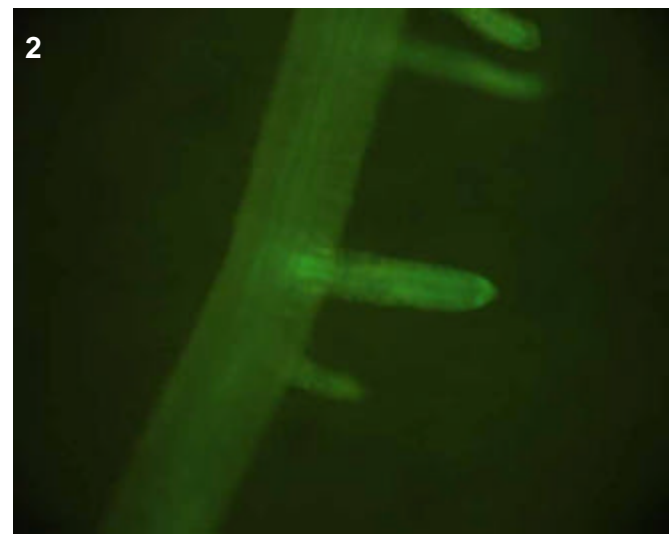
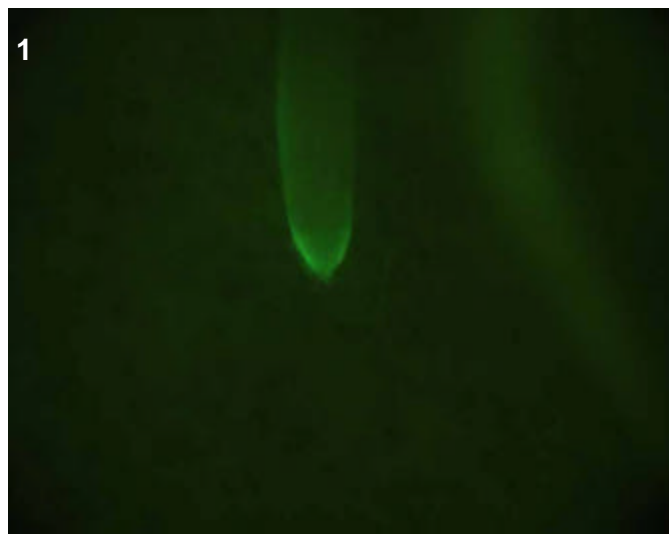
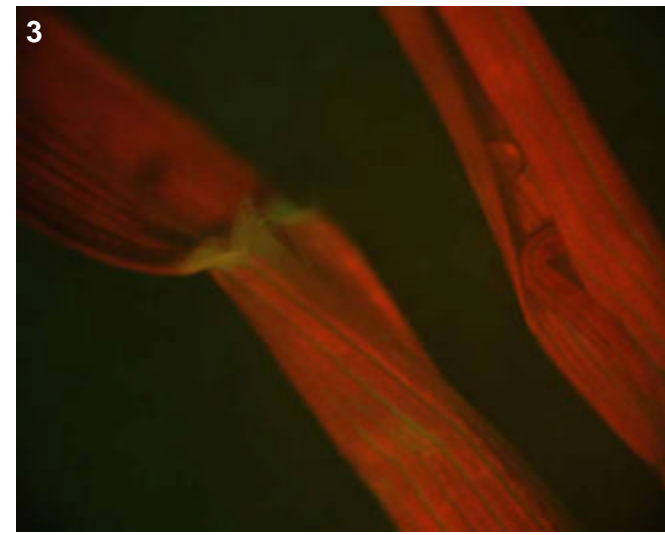
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Interesting root expression, perhaps an overall epidermal pattern (pic 1) with perhaps some vascular expression as well in lateral roots (pic 2).

# Genotype: AQX H02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

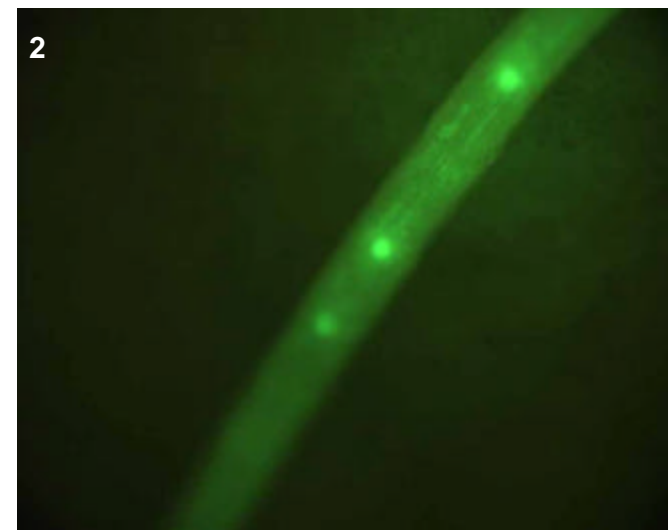
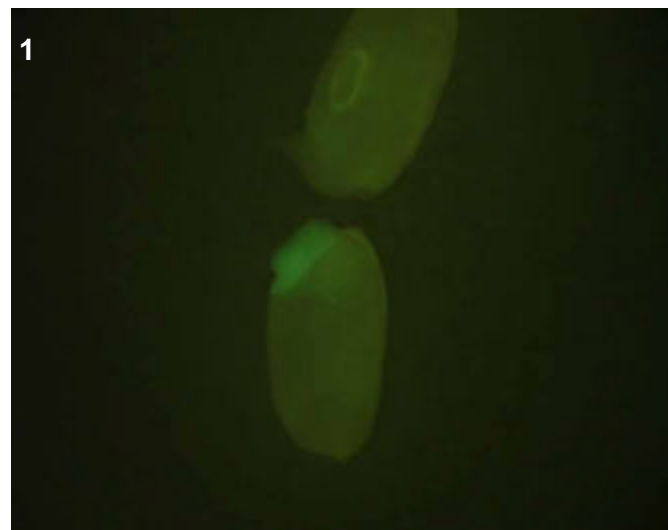
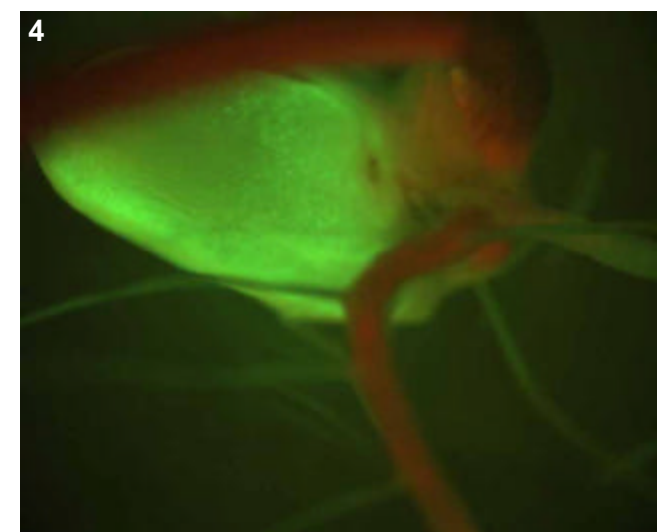
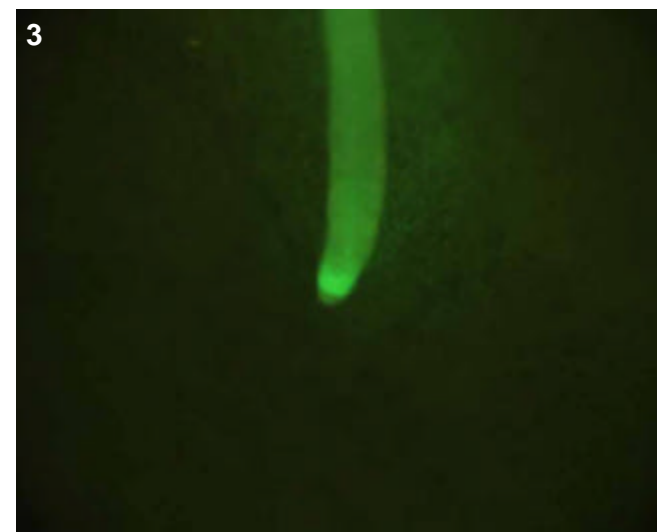
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 4



## T0 comments

## T1 seed comments

3/5 seeds show this pattern in either the embryo or coleorhiza.

## T1 seedling comments

# Genotype: AQY E06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

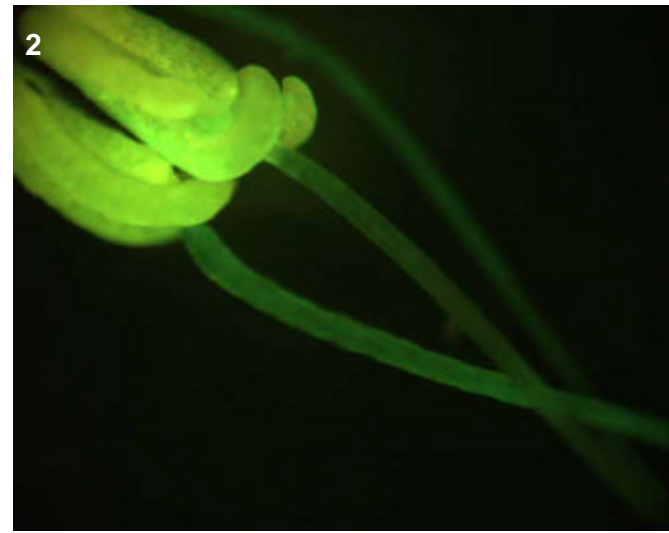
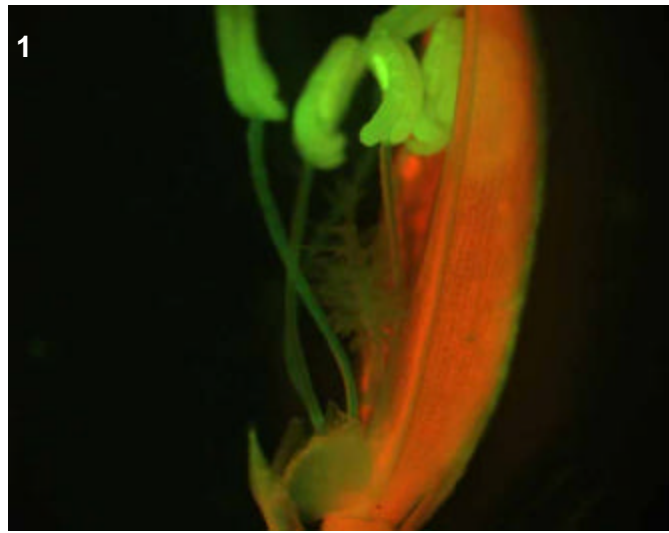
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants **Confocal?**

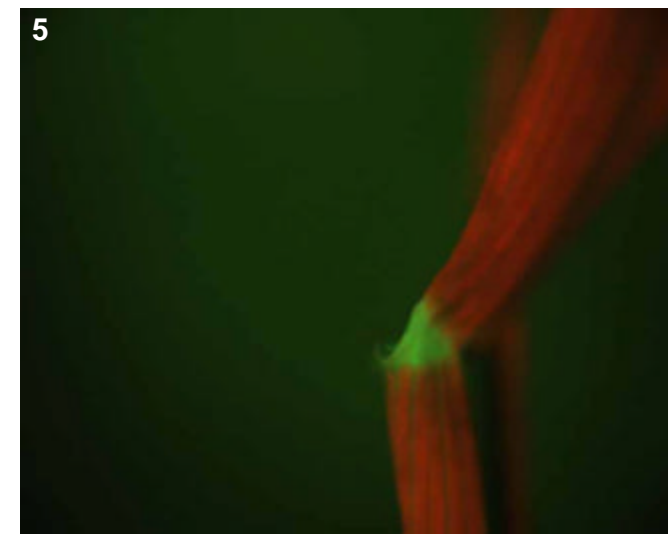
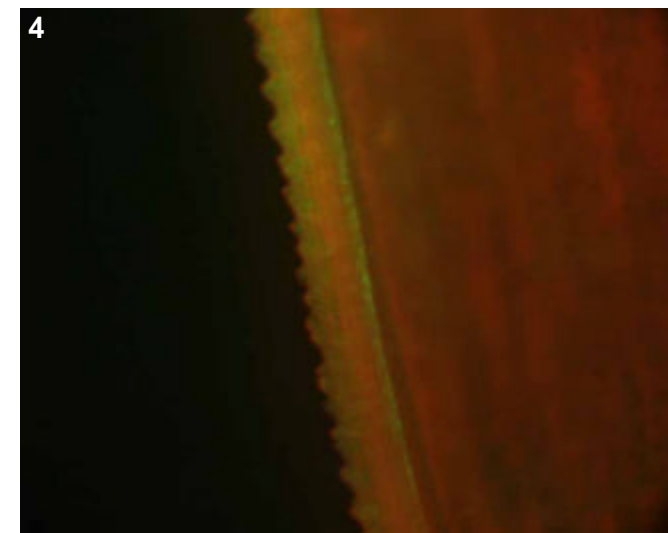
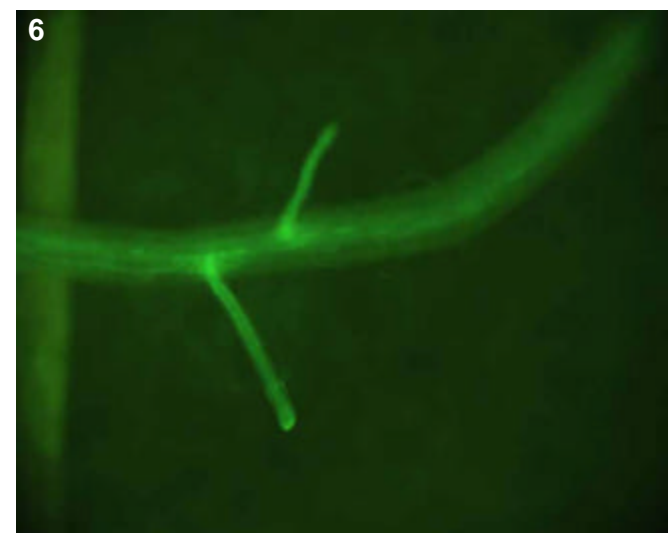
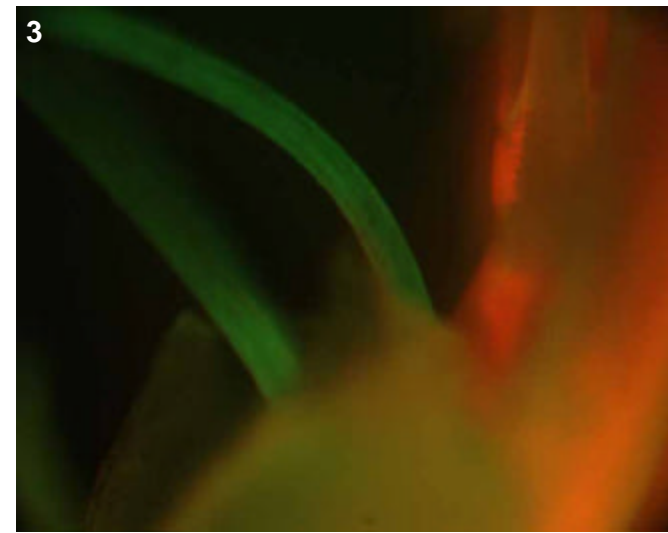
**Number T2 seed produced:** 10



**T0 comments**  
 Bright anther filaments. Also faint floral vascular.

**T1 seed comments**  
 There may be faint scutellum expression in the seeds

**T1 seedling comments**  
 Expression was brighter in the shoot than in the root.



# Genotype: AQY F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

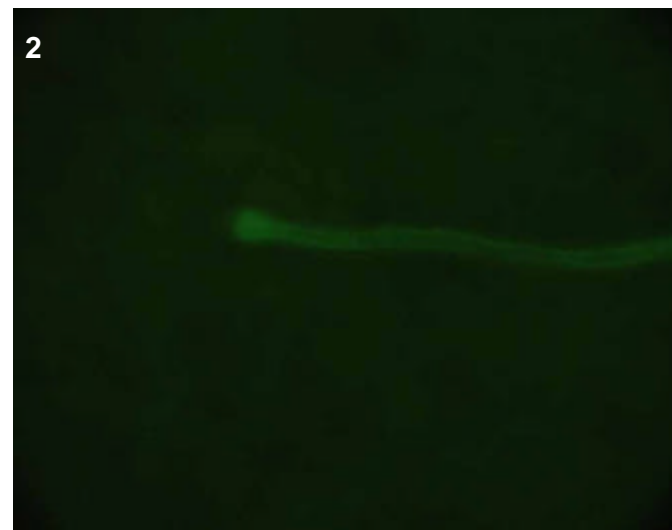
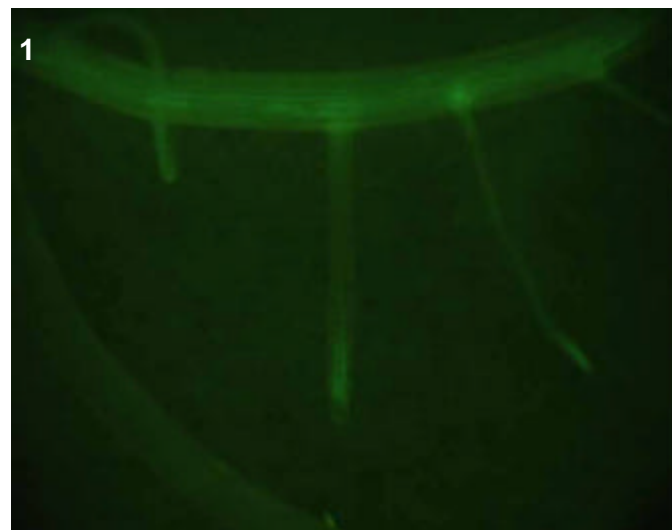
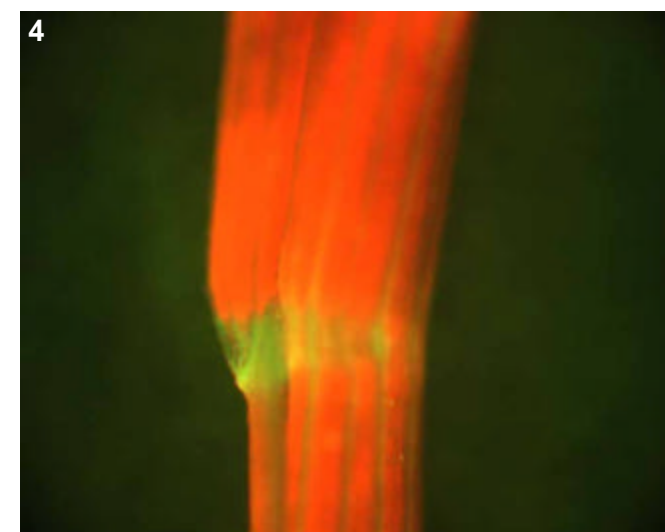
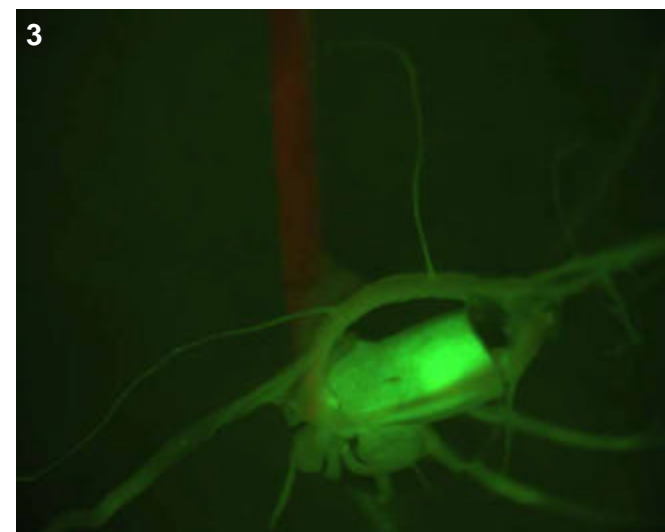
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 34



### T0 comments

No pics for this line.

### T1 seed comments

### T1 seedling comments

# Genotype: AQY F08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

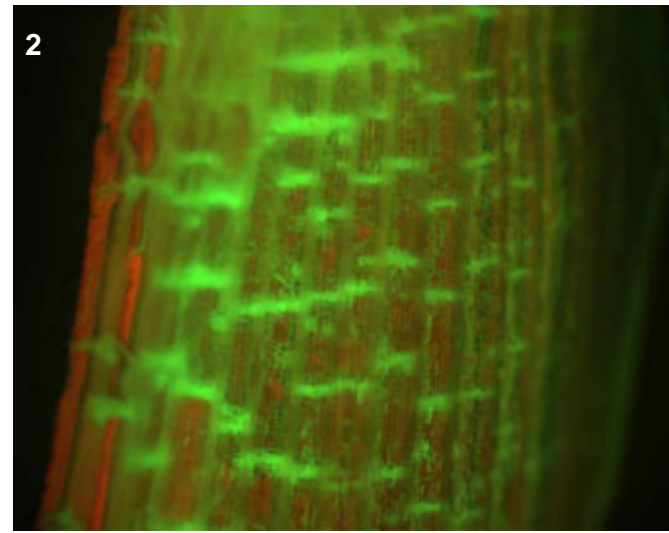
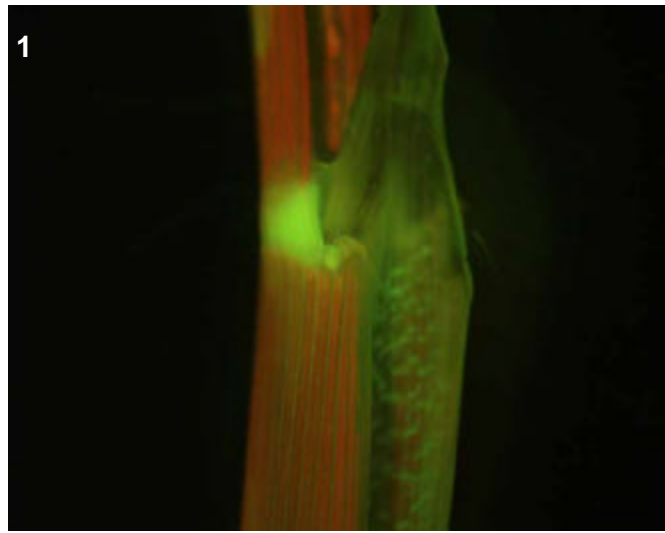
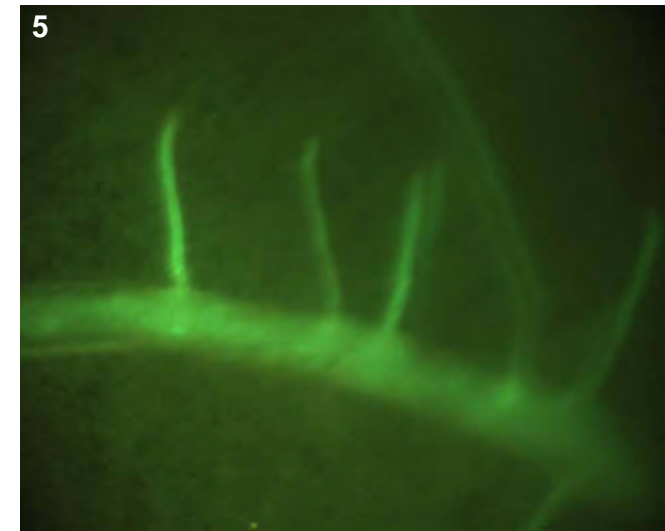
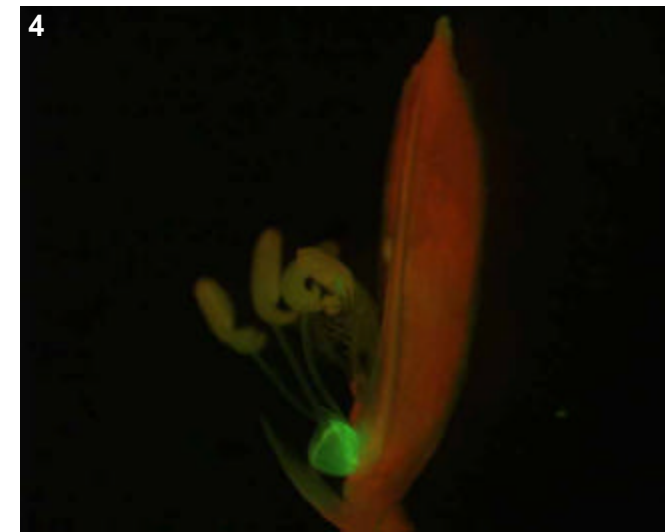
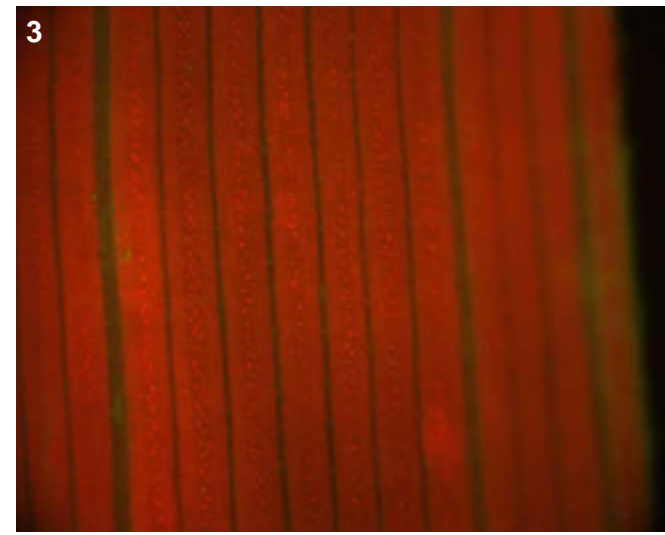
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 9



## T0 comments

## T1 seed comments

## T1 seedling comments

Rather faint root expression.

# Genotype: AQY H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

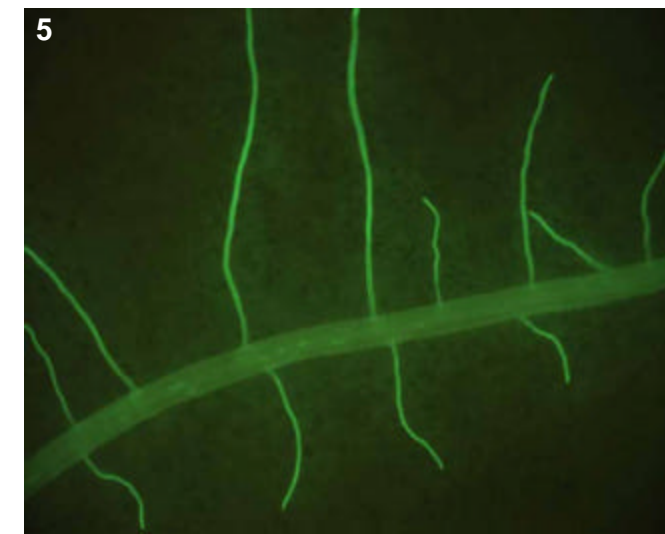
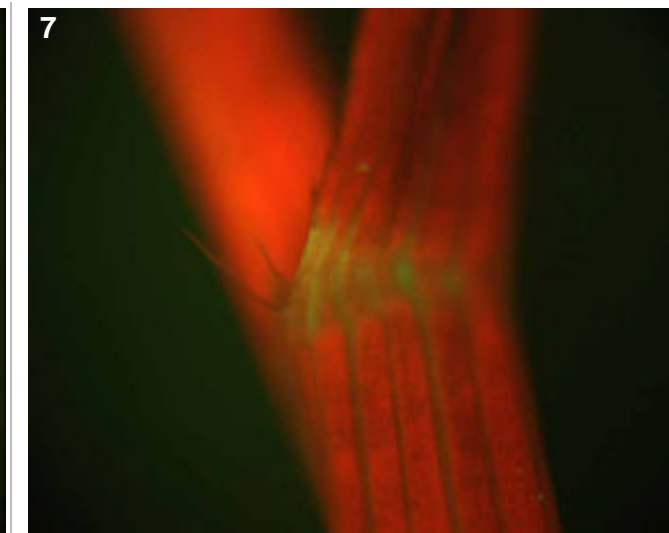
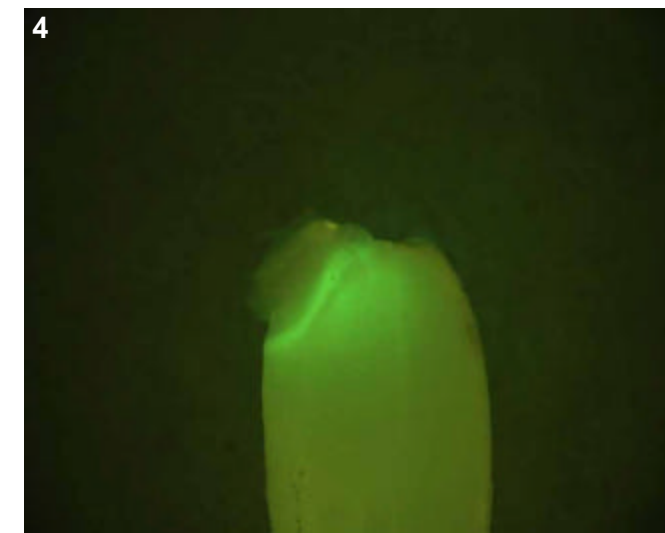
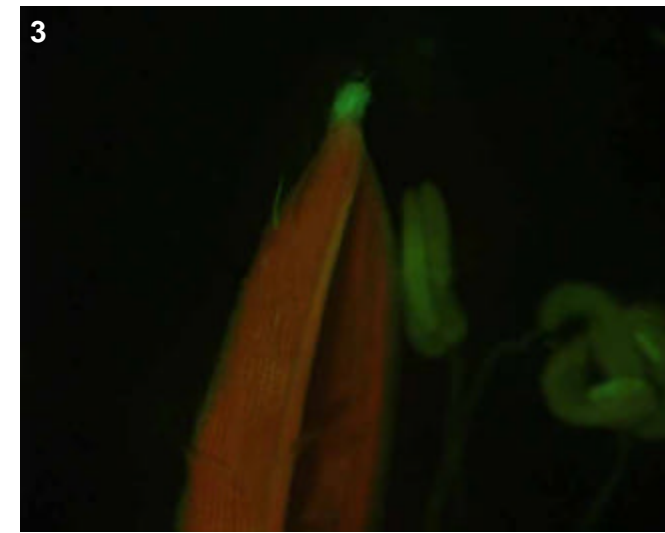
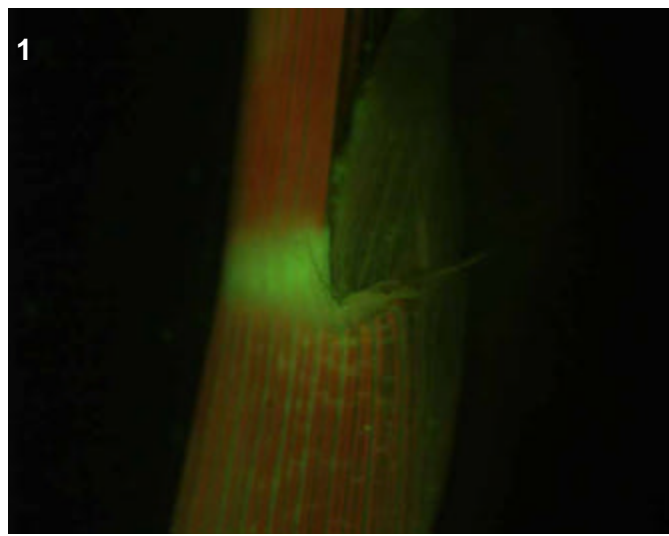
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 12



### T0 comments

Bright expression in collar, sheath vascular and the floral tip.

### T1 seed comments

3/5 seeds showed this pattern

### T1 seedling comments

Only faint expression in collar, note the especially bright expression in tips of roots (pic 6). Perhaps epidermal?



# Genotype: AQZ A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

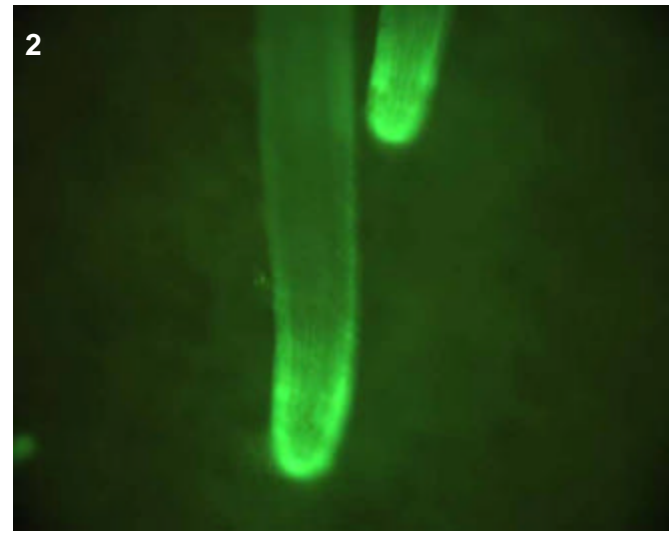
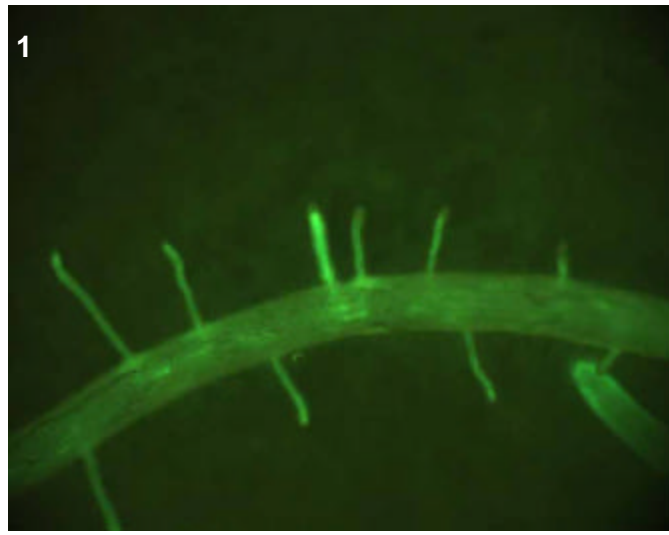
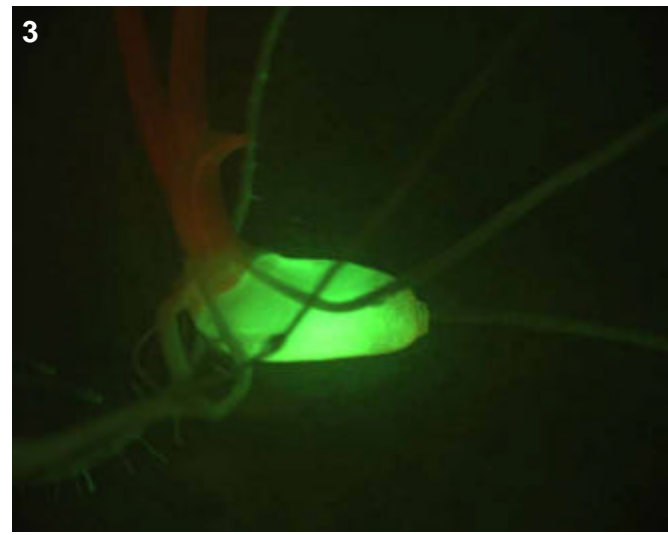
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** YES

**Number T2 seed produced:** 4



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
This looks like a root epidermal line--especially evident in picture 2. Should confocal. Endosperm expression (pic 3) was most bright.

# Genotype: AQZ C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

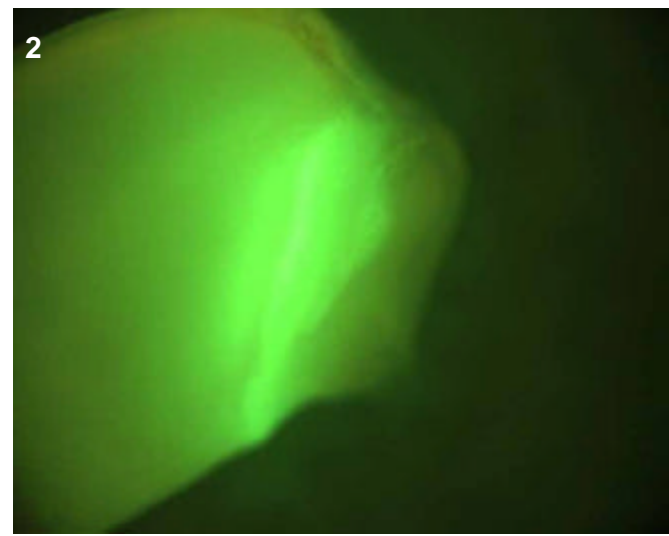
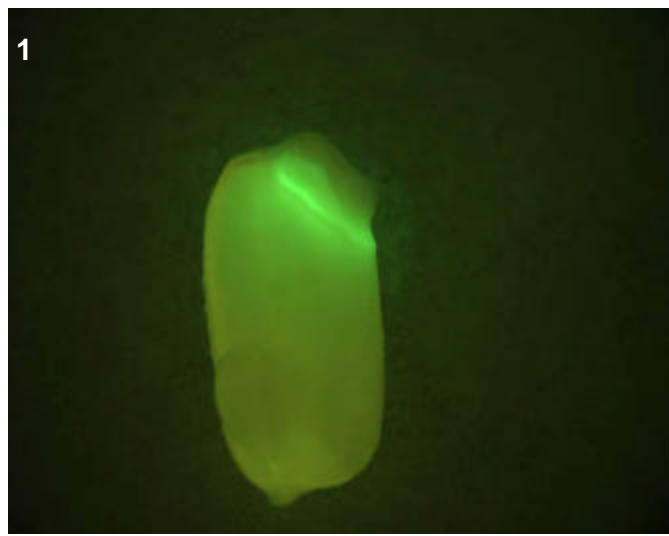
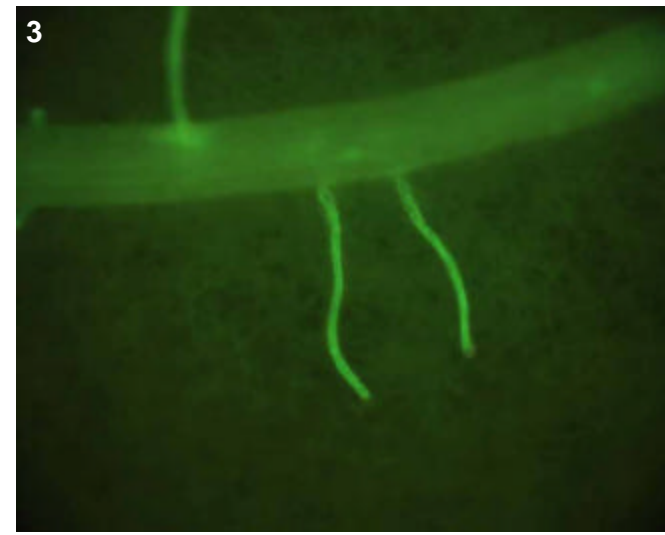
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 2



## T0 comments

## T1 seed comments

3/5 seeds show this pattern, weak expression.

## T1 seedling comments

Bright expression in roots, perhaps vascular? Also shoot vascular expression.

# Genotype: AQZ E02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

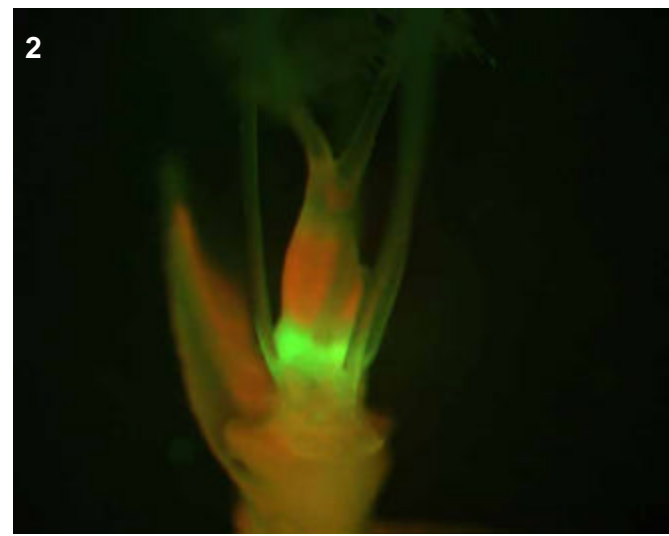
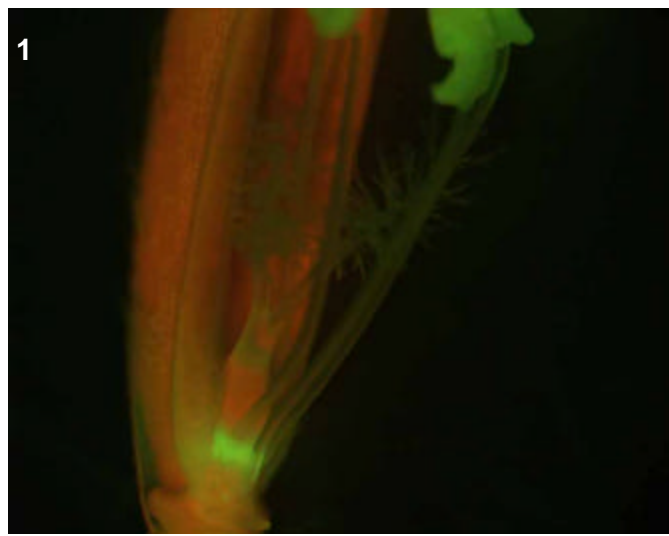
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 4



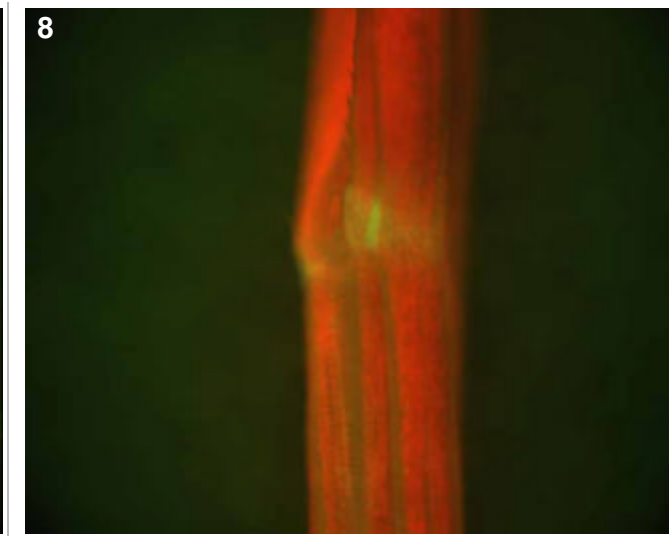
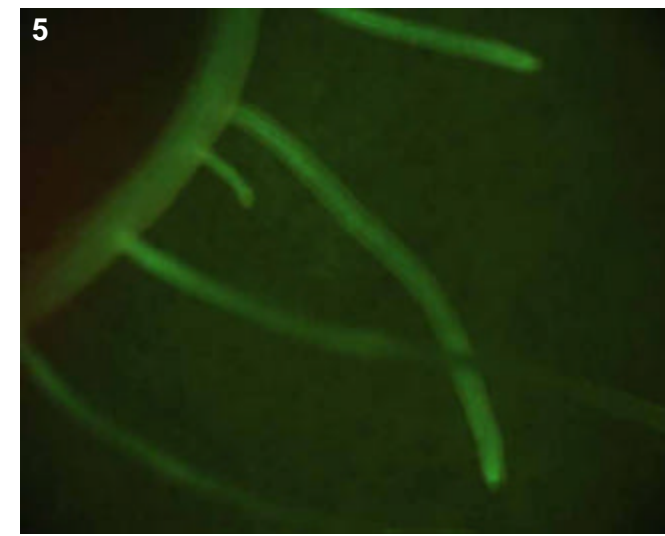
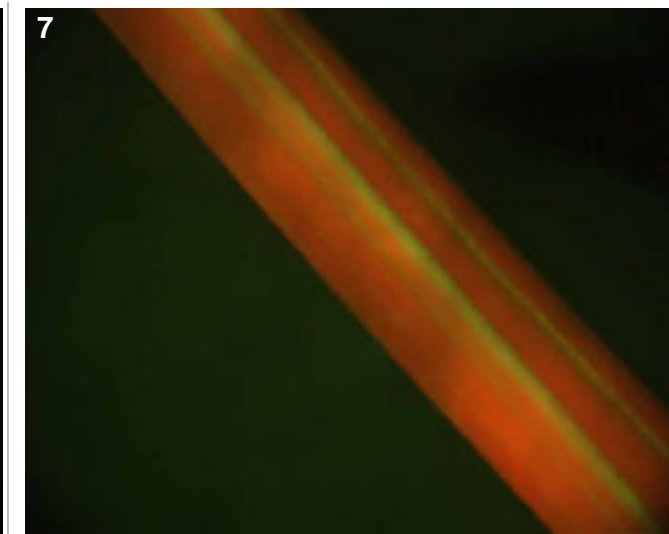
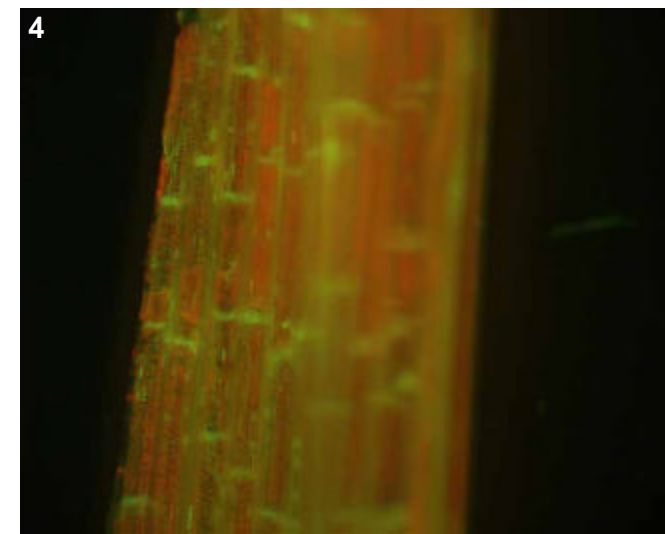
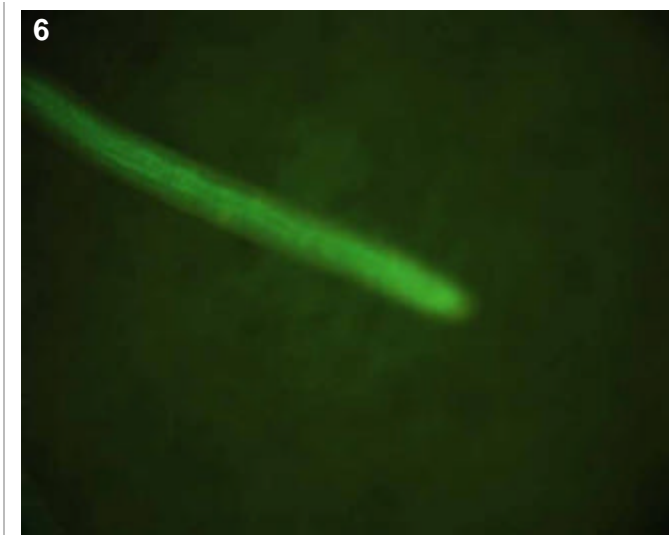
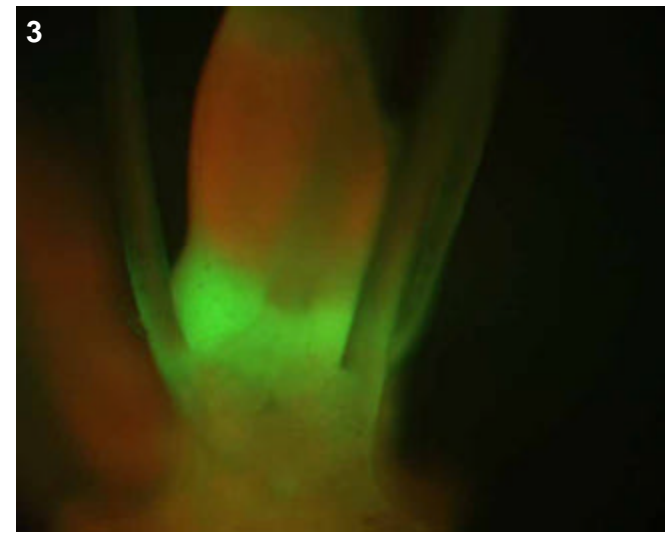
### T0 comments

Floral expression appears to be in the base of the carpel.

### T1 seed comments

### T1 seedling comments

Perhaps general expression in lateral roots, faint expression in crowns.



# Genotype: ARA D07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

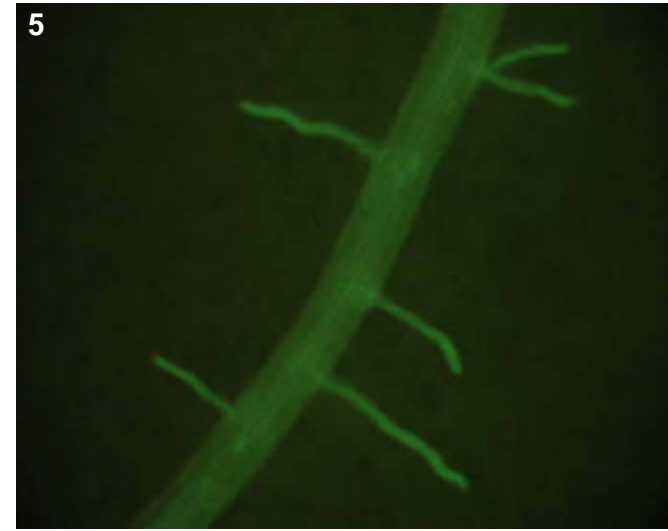
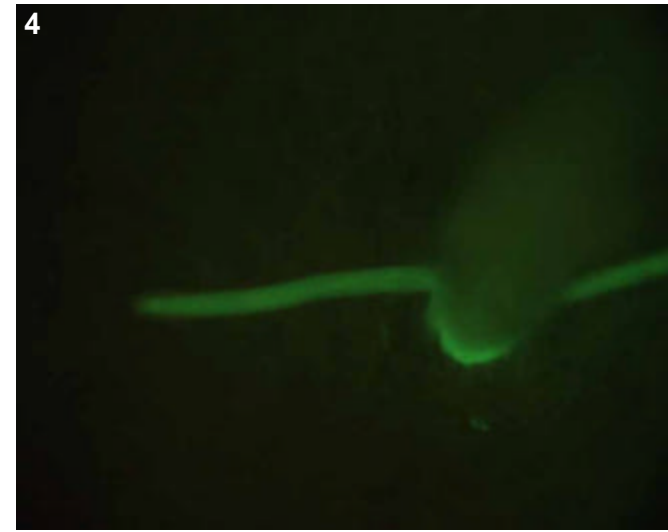
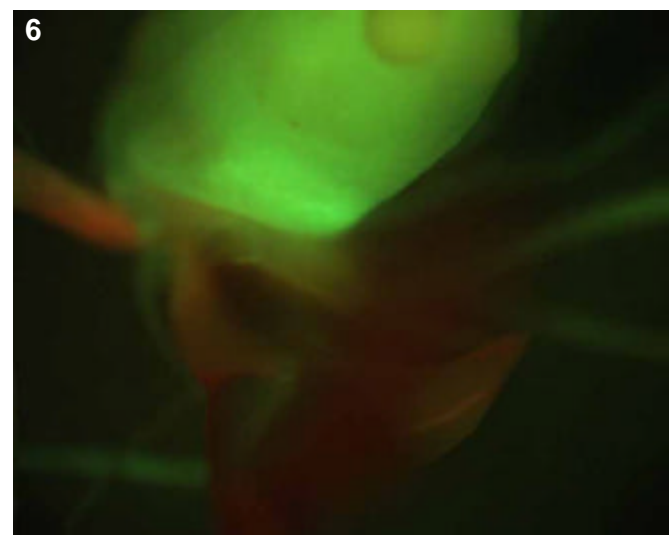
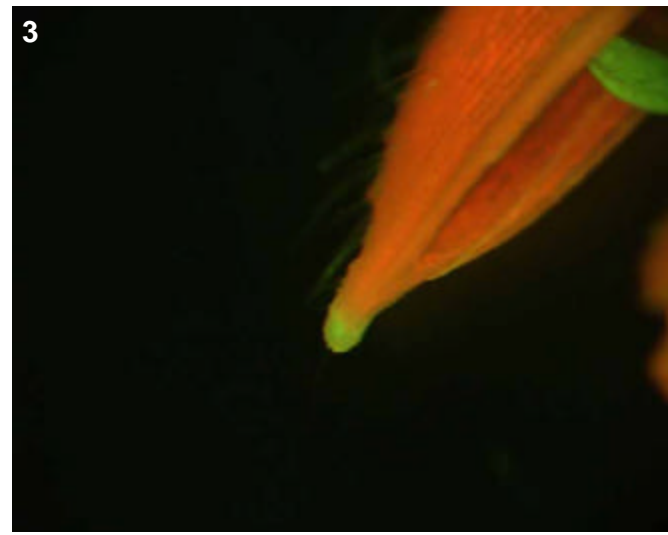
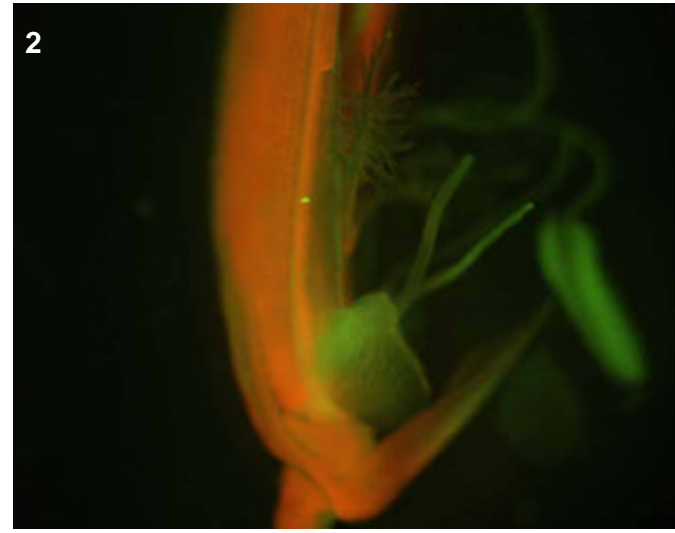
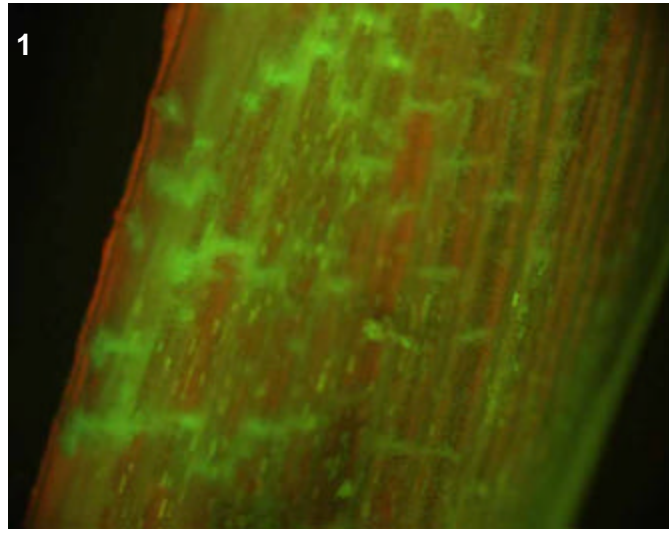
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
 YES, 3 GFP+ plants    Confocal?

Number T2 seed produced: 10



**T0 comments**  
 Faint expression in collar, lodicules and tips of flower. Brighter expression in sheath vascular.

**T1 seed comments**

**T1 seedling comments**

# Genotype: ARA E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

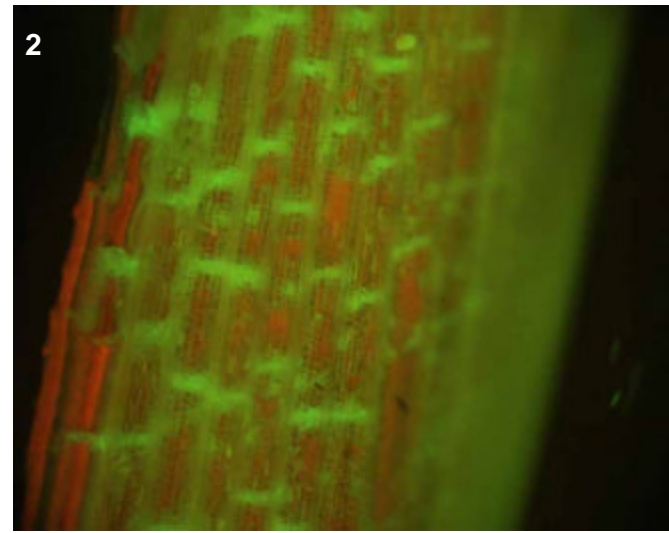
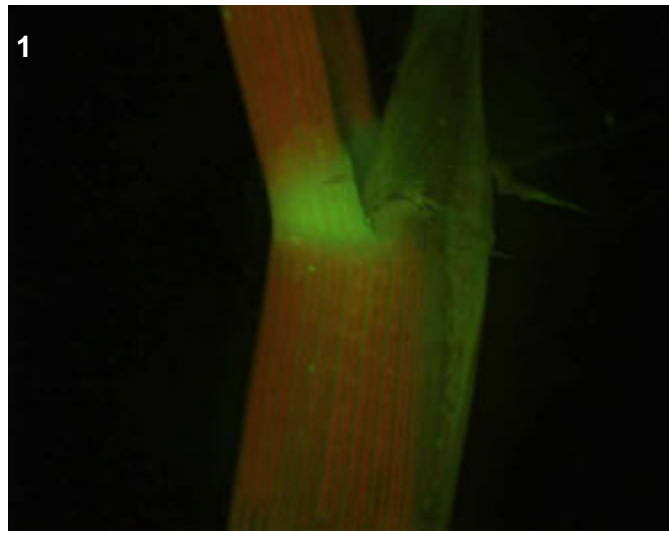
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 17



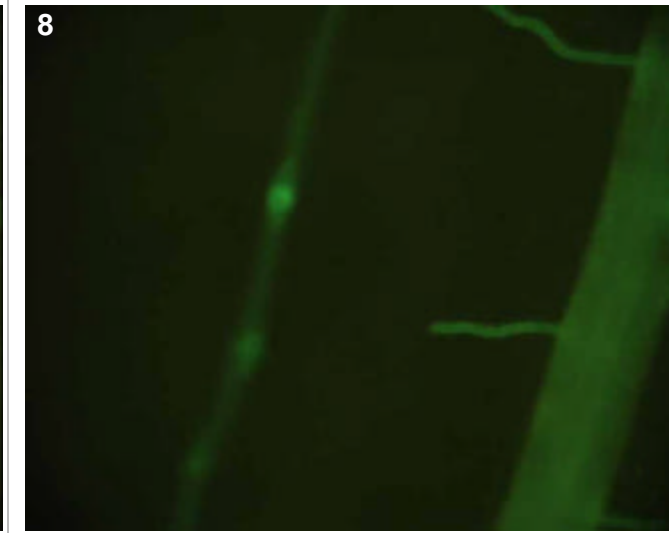
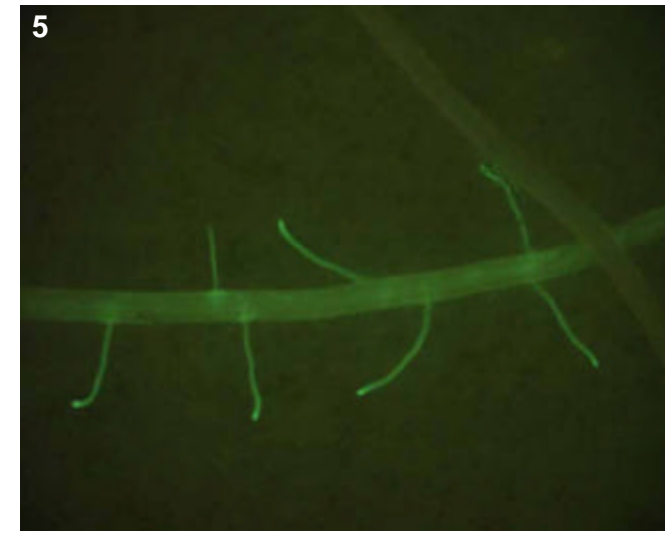
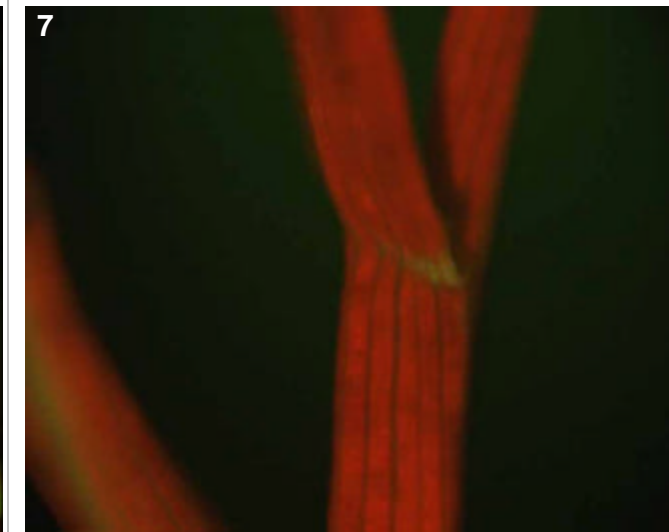
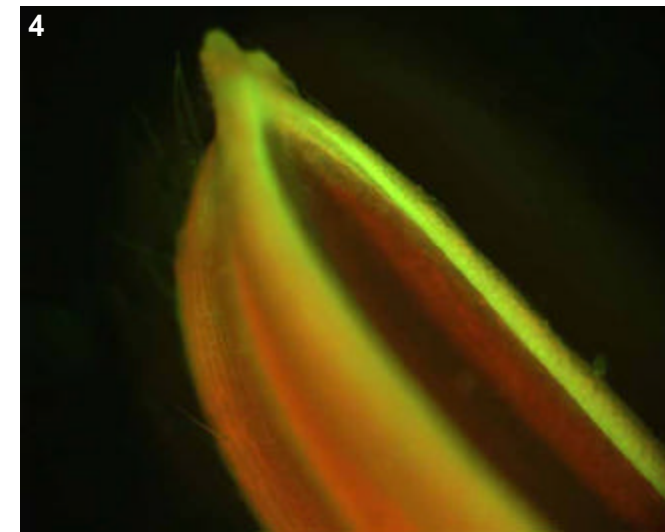
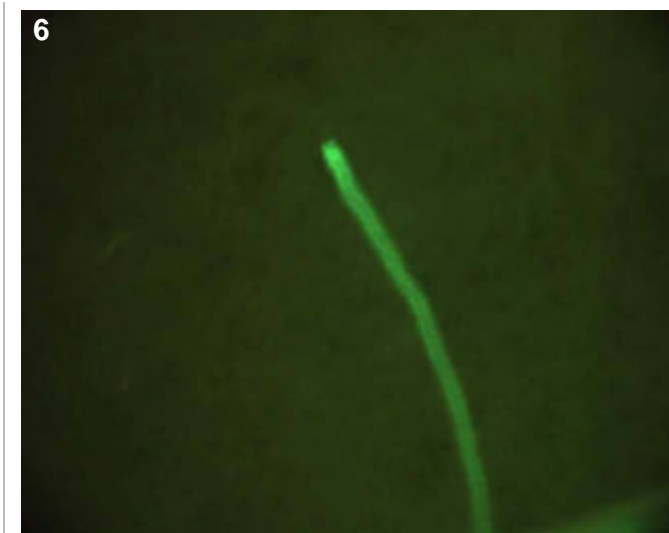
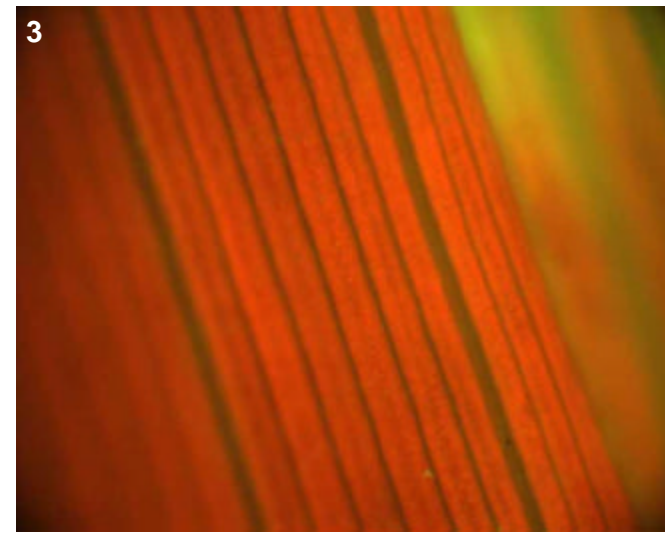
### T0 comments

Bright vascular line.

### T1 seed comments

### T1 seedling comments

Expression in the collar was faint, root expression was bright.



# Genotype: ARA F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-3  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

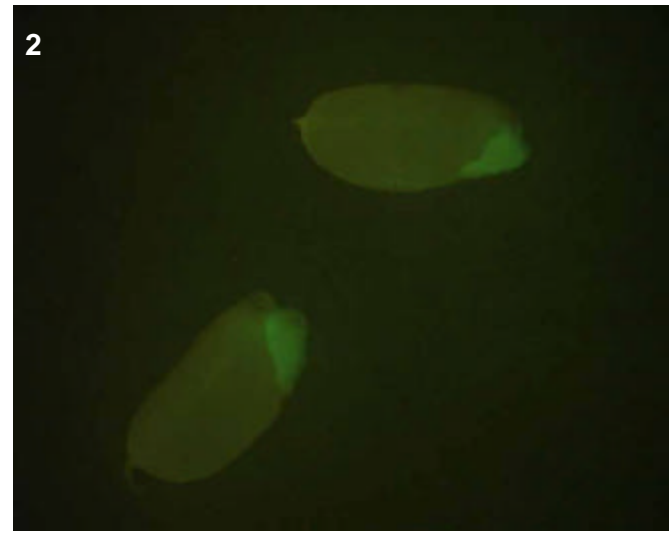
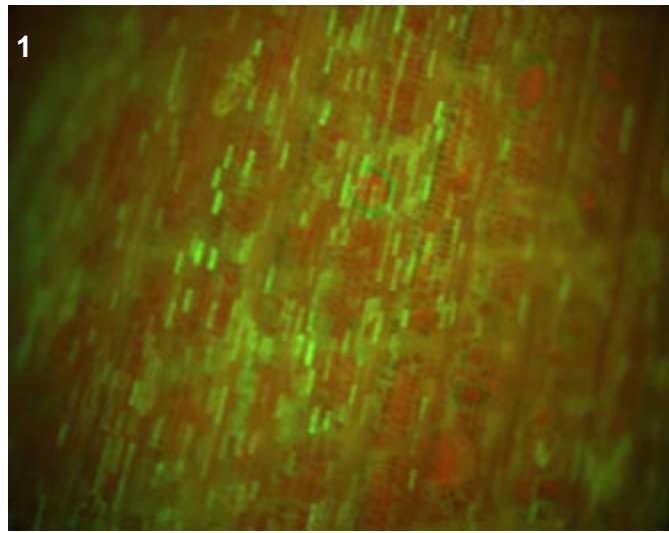
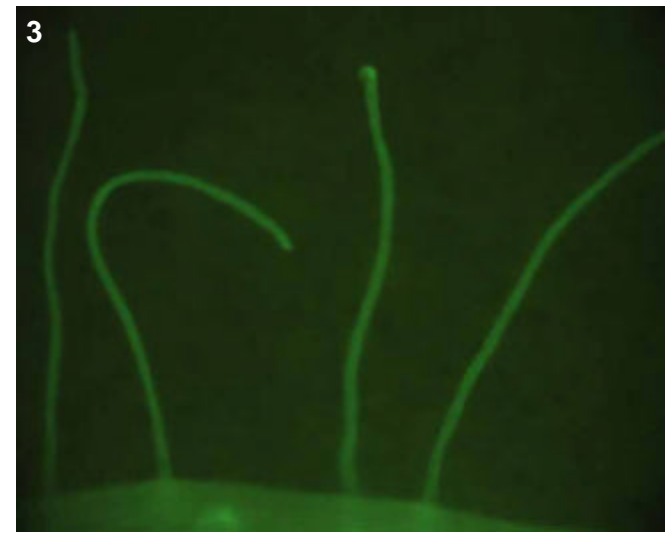
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants **Confocal?**

**Number T2 seed produced:** 3



### T0 comments

Maybe scattered cells in sheath vascular?

### T1 seed comments

4/5 seeds showed bright expression in the embryo region, maybe the coleorhiza too.

### T1 seedling comments

Perhaps epidermal expression in the roots? No picture taken of shoot expression.

# Genotype: ARB E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

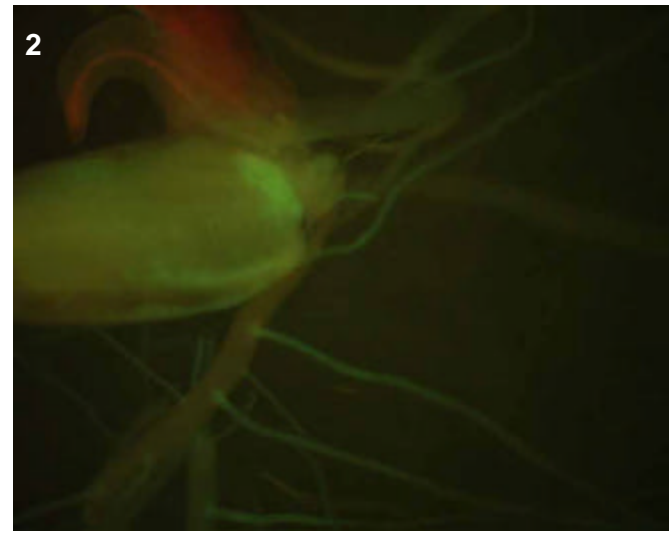
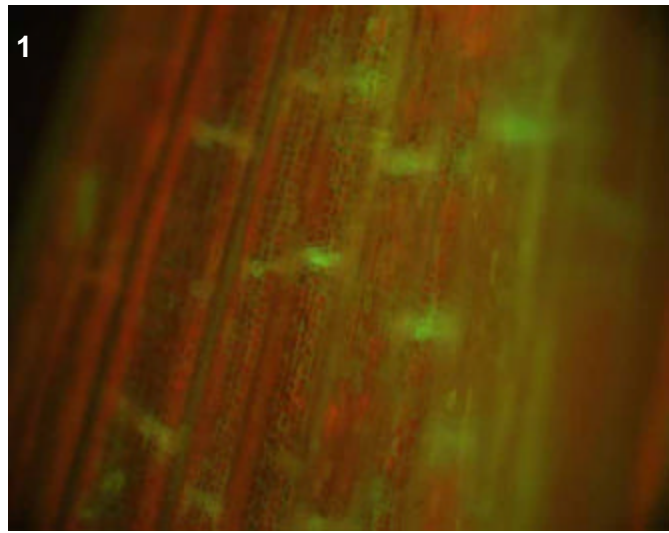
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 26



### T0 comments

### T1 seed comments

### T1 seedling comments

Root expression could be specific to lateral roots, but difficult to tell because the crowns had a reddish colour.

# Genotype: ARC A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

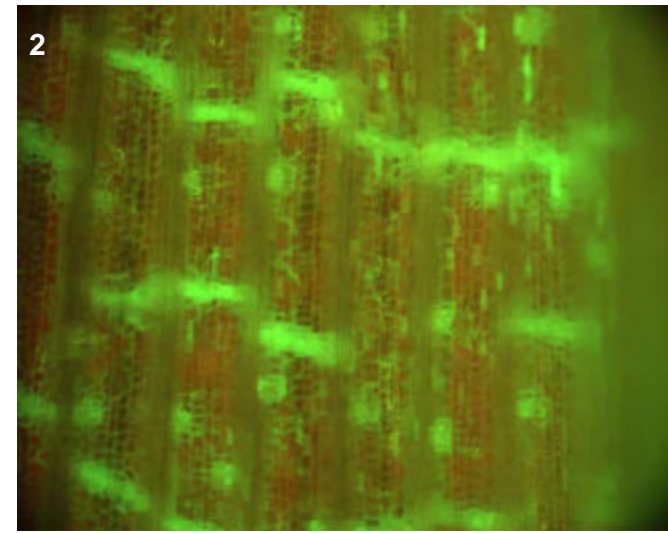
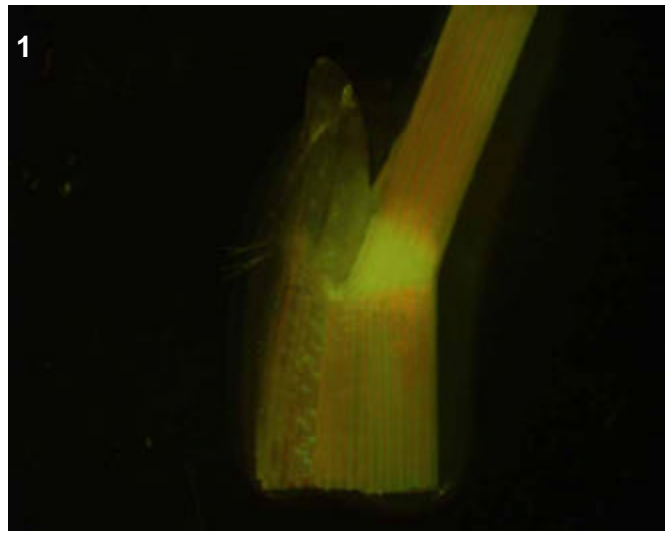
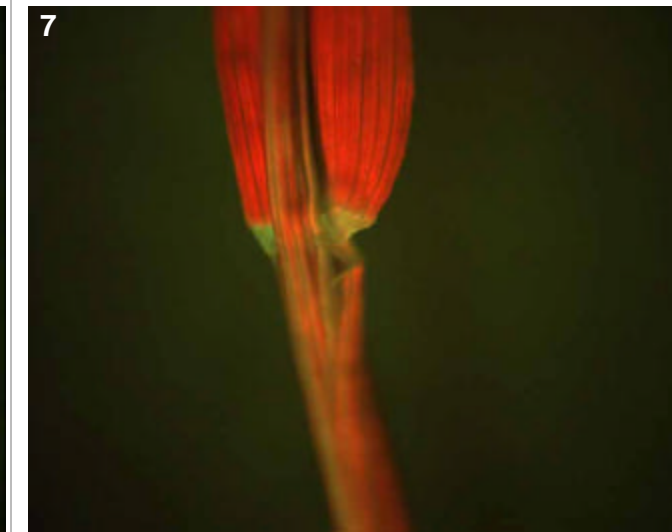
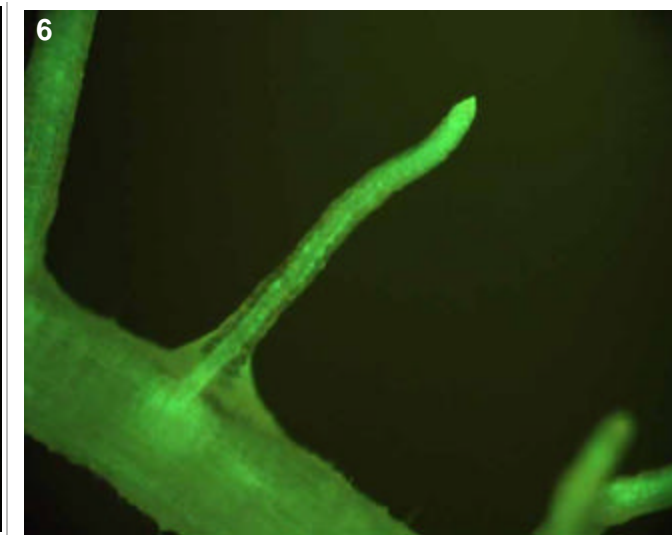
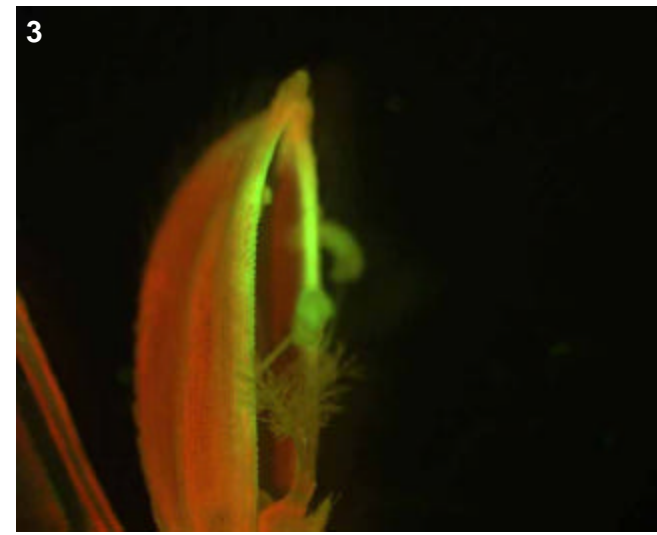
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 17



**T0 comments**

**T1 seed comments**  
 1/5 had expression

**T1 seedling comments**  
 Bright digesting endosperm (pic 5).



# Genotype: ARC A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-5  
 T1 seed/seedling: 6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

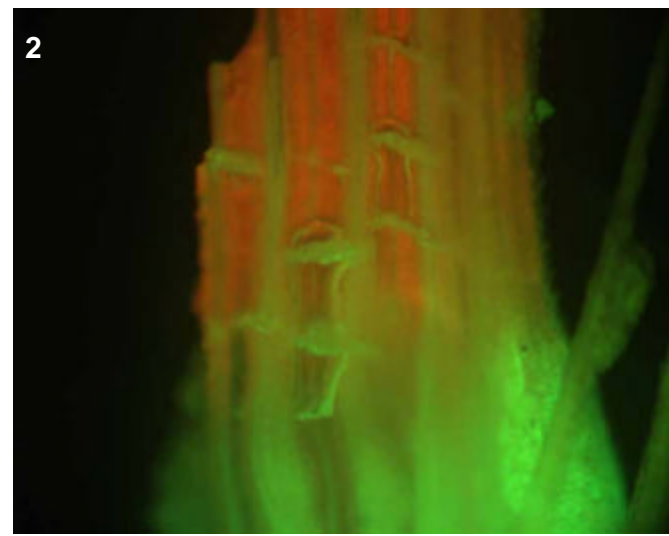
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

Number T2 seed produced: 0



### T0 comments

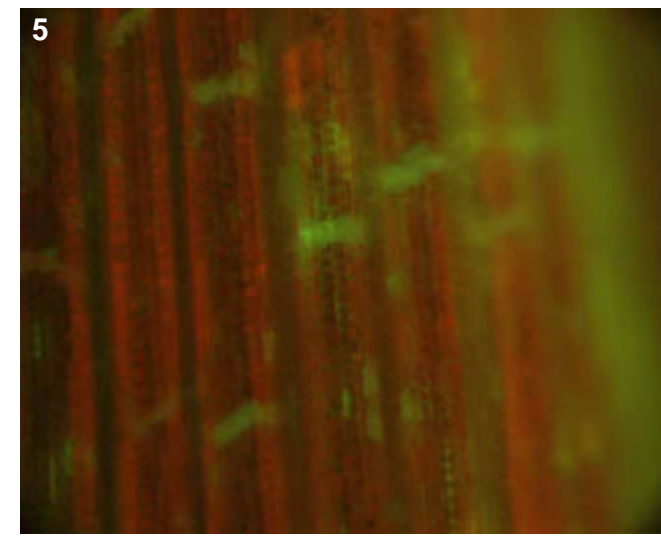
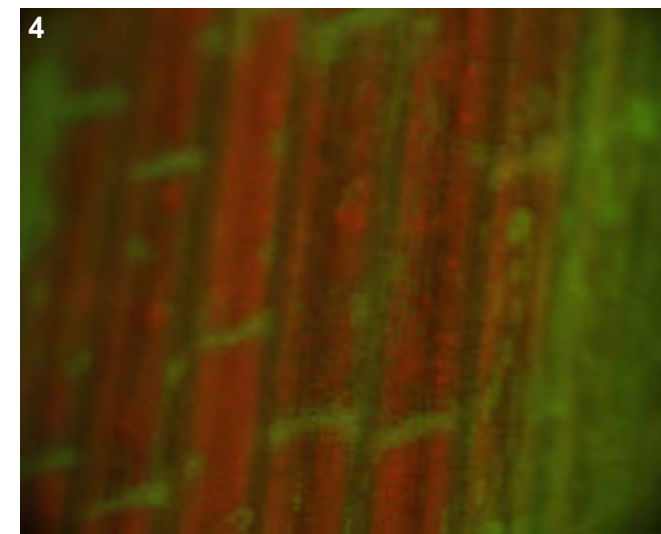
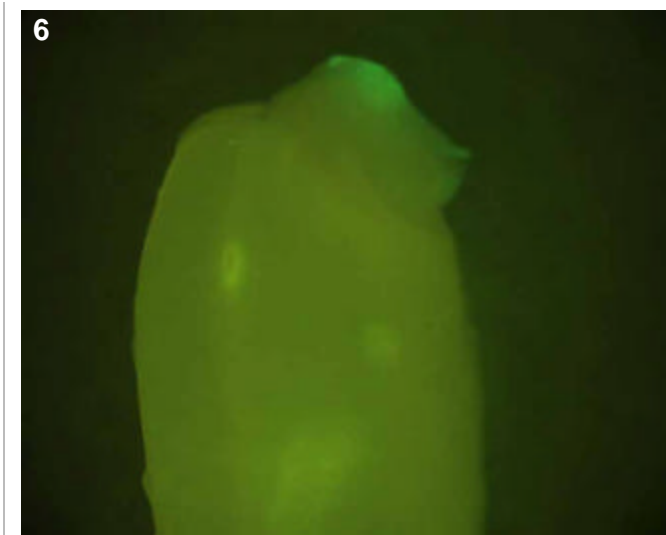
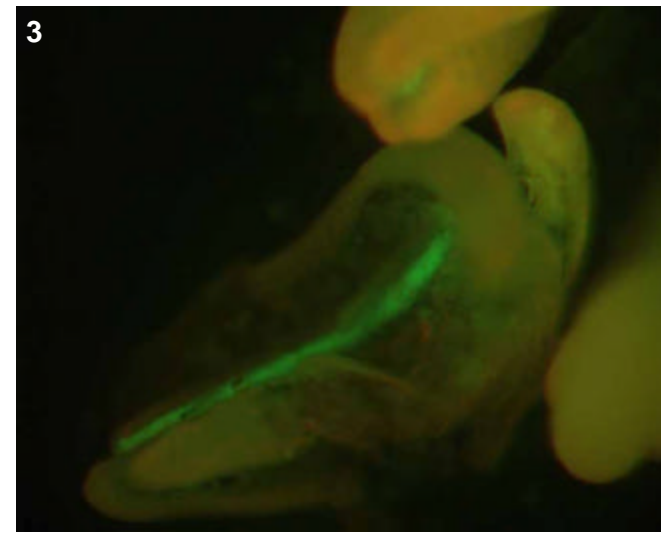
Interesting "stripe" in the anthers, where the filament enters (see pic 3). Must be filament vascular expression inside the anther. In older flowers, there may be vascular expression throughout the entire filament.

### T1 seed comments

1/5 had expression

### T1 seedling comments

Expression quite general throughout the root, and vascular in the shoot. No pictures were taken of the seedlings. The 1 GFP+ seedling died after transfer to the greenhouse.



# Genotype: ARC A12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

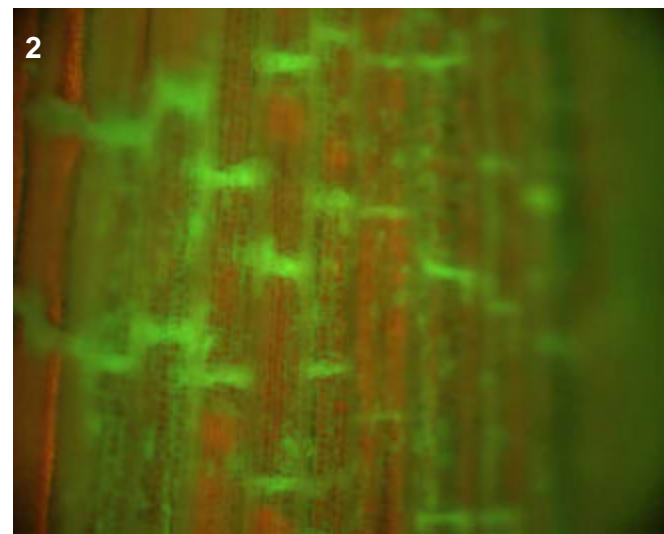
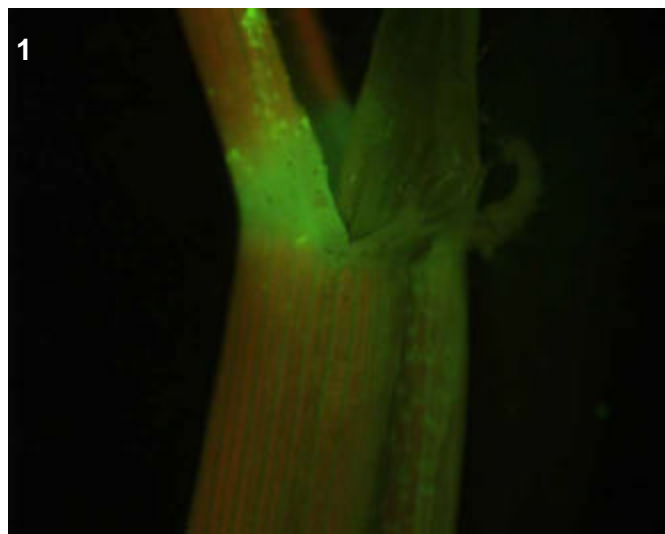
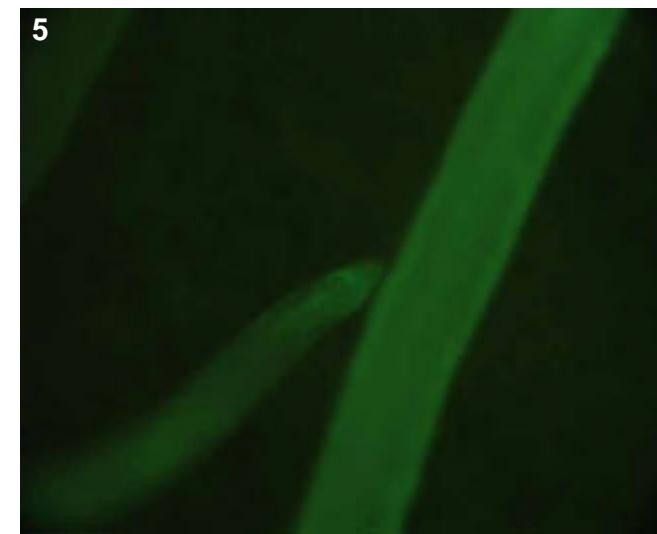
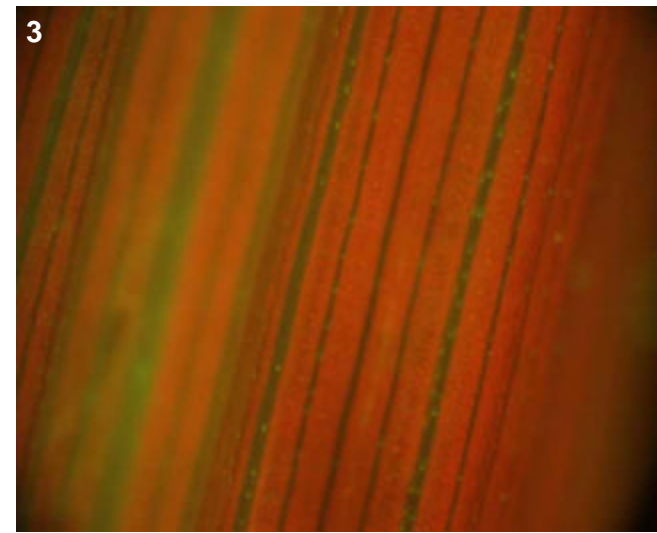
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 12



### T0 comments

Flowers were too old to examine.

### T1 seed comments

### T1 seedling comments

Medium expression in the roots.

# Genotype: ARC B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

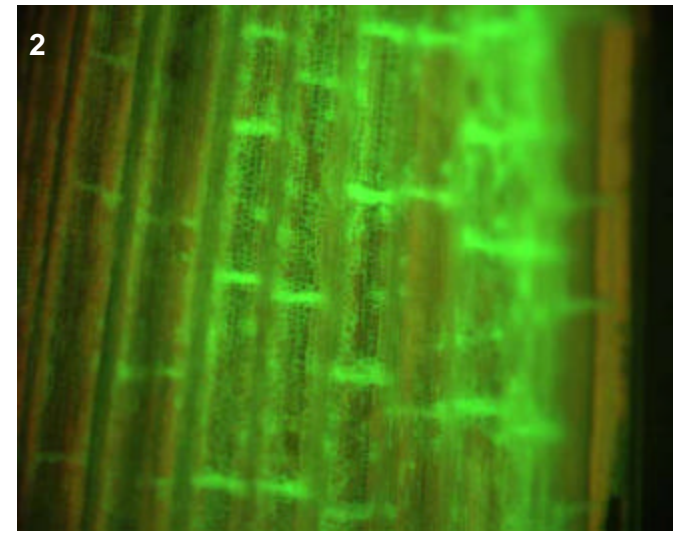
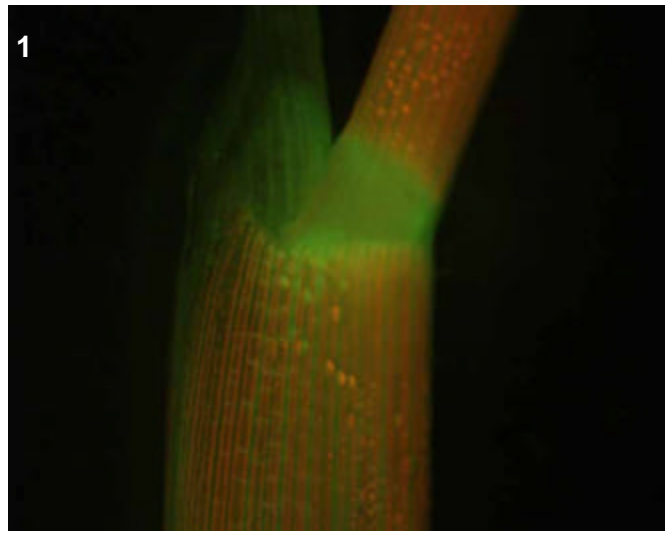
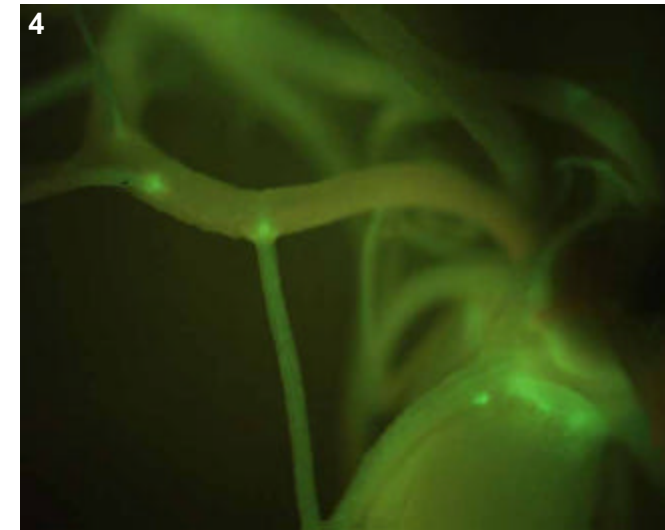
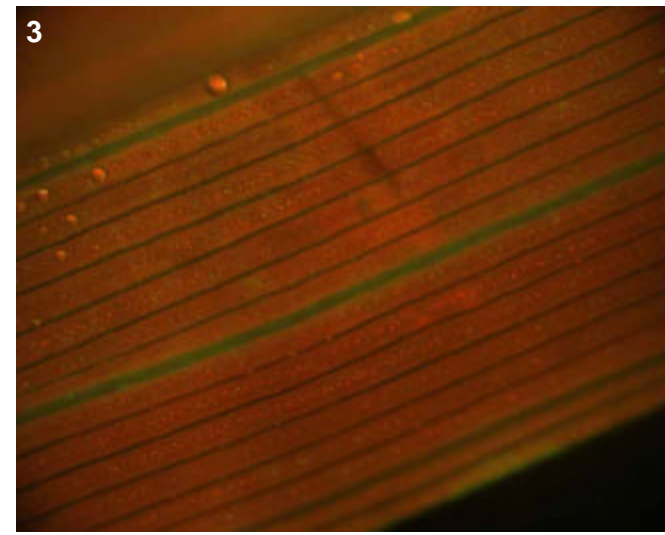
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 24



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARC D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-10  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

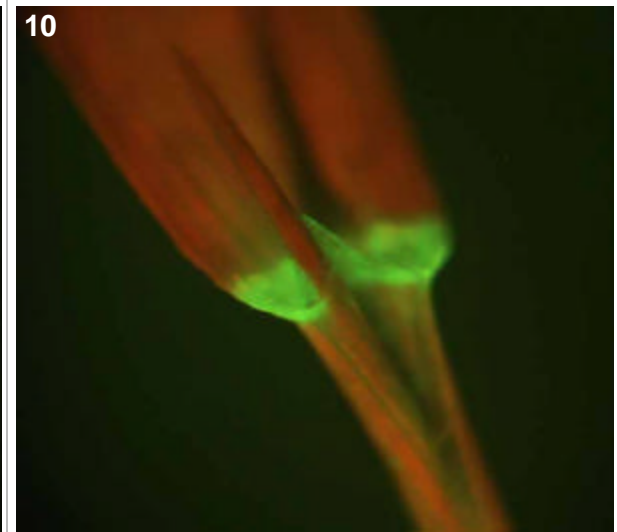
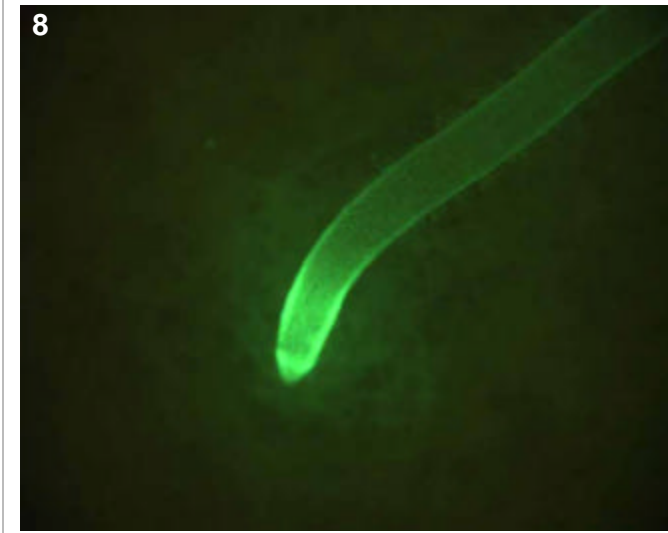
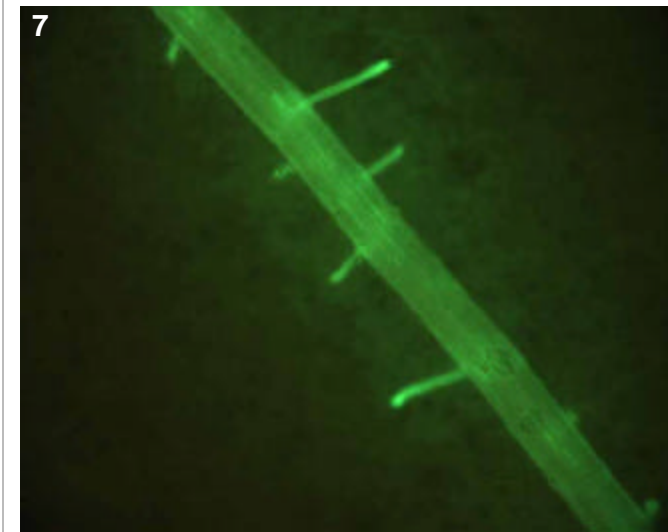
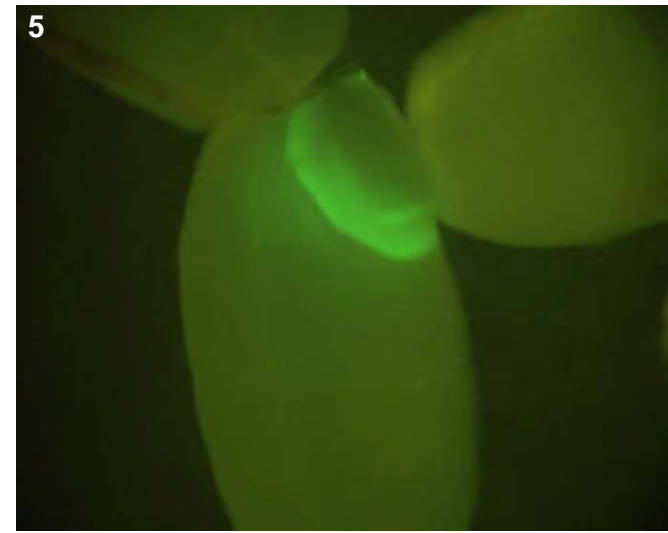
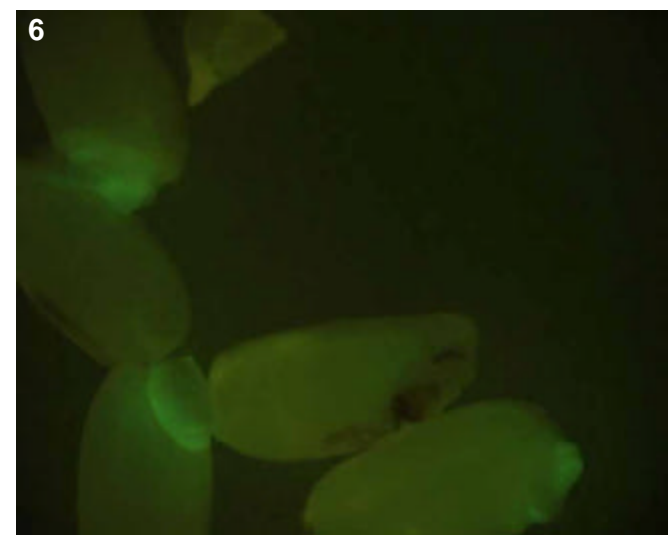
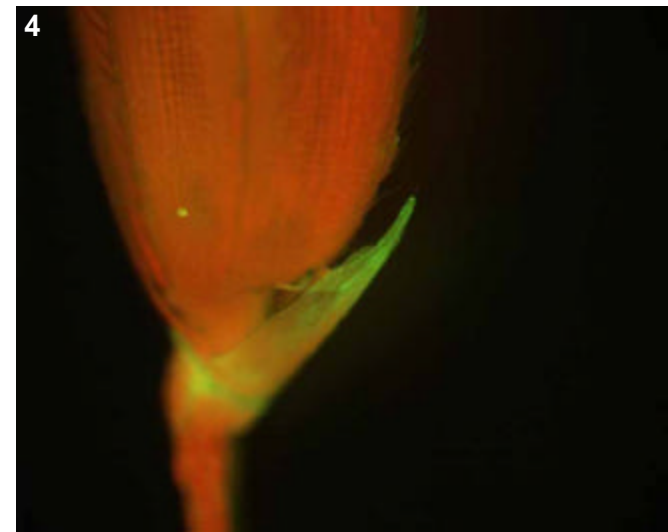
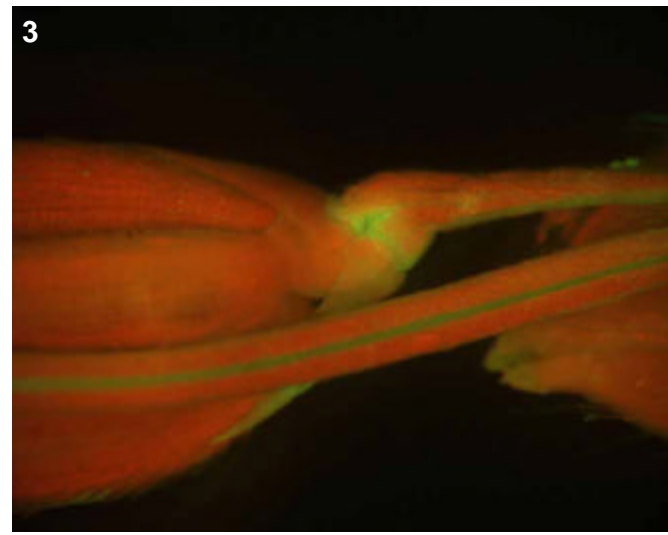
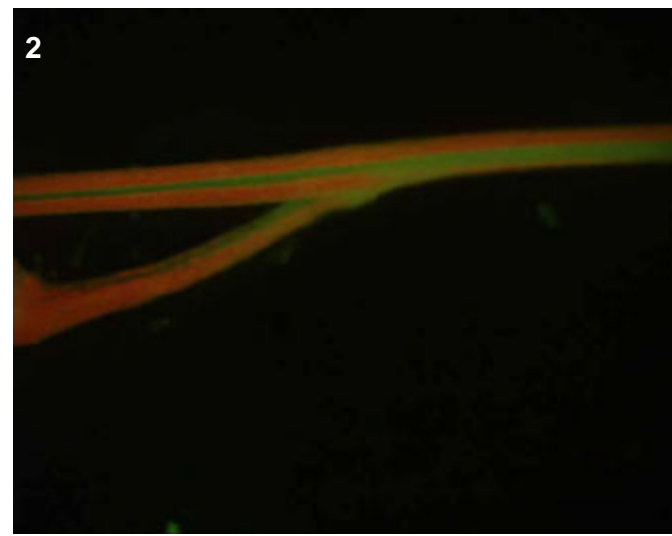
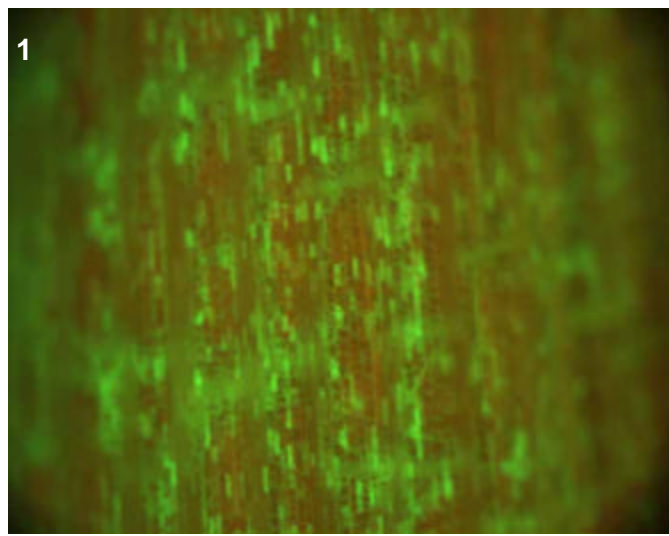
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 15



### T0 comments

Scattered expression in cells of sheath. Bright vascular expression in the pedicel (pic 2) floral stem (pic 3) and sterile lemmas (pic 4).

### T1 seed comments

3/5 seeds had expression. Two seeds looked like embryo, while the other looked like scutellum.

### T1 seedling comments

Looks like bright epidermal expression in the roots (pics 7-8).

# Genotype: ARC E03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-5  
 T1 seed/seedling: 6-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

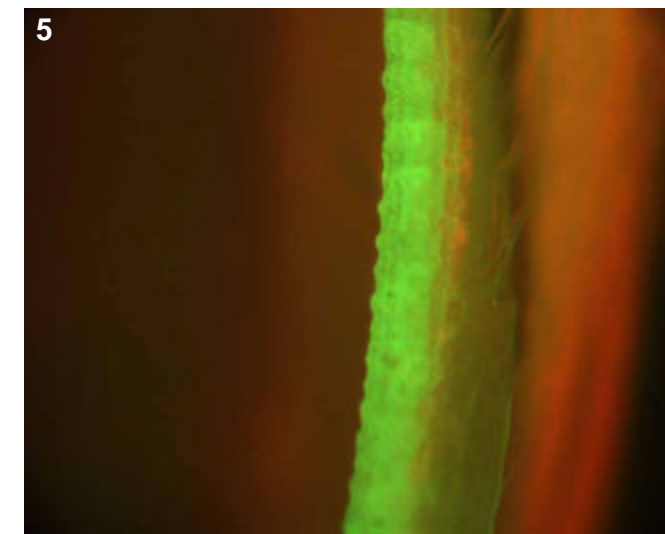
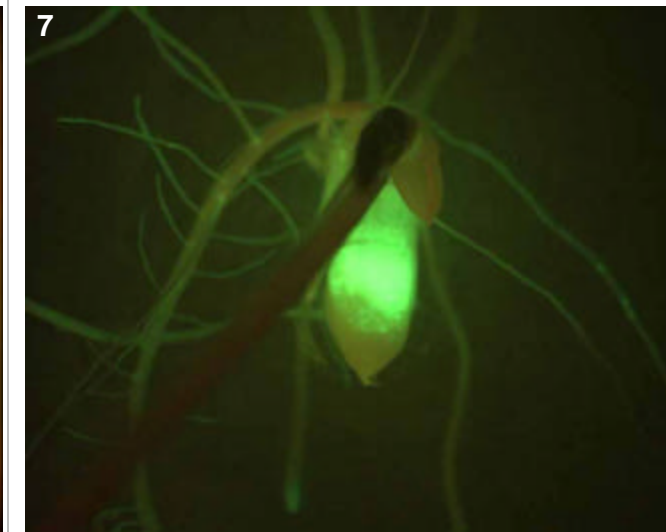
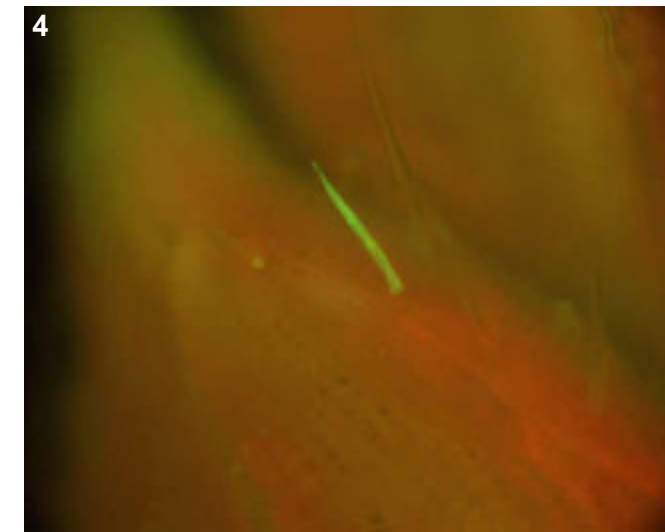
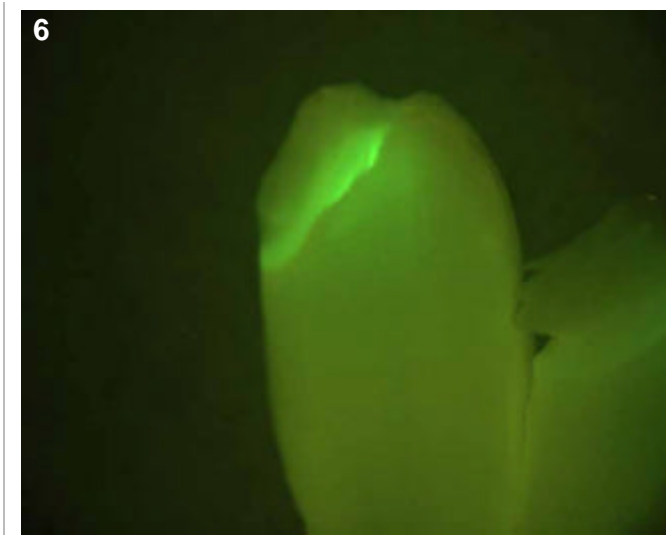
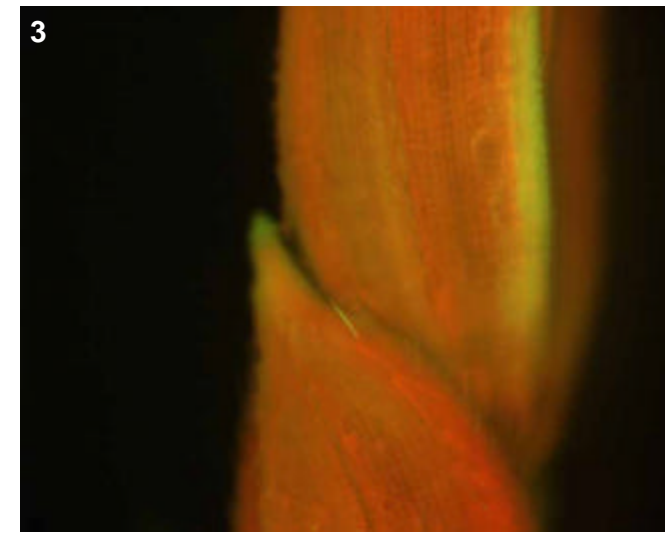
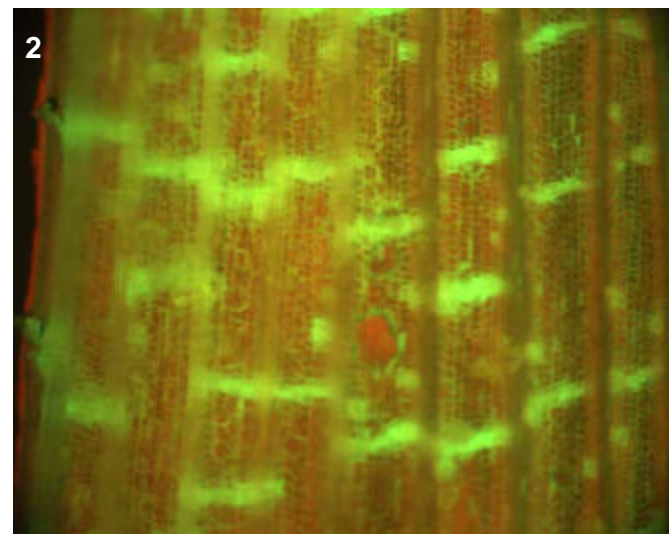
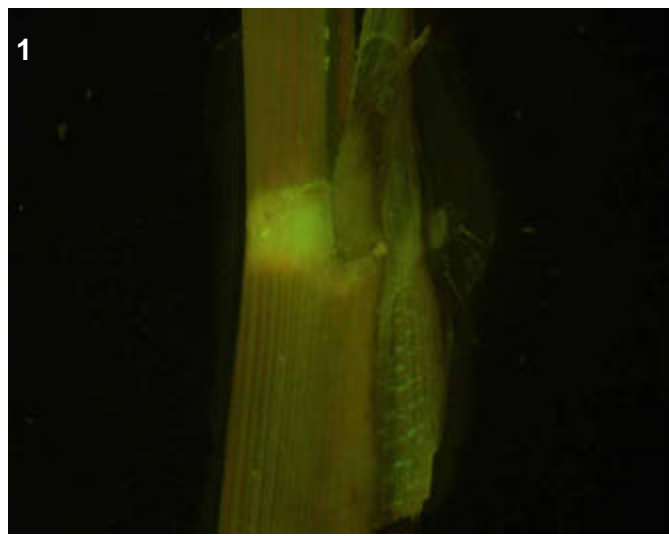
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 41



**T0 comments**

**T1 seed comments**  
 2/5 seeds had medium expression in scutellum

**T1 seedling comments**  
 Note the brighter expression towards tips of crowns (pic 7) as well as the very bright endosperm.

# Genotype: ARC E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

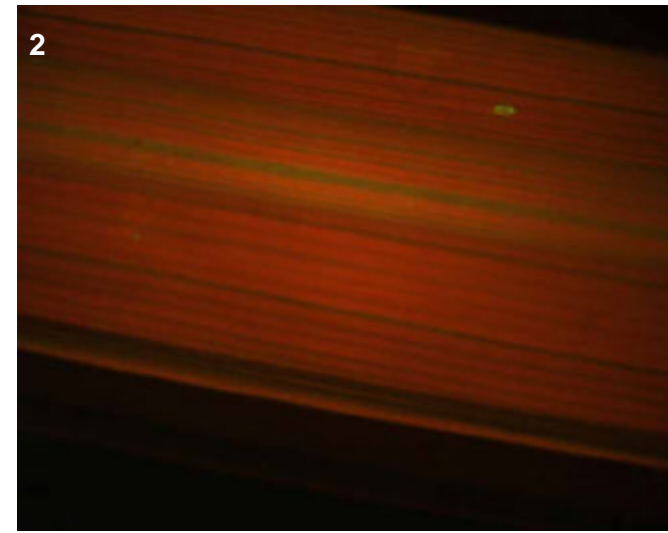
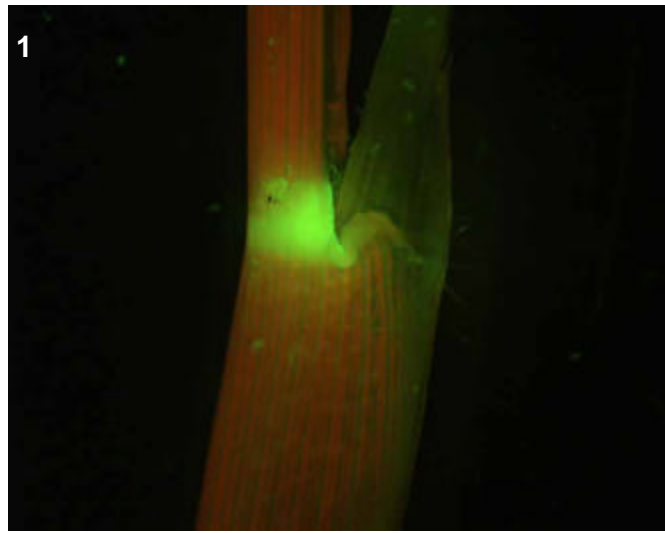
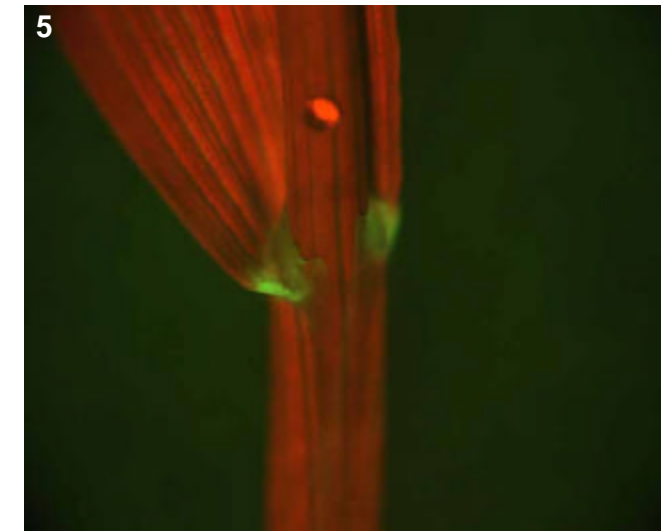
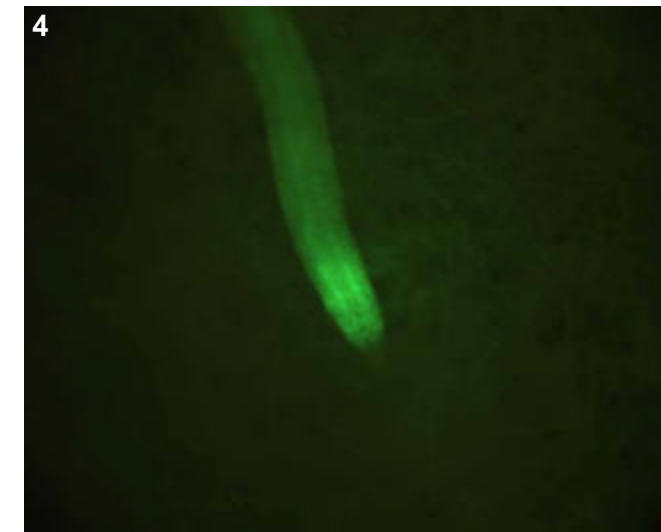
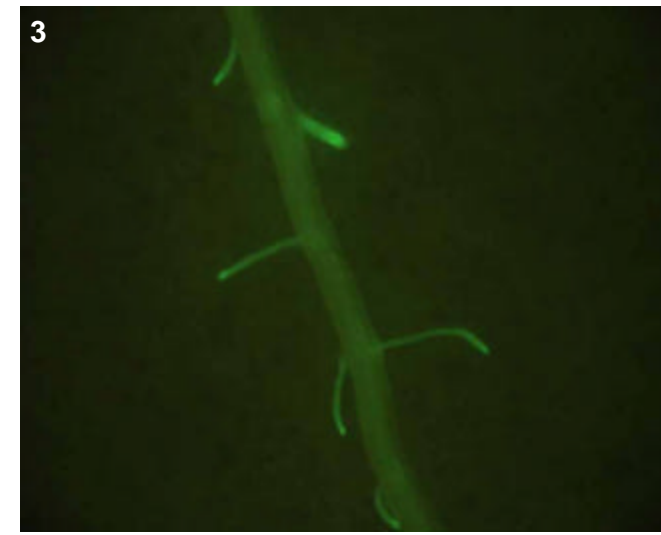
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



### T0 comments

Flowers too diseased for photograph.

### T1 seed comments

### T1 seedling comments

Perhaps epidermal expression in roots (pic 4)

# Genotype: ARC E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

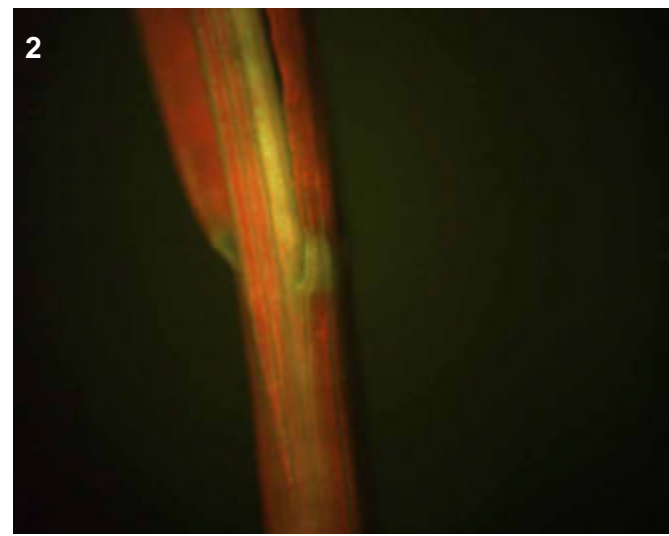
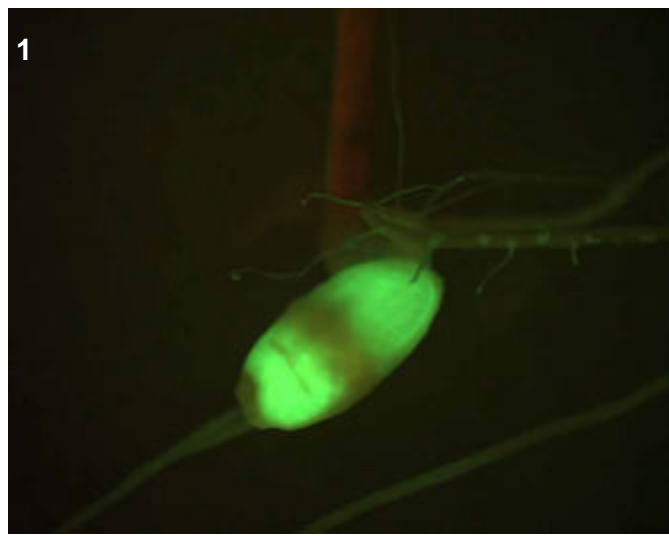
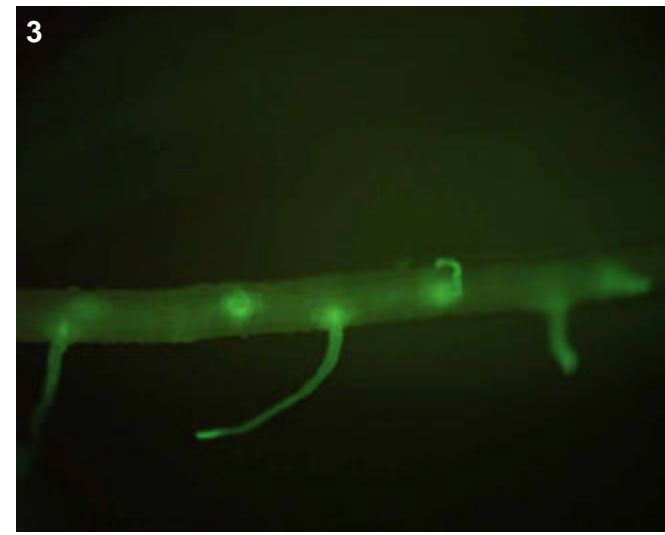
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression is brighter at lateral root emergence and root tips (pic 3). The 1 GFP+ seedling died after transfer to the greenhouse.

# Genotype: ARC E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-8  
 T1 seed/seedling: 9-10  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

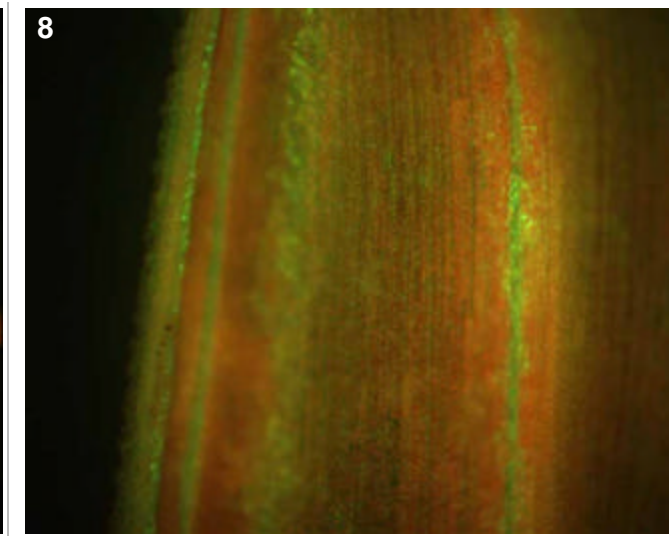
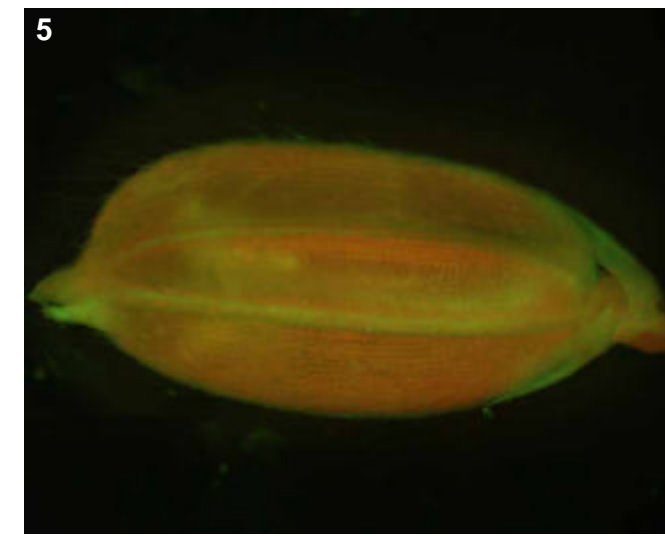
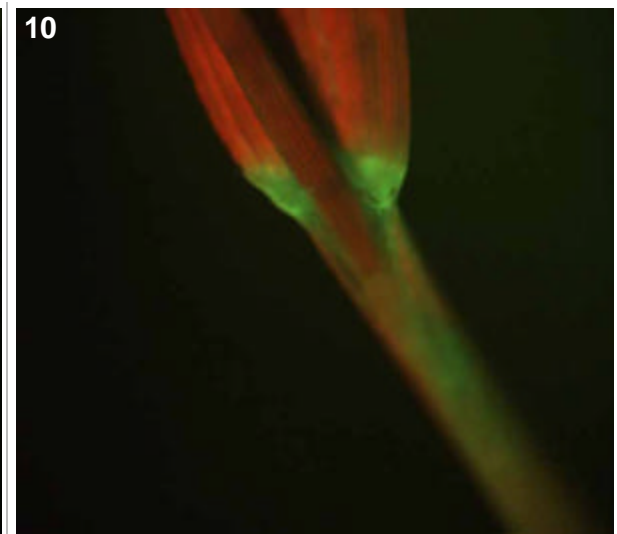
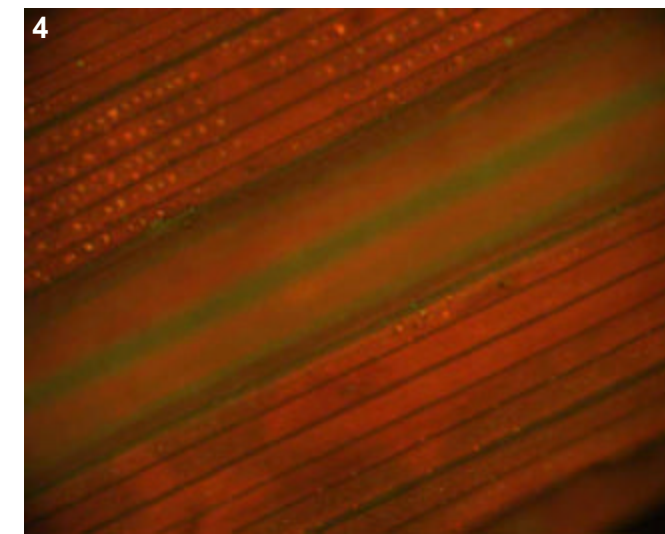
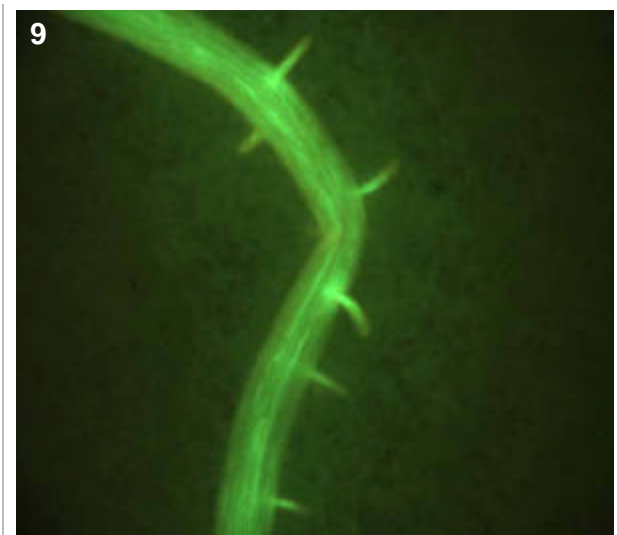
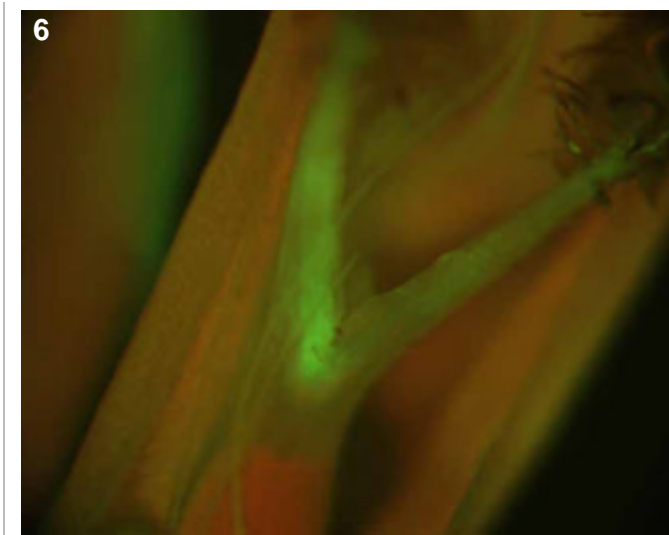
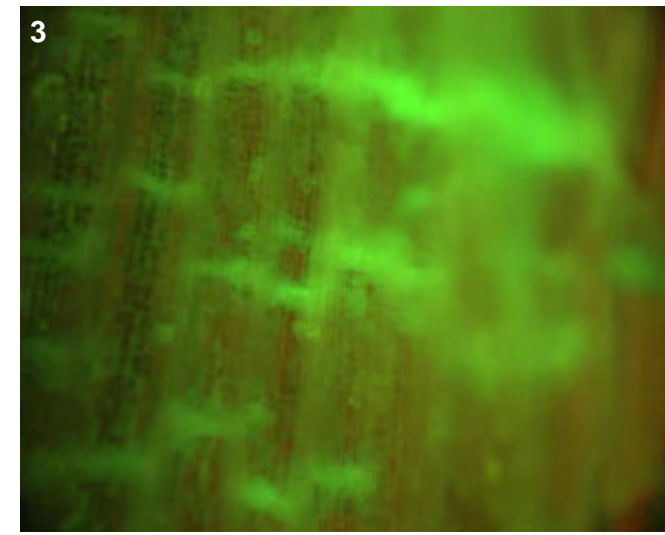
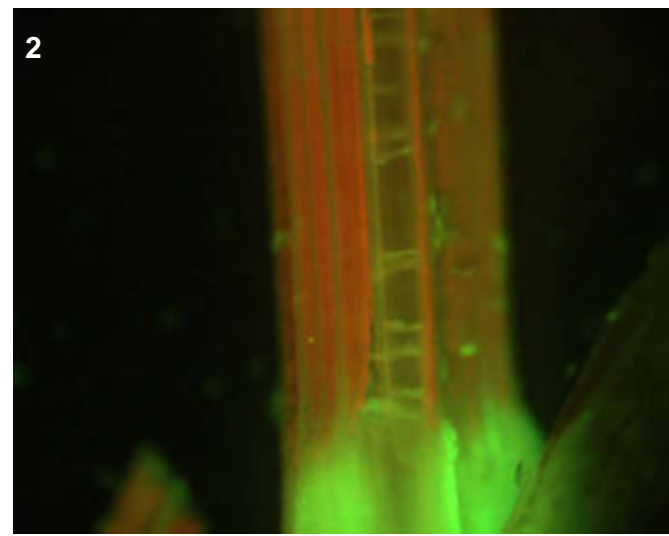
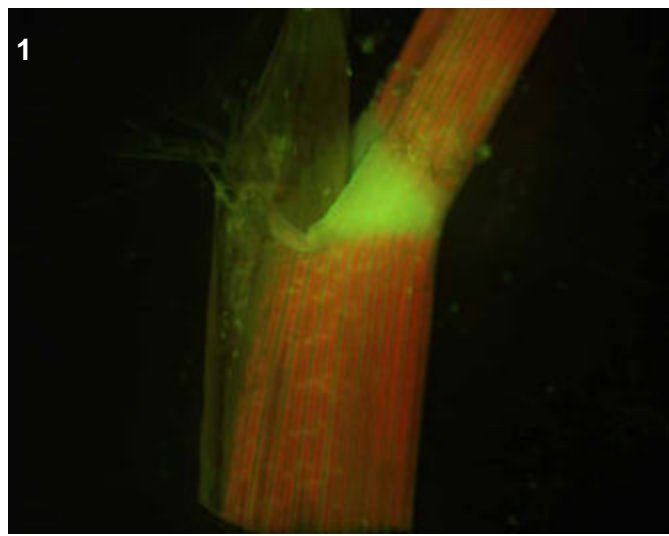
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 105



## T0 comments

Note the stigma expression in pictures 6 and 7.

## T1 seed comments

## T1 seedling comments

Could be quite general expression throughout the shoot, perhaps in the mesophyll around collar (pic 10).



# Genotype: **ARD B09**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

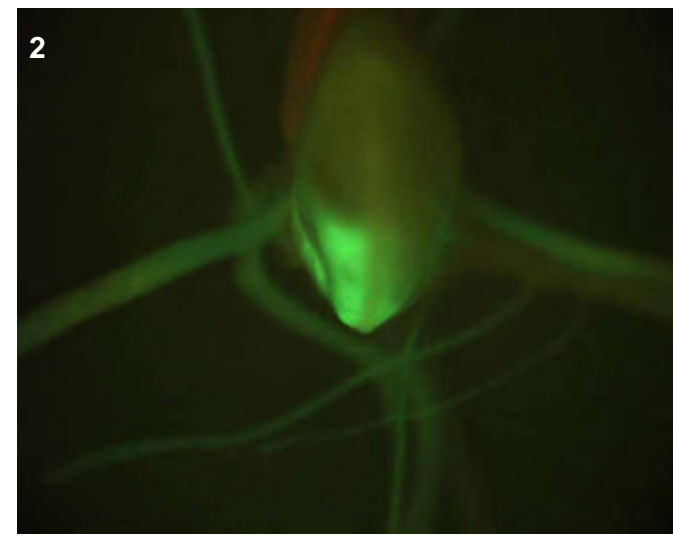
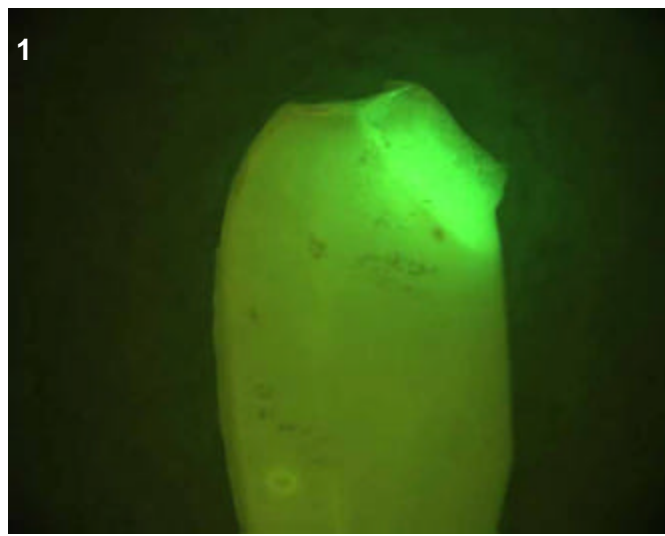
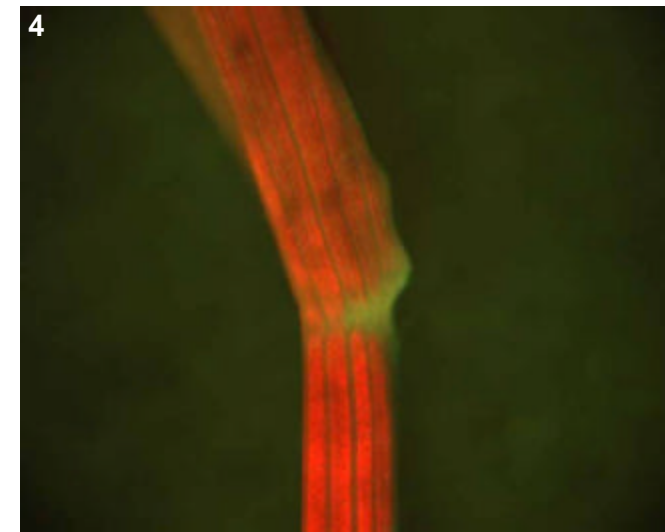
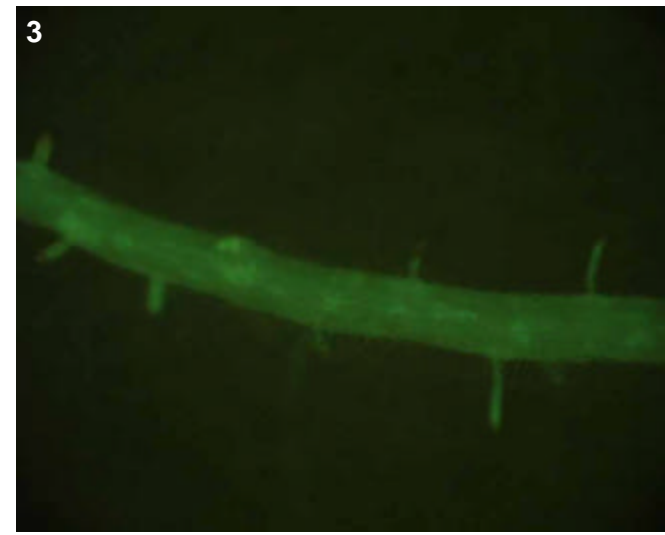
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 2



## T0 comments

## T1 seed comments

1/5 seeds had expression.

## T1 seedling comments

# Genotype: **ARD B11**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

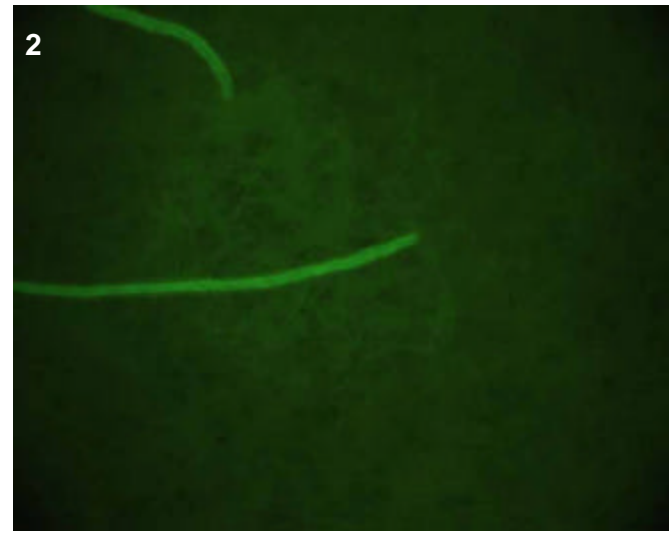
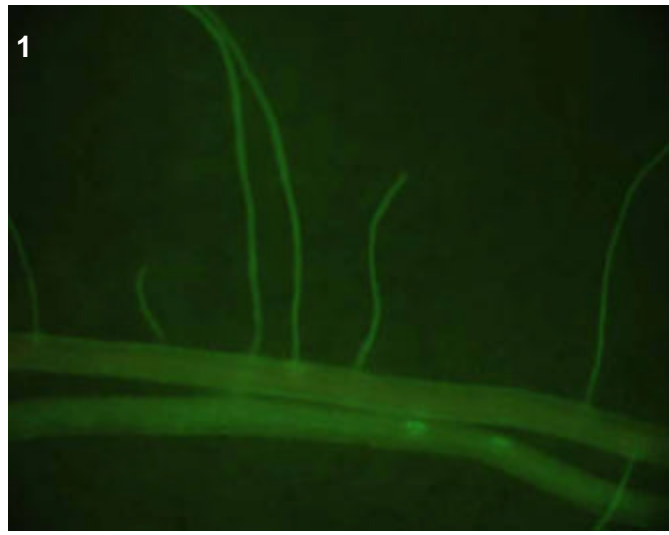
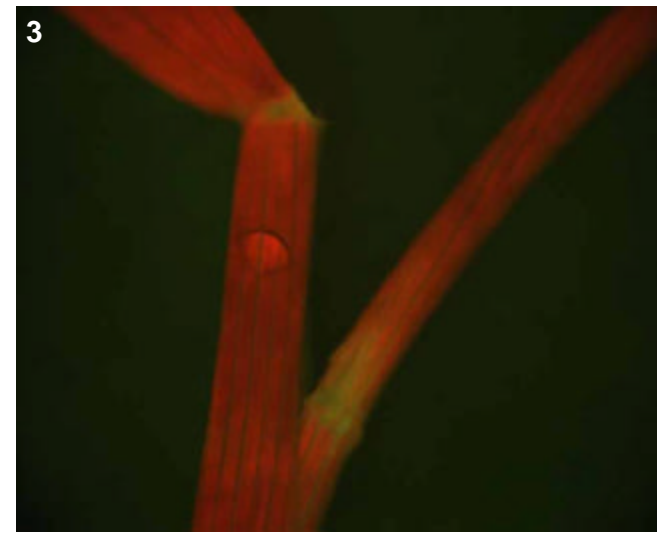
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 51



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: **ARD D10**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

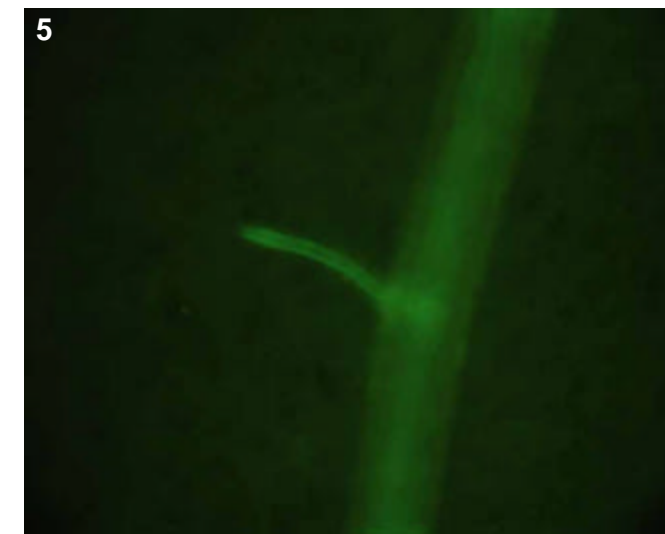
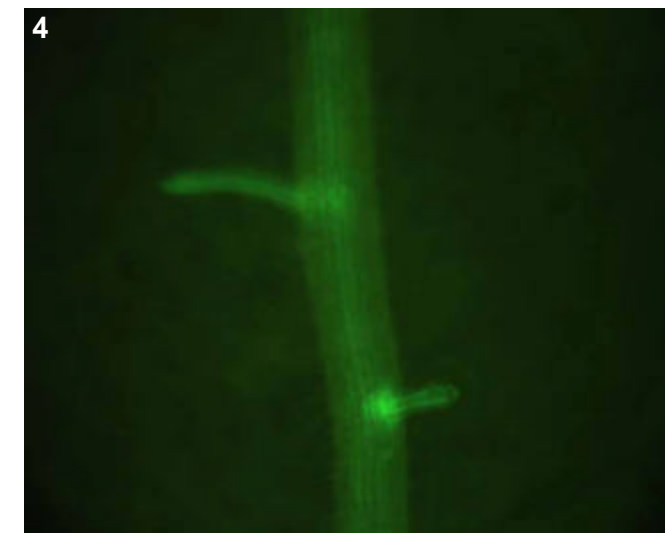
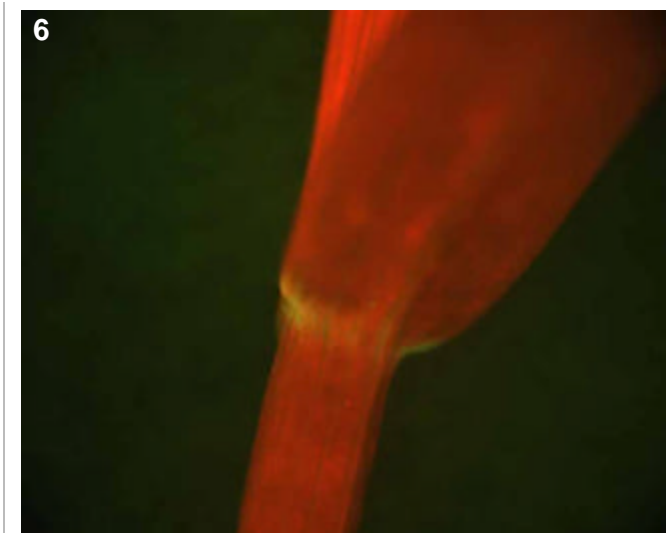
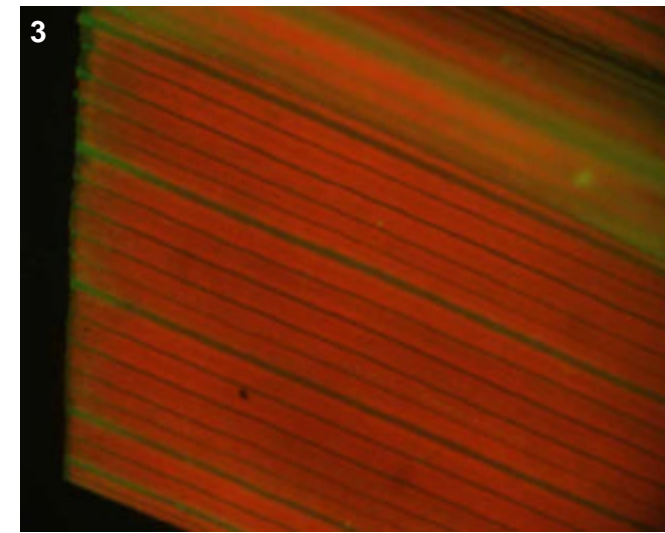
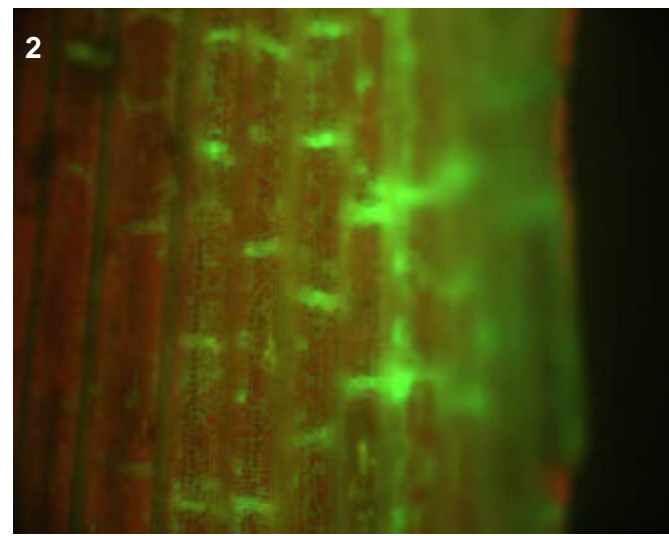
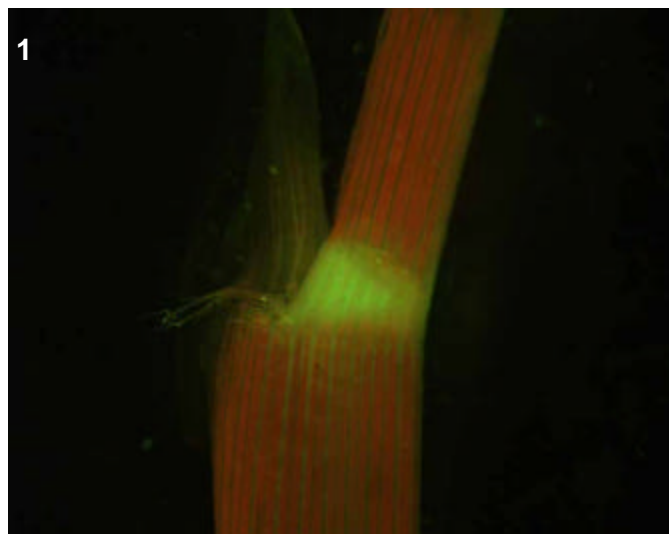
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 25



### T0 comments

Flowers were too old for analysis.

### T1 seed comments

### T1 seedling comments

Bright root vascular expression (pics 3-4), faint expression in shoot collar and leaf tips.

# Genotype: **ARD F05**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

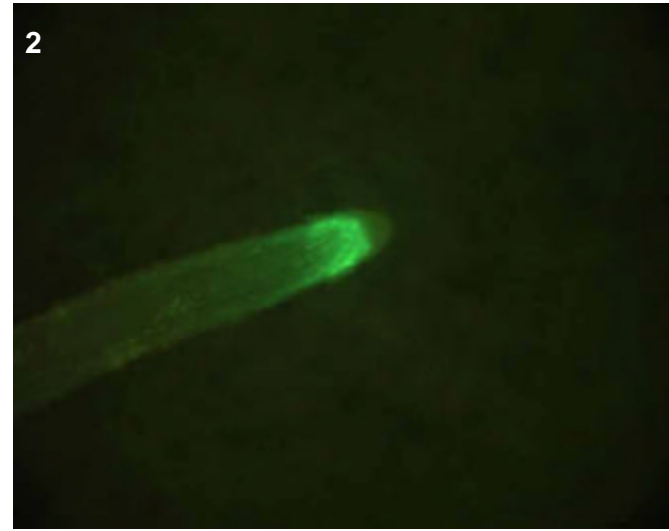
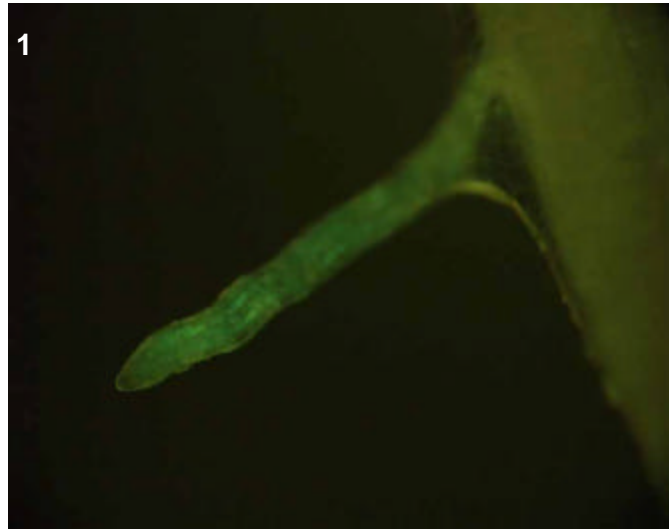
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 11



## T0 comments

## T1 seed comments

## T1 seedling comments

Very interesting, and specific, expression in the roots. Perhaps an epidermal pattern (based on pic2) but confocal will clarify.

# Genotype: ARE A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

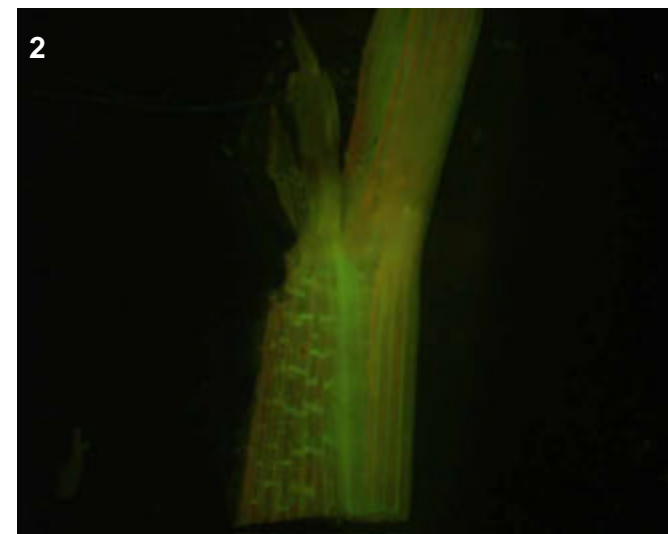
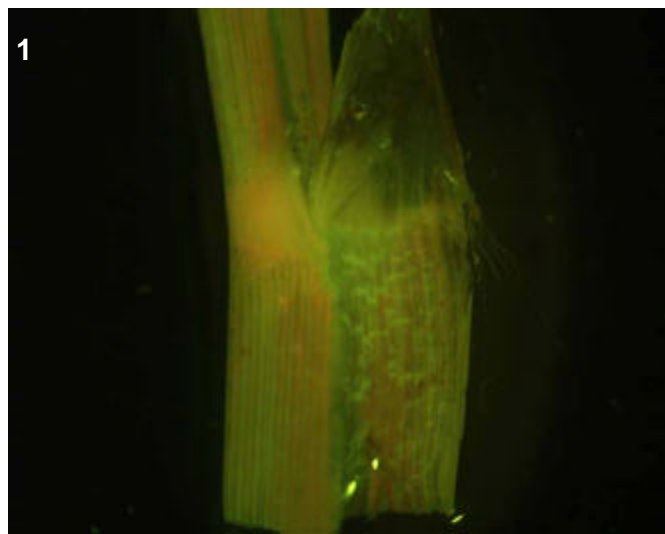
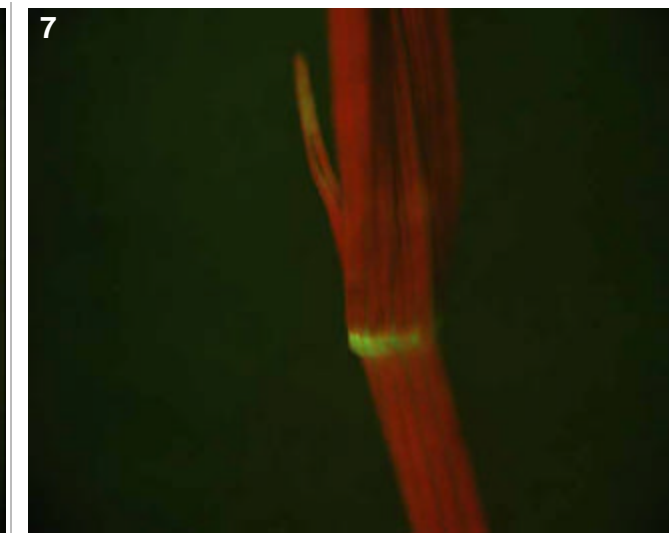
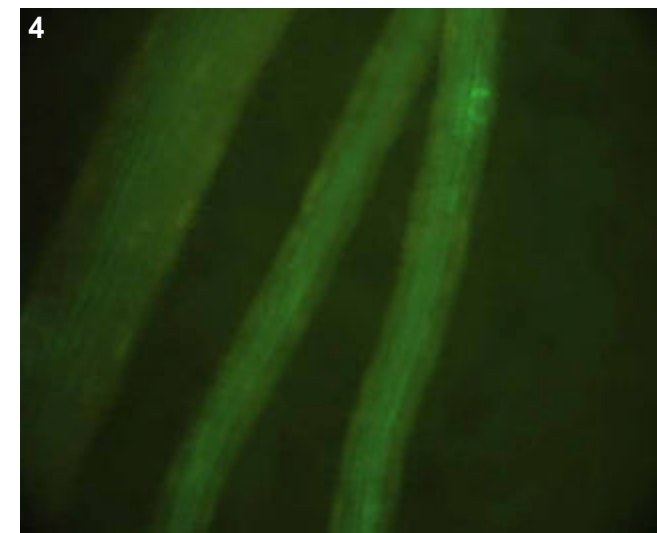
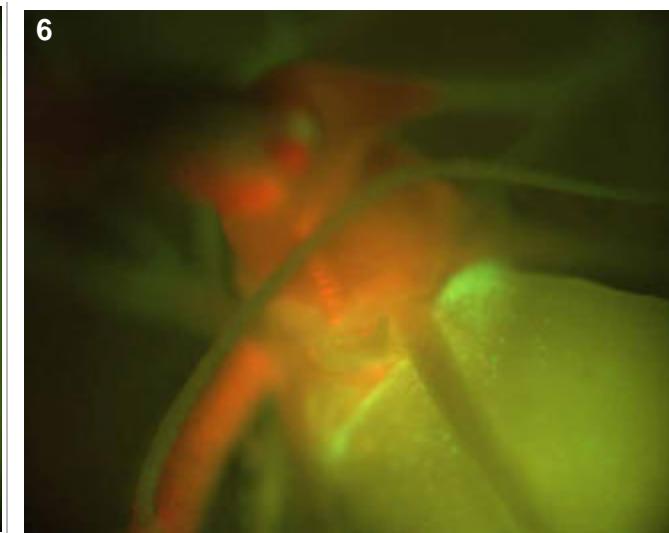
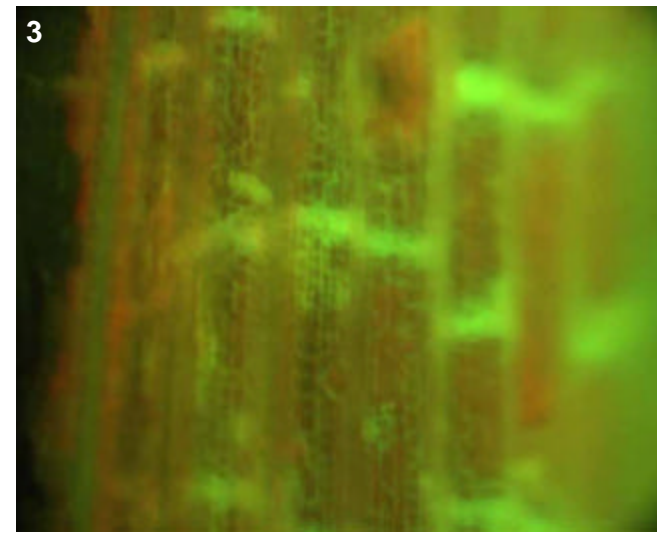
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



### T0 comments

### T1 seed comments

### T1 seedling comments

Note the interesting point of expression near the root apex of crown roots (pic 5).

# Genotype: ARE B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

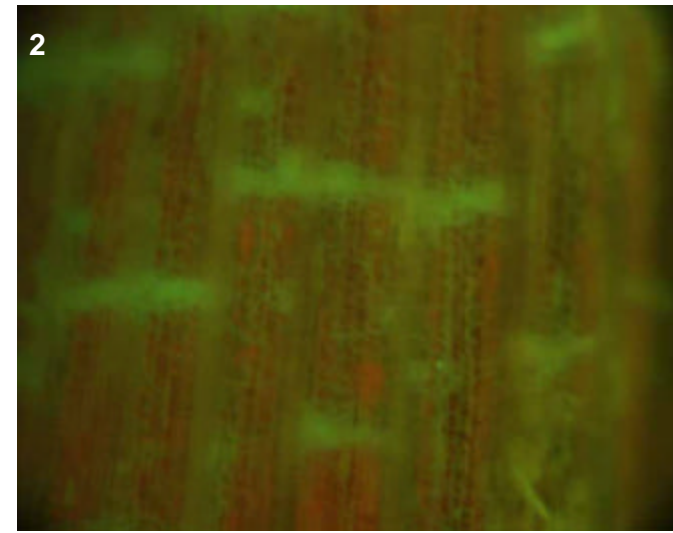
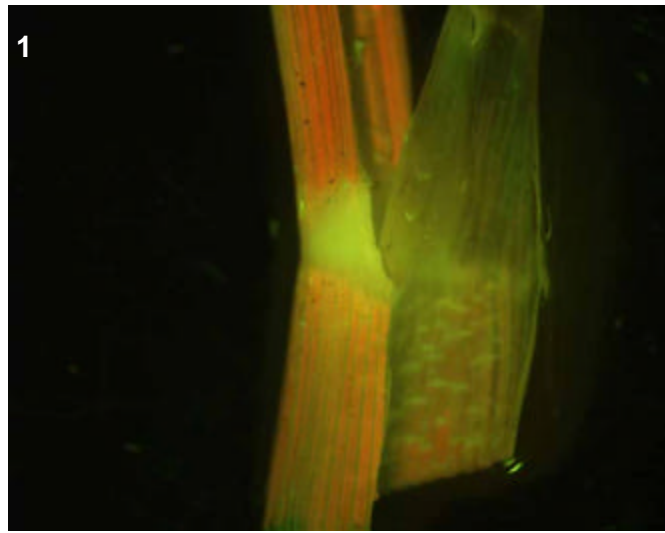
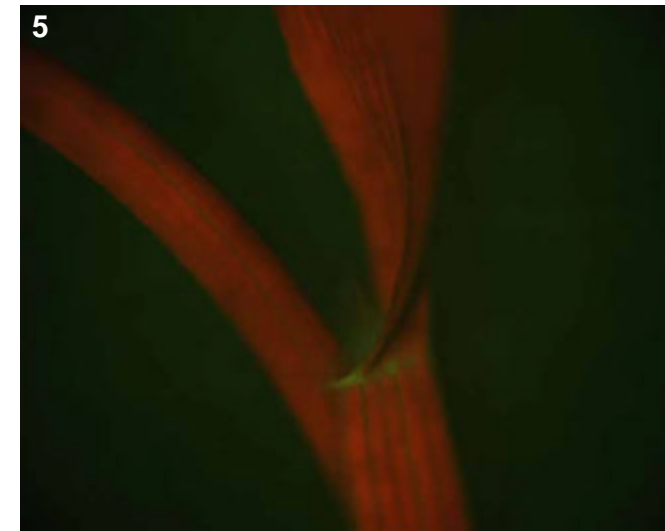
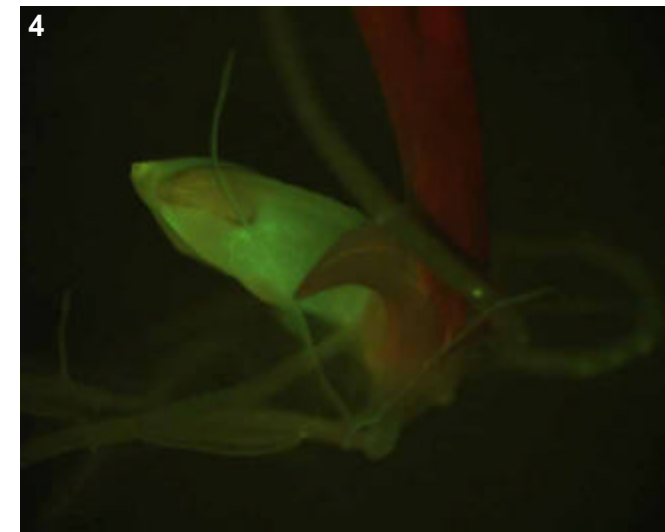
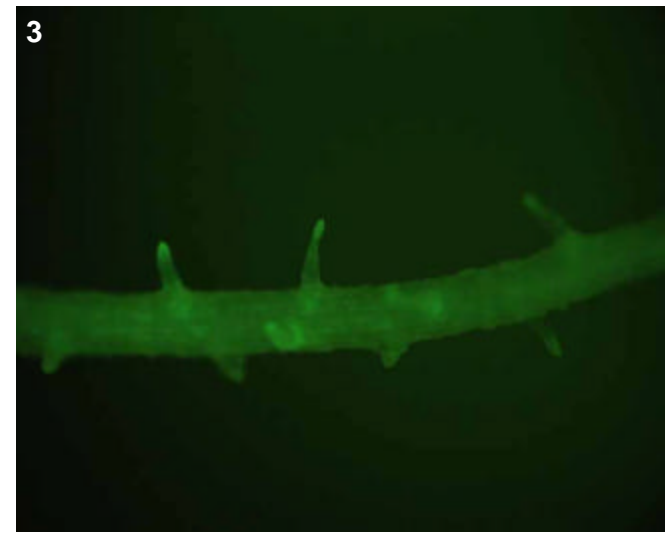
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 12



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARE B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

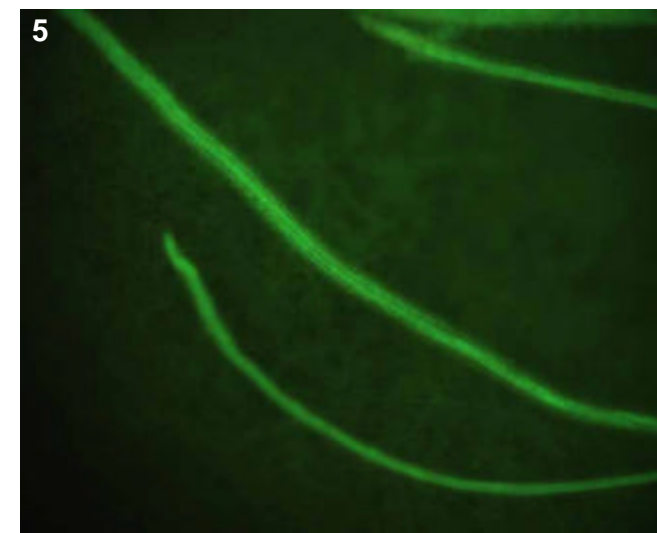
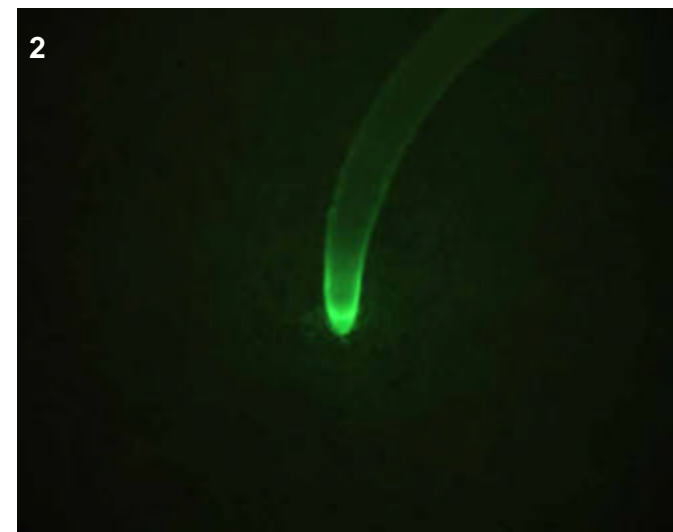
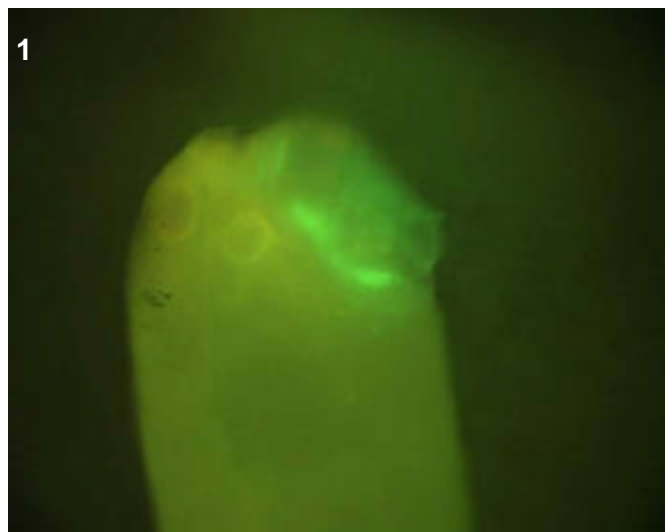
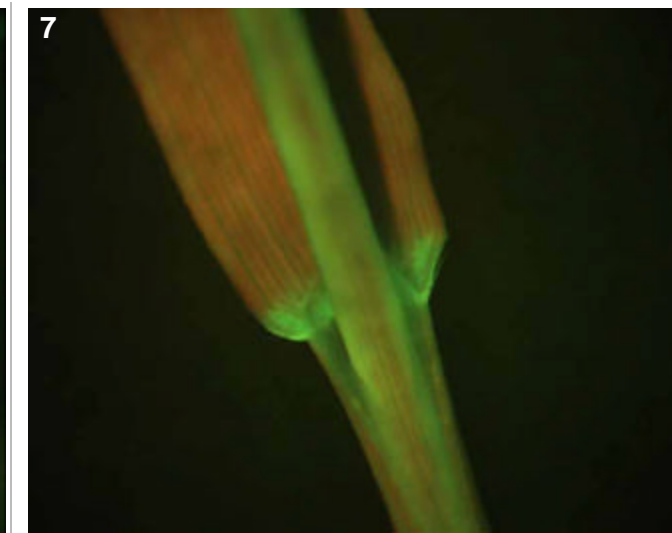
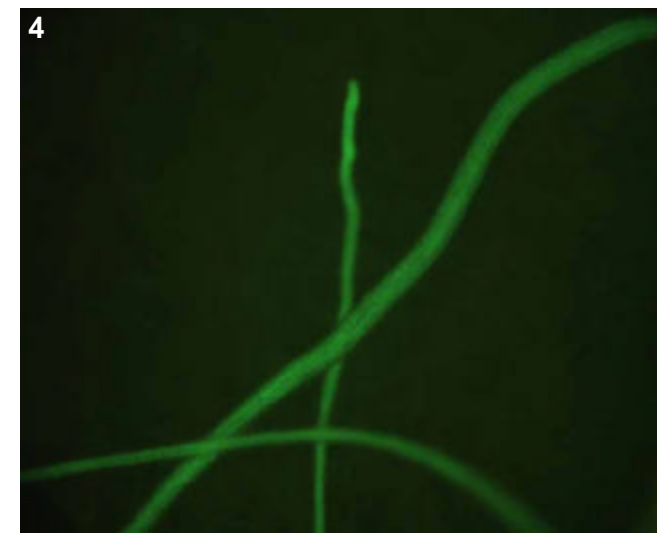
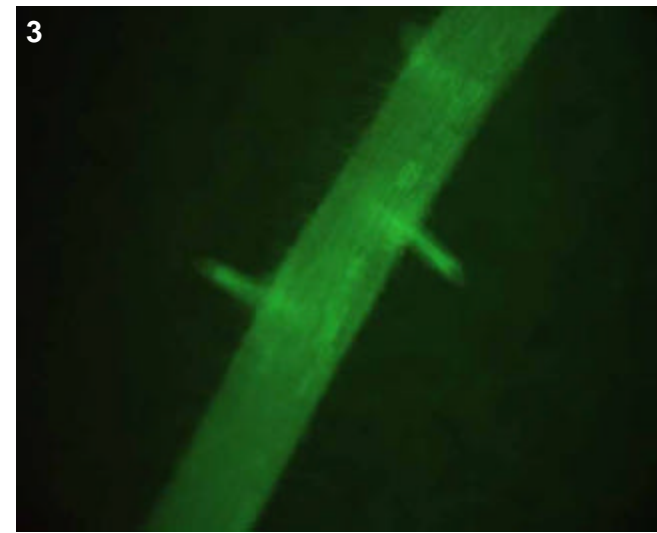
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



## T0 comments

## T1 seed comments

2/5 seeds had faint expression in the embryo

## T1 seedling comments

Bright expression in the roots (pic 2-5) and shoot (pics 6-8). Perhaps there is epidermal expression not only in the root (pic 2), but also in the shoot (pic 7).

# Genotype: ARE D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

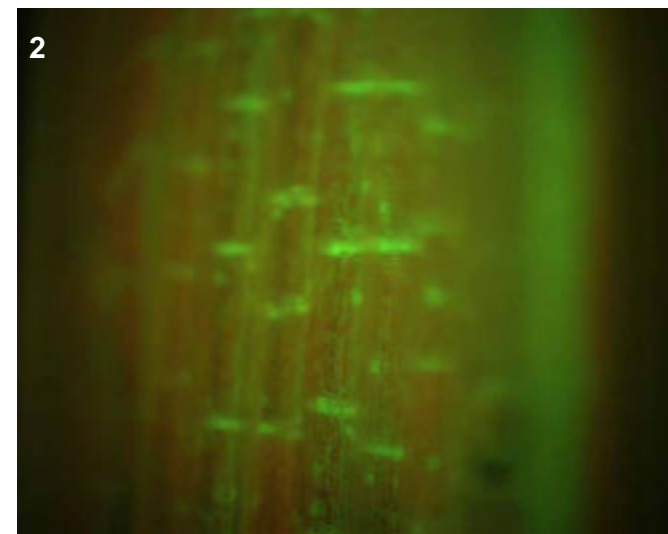
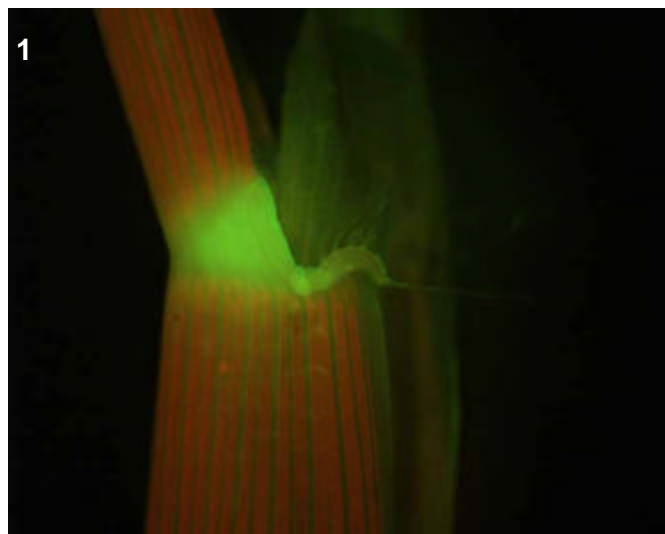
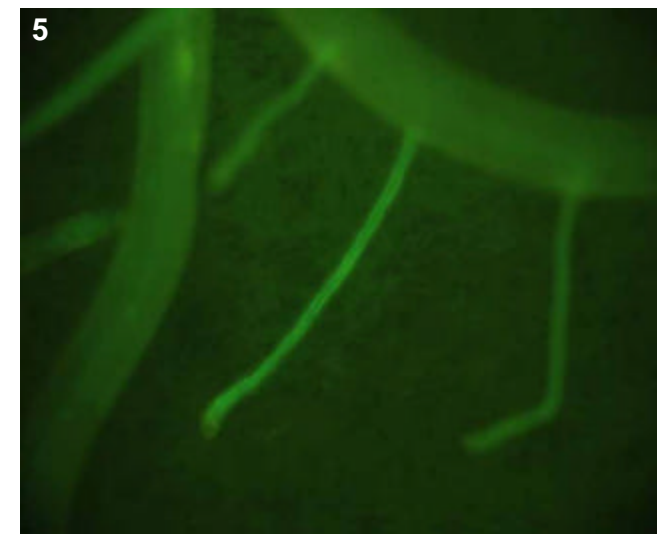
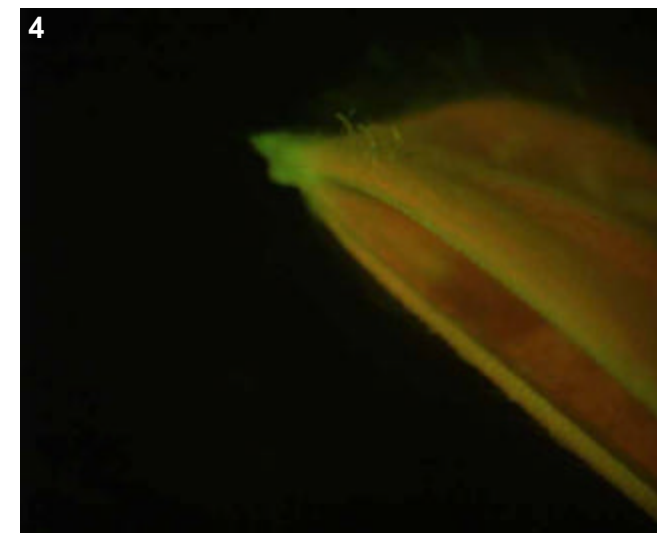
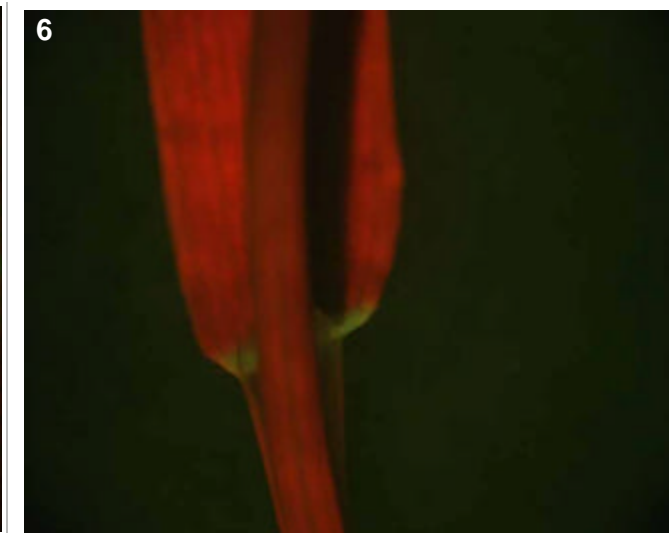
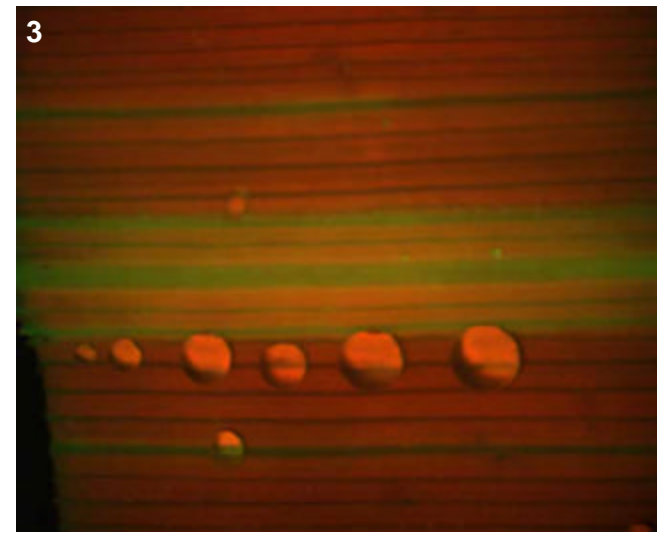
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



### T0 comments

Bright collar and sheath/leaf vascular, more faint floral vascular (pic 4).

### T1 seed comments

### T1 seedling comments

Medium vascular expression in the roots (pic 5), weak expression in the collar (pic 6).



# Genotype: ARE E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

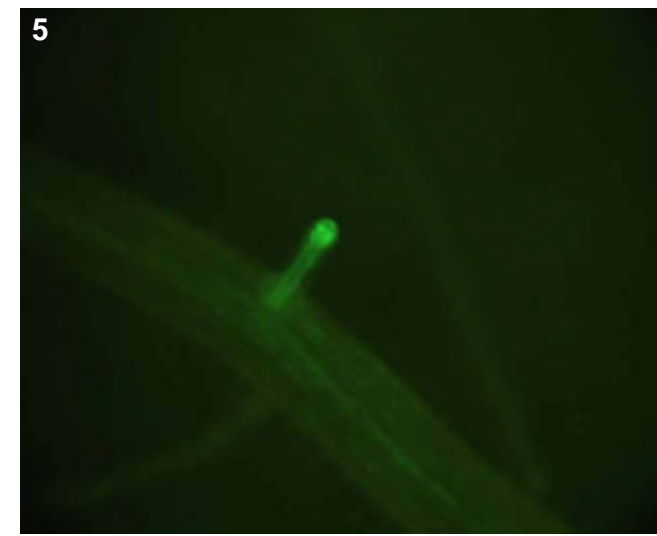
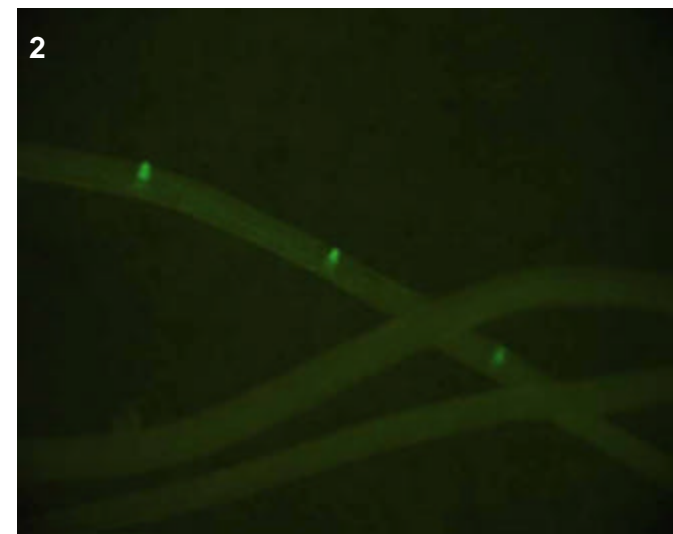
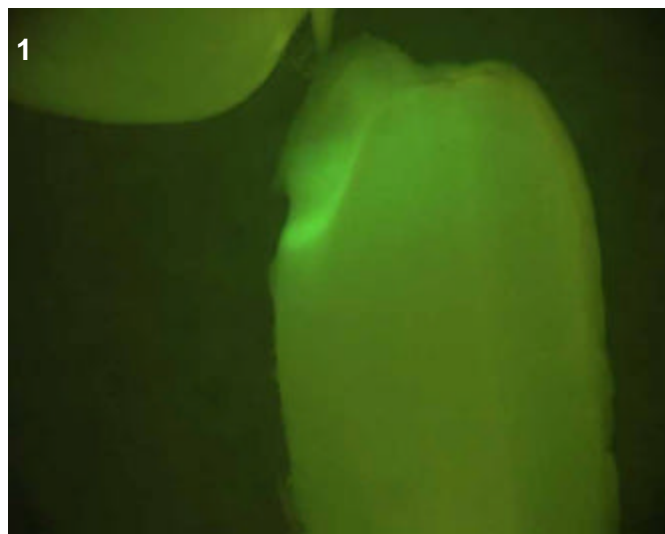
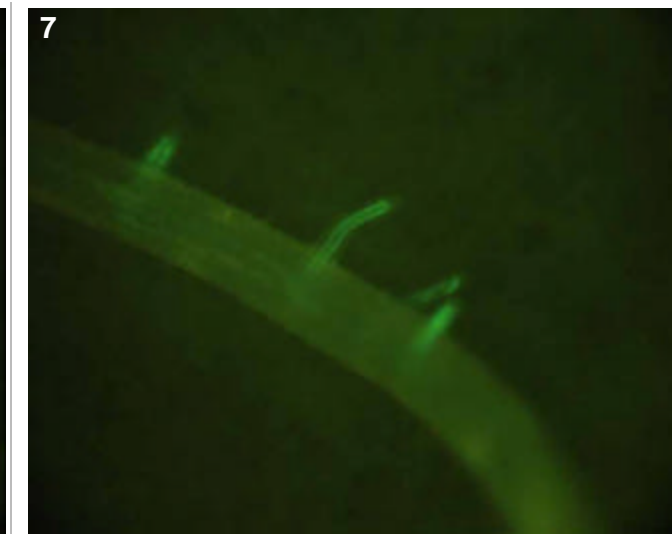
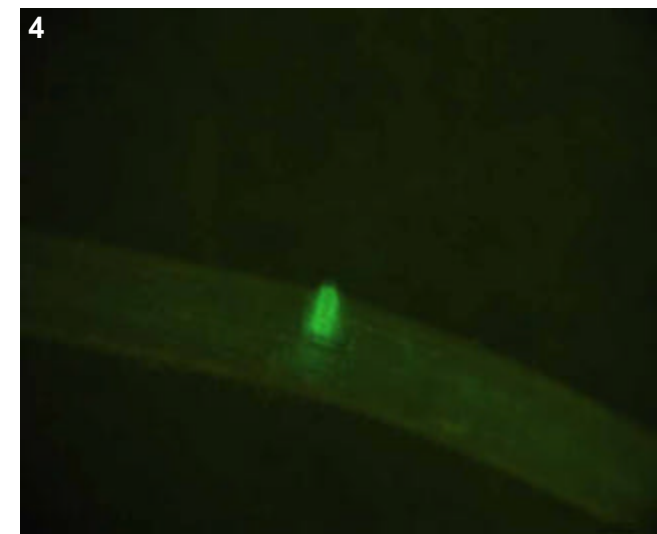
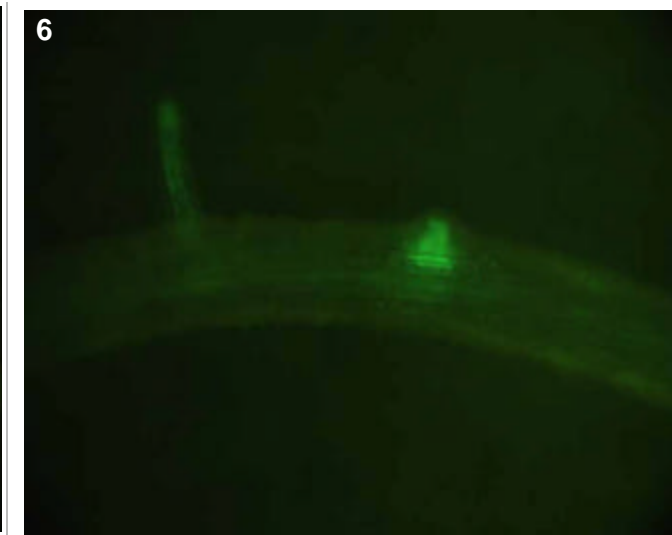
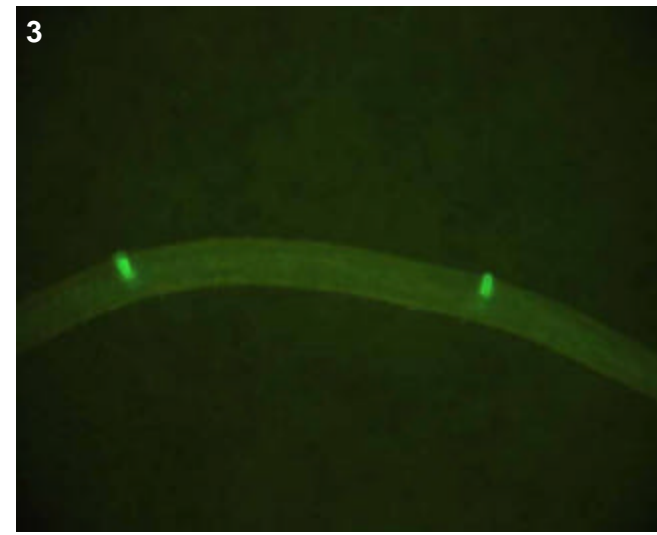
YES, 1 GFP+ plant

**Confocal?**

YES

**Number T2 seed produced:**

12



## T0 comments

## T1 seed comments

2/5 seeds had medium expression in scutellum

## T1 seedling comments

A great root-specific line. Expression only appears around one week, with the emergence of bright lateral roots (pics 2-4). Expression appears to be vascular in the lats (pic 5-7). Tips of some of the crown roots also show a bright point of expression close to the root apex.

# Genotype: ARE E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

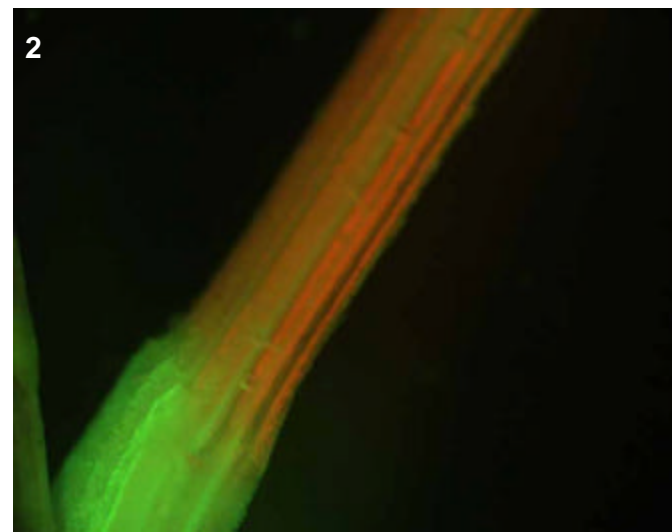
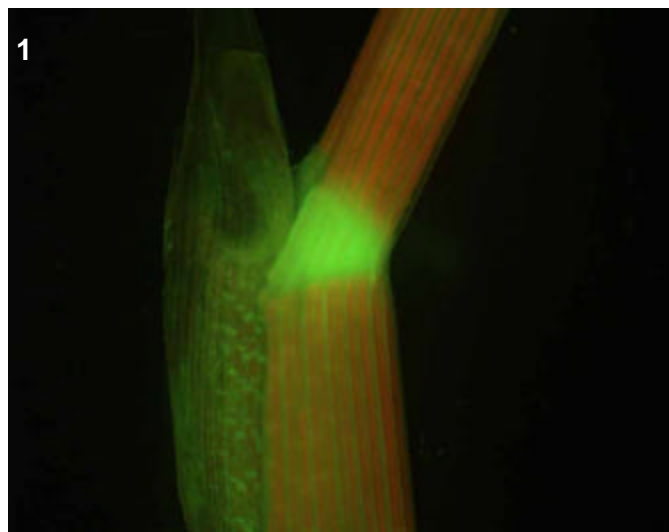
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced: 32



### T0 comments

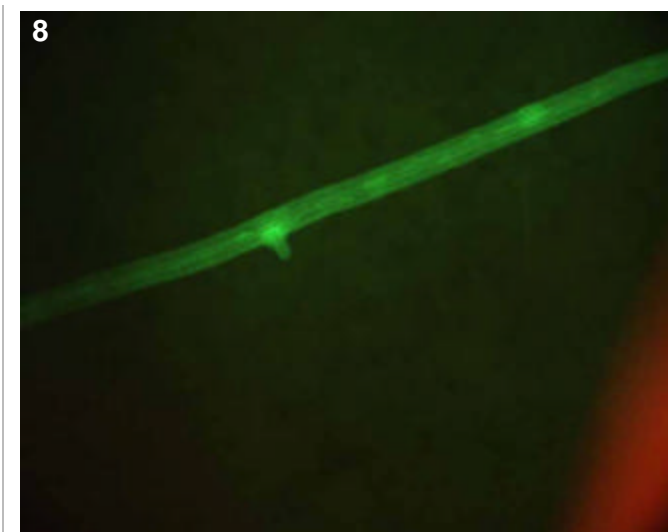
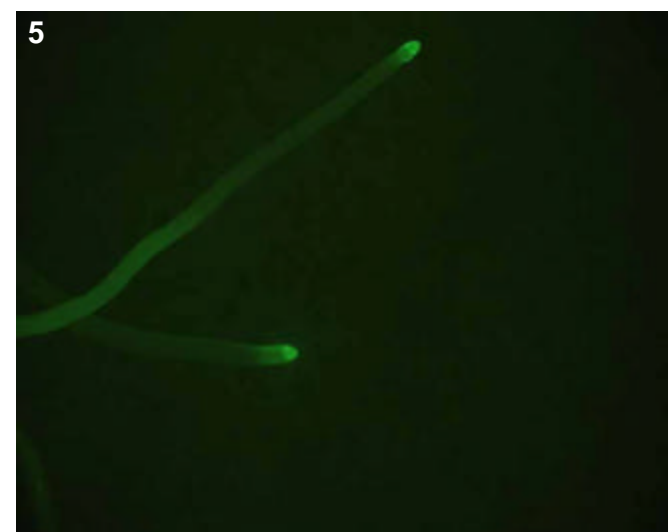
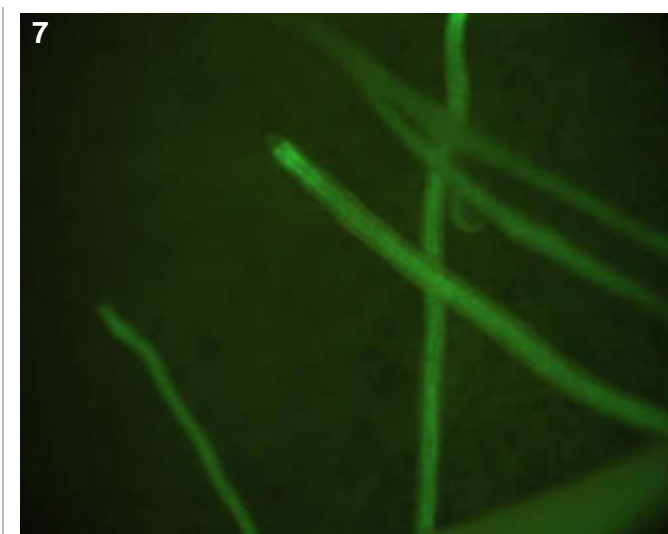
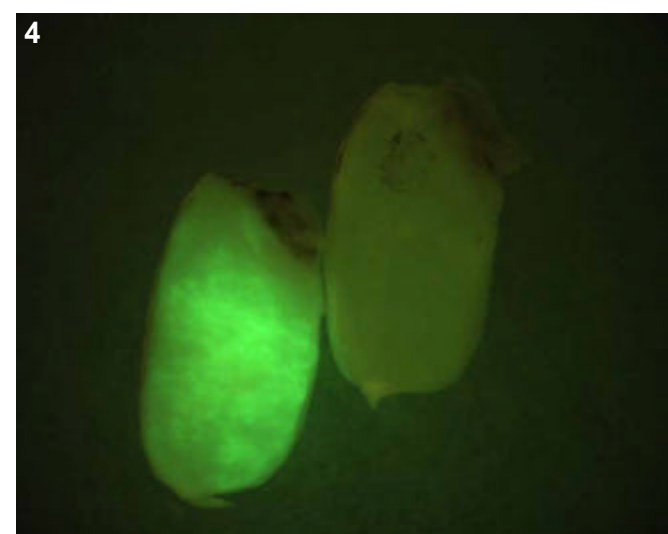
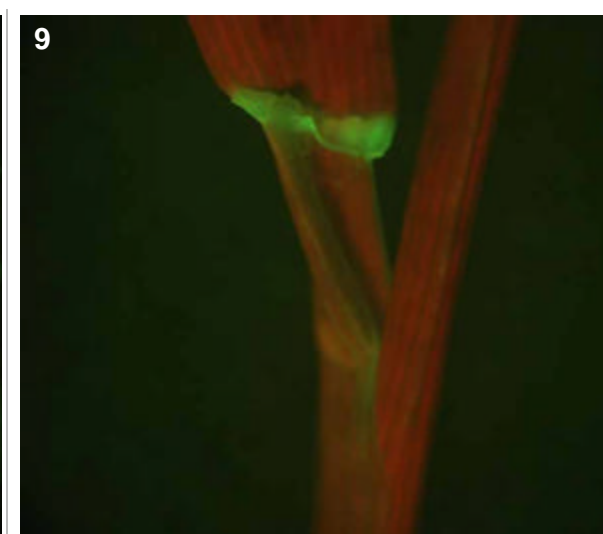
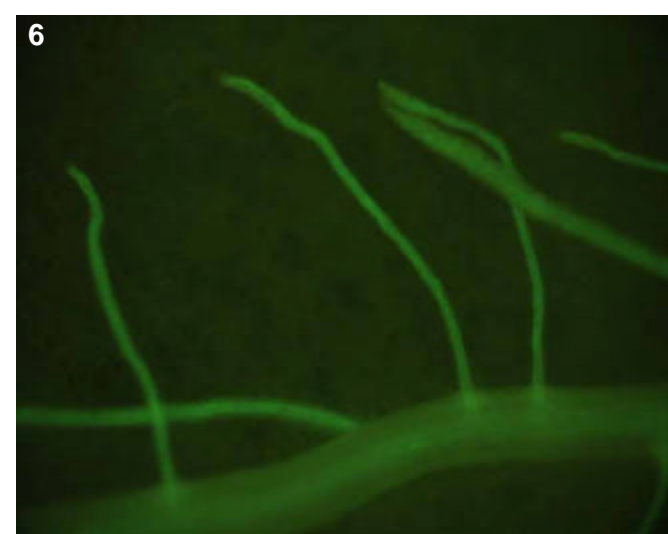
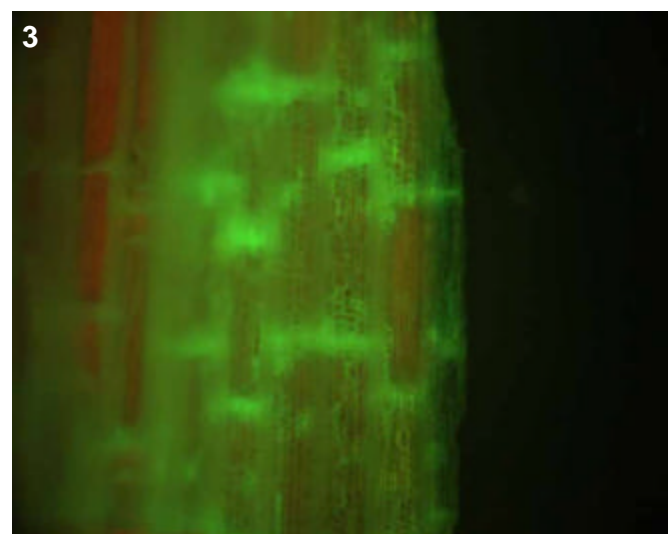
Flowers were too old for analysis.

### T1 seed comments

1/5 seeds had expression in the aleurone/endosperm layer (pic 4)

### T1 seedling comments

Bright expression, either epidermal or vascular I think, in the roots (pics 5-8). Also bright collar and vascular in the shoot (pic 9).



# Genotype: ARE F08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

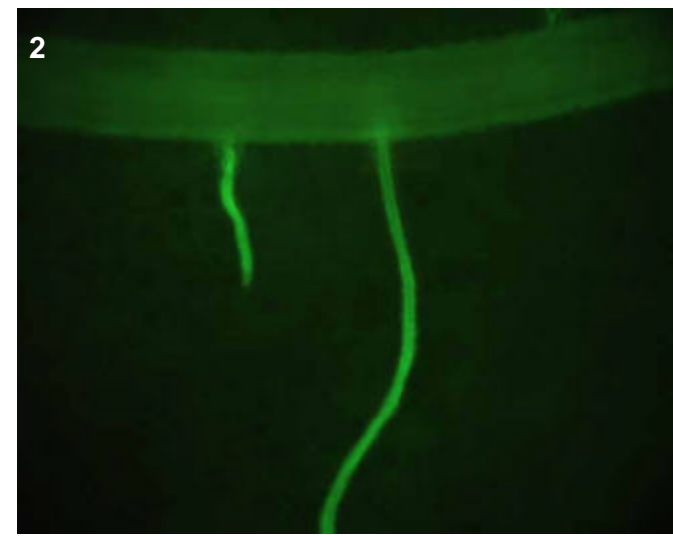
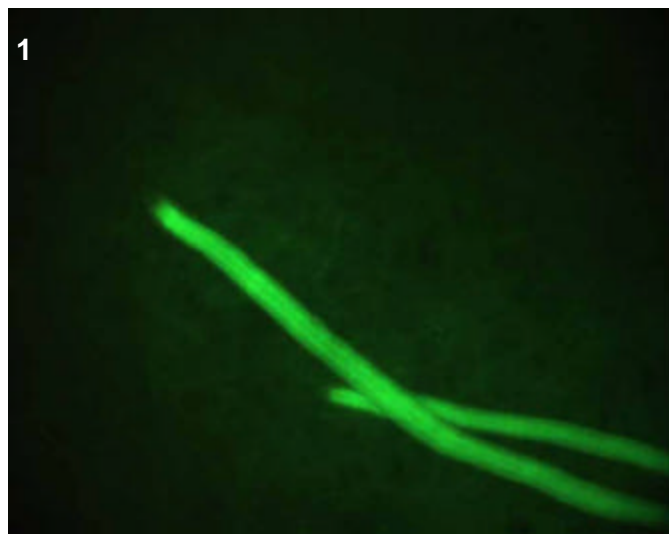
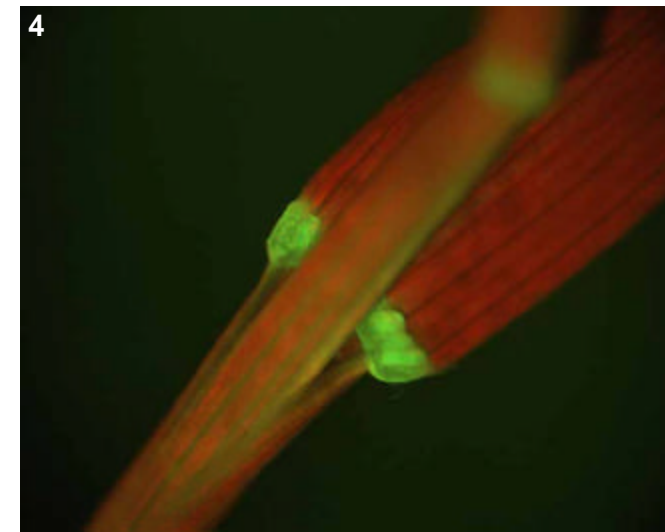
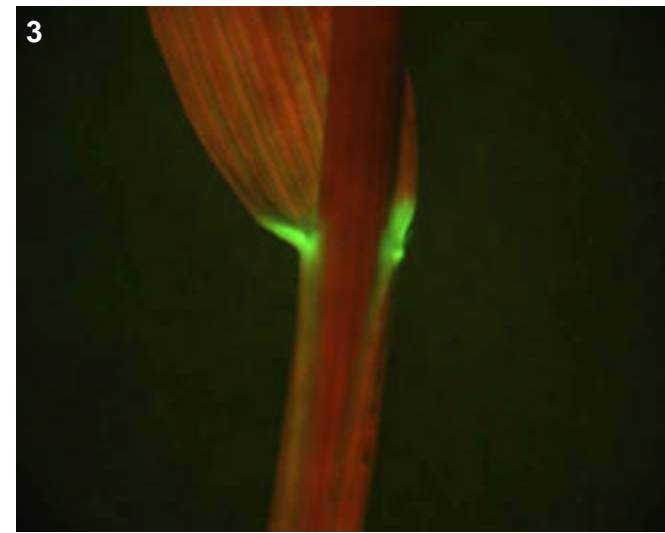
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 7



## T0 comments

## T1 seed comments

## T1 seedling comments

All 5 of the seedlings showed very bright expression in both the root (pics 1-2) and shoot (pics 3-4).

# Genotype: ARE G03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

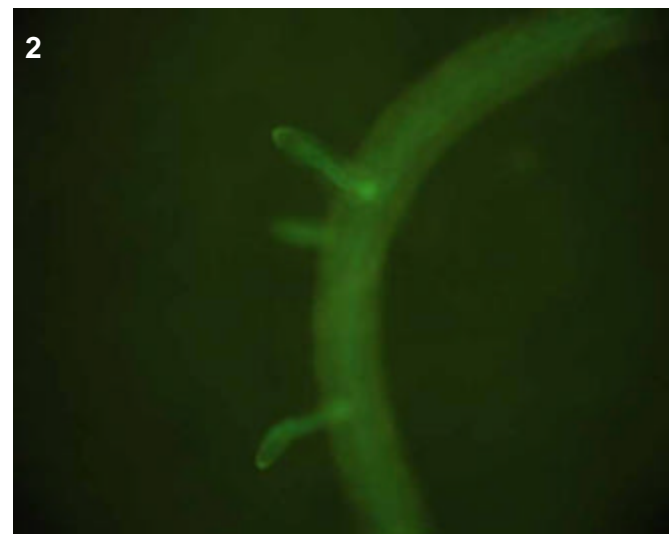
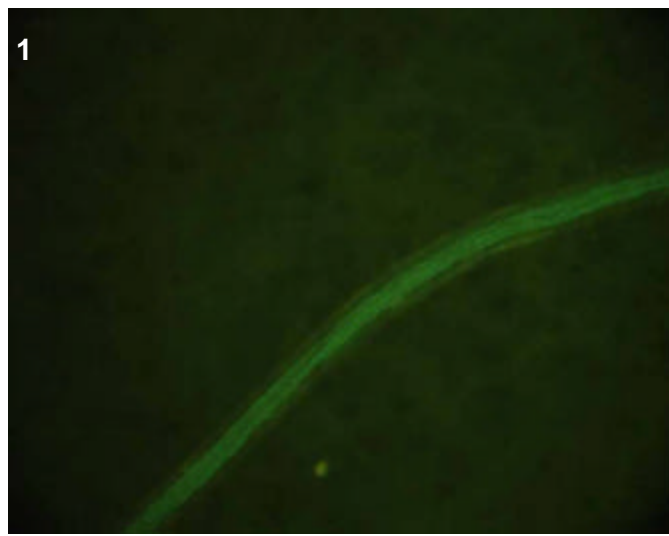
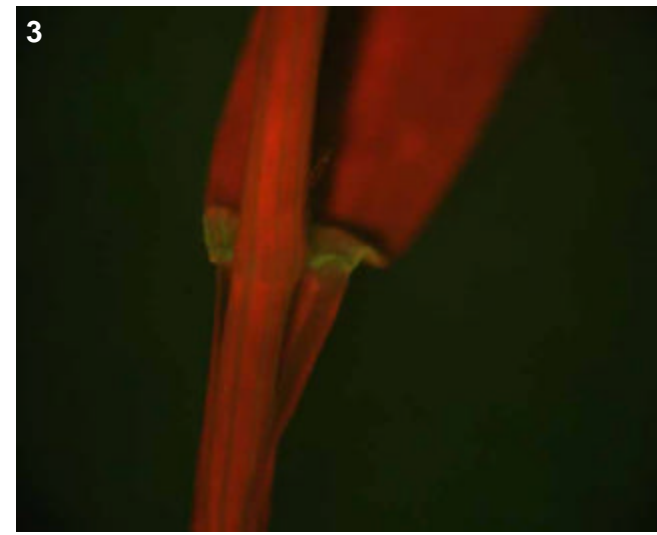
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium root vascular expression, faint in the collar (pic 3).

# Genotype: ARE G07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

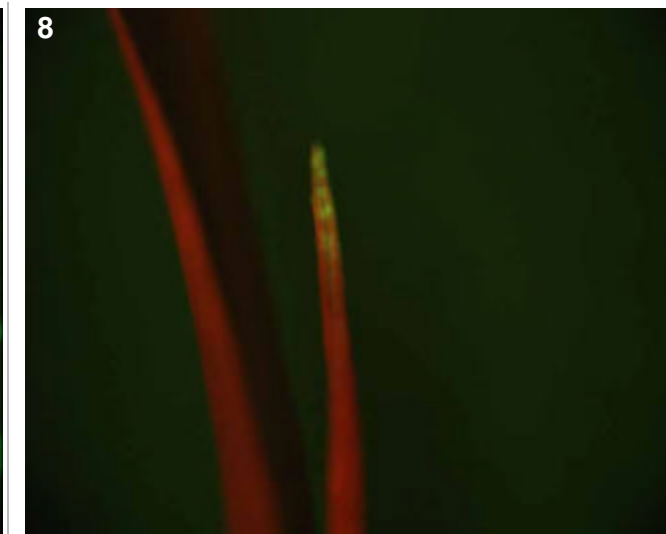
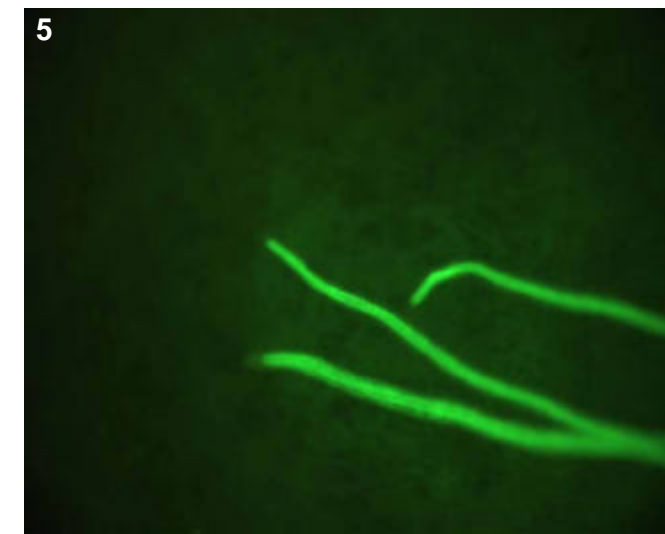
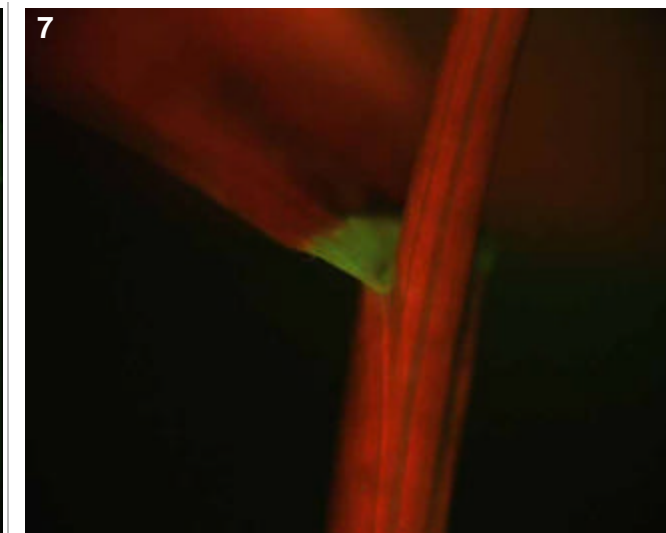
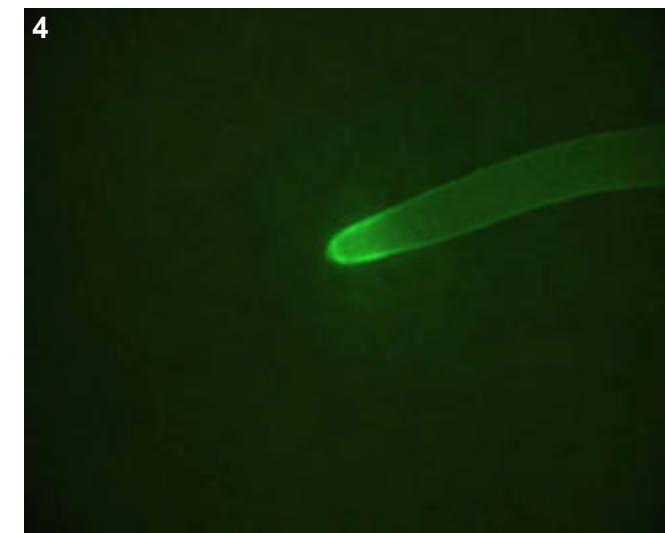
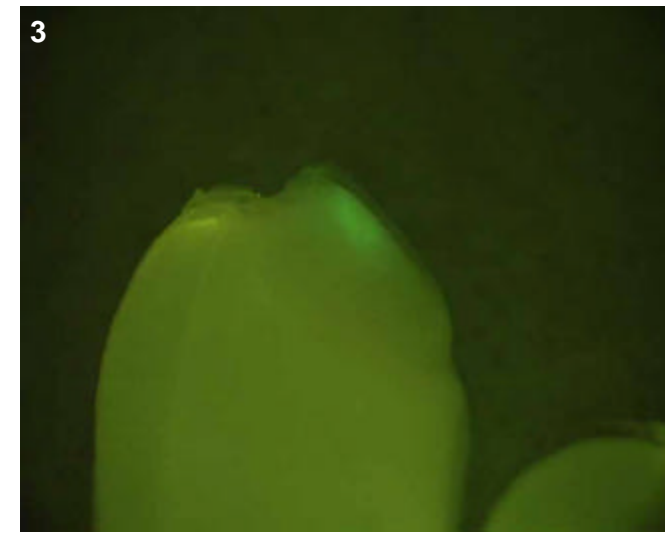
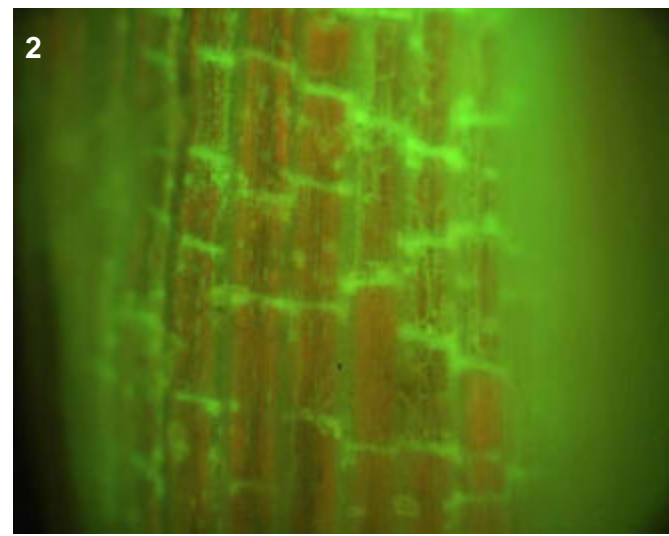
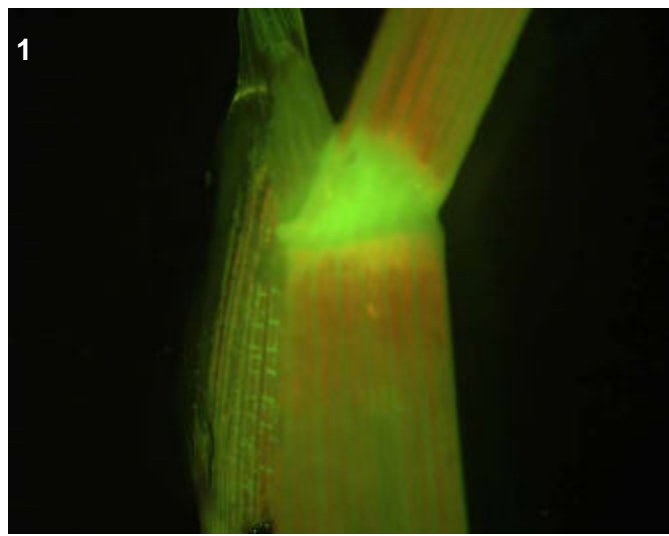
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 24



**T0 comments**

**T1 seed comments**  
 1/5 seeds had faint expression in the embryo

**T1 seedling comments**  
 Very bright roots, epidermal at least in the crowns (pics 4-6). Medium expression in the collar (pic 7) and leaf tips (pic 8).

# Genotype: ARE G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

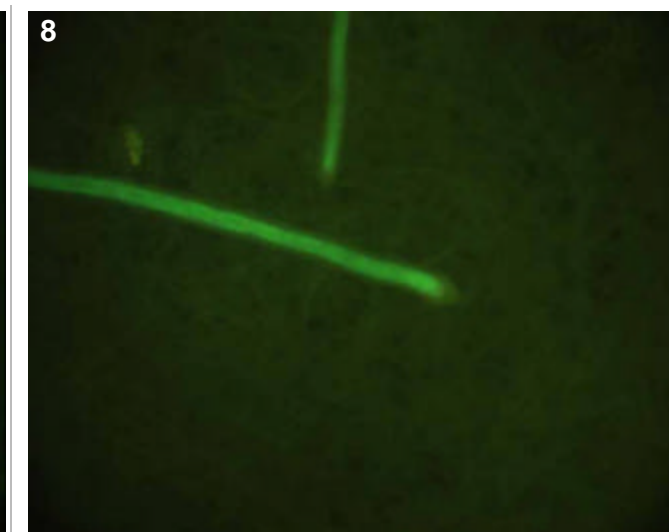
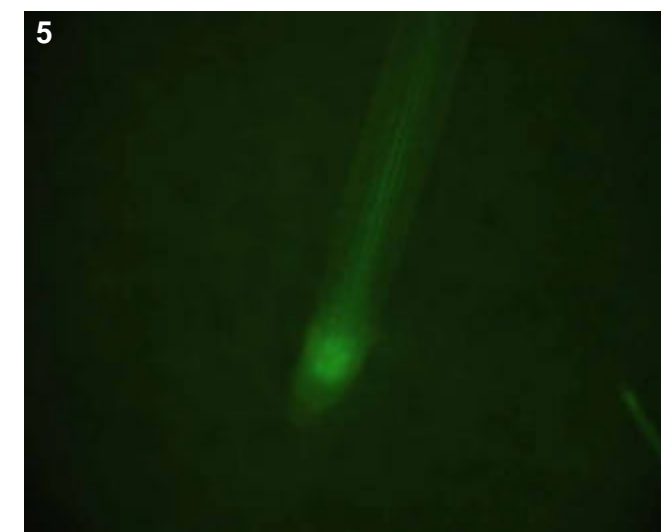
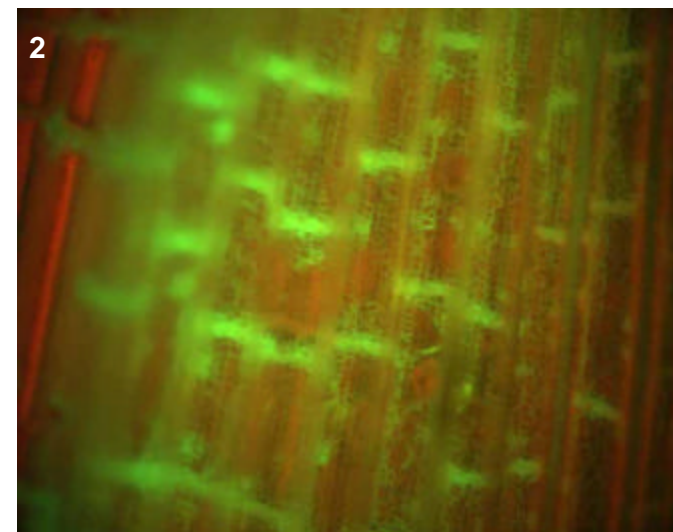
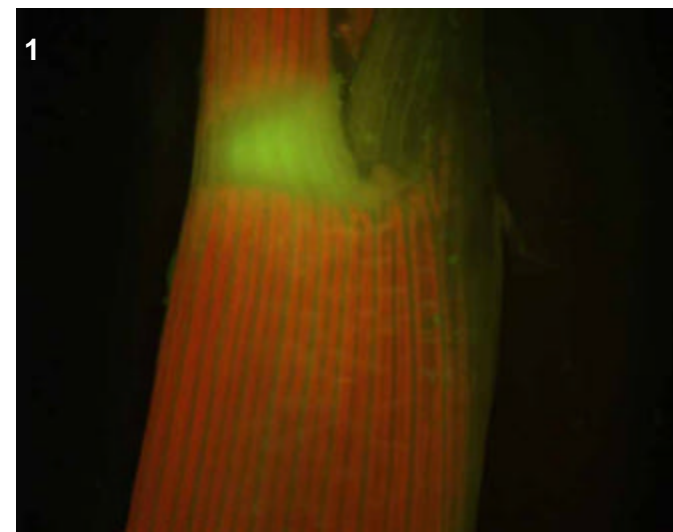
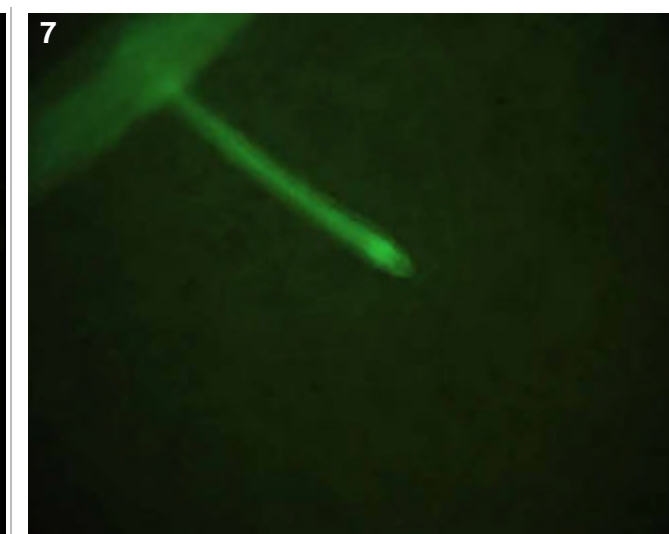
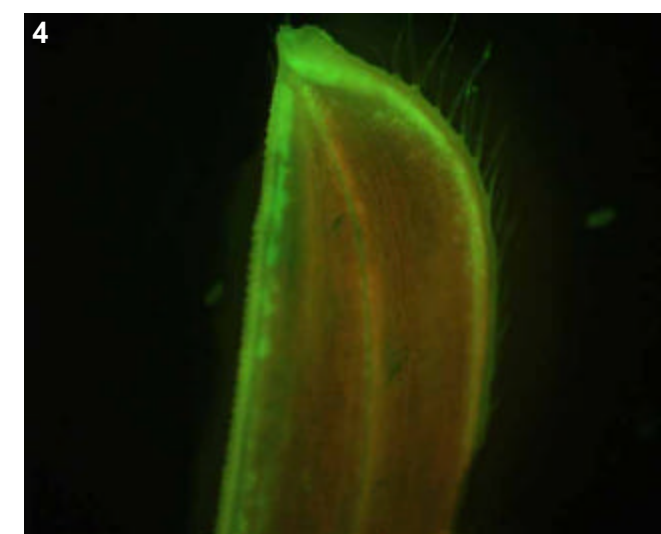
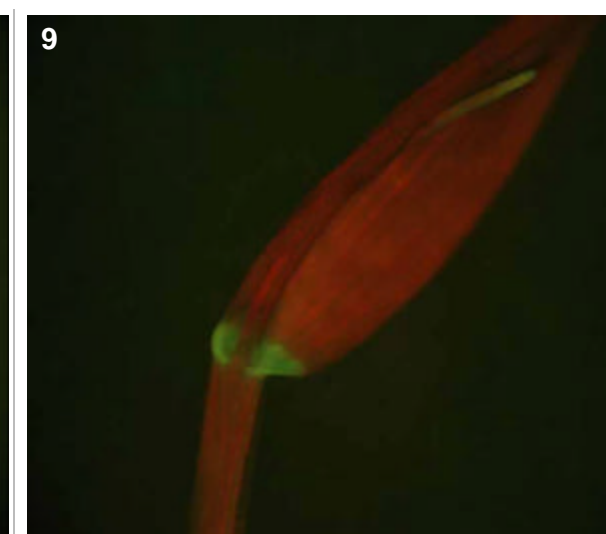
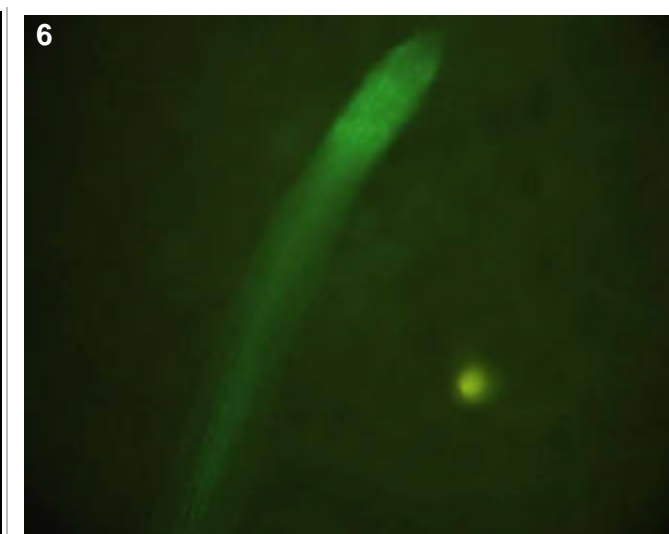
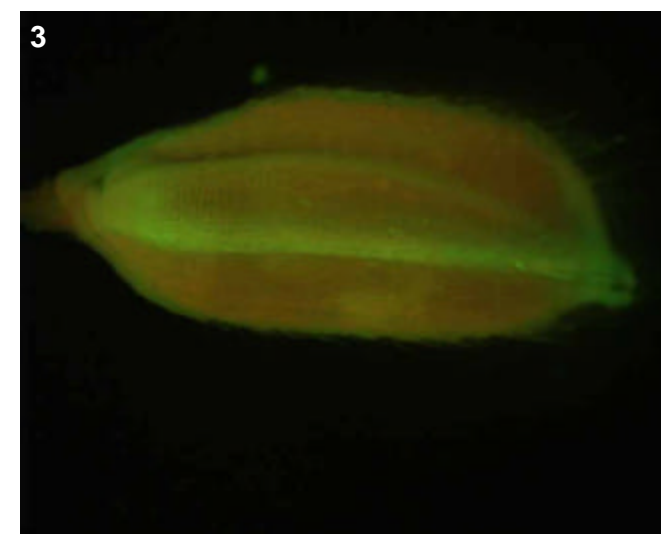
YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**

33



### T0 comments

Bright expression in sheath and floral vascular, while the collar expression (pic 1) is medium expression.

### T1 seed comments

### T1 seedling comments

Note the interesting expression in crown roots (pics 5-6), bright expression near root apex followed by thin "line" extending into the mature root. Pattern may be the same in lats (pics 7-8). Also bright expression in the collar and leaf tips (pic 9).

# Genotype: ARE G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-5  
 T1 seed/seedling: 6-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

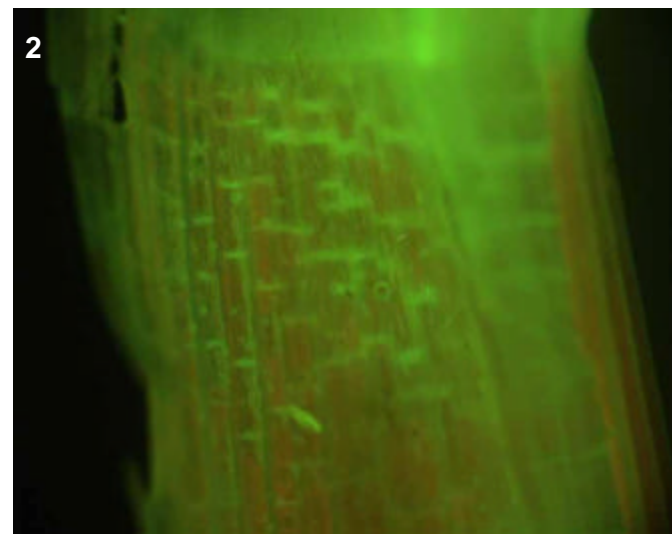
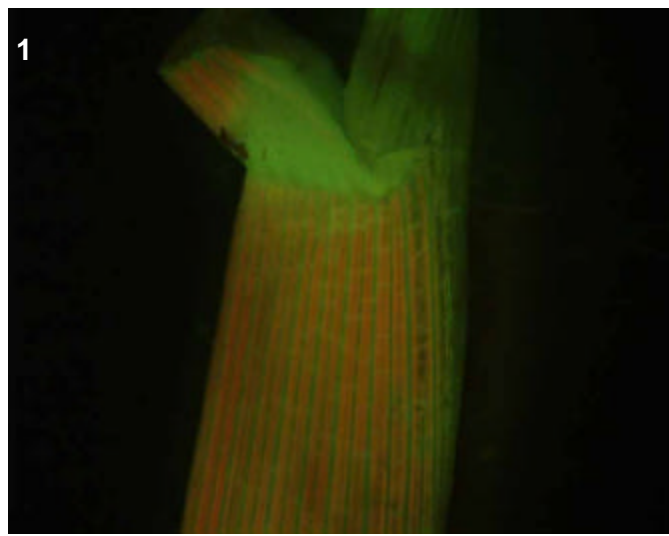
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 7



### T0 comments

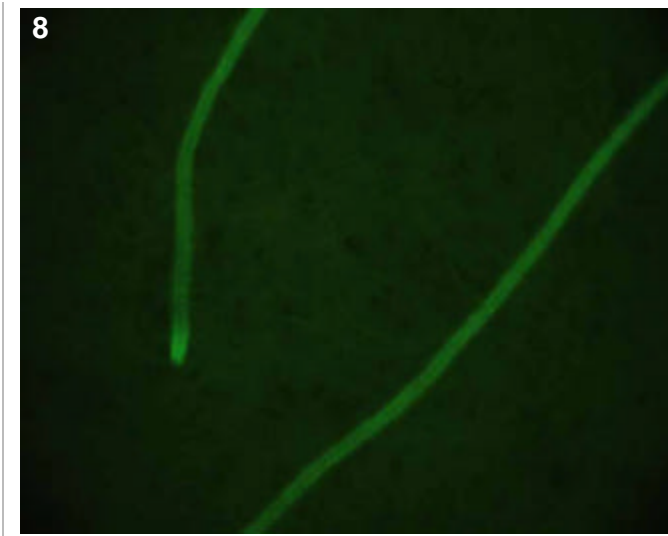
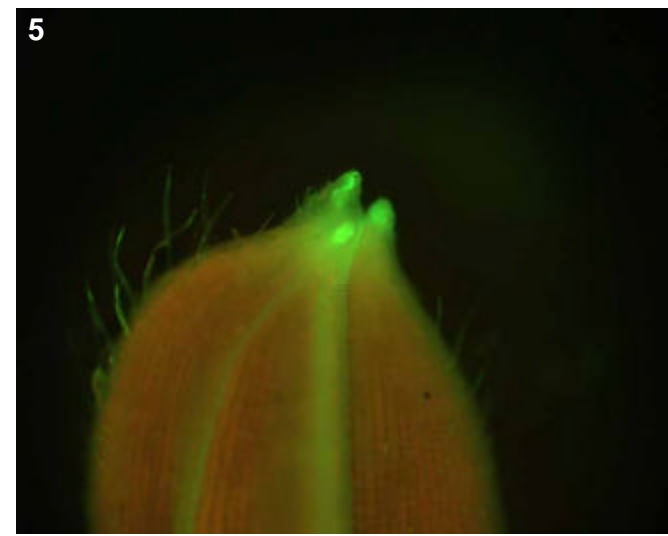
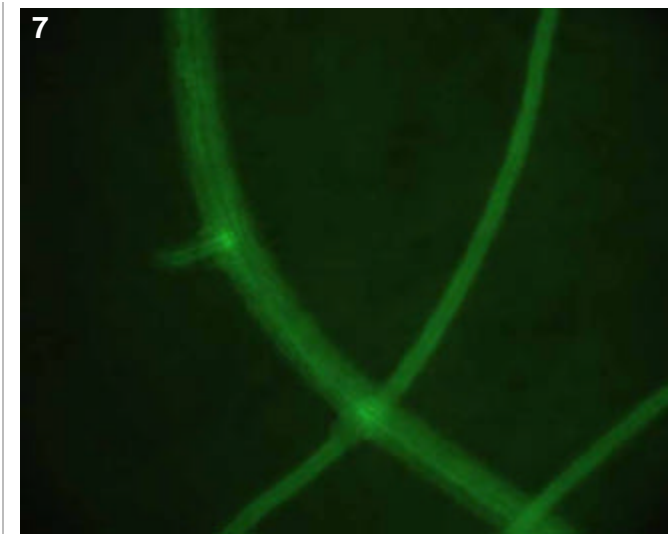
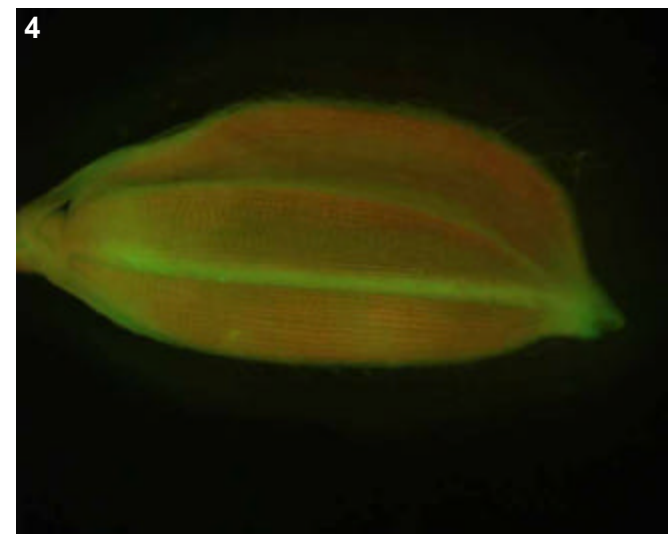
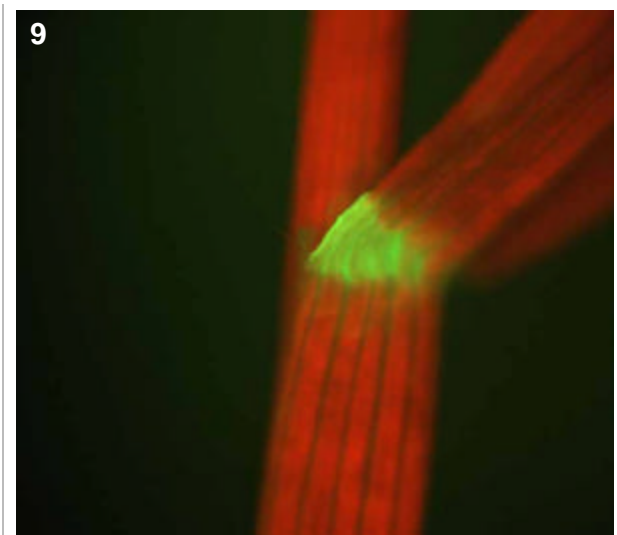
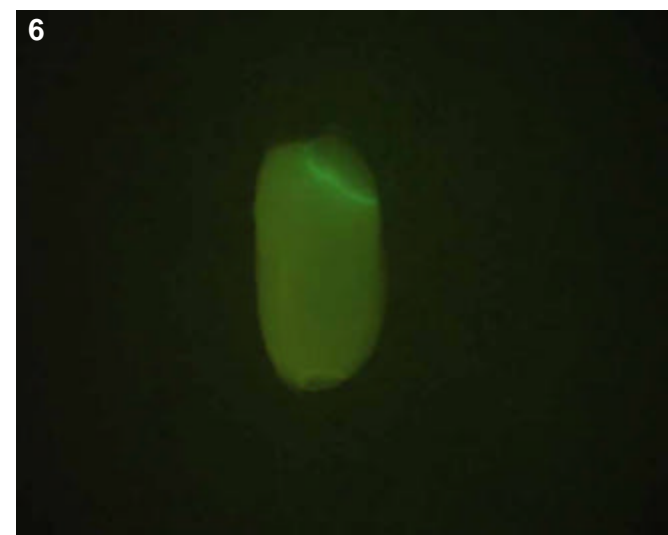
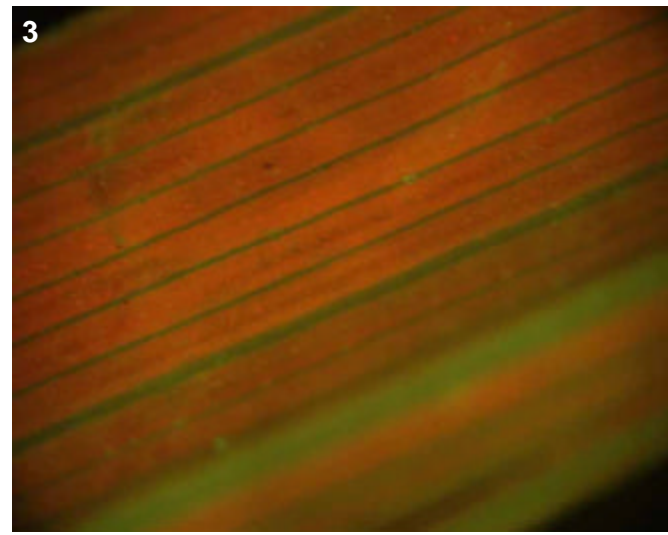
A bright vascular line.

### T1 seed comments

2/4 seeds had medium expression

### T1 seedling comments

Only 1/5 seeds germinated, yielding one seedling with bright root vascular expression (pics 7-8) and collar (pic 9).



# Genotype: ARF B05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

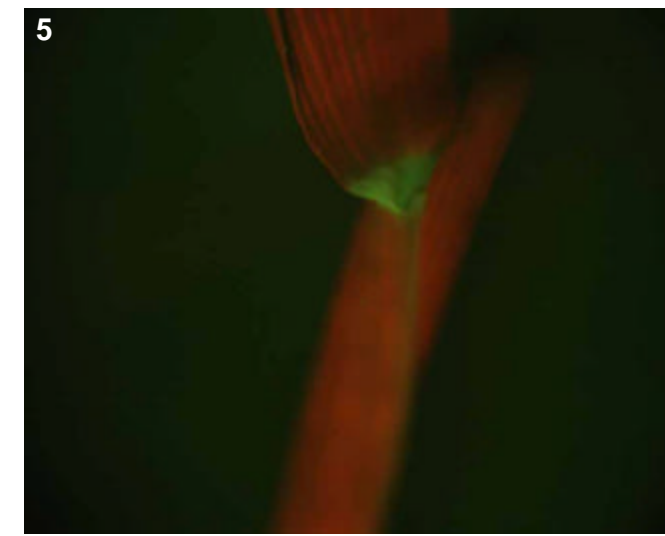
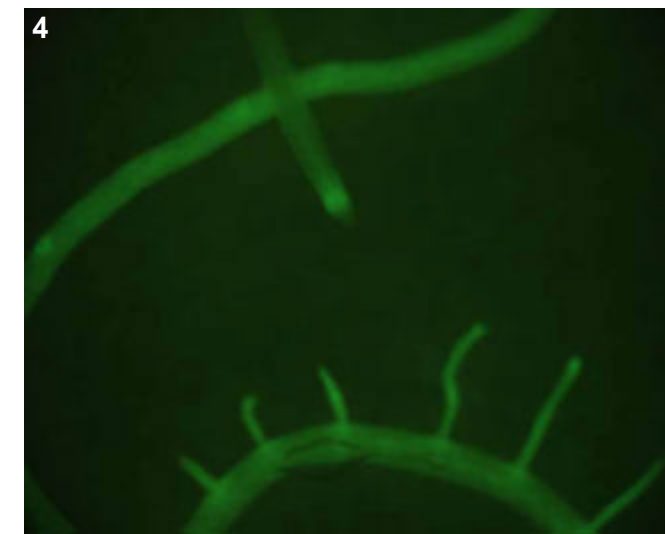
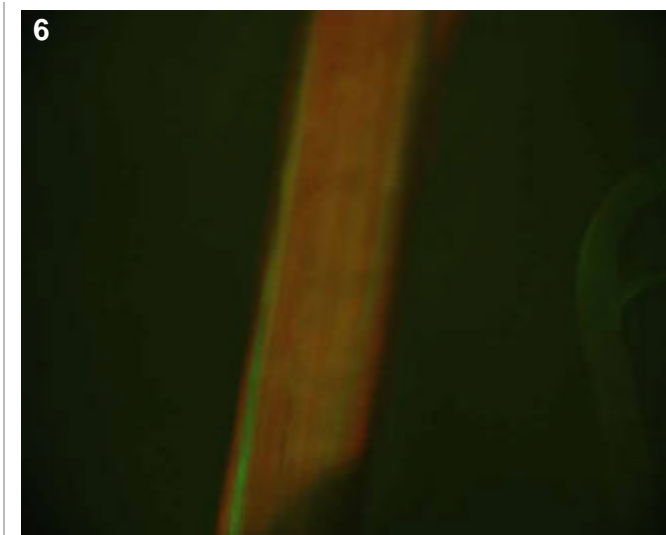
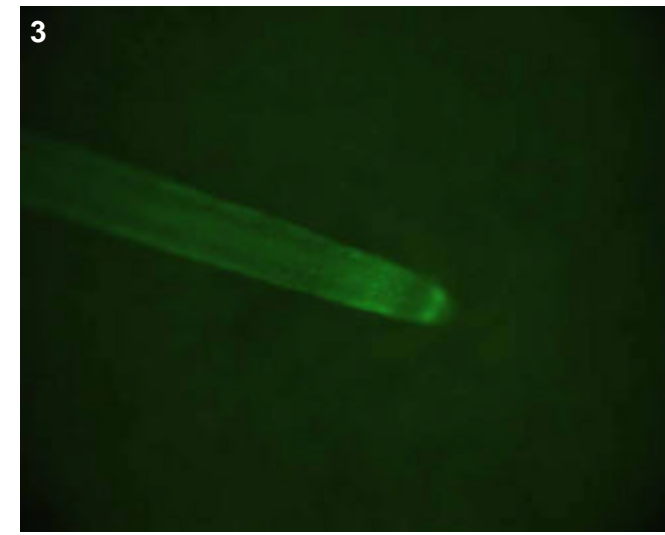
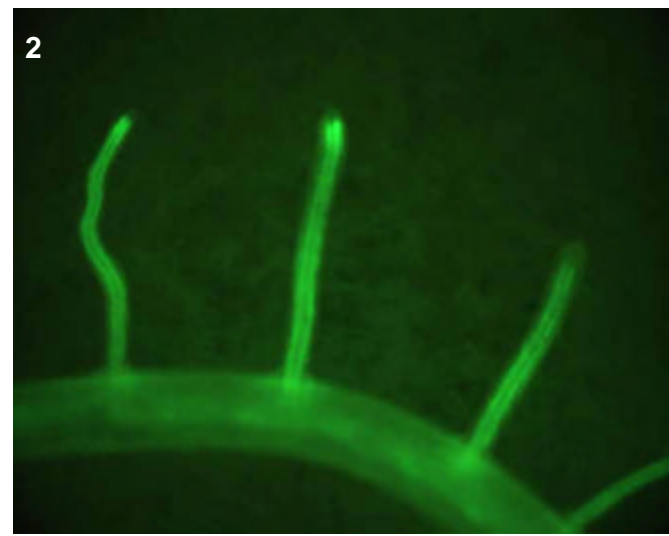
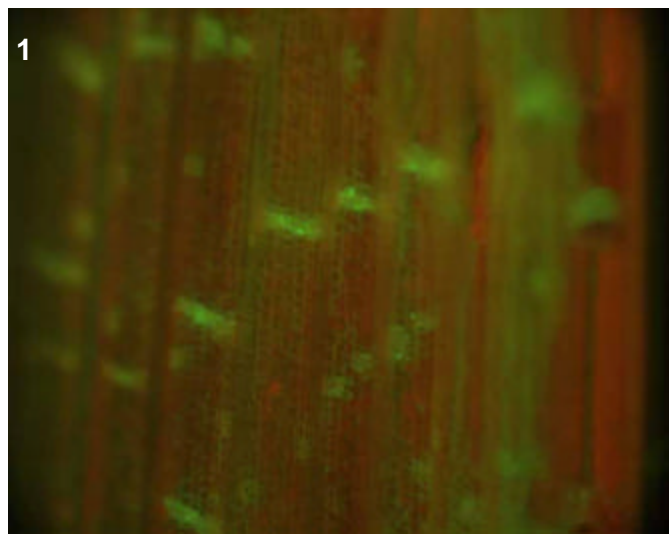
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 7



### T0 comments

Expression in the horizontal vascular elements of sheath only.

### T1 seed comments

### T1 seedling comments

Note the very bright roots-could be cortical/endo. expression (pics 2-4). Note what appears to be root initials bright at tips of crown roots (pic 3). Also bright vascular in shoot (pic 6).



# Genotype: ARF C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

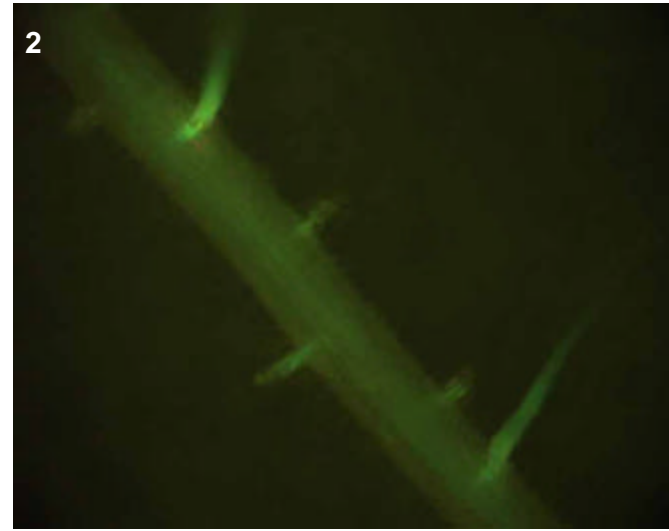
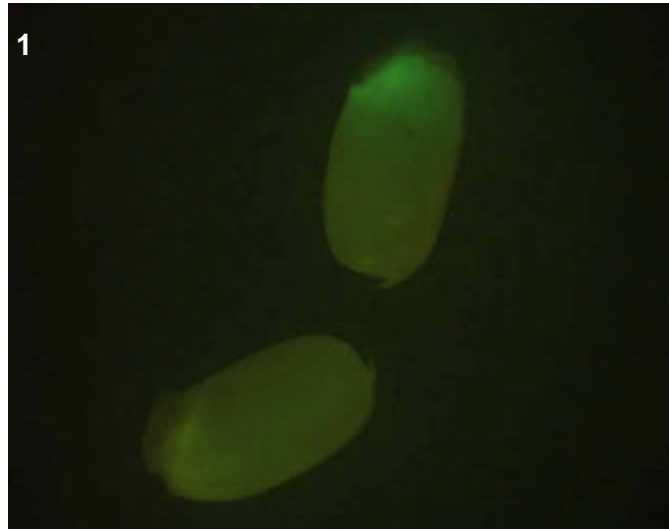
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

1/5 had expression

## T1 seedling comments

A root-specific line, with bright expression in the vascular system (pic 2).

# Genotype: ARF E03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

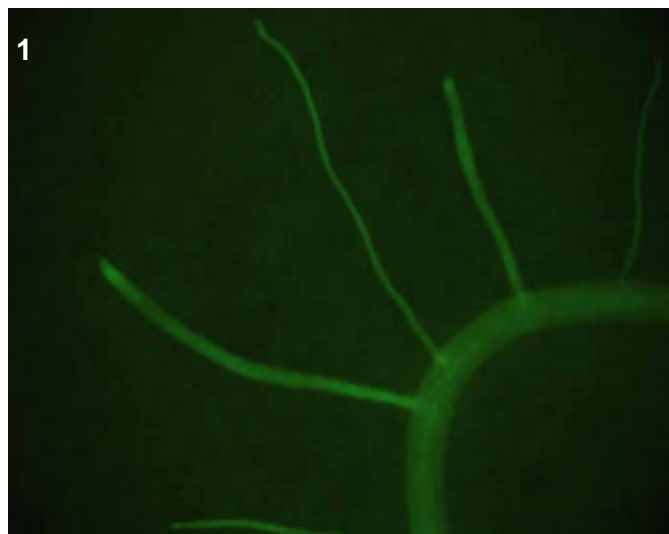
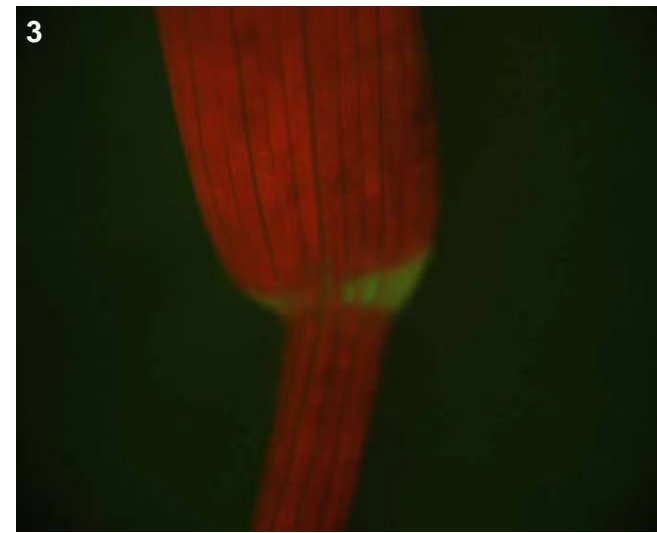
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 10



## T0 comments

## T1 seed comments

## T1 seedling comments

Very bright expression in the roots, looking brightest in the vascular but not entirely specific to the vascular (pics 1-2). Also bright collar (pic 3).

# Genotype: ARF E11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

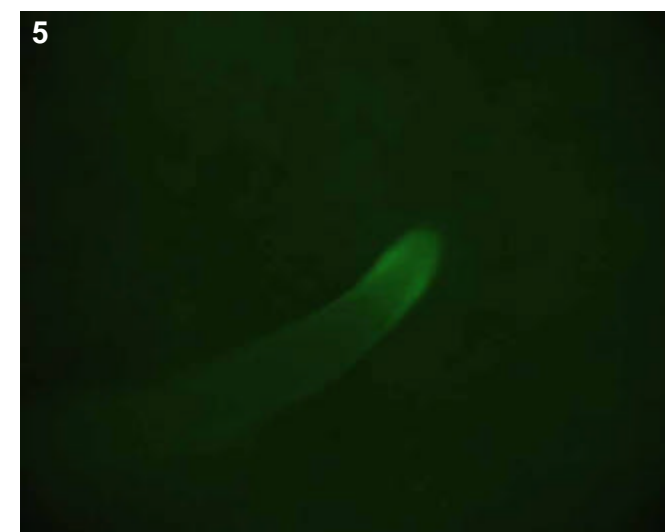
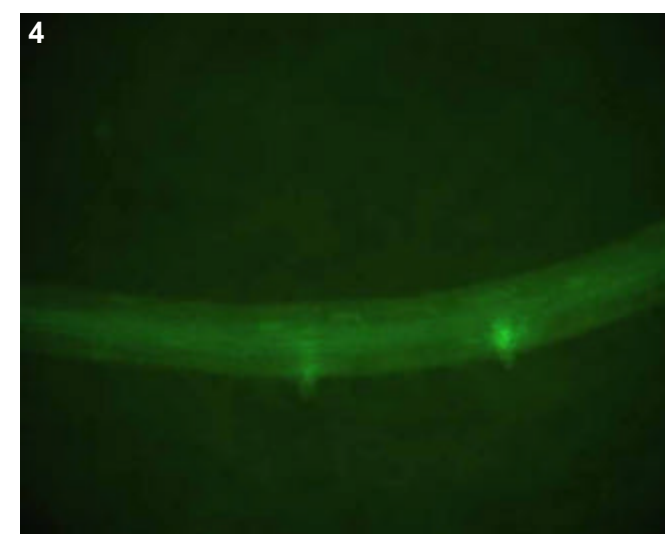
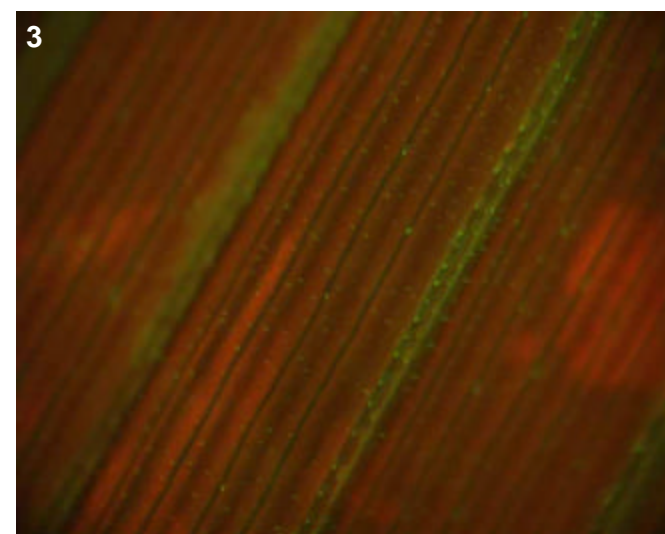
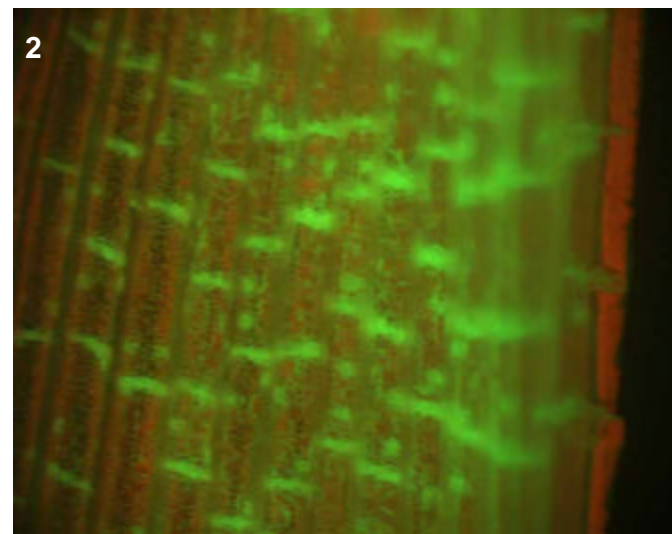
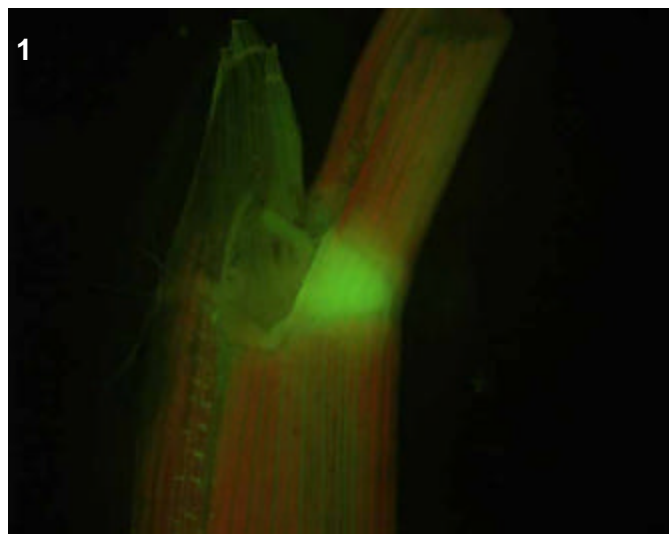
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 2



### T0 comments

Note the bright leaf trichomes in picture 3.

### T1 seed comments

### T1 seedling comments

Medium root expression observed, appearing to be epidermal/vascular in crowns (pics 4-5) and more vascular in lats (pic 6). It was noted that there may have been very faint collar and sheath vascular expression as well, but too faint for any pictures.

# Genotype: ARF F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

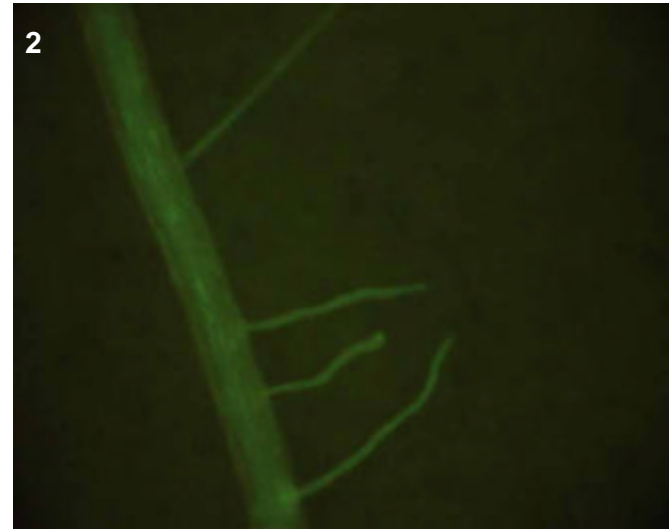
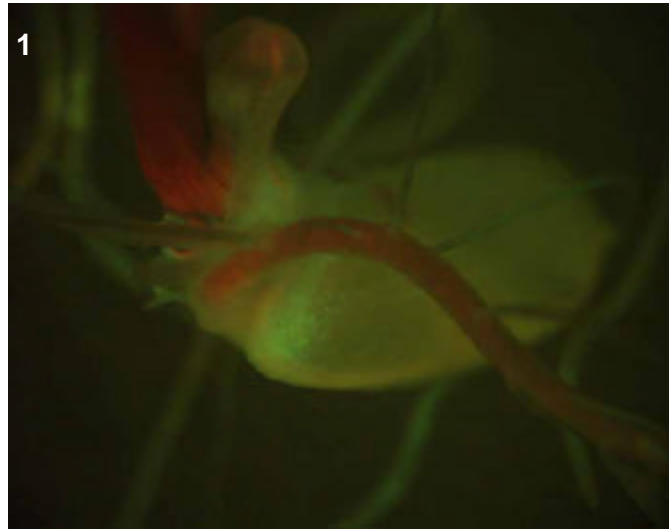
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 10



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARF F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

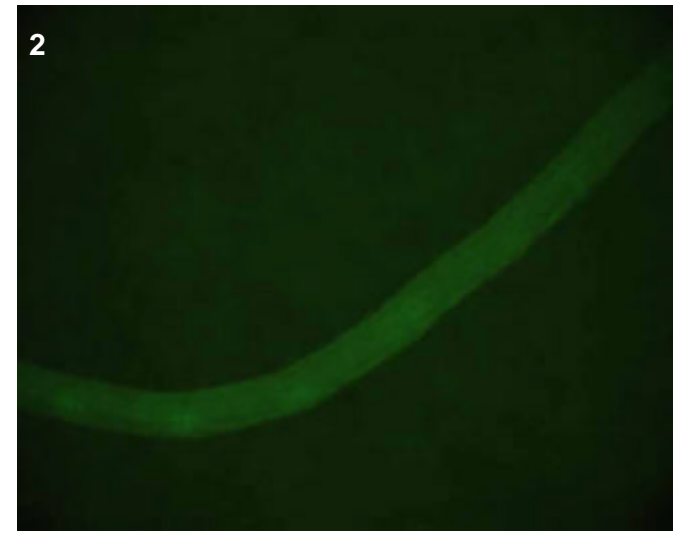
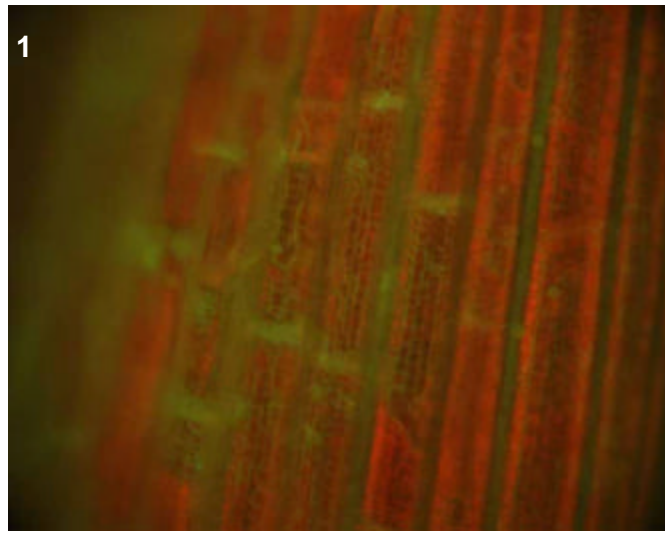
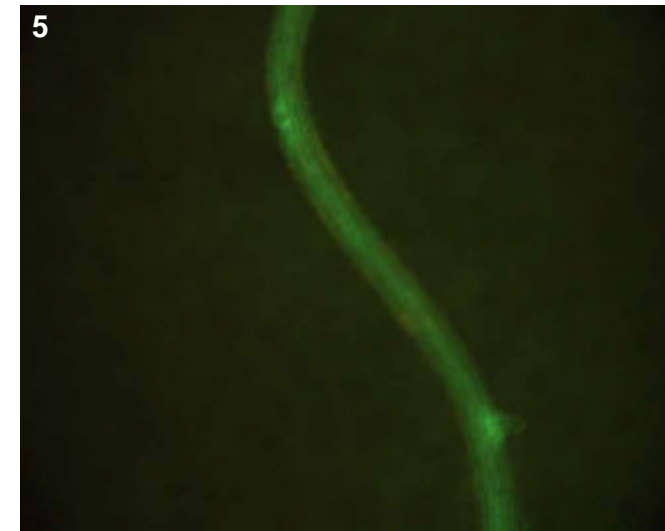
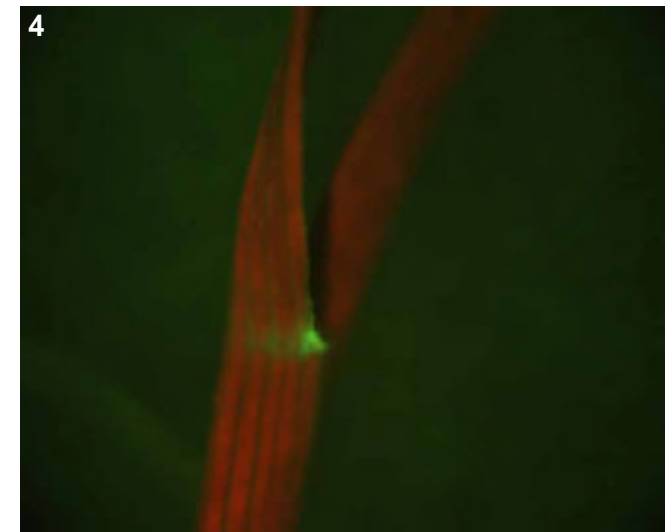
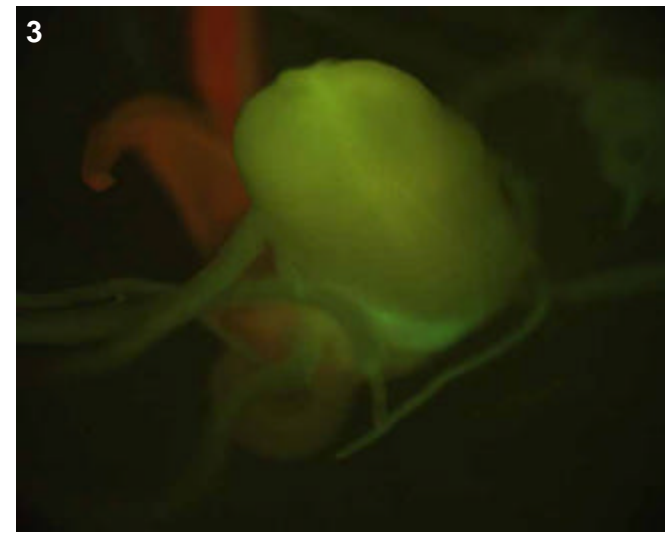
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 47



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ARF G04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

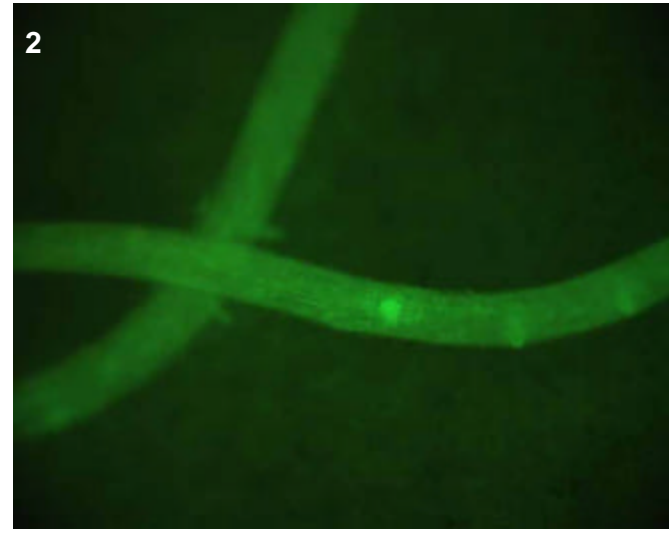
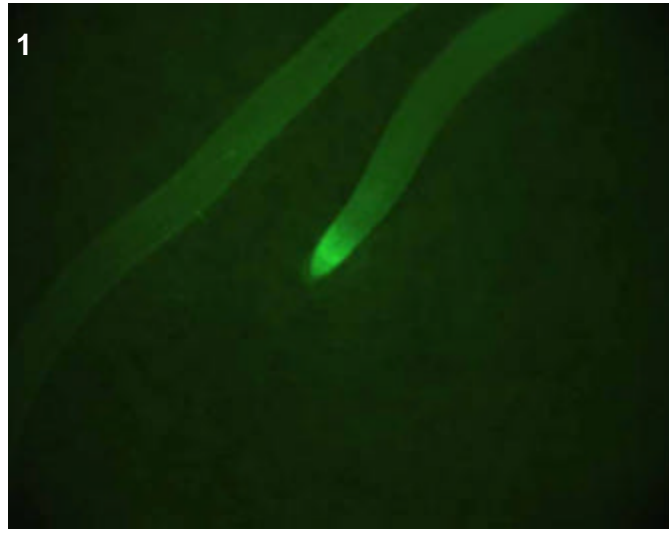
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



## T0 comments

## T1 seed comments

## T1 seedling comments

A root-specific line, with what appears to be medium epidermal expression (pics 1-2).

# Genotype: ARF H08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

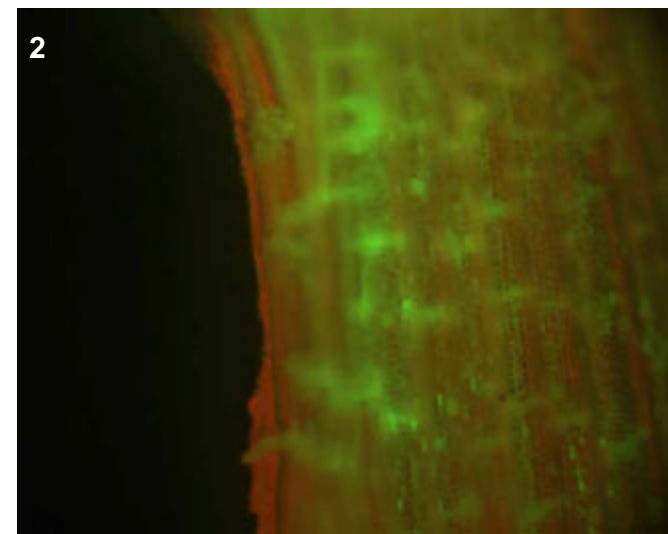
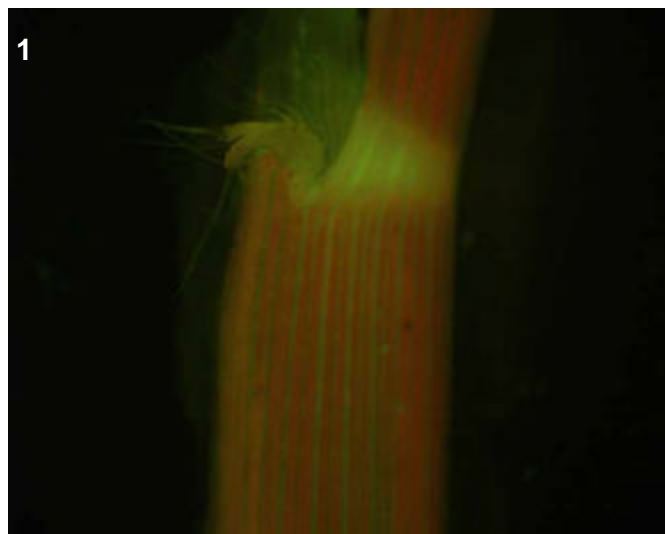
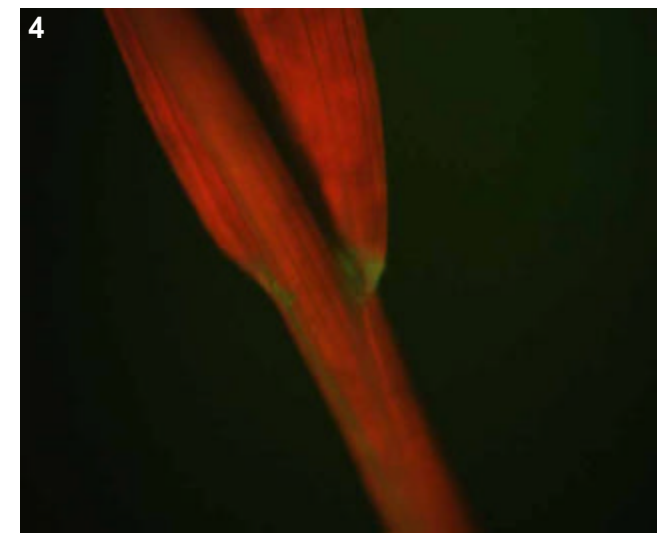
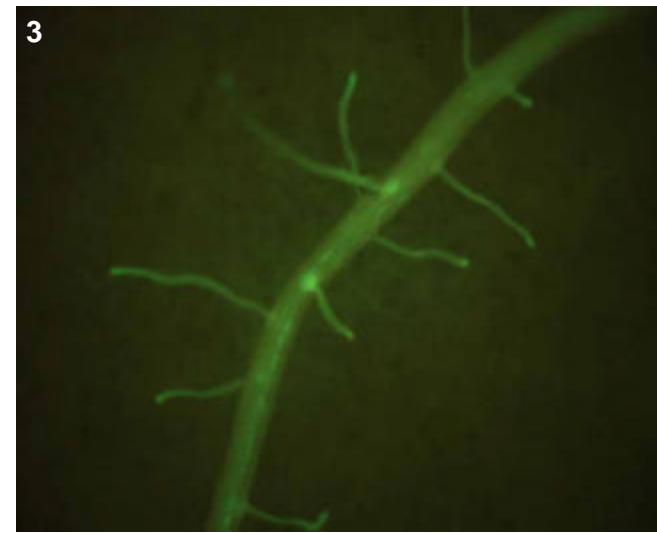
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



### T0 comments

Expression in the sheath vascular is limited to the region just below one part of the collar. In picture 2 note how the horizontal elements are bright on just the upper left half of the vascular. Flowers were too old for analysis.

### T1 seed comments

### T1 seedling comments

Expression in roots brightest near zone of lateral root emergence and root tip (pic 3). The two seedlings that I moved to the greenhouse look abnormally small after two weeks of growth. Eventually they died.

# Genotype: ARG A02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-7  
 T1 seed/seedling: 8-11  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

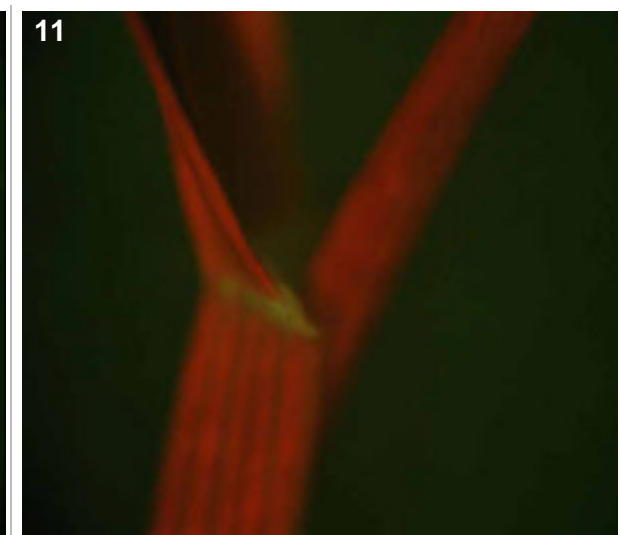
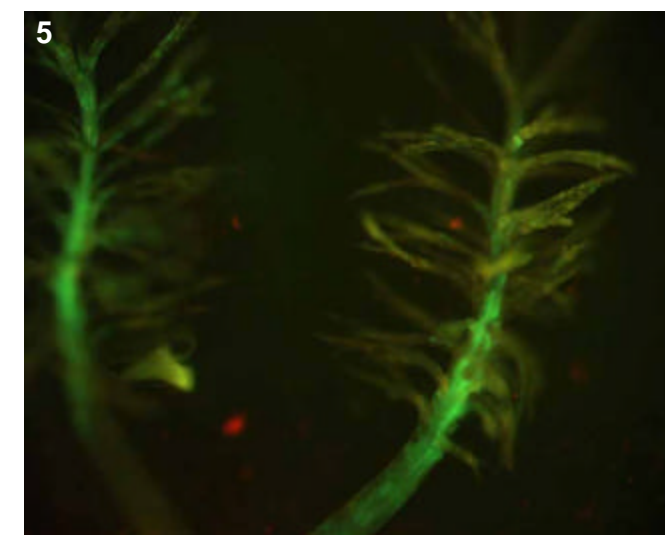
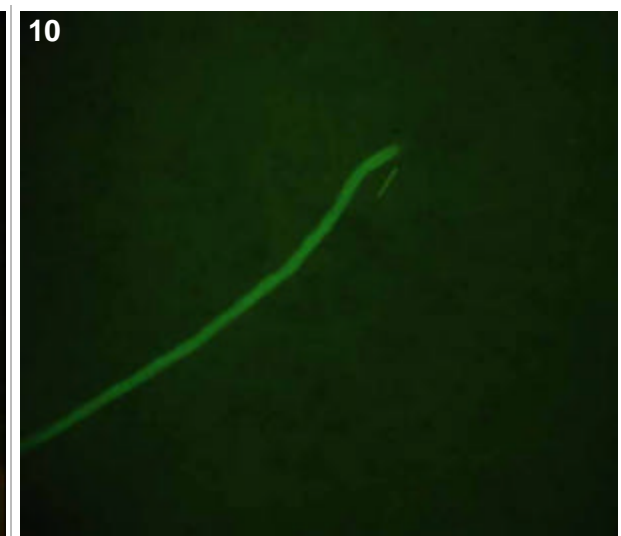
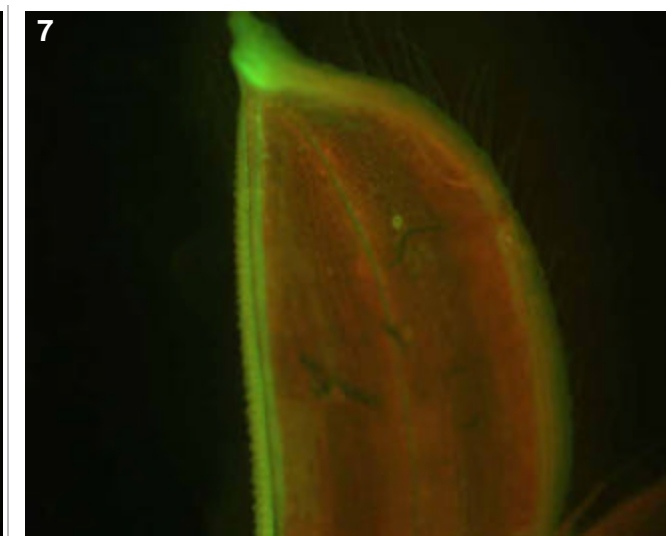
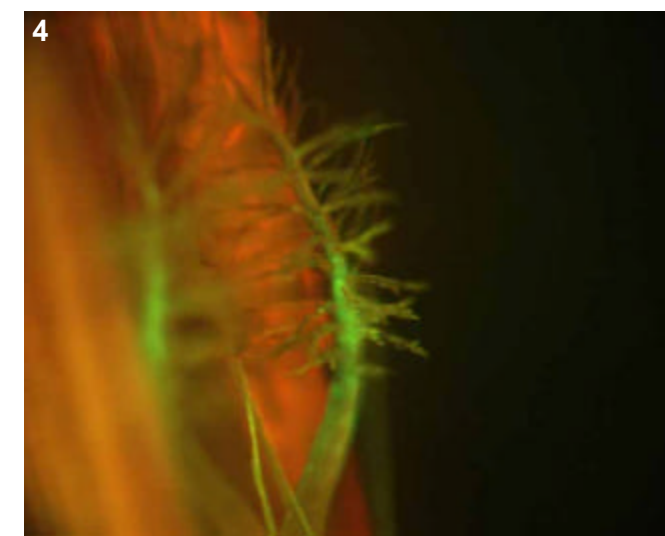
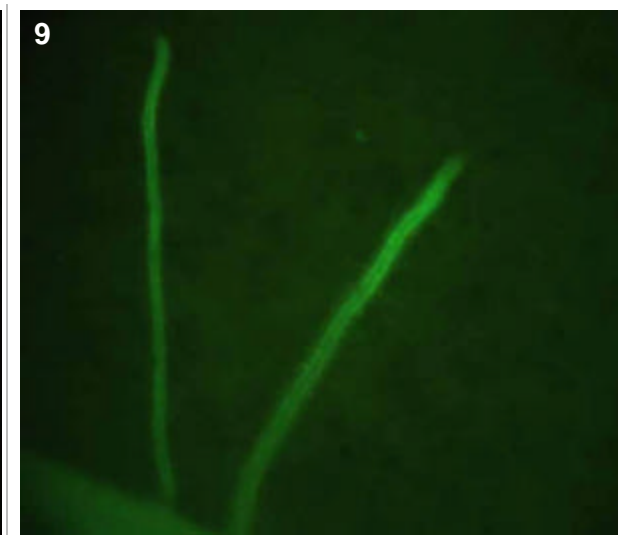
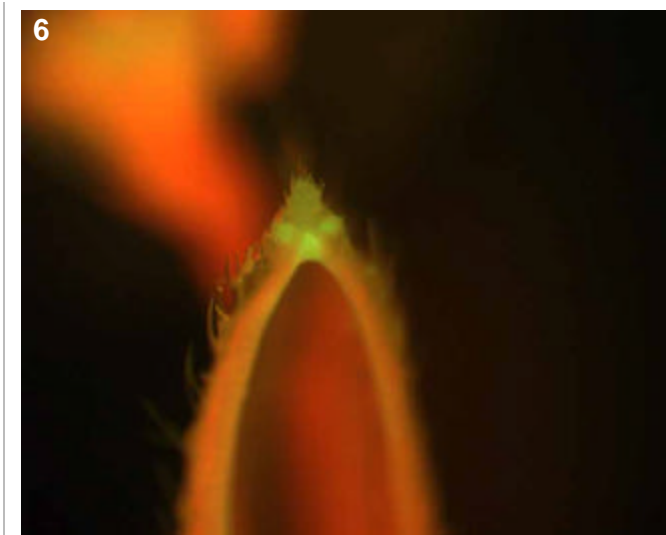
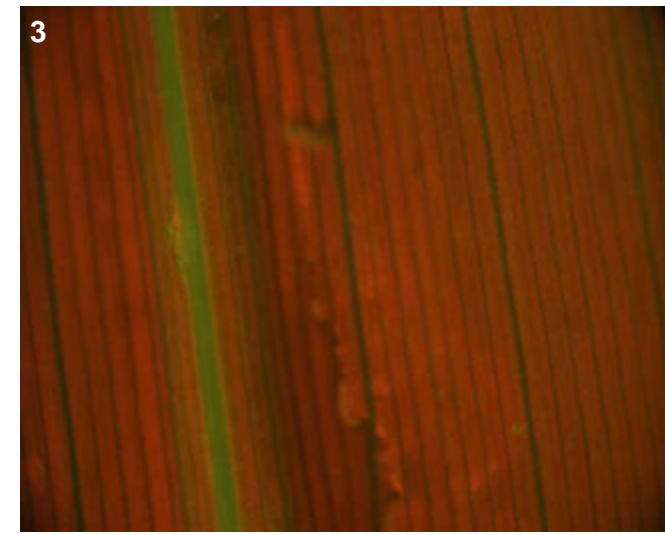
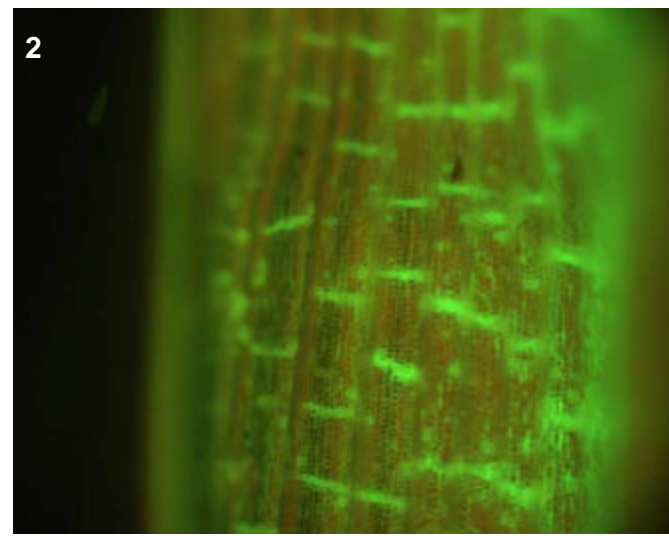
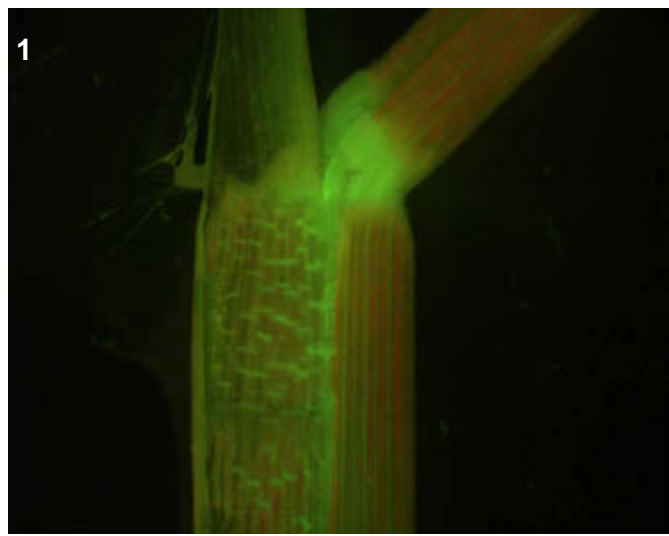
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 14



**T0 comments**  
 Stigma was GFP positive (pics 4 and 5) in only half of the flowers so be careful to check this line again in the next generation to verify the pattern.

**T1 seed comments**

**T1 seedling comments**  
 Bright roots, it crowns it appears epidermal or root cap (pic 8) while in lats (pics 9-10) it looks vascular. Expression in collar (pic 11) is faint.



# Genotype: ARG A06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

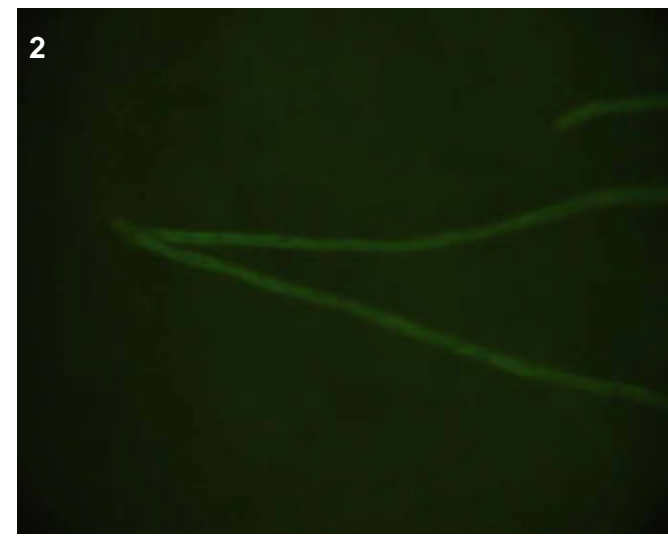
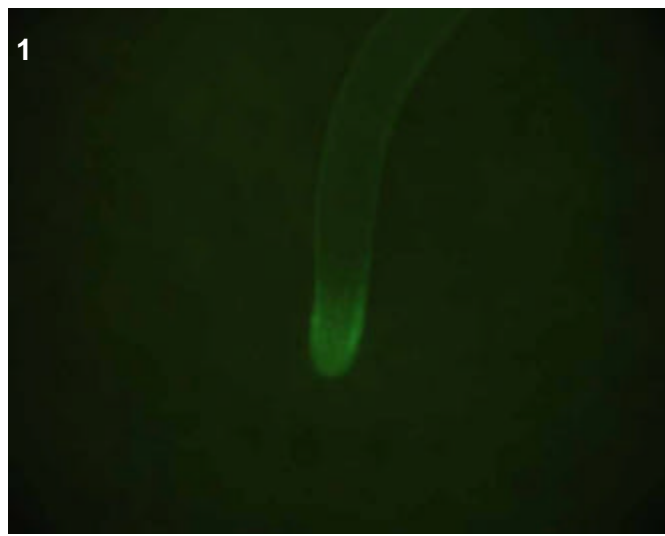
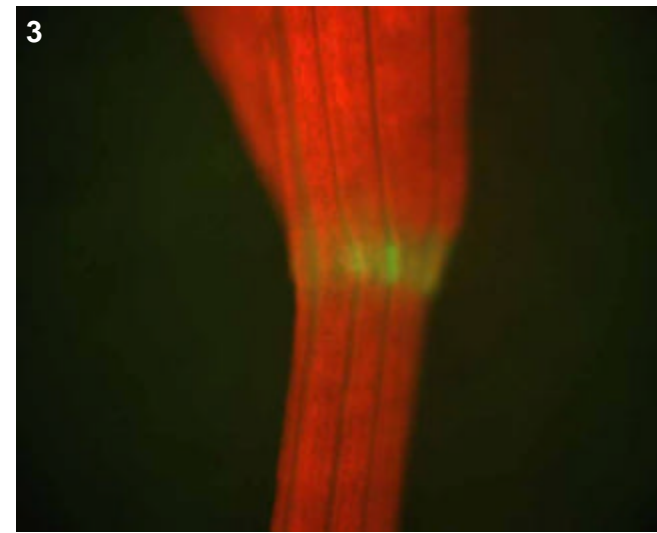
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 2



## T0 comments

## T1 seed comments

## T1 seedling comments

Perhaps epidermal expression in the roots (pics 1-2)?

# Genotype: ARG A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

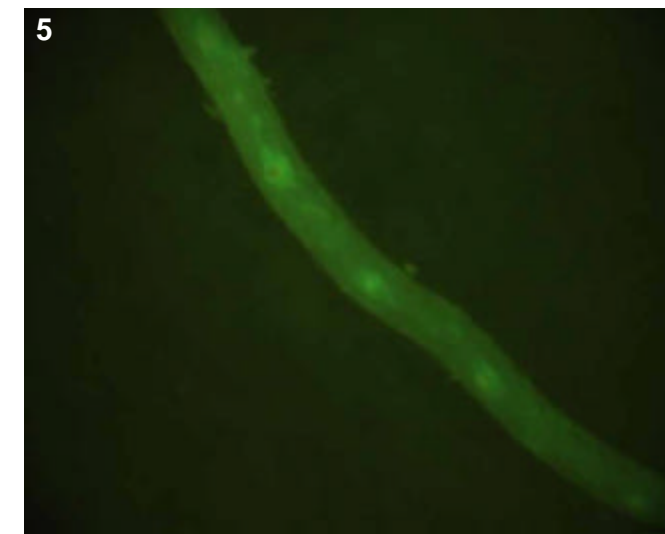
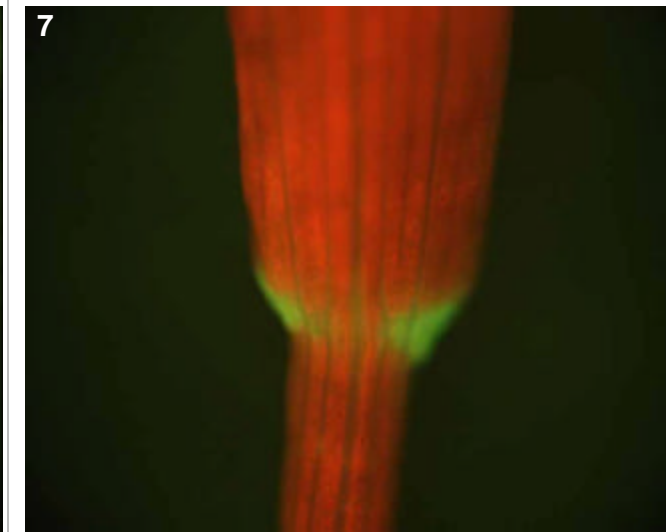
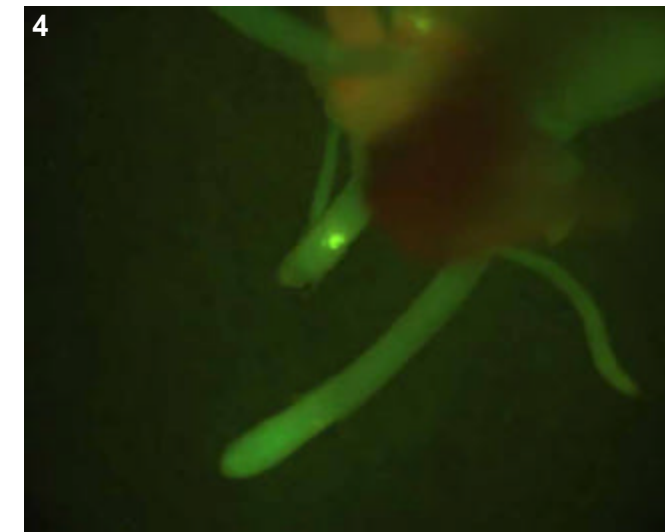
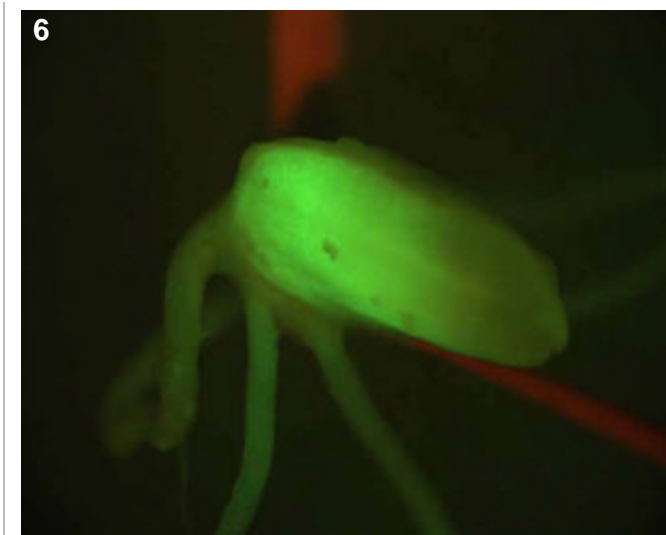
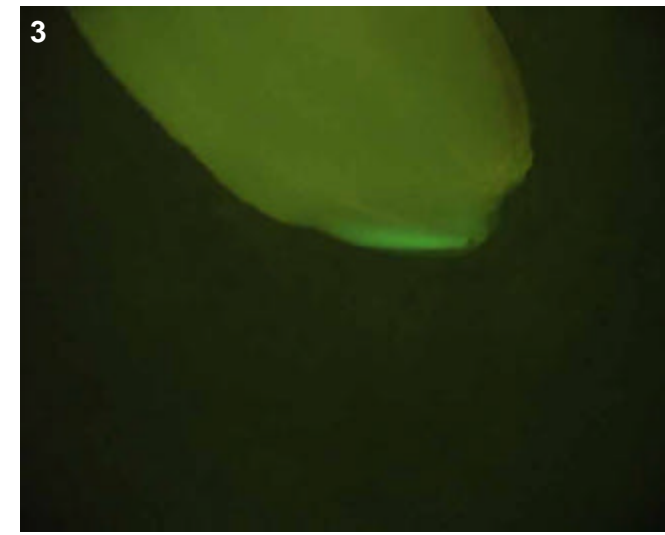
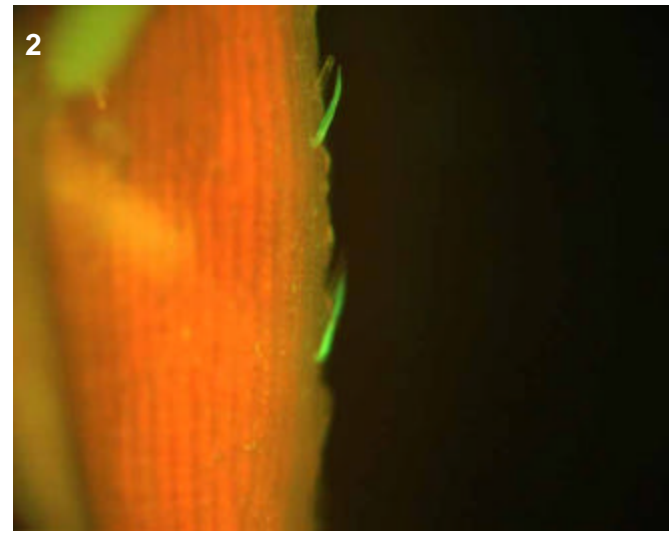
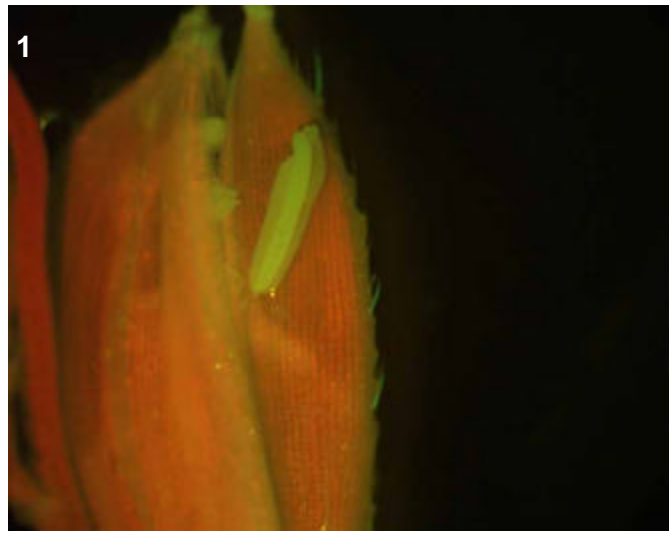
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 13



### T0 comments

The large trichomes of the flower.

### T1 seed comments

1/5 seeds had faint expression in the embryo.

### T1 seedling comments

Quite general expression throughout the root (pics 4-5).

# Genotype: ARG A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

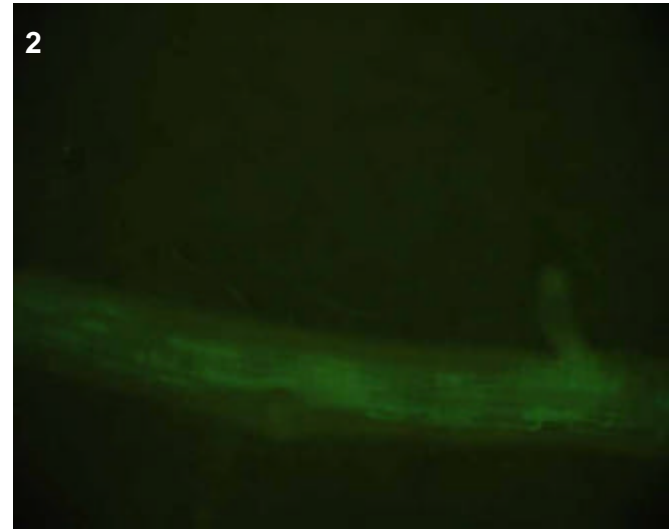
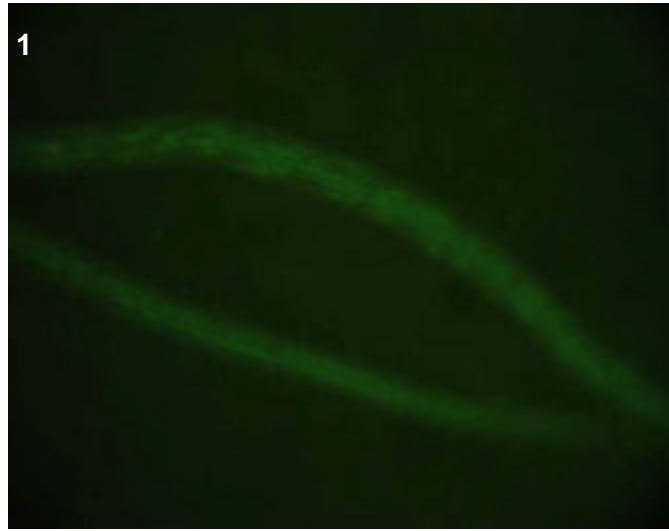
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 8



## T0 comments

## T1 seed comments

## T1 seedling comments

A rather patchy expression pattern specific to the crown roots (pics 1-2). The patchy look appears to be caused by random epidermal or cortical cells expressing GFP near the root surface, seen best in picture 2.

# Genotype: ARG B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

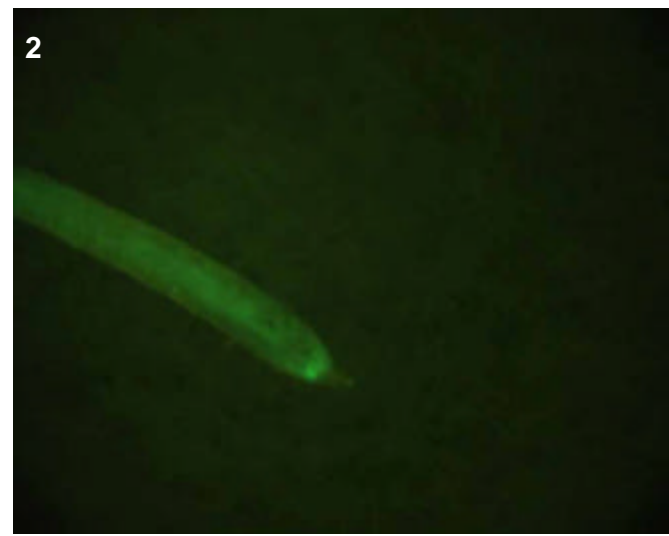
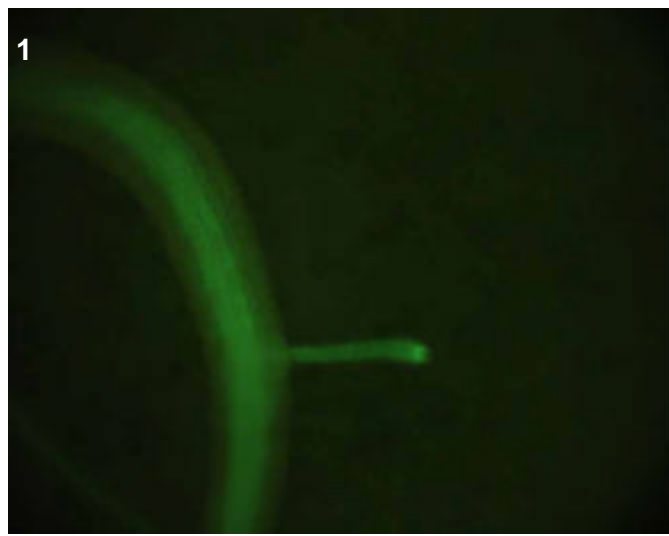
YES, 1 GFP+ plant

**Confocal?**

YES

**Number T2 seed produced:**

0

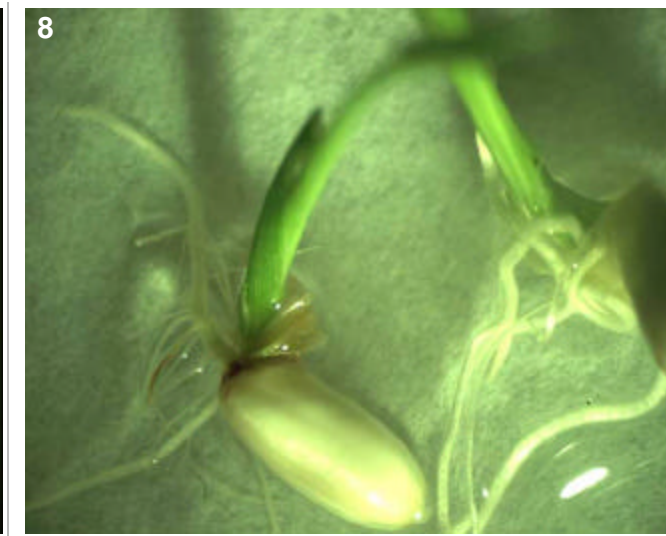
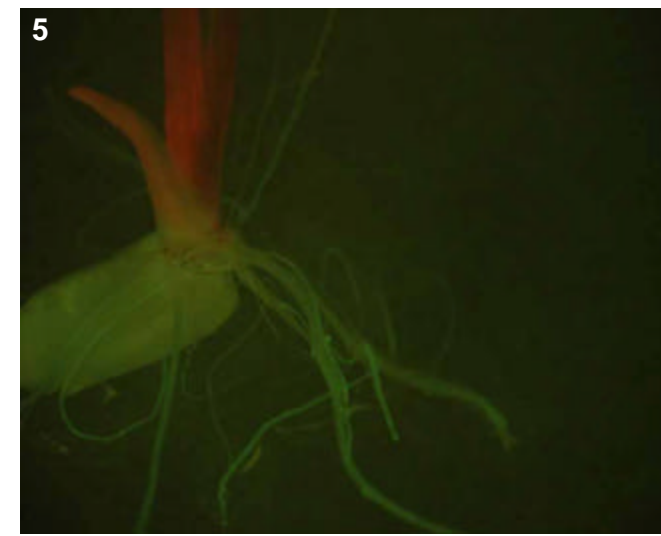
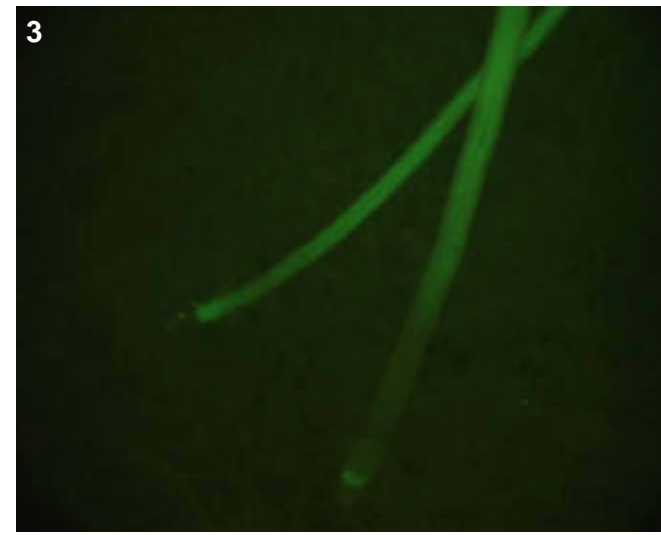


### T0 comments

### T1 seed comments

### T1 seedling comments

A root mutant with GFP expression specific to the root. Root expression appears general, but brighter in vascular (pics 1-3). Mutant phenotype--very small, atrophied seminal root and crown roots. Lots of long small laterals (pics 4-5). 2/5 plants were mutant (6-7). Pic 8 compares mutant (on left) to non-GFP expressing sibling (on right). I moved one mutant to greenhouse, confocalled the other.



# Genotype: ARG C01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

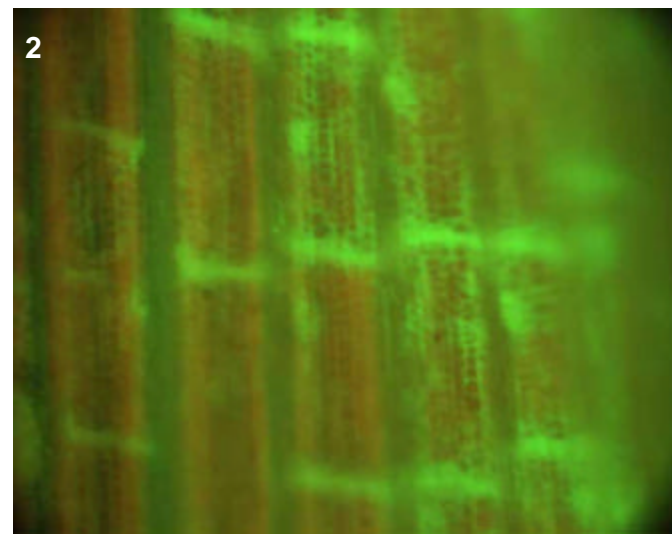
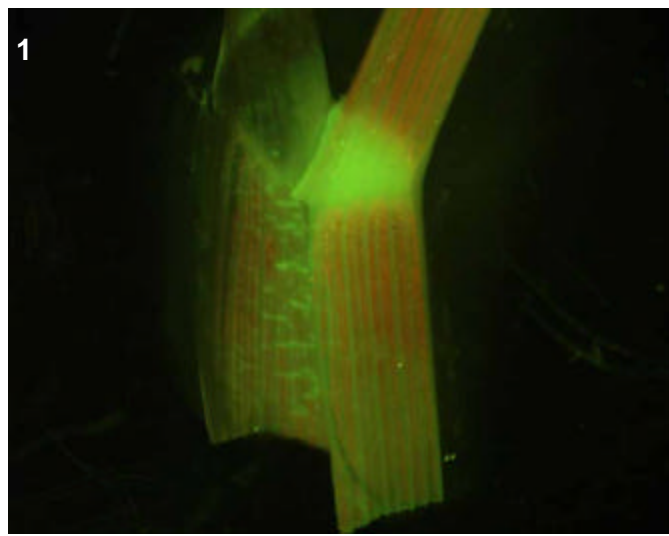
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 4



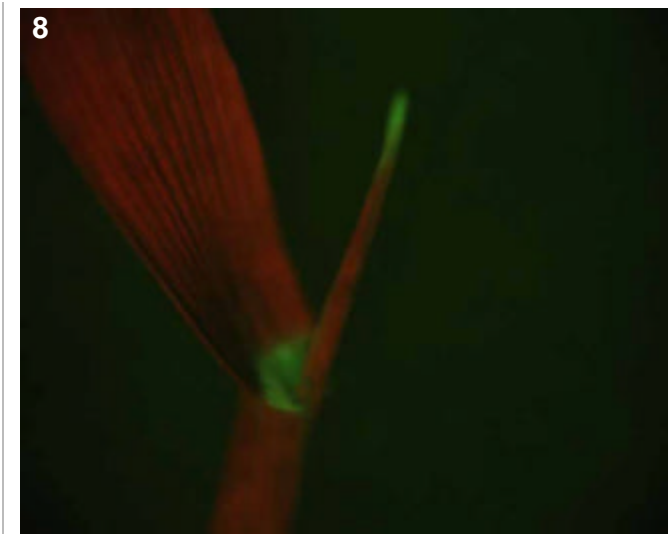
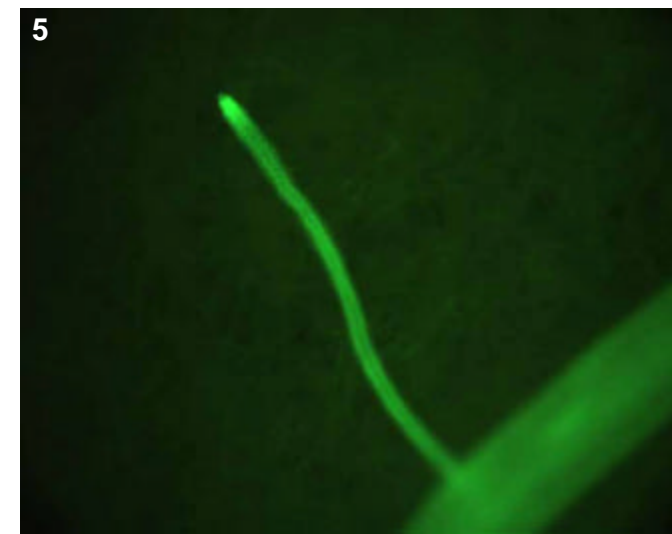
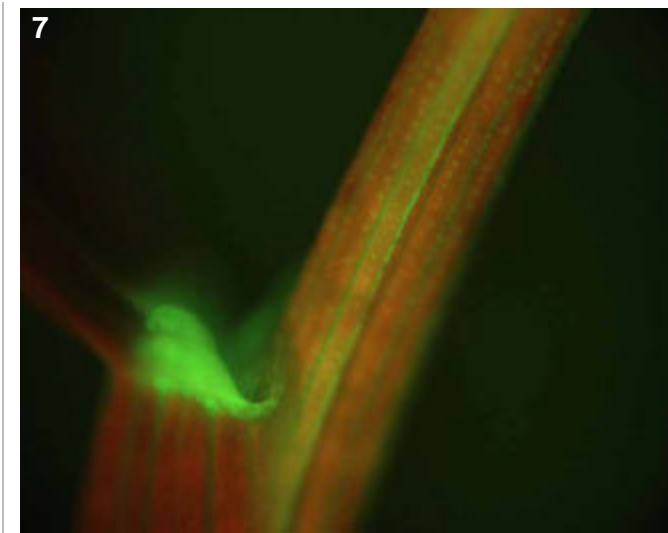
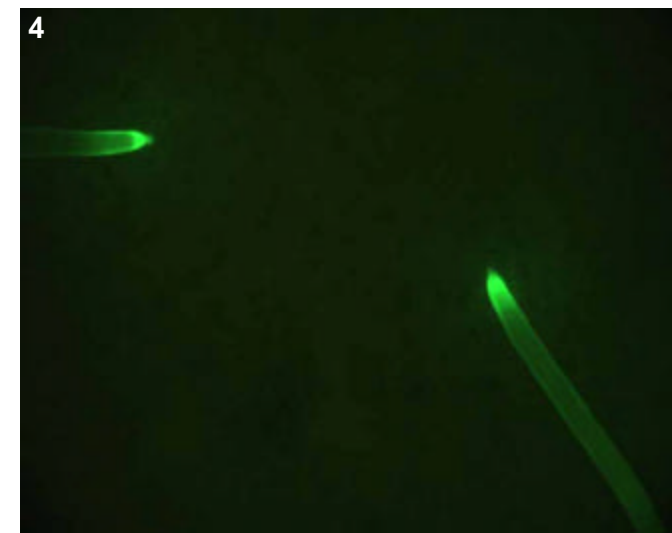
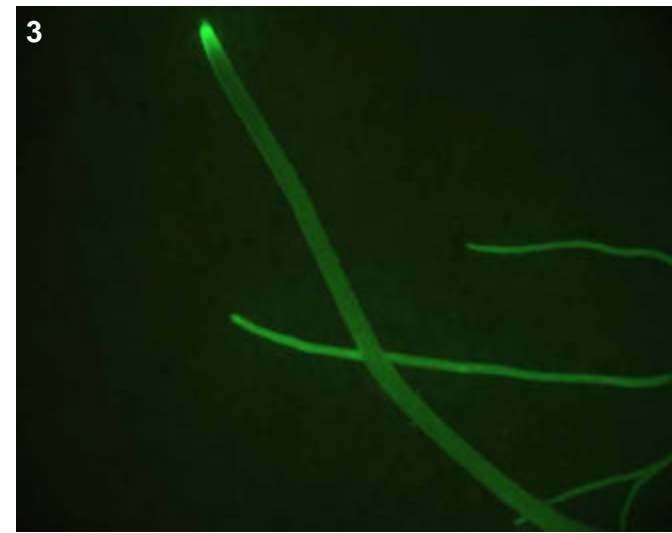
### T0 comments

### T1 seed comments

There may have been faint expression in the scutellum, but too faint to be sure.

### T1 seedling comments

Very bright roots (pics 3-5), endosperm (6) and shoot (pics 7-8). Looks like bright epidermal in crown roots (3-4) and lats (5). Note the bright collar, sheath vascular and guard cells in pic 7.



# Genotype: ARG C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

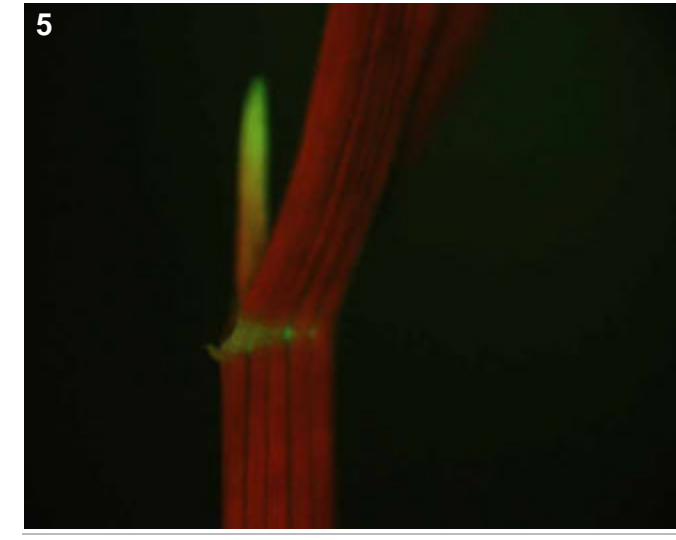
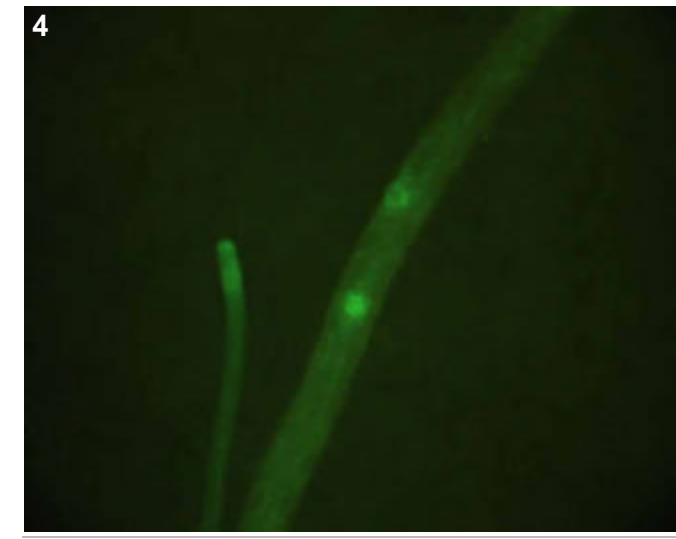
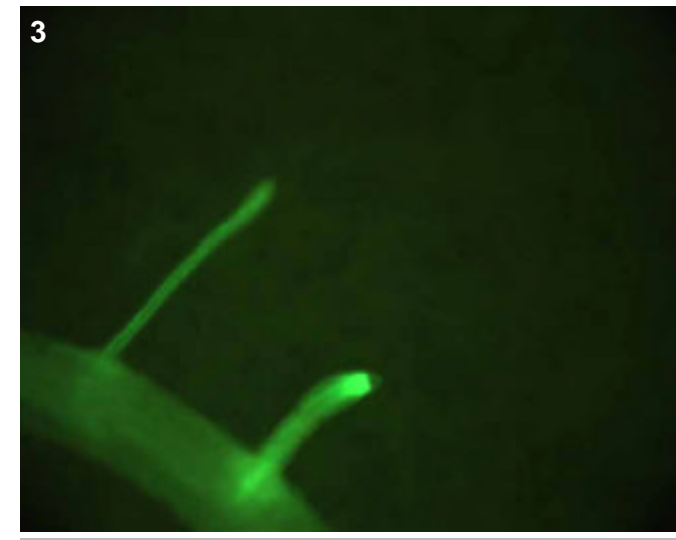
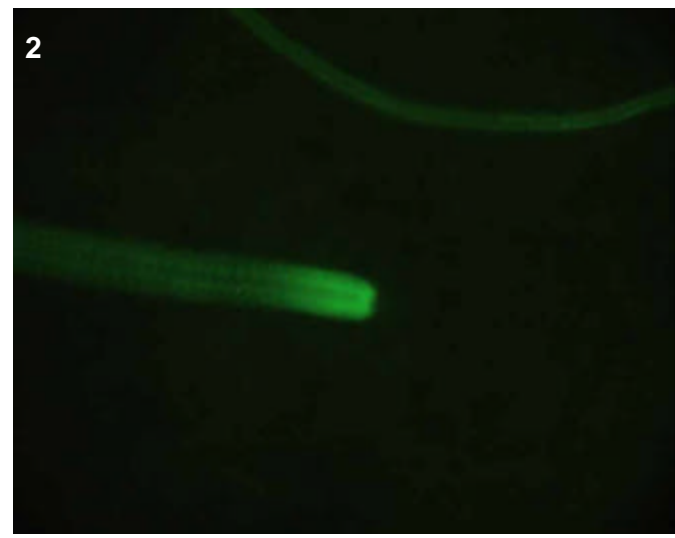
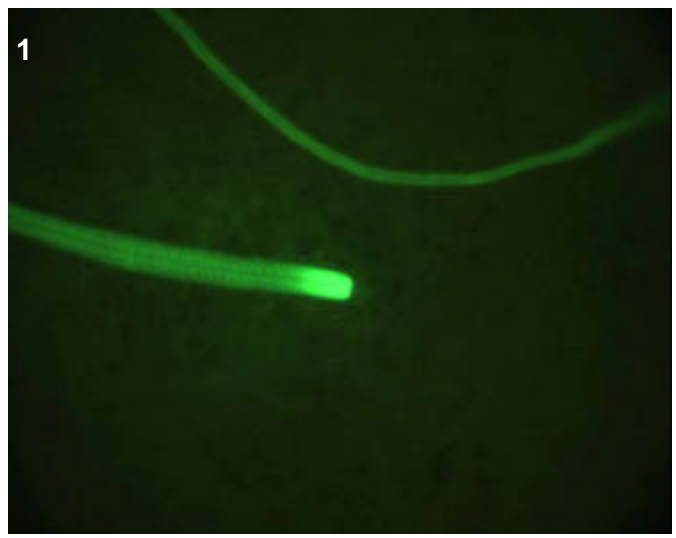
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?** WIP

Number T2 seed produced: 4



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
 Expression in roots was very bright (pics 1-4) and perhaps is cortical based on the appearance of the root in pic 2.

# Genotype: ARG D12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

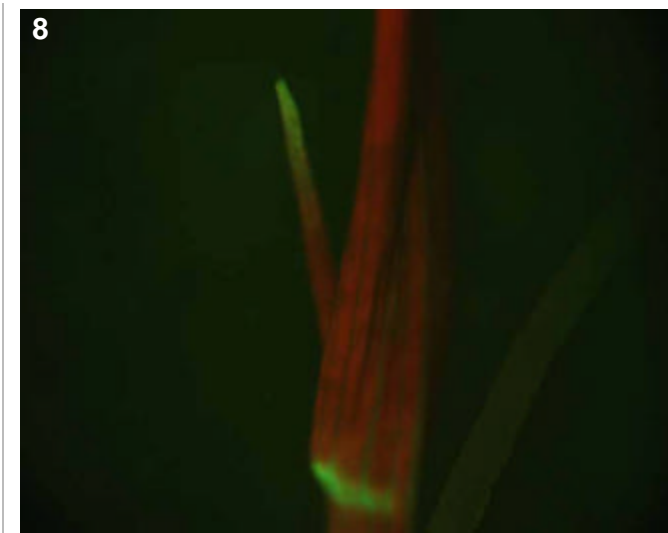
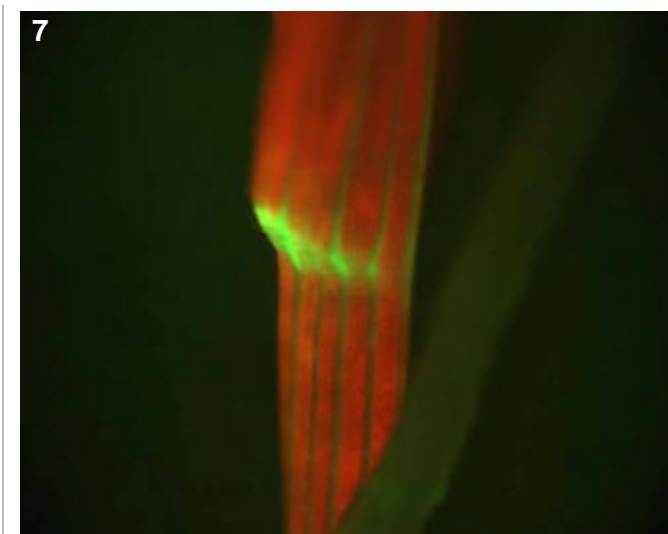
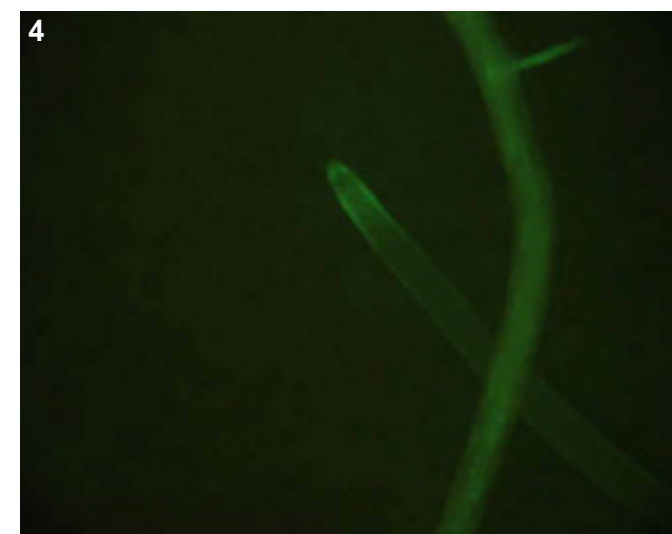
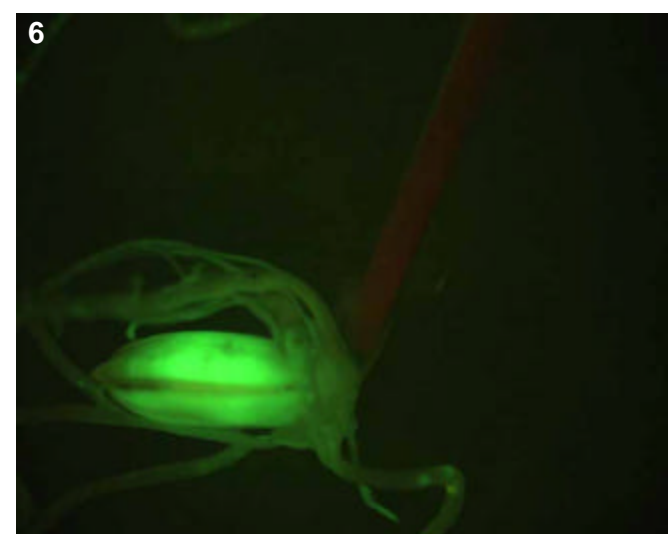
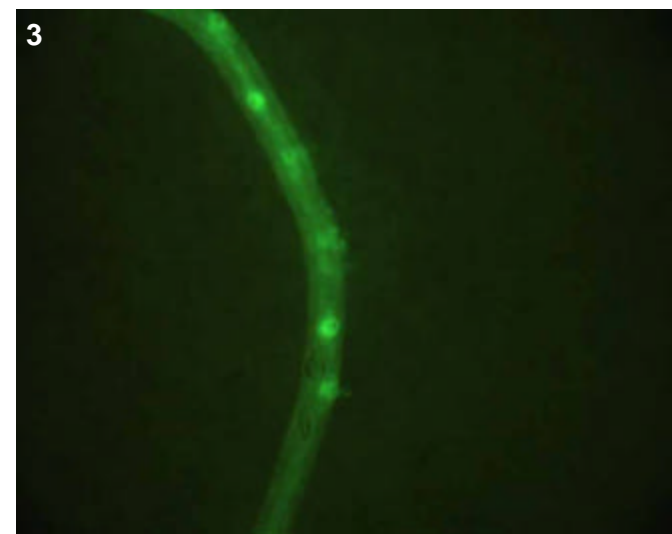
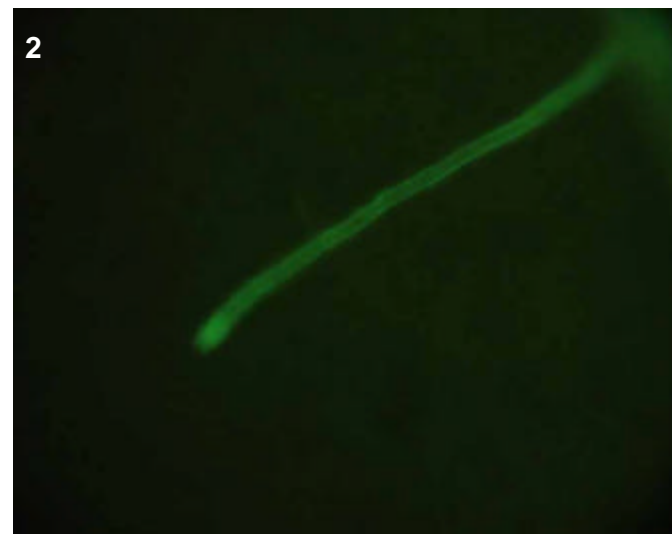
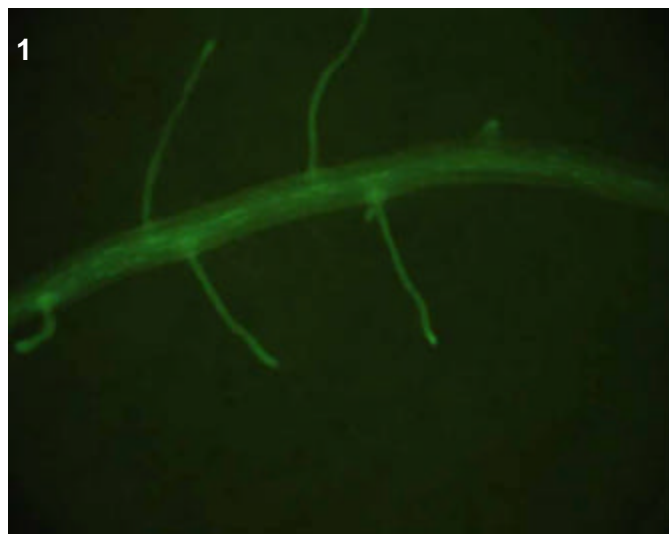
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 15



### T0 comments

All of the pictures for this line were lost. Flowers were too old for analysis.

### T1 seed comments

### T1 seedling comments

Note the bright digesting endosperm (pics 5-6). Root expression might be epidermal in crowns (pic 4) and cortical in lats (pics 1-2). Three plants were moved to the greenhouse, however, two of them died after transfer 3L pot leaving only 1 plant remaining.

# Genotype: ARG F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

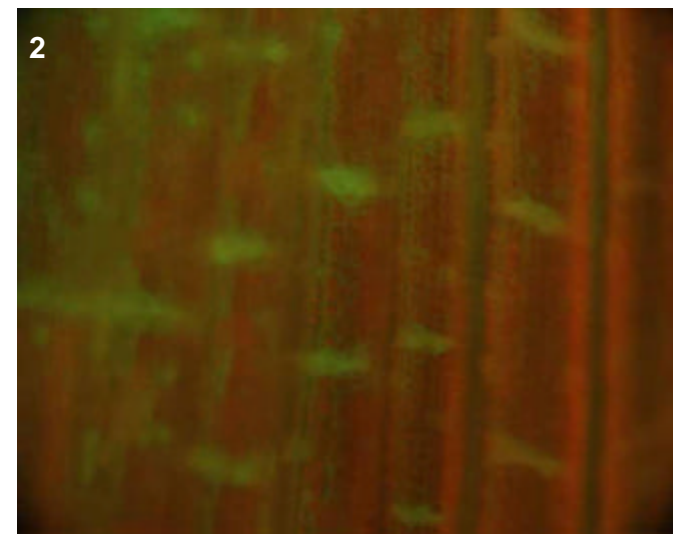
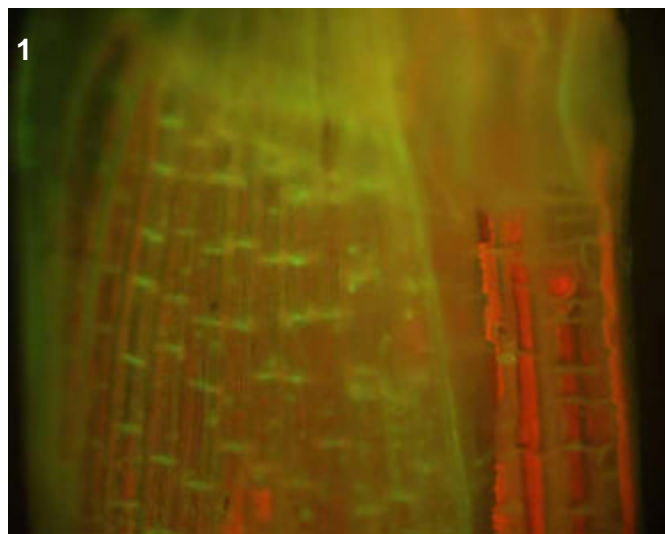
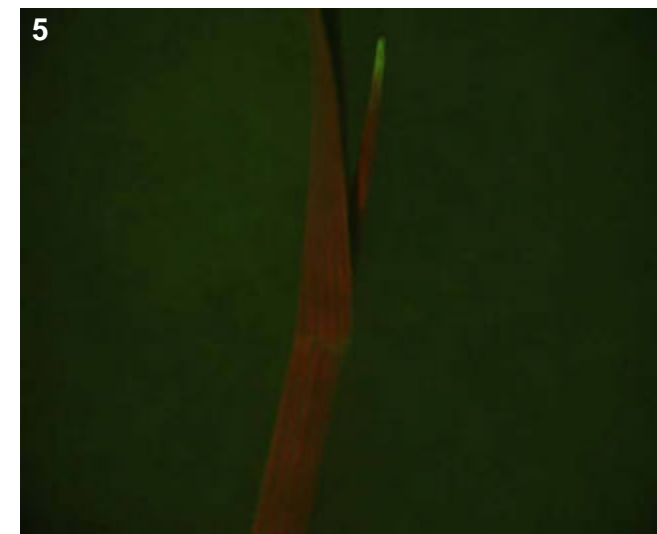
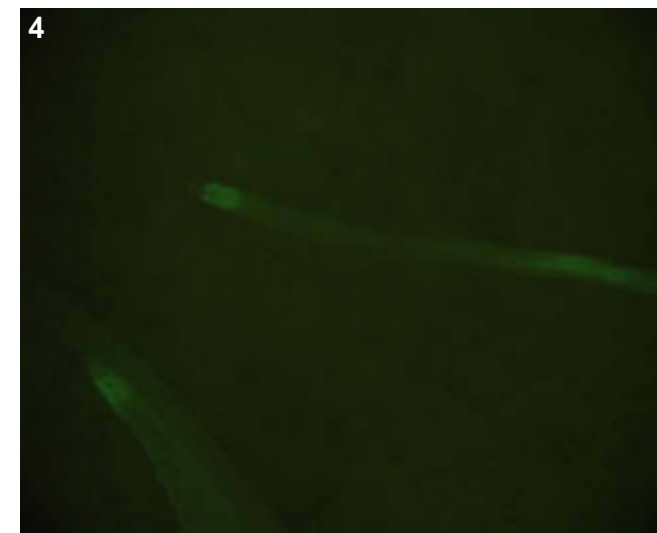
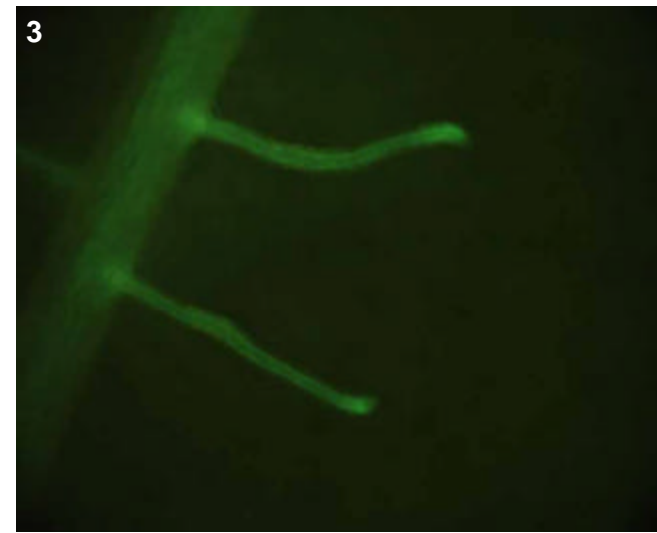
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 20



### T0 comments

Collar expression is very faint, sheath vascular is bright.

### T1 seed comments

### T1 seedling comments

Bright vascular expression in lats (pic 3) and note the interesting pattern in crowns (pic 4). Expression in shoot was most evident in the leaf tips, but there may have been vascular expression as well.



# Genotype: ARG F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

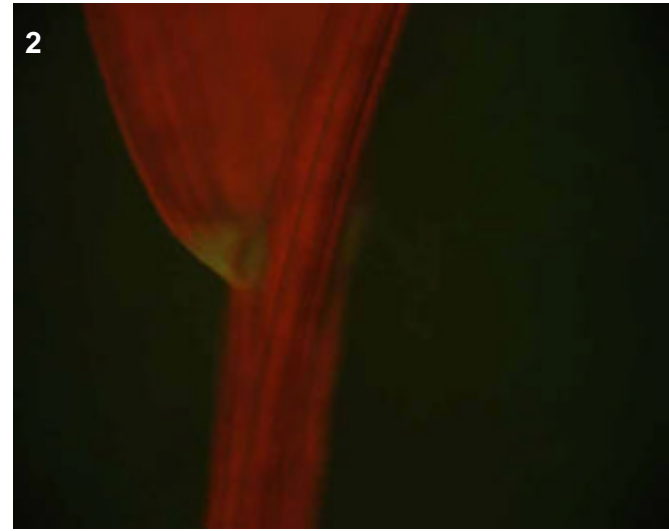
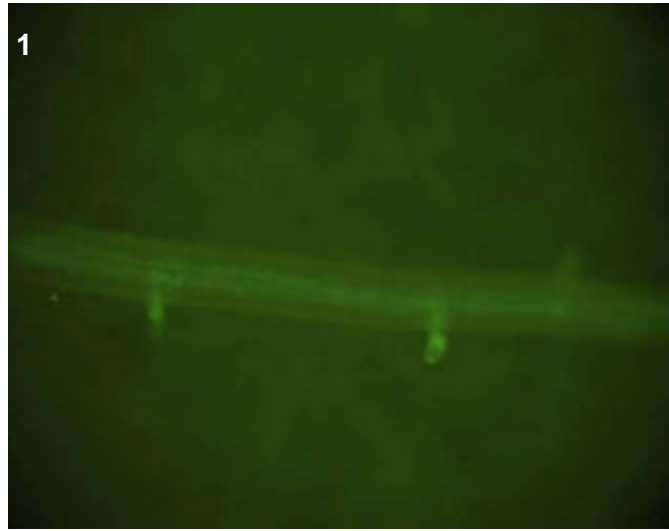
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 25



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint vascular expression in roots (pic 1) and in the collar (pic 2).

# Genotype: ARG H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

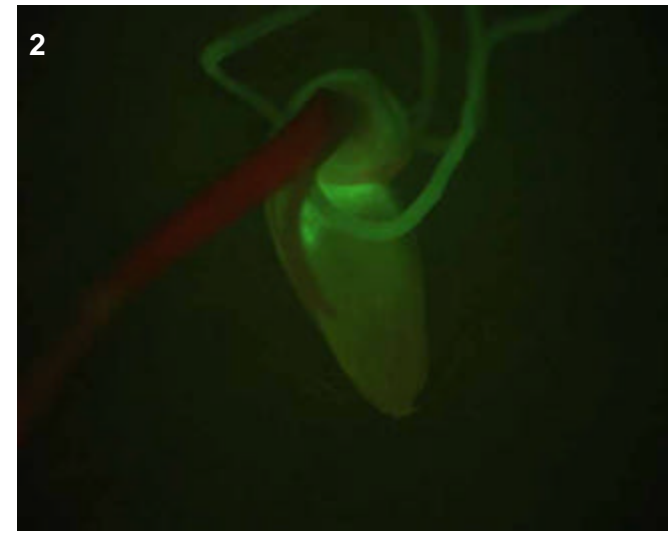
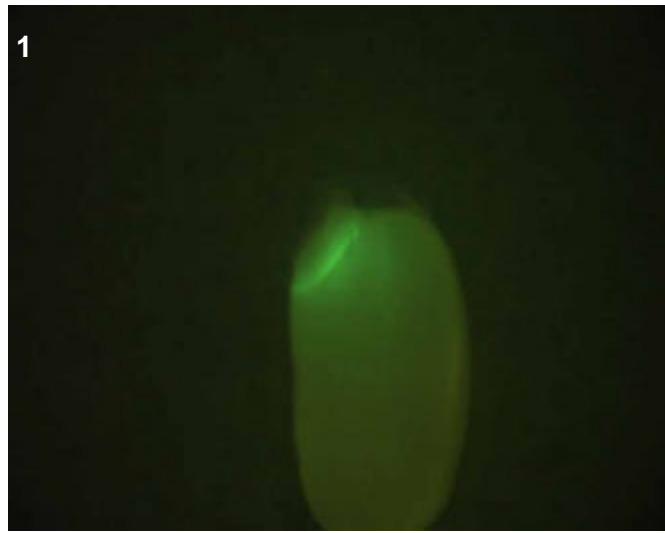
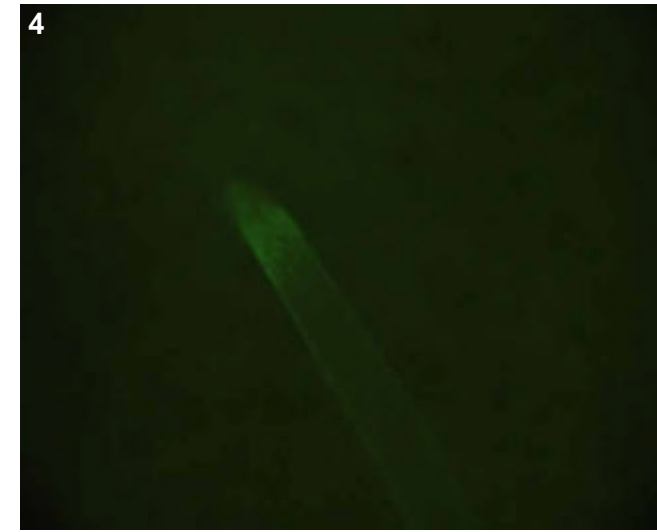
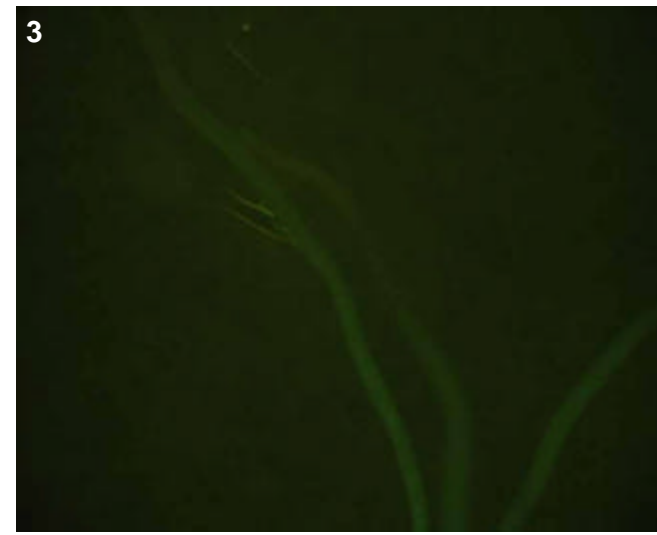
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 4



## T0 comments

## T1 seed comments

1/5 seeds had expression

## T1 seedling comments

Interesting root in that the brightest expression occurs in the older portion of the root. This expression was not very bright and difficult to photograph, but pic 2 shows it best. I didn't observe expression in lats. There was also faint epidermal expression around tips of crown roots (pic 4). Maybe faint collar?

# Genotype: ARH A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

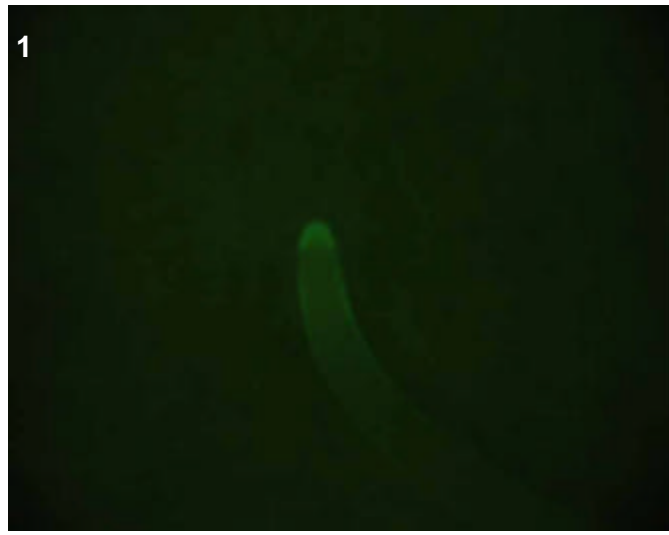
No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

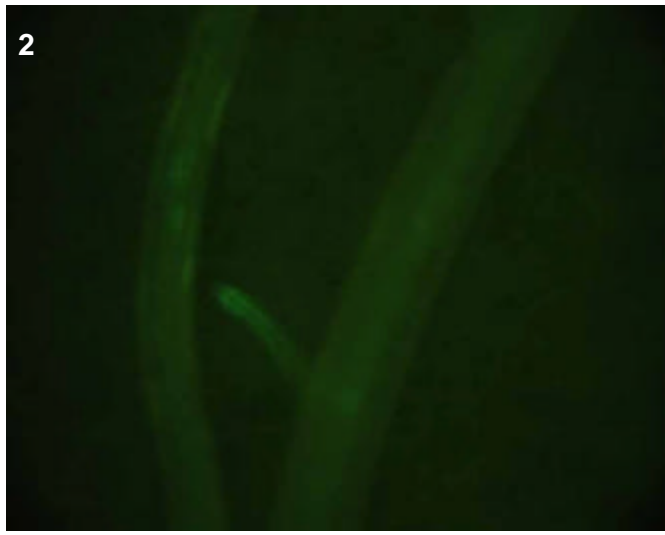
**Confocal?**

**Number T2 seed produced:** 0

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Quite weak expression specific to roots (pics 1-2). Maybe an epidermal pattern?

# Genotype: ARH B06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

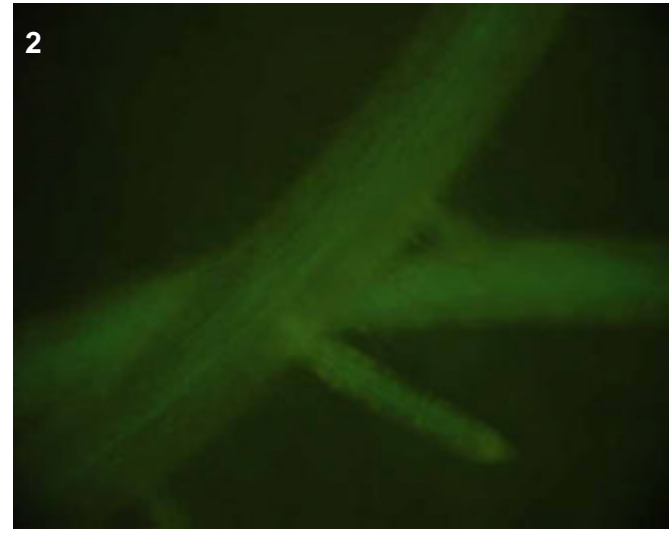
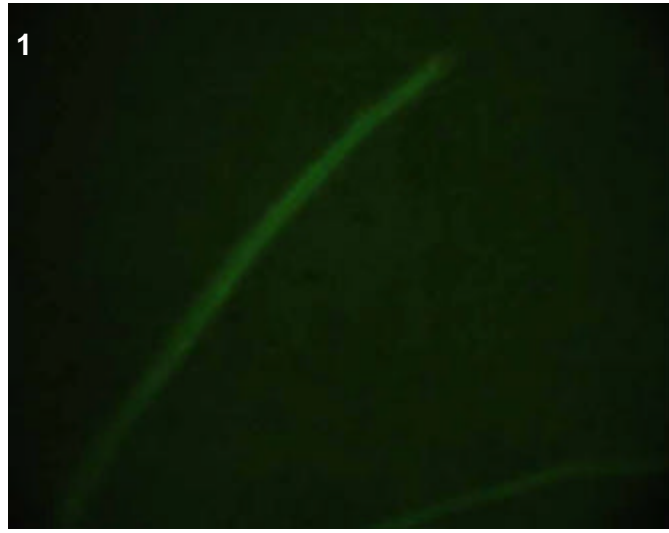
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 33



### T0 comments

### T1 seed comments

### T1 seedling comments

Weak, yet clearly vascular, pattern in the roots (pics 1-2).

# Genotype: ARH D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

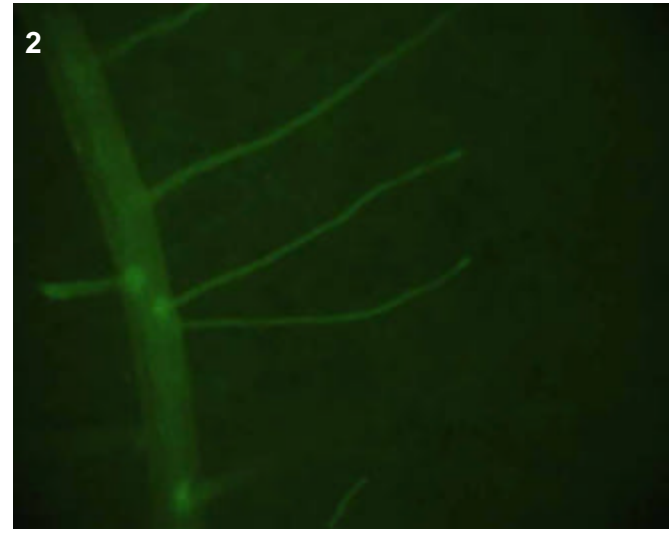
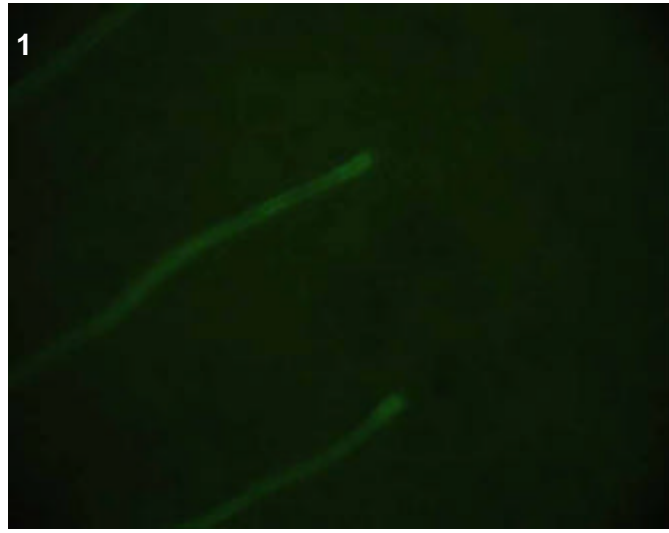
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 6



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium root vascular expression, the brightest expresser of the 5 seedlings was an albino.

# Genotype: ARH E03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

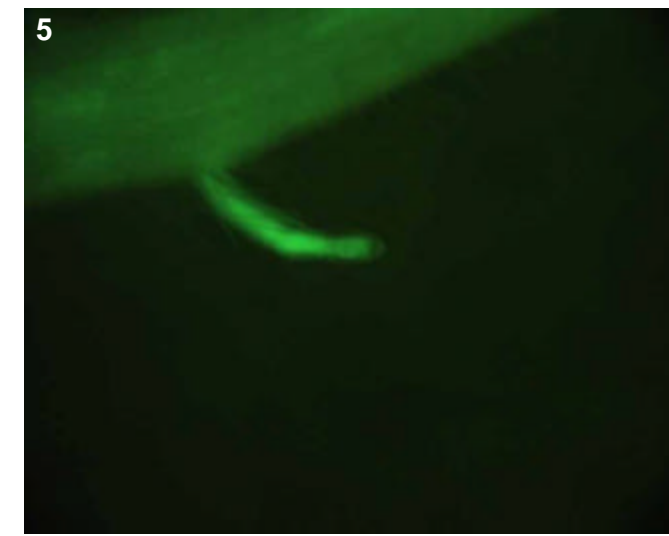
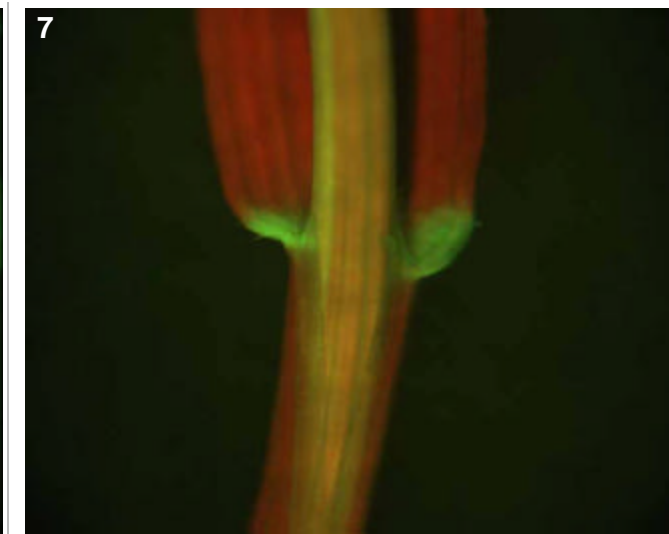
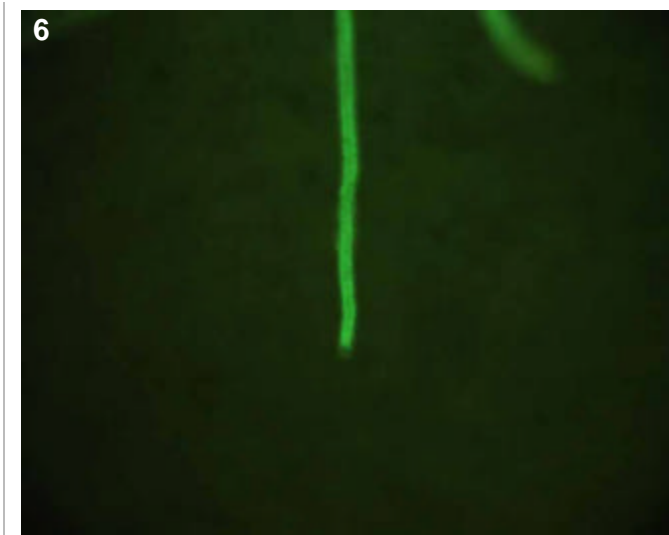
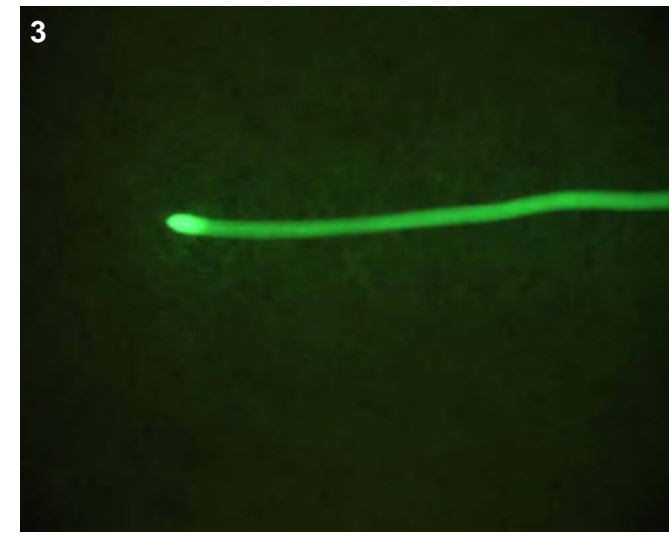
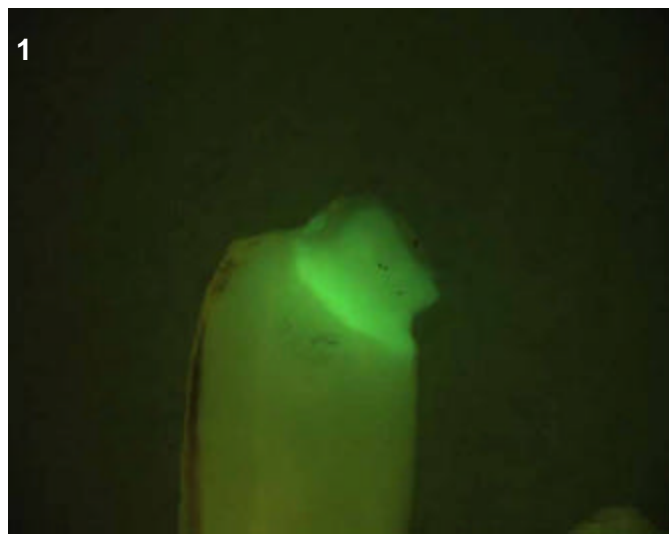
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 11



## T0 comments

## T1 seed comments

2/5 showed expression in the embryo and perhaps also the coleorhiza.

## T1 seedling comments

Very bright roots (pics 1-6), perhaps a cortical pattern? Note the interesting pattern in crown roots in pic 2. Also very bright shoots (pic 7), notice the bright collar and perhaps more general expression throughout the leaf tissue. Interestingly, 2/4 plantlets were looked pale--possibly a mutant phenotype linked to the insertion??

# Genotype: ARH G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

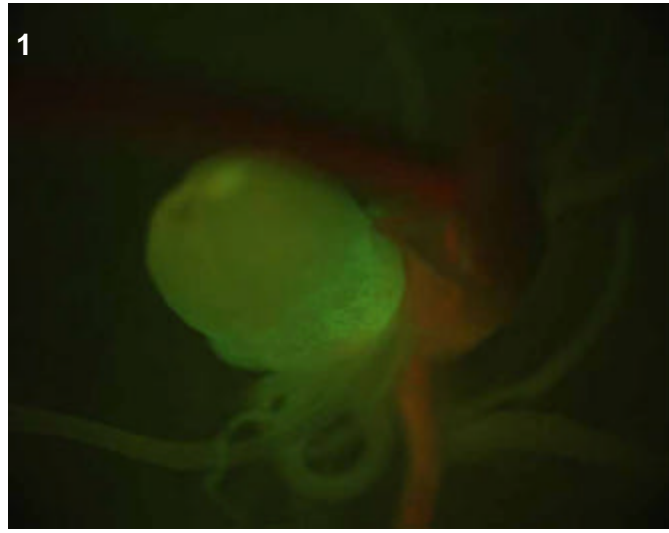
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 13



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium endosperm expression (pic 1), very faint root vascular expression.

# Genotype: ARI B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

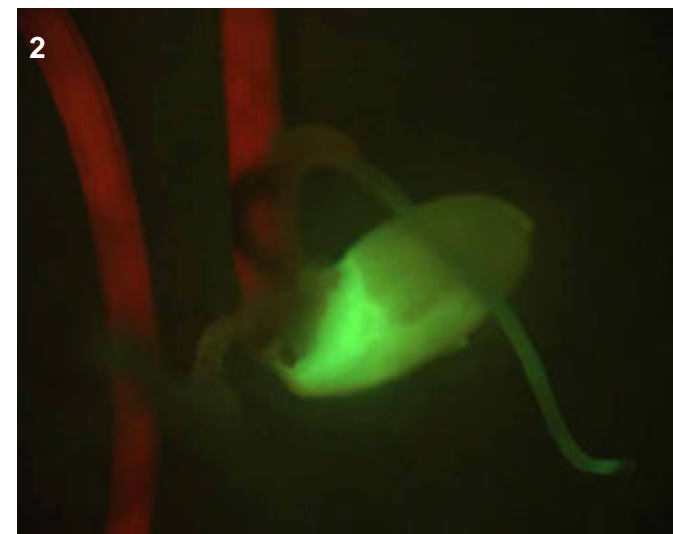
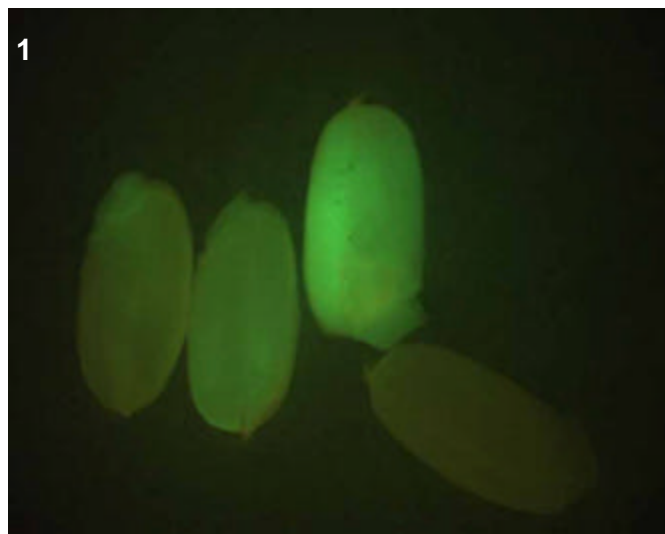
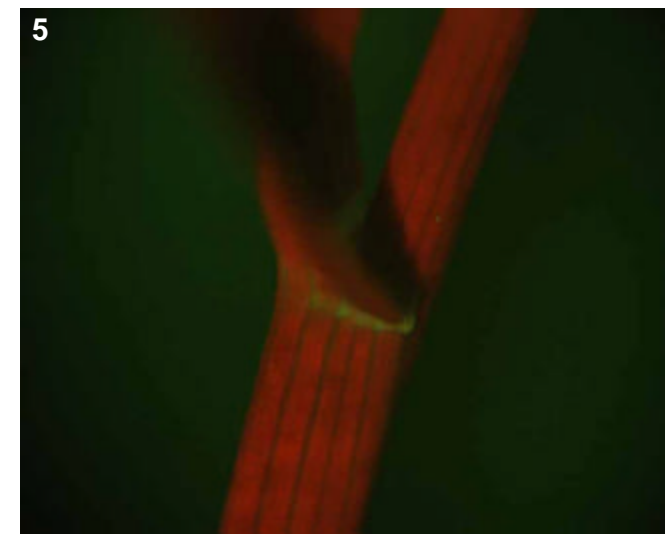
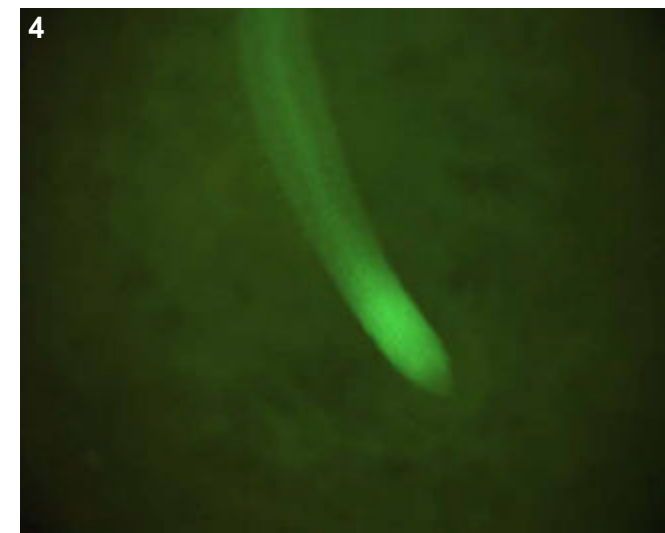
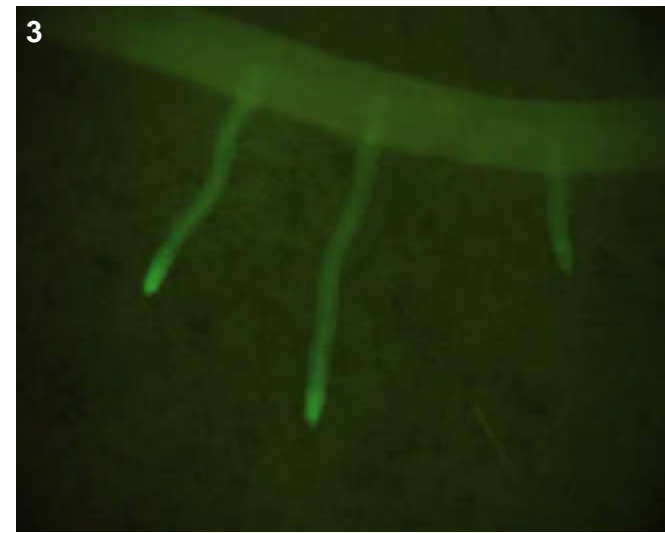
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 94



## T0 comments

## T1 seed comments

4/5 seeds had expression, patterns ranged from bright aleurone/endo (3rd seed from right in pic 1), to medium in aleurone/endo (2nd seed), to just medium embryo/coleorhiza (1st seed on right).

## T1 seedling comments

Possibly an epidermal pattern in the roots (pics 3 and 4)? All 5 of the seedlings were GFP positive.



# Genotype: ARI B12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

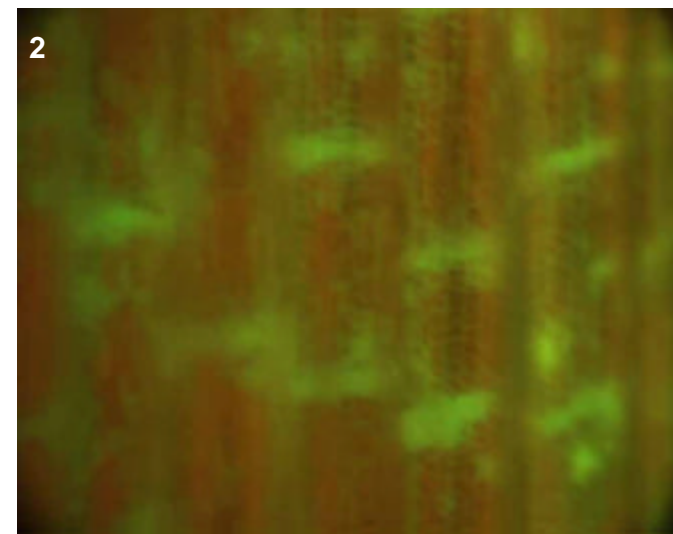
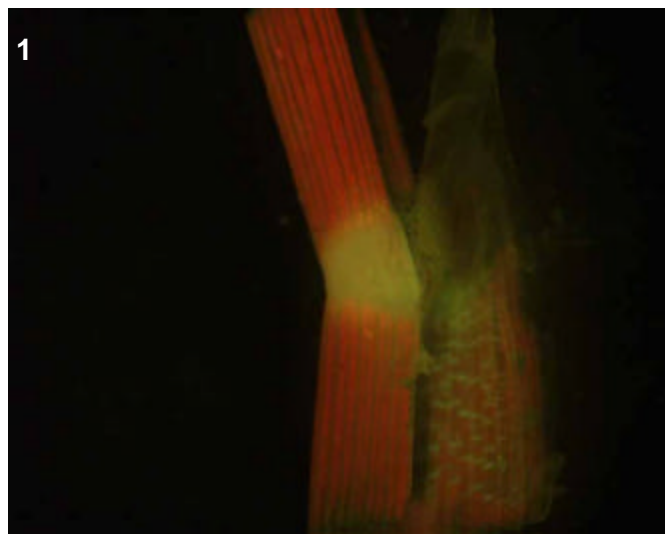
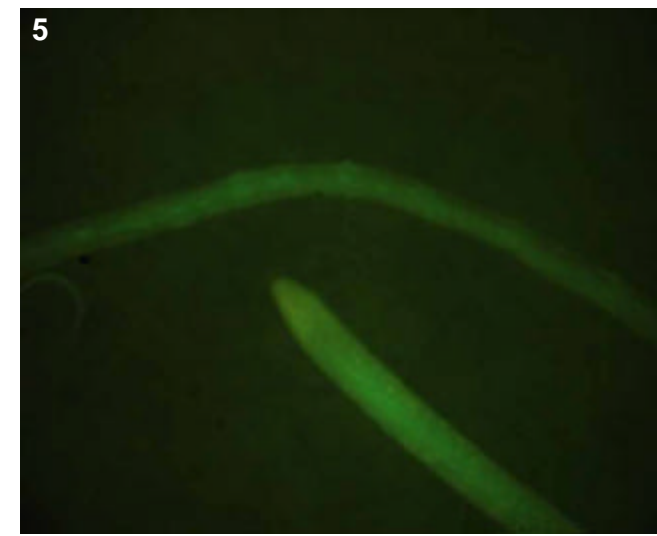
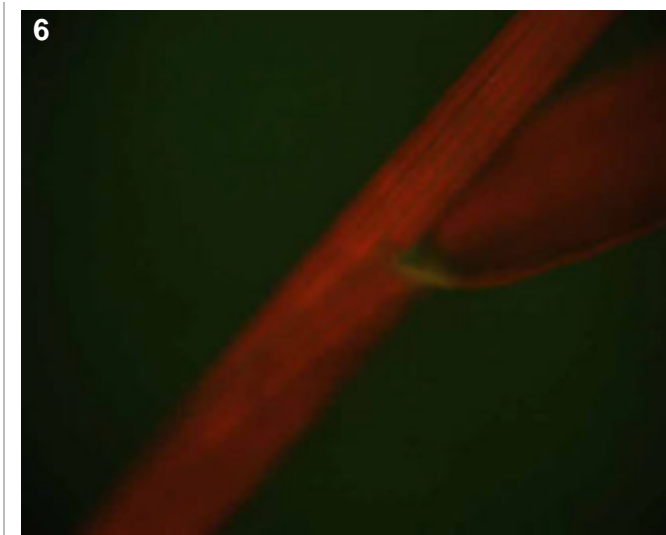
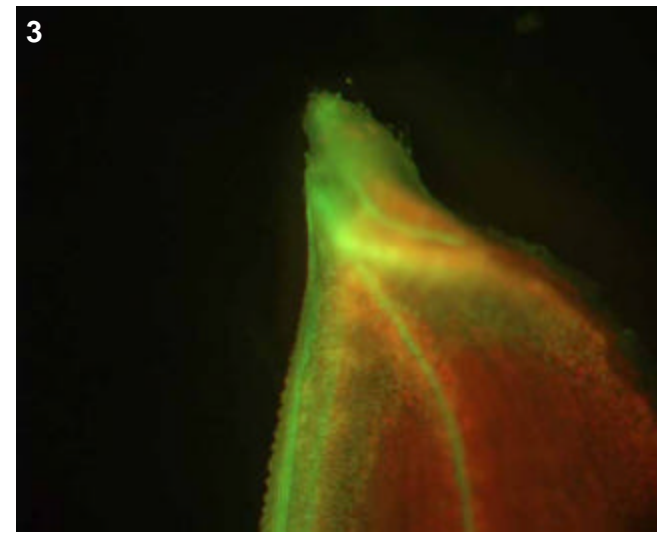
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 69



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression was brightest in the roots (pics 4-5) while the collar expression was faint (pic 6).

# Genotype: ARI D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

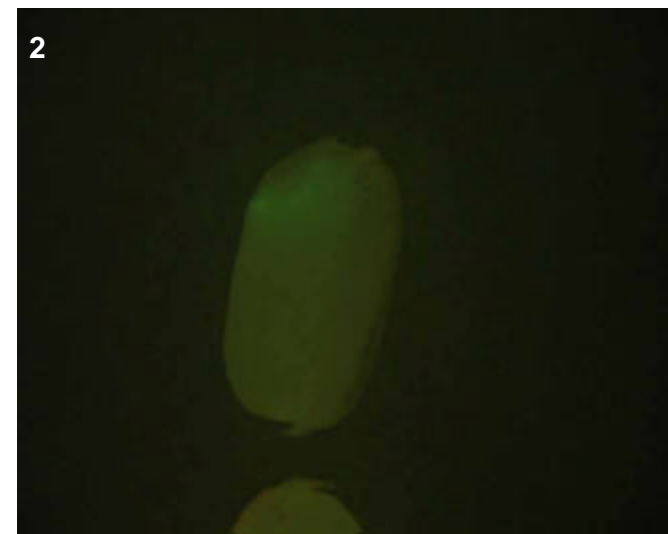
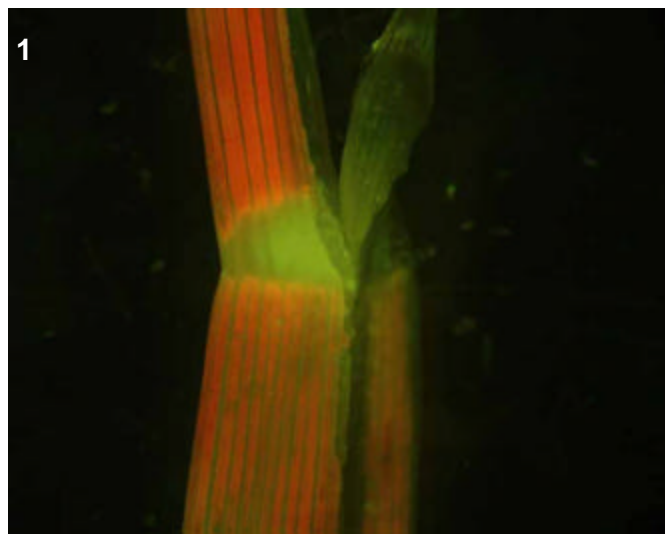
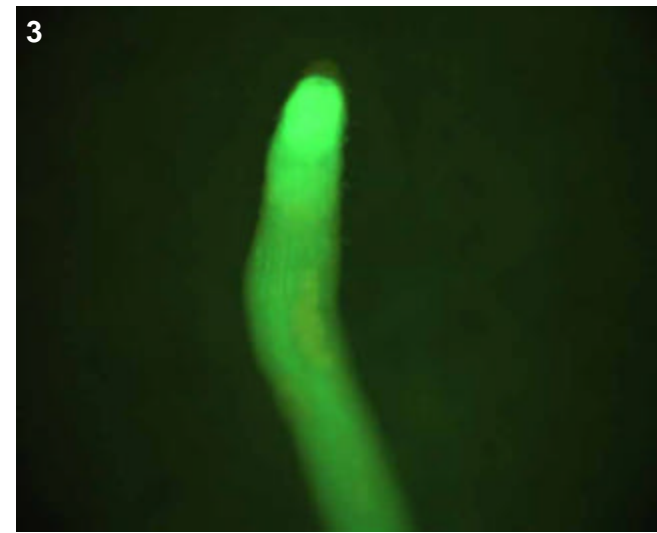
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 47



## T0 comments

## T1 seed comments

3/5 seeds had faint expression in the embryo (pic 2).

## T1 seedling comments

Root expression was brightest at the point of lateral root emergence and also at root apex of both laterals and crowns.

# Genotype: ARI F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

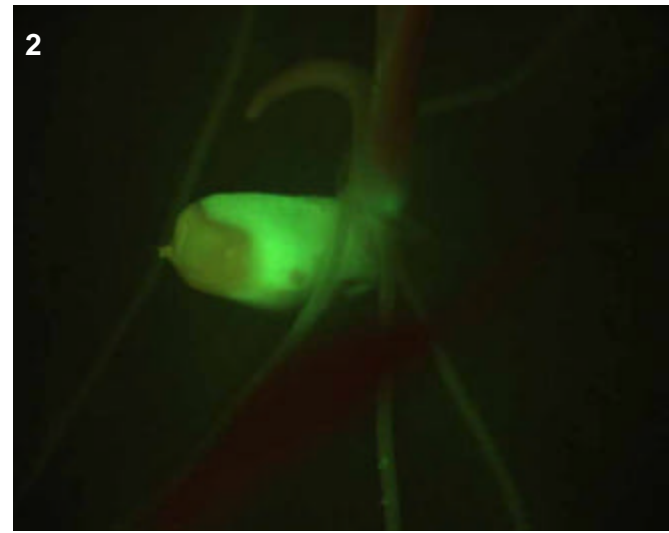
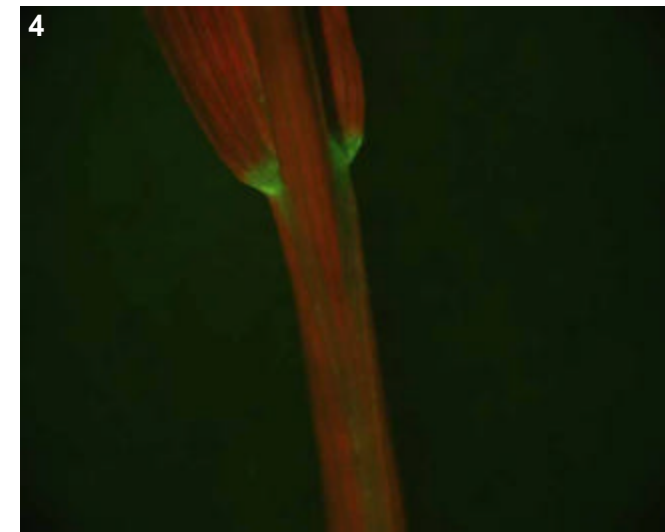
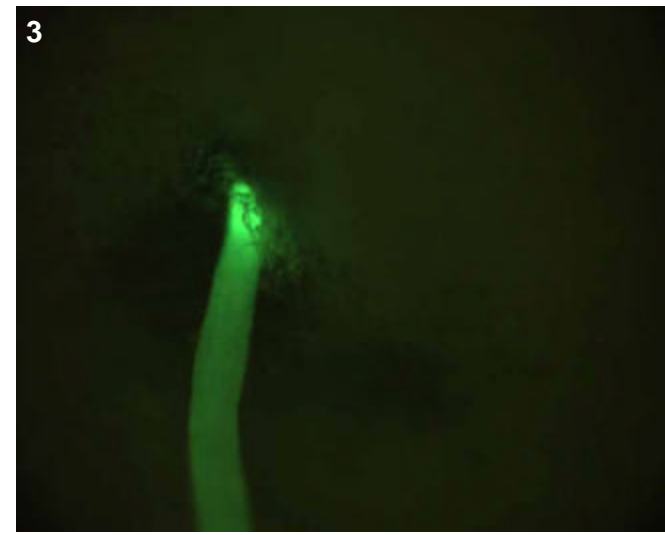
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 178



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

Looks like either an overall vascular or epidermal pattern throughout the root and shoot, confocal will clarify.

# Genotype: ARI F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

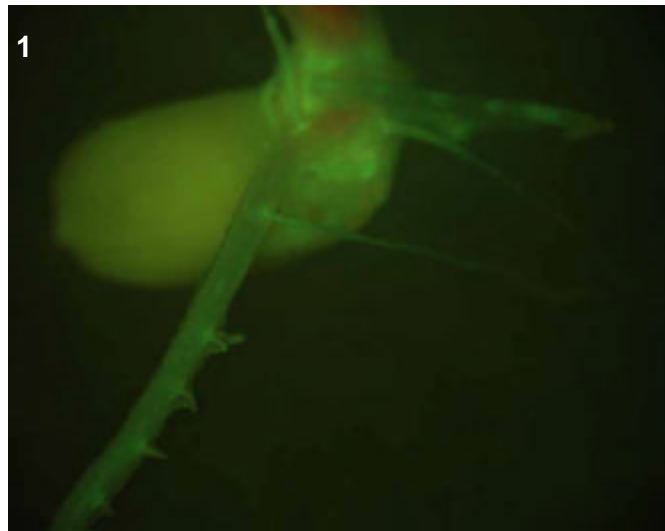
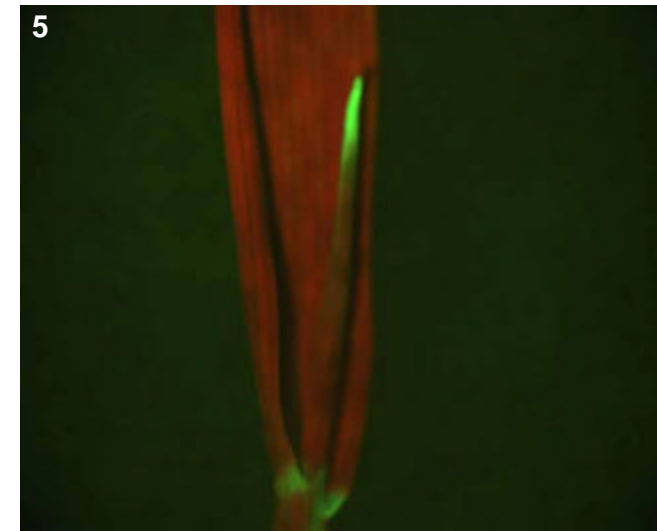
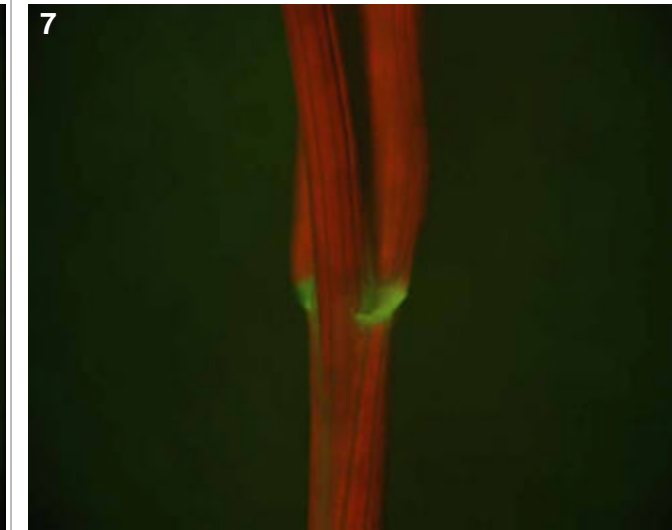
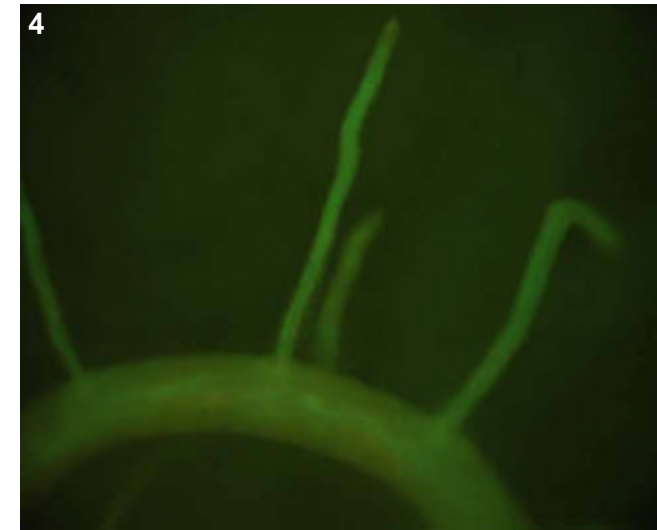
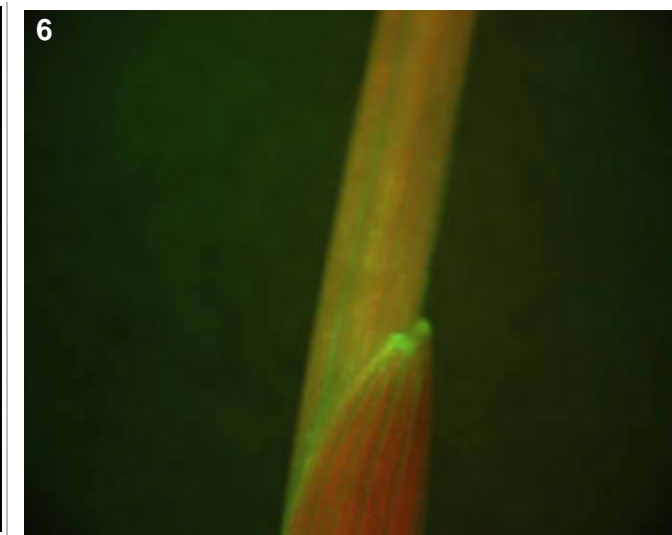
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 112



## T0 comments

## T1 seed comments

## T1 seedling comments

Perhaps a phenotype here. There were two GFP+ seedlings, however, the one with brighter GFP had a smaller, more compact root (pic 3) and shoot.

# Genotype: ARI G07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

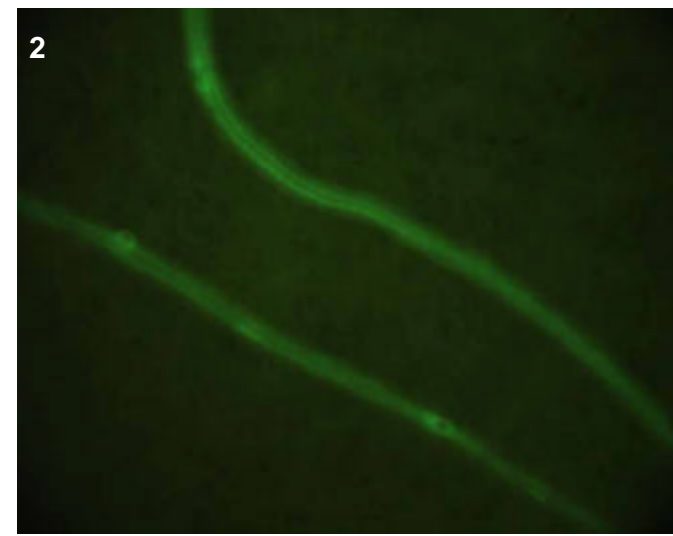
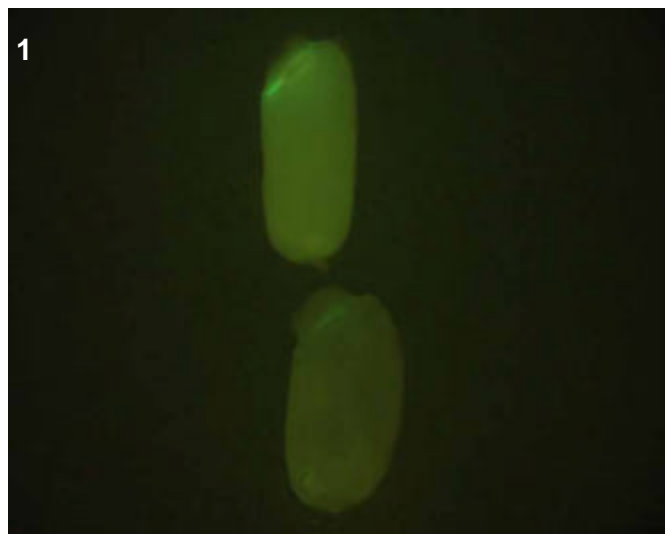
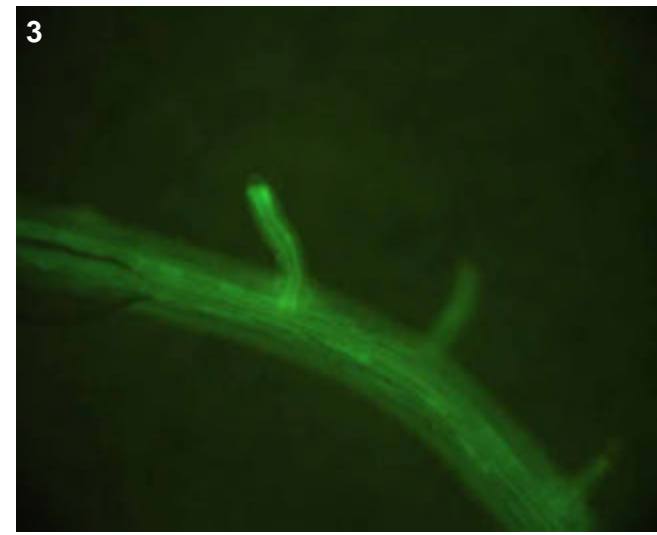
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 70



### T0 comments

### T1 seed comments

4/5 seeds had medium expression in the scutellum

### T1 seedling comments

A root-specific line.

# Genotype: ARI H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

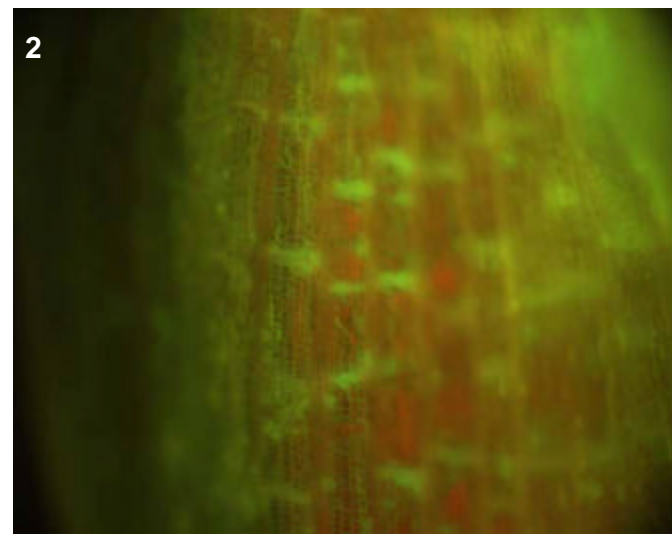
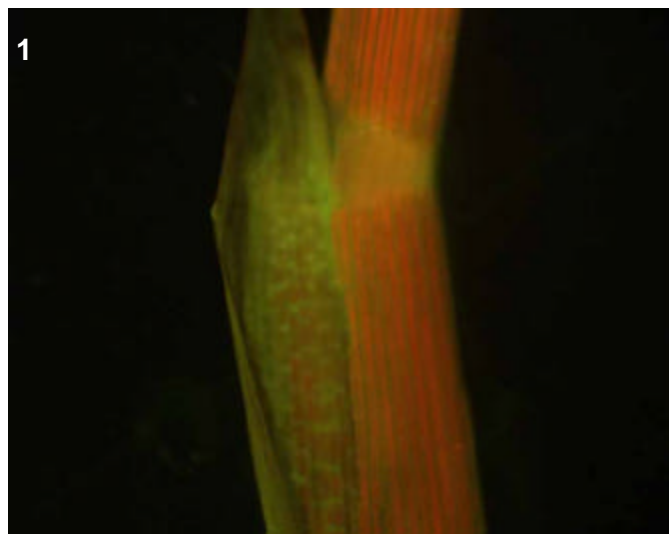
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 101



### T0 comments

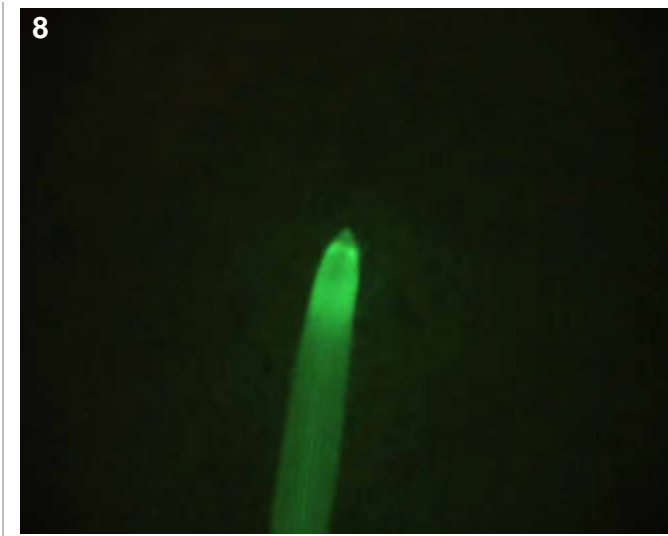
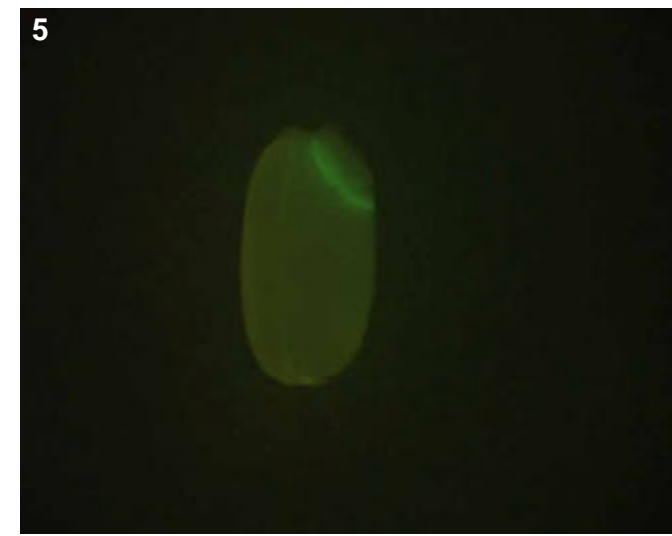
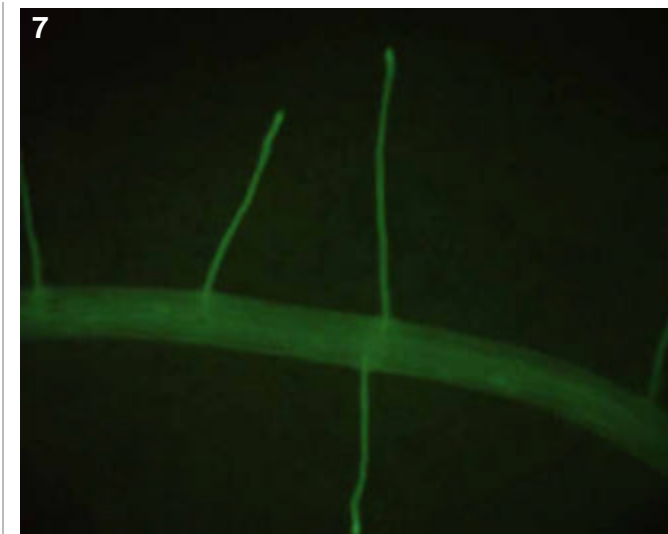
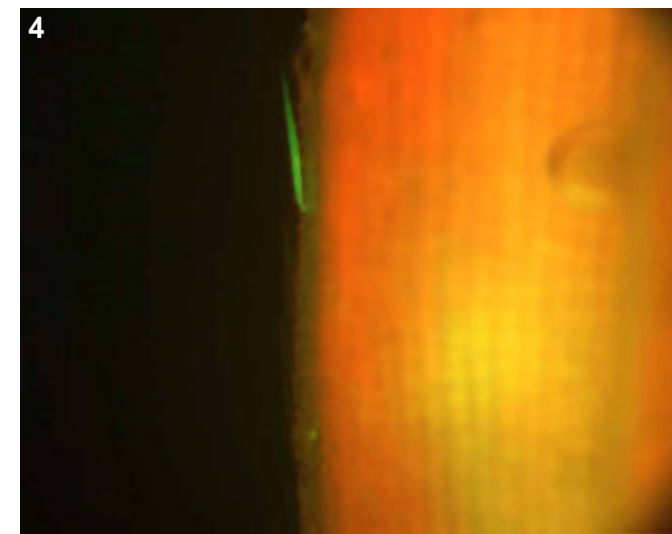
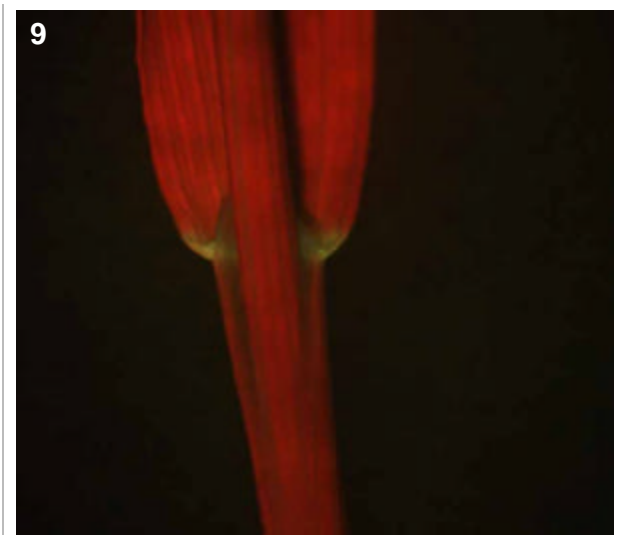
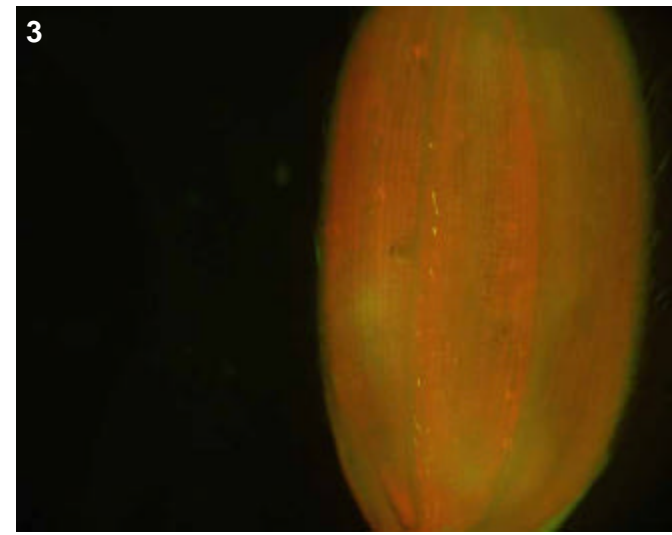
The floral trichome expression (pics 3 and 4) was quite scattered.

### T1 seed comments

3/5 seeds had medium expression in the scutellum (pic 5).

### T1 seedling comments

Looks like an epidermal pattern in roots, at least for the crown roots (pic 8).



# Genotype: ARI H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

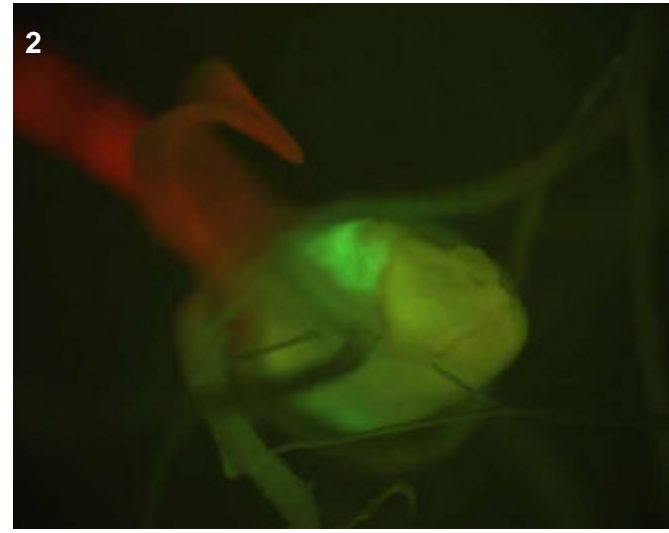
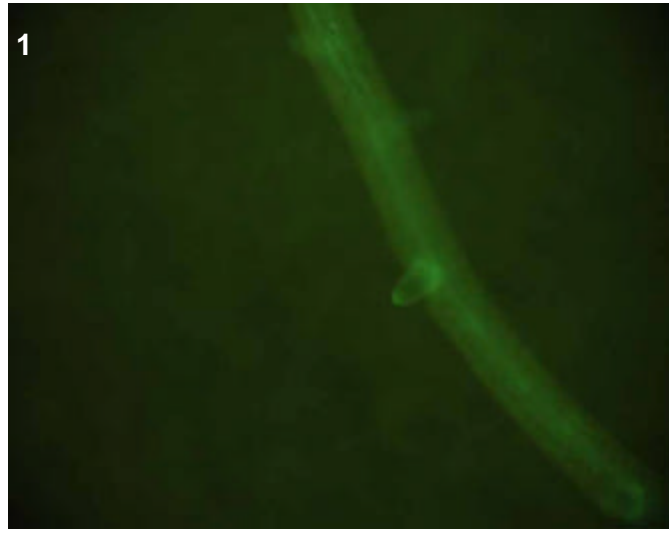
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 26



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium endosperm expression (pic 2), faint root vascular (pic 1).

# Genotype: ARJ B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

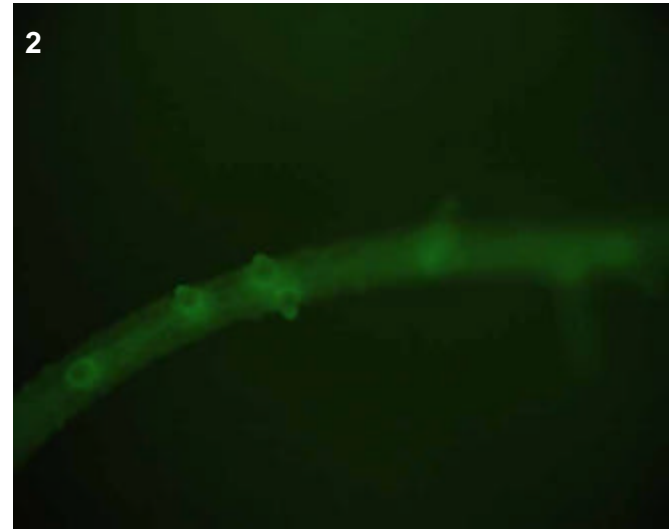
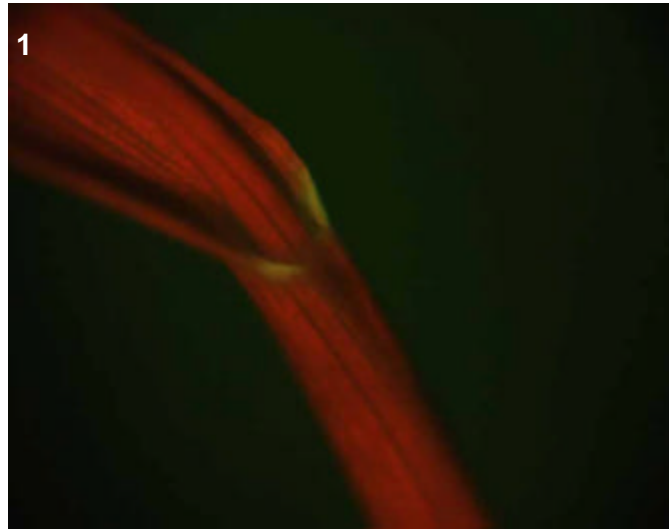
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 57



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ARJ C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

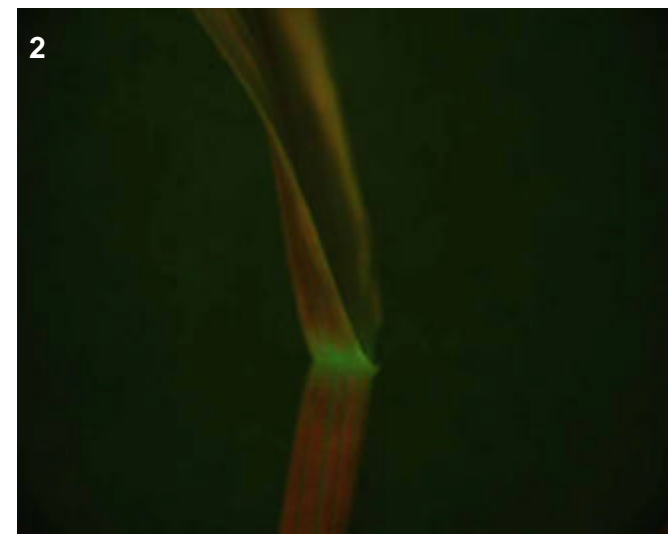
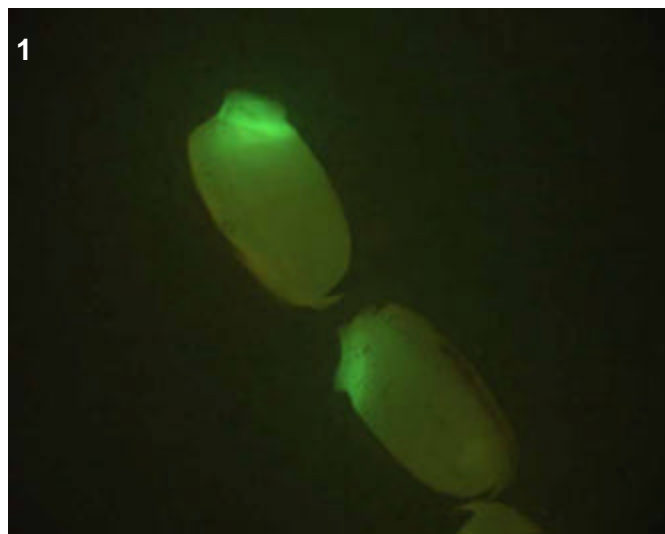
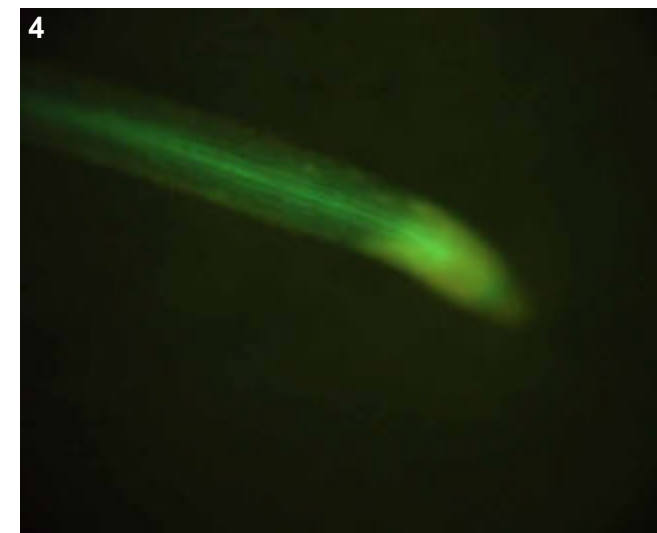
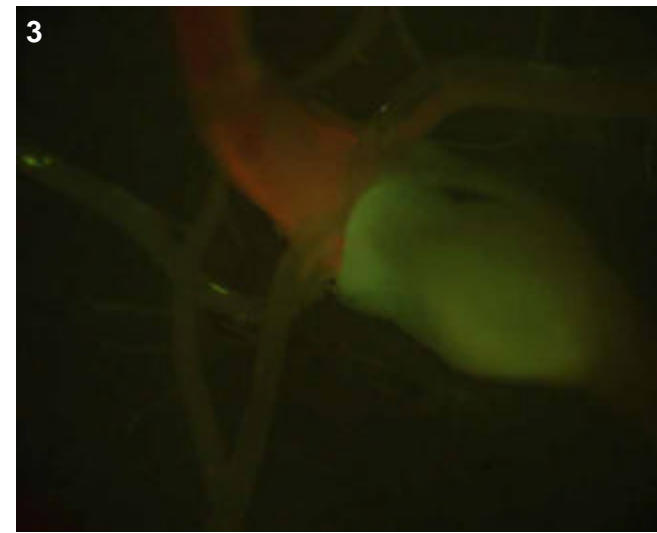
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 43



## T0 comments

## T1 seed comments

3/5 seeds had very bright expression in the embryo region (pic 1).

## T1 seedling comments

Expression was bright towards the base of the shoot (pic 3) and in the collar and shoot vascular (pic 2). Expression also appears unusually bright in the crown root vascular (pic 4), though there were not any laterals to get a good look at.

# Genotype: ARJ C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

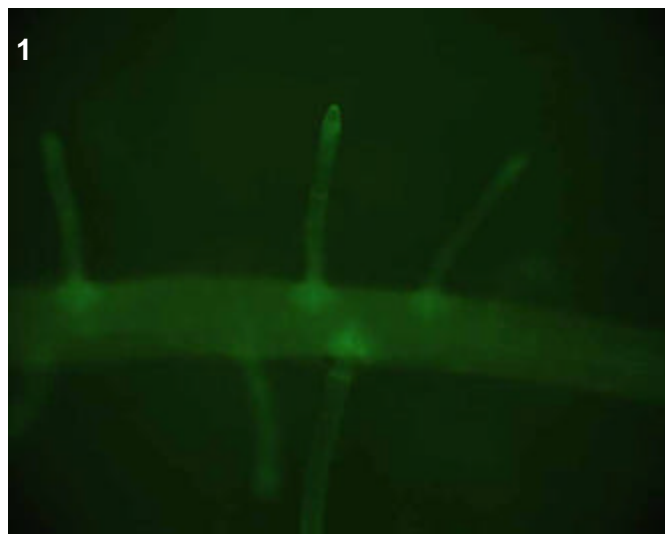
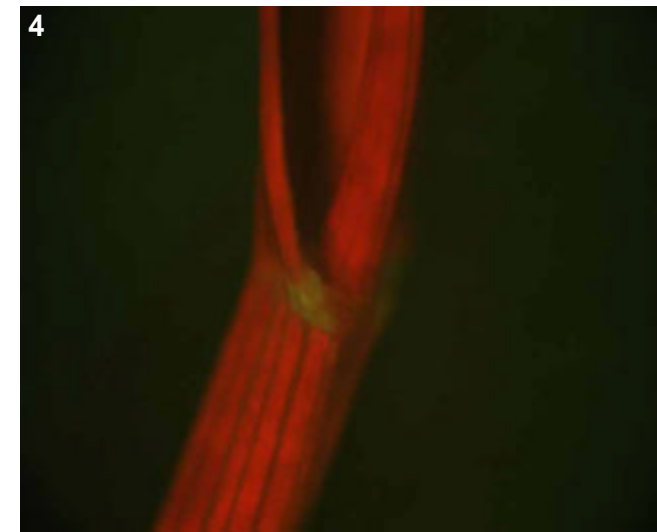
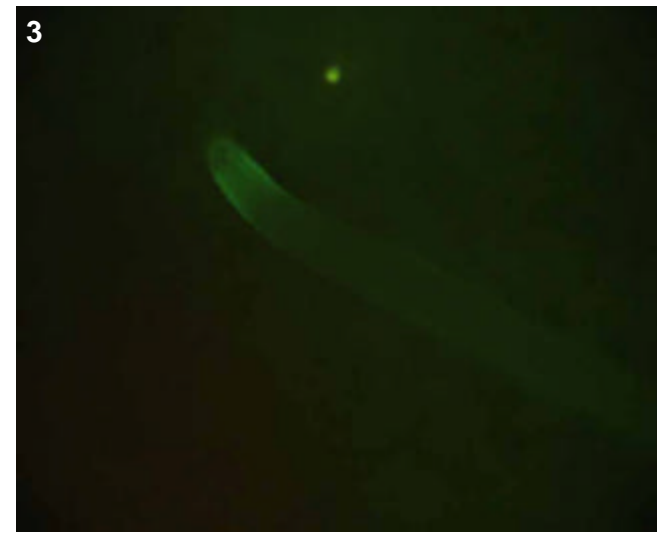
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 35



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression was bright in the laterals (pics 1 and 2) and could be cortical throughout with some epidermal expression as well in tips. Tips of crowns showed epidermal expression (pic 3), collar expression was faint (pic 4).

# Genotype: ARJ D03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

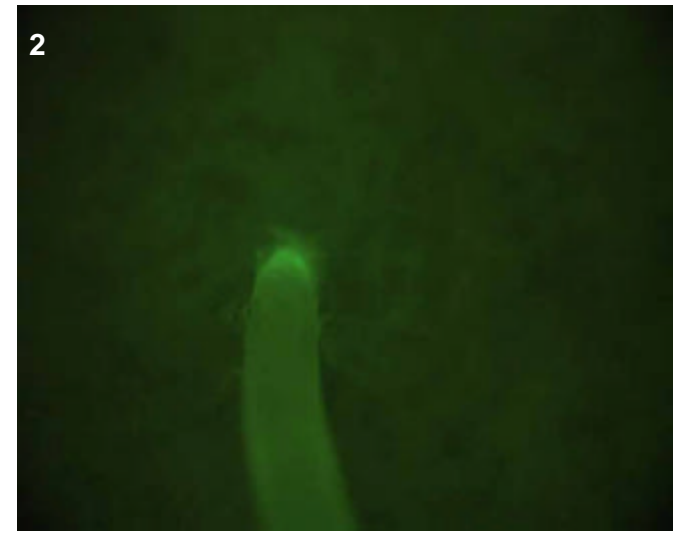
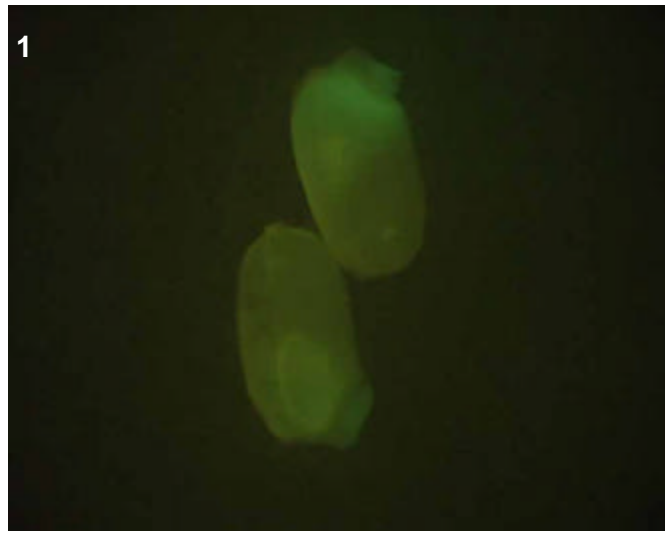
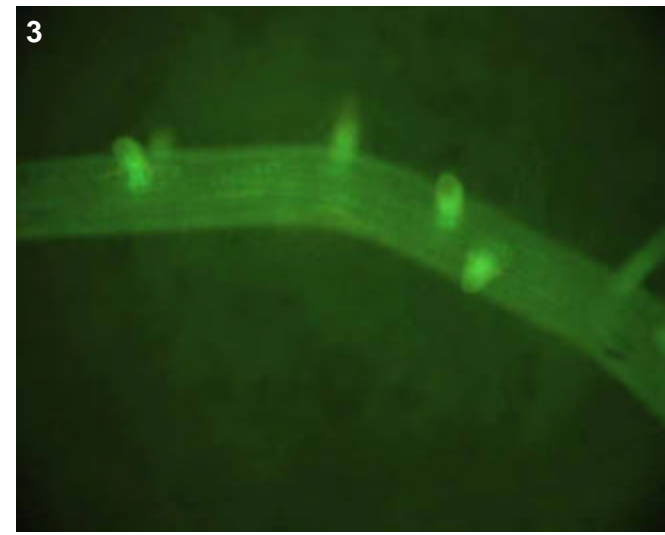
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

Number T2 seed produced: 54



## T0 comments

## T1 seed comments

3/5 seeds had expression. The coleorhiza appears to have expression, as well as the embryo.

## T1 seedling comments

Interesting root expression (pics 2-4), especially in the laterals. The pattern (perhaps vascular) looks to be much brighter in the elongation zone of root tips (pic 4). Confocal could clarify the cell type responsible for this pattern.

# Genotype: ARJ E08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

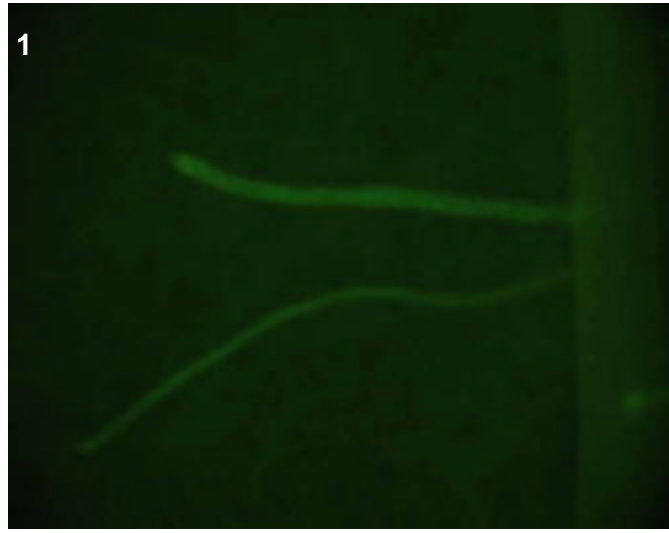
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 54



## T0 comments

## T1 seed comments

## T1 seedling comments

Just a faint vascular pattern detected in laterals (pic 1).

# Genotype: ARJ G03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

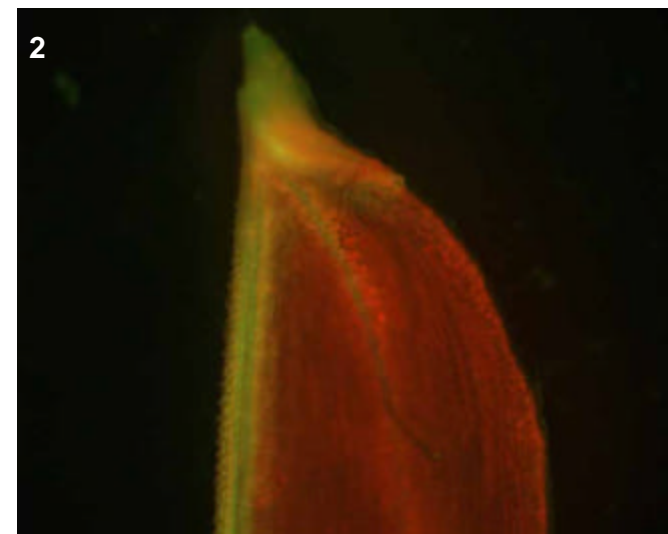
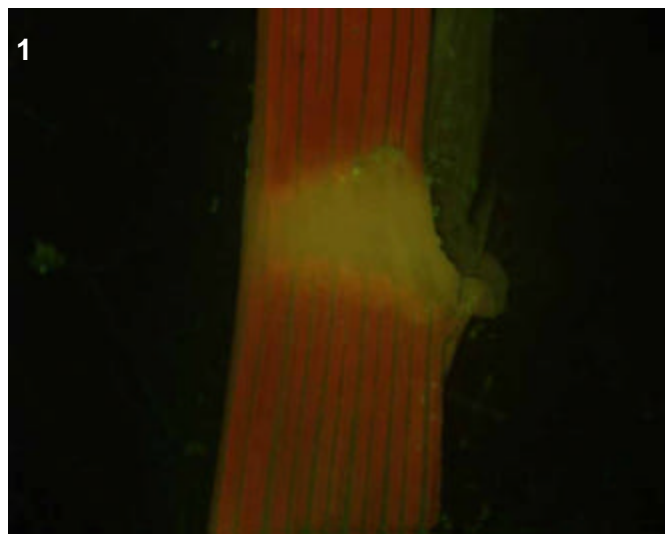
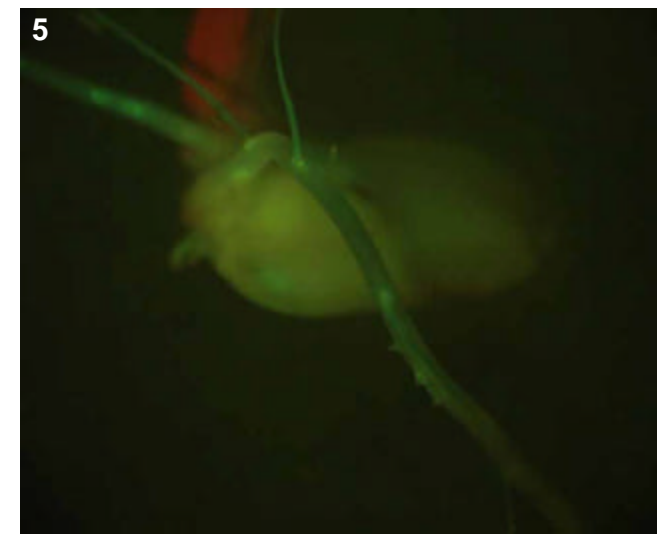
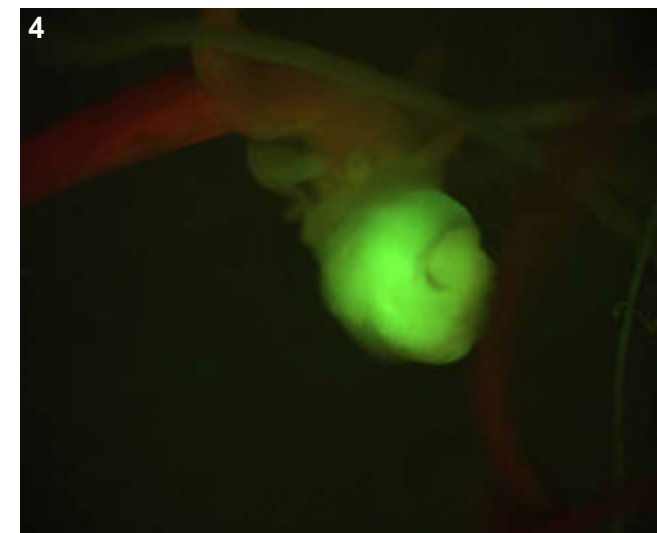
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 27



## T0 comments

## T1 seed comments

1/5 seeds had medium expression in the scutellum (pic 3).

## T1 seedling comments

No good picture of roots taken, but from picture 5 it looks like a vascular pattern.

# Genotype: ARJ G08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-10  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

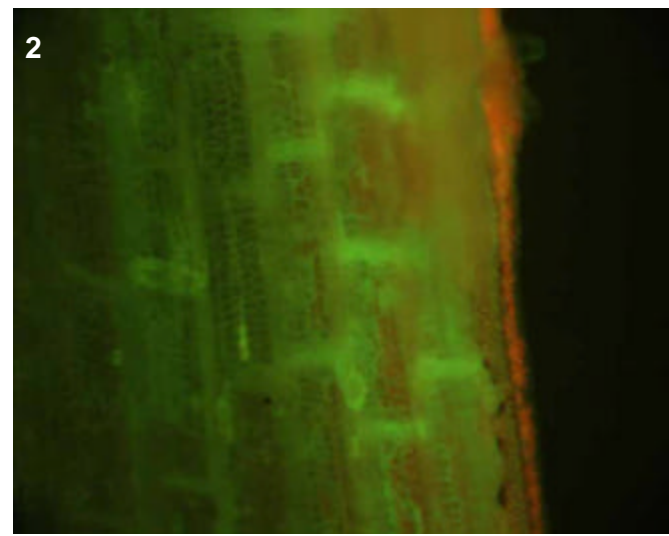
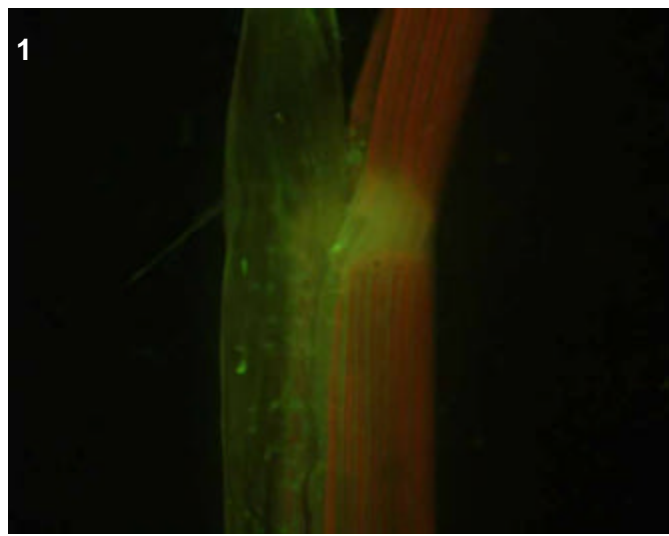
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 43



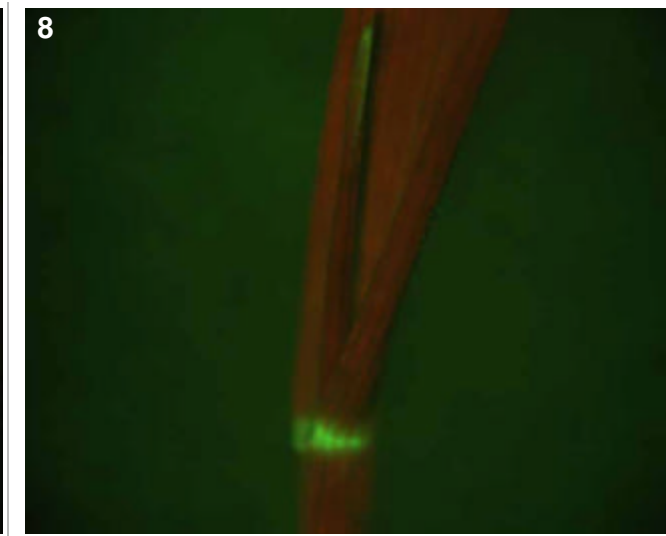
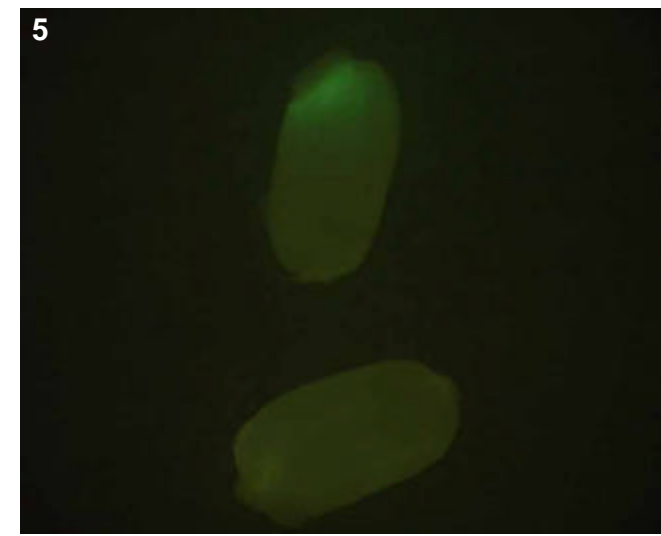
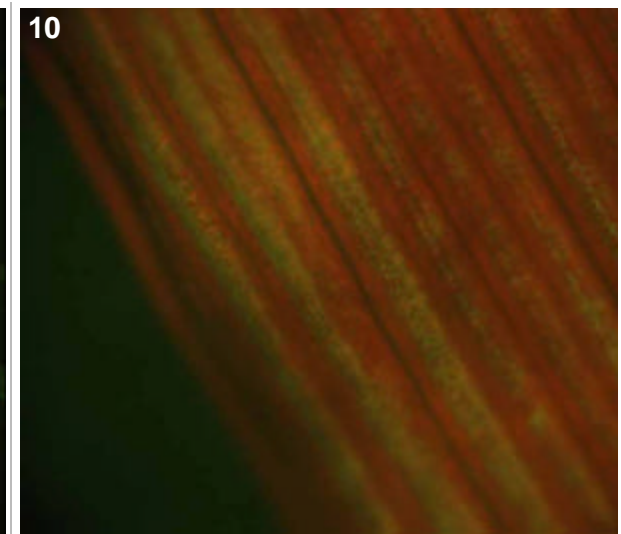
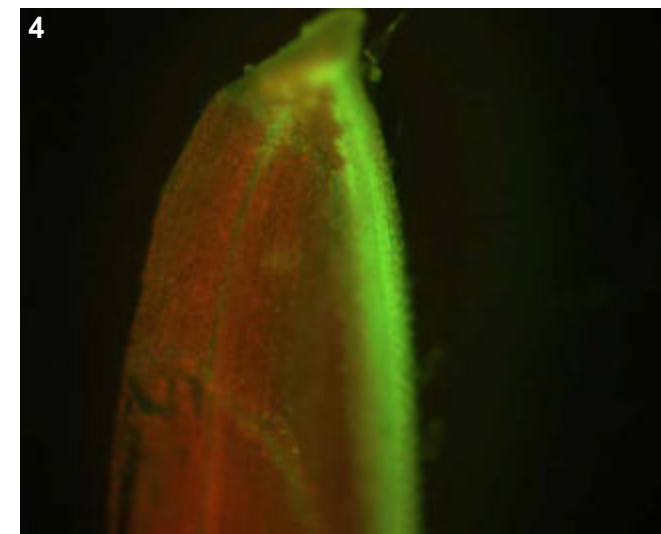
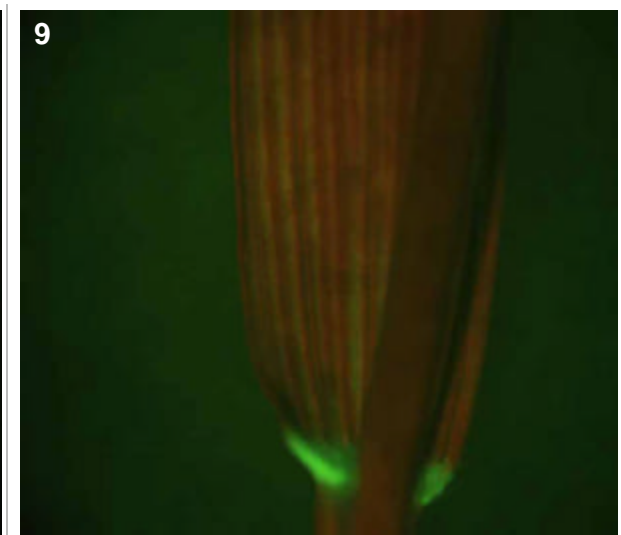
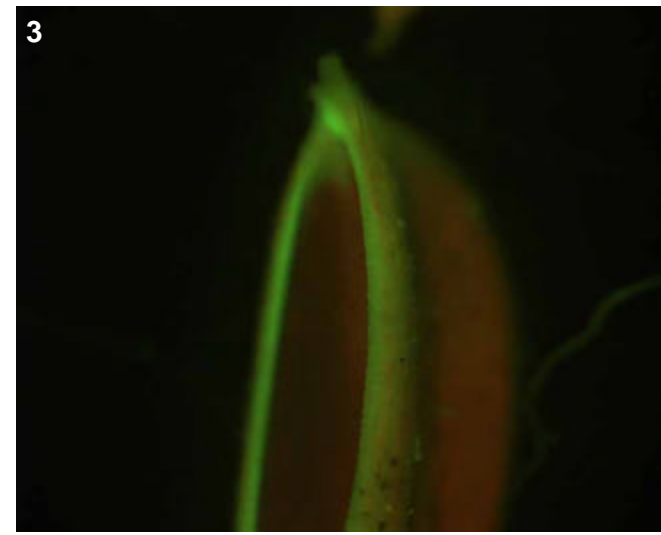
### T0 comments

### T1 seed comments

Bright expression in embryo of 4/5 seeds

### T1 seedling comments

Note the bright "stripes" of expression on leaf tissue (pics 9-10), I'm not sure what cell-type this is but it doesn't look vascular. Perhaps mesophyll tissue between the leaf veins?



# Genotype: ARJ G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

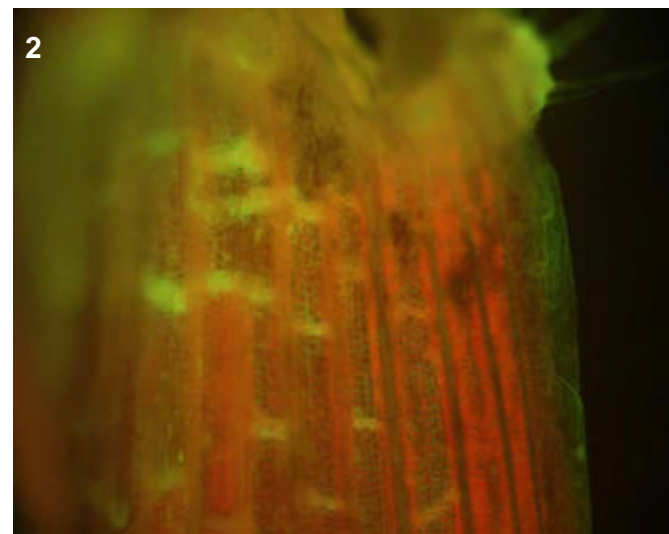
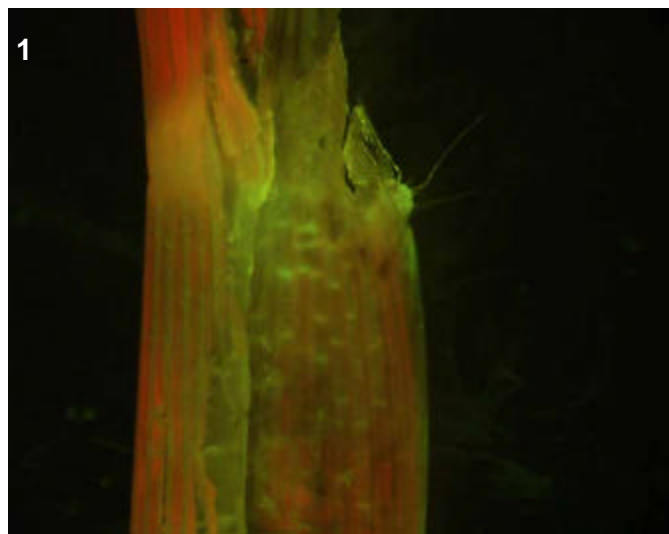
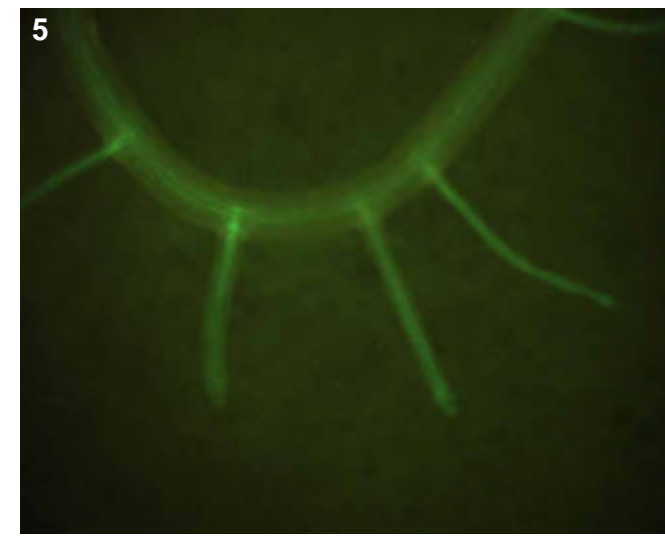
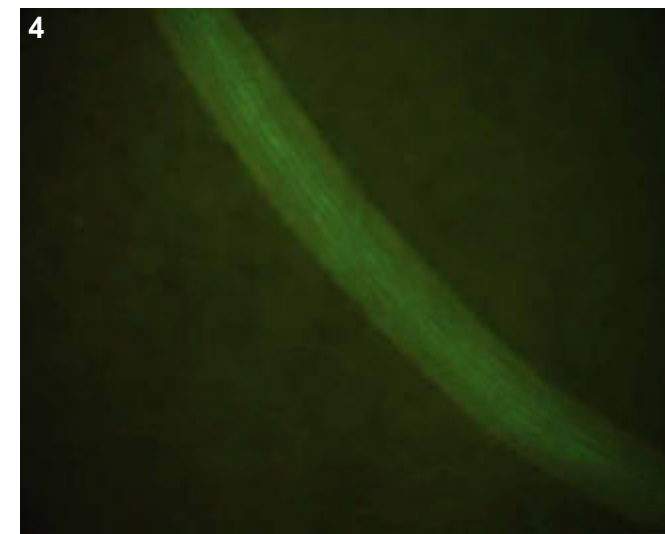
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

Number T2 seed produced: 109



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright vascular pattern in roots (pics 4-5), tips of crowns and seminal had epidermal expression (pic 3).

# Genotype: ARK D11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

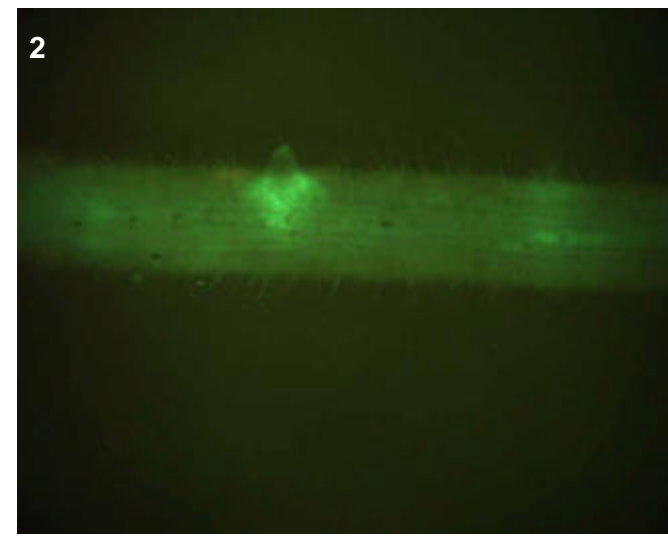
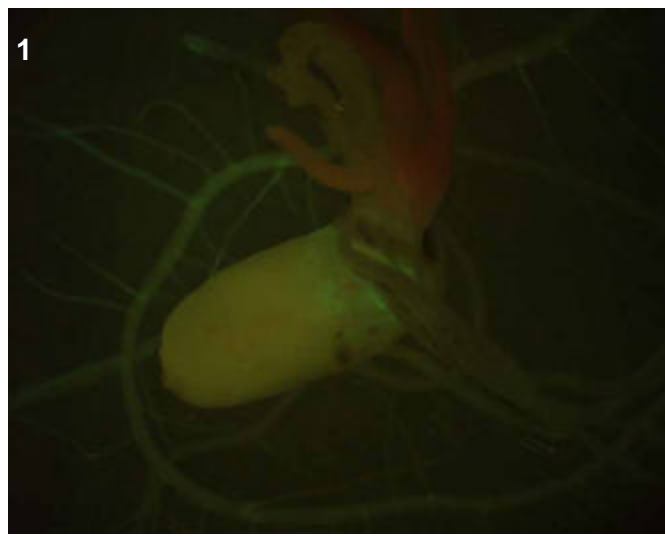
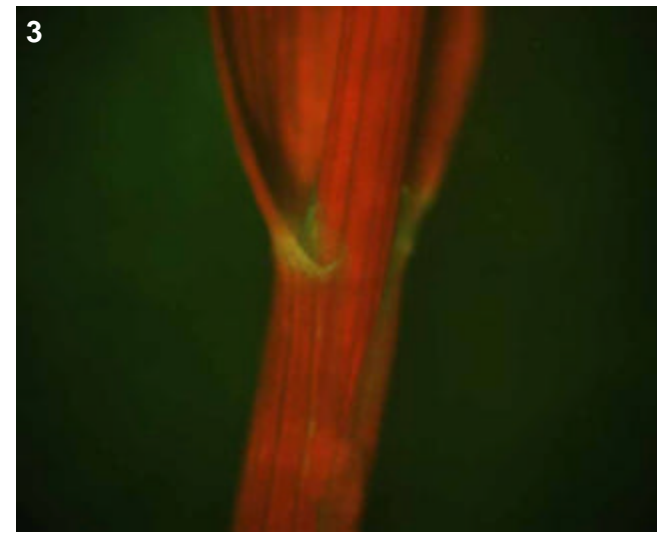
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 87



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ARK G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

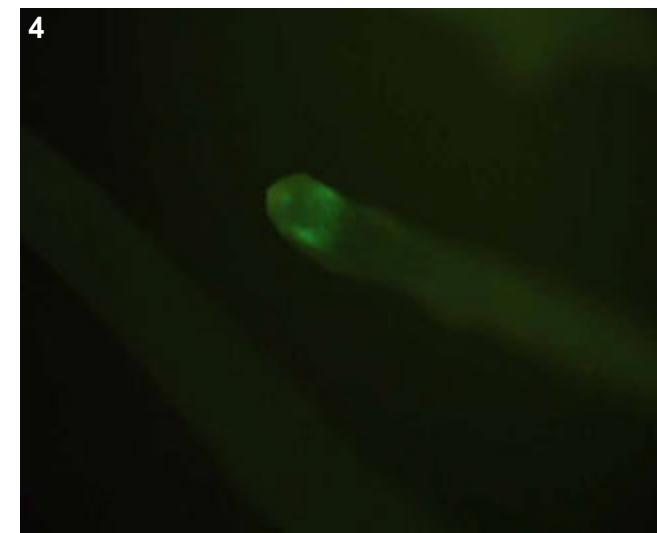
**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:** 53



## T0 comments

## T1 seed comments

2/5 seeds showed expression in what looks like the central vascular bundle of the seed (pic 1).

## T1 seedling comments

Bright expression throughout the endosperm (pic 2). Root expression was very interesting as it occurred only in the youngest crown roots and in some type of initials at the root tip presumably in the elongation zone (pics 3-4). This would be a great line for confocal analysis.

# Genotype: ARK G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

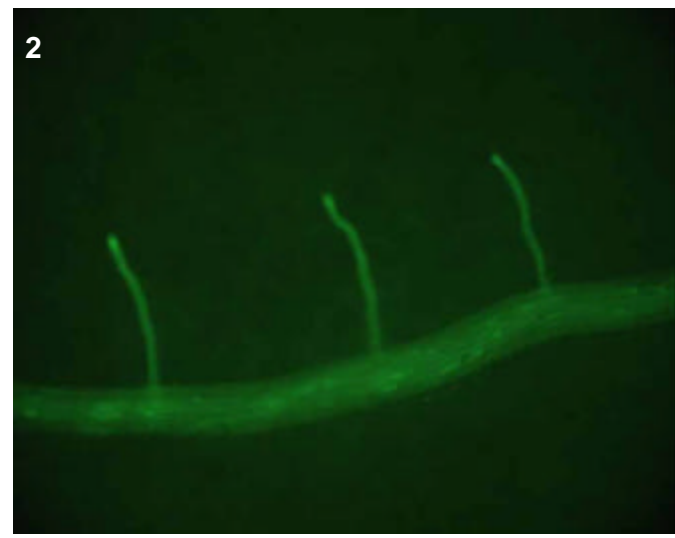
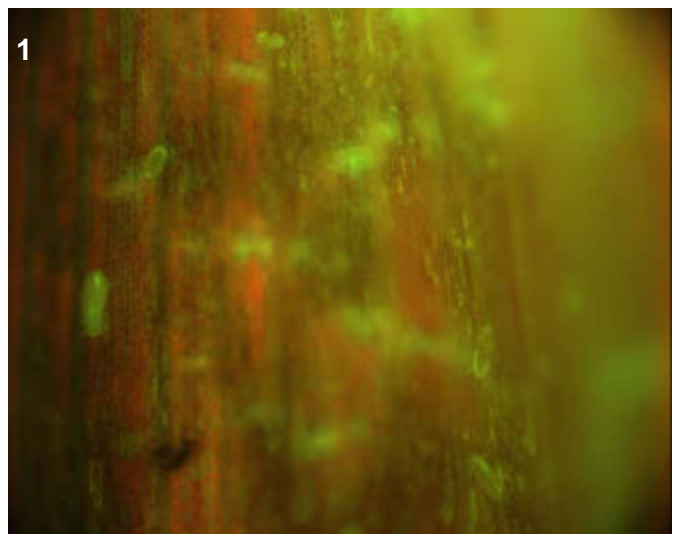
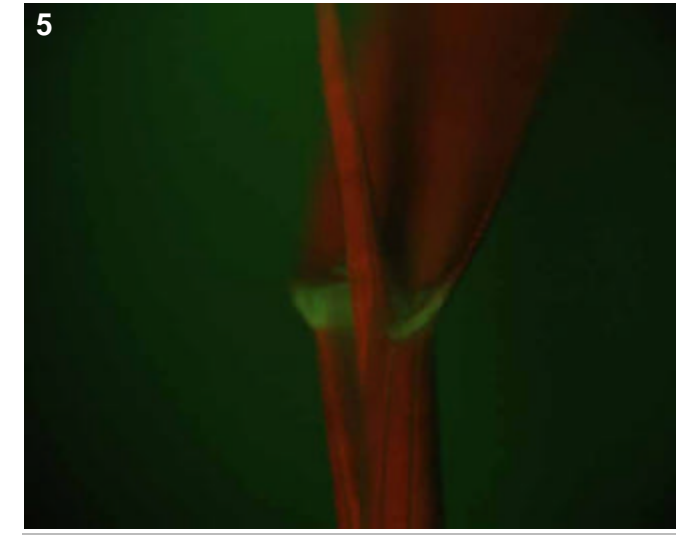
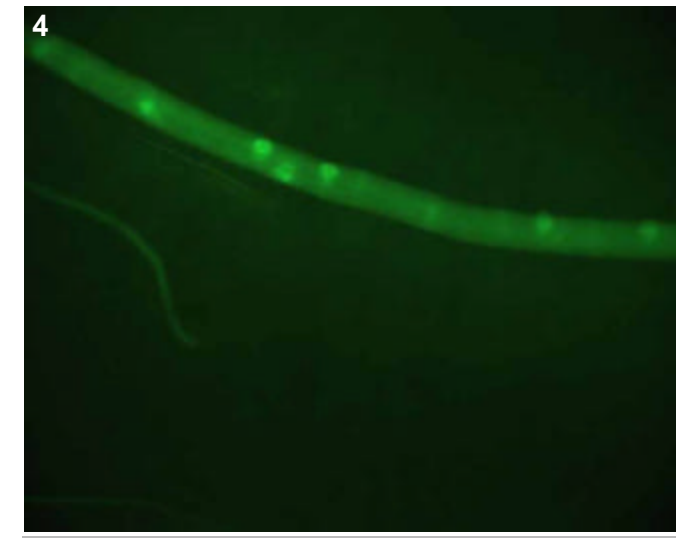
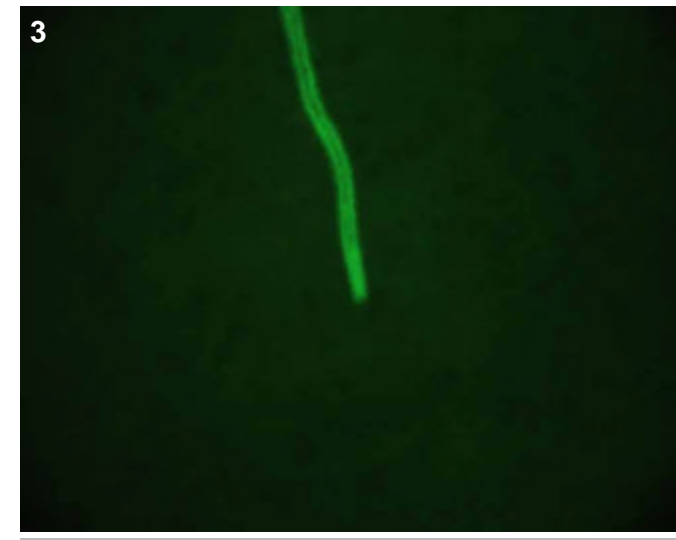
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants **Confocal?**

Number T2 seed produced: 87



**T0 comments**  
 Sheath vascular only, but tissue was in very poor condition.

**T1 seed comments**

**T1 seedling comments**  
 Bright root expression (pics 2-4), medium collar expression (pic 5).

# Genotype: ARK H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

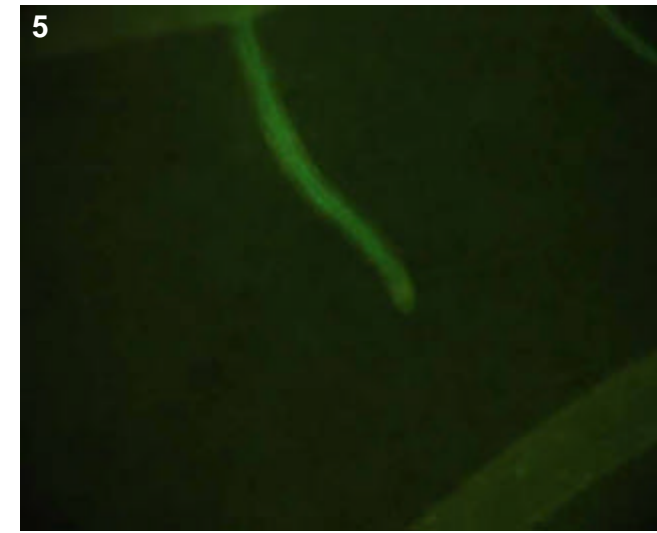
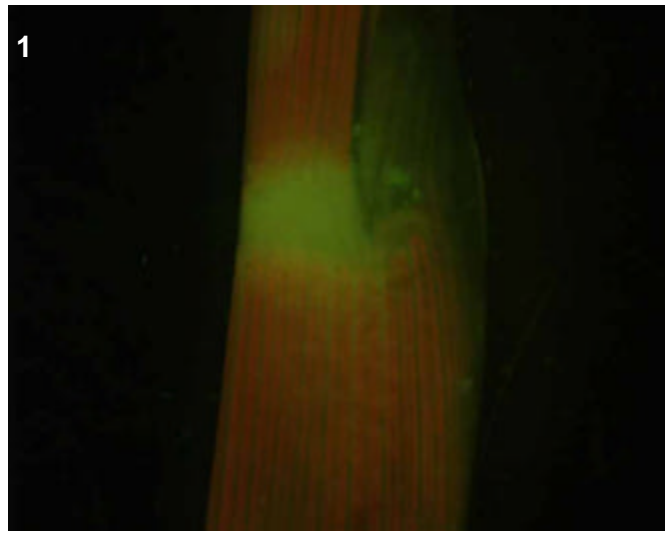
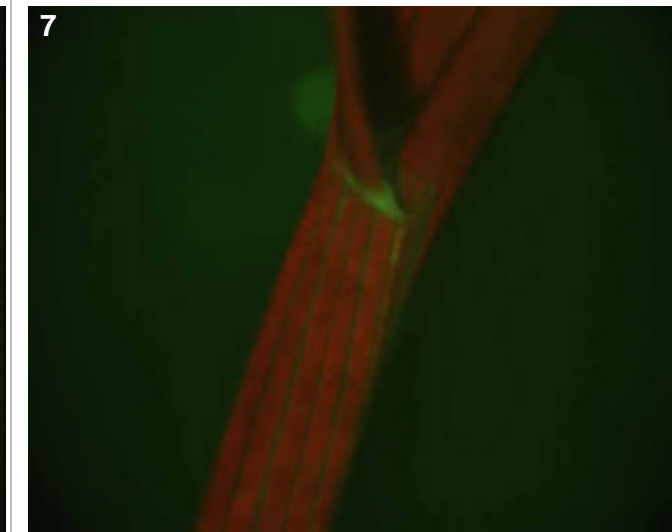
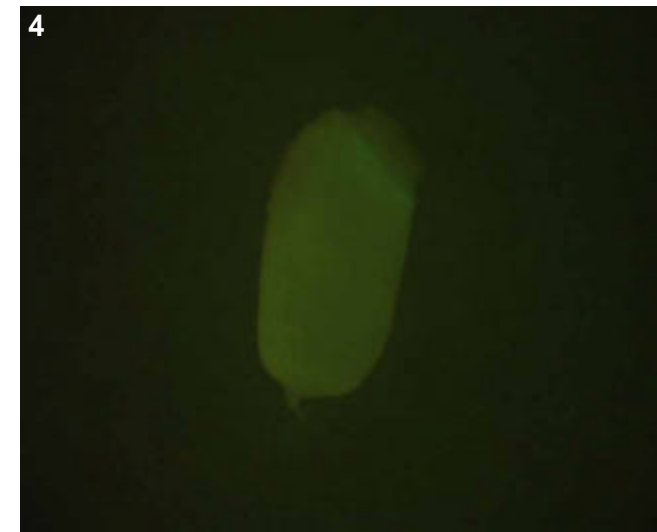
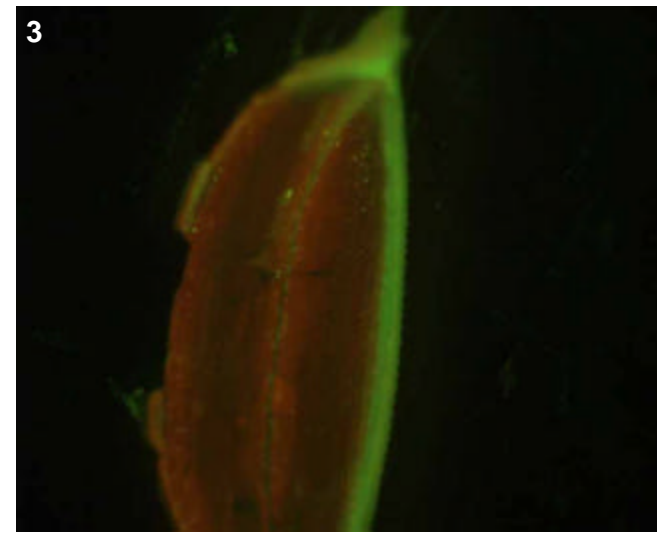
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 137



## T0 comments

Probably leaf vascular, but no pic taken because sample was bad.

## T1 seed comments

1/5 seeds showed faint expression in the scutellum.

## T1 seedling comments

# Genotype: ARK H12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

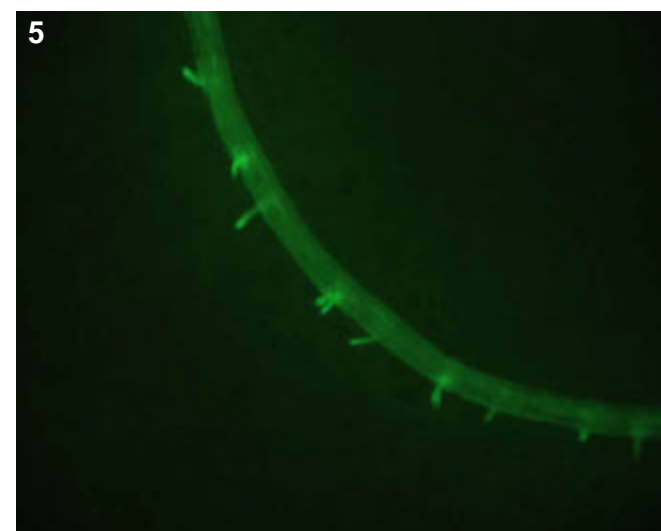
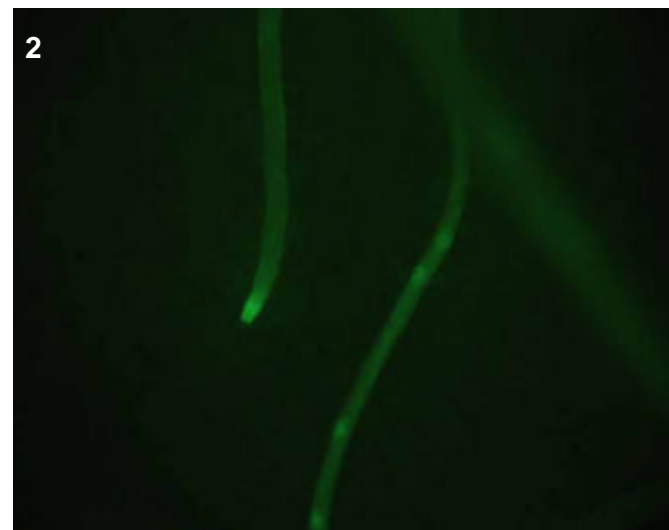
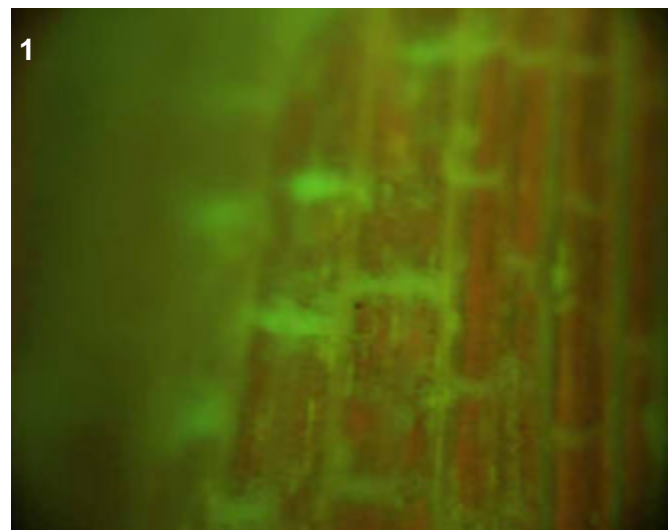
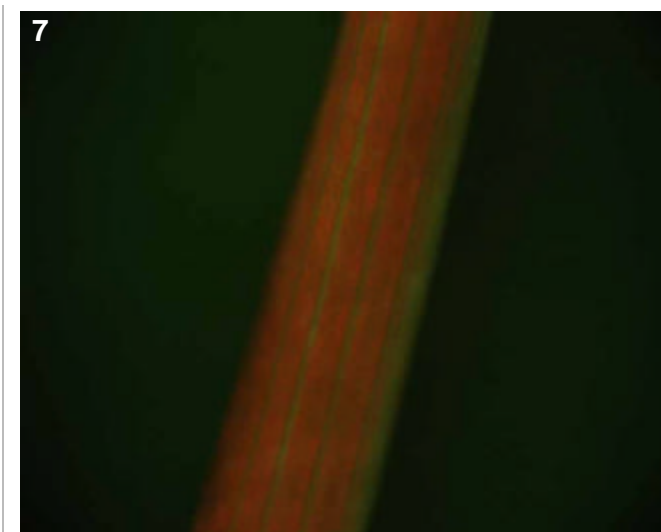
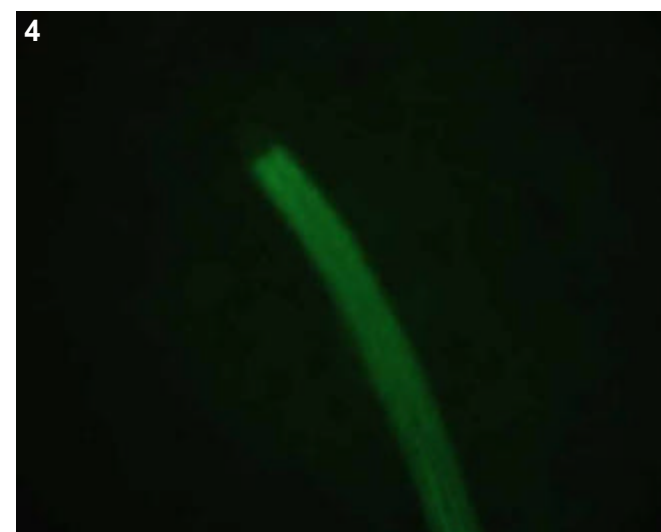
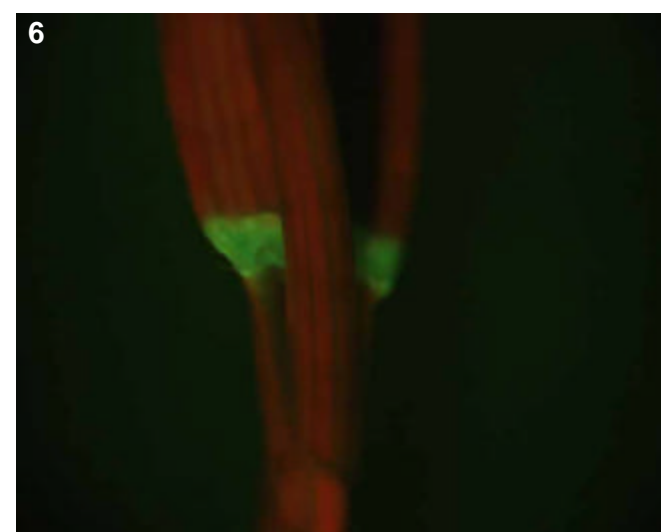
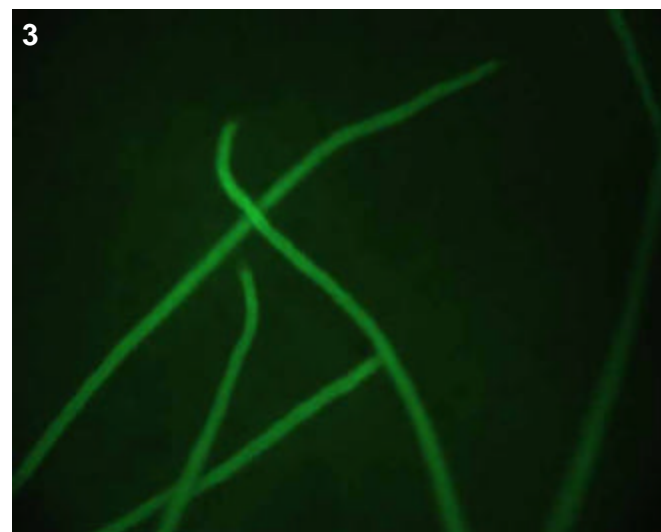
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants **Confocal?**

Number T2 seed produced: 55



### T0 comments

### T1 seed comments

### T1 seedling comments

Bright vascular line in both root (pics 2-5) and shoot (pics 6-7). Root expression in pic 4 is particularly interesting--perhaps cortical expression?

# Genotype: ARL A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-4  
 T1 seed/seedling: 5-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

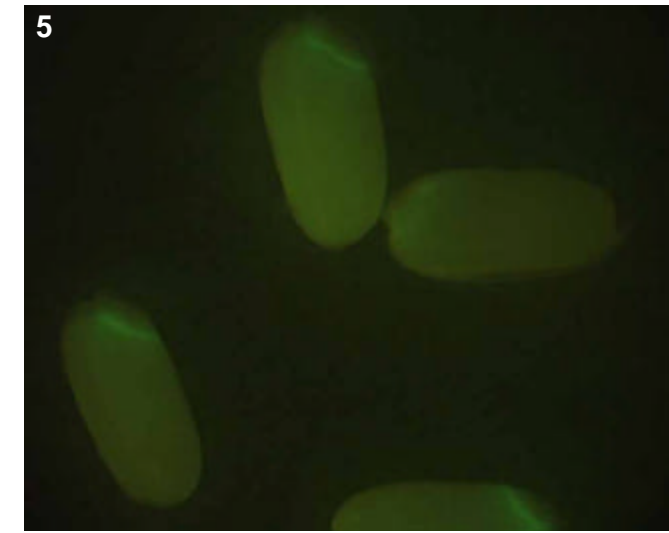
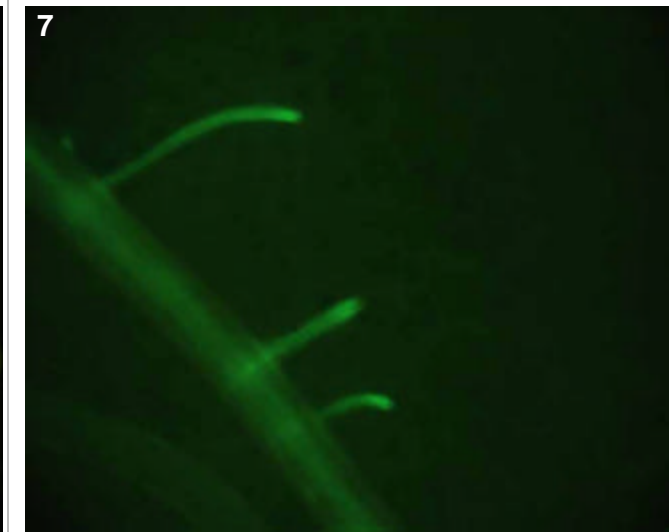
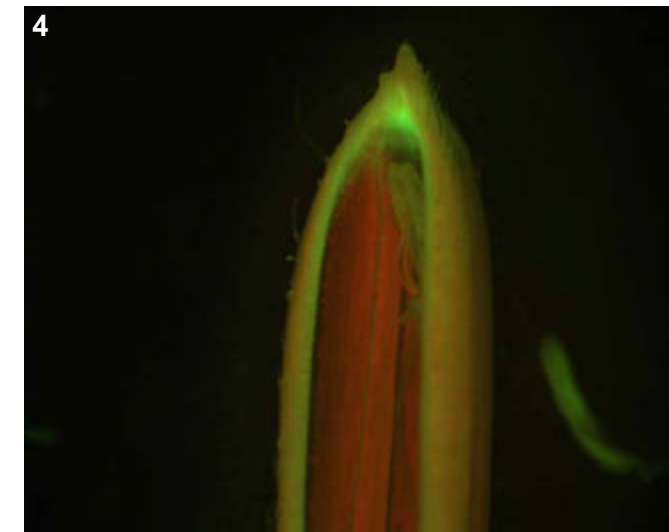
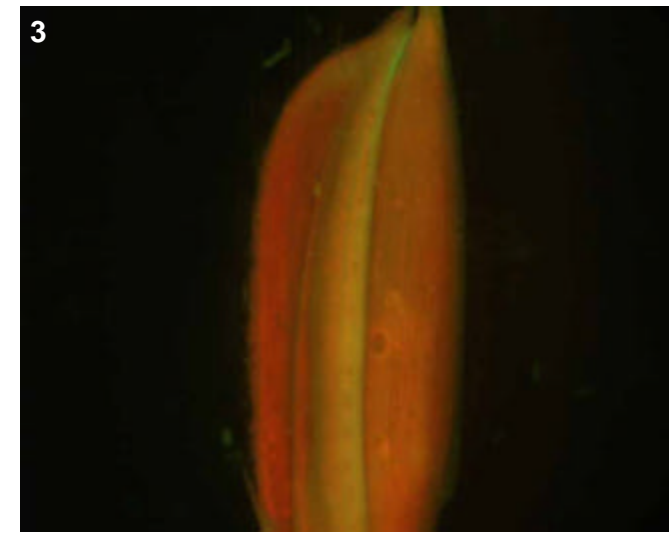
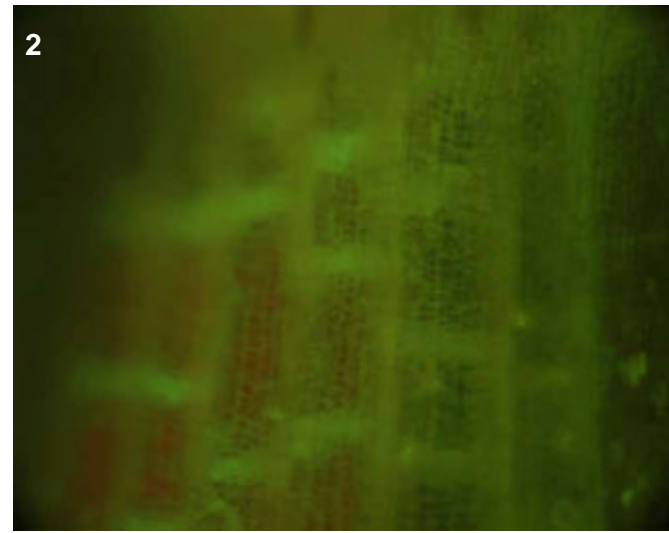
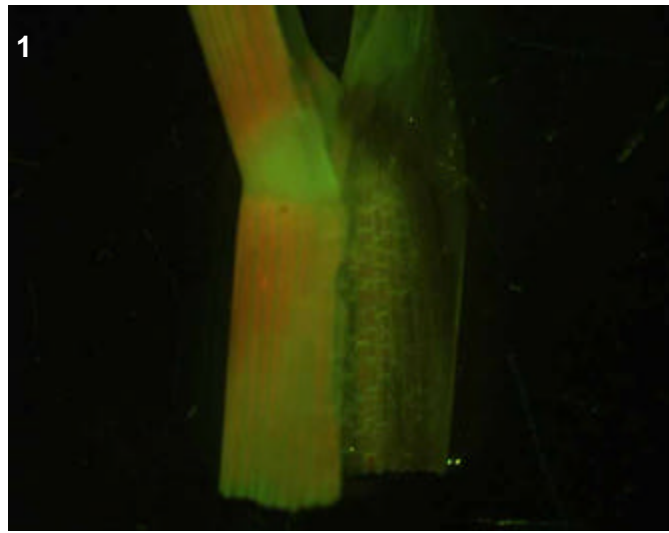
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 132



### T0 comments

Lemma/palea expression is in the tips (pic 4).

### T1 seed comments

3/5 seeds showed bright expression in the embryo (pic 5).

### T1 seedling comments

Bright root expression (pics 6-7), with most expression in the tips.

# Genotype: ARL B10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

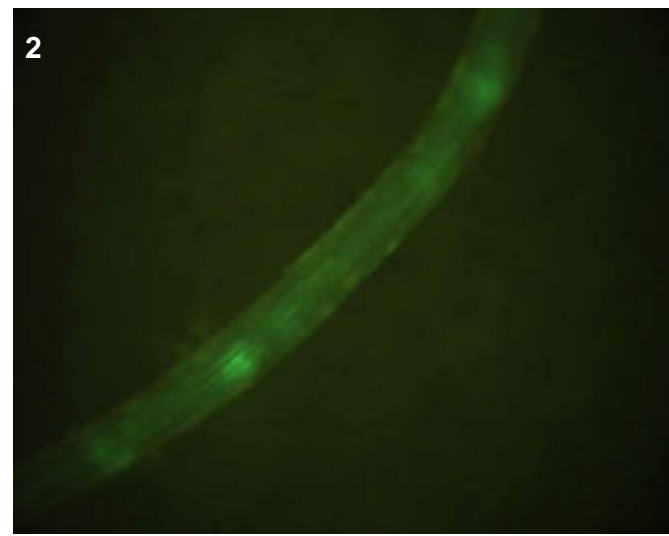
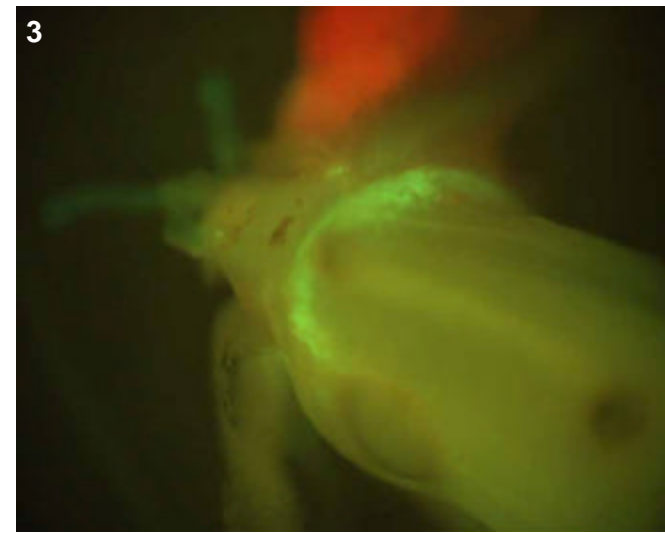
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 116



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression was bright near point of lateral root emergence (pic 2) and vascular in elongated laterals (pic 1). The apex of crown roots (top root, pic 1), was also bright, perhaps epidermal.

# Genotype: ARL D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

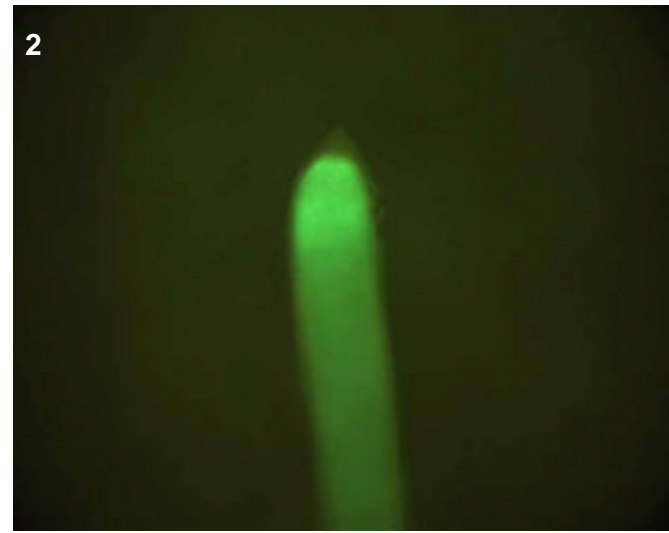
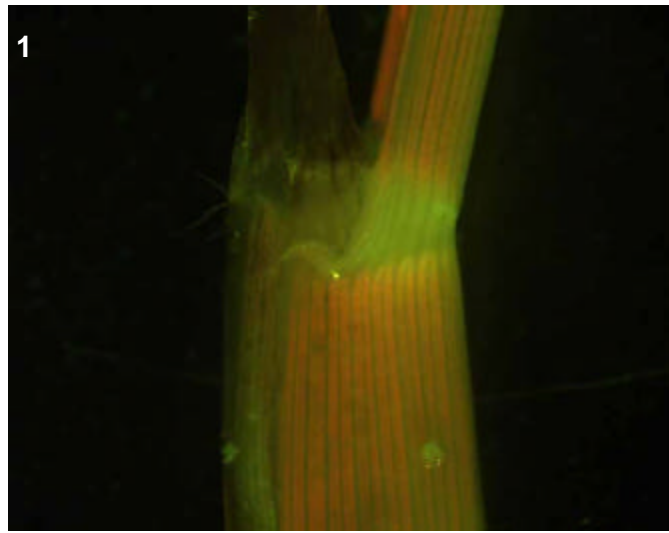
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 72



### T0 comments

A collar-specific line.

### T1 seed comments

### T1 seedling comments

Bright expression near tips of crown roots (pic 2), but the single picture taken is insufficient to define what type of pattern is present.

# Genotype: ARL D12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

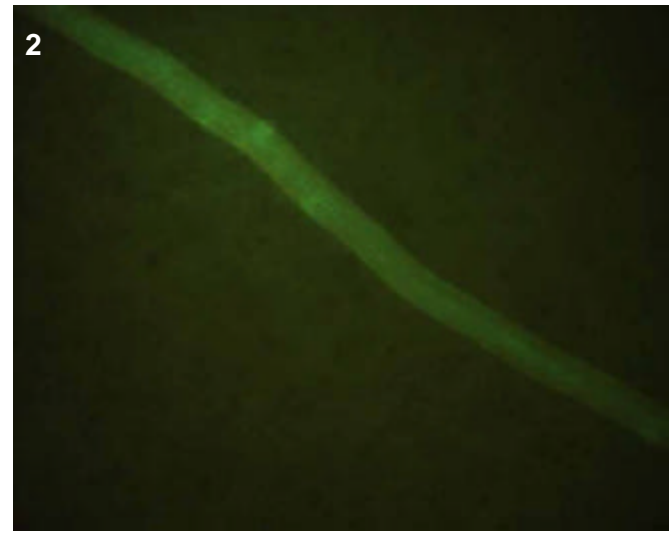
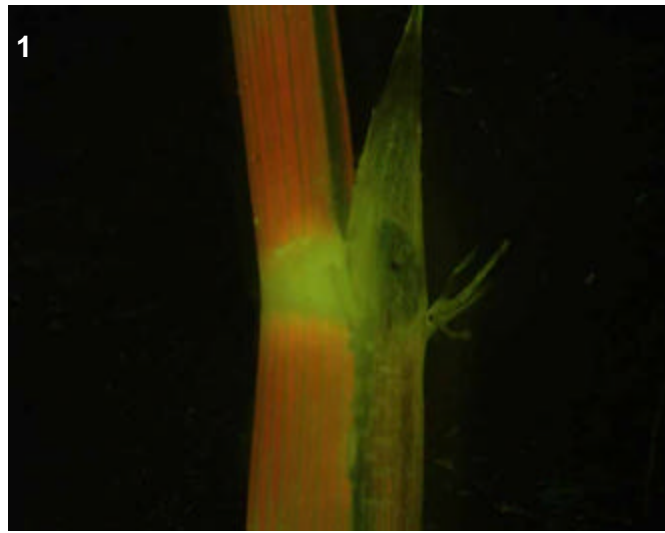
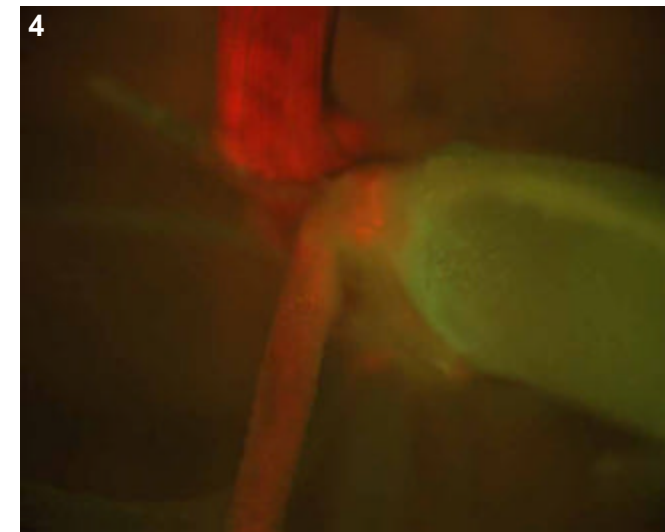
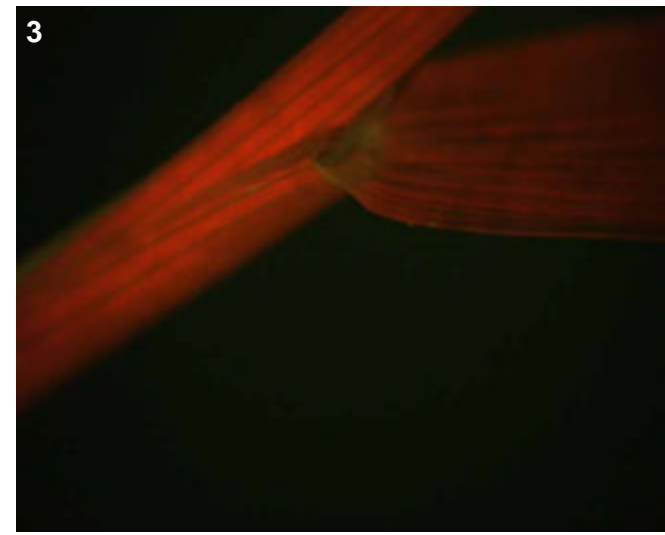
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 15



## T0 comments

A collar-specific line

## T1 seed comments

## T1 seedling comments



# Genotype: ARL E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

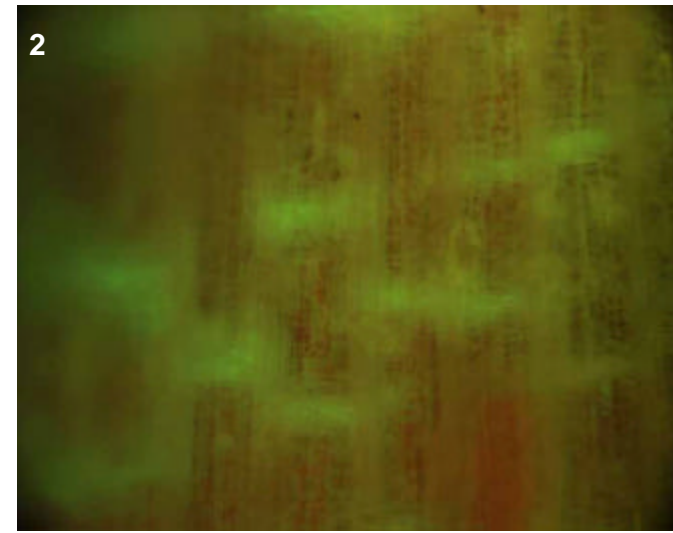
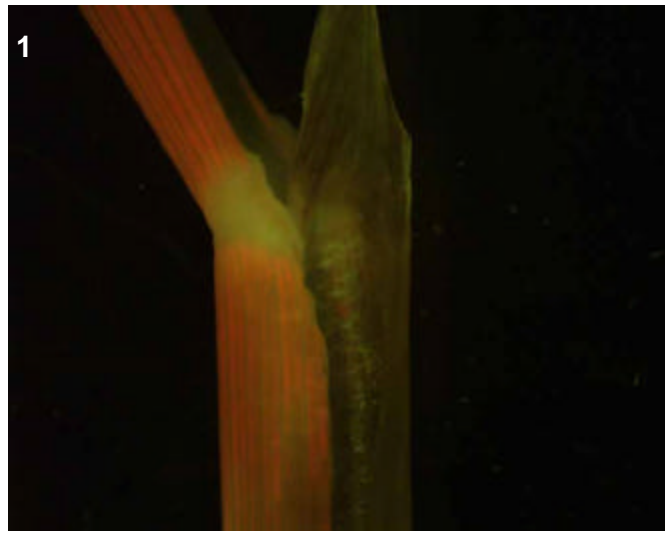
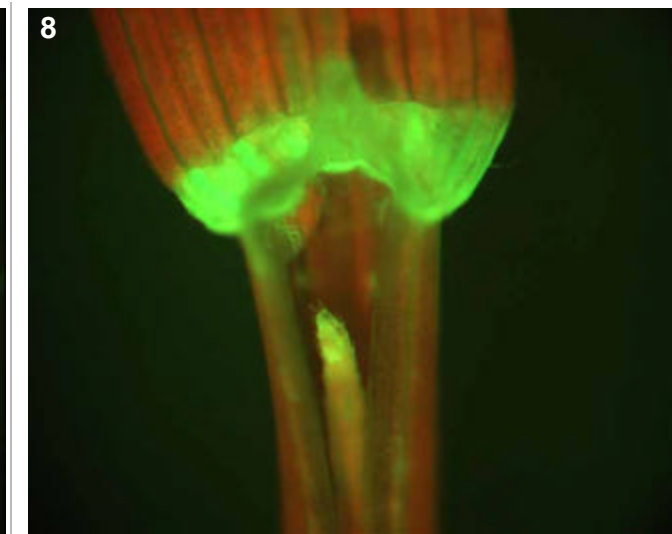
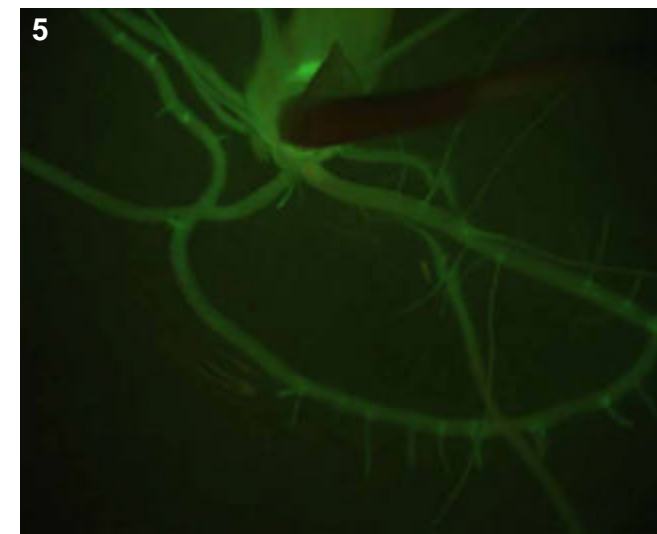
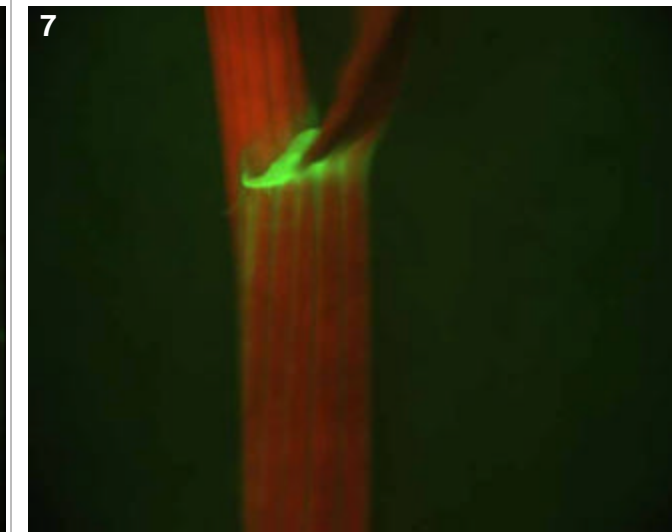
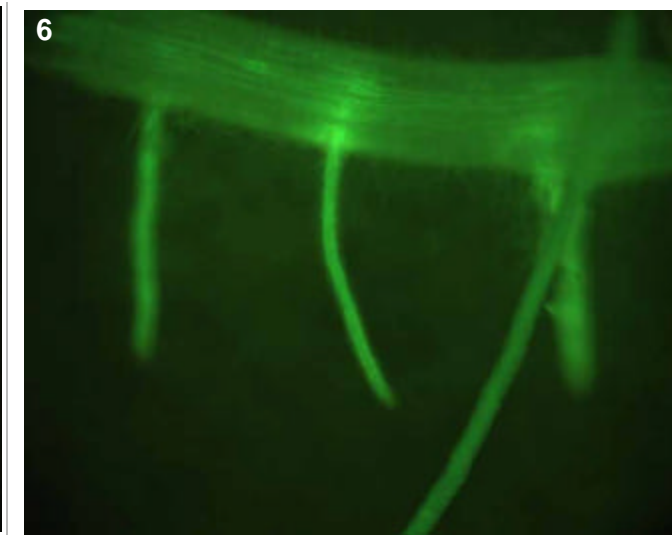
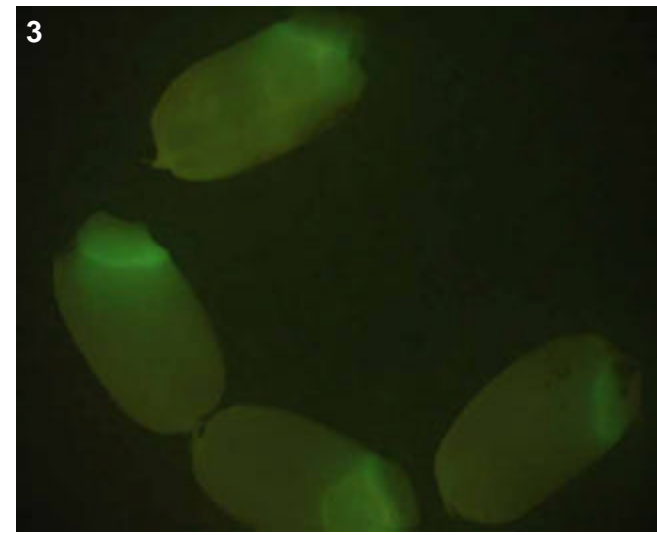
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 18



## T0 comments

## T1 seed comments

5/5 seeds showed bright expression in the scutellum (pic 3).

## T1 seedling comments

Bright vascular in root (pics 4-6) and shoot (pic 7). This line is probably a root mutant due to the rather small size of seminal and crown roots (pics 4-5) and perhaps a shoot mutant as well because one of the two plants had delayed emergence of the second leaf (pic 8).

# Genotype: ARL F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

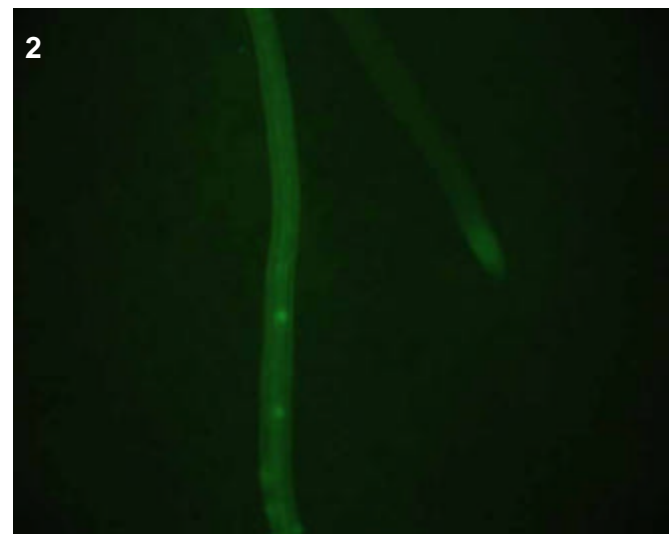
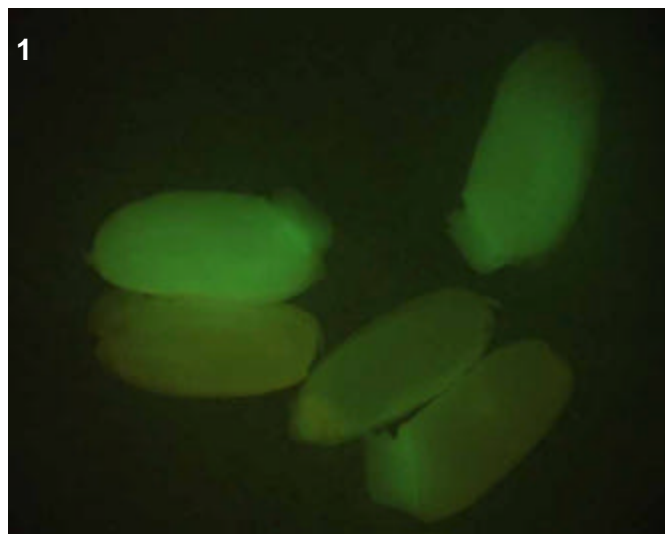
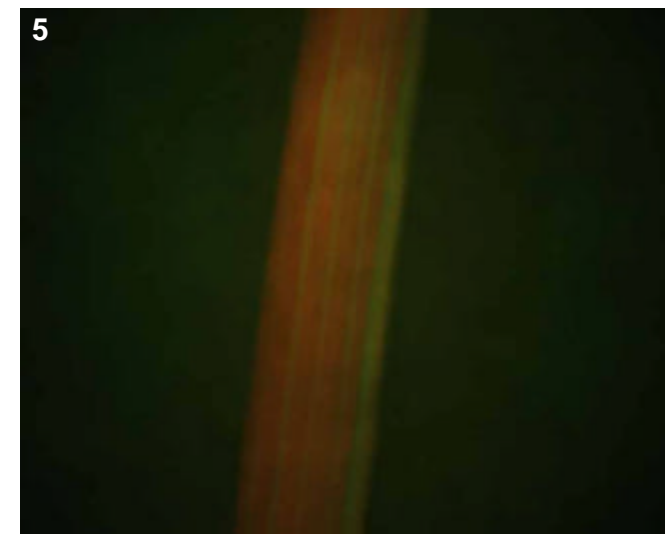
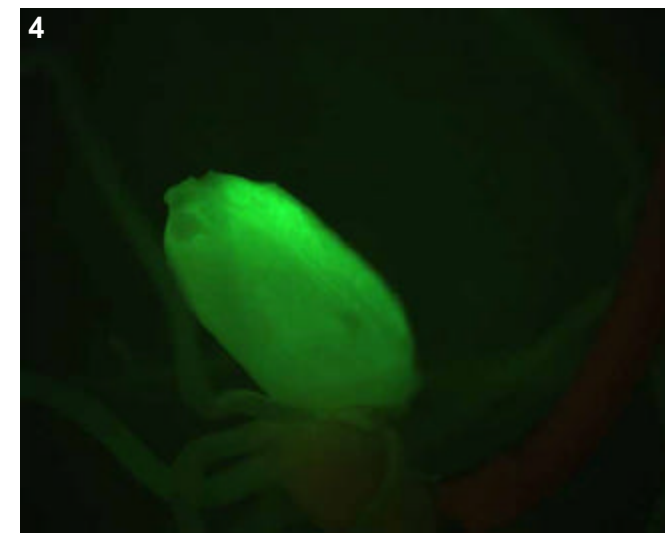
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 72



## T0 comments

## T1 seed comments

4/5 seeds had expression (pic 1) ranging from aleurone/endo, embryo and scutellum bright (upper two seeds), to the same pattern but less bright (second seed up from bottom) to just the embryo and scutellum bright (bottom)

## T1 seedling comments

Bright expression in roots (pics 2-3), perhaps cortical/epidermal expression. Endosperm also bright (pic 4) as well as shoot vascular (pic 5).

# Genotype: ARL F12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-4  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

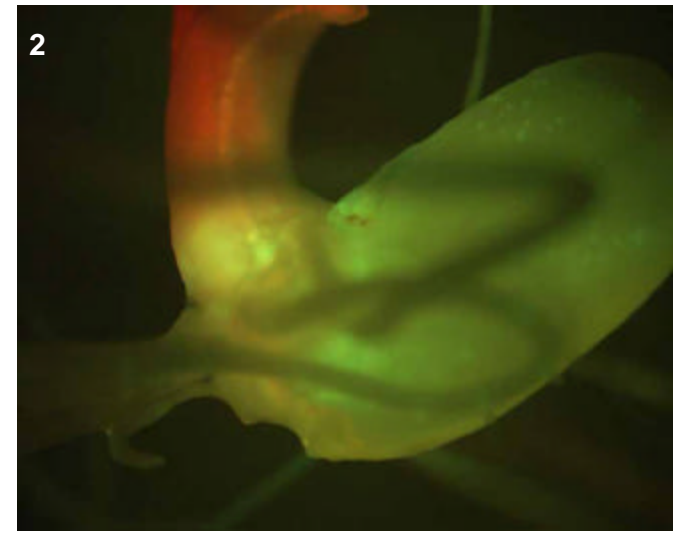
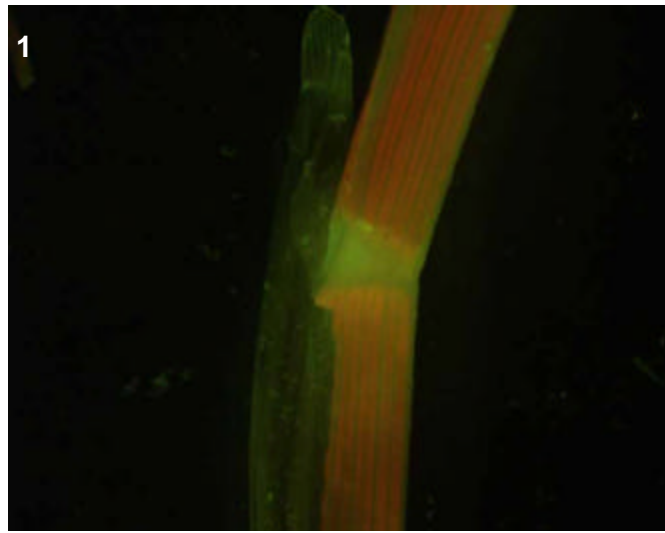
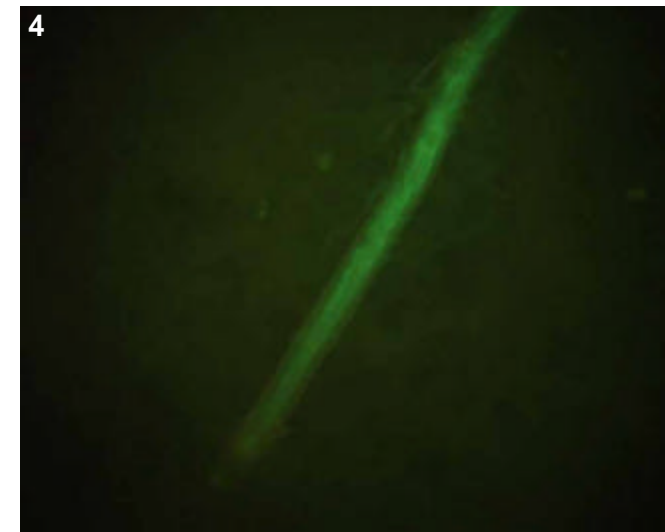
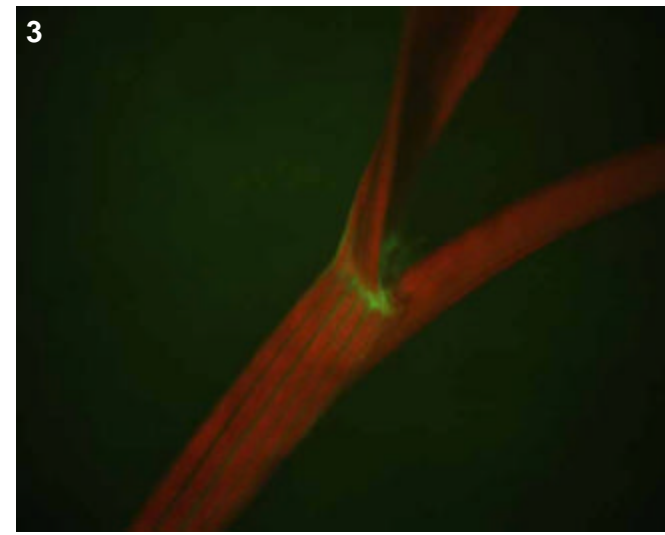
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 64



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARM C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-10

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

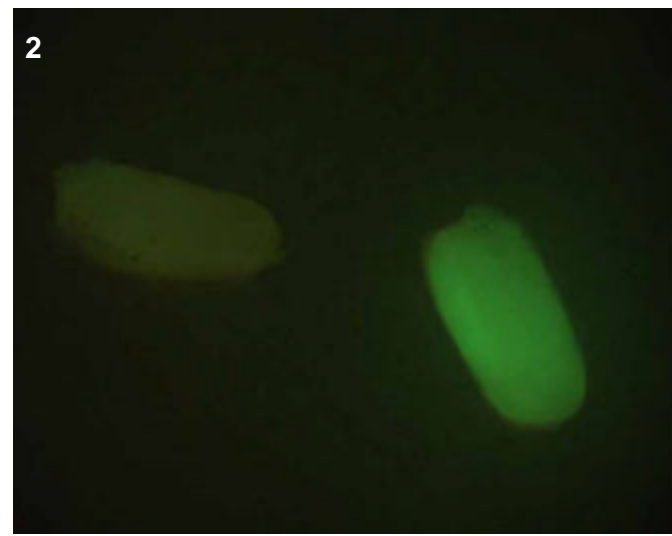
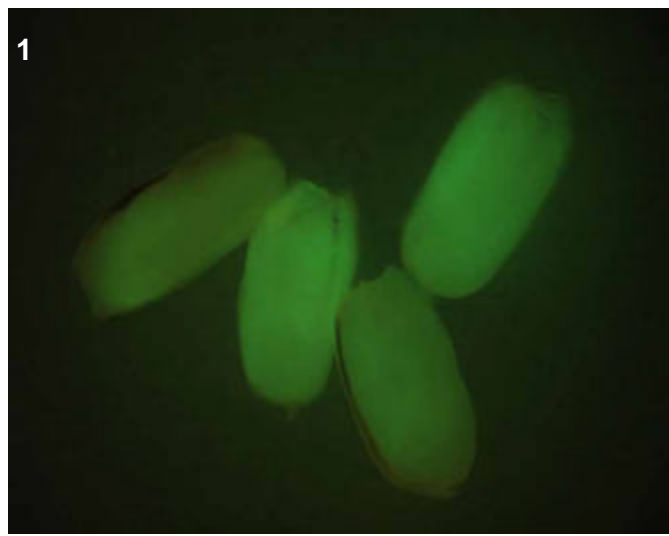
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 104



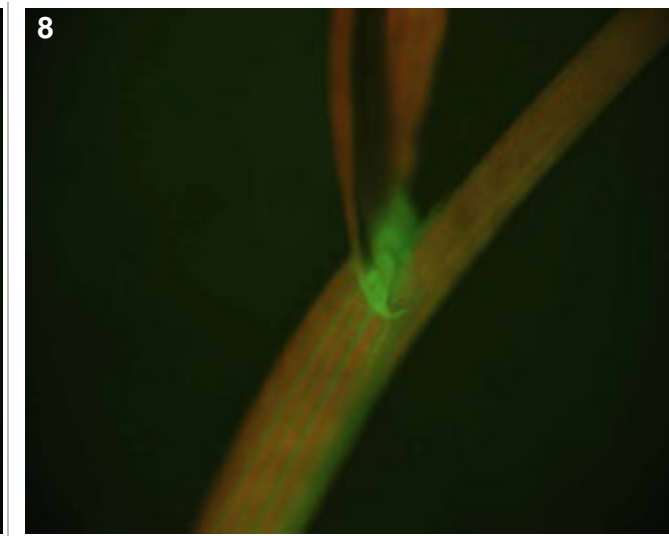
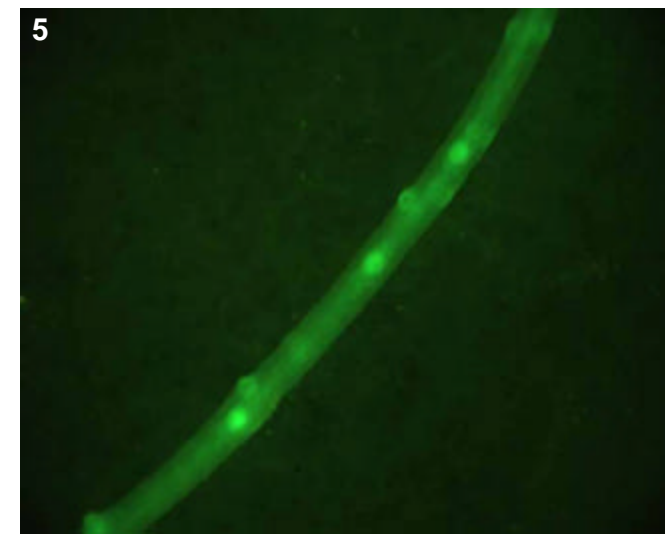
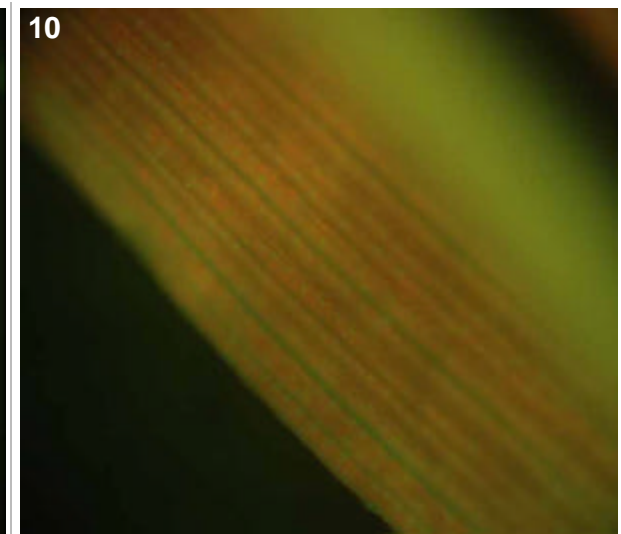
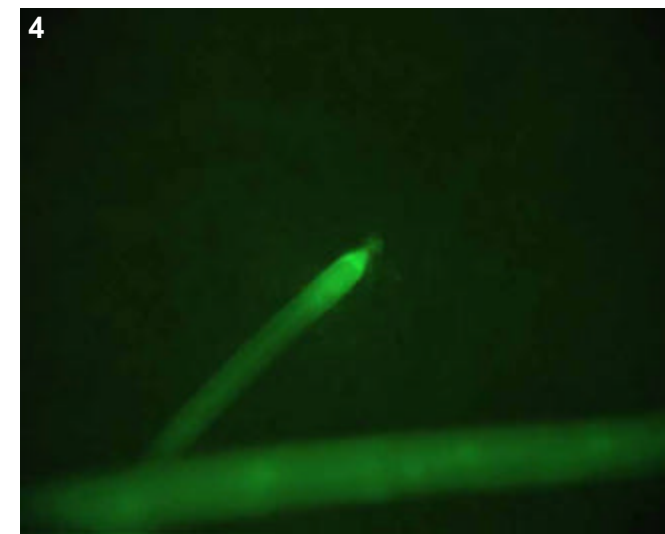
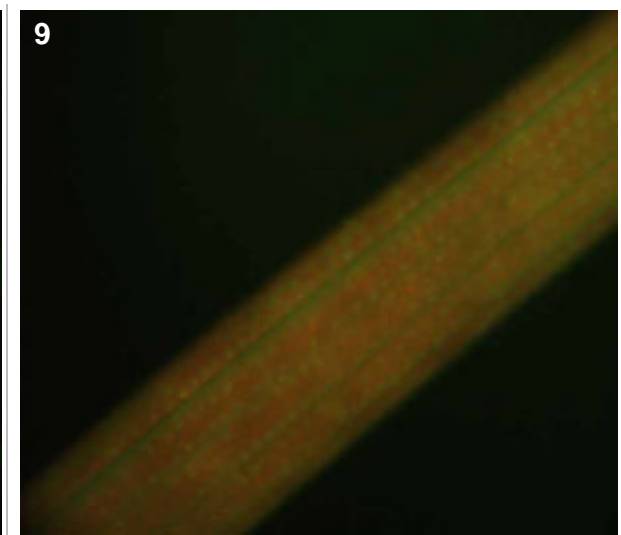
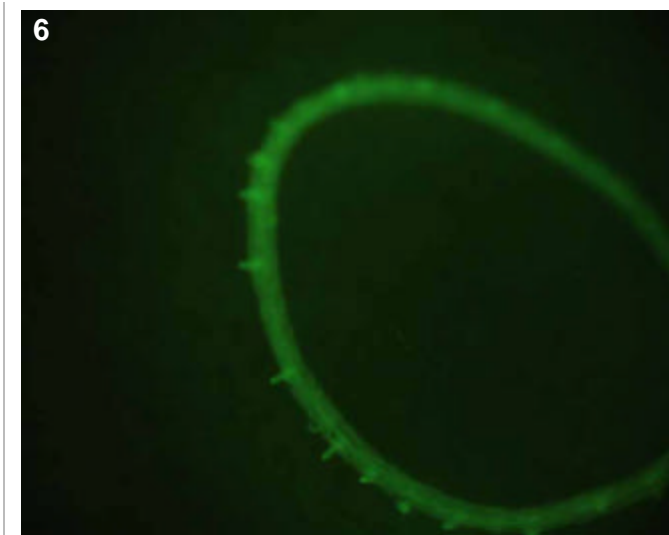
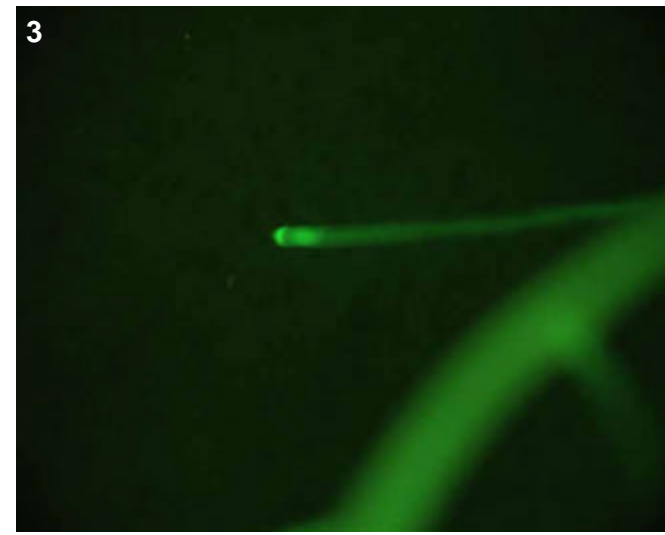
### T0 comments

### T1 seed comments

3/5 seeds had bright expression in aleurone/endosperm. Maybe coleorhiza too (pictures 1-2).

### T1 seedling comments

Very bright expression--looks like constitutive throughout the plant.



# Genotype: ARN A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

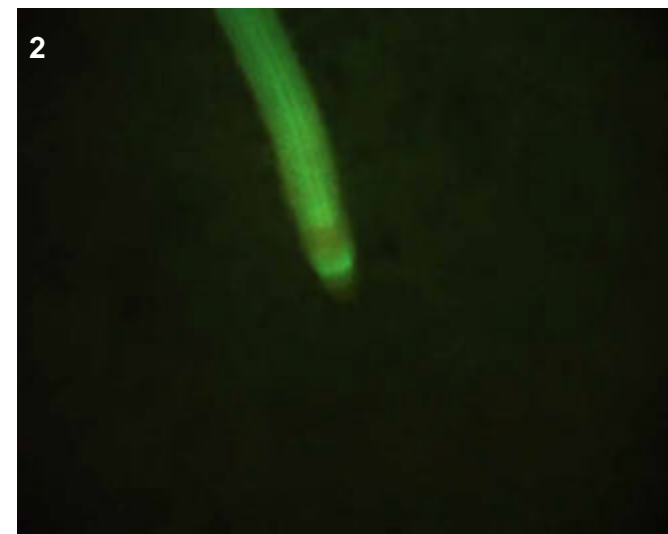
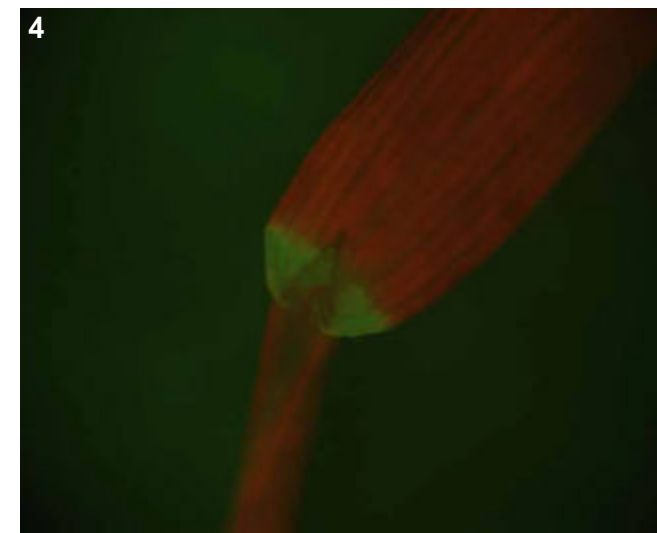
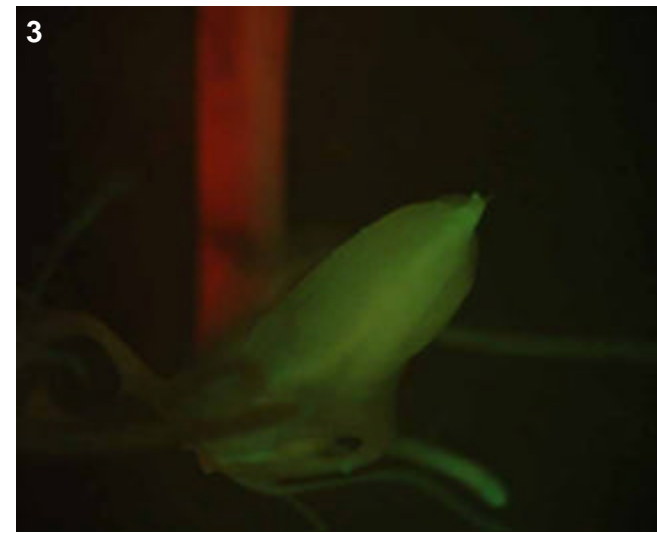
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 18



## T0 comments

## T1 seed comments

## T1 seedling comments

NOTE: This line may have been mixed up with ARN E09

# Genotype: ARN D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

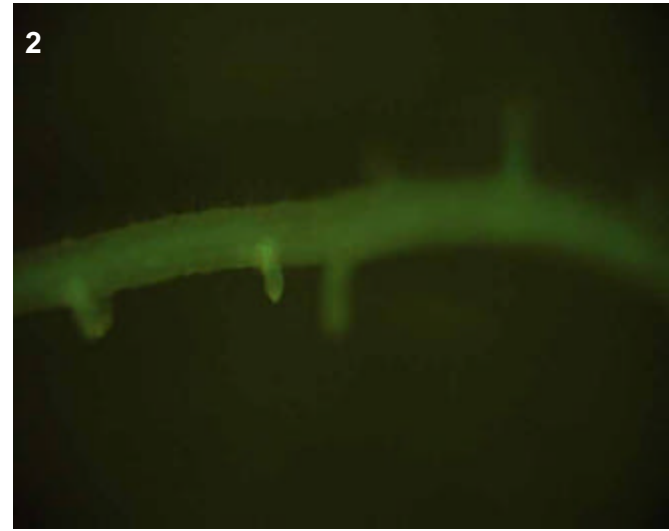
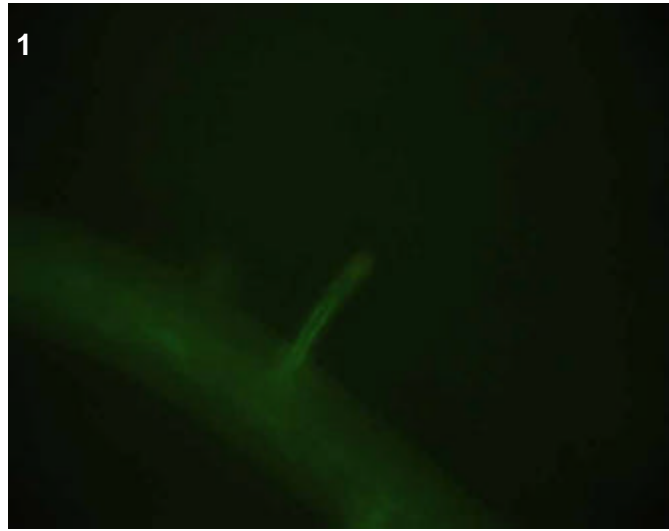
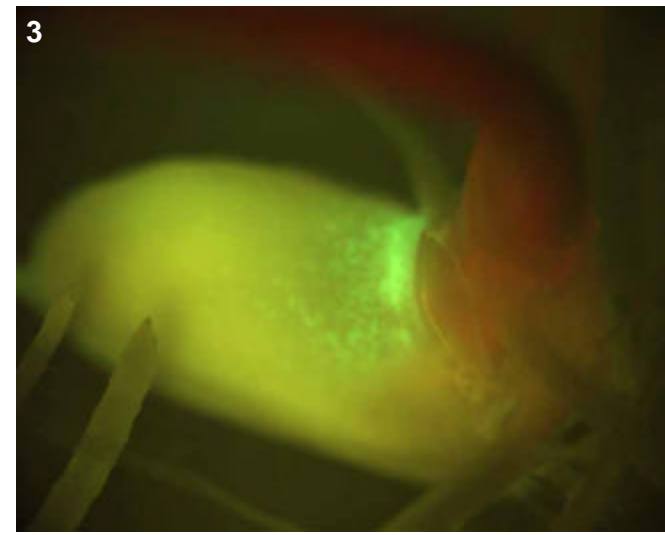
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 11



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARN F12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

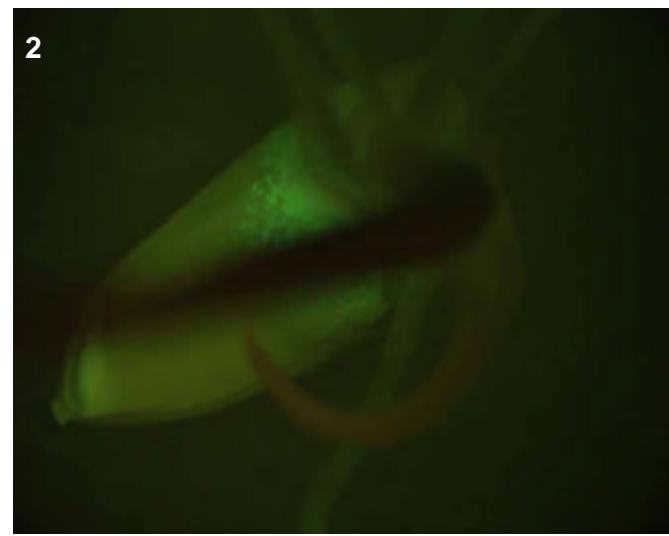
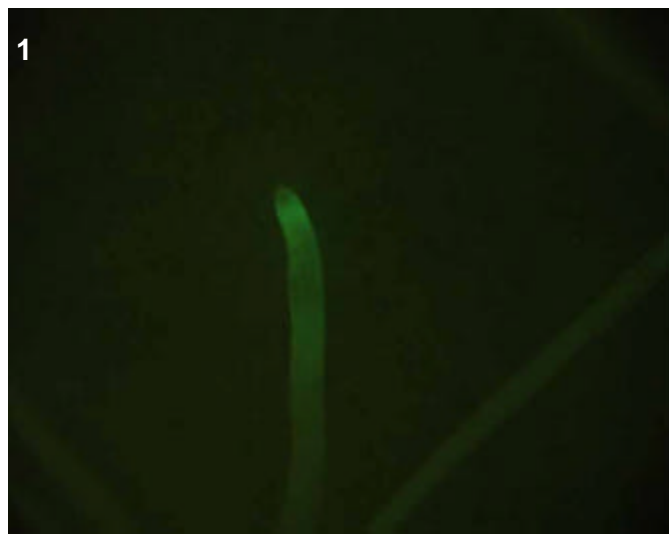
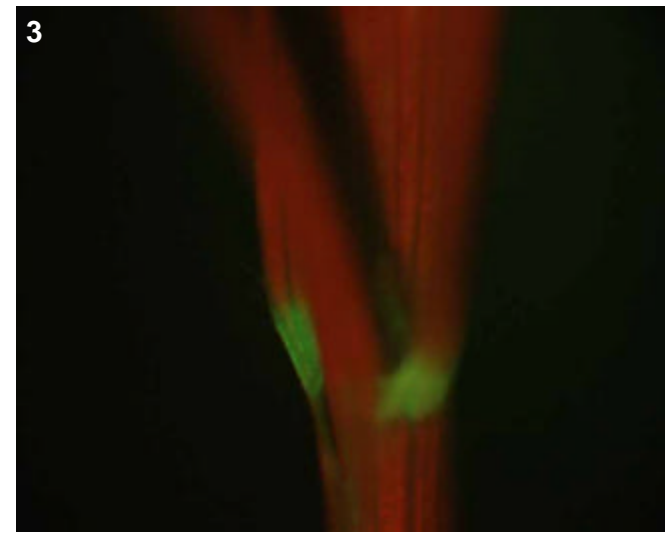
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 78



## T0 comments

## T1 seed comments

## T1 seedling comments

Interesting root pattern (pic 1) because the expression appeared specific to crowns.

# Genotype: ARO A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

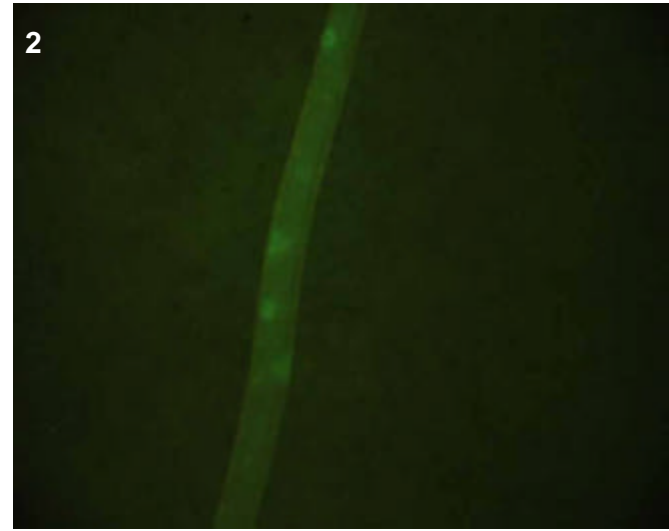
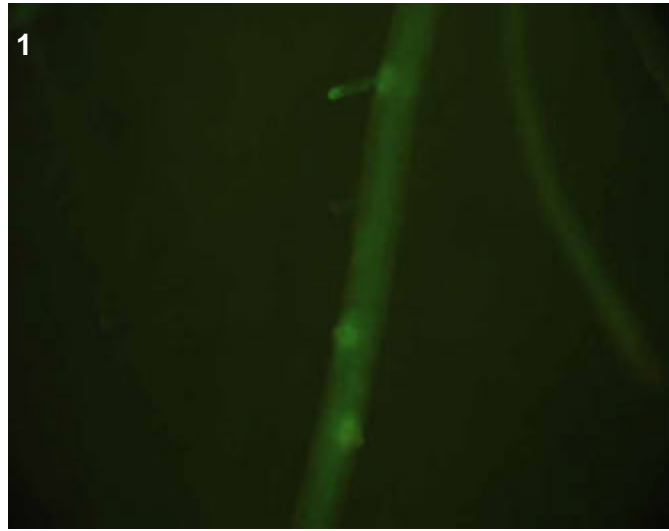
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 32



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression was bright in crown/seminal vascular and lateral root emergence (pics 1-2), but faint in the lateral root vascular.



# Genotype: ARO B11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 62

## T0 comments

Faint expression in the collar and sheath vascular, no pics taken.

## T1 seed comments

## T1 seedling comments

Faint expression in endosperm and crowns, again no pictures were taken.

# Genotype: ARO D12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

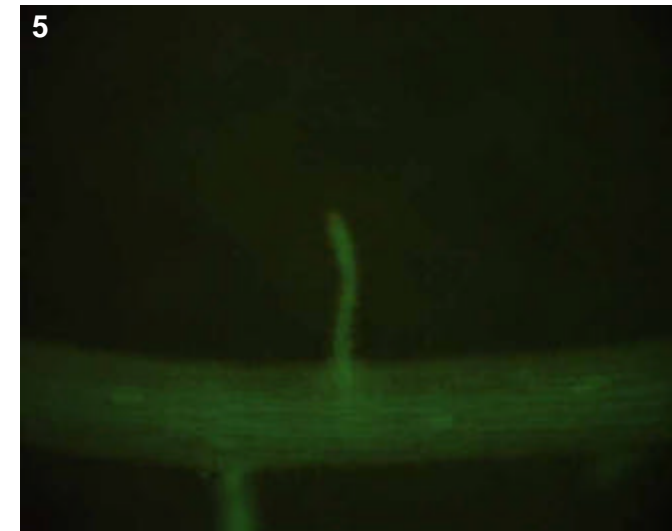
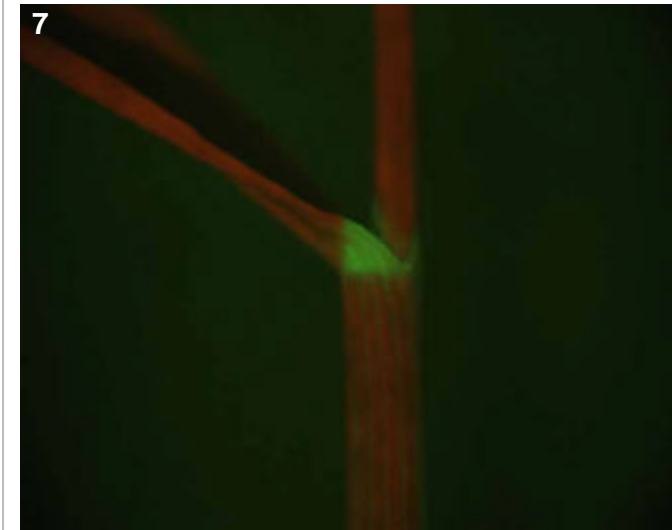
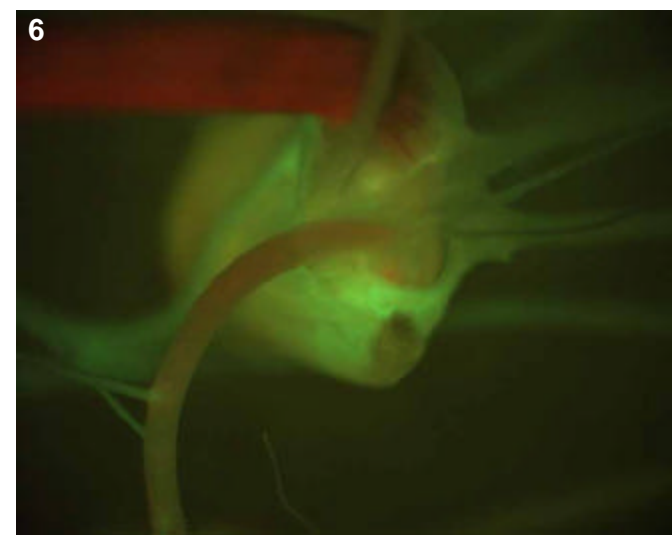
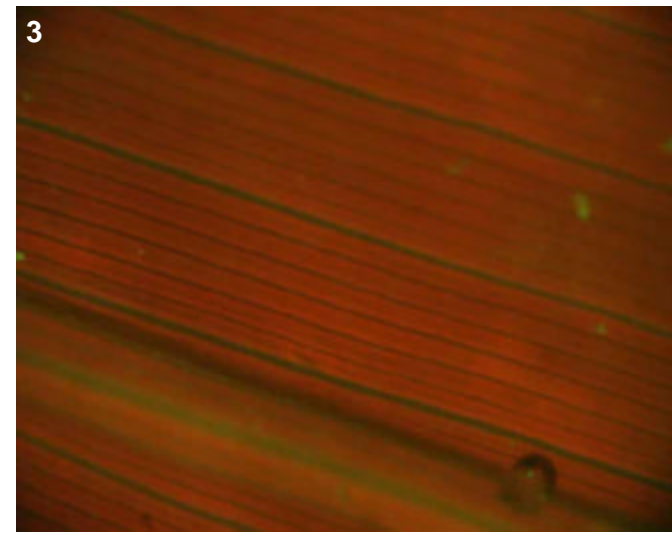
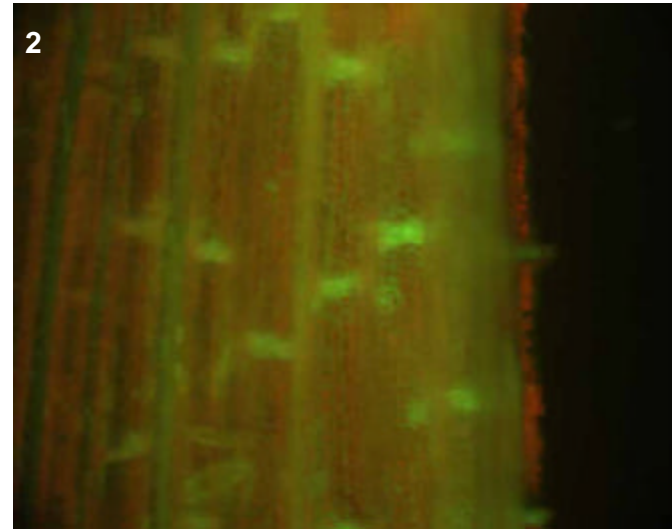
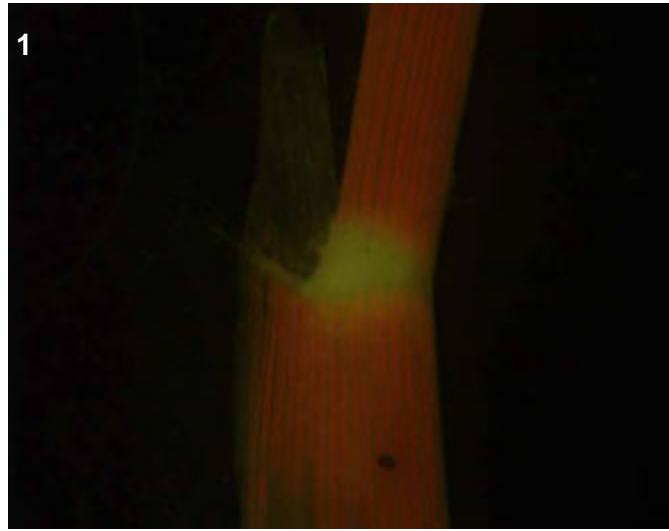
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants **Confocal?**

**Number T2 seed produced:** 8



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ARO E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

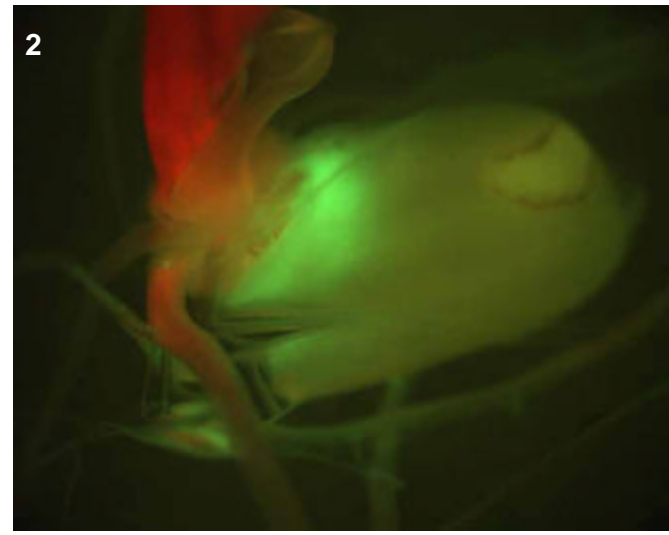
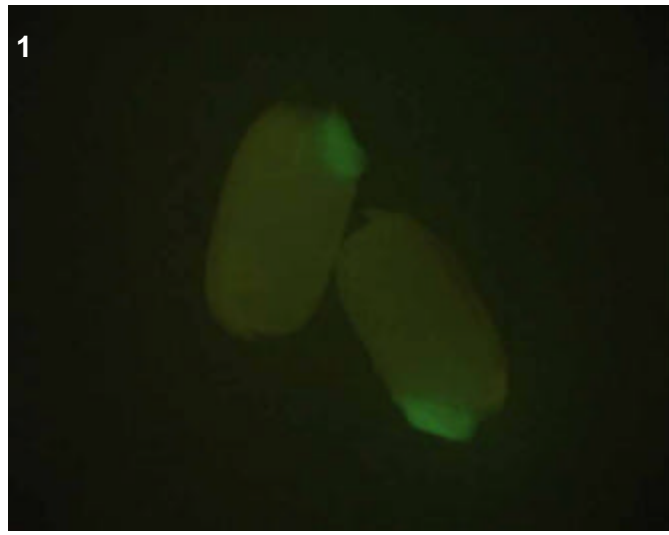
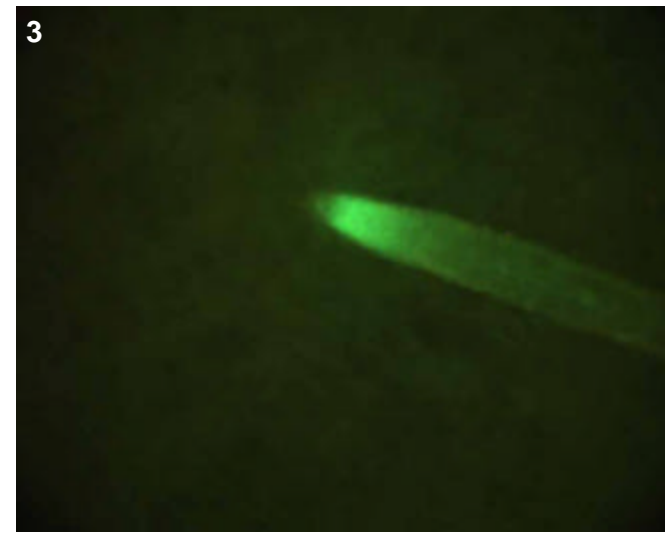
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 51



## T0 comments

## T1 seed comments

3/5 seeds had bright expression.

## T1 seedling comments

# Genotype: ARO F06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-7  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

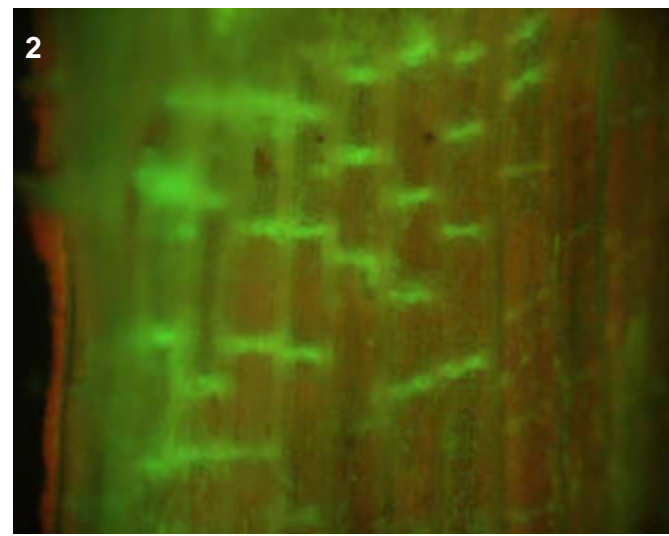
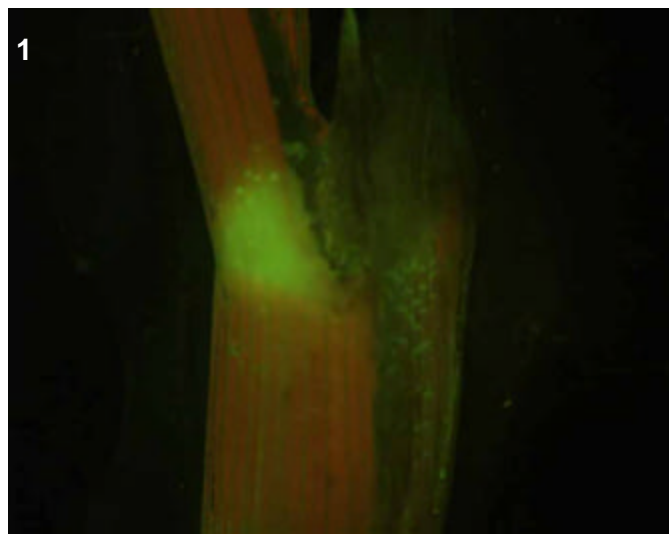
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 28



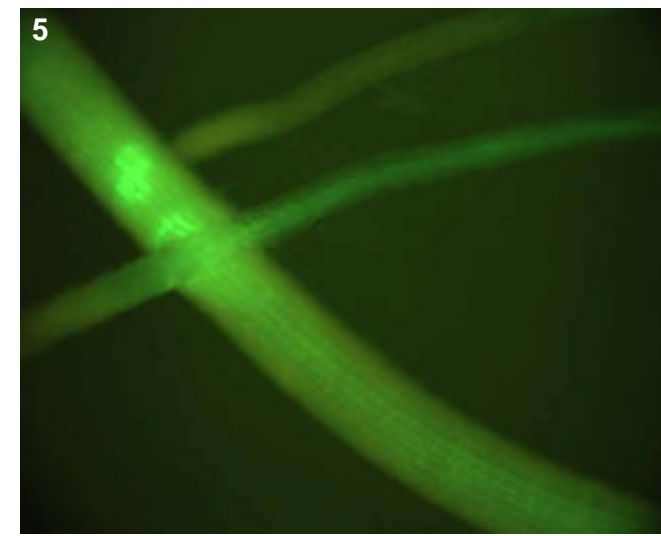
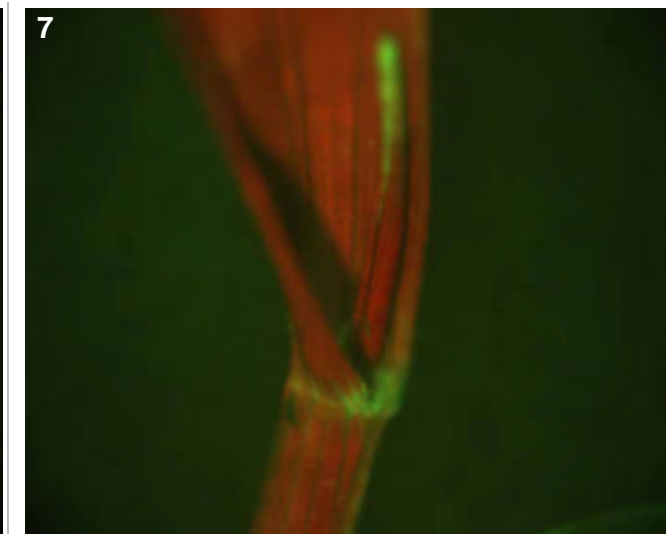
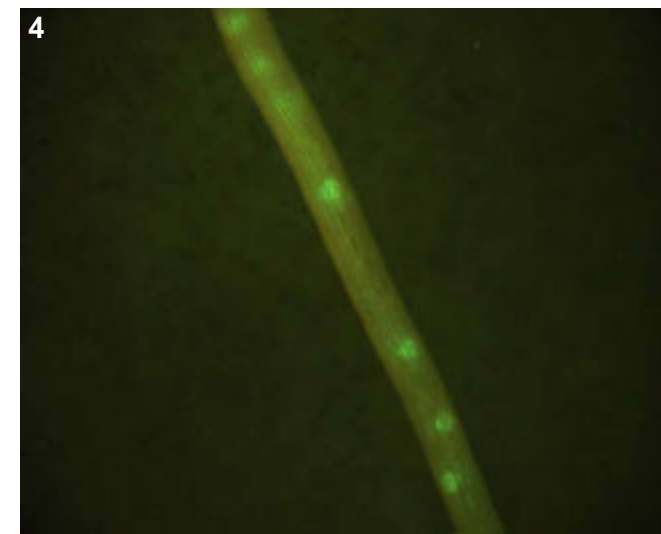
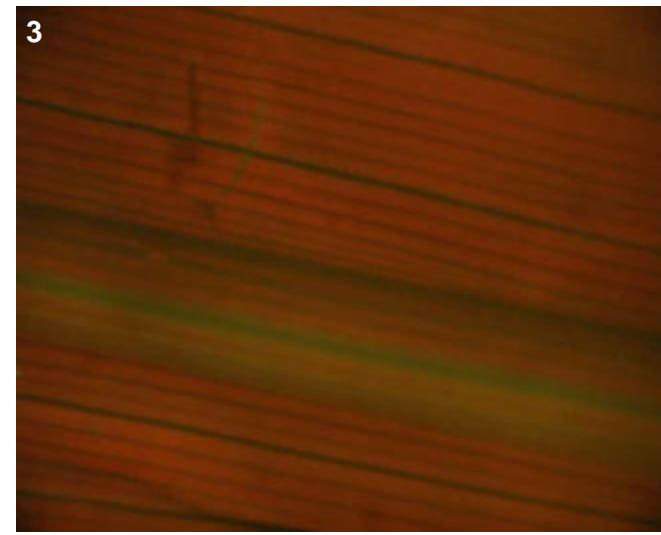
### T0 comments

Flowers were too old for analysis. Looks like a bright midrib in the leaf section (pic 3).

### T1 seed comments

### T1 seedling comments

Bright vascular in both the root (pics 4-6) and shoot (pic 7). This line may be mutant due to the rather compact size of plantlets (see pic 6).



# Genotype: ARO H05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

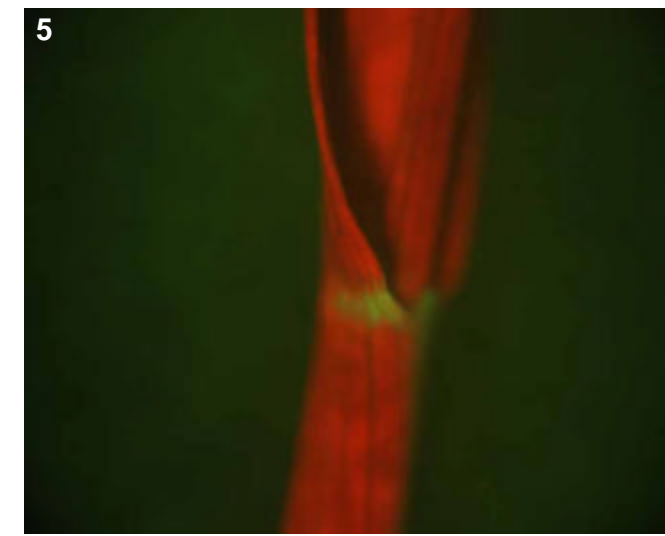
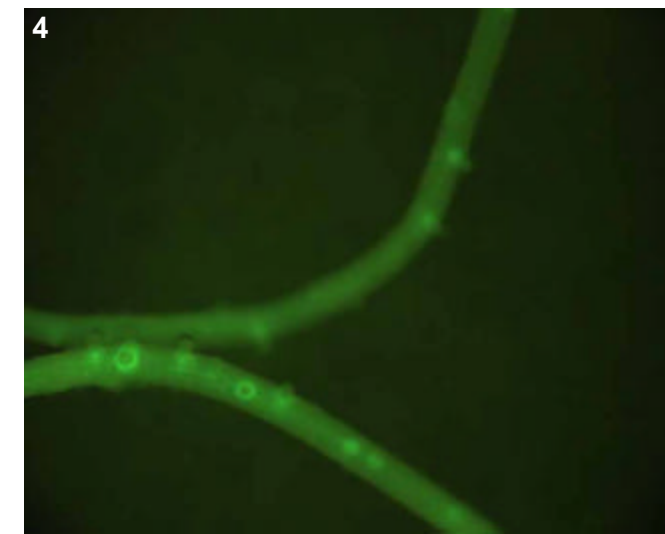
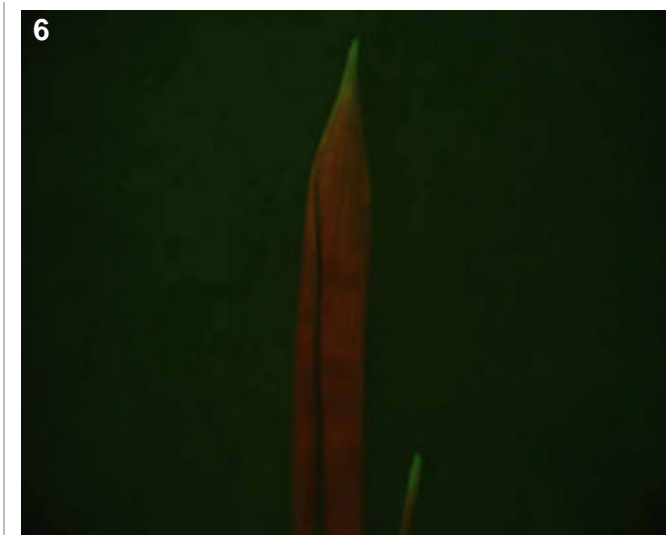
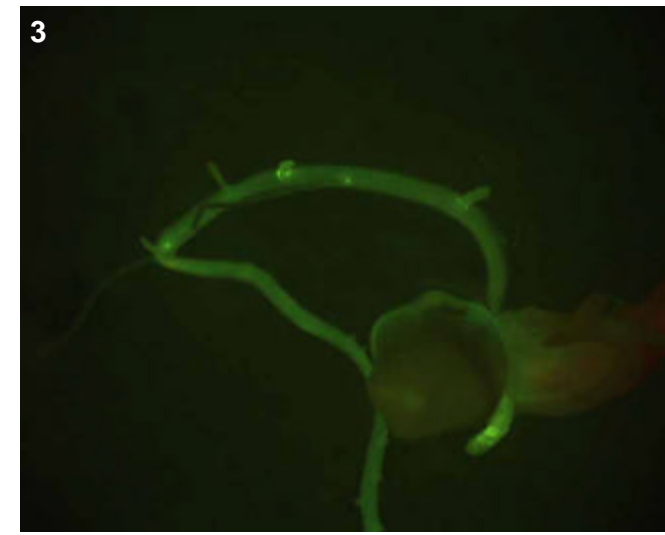
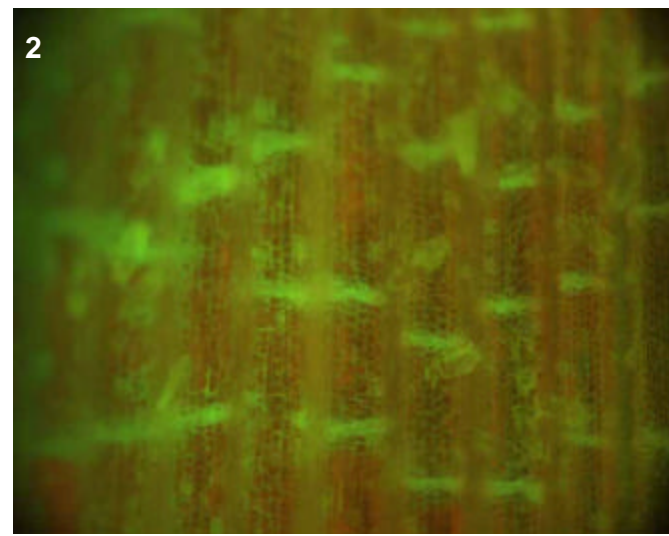
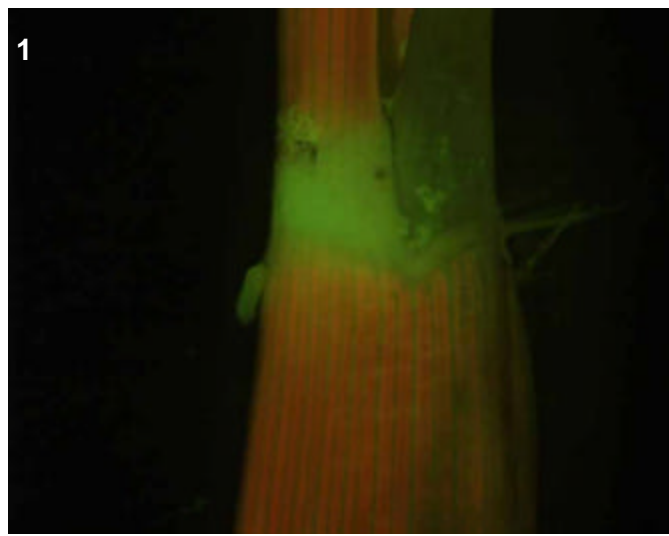
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 65



### T0 comments

flowers were too old to be analyzed.

### T1 seed comments

### T1 seedling comments

General expression throughout roots (pics 3-4), while shoot expression appeared specific to the collar (pic 5) and leaf tips (pic 6).

# Genotype: ARO H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-6  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

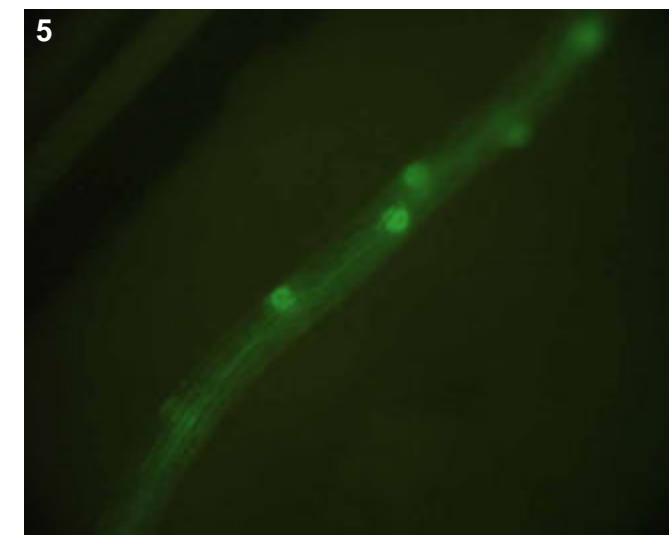
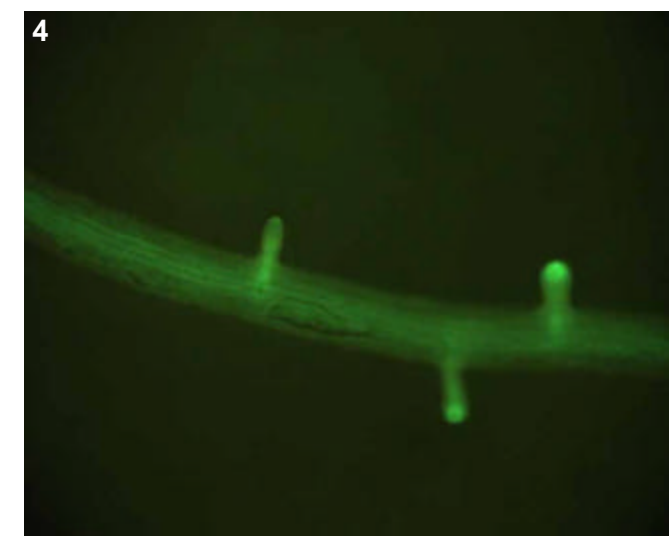
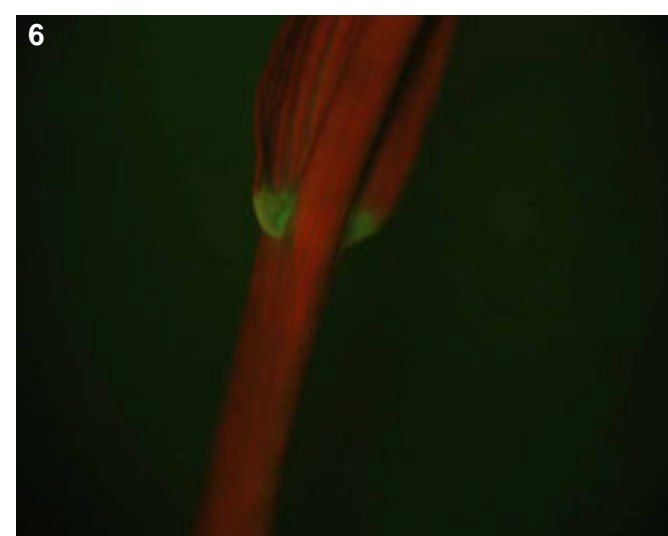
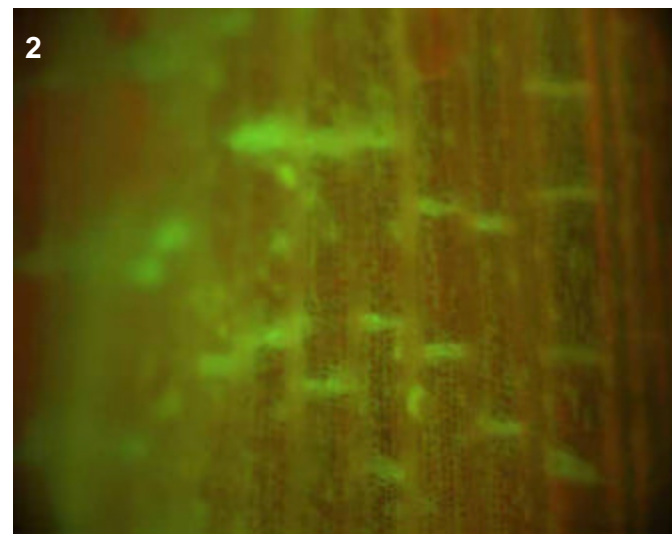
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 51



## T0 comments

## T1 seed comments

4/5 seeds had medium expression in the embryo.

## T1 seedling comments

# Genotype: ARP A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

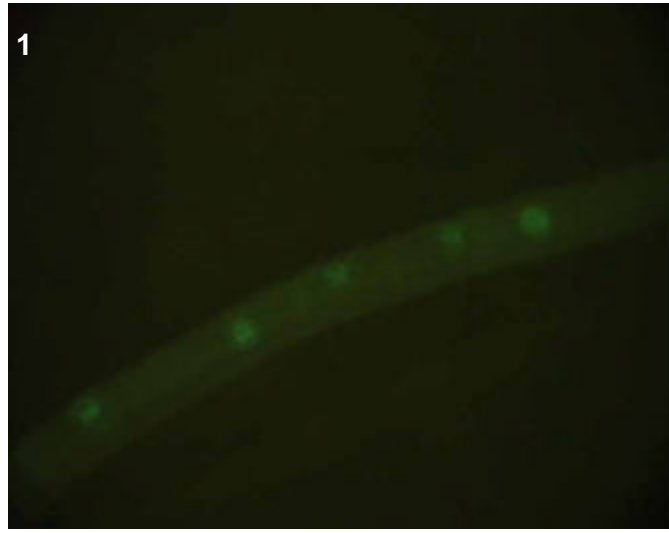
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 134



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression appeared specific to the zone of lateral root emergence on the seminal root (pic 1).

# Genotype: ARP B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

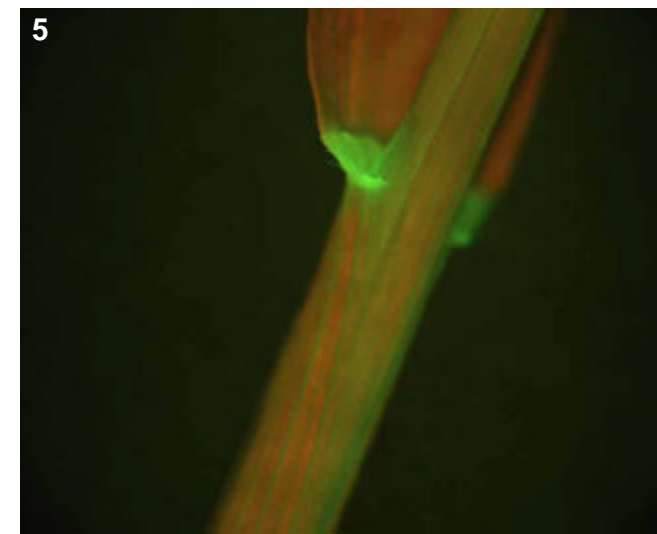
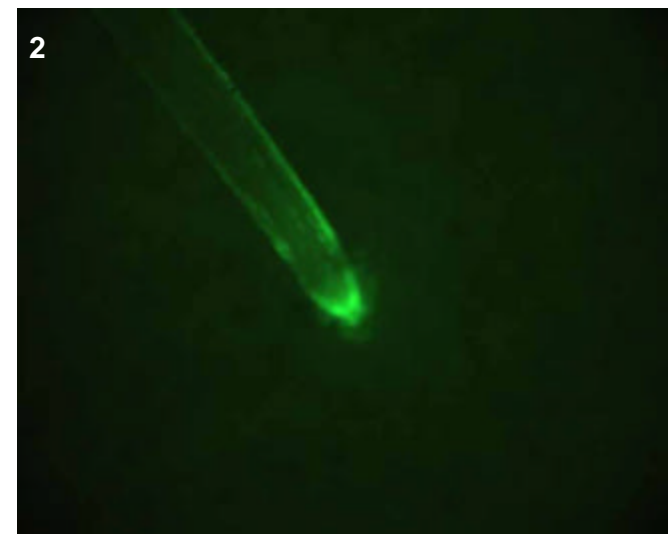
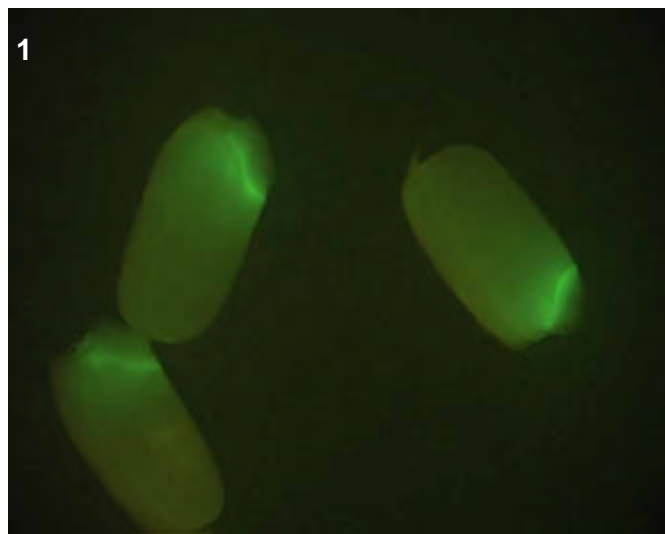
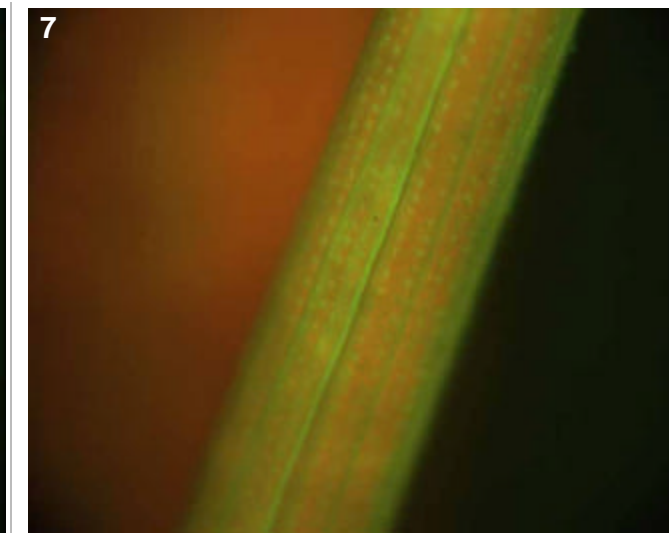
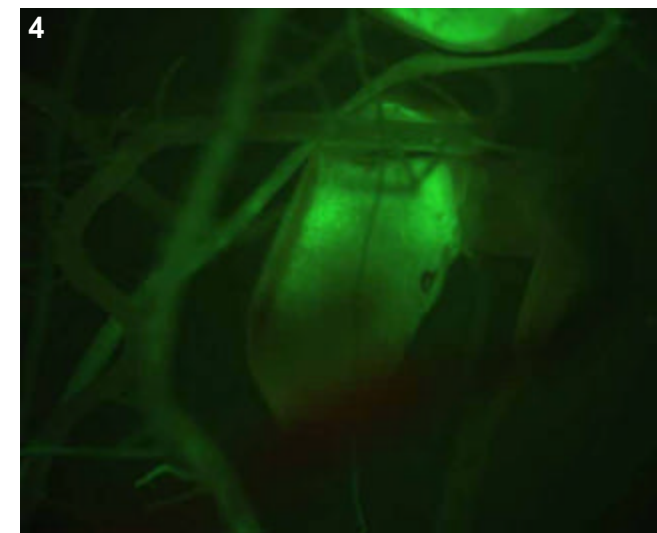
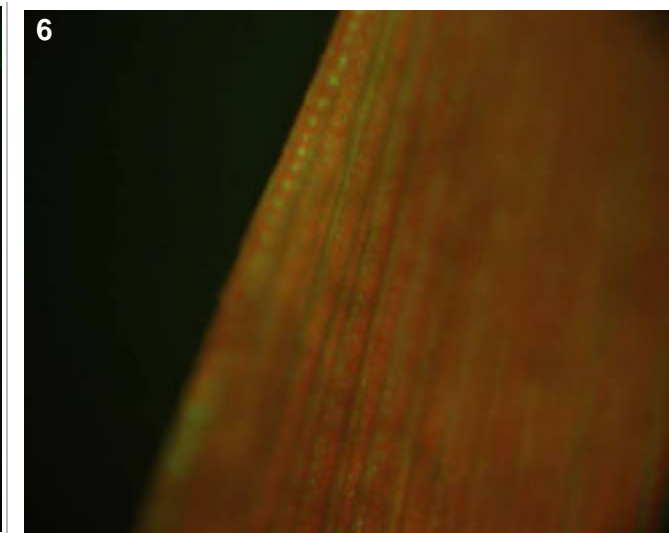
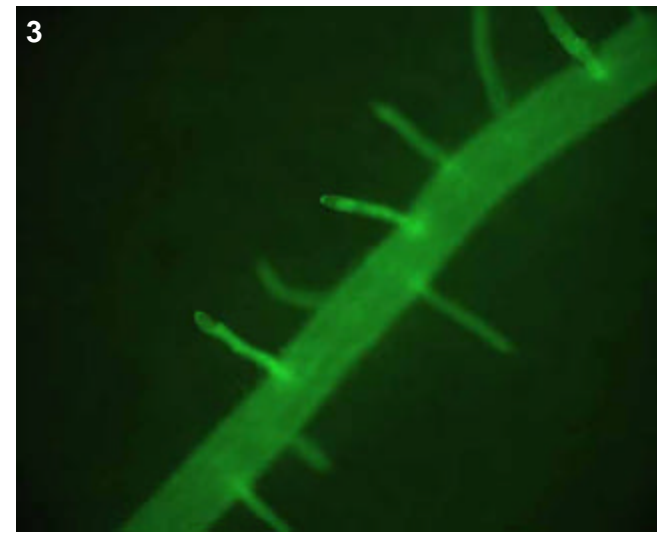
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced: 26



## T0 comments

## T1 seed comments

4/5 seeds showed expression

## T1 seedling comments

Looks like bright epidermal expression in roots (pics 2-3). Also bright expression in the shoot--collar and perhaps epidermal expression there as well. Note the bright guard cells in pics 6 and 7.



# Genotype: ARP D03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

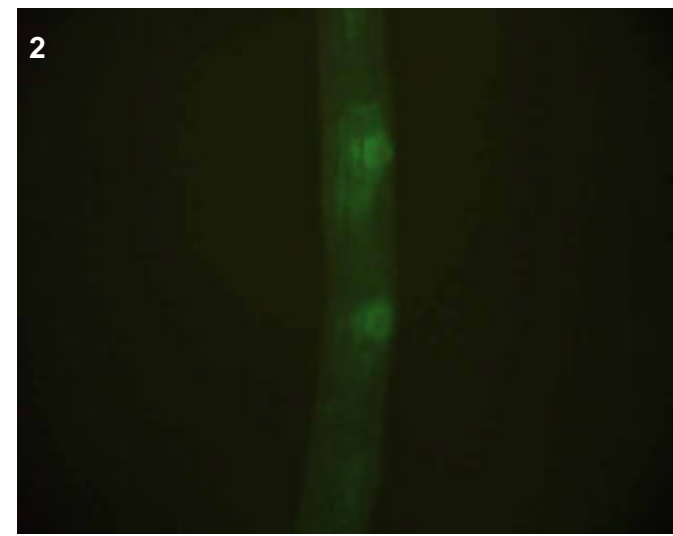
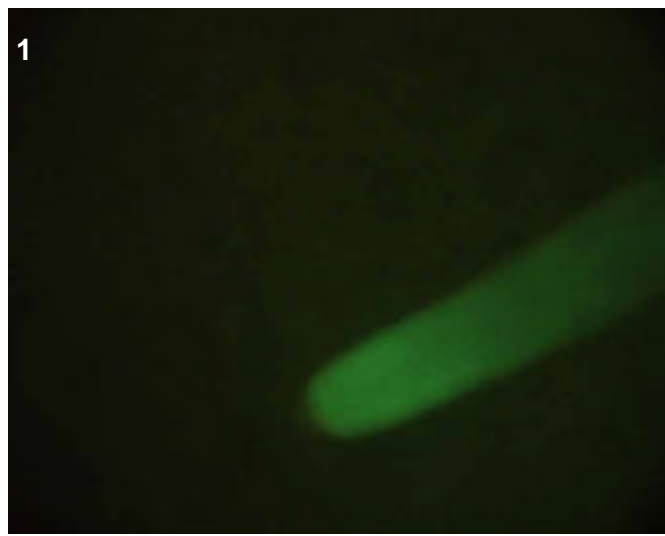
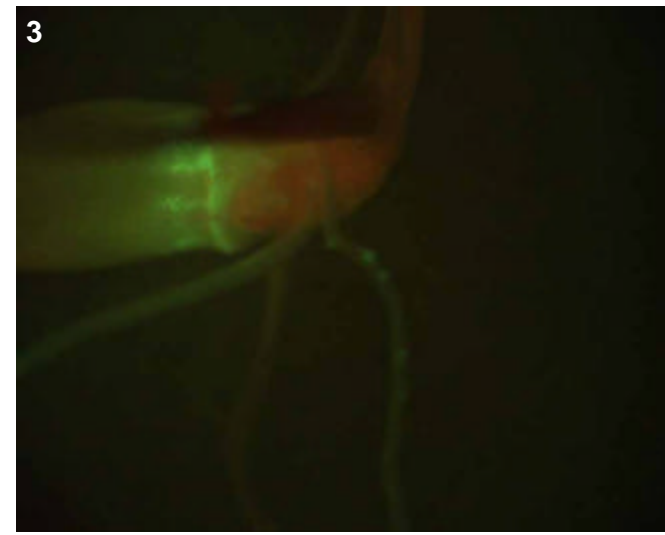
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 118



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARP E10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

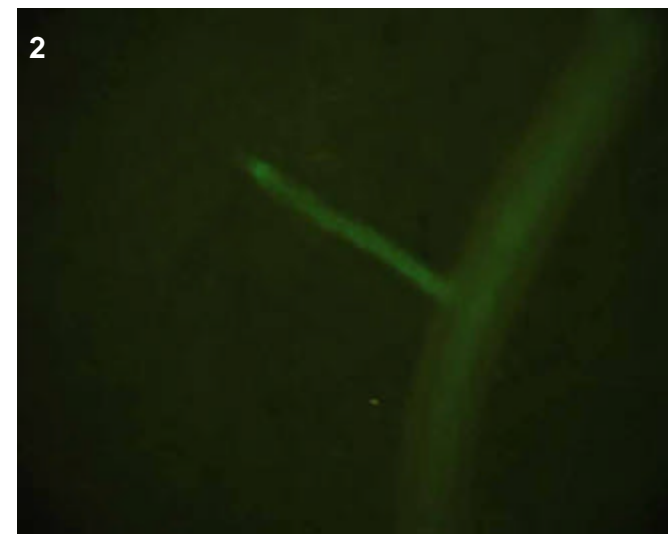
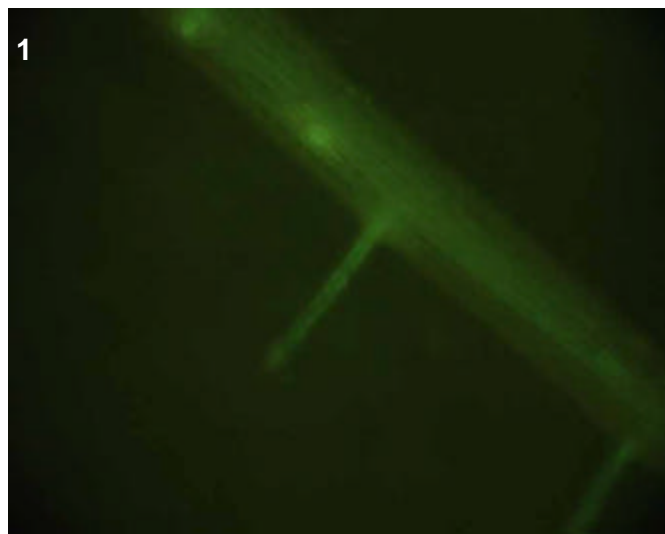
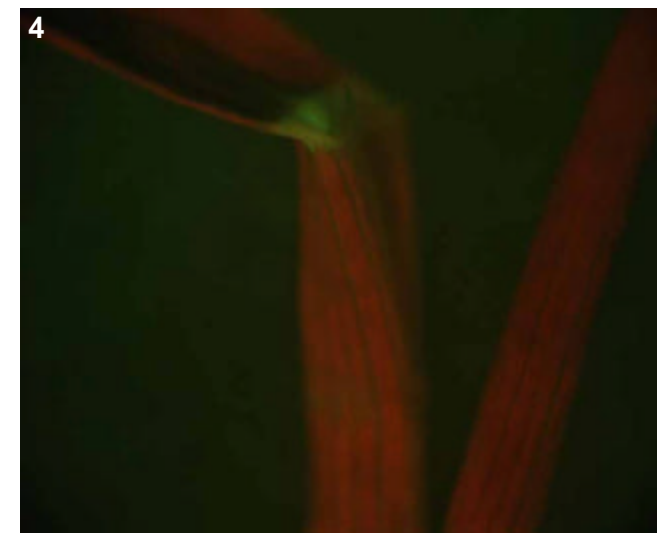
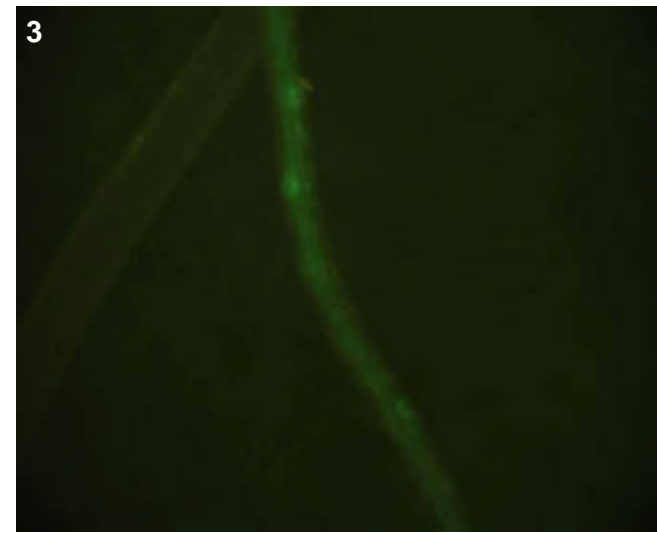
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 102



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium root vascular expression (pics 1-3), faint endosperm and collar (pic 4).

# Genotype: ARP F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

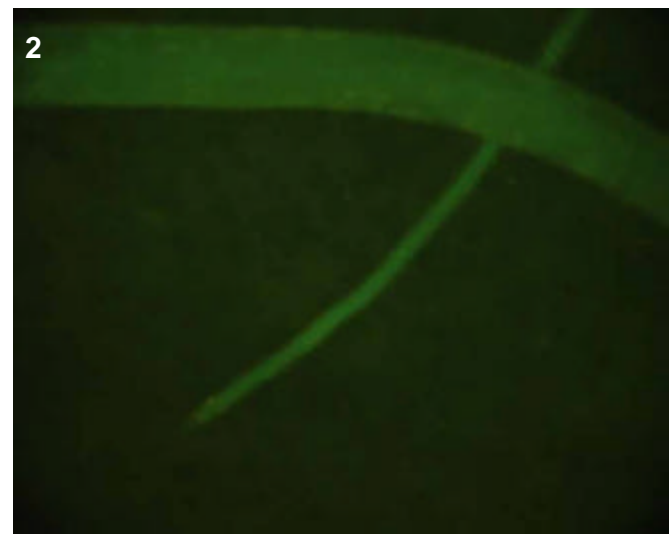
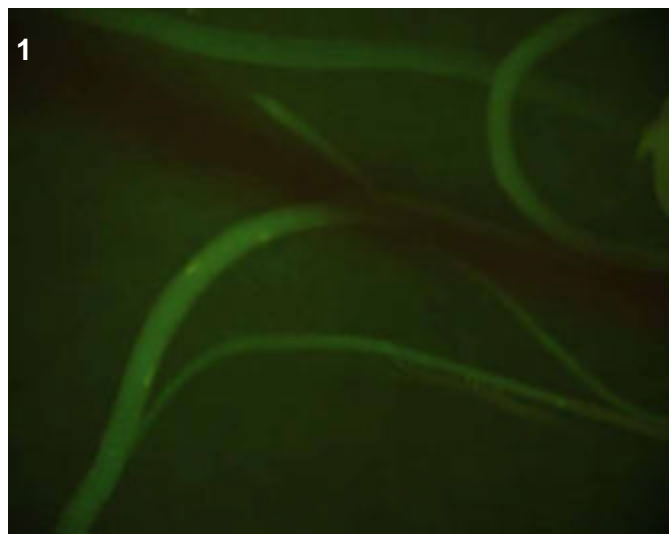
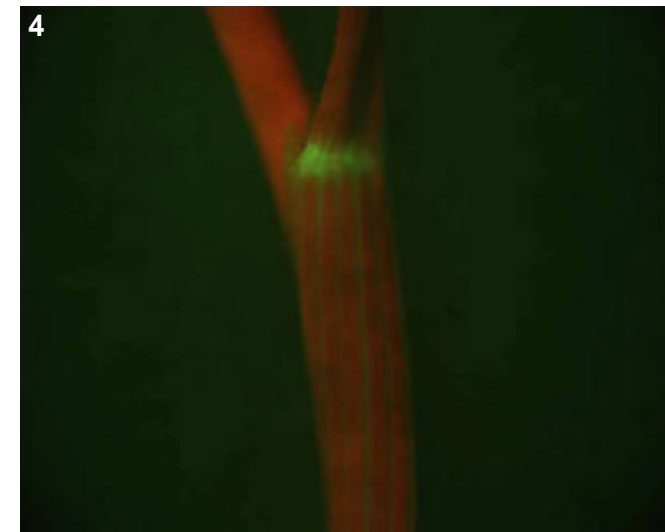
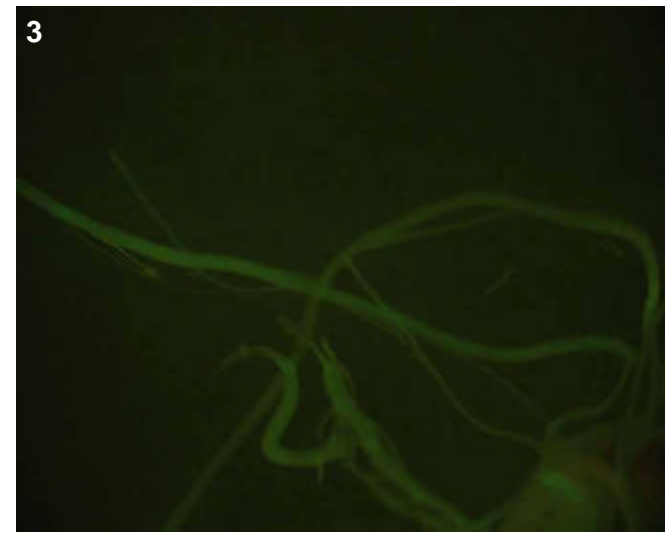
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 60



## T0 comments

## T1 seed comments

## T1 seedling comments

The root had general expression throughout (pics 1-3) and looked compact with long thin crown roots indicating perhaps a root mutant phenotype. Bright expression in collar and sheath vascular (pic 4).

# Genotype: ARP H12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

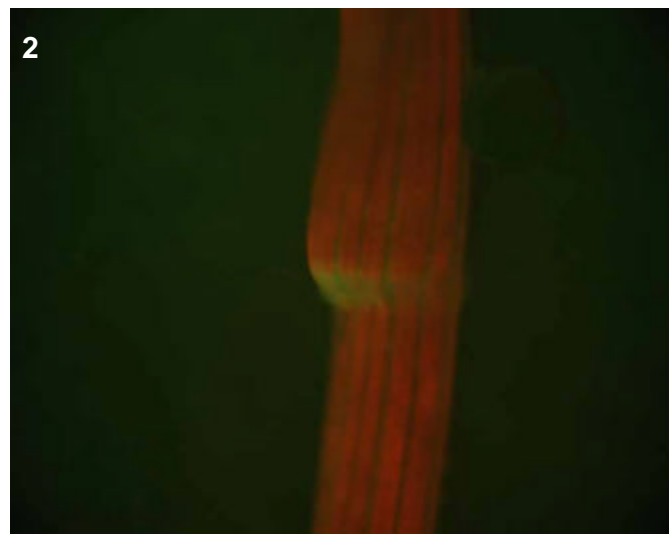
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 123



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression appeared general in crowns but vascular in the laterals (pic 1). Also collar and shoot vascular (pic 2).

# Genotype: ARQ B01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

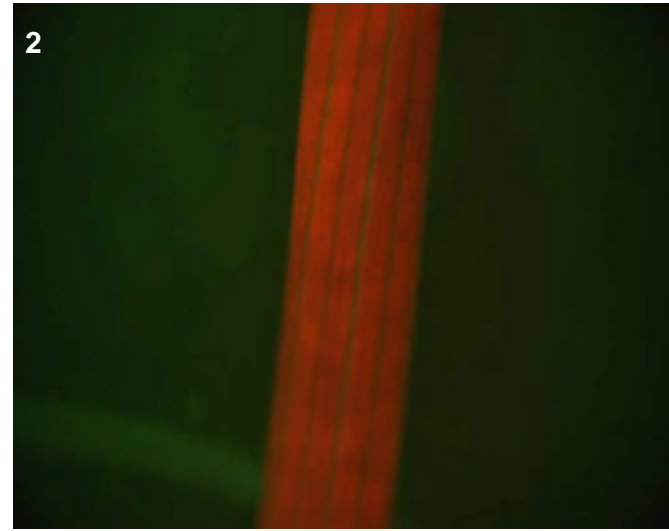
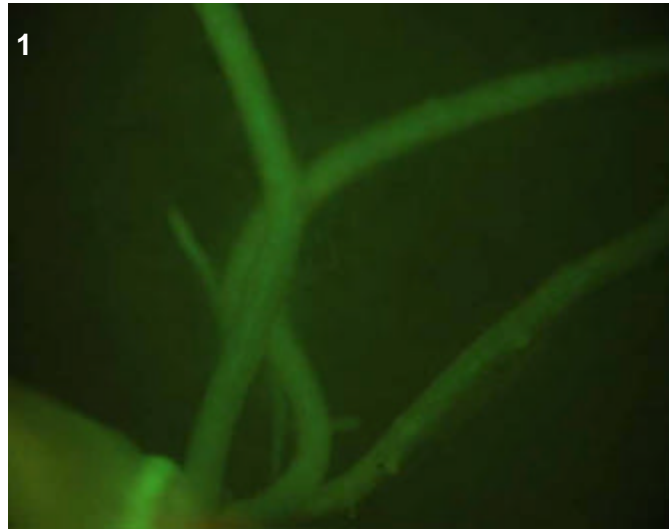
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 33



### T0 comments

### T1 seed comments

### T1 seedling comments

General expression throughout roots (pic1). Shoot vascular expression (pic 2) but no collar.

# Genotype: ARQ B06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

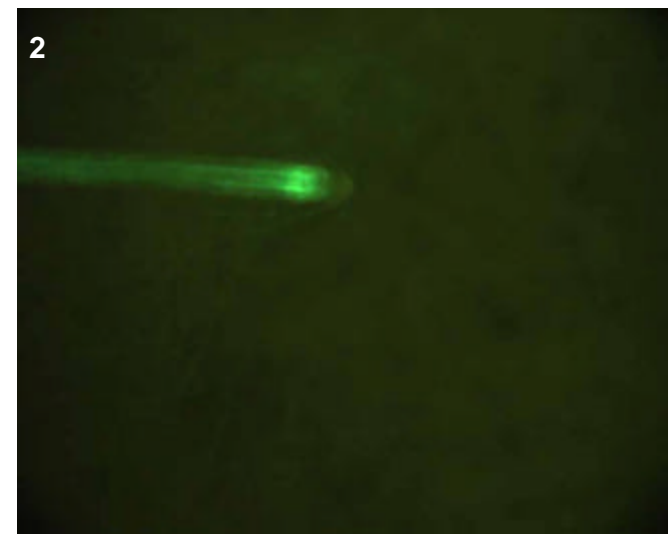
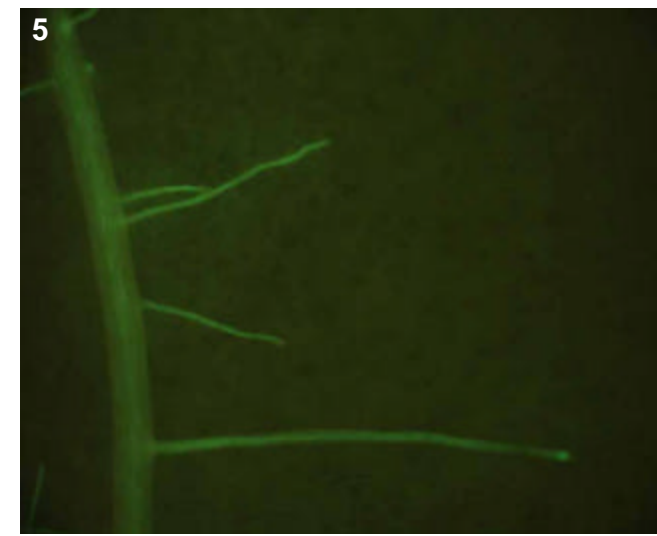
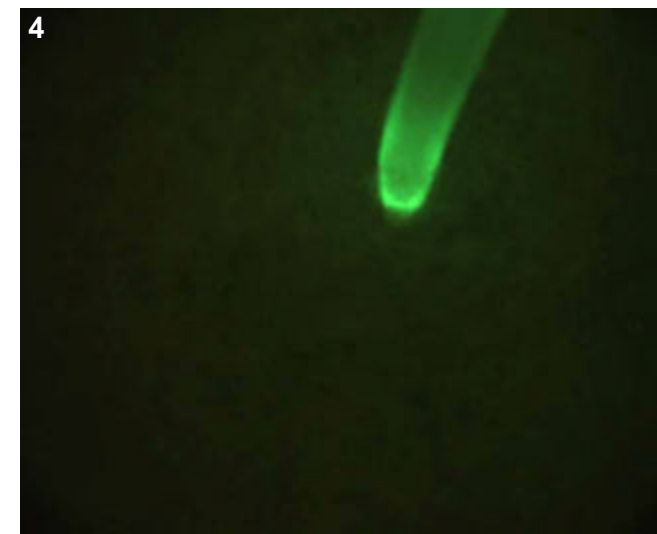
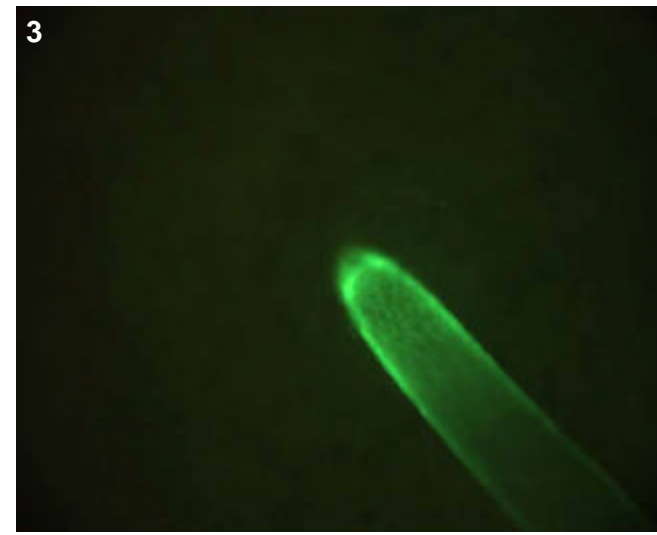
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 40



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright root expression, perhaps cortical, in laterals (pics 2 and 5), note the very bright GFP near elongation zone of tips. Tips of crowns were bright epidermal (pics 3-4). More faint collar expression (pic 6).

# Genotype: ARQ B12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

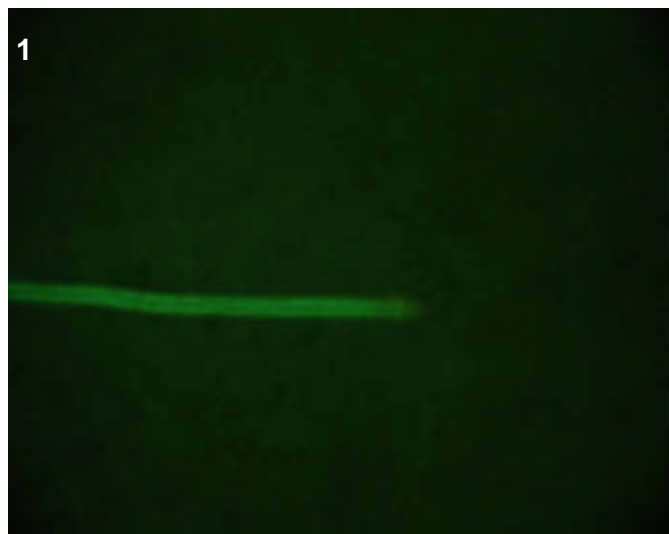
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 65



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright root expression (pic 1), mostly in the lats. Also bright shoot vascular and collar (pic 2).

# Genotype: ARQ C12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

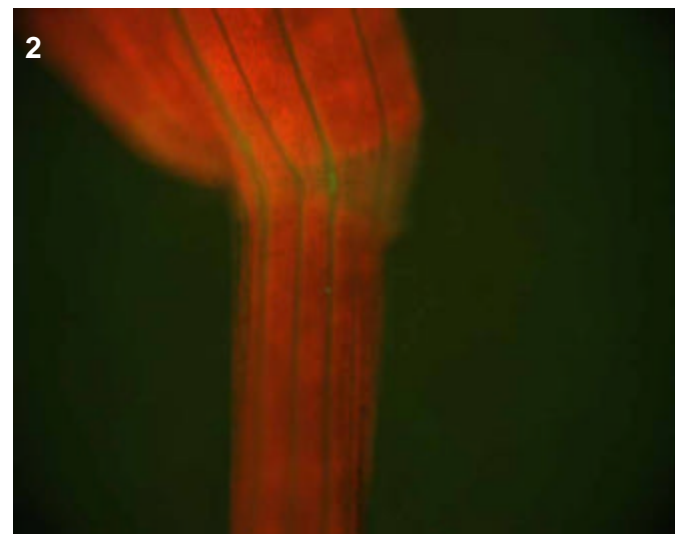
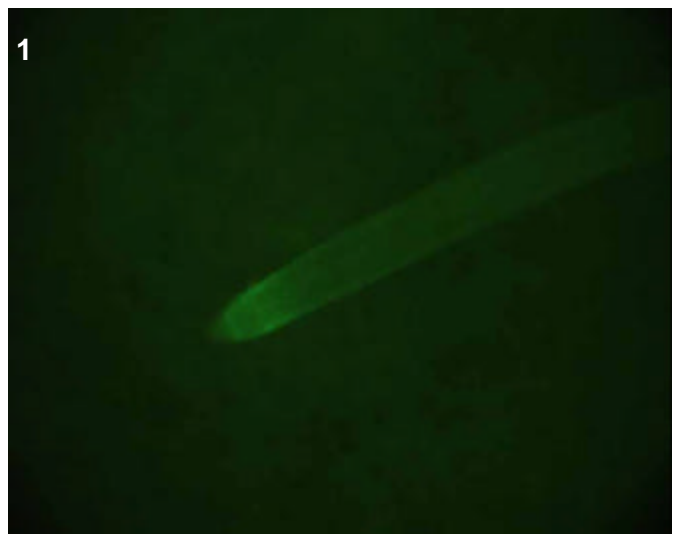
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
 Interesting root expression, characterized by medium epidermal expression in the seminal and crowns (pic 1).  
 Bright shoot vascular (pic 2), but not the collar.



# Genotype: ARQ D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

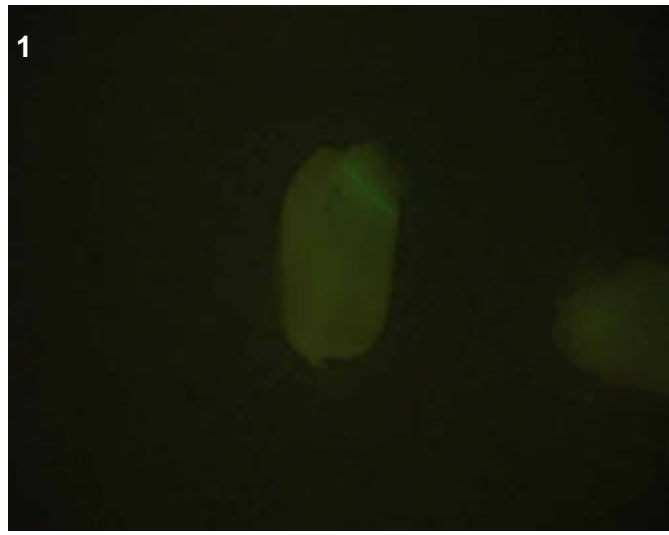
No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

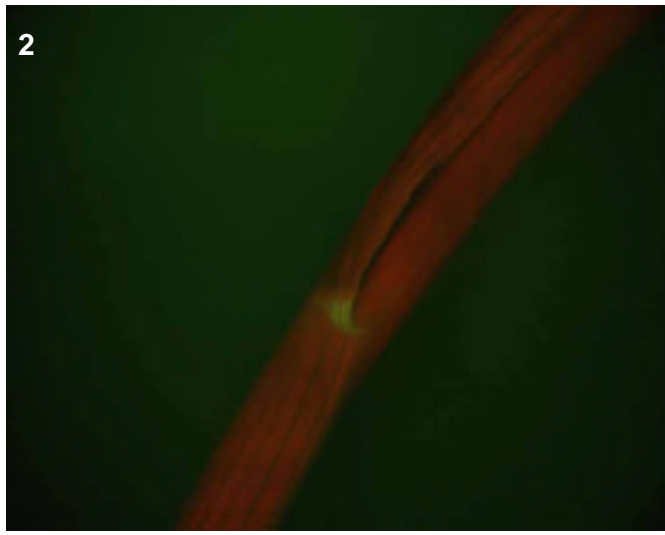
**Confocal?**

**Number T2 seed produced:** 115

1



2



## T0 comments

## T1 seed comments

1/5 seeds had expression.

## T1 seedling comments

Root expression of some kind, but could not be defined due to bacterial contamination.

# Genotype: ARQ D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

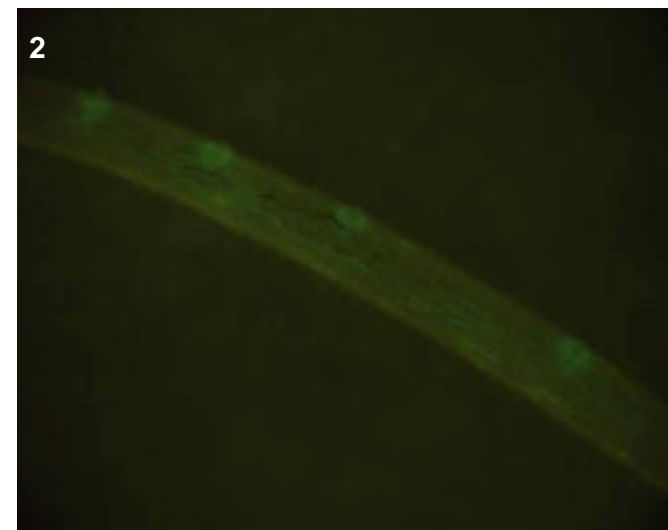
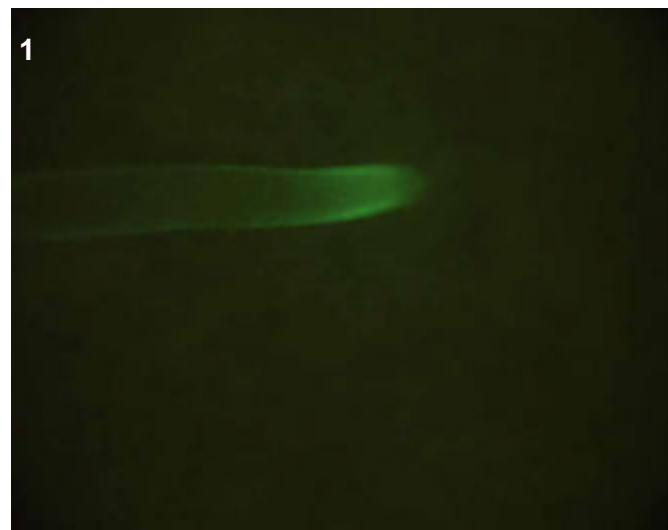
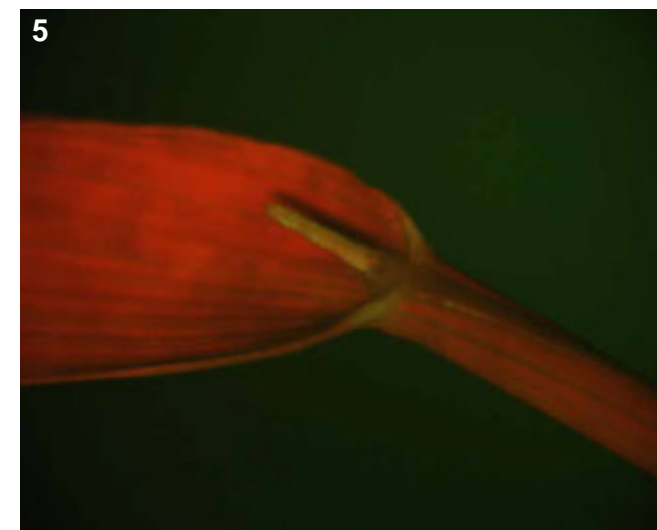
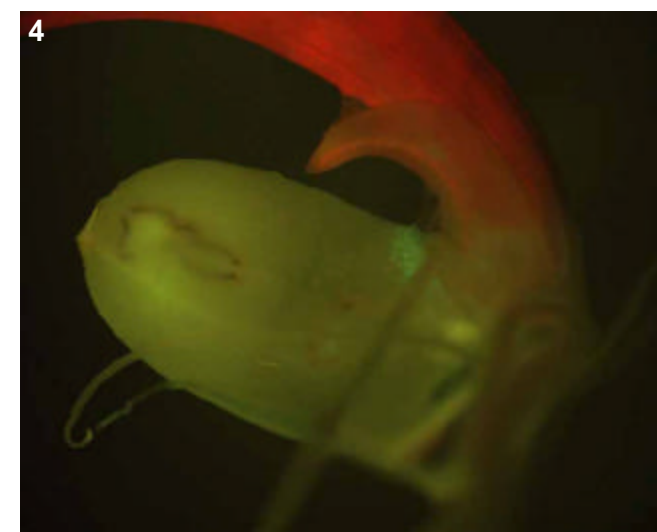
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 150



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ARQ E01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 1

## T0 comments

## T1 seed comments

## T1 seedling comments

Faint root vascular expression, no pictures taken.

# Genotype: ARQ G02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

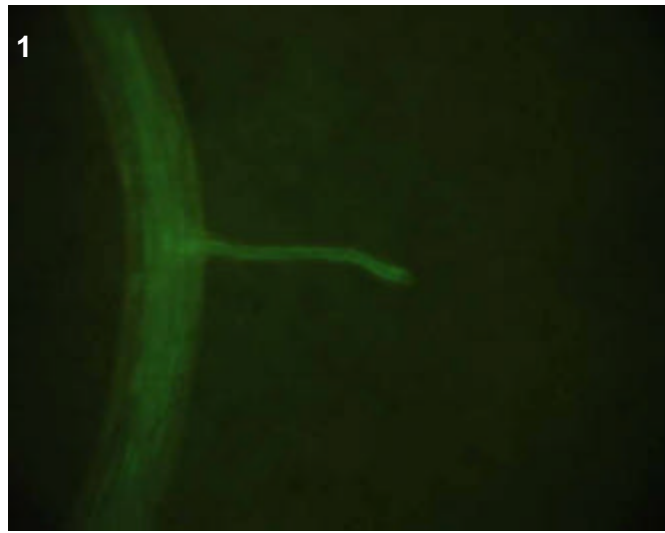
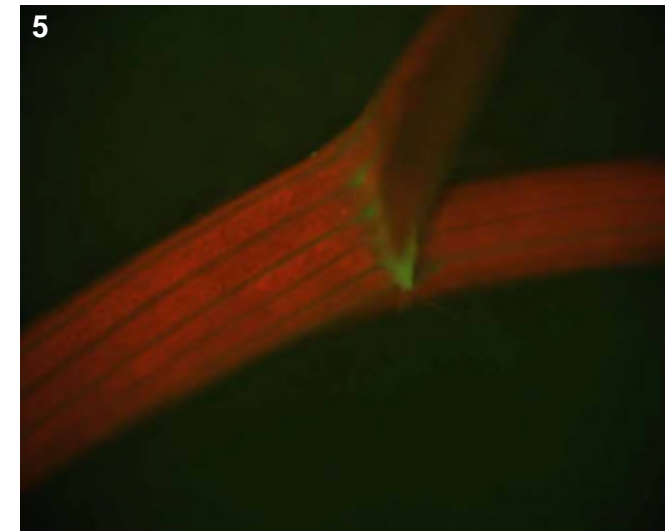
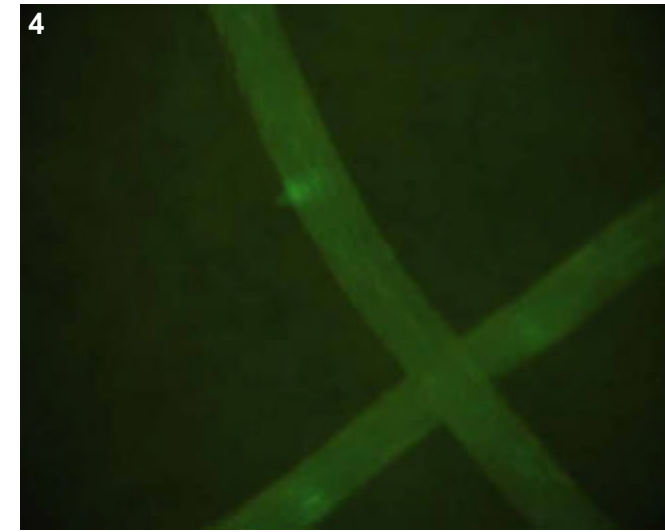
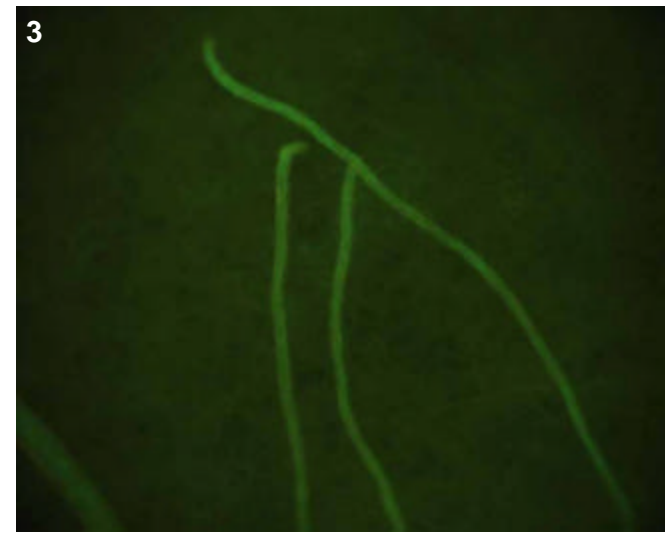
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 194



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright root vascular expression (pics 1-4), particularly in the laterals. Note the interesting expression pattern near tips of young crown roots (pic 2). Medium collar and sheath vascular expression (pic 5).

# Genotype: ARQ G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

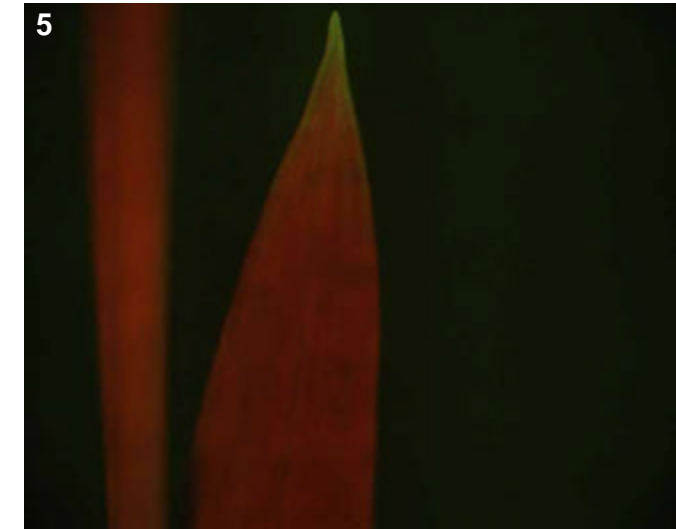
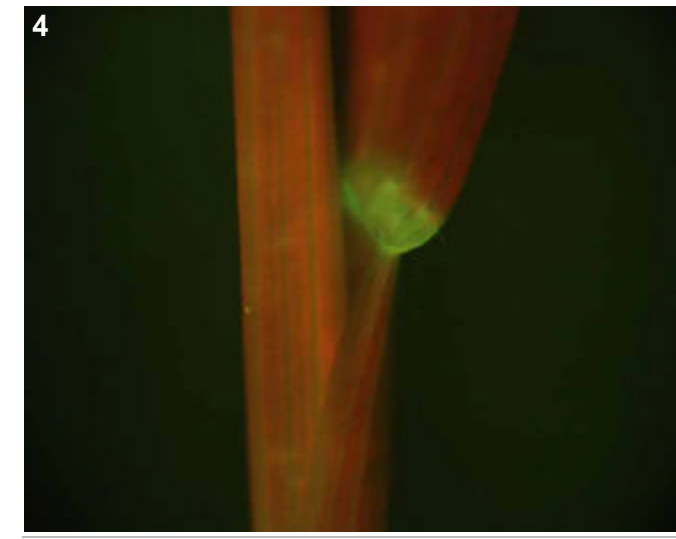
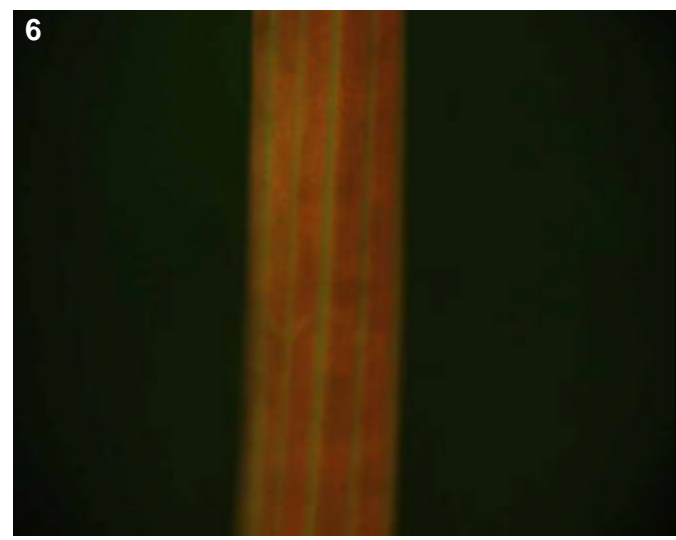
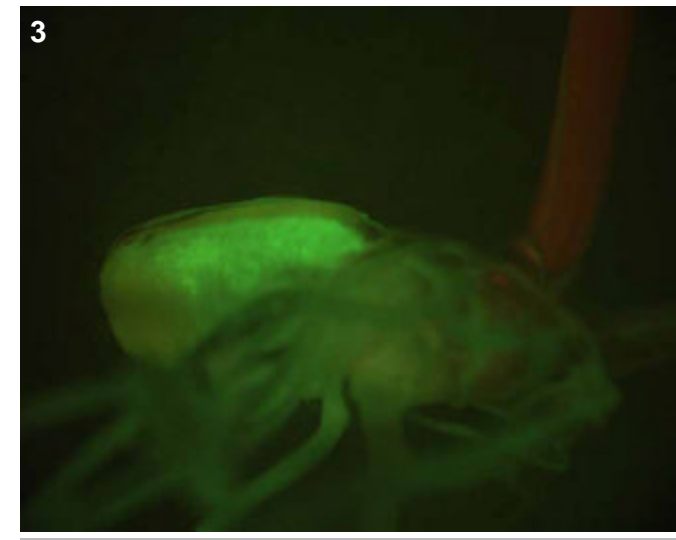
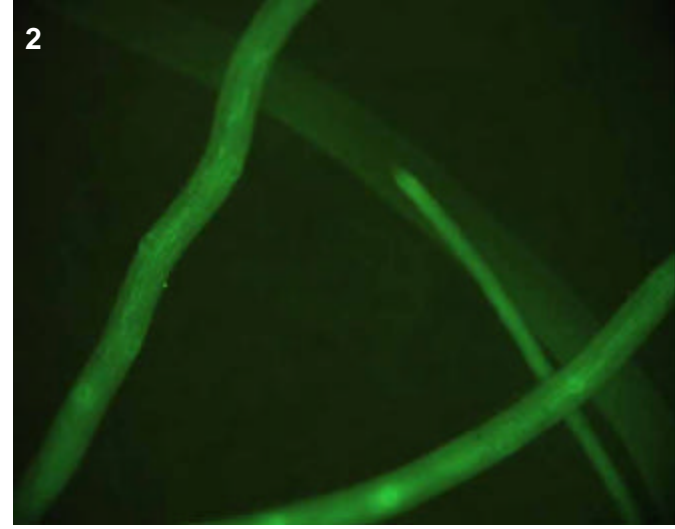
## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?**  
YES, 2 GFP+ plants
- Confocal?**

Number T2 seed produced:



**T0 comments**

**T1 seed comments**  
2/5 seeds showed expression

**T1 seedling comments**  
Bright, quite general appearing expression in roots (pics 2-3). Also bright endosperm, (pic 3) as well as collar and tips of leaves (pics 4-5).

# Genotype: ARQ H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 13

## T0 comments

## T1 seed comments

## T1 seedling comments

Weak expression, no pictures taken.

# Genotype: ARR A02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

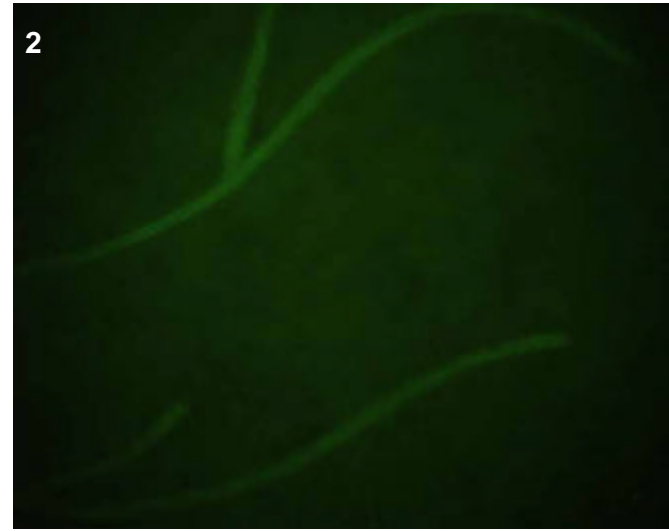
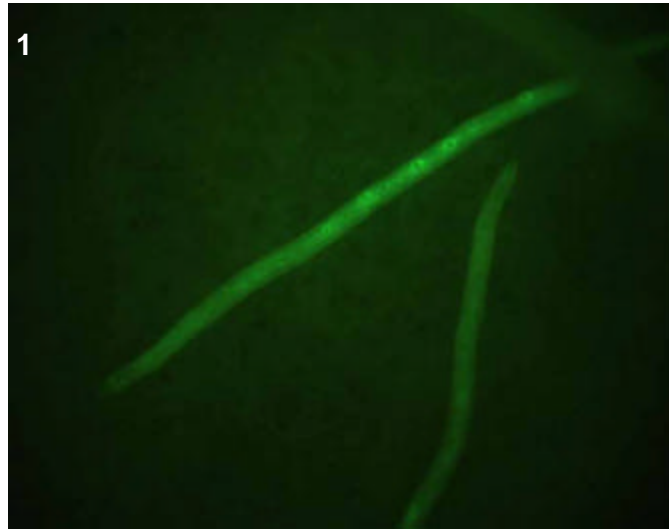
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 22



## T0 comments

## T1 seed comments

## T1 seedling comments

Fairly weak vascular expression in the roots (pic 1-2). Possibly some shoot vascular expression but not sure.

# Genotype: ARR A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

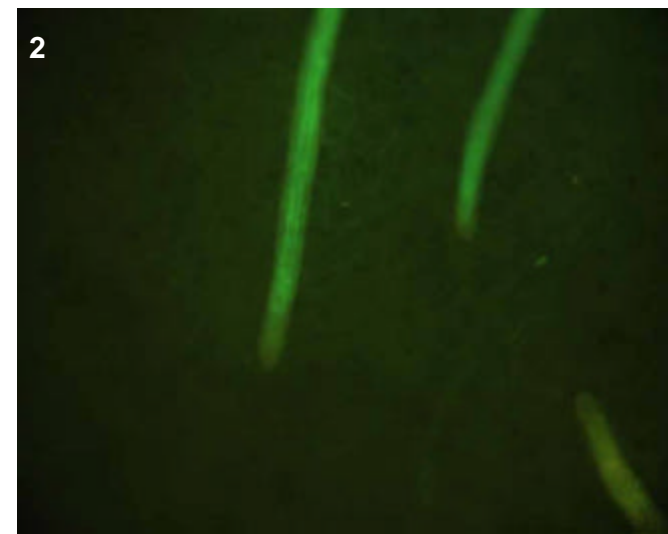
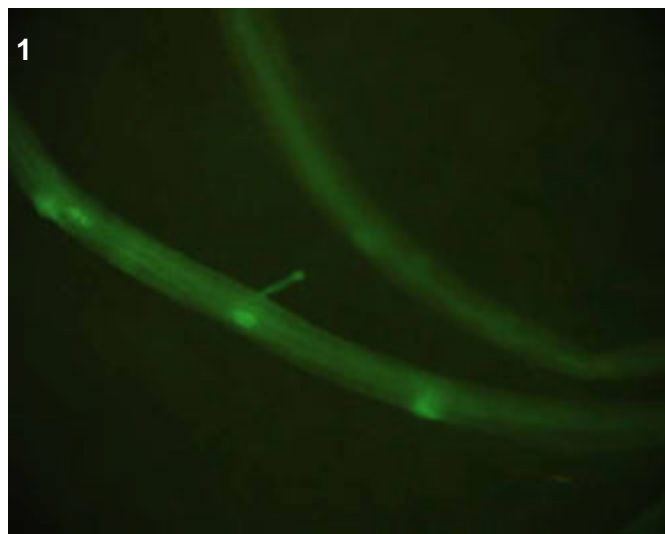
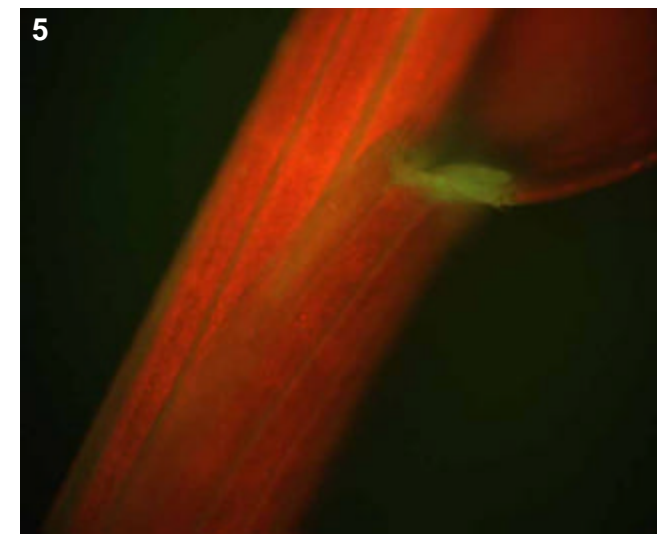
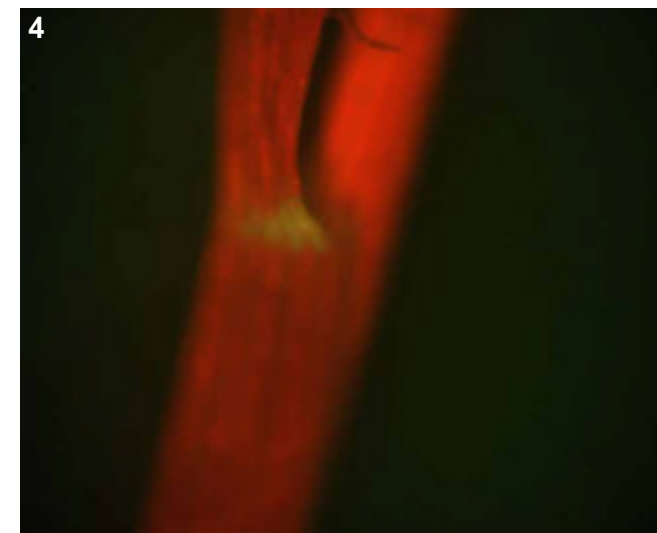
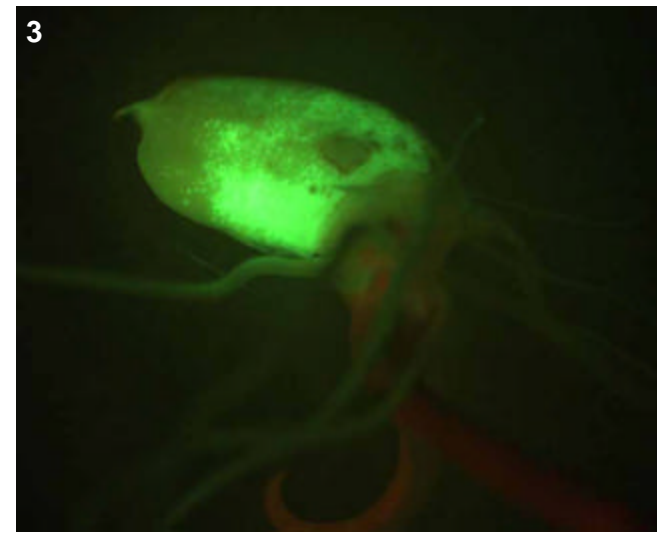
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 170



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright root expression (pics 1-2), as well as endosperm (pic 3). Medium collar and shoot vascular expression (pics 4-5).



# Genotype: ARR A11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 35

## T0 comments

## T1 seed comments

## T1 seedling comments

Faint expression in root epidermis, as well as faint expression in collar (no pictures taken).

# Genotype: ARR C09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

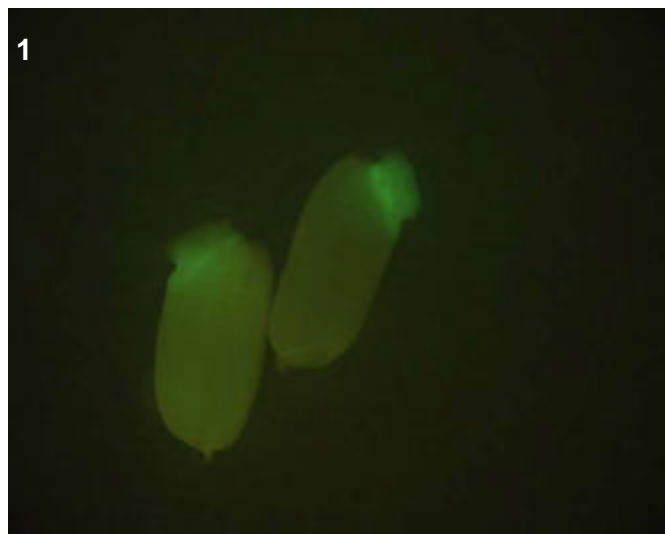
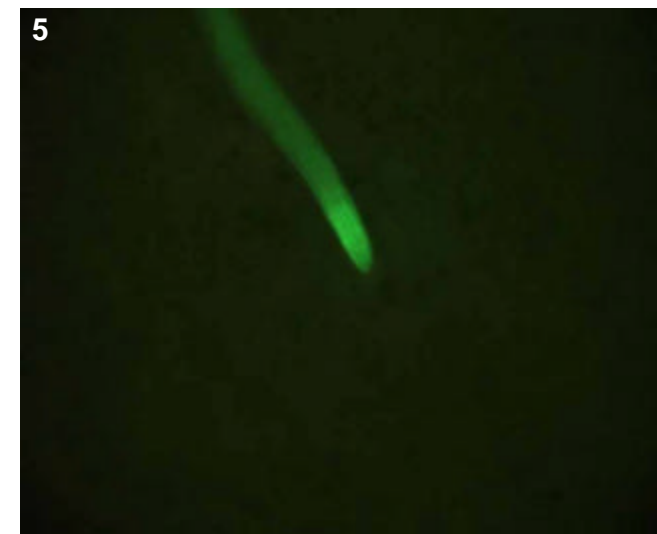
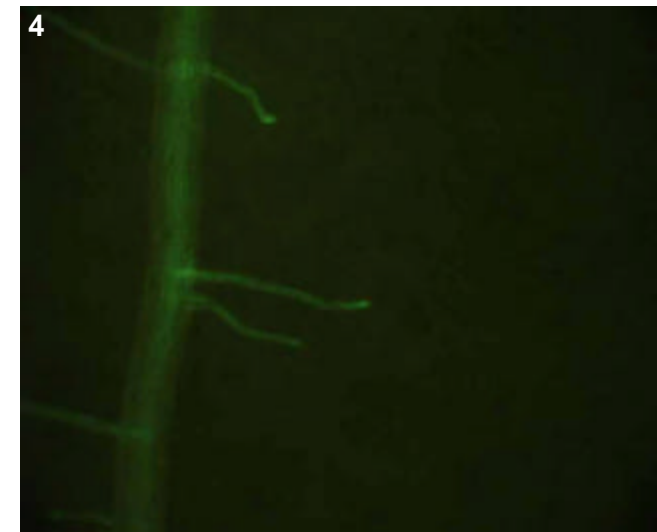
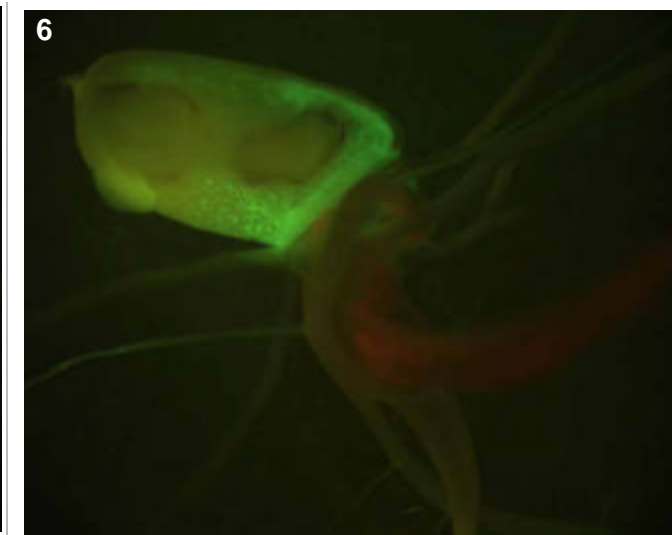
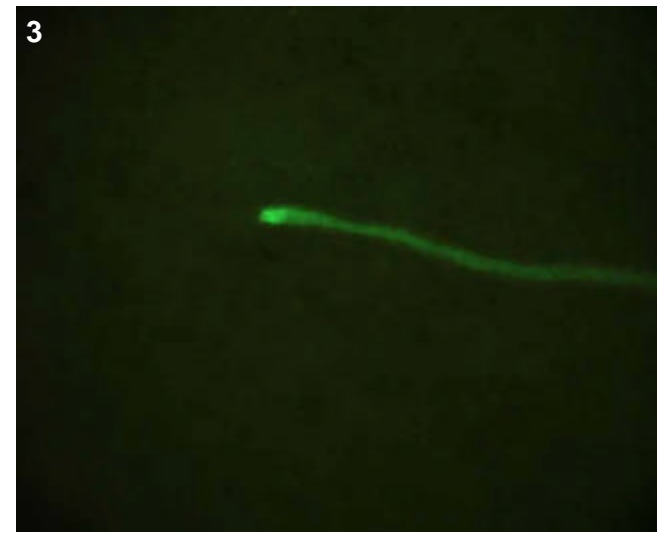
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 46



## T0 comments

## T1 seed comments

4/5 seeds had expression. Expression clearly in coleorhiza of seeds (see pic 1, seed on right).

## T1 seedling comments

Bright distinct root vascular expression (pics 2-5), note the especially bright expression near the cell division/elongation zone of both lateral and crown root tips. No root cap expression. Perhaps faint shoot vascular but not sure.

# Genotype: ARR C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

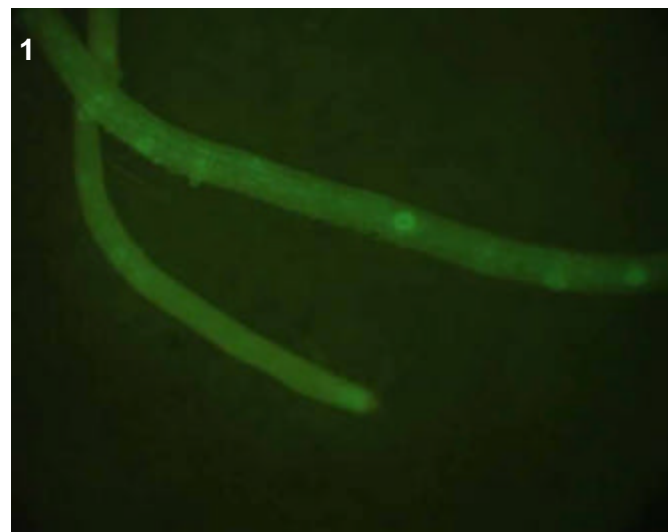
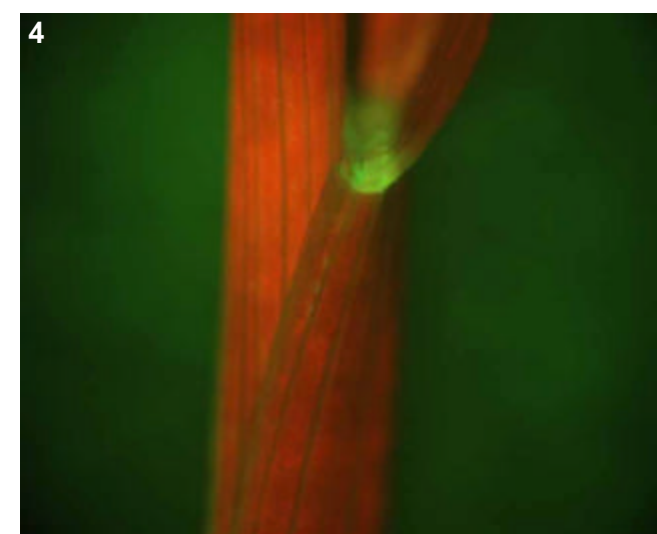
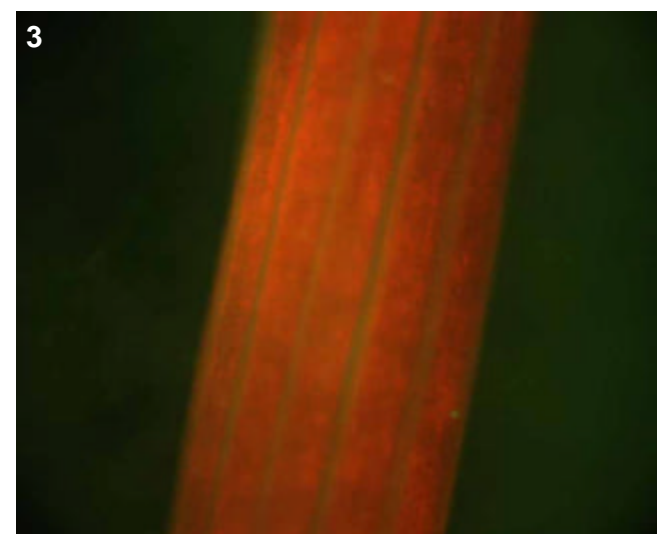
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

Number T2 seed produced: 0



### T0 comments

### T1 seed comments

### T1 seedling comments

Brightest expression in the shoot vascular and collar (pics 3-4).

# Genotype: ARR D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

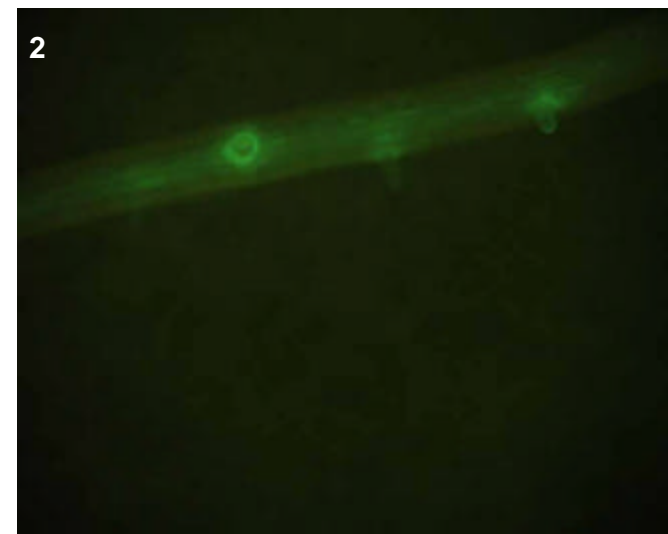
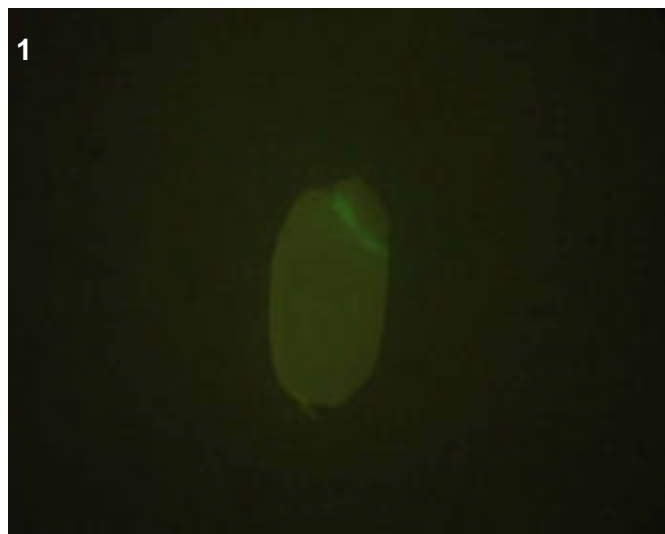
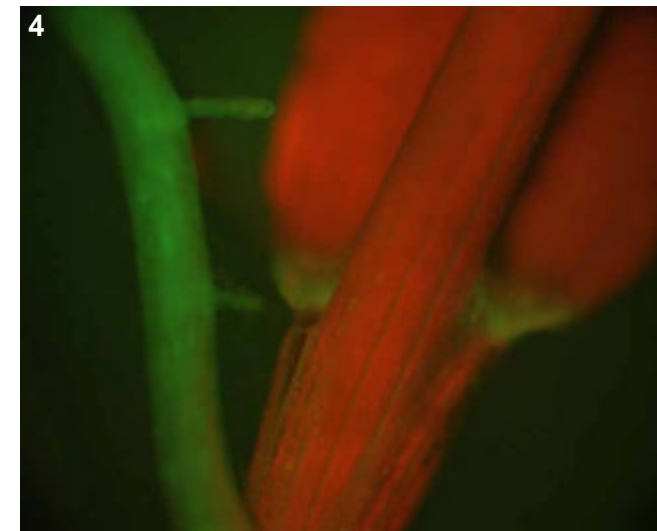
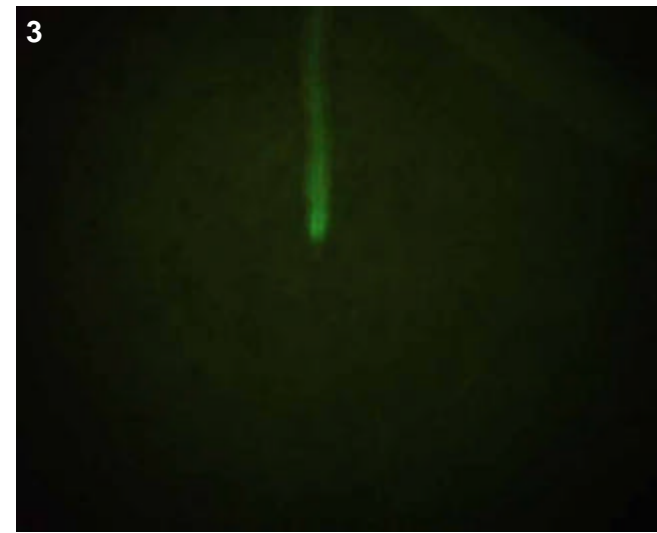
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 168



## T0 comments

## T1 seed comments

4/5 seeds had expression.

## T1 seedling comments

Note the bright vascular expression near lateral tips (pic 3).

# Genotype: ARR D10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

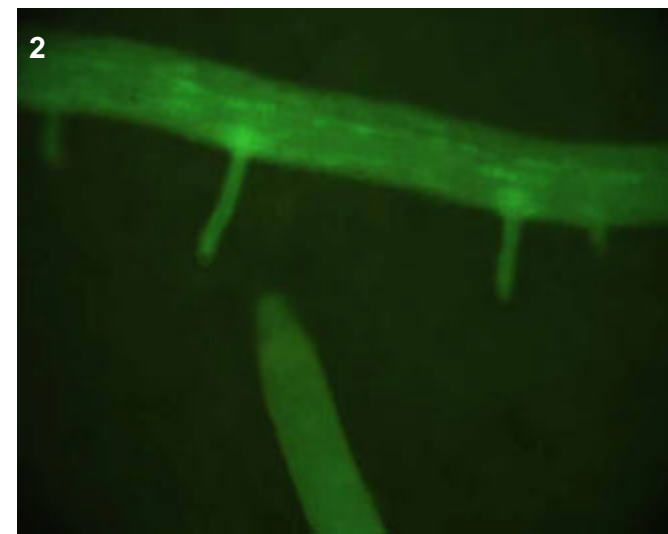
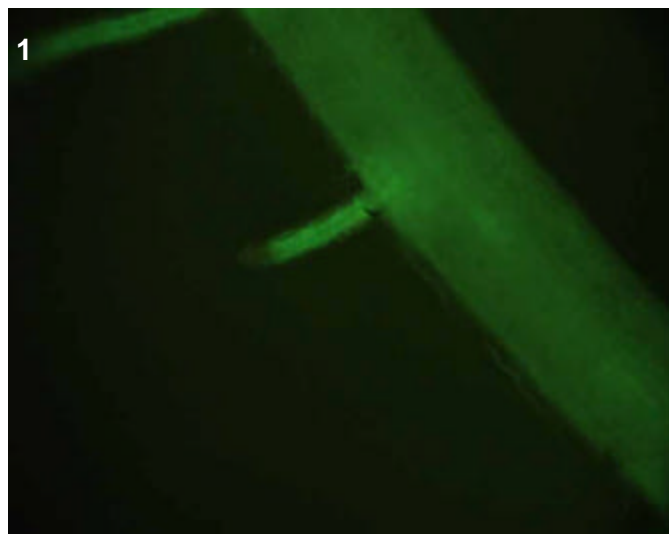
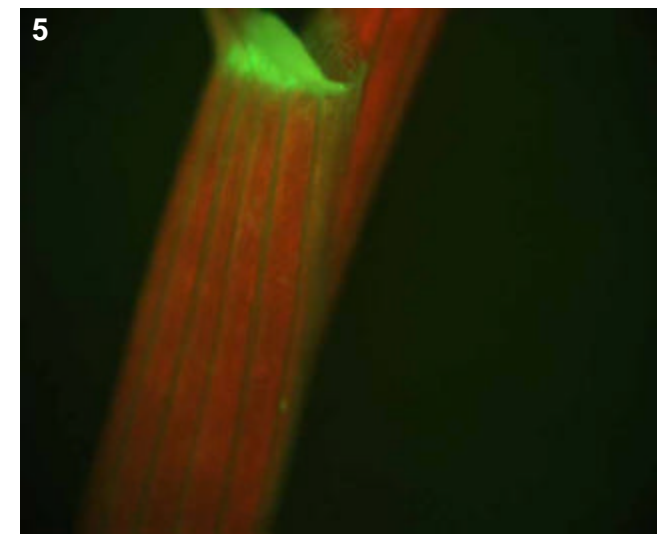
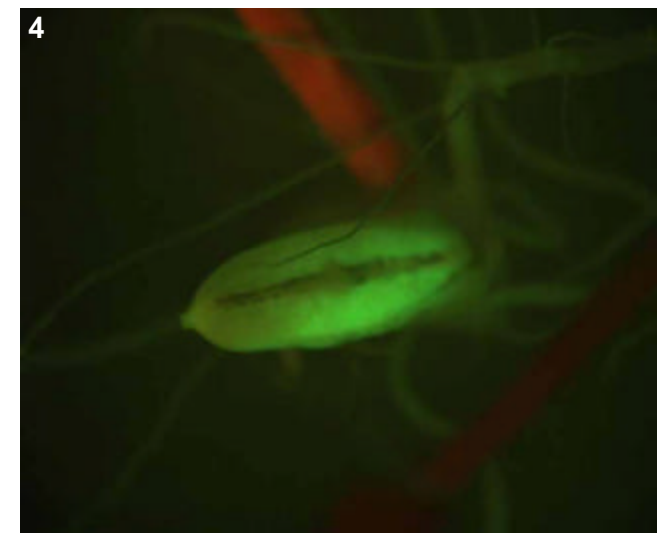
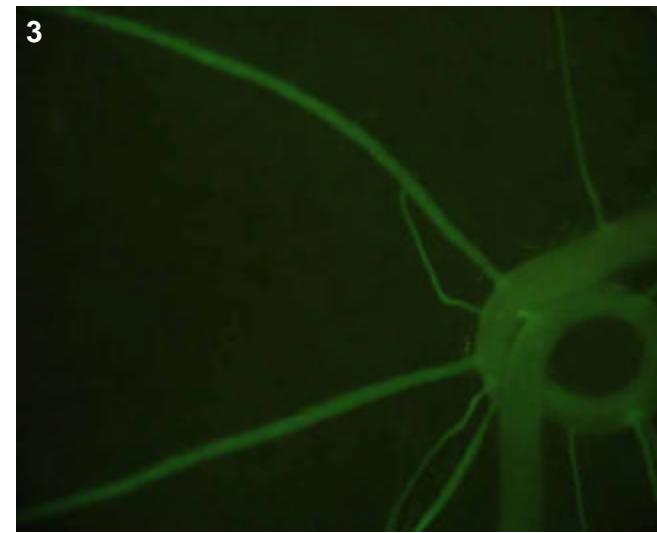
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 93



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright, distinct expression in root vascular (pics 1-3) that could perhaps be good for confocal. Also bright endosperm (pic 4), collar and shoot vascular (pic 5).

# Genotype: ARR F01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

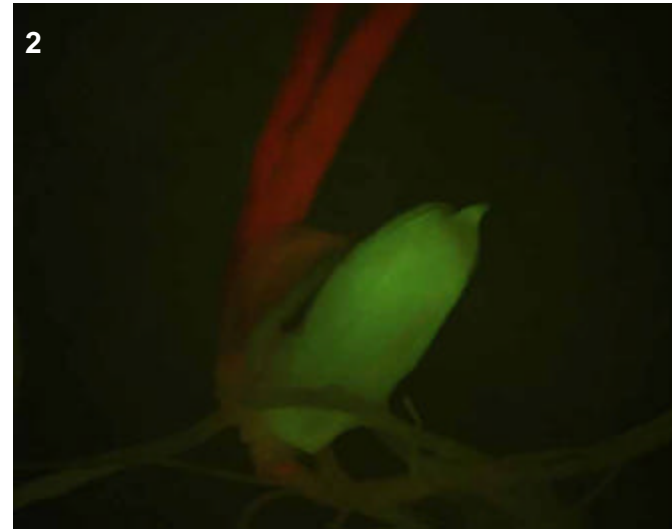
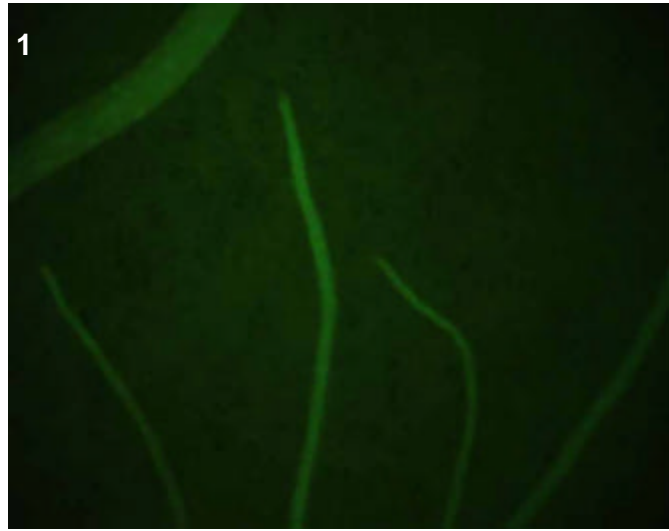
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 169



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARR F04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-2  
 T1 seed/seedling: 3-8  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

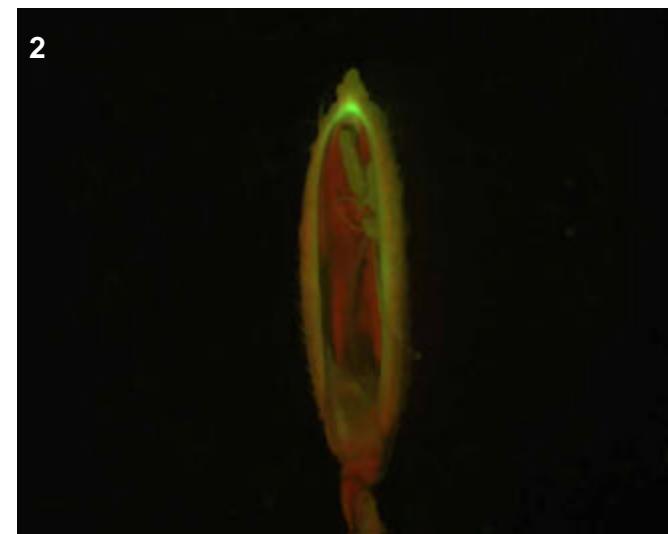
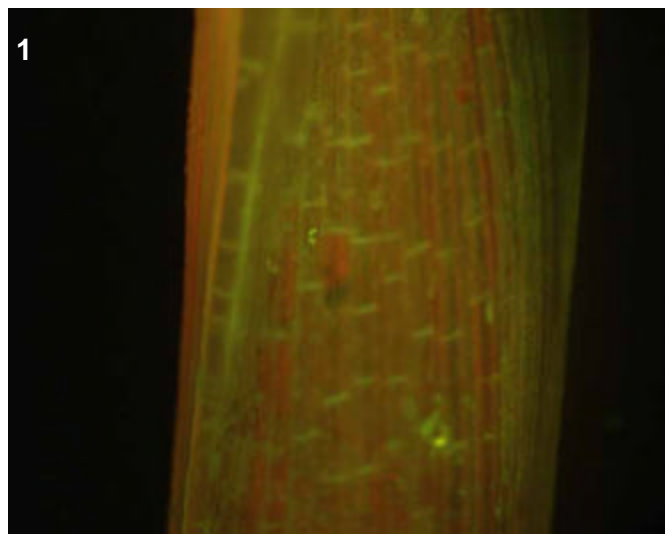
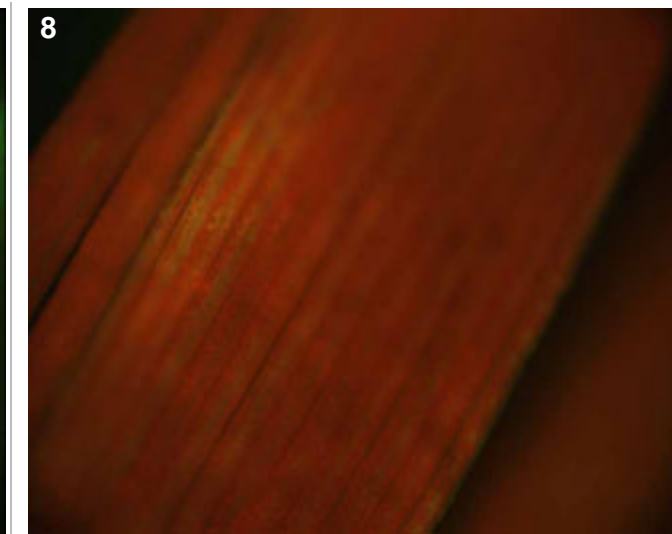
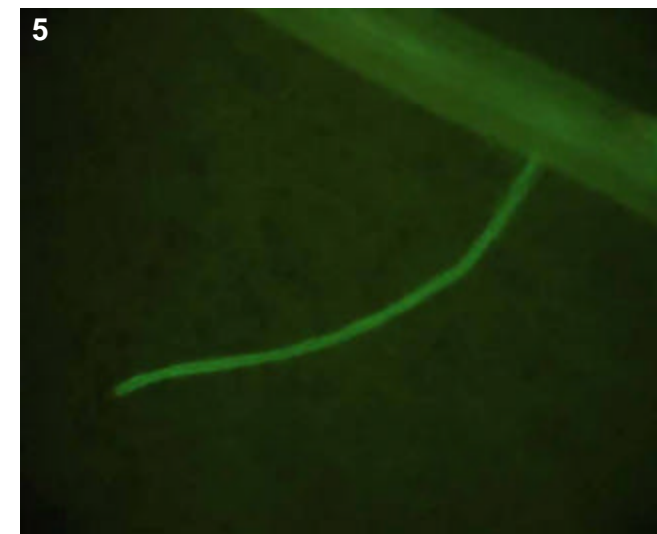
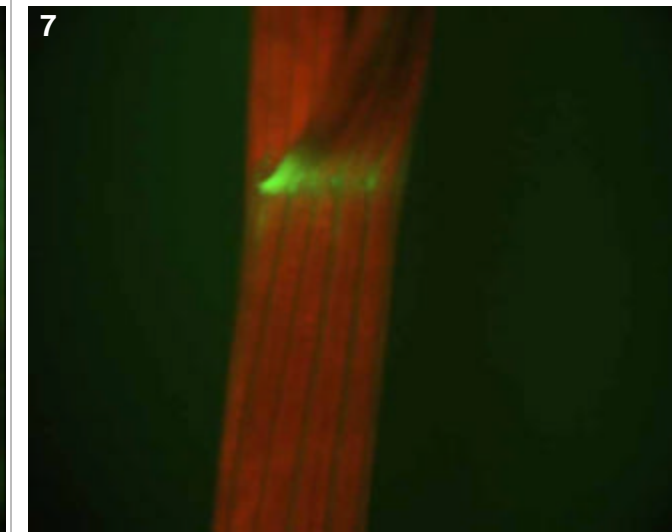
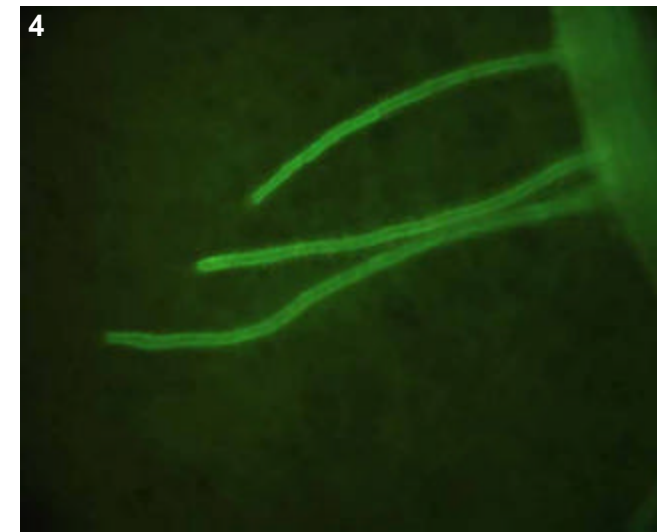
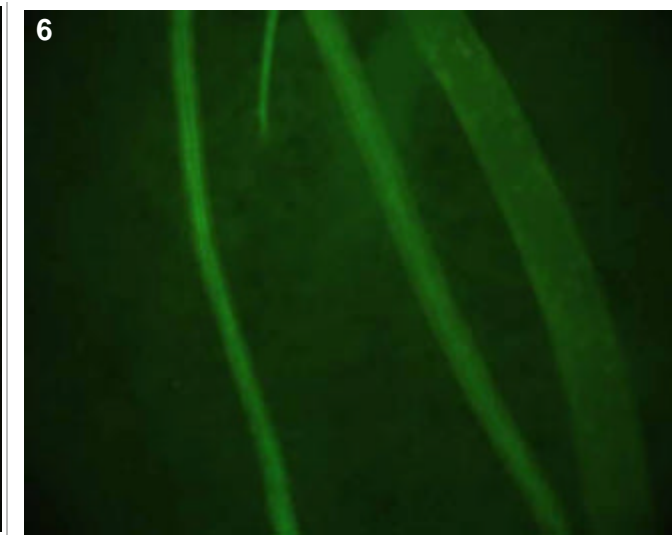
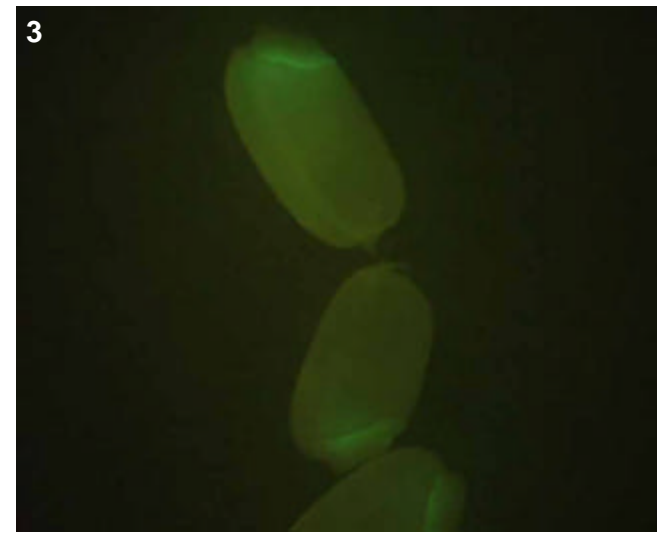
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 200



### T0 comments

Medium expression in vascular of collar and flower (pics 1-2).

### T1 seed comments

3/5 seeds had bright expression in the embryo (pic 3).

### T1 seedling comments

Bright vascular in both the root (pics 4-6) and shoot (pics 7-8). Note the bright "stripes" on the surface of leaf tissue (pic 8).

# Genotype: ARR G03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

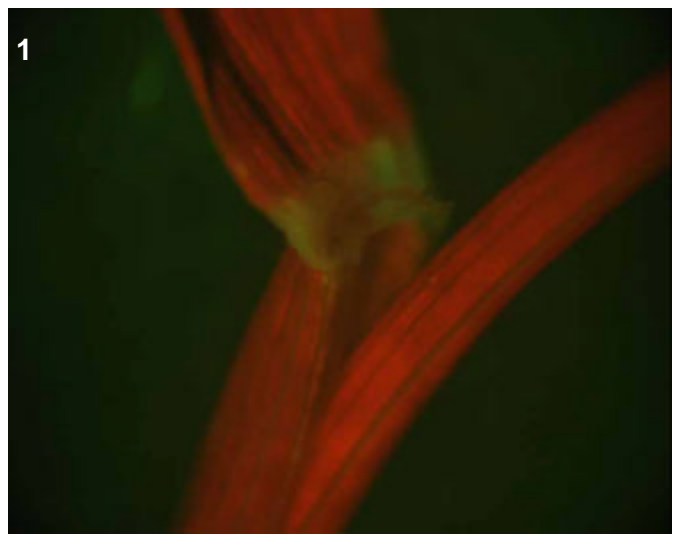
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 4



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint root vascular (no pictures taken), medium collar and shoot vascular.



# Genotype: ARR G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?**  
YES, 2 GFP+ plants
- Confocal?**
- Number T2 seed produced:** 148

## T0 comments

## T1 seed comments

## T1 seedling comments

Faint root vascular, medium shoot vascular (no pictures taken).

# Genotype: ARR H08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

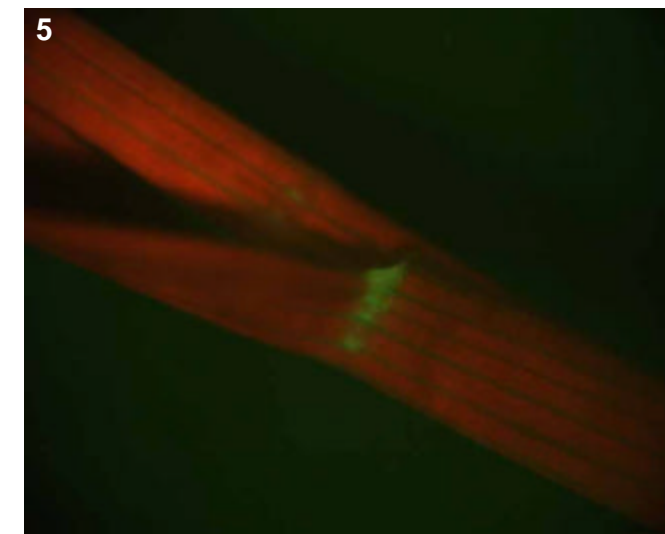
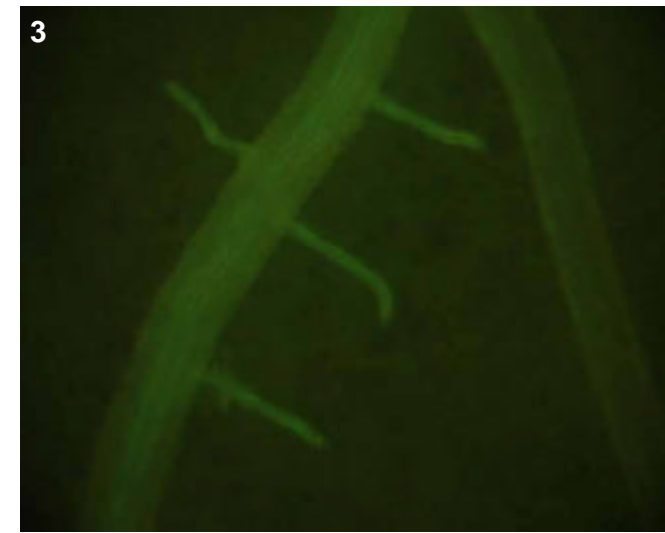
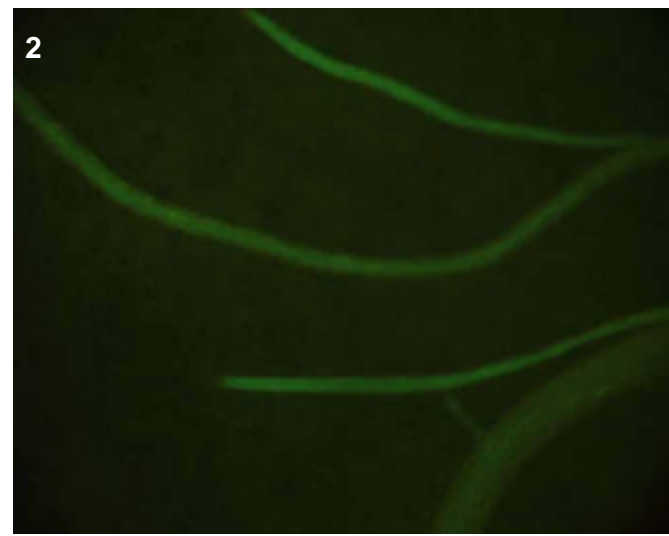
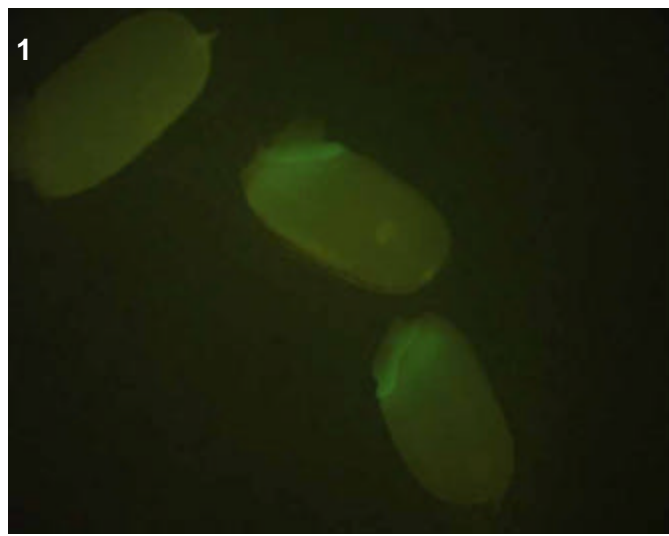
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 84



## T0 comments

## T1 seed comments

2/5 seeds had bright expression in the embryo (pic 1).

## T1 seedling comments

Bright vascular line in both root (pics 2-3) and shoot (pic 5). Also expression in the digesting endosperm (pic 4).

# Genotype: ARS A02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

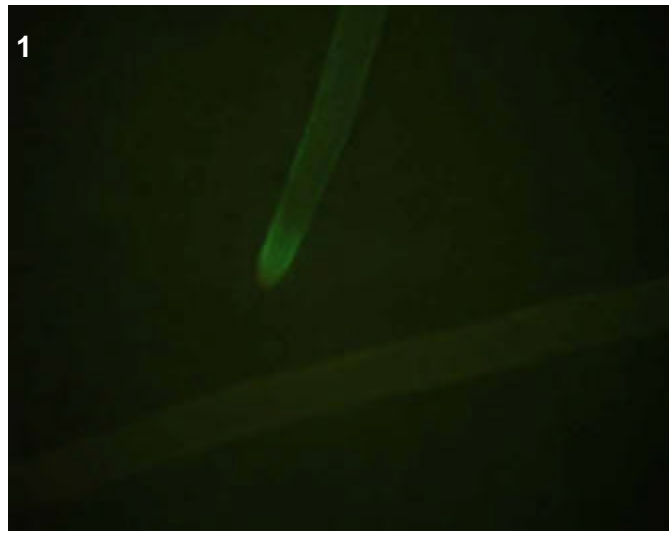
No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

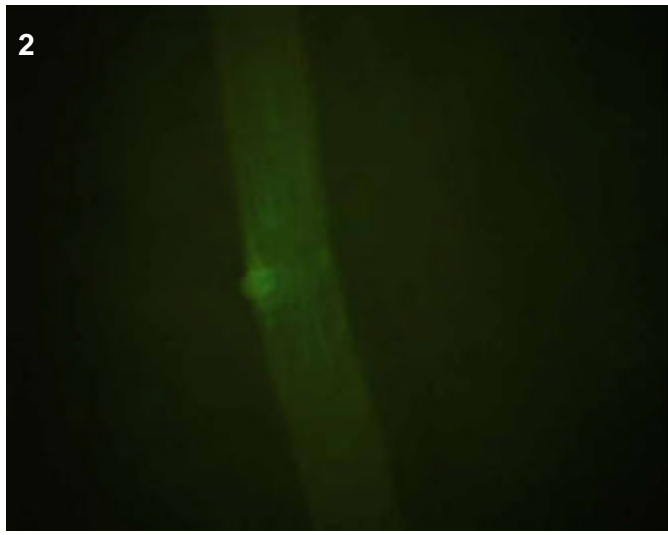
**Confocal?**

**Number T2 seed produced:** 105

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium, epidermal expression at tips of crowns (pic 1), very faint expression towards base of laterals (pic 2).

# Genotype: ARS B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

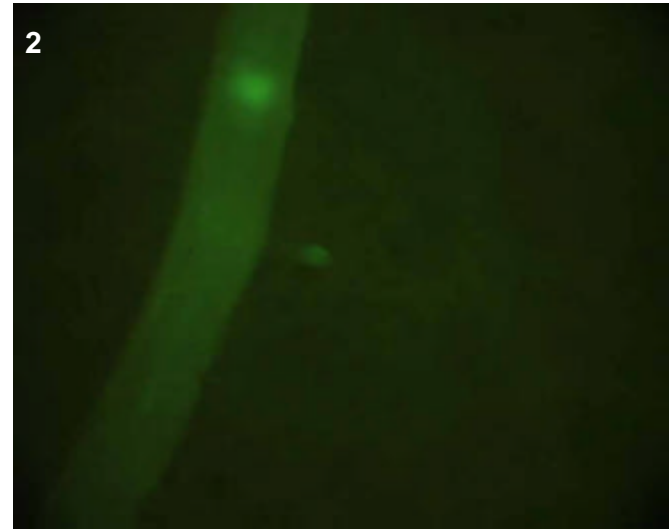
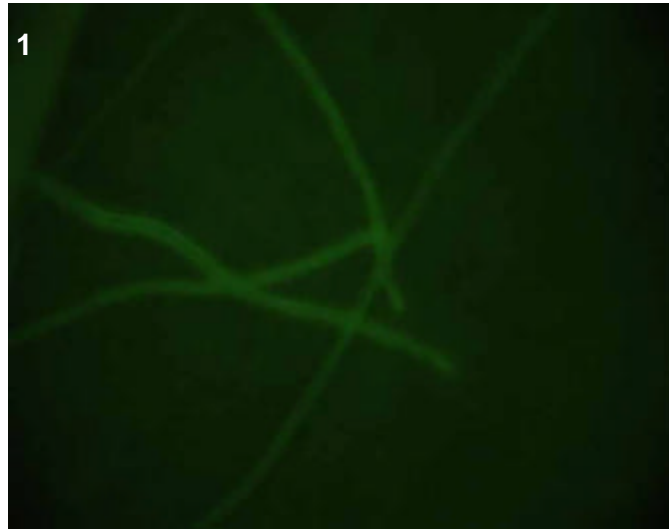
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 5



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium expression throughout the roots, with a bright band of expression noted near the tips of many lateral roots (pic 2).

# Genotype: ARS C02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

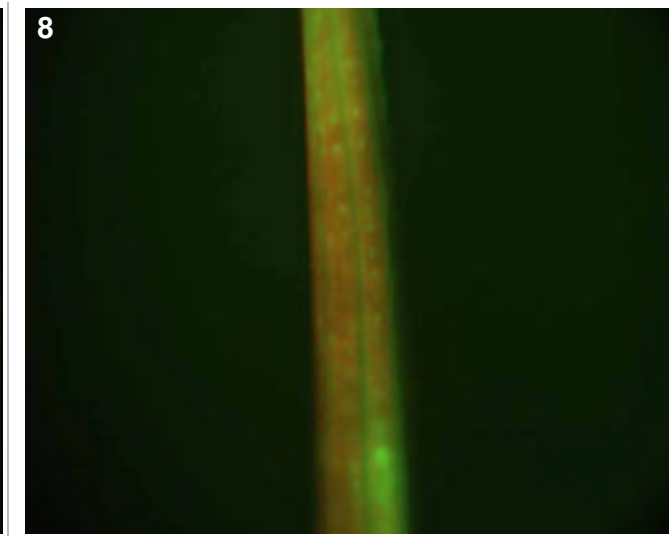
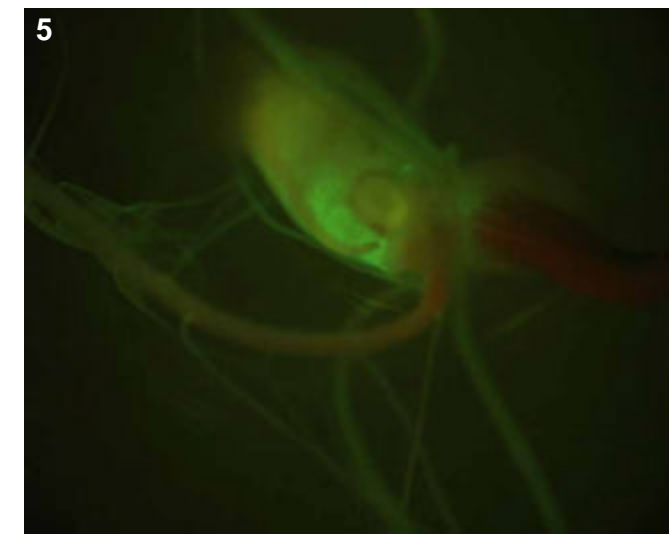
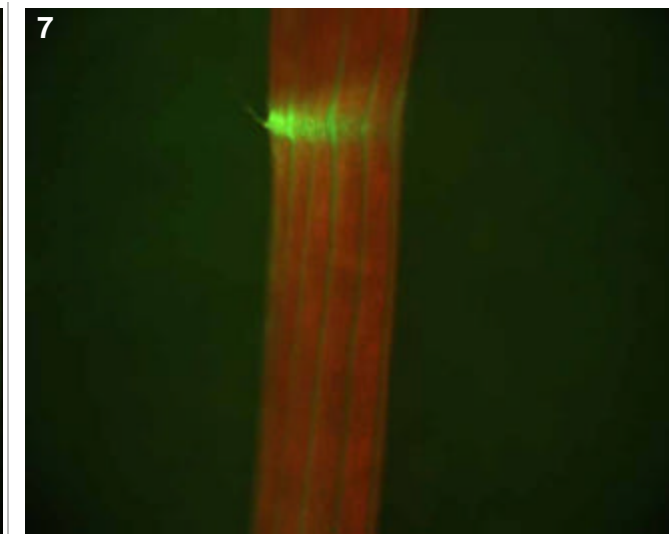
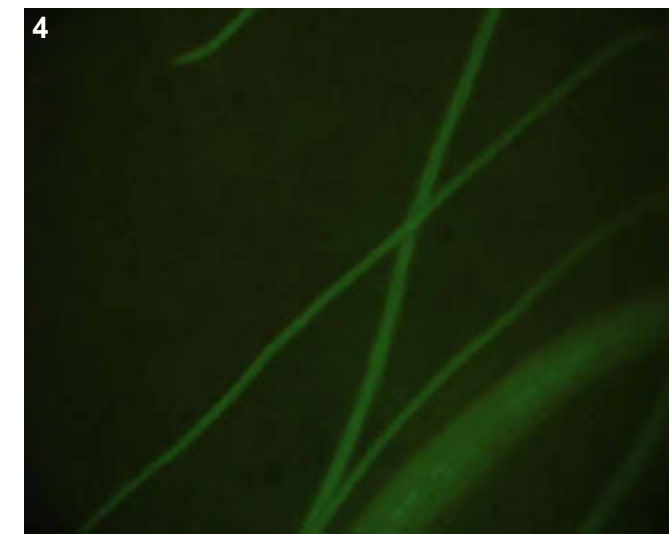
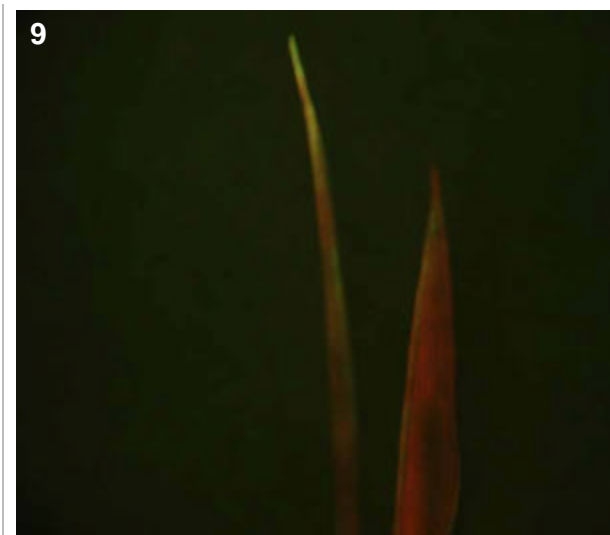
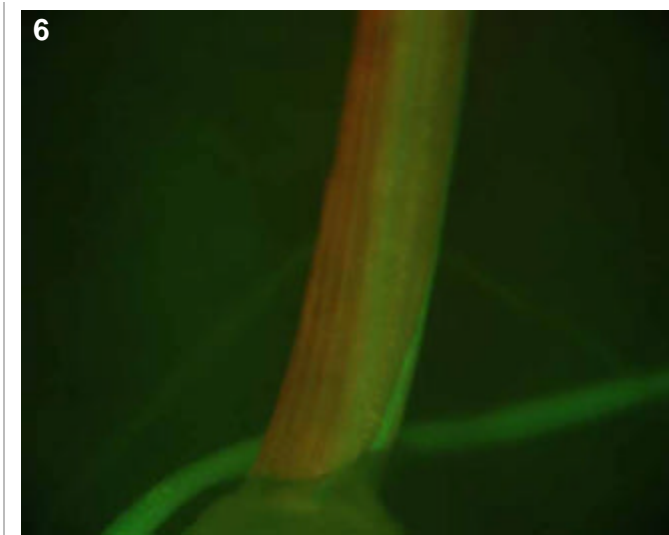
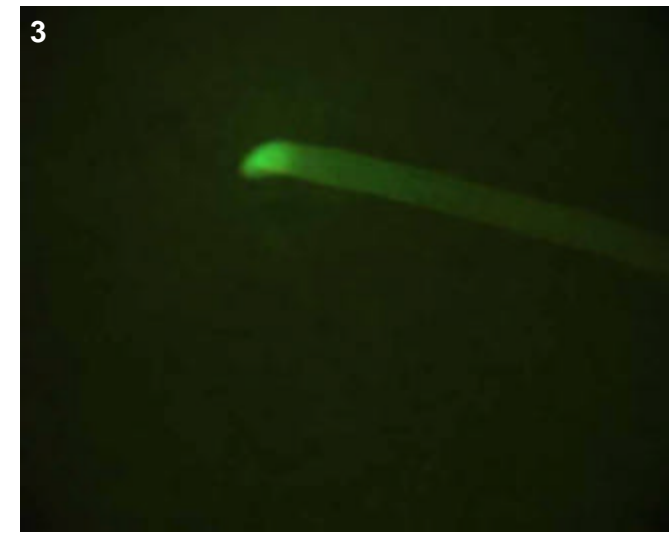
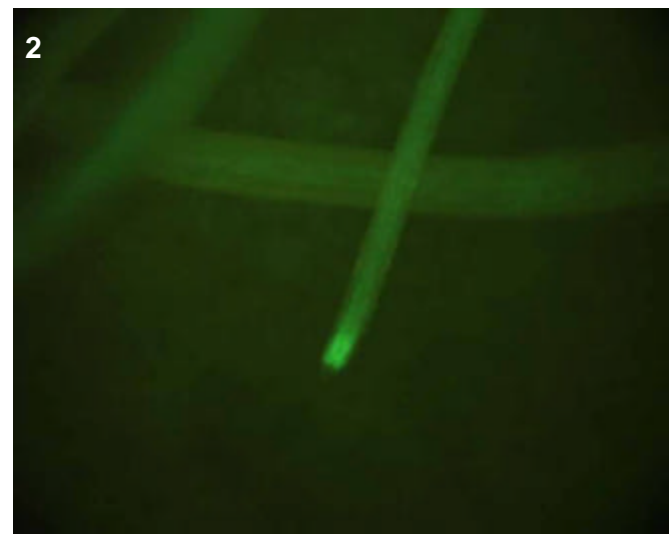
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 2



## T0 comments

## T1 seed comments

2/5 seeds had medium expression. Interesting because it looked like expression specifically towards the lower side of the scutellum. In pic 1, expression is just in the upper left part of the seed, in the lowest part of the visible

## T1 seedling comments

Very bright root (pics 2-4) and shoot (pics 6-9). Note the bright tips of roots (pics 2-3). Vascular expression in the sheath is extremely bright and begins at the base of shoot (pic 6) continuing through the bright collar (pic 7). Bright "dots" near leaf tip (pic 8), guard cells?

# Genotype: ARS D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

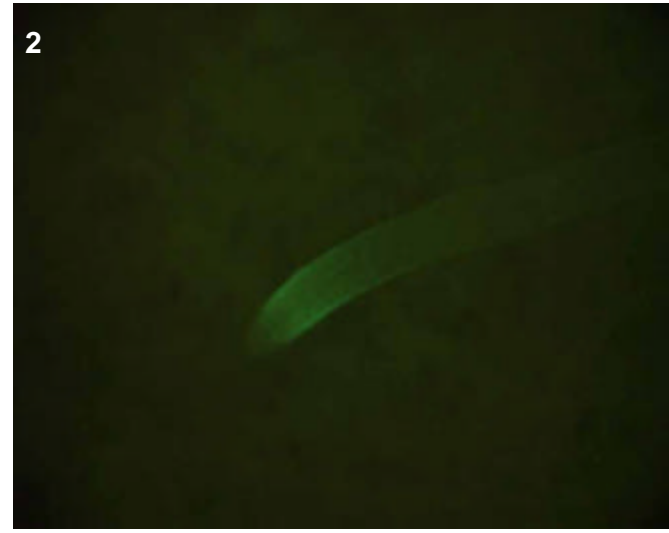
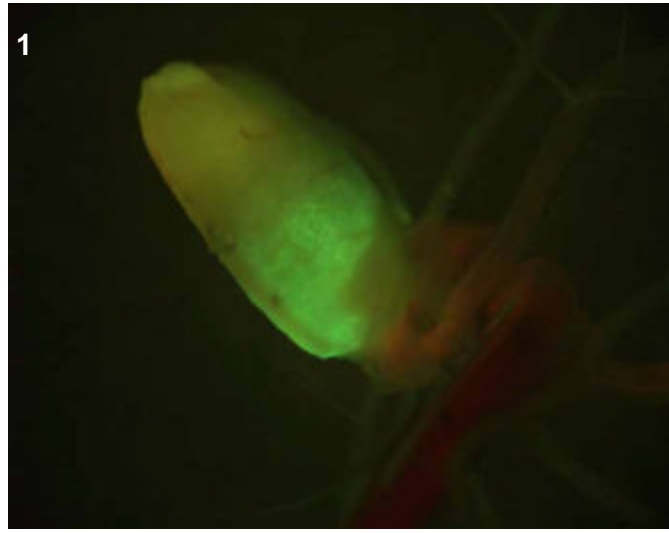
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 6



## T0 comments

## T1 seed comments

## T1 seedling comments

Endosperm expression and epidermal cells of crown tips.

# Genotype: ARS D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

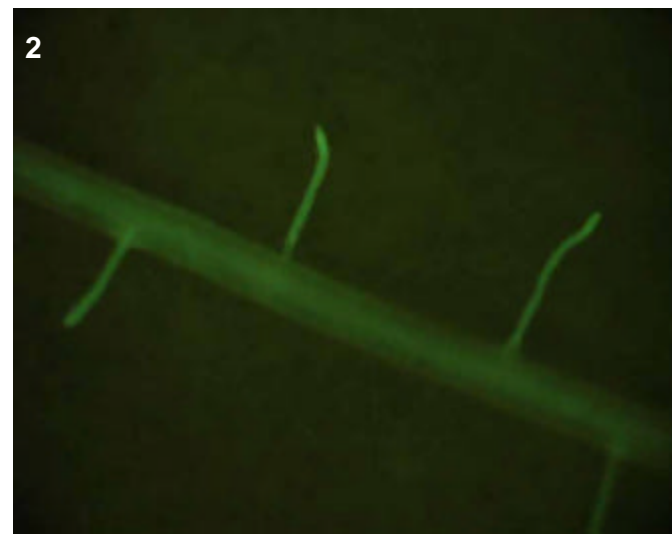
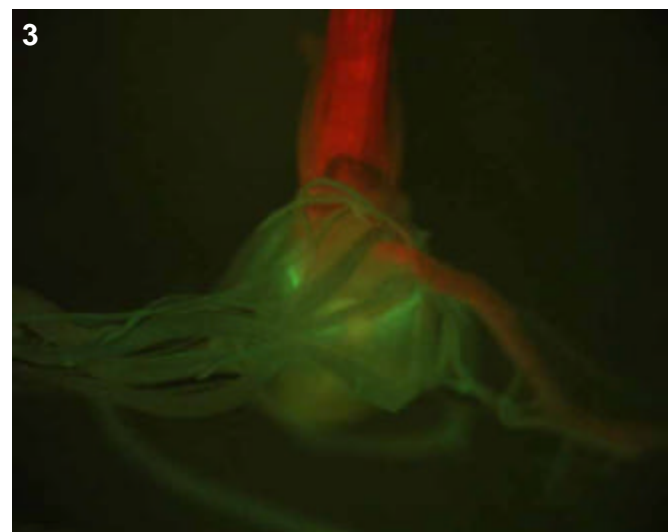
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 5



### T0 comments

### T1 seed comments

### T1 seedling comments

Epidermal in crown root tips (pic 1), vascular elsewhere (pic 2).

# Genotype: ARS D10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

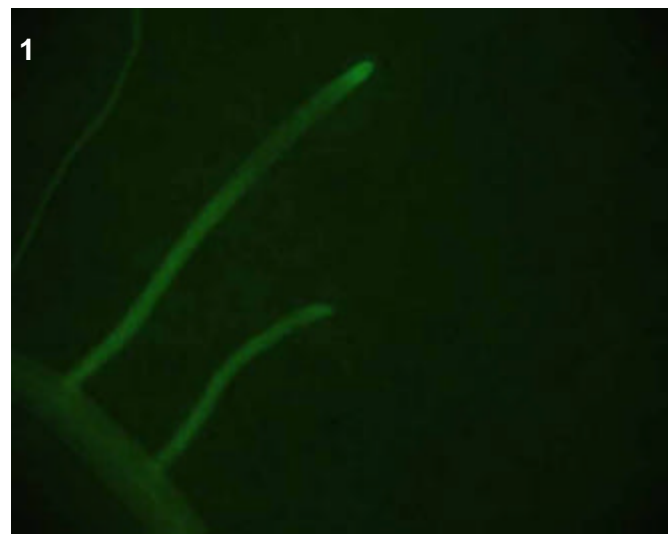
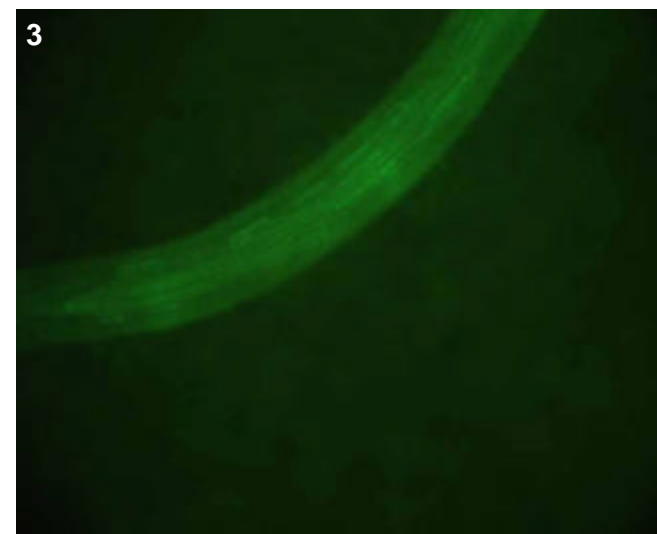
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 19



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright expression, either epidermal or vascular, in lateral roots (pic1) and bright expression near tips of crown roots (pic 2) with a bright band apparent near the root apex. Older portions of crown roots (pic3) appear to have epidermal expression.



# Genotype: ARS D12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

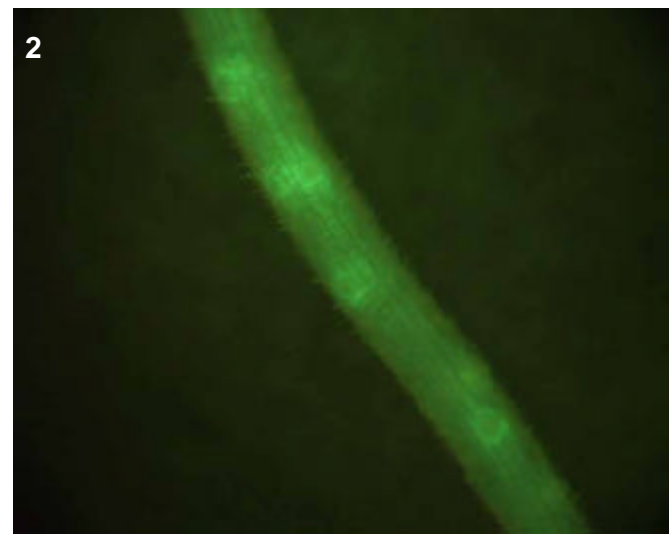
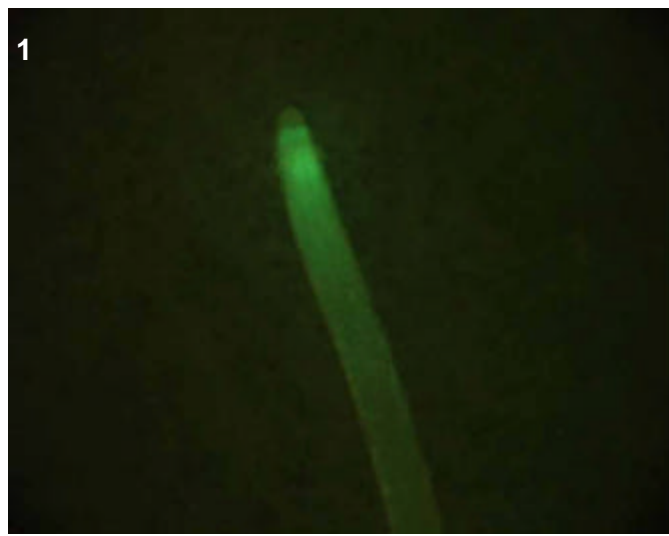
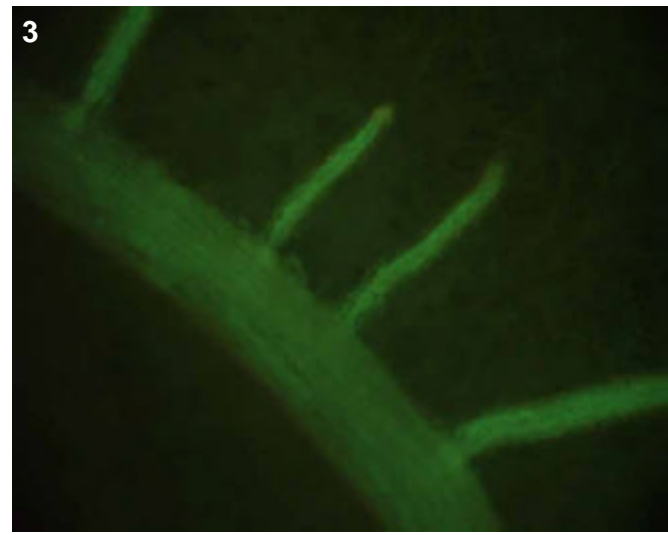
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?
- Confocal?
- Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARS G01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

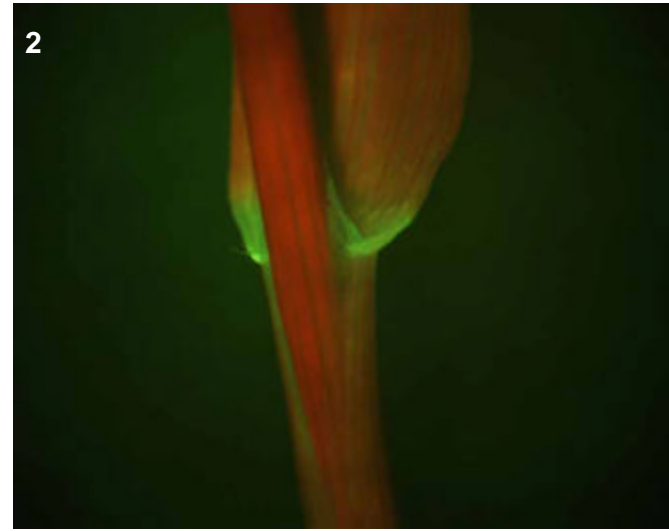
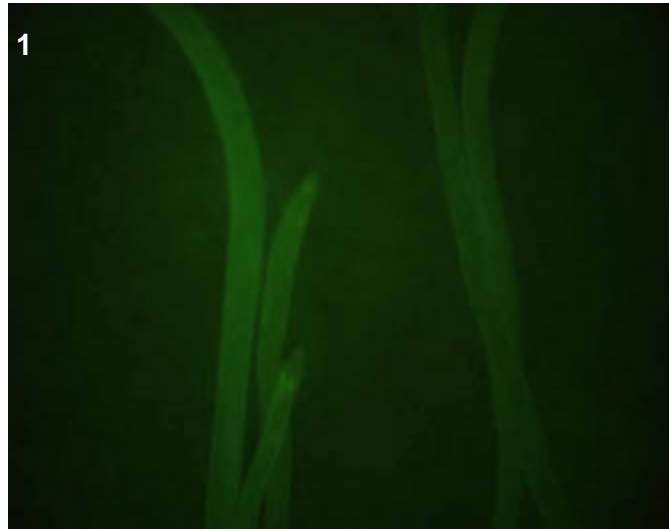
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 118



## T0 comments

## T1 seed comments

## T1 seedling comments

Could be medium epidermal expression in roots (pic 1), the same may be the case for shoots (pic 2).

# Genotype: ARS H01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

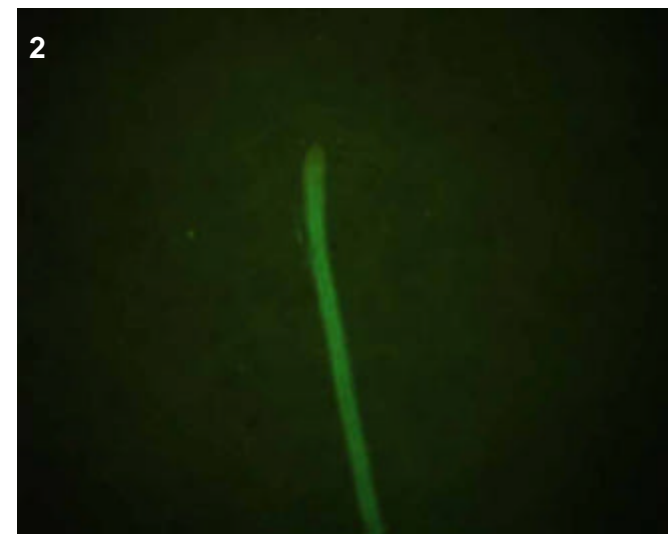
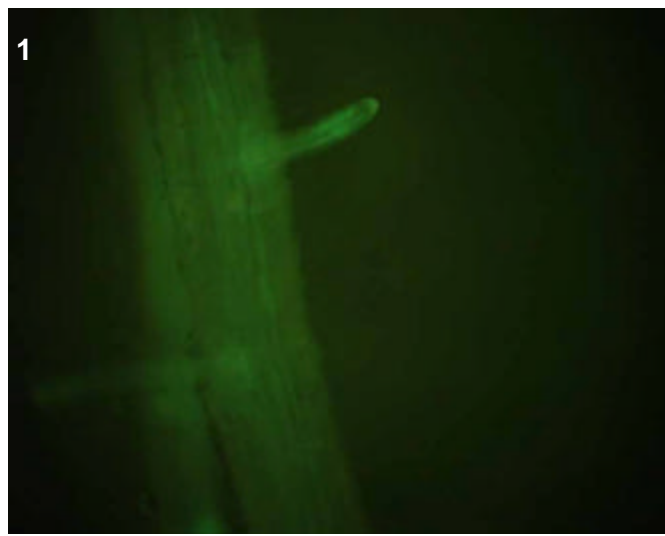
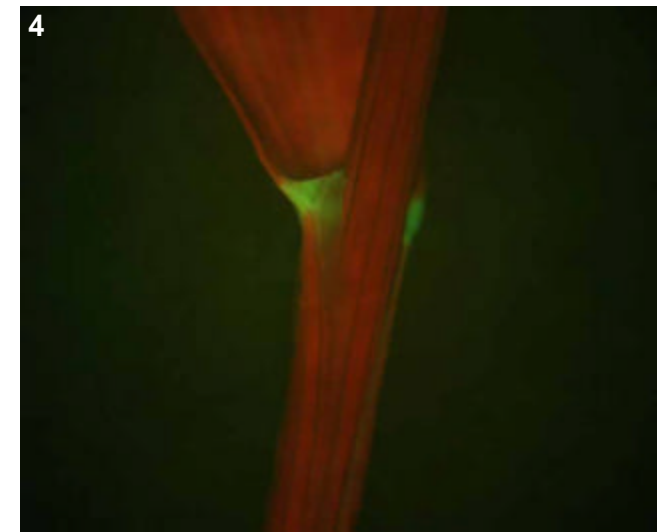
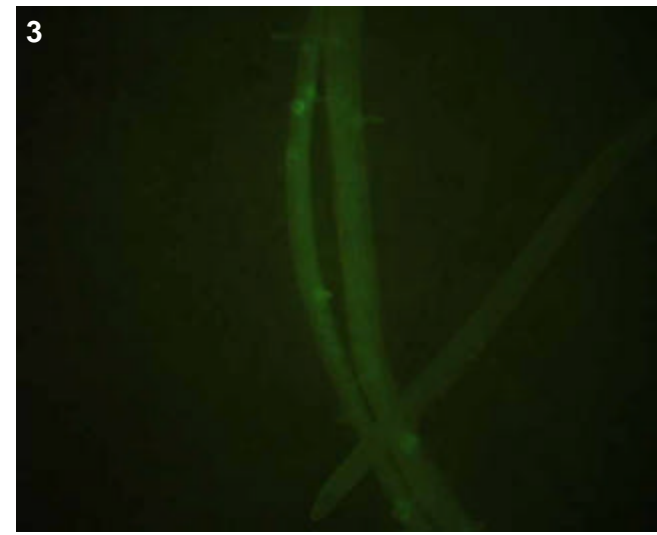
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 232



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression is most bright in the laterals (pics 1-3). Also bright collar and shoot vascular (pic 4).

# Genotype: ARS H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

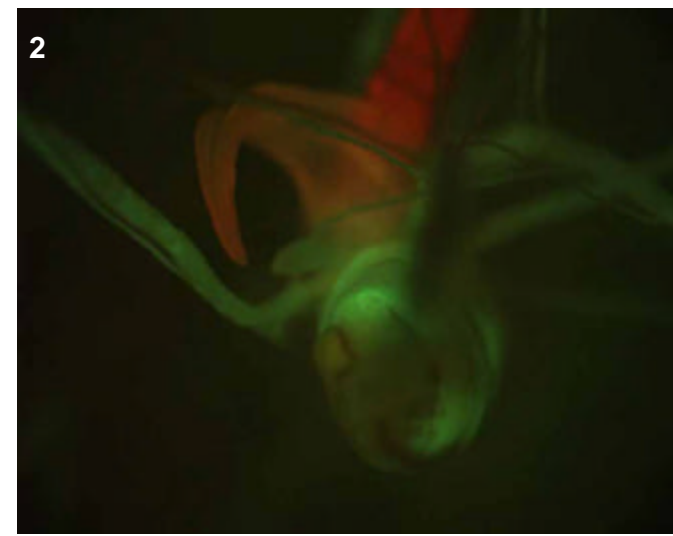
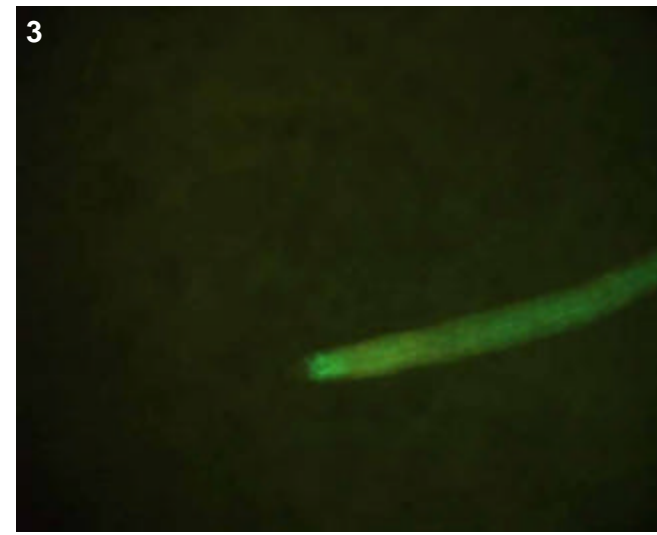
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 24



## T0 comments

## T1 seed comments

2/5 seeds had faint expression in the scutellum (pic 1)

## T1 seedling comments

# Genotype: ARS H09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

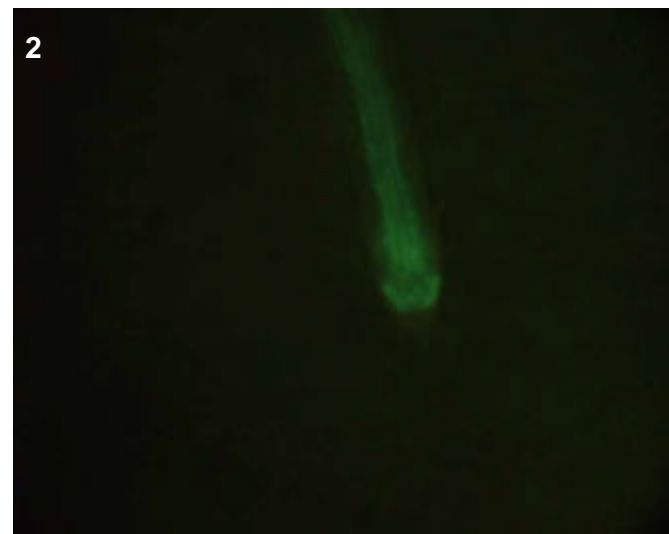
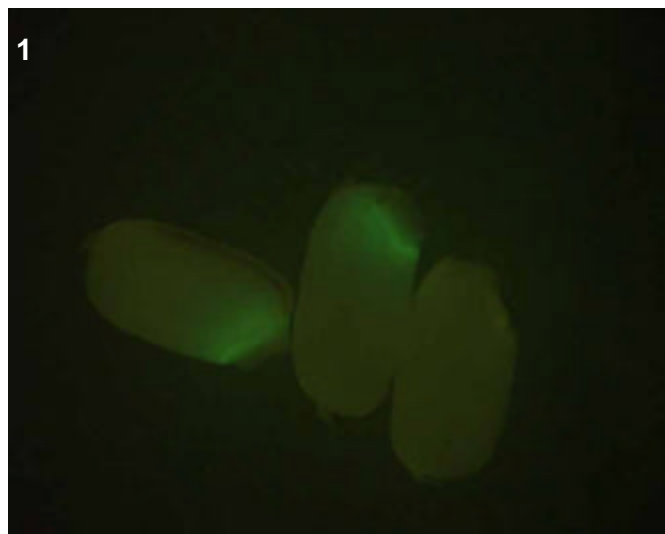
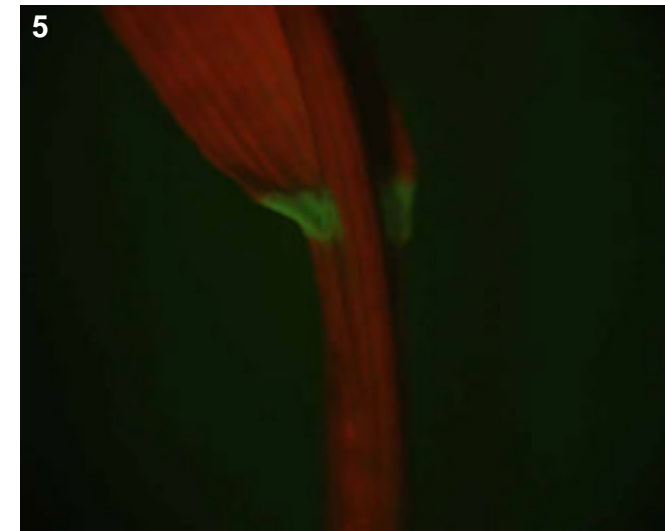
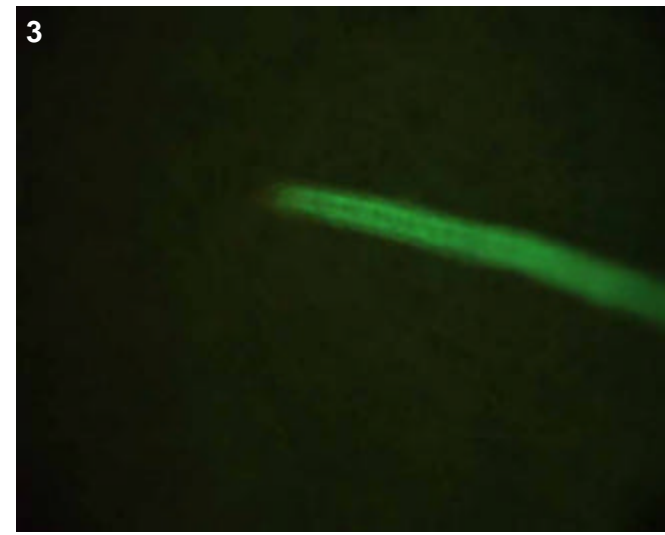
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced: 0



## T0 comments

## T1 seed comments

3/5 seeds had bright expression in the embryo (pic 1).

## T1 seedling comments

Note the interesting pattern in crown roots (pic 2) which could be interesting to analyze by confocal.

# Genotype: ART A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

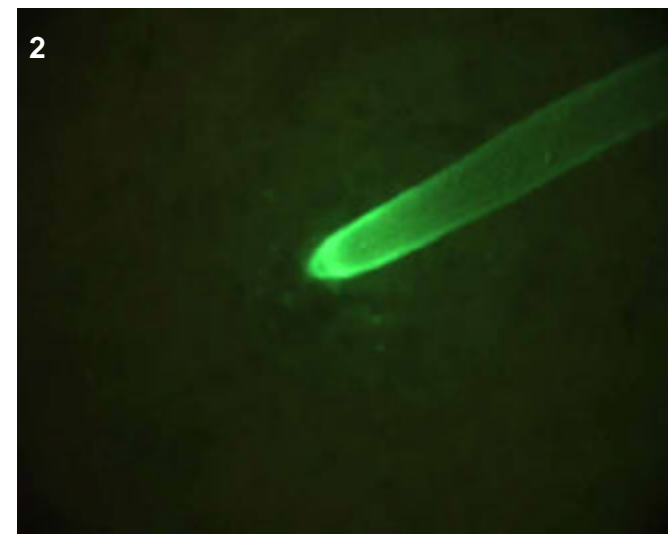
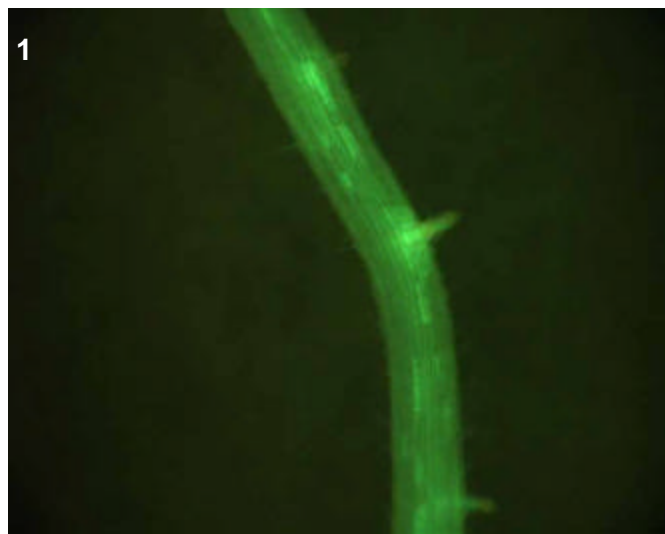
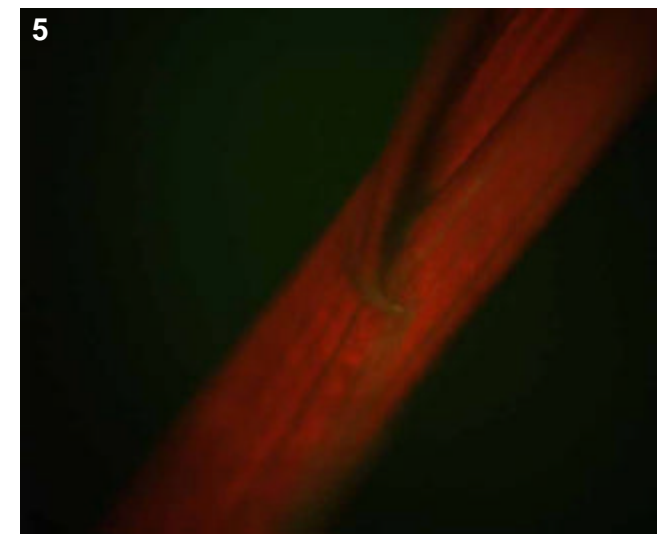
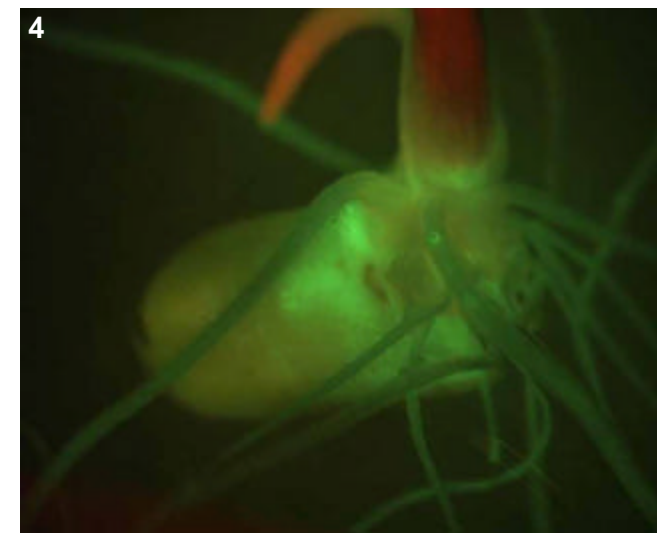
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 14



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks like a bright epidermal pattern in roots (pics 1-3).

# Genotype: ART B06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1  
 T1 seed/seedling: 2-5  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

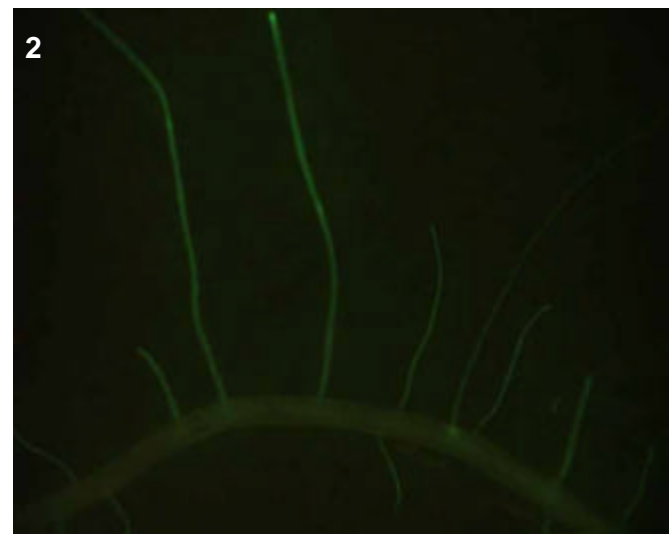
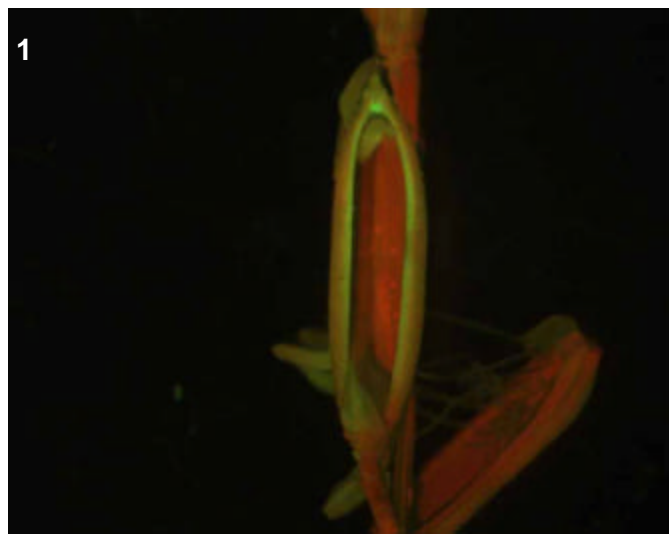
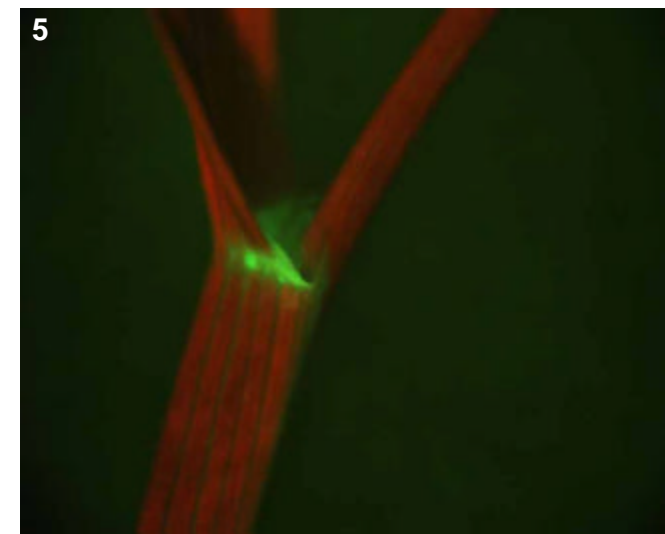
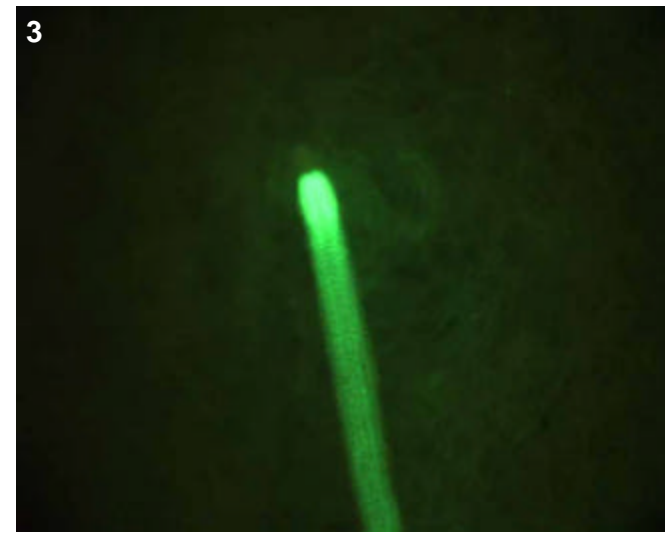
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 22



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ART B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

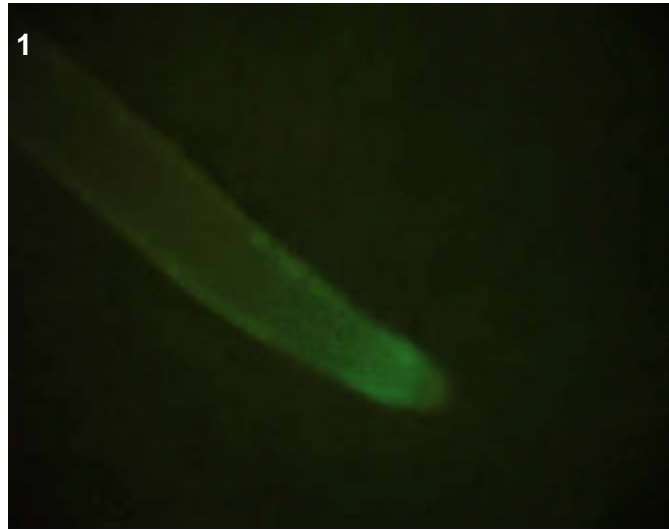
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 1



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks like epidermal expression near tips of crown roots (pic 1).



# Genotype: ART E05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

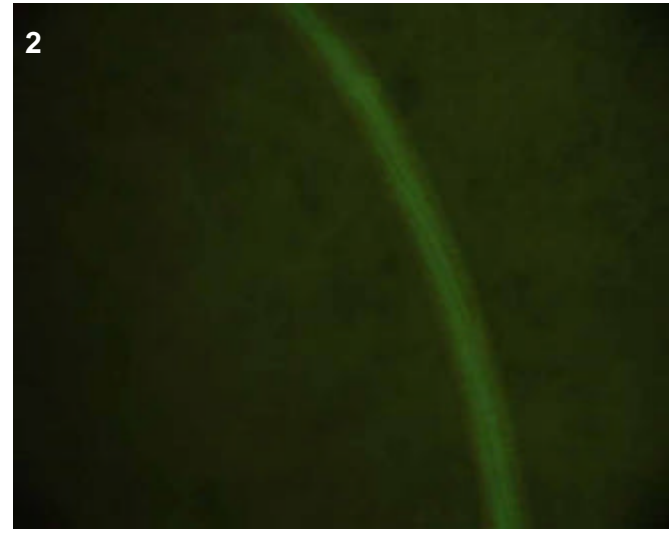
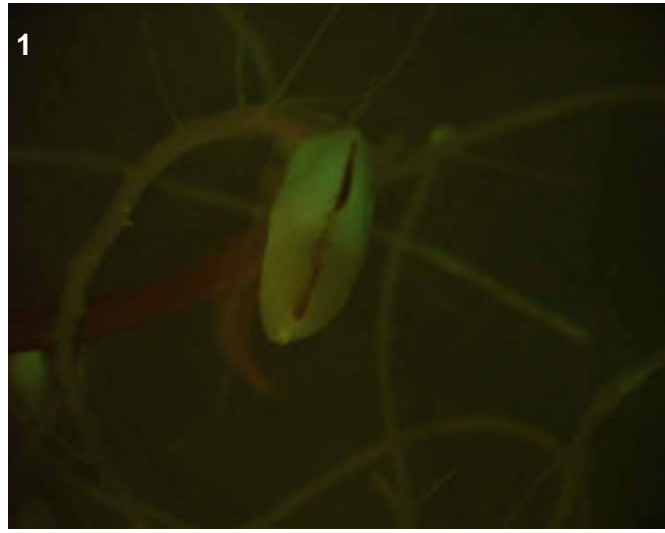
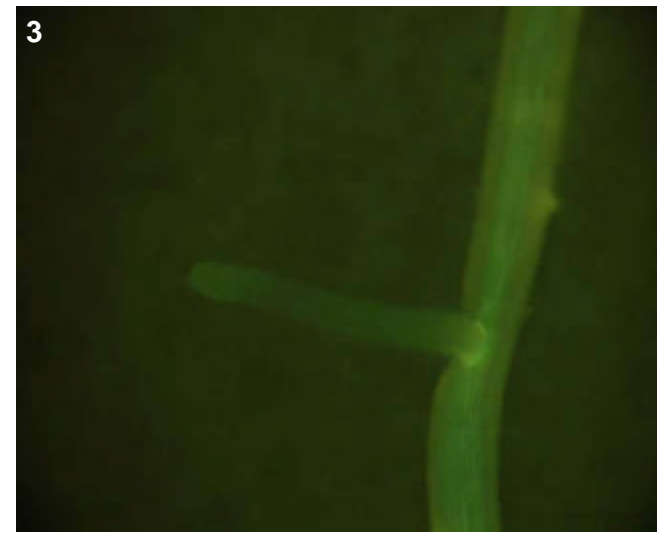
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 5



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ART F09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant: 1-3  
 T1 seed/seedling: 4-9  
 T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

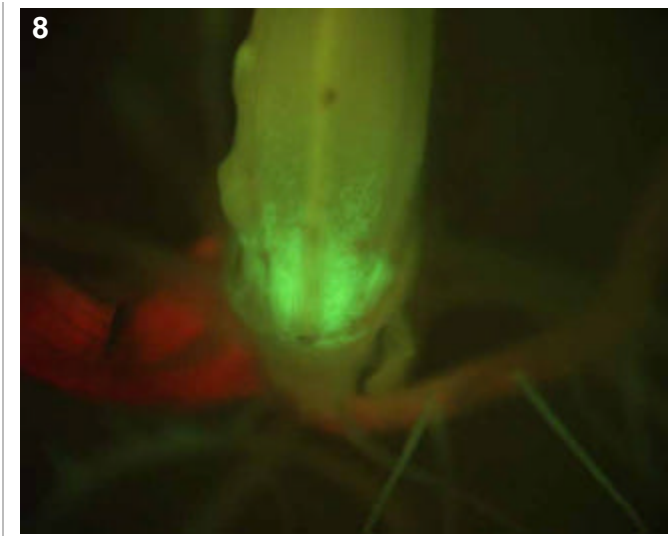
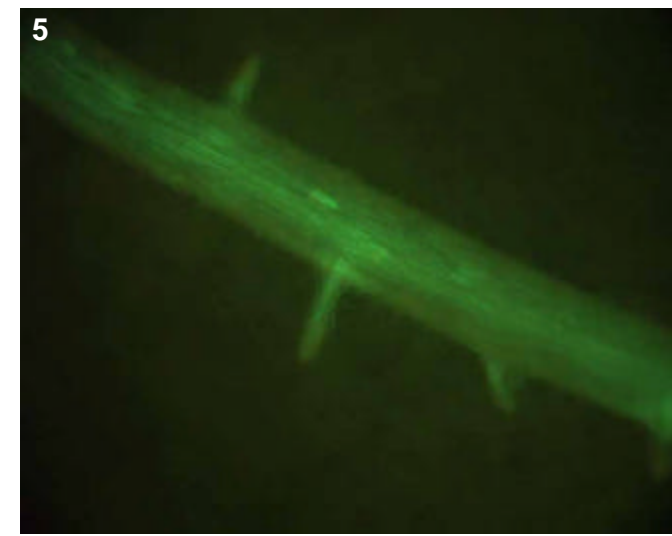
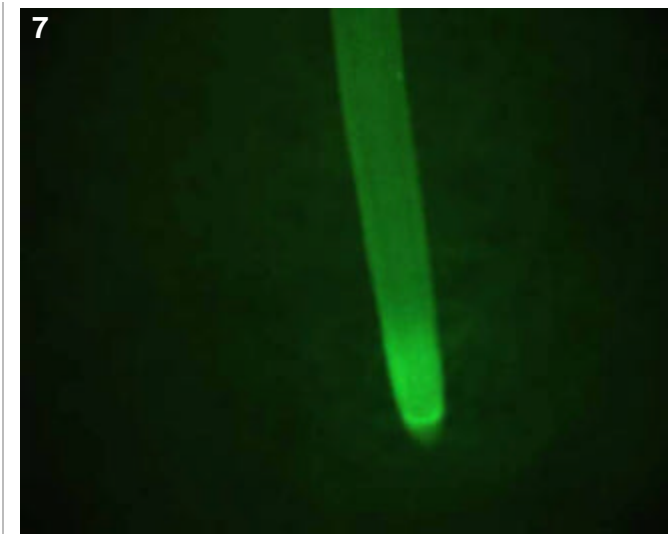
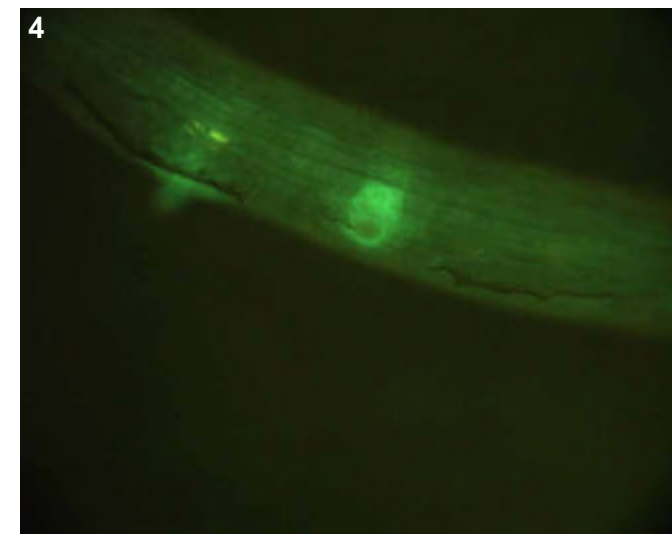
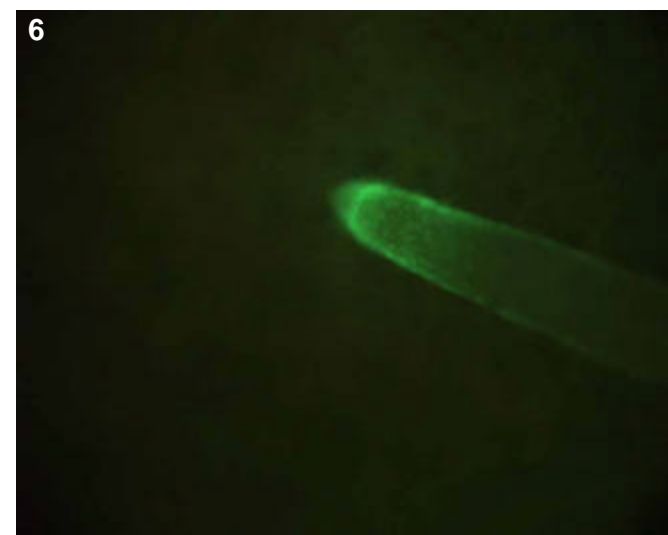
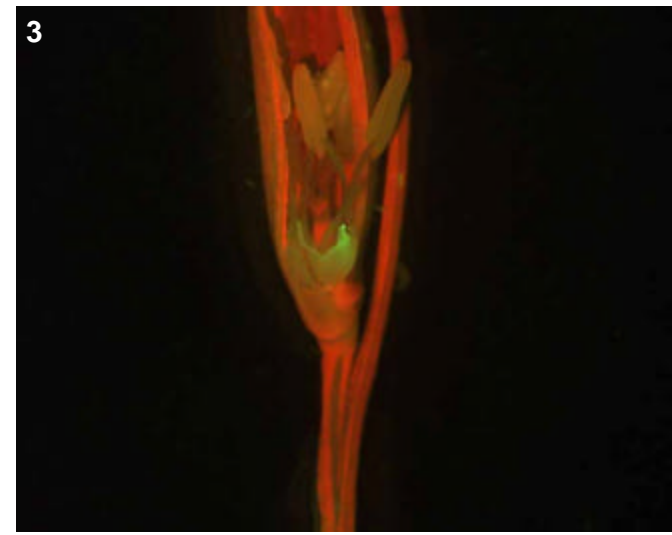
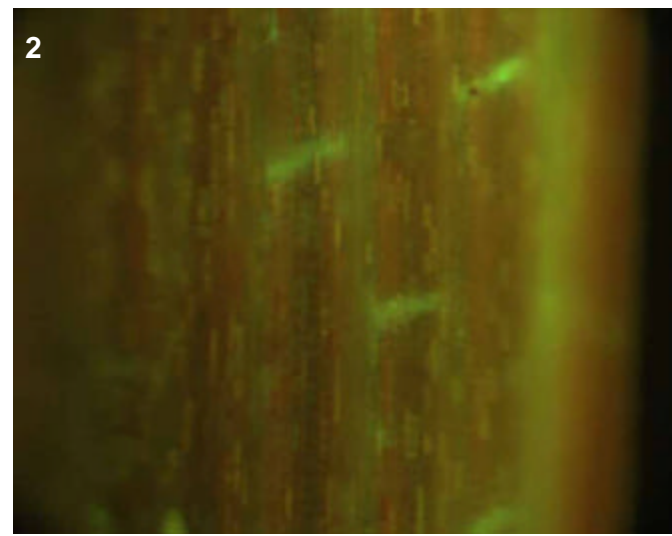
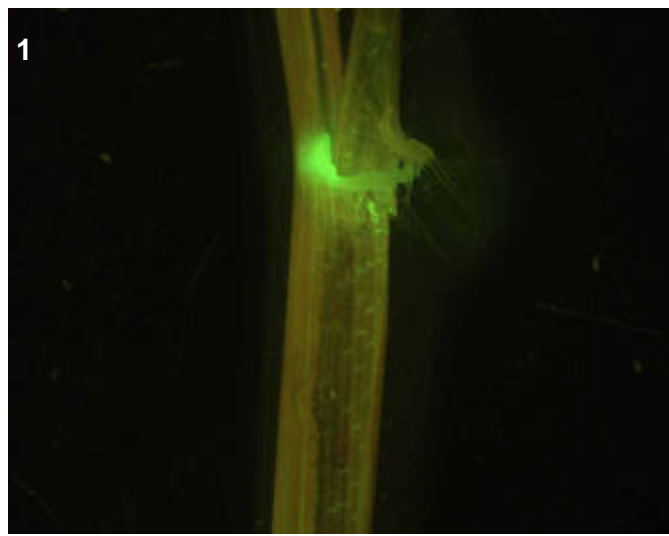
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 17



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
 Looks like a bright epidermal pattern in crowns (pics 6-7).

# Genotype: ART G08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

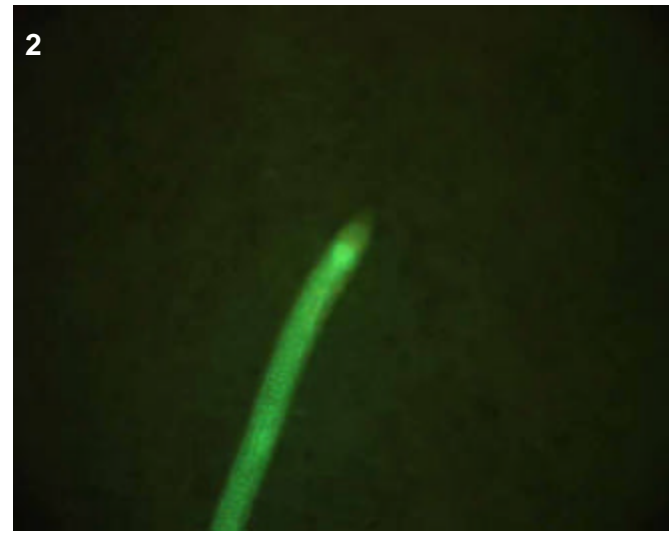
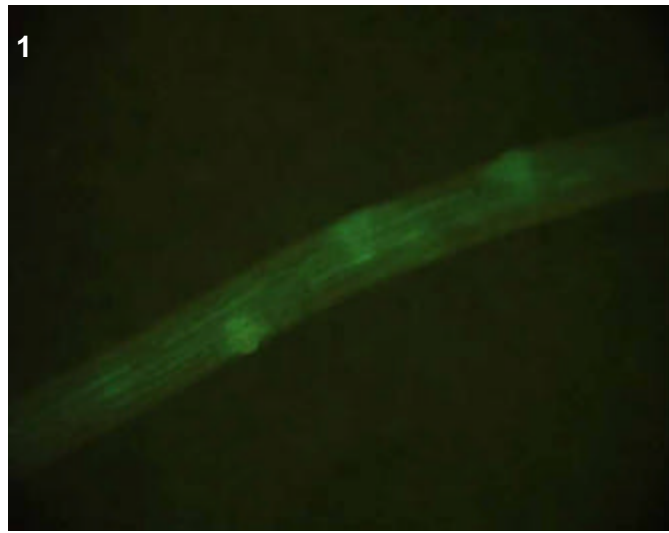
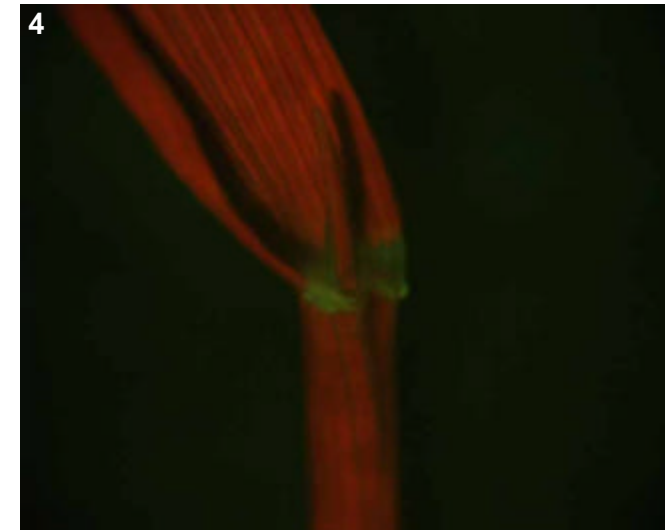
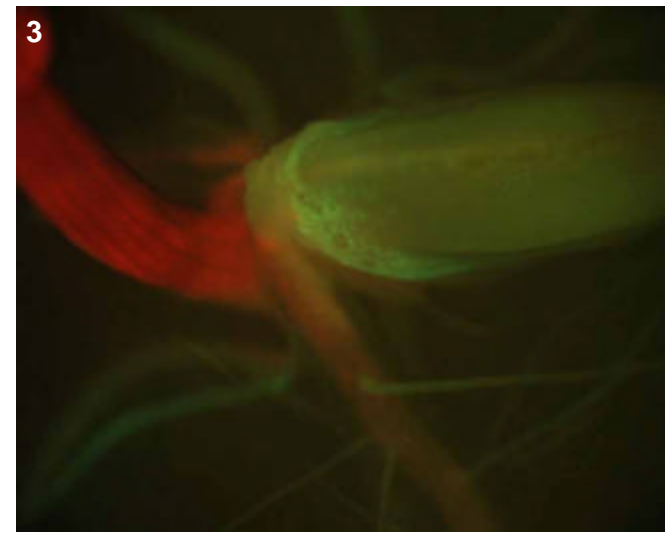
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



## T0 comments

## T1 seed comments

2/5 seeds had very faint expression in the scutellum region, no pic taken.

## T1 seedling comments

# Genotype: ART H01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

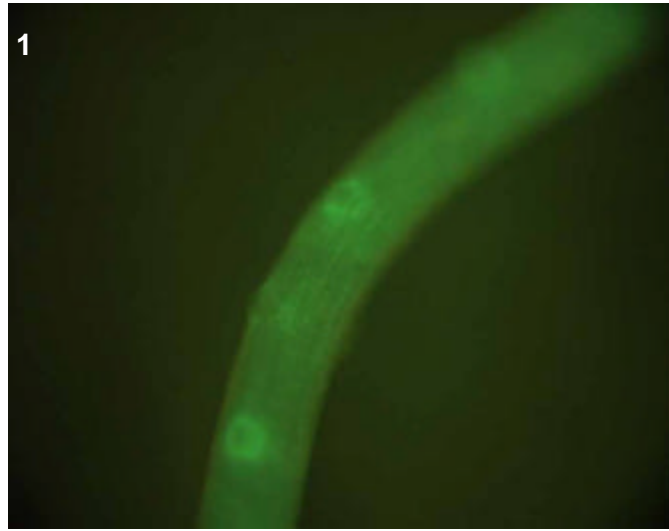
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 2



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ART H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

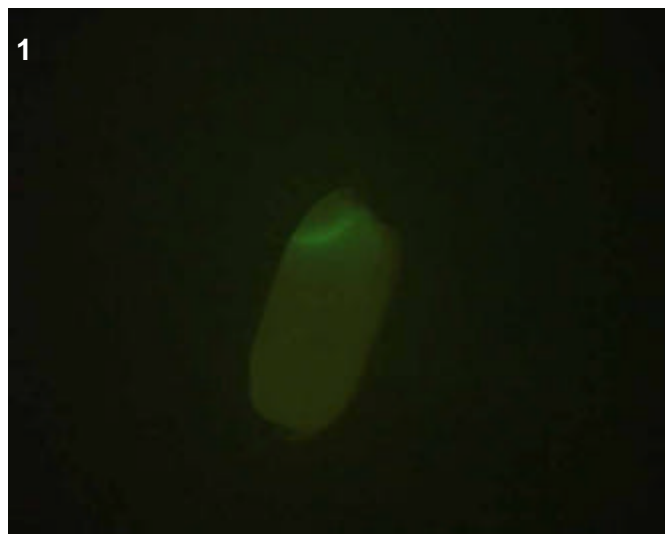
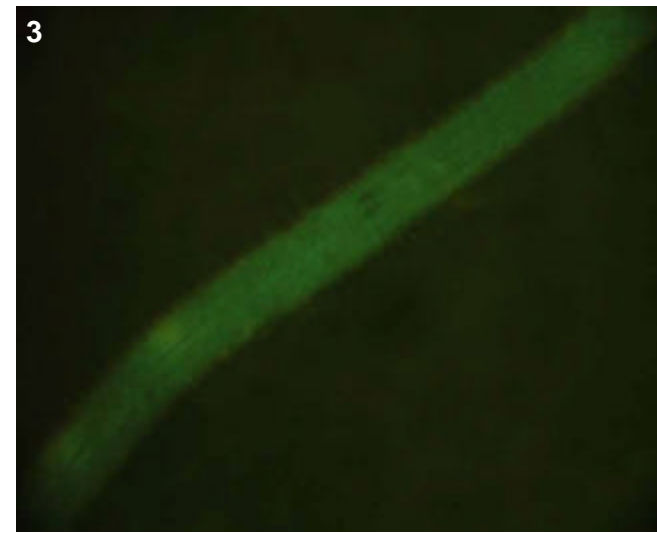
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 14



## T0 comments

## T1 seed comments

3/5 seeds had expression in the scutellum, and perhaps the embryo as well.

## T1 seedling comments

Epidermal expression in crowns (pics 2-3).

# Genotype: ARU A05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

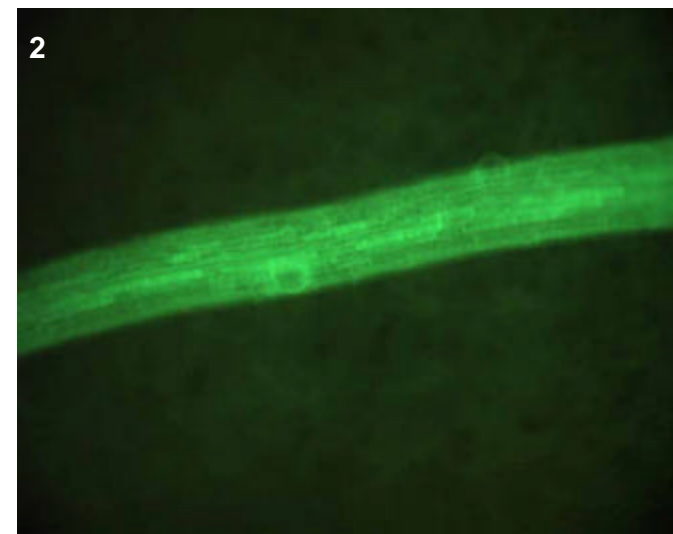
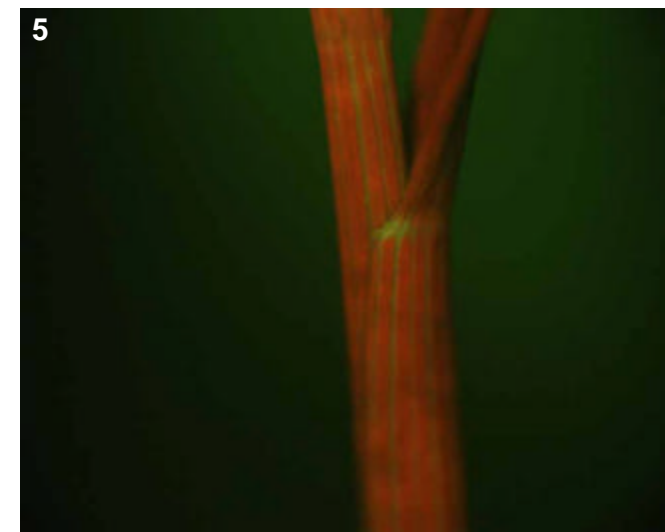
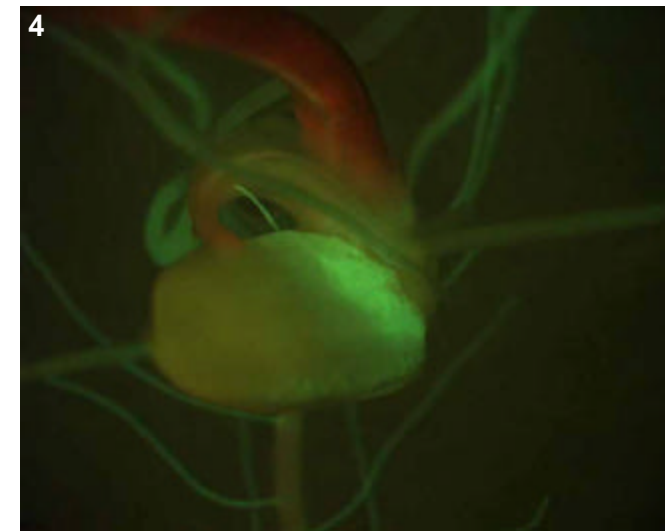
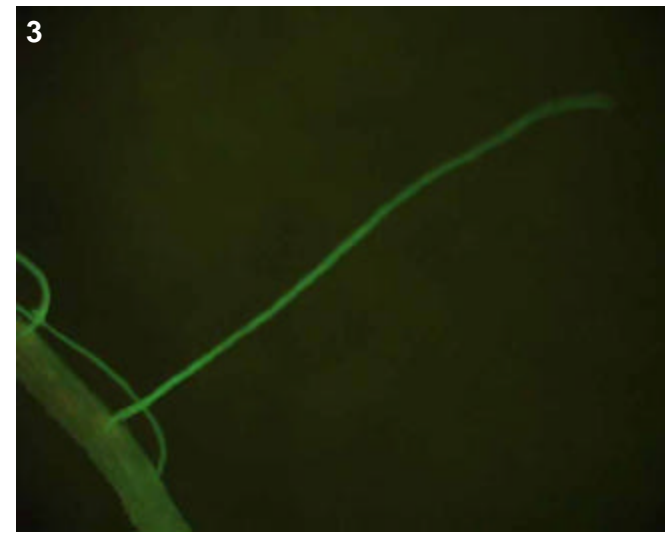
**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**

1



## T0 comments

## T1 seed comments

1/4 seeds had medium expression in scutellum, but only on one side (lower left of scutellum in pic 1).

## T1 seedling comments

Could be bright epidermal expression in roots (pics 2-3).

# Genotype: ARU A06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

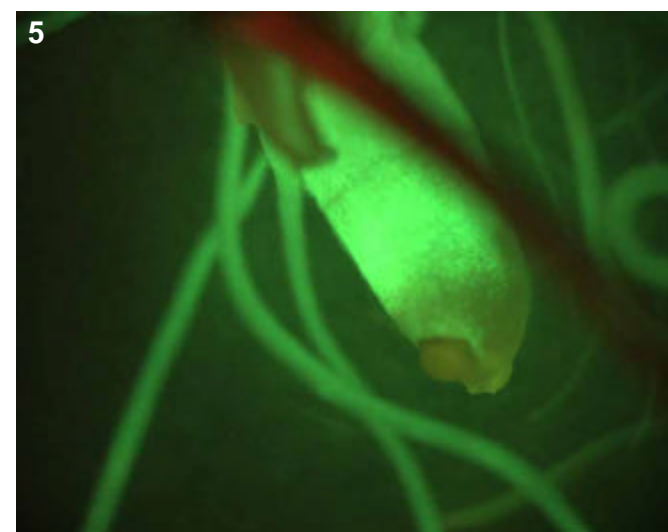
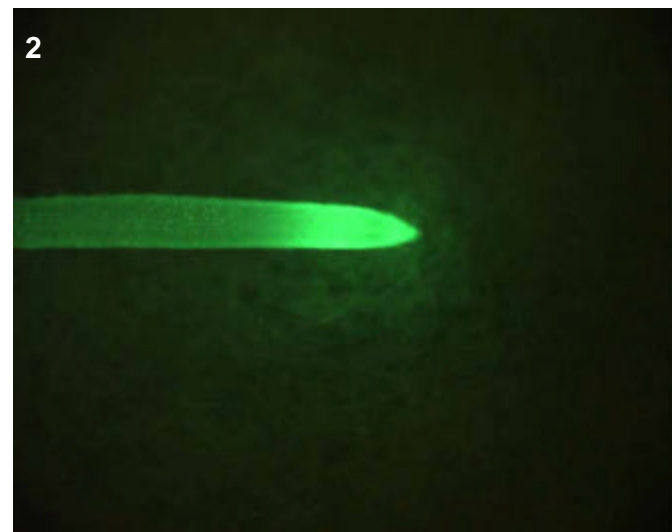
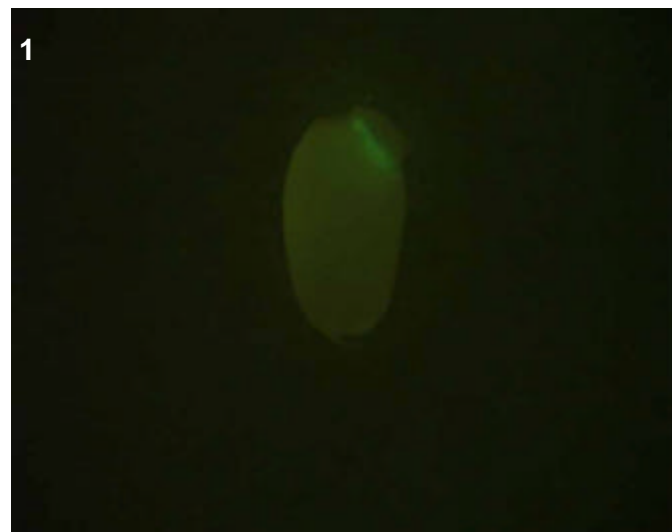
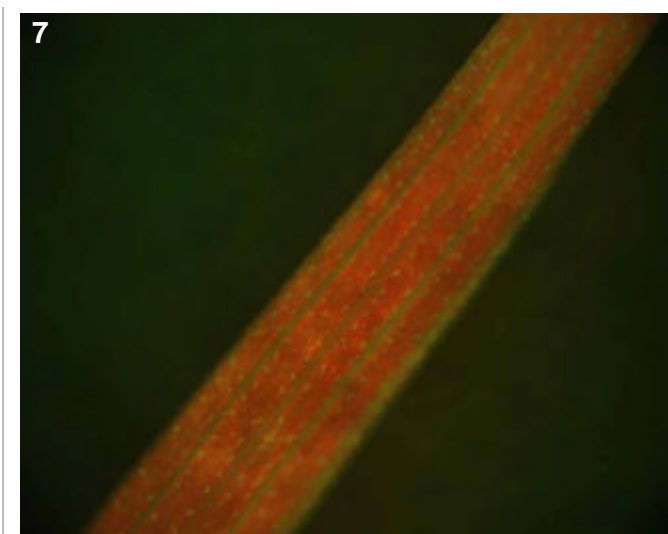
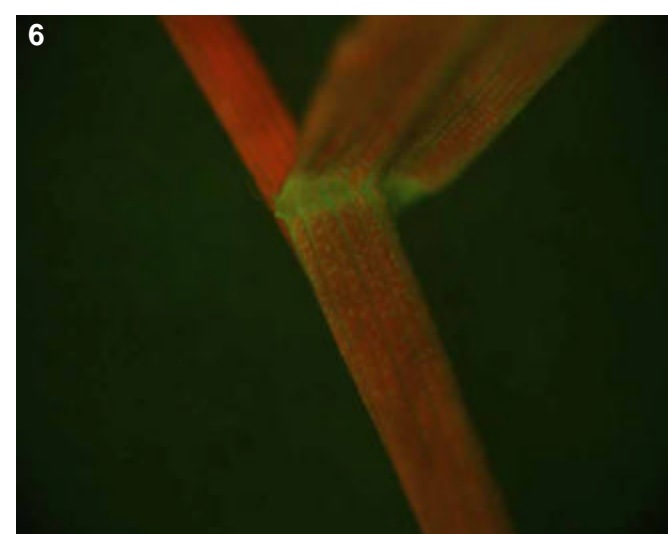
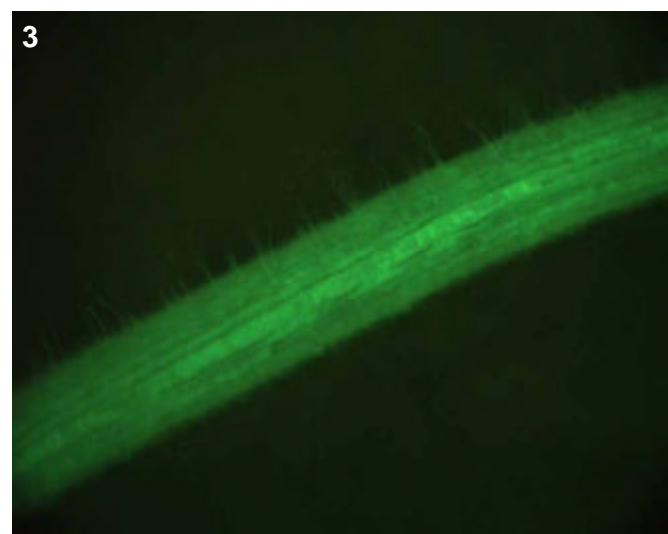
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 3



## T0 comments

## T1 seed comments

2/5 seeds had bright expression in the scutellum region

## T1 seedling comments

Definitely bright root epidermal expression (pics 4-5) with perhaps also something inside like cortical (pic 4). Note the very bright guard cells on surface of leaf AND sheath (pics 6-7), because expression is usually found only on the leaf.

# Genotype: ARU E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

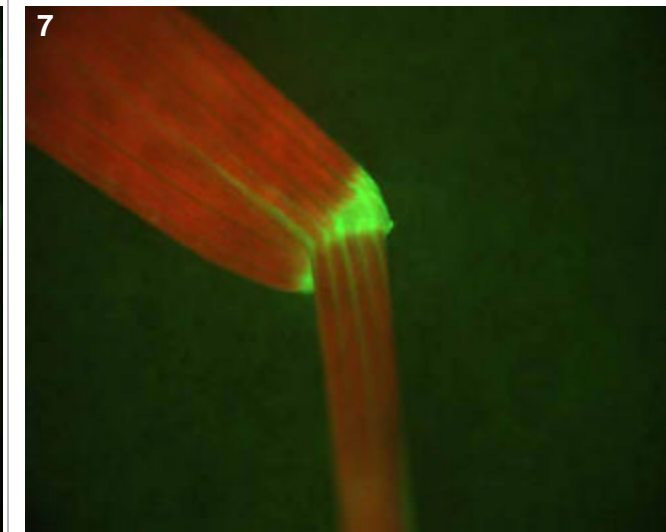
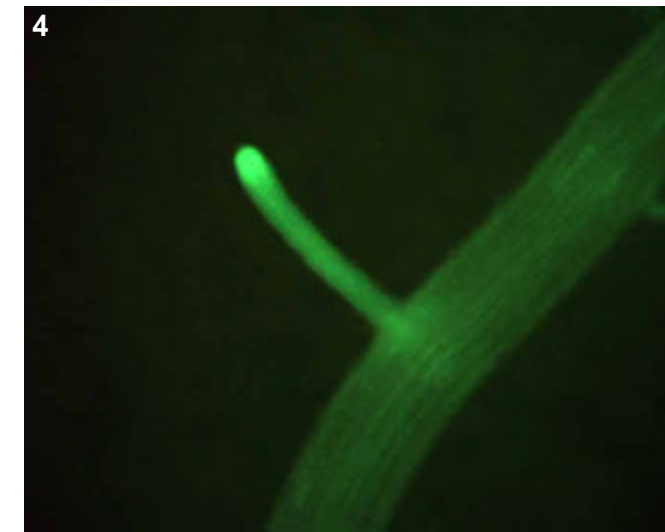
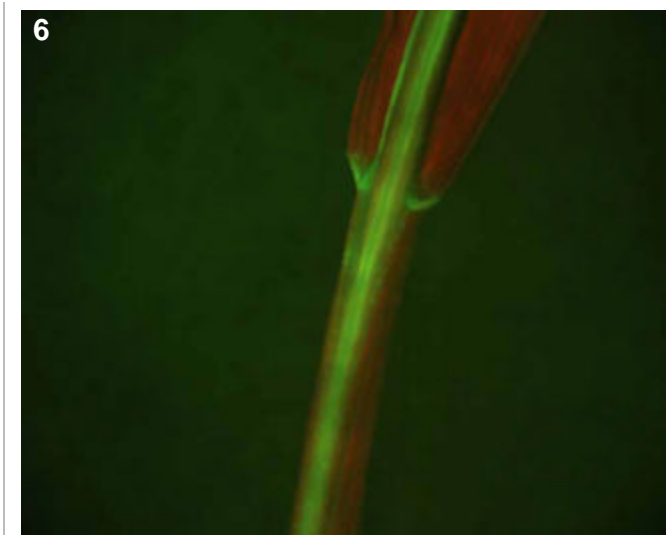
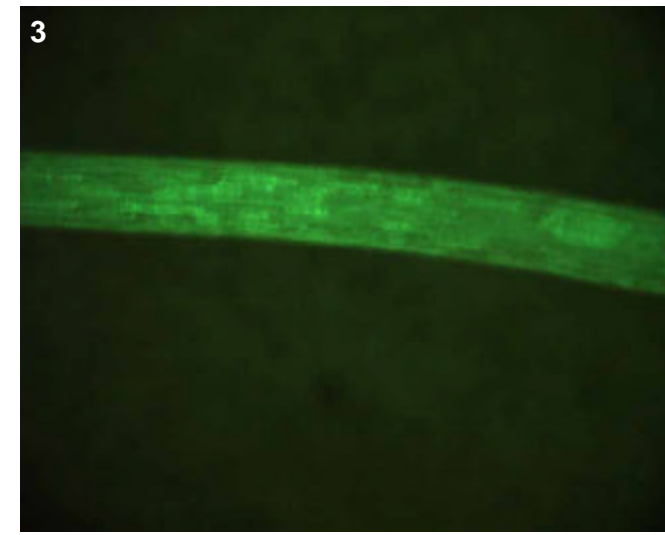
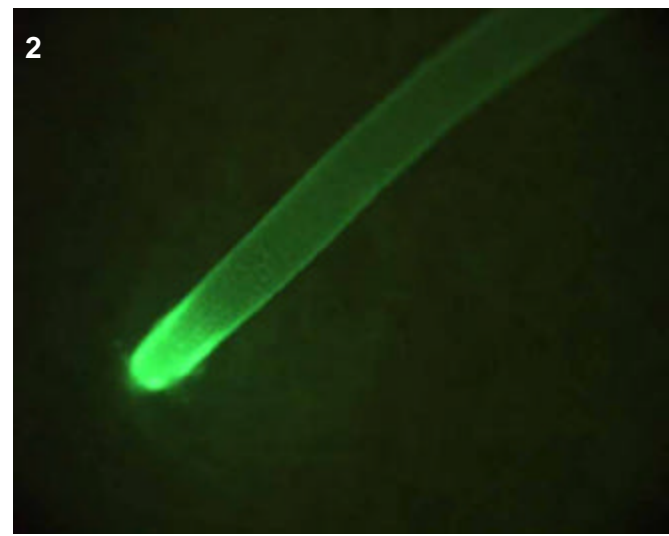
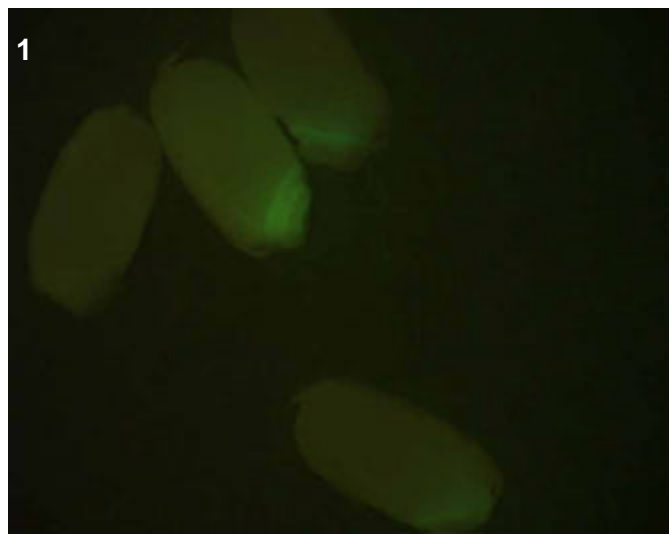
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced:



**T0 comments**

**T1 seed comments**  
3/5 seeds had expression in the scutellum, as well the coleorhiza (see central seed in pic 1)

**T1 seedling comments**  
Could be epidermal expression in the roots (pic 2) as well as the shoot, particularly in the leaf (pic 6).



# Genotype: ARV A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

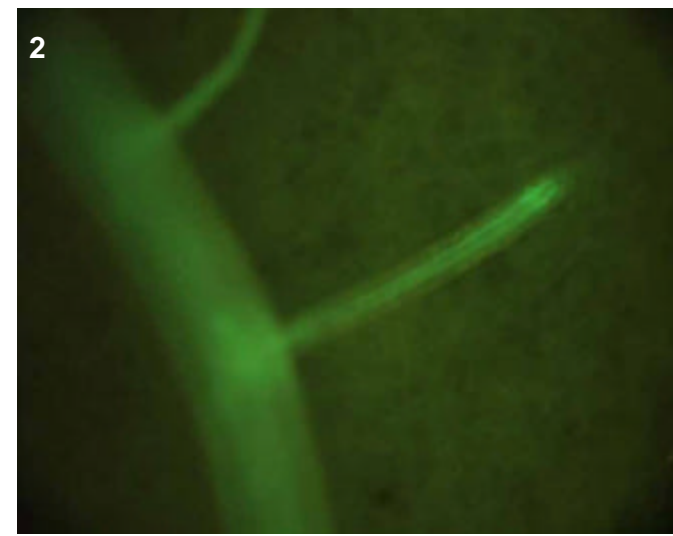
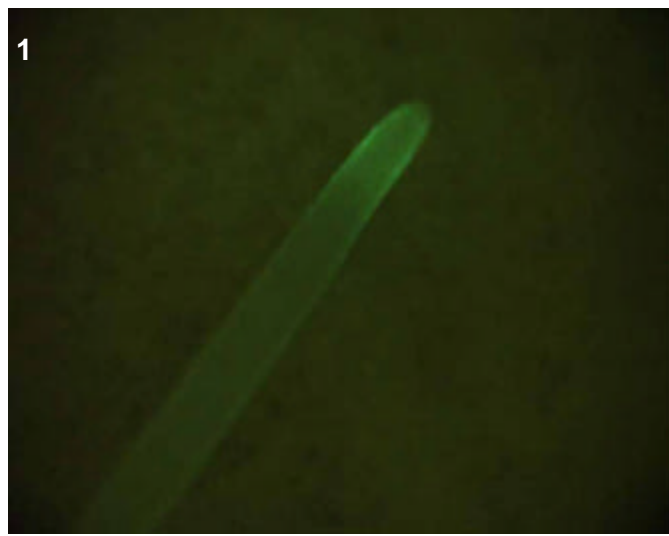
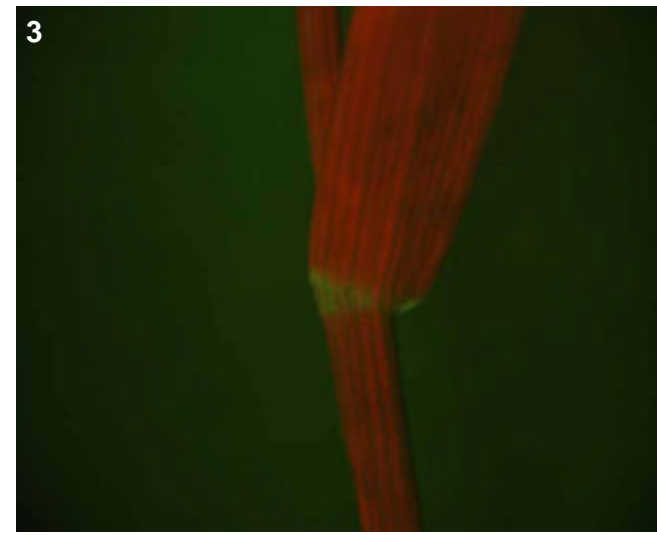
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 4



## T0 comments

## T1 seed comments

## T1 seedling comments

Epidermal expression near tips of crowns (pic 1), something interior in lats (pic 2).

# Genotype: ARV C02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

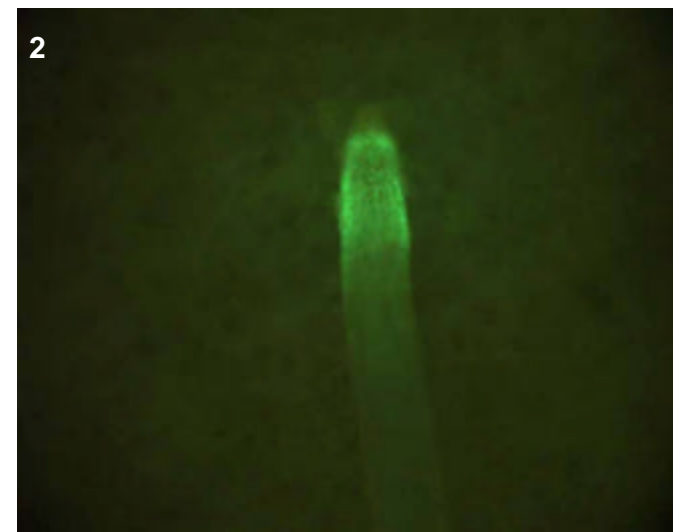
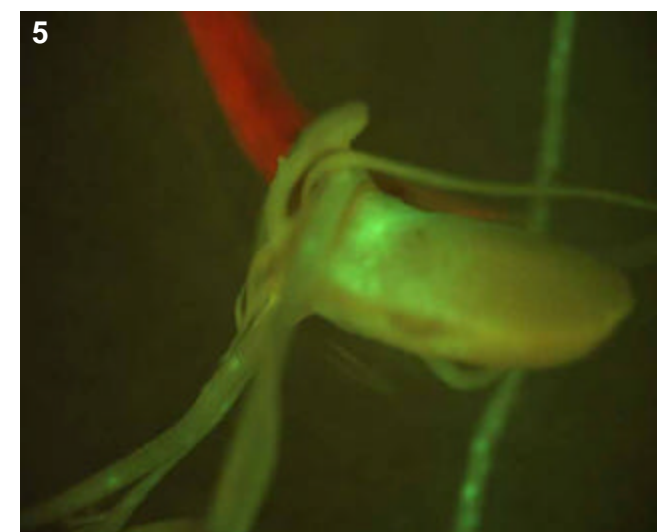
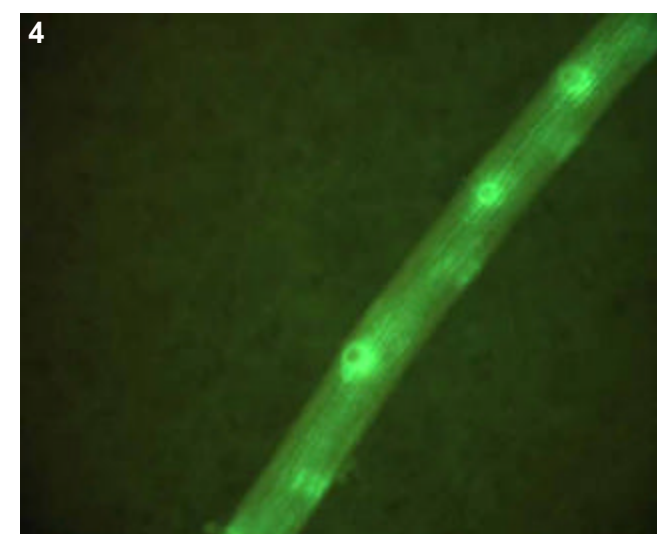
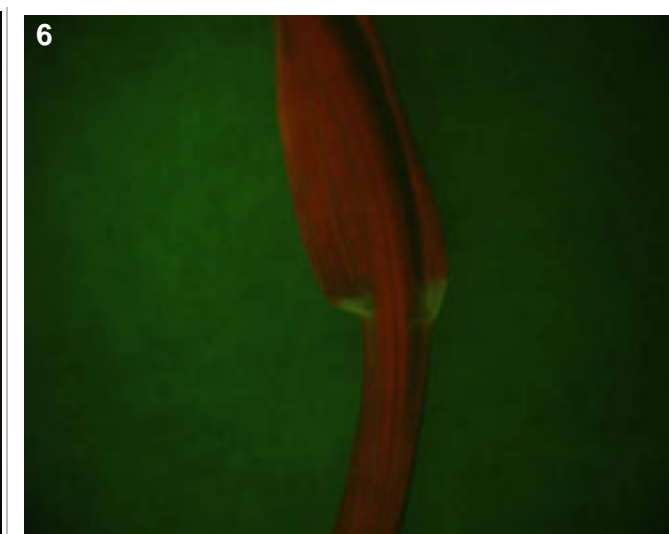
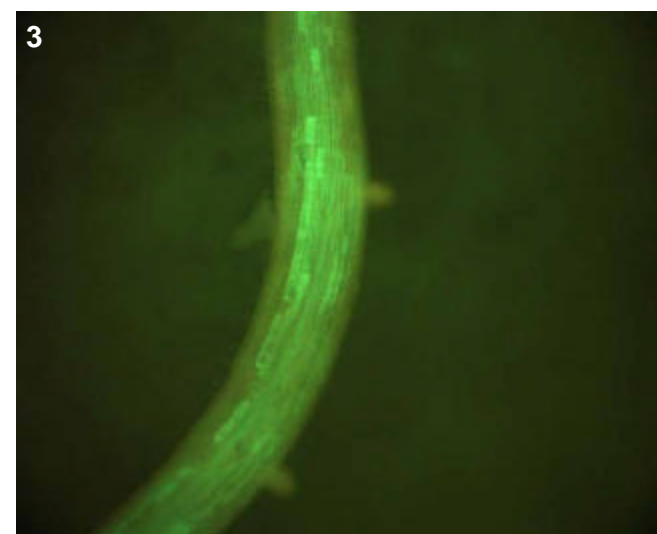
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 2



## T0 comments

## T1 seed comments

1/5 seeds had medium expression in the embryo, perhaps 2 more have very faint embryo expression.

## T1 seedling comments

# Genotype: ARV G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

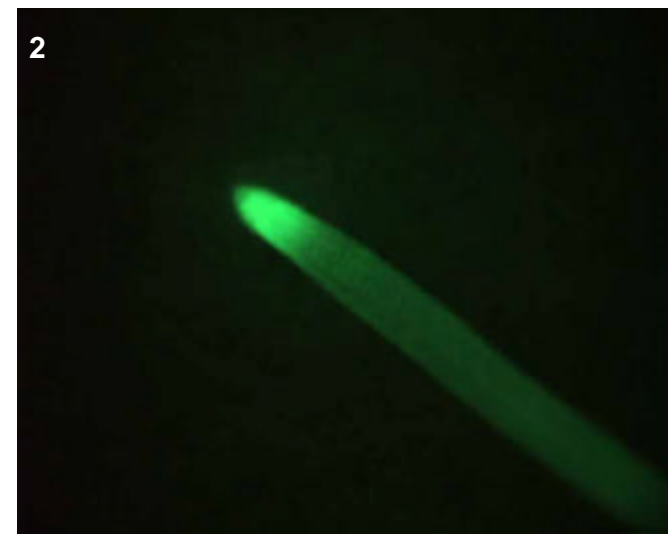
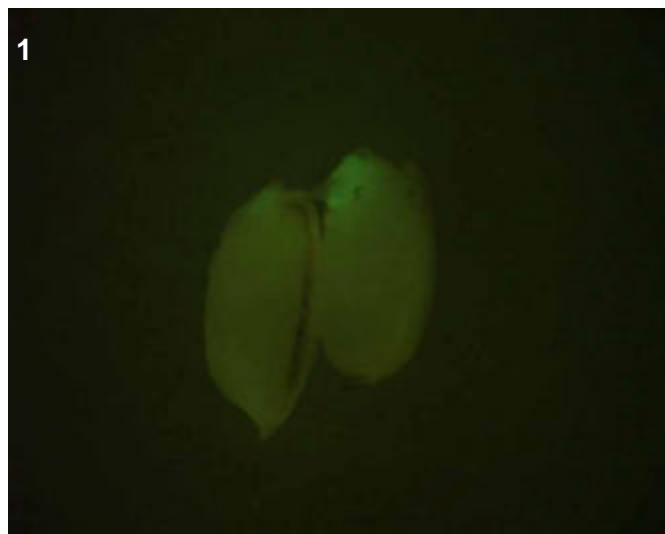
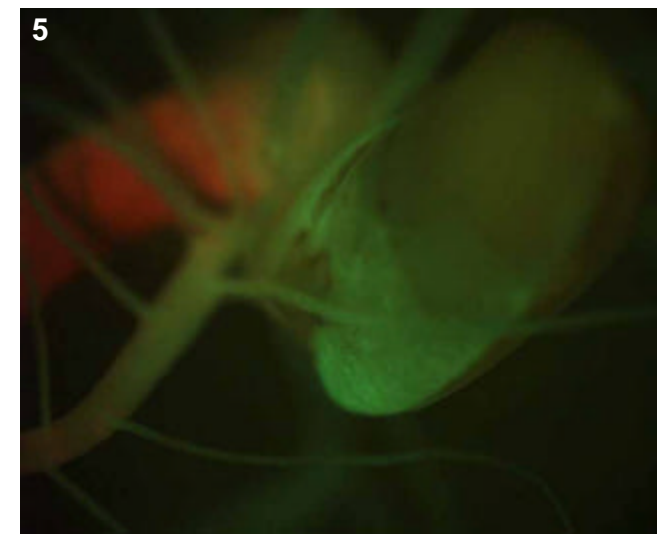
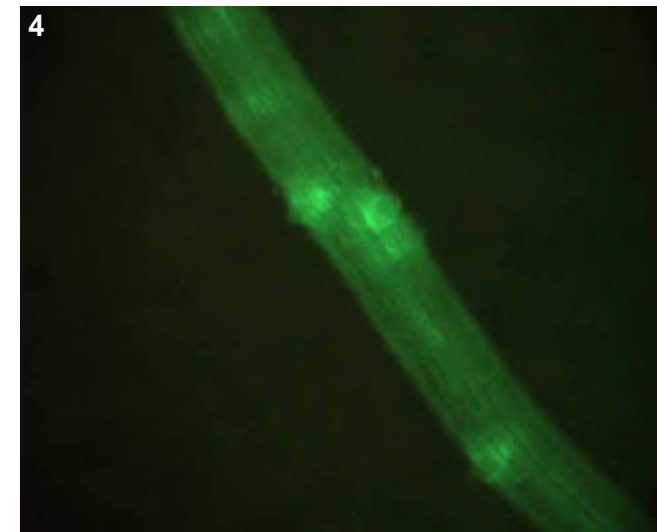
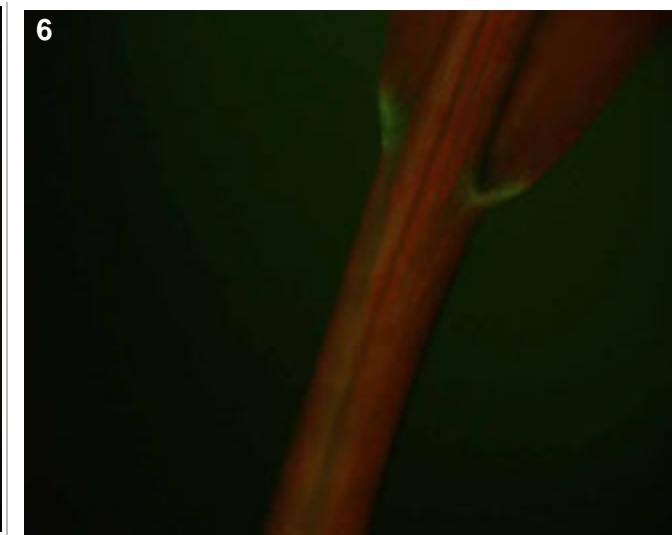
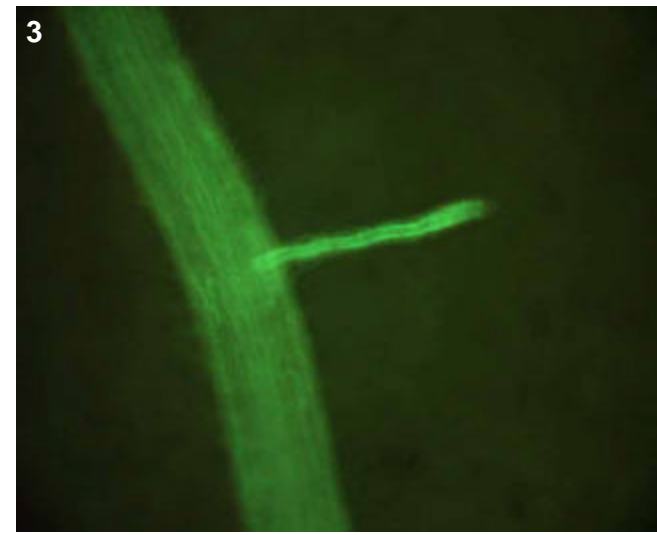
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 26



## T0 comments

## T1 seed comments

2/5 seeds had expression

## T1 seedling comments

Epidermal in crown/seminal roots (pic 2), something inside the lats (pic 2).

# Genotype: ARW A06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

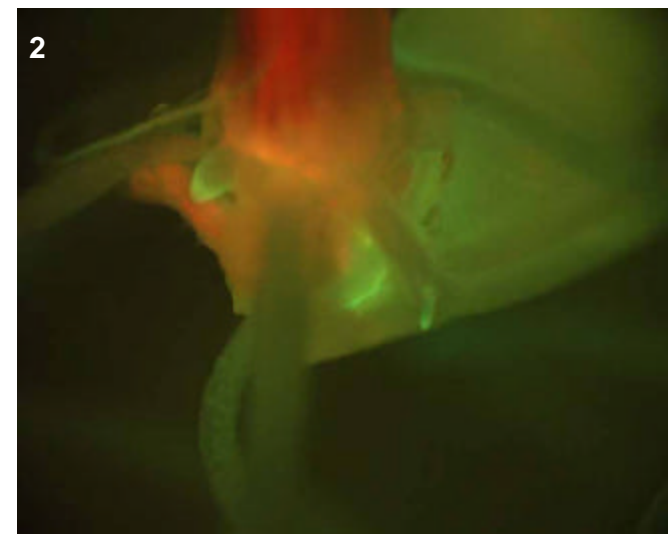
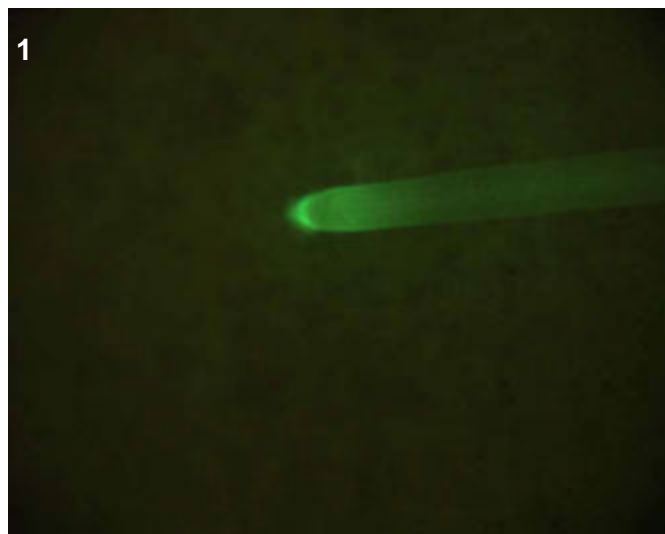
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 1



## T0 comments

## T1 seed comments

## T1 seedling comments

Crown roots show bright cap and some epidermal expression near tips (pics 1-2).

# Genotype: ARW B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

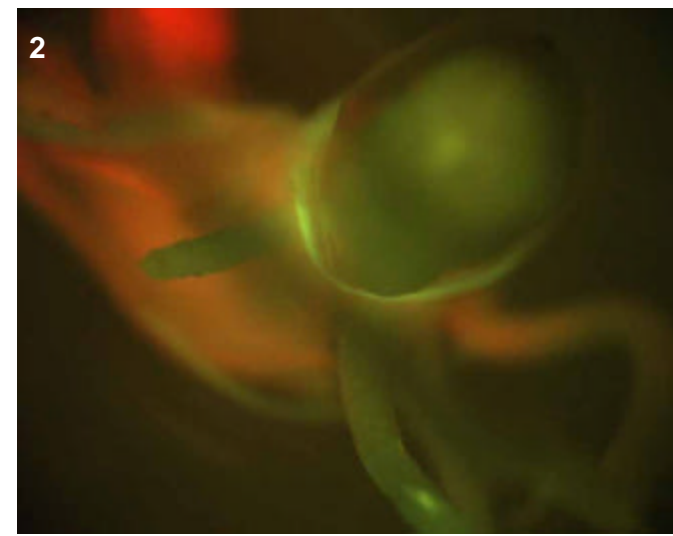
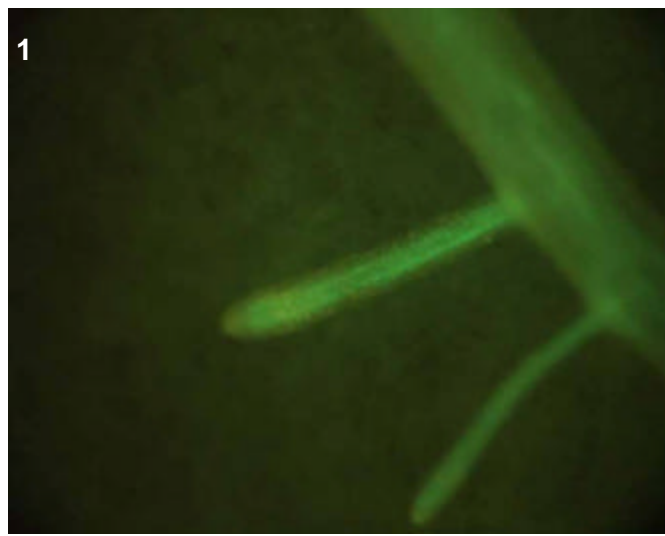
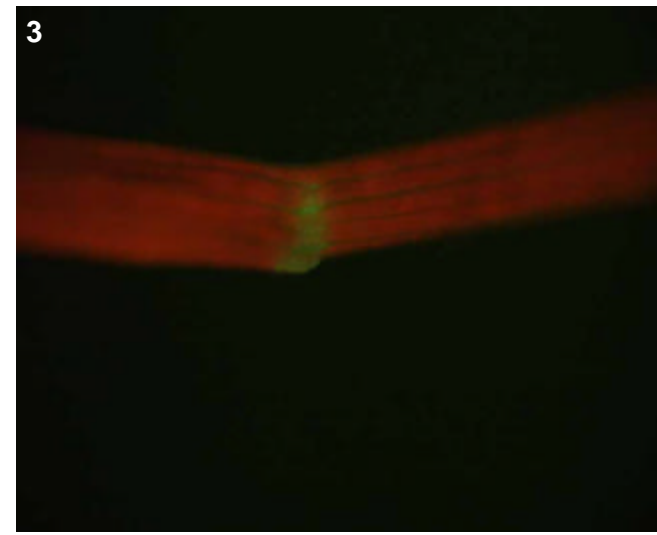
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 1



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARW C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

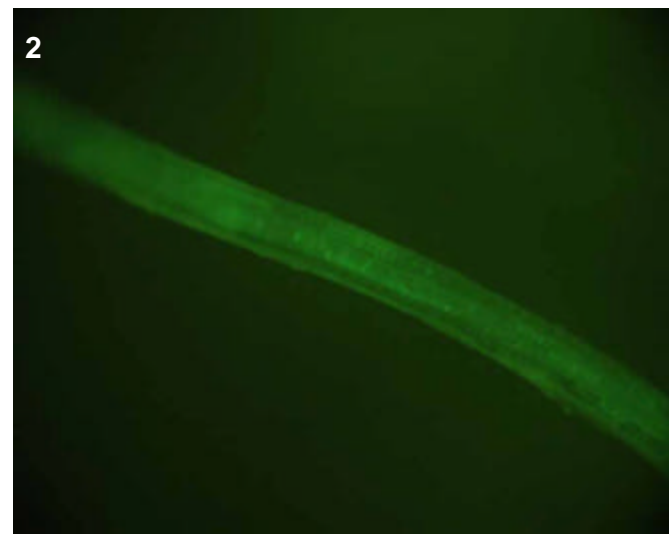
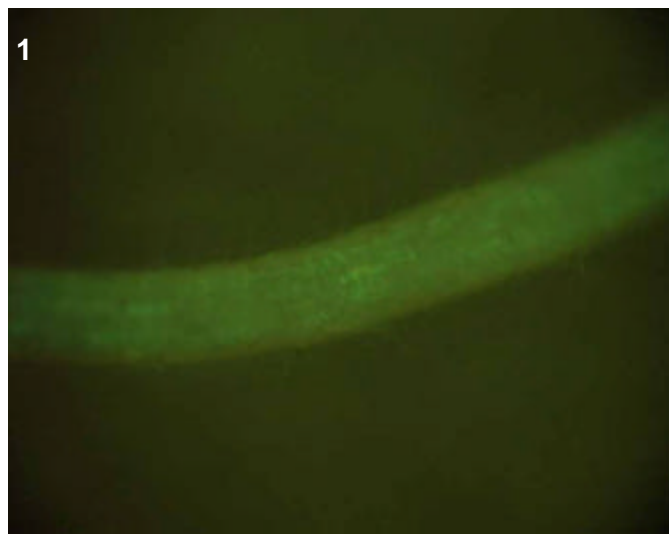
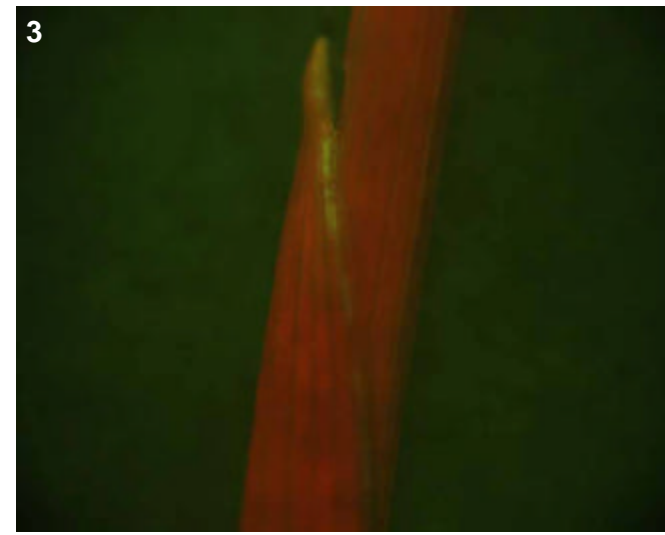
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 15



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARW C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

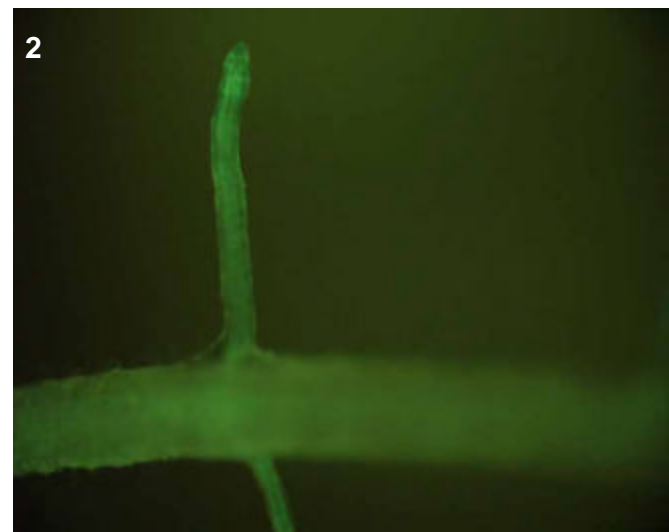
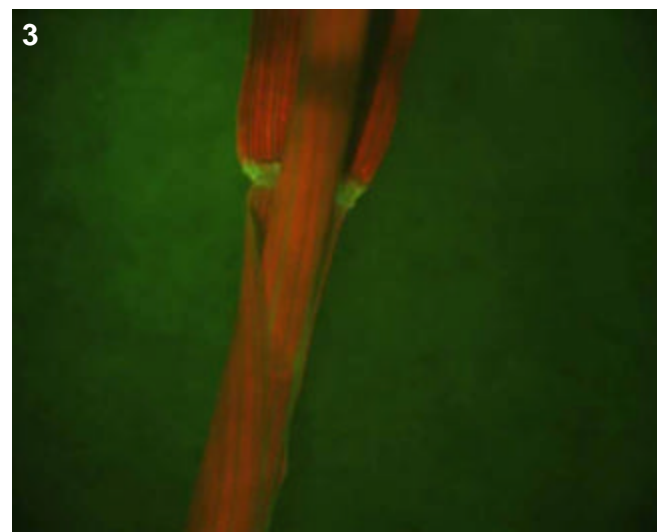
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 17



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARW D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

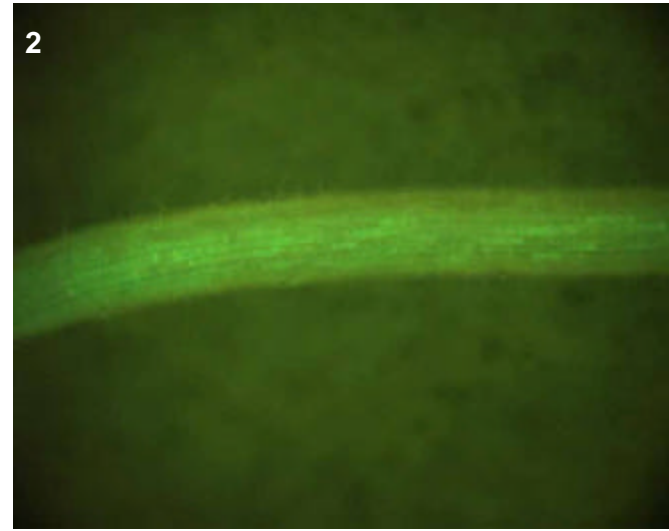
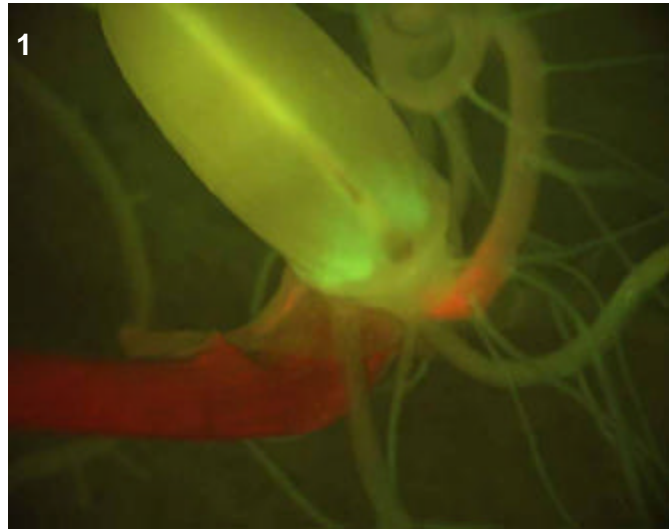
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 5



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ARW E02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

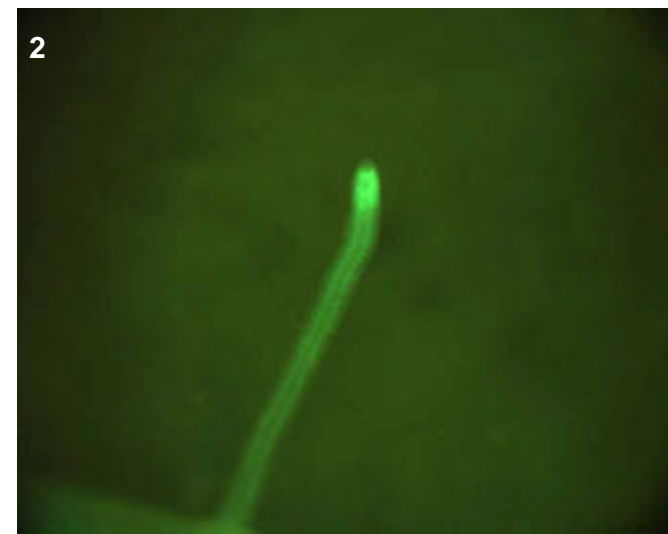
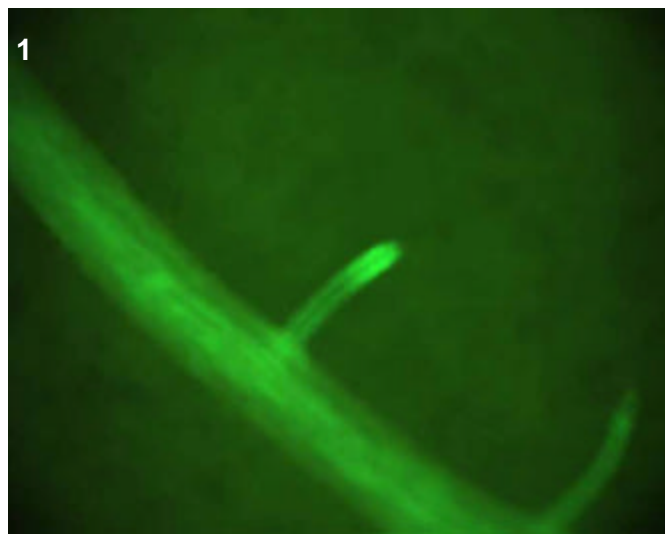
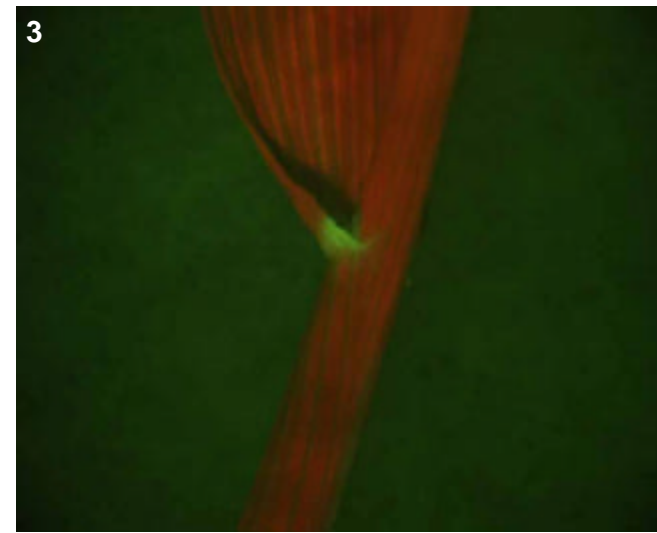
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright vascular expression in roots (pics 1-2), either stelar or extra-stelar. Note the especially bright expression near tips in the division/elongation zone.

# Genotype: ARW E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

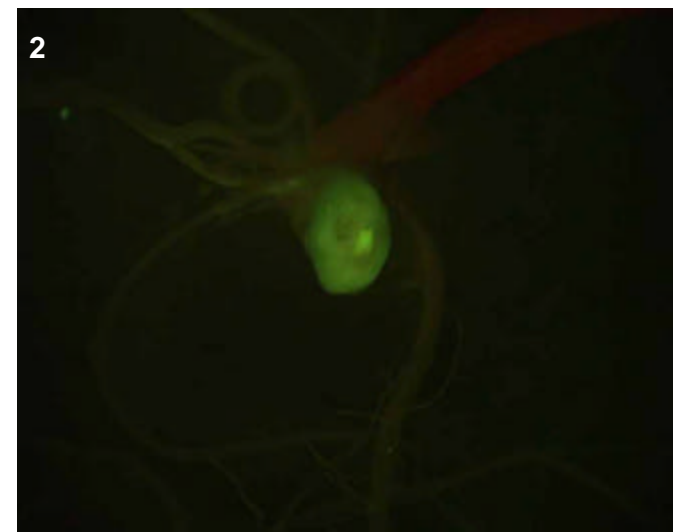
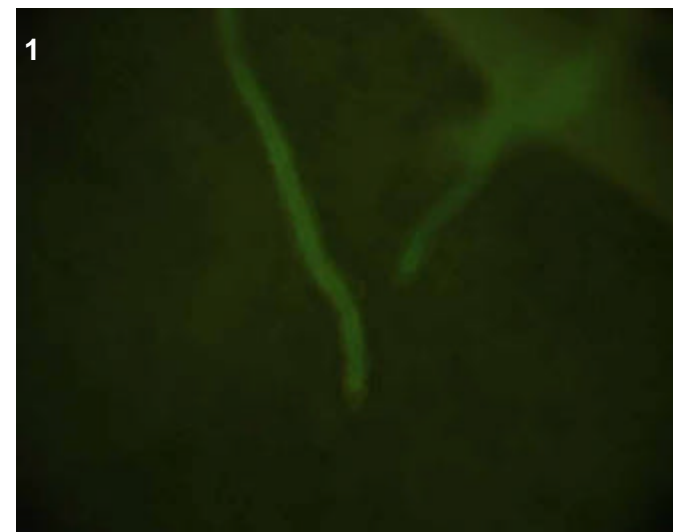
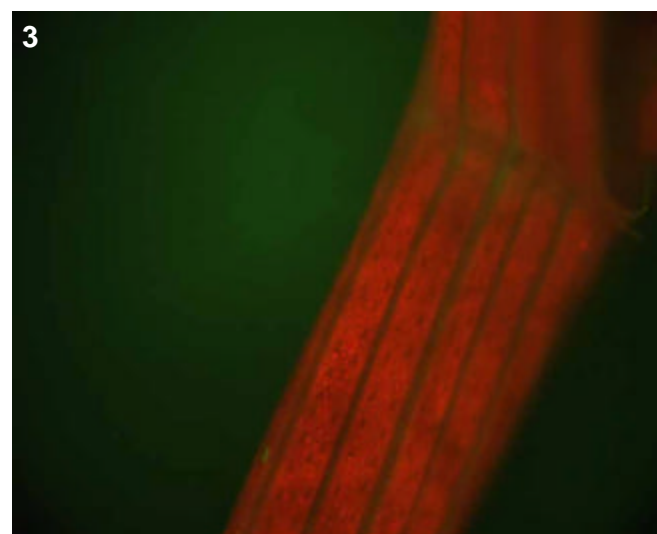
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 15



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ARW F12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

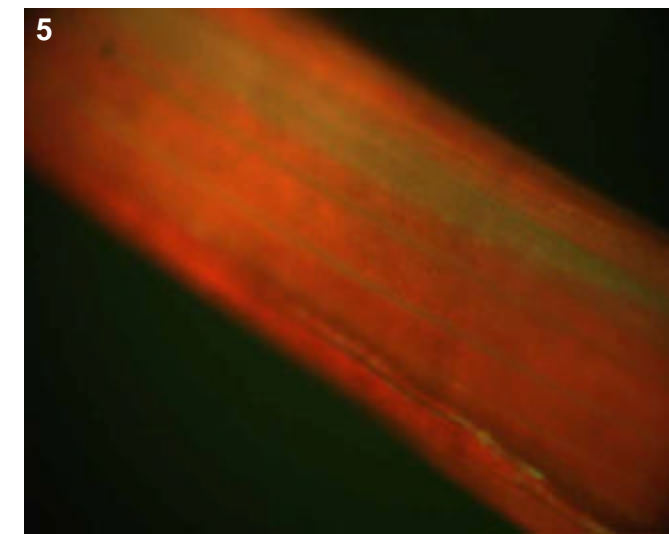
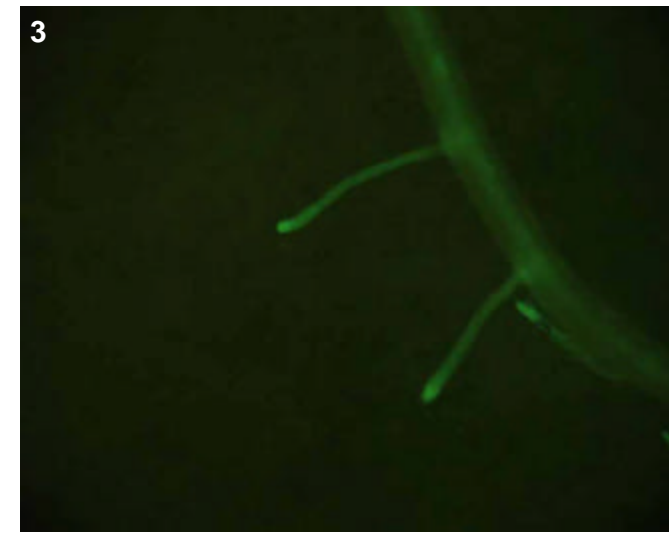
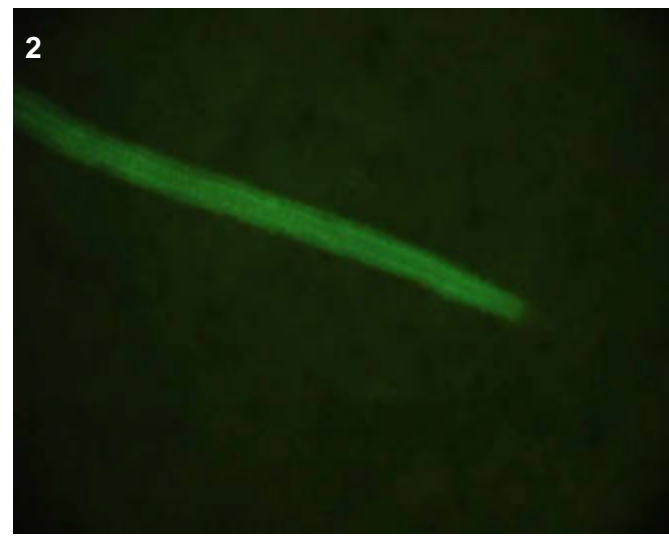
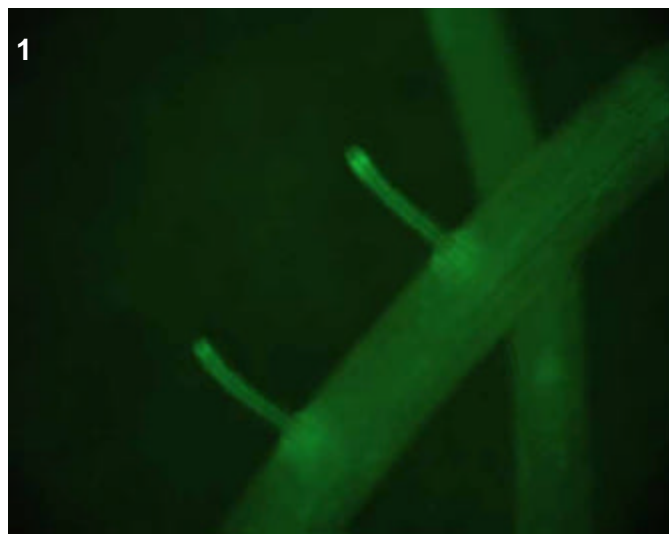
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 29



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression could be cortical in lats (pics 1-3). Epidermal expression at tips of crowns (pic 4). Virtually no collar expression but bright vascular expression particularly in the sheath (pic 5). There may also be some mesophyll expression in the sheath?

# Genotype: ARW G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

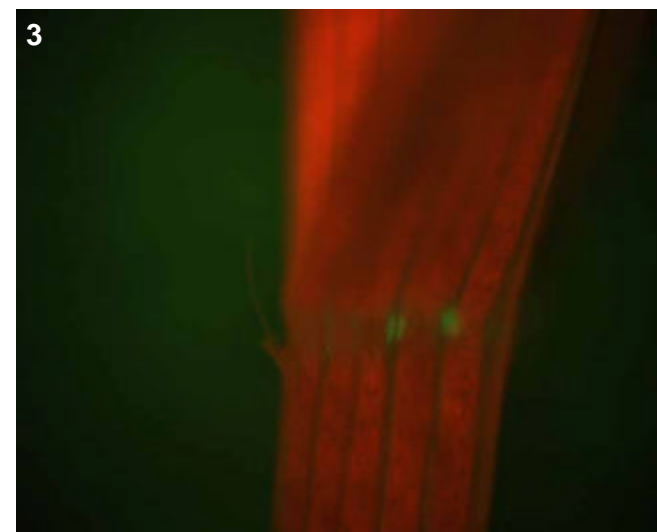
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 36



### T0 comments

### T1 seed comments

### T1 seedling comments

The collar expression was very specific to the sides of the vascular elements (pic 3). There may have been some shoot vascular expression as well, but not sure.

# Genotype: ARW G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

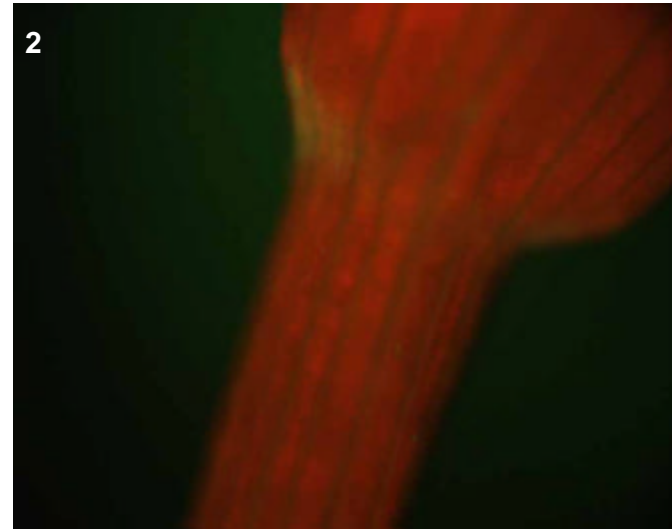
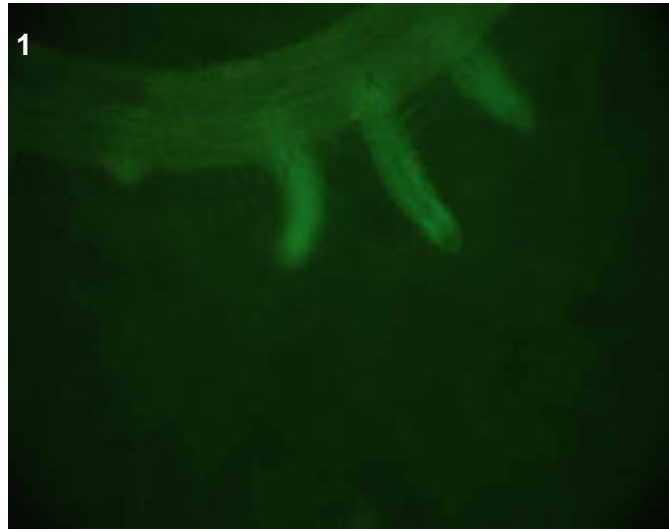
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 6



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression looks cortical/endodermal (pic 1) and was most visible in young, emerging lateral roots.

# Genotype: ARW H10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

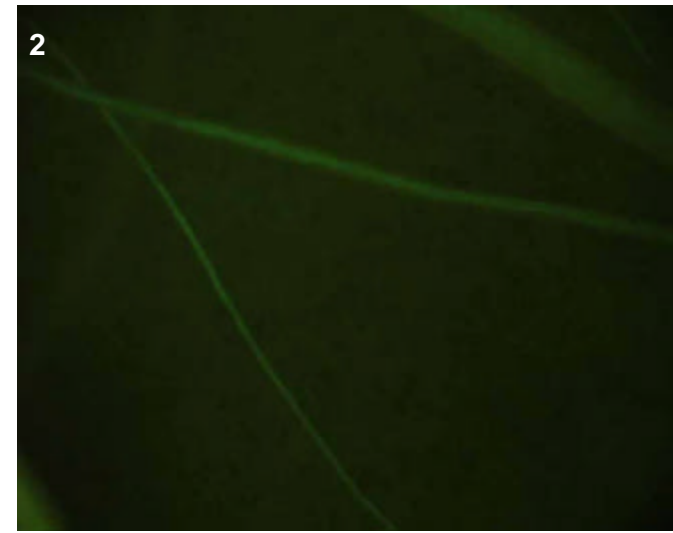
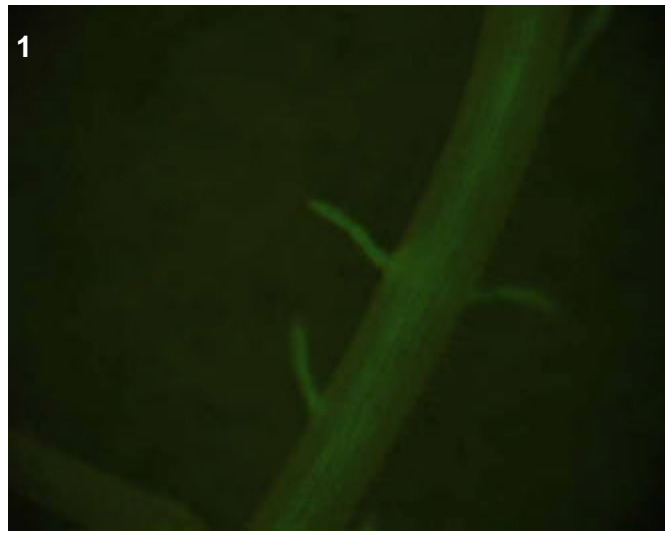
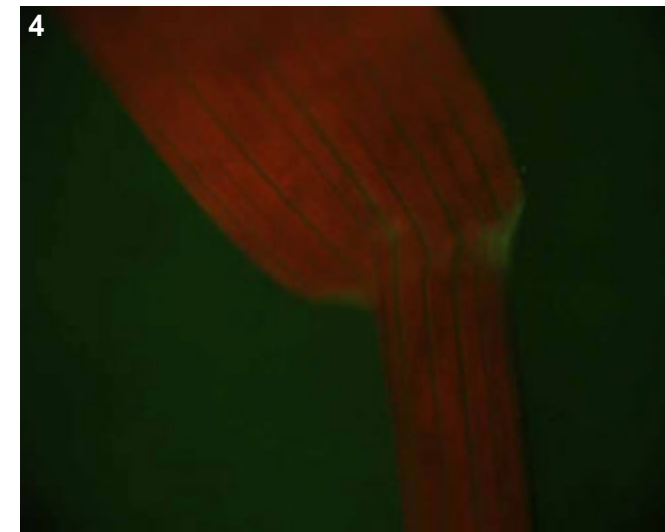
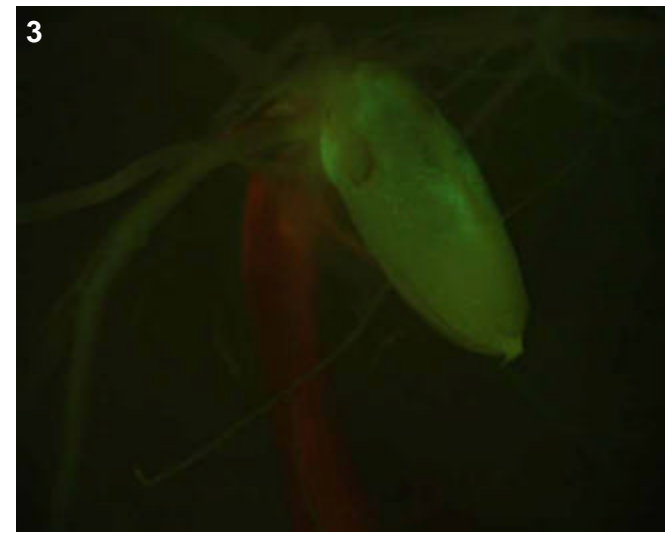
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 34



## T0 comments

## T1 seed comments

## T1 seedling comments

In the shoot, vascular expression was much brighter than the faint collar expression (pic 4).

# Genotype: ARX B03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

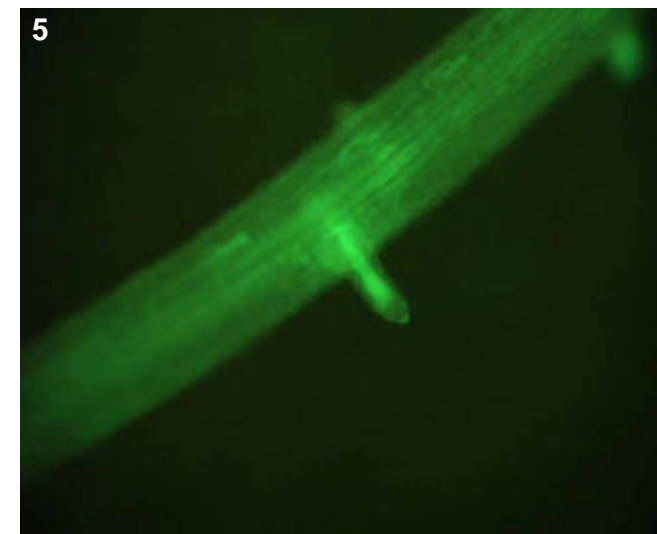
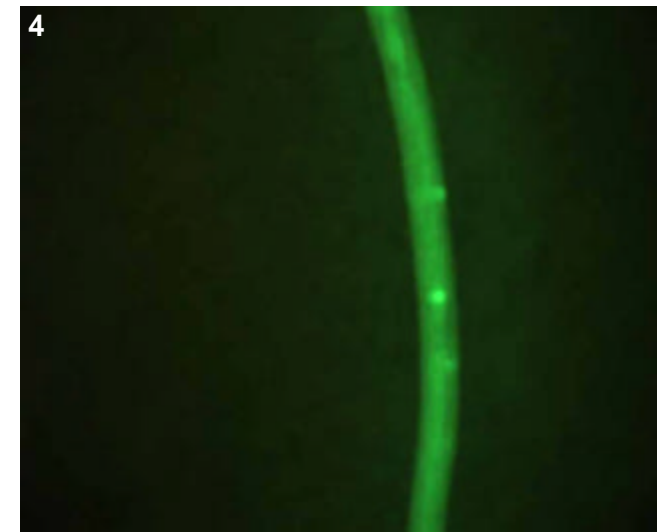
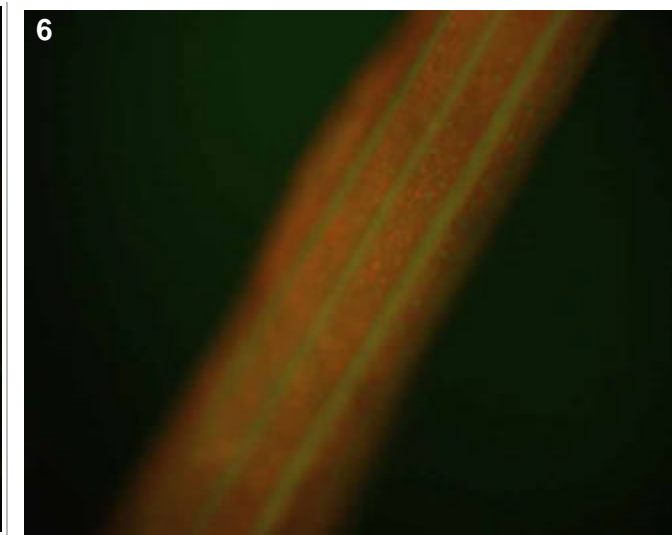
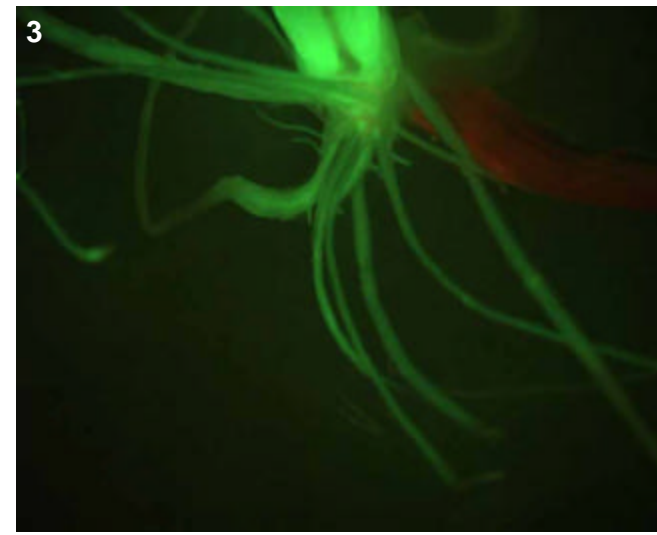
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 15



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

Extremely bright endosperm (pic 2) and small, compact roots (pics 3-5). The roots may display a mutant phenotype? In shoot, bright sheath vascular (pic 6) and leaf guard cells (pic 7). The collar, however, had no expression.

# Genotype: ARX B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

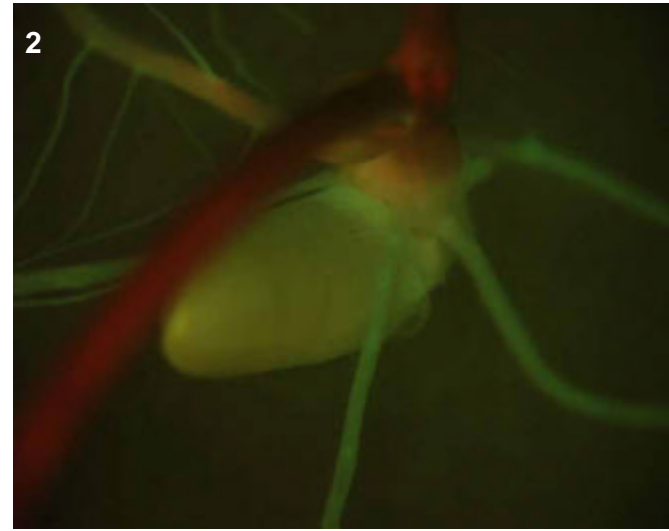
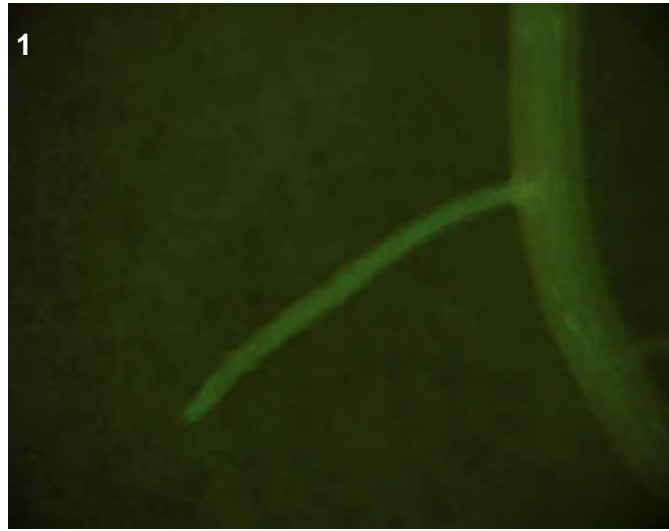
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 37



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ARX C02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

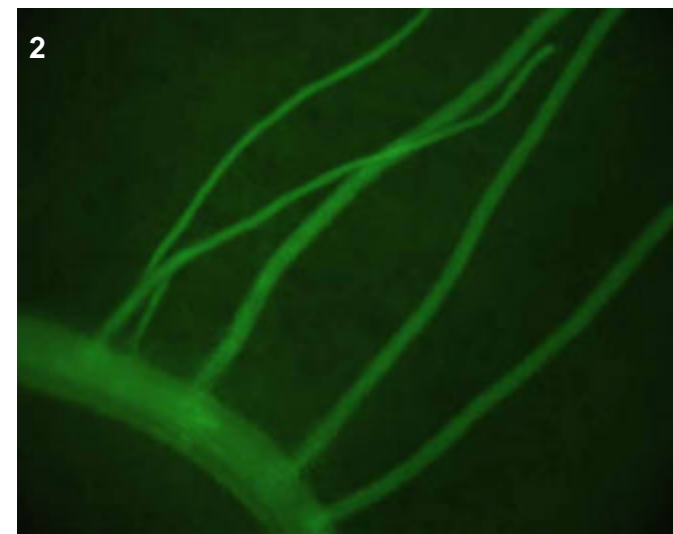
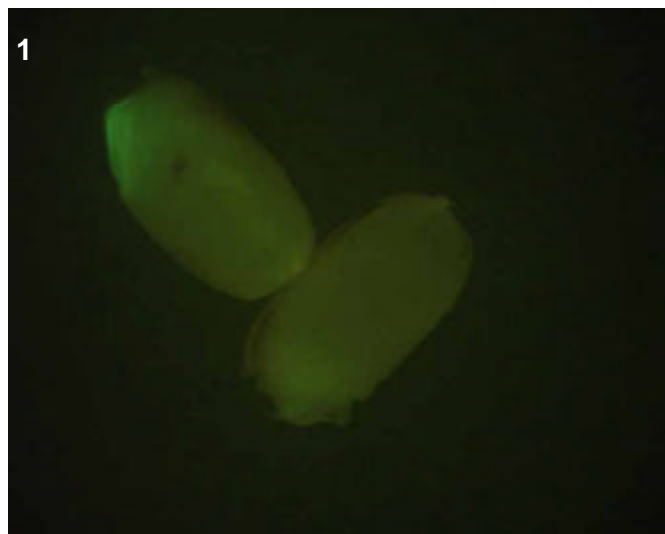
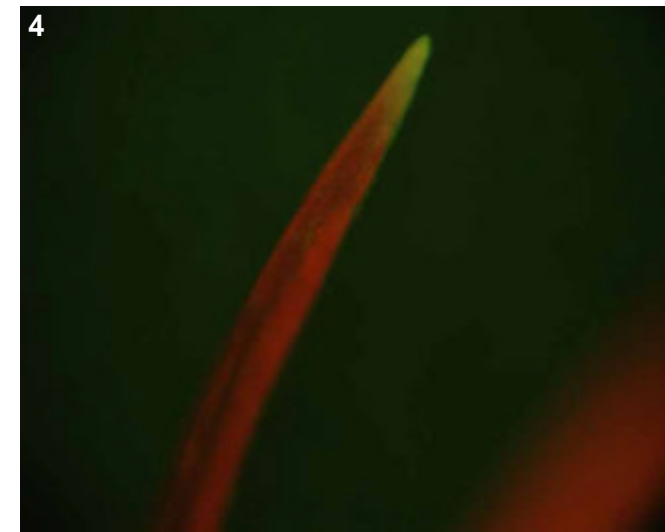
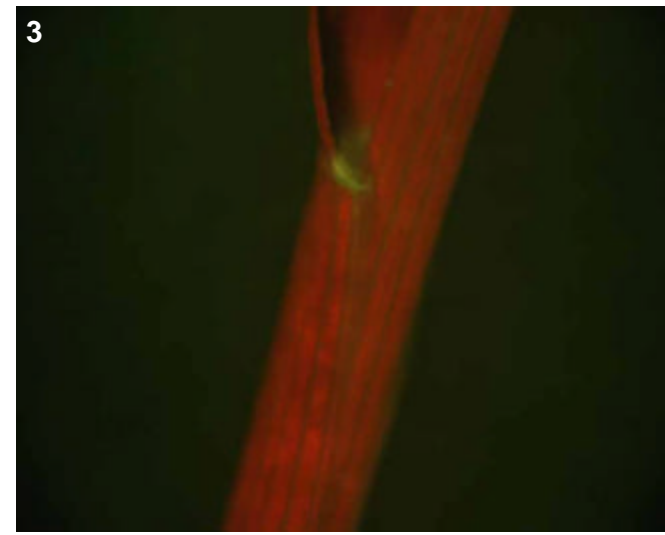
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 9



## T0 comments

## T1 seed comments

1/4 seeds showed expression

## T1 seedling comments

Bright, perhaps epidermal, expression in roots (pic 2). Medium expression in collar (pic 3) and leaf tips (pic 4).

# Genotype: ARX C04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 26



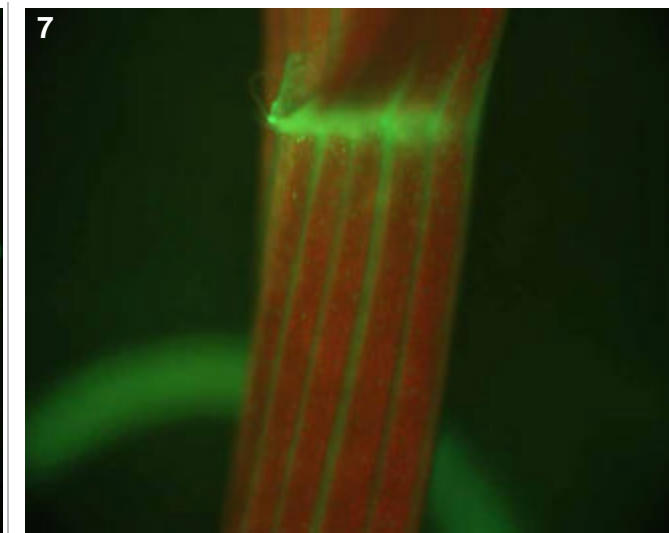
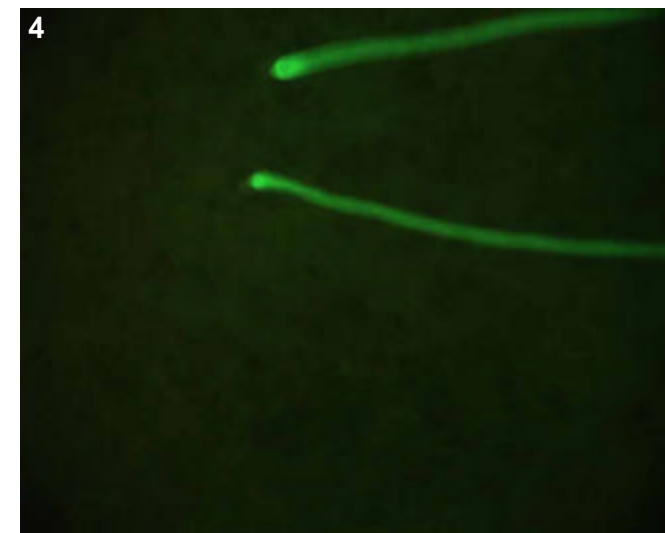
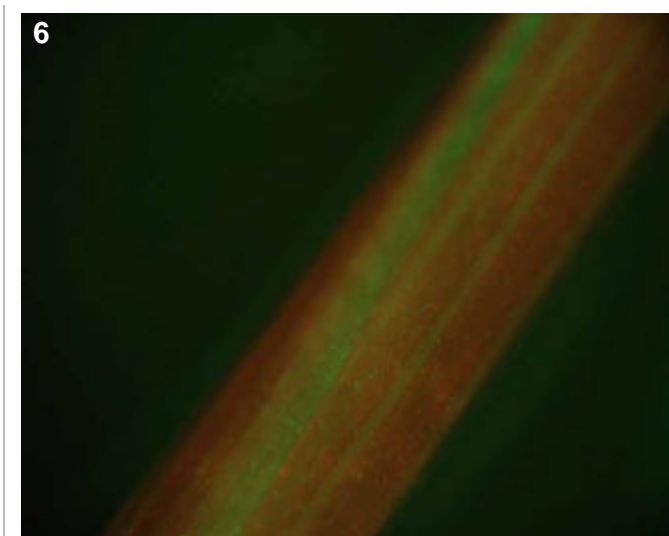
### T0 comments

### T1 seed comments

2/5 seeds had faint expression towards the lower left side of the scutellum (central seed, pic 1).

### T1 seedling comments

Extremely bright roots (pics 2-4), perhaps all tissue layers are GFP positive. Shoots also extremely bright--collar, vascular and trichomes on the leaf and sheath (pics 6-8).



# Genotype: ARX C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

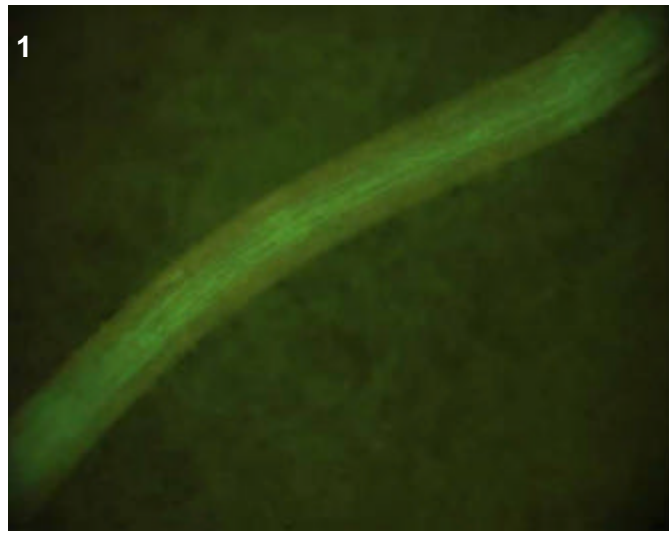
**T1 in greenhouse?**

YES, 1 GFP+ plant

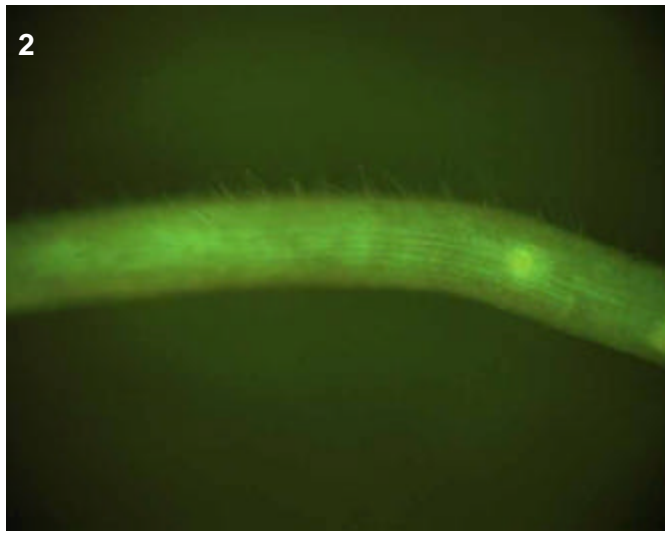
**Confocal?**

**Number T2 seed produced:** 13

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression specific to roots (pics 1-2) and may be epidermal. There were no lateral roots to examine.

# Genotype: ARX C11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

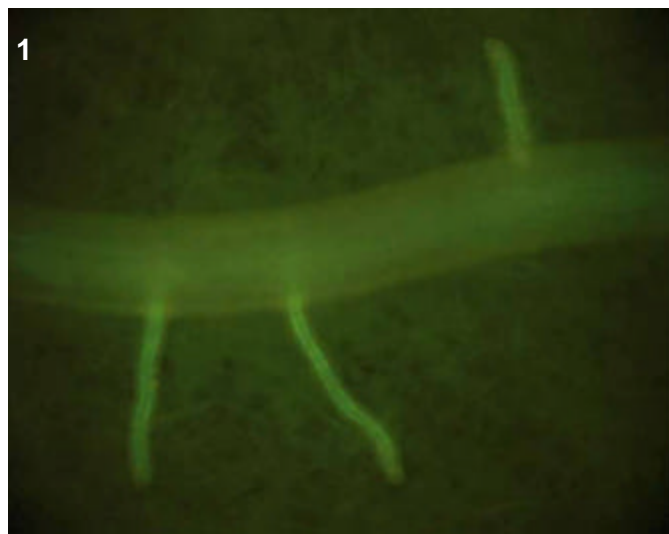
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARX D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

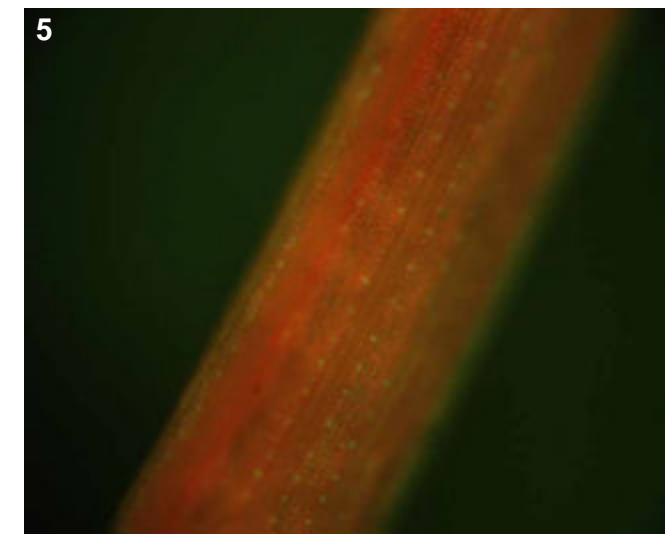
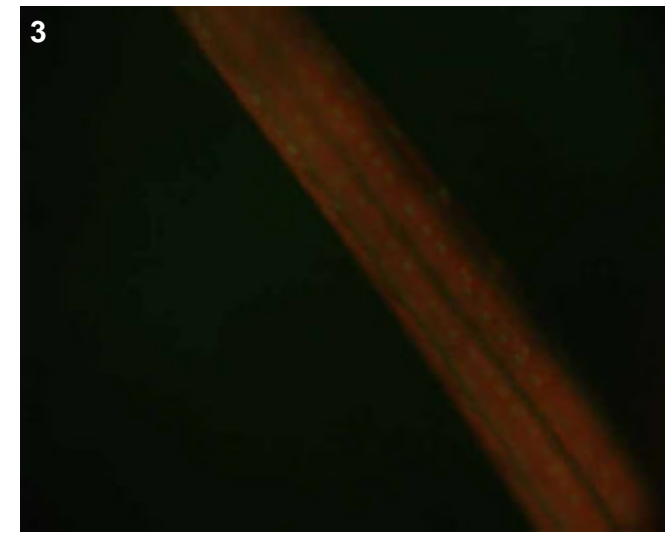
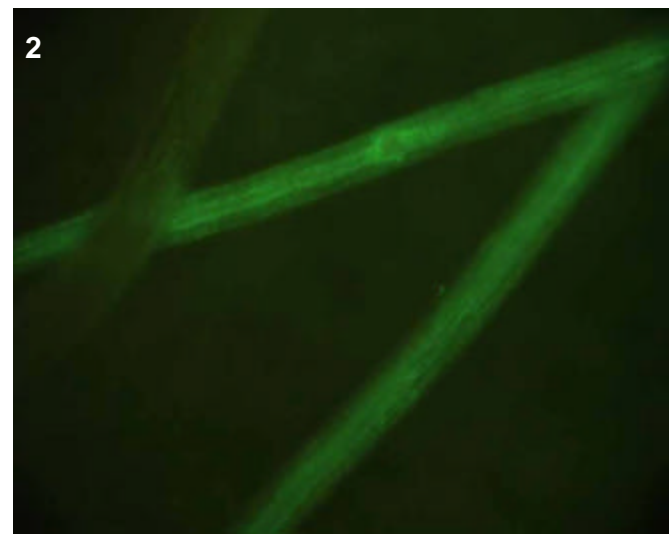
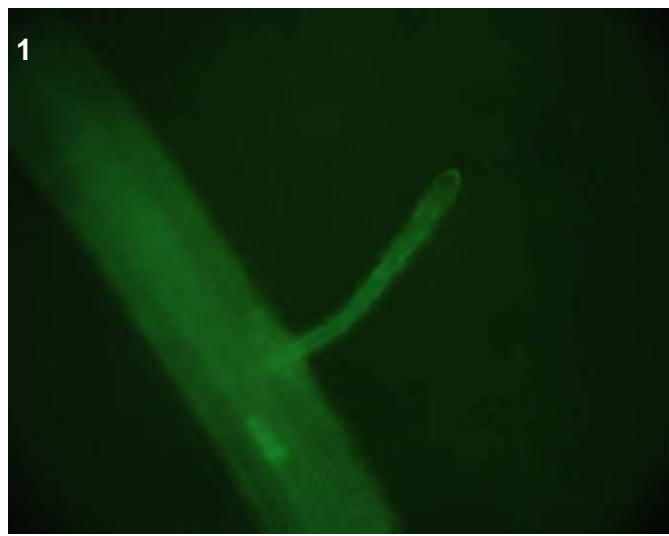
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 25



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright, perhaps quite general, expression in roots (pics 1-2). Note the bright guard cells on leaf (pic 3) and sheath (pic 5).

# Genotype: ARX D11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

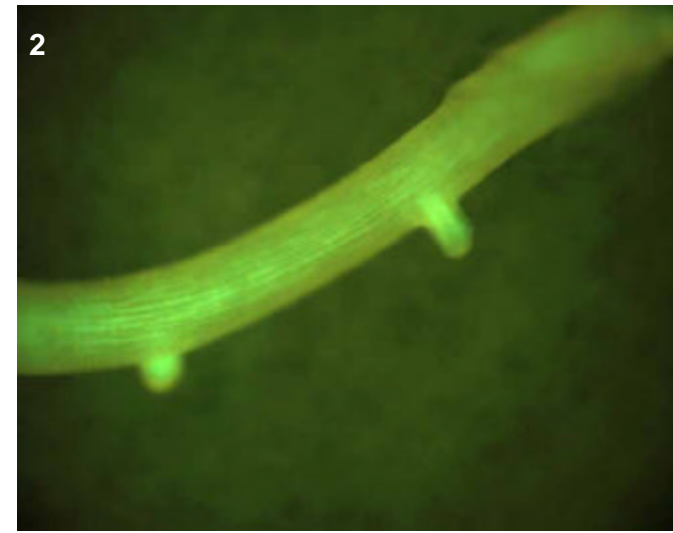
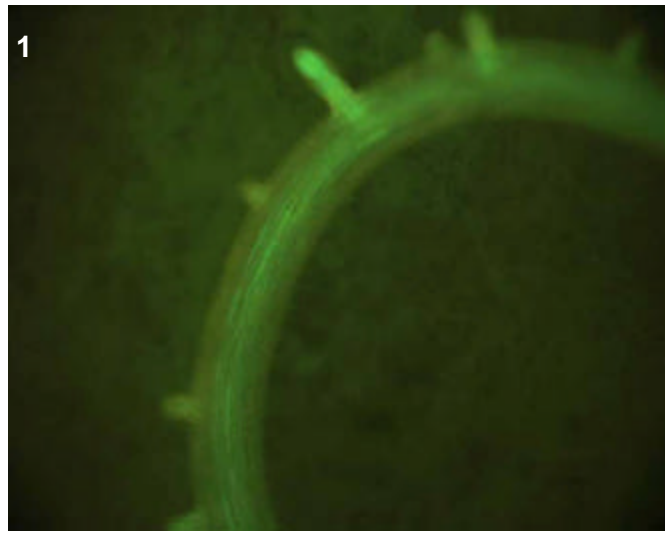
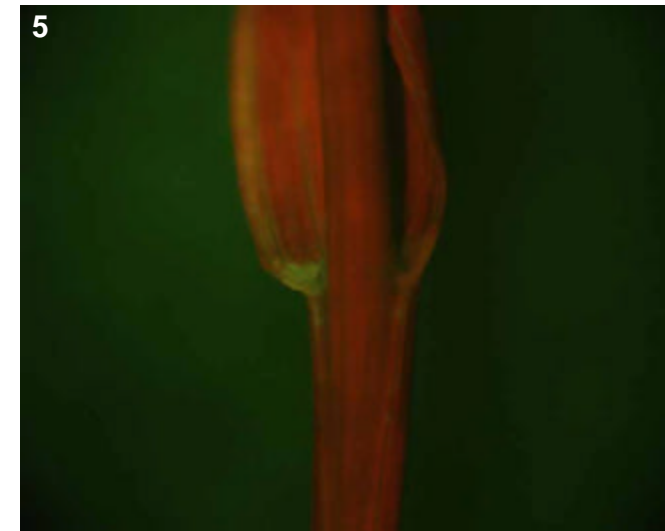
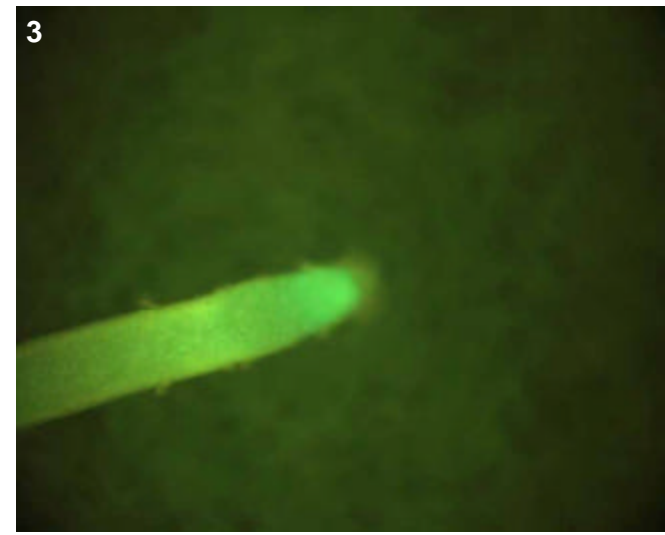
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 7



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ARX E01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-10

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

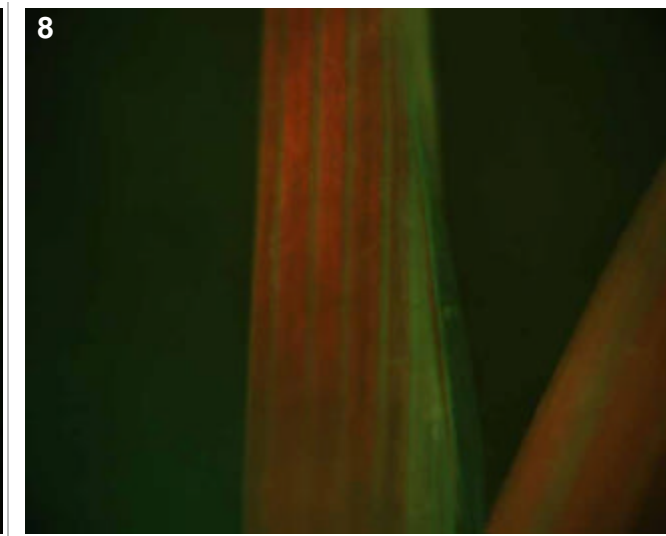
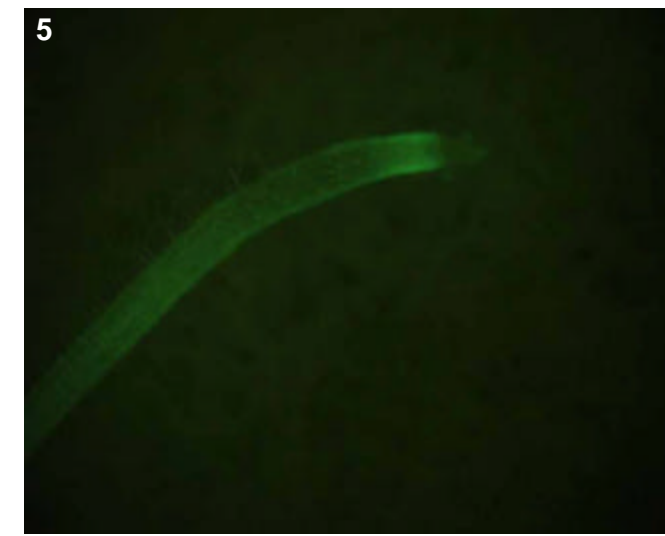
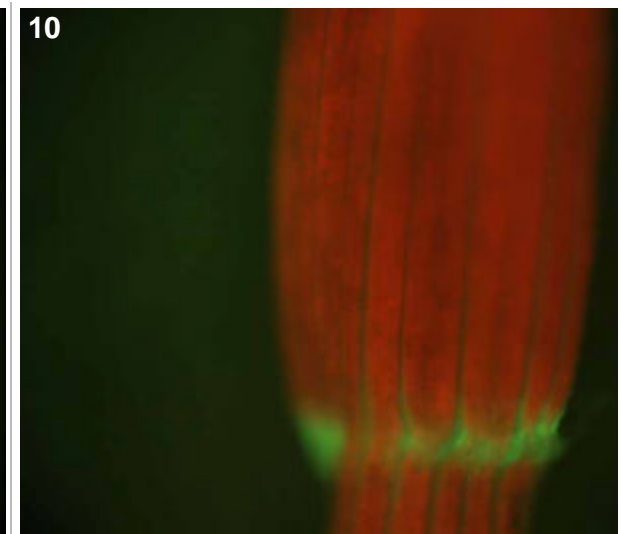
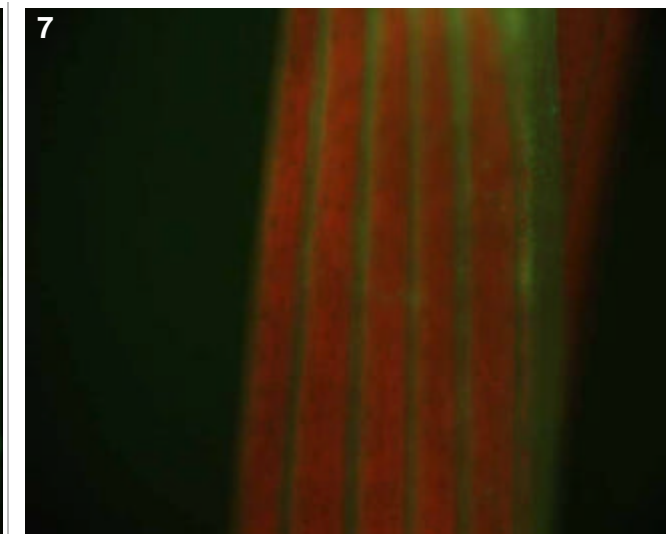
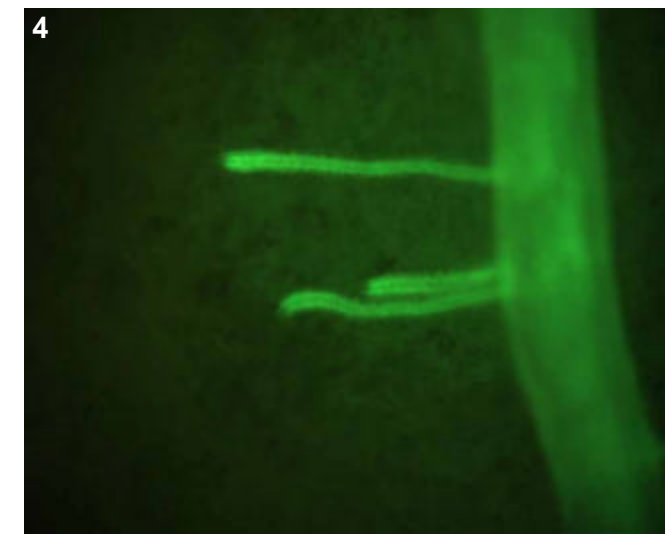
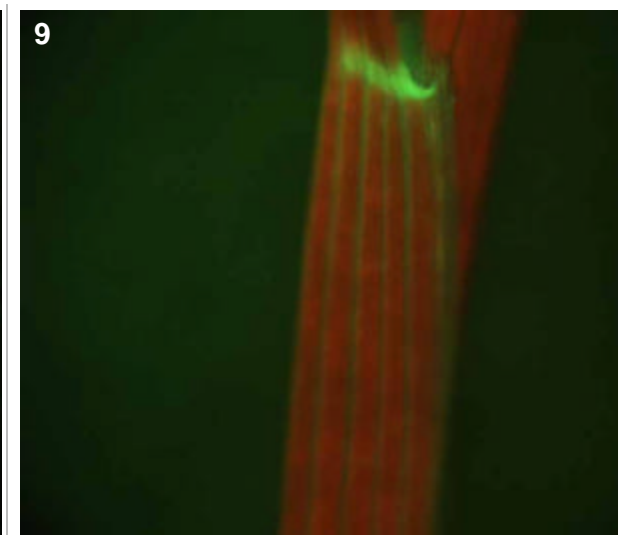
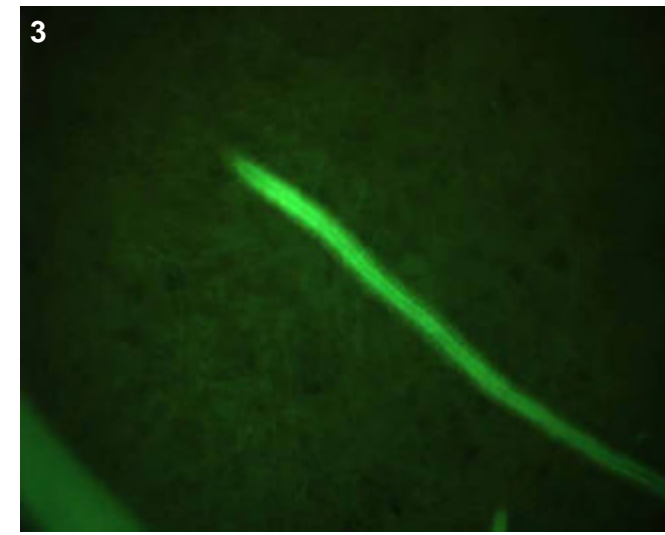
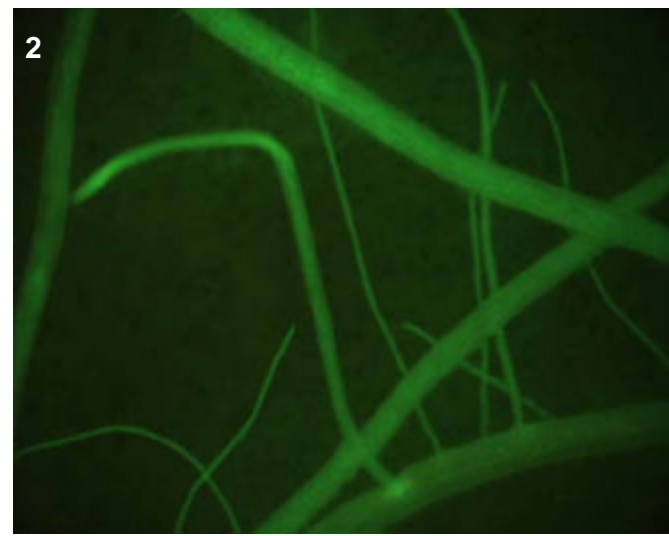
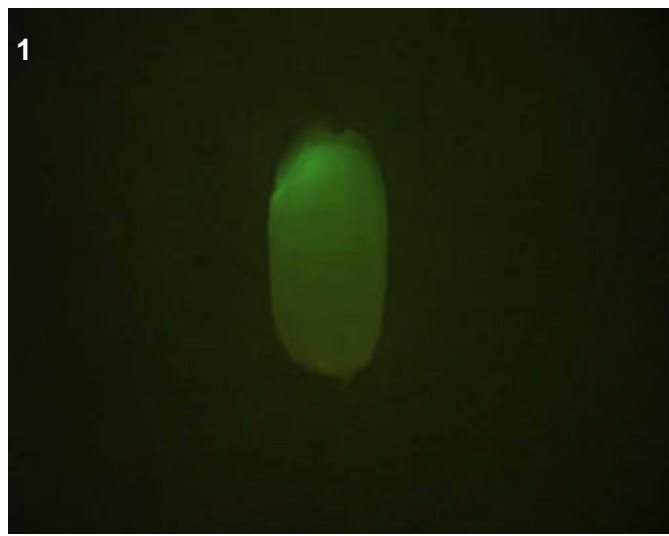
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 34



## T0 comments

## T1 seed comments

4/5 seeds had expression, however, 2 were bright (like pic 1) and 2 were faint. Hetero- vs. homo-zygosity of the transgene perhaps?

## T1 seedling comments

Extremely bright expression! In roots could be cortical/endodermal in the laterals (pics 2-4), epidermal at tips of crowns (pic 5). In shoot, bright vascular expression in the coleoptile (pics 7-8) and sheath (pic 9). Much fainter vascular expression in the leaf (pic 10).

# Genotype: ARX E03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

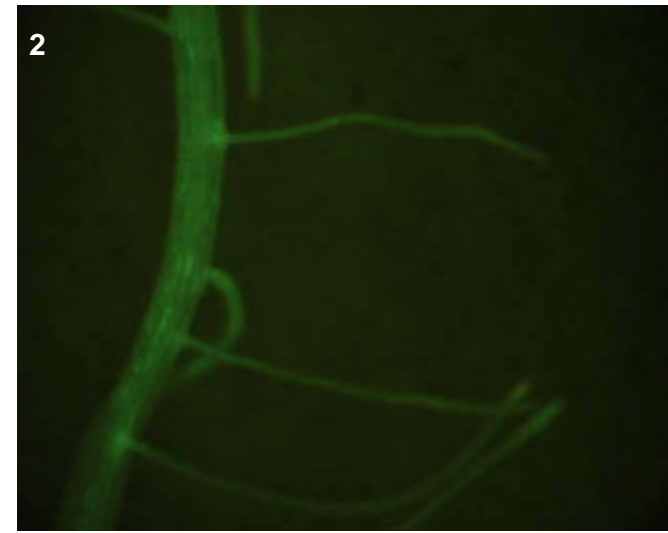
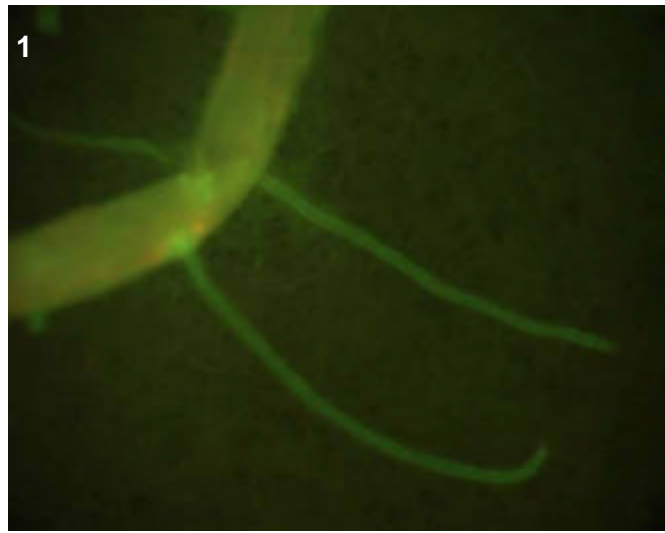
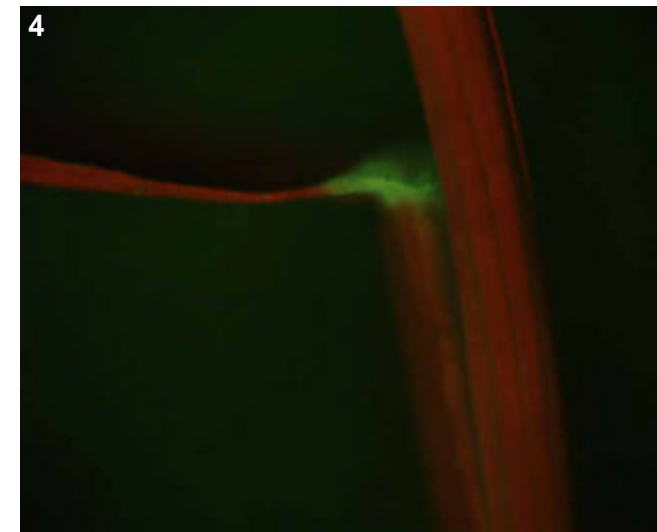
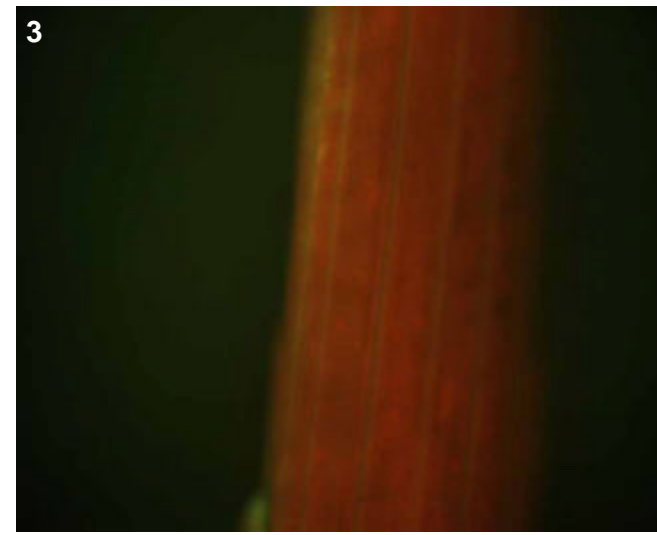
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 25



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ARX E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

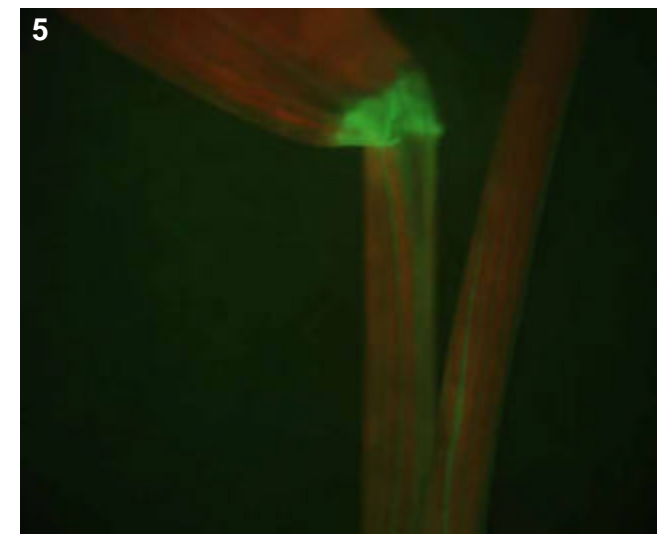
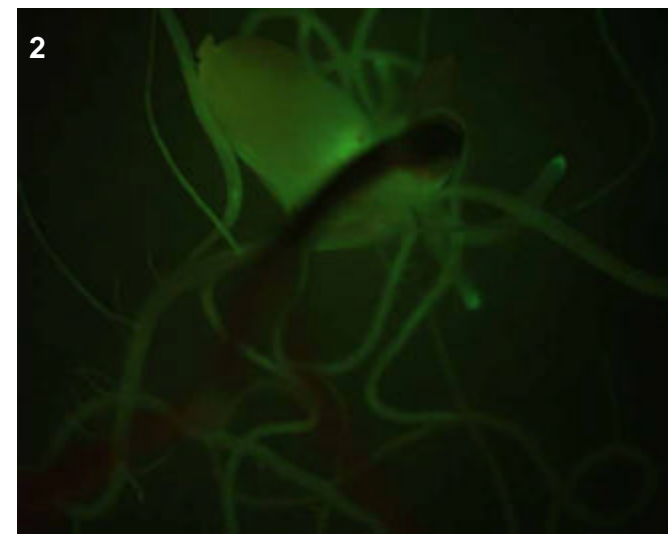
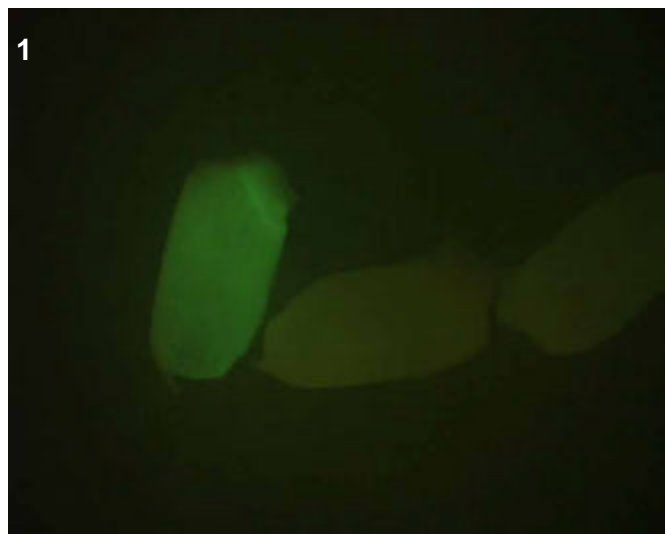
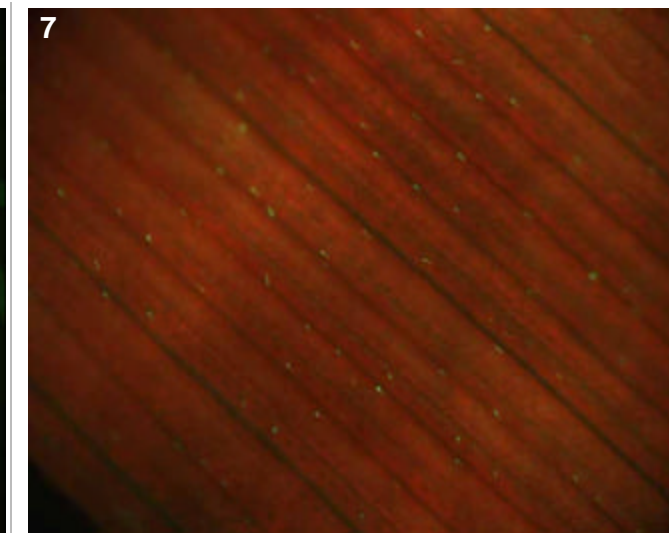
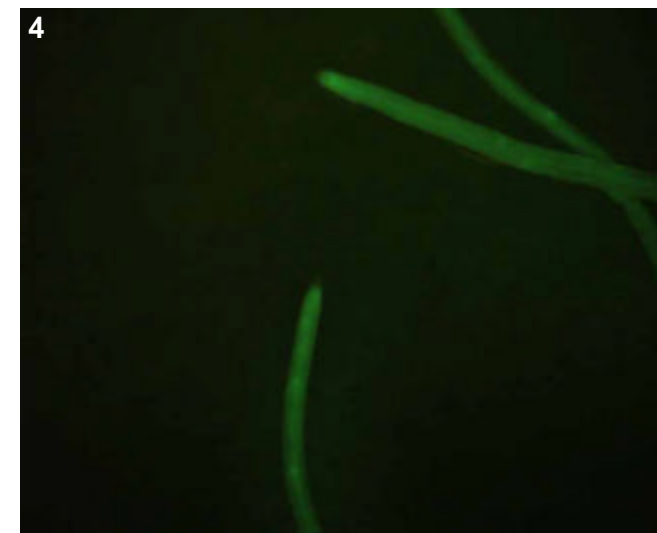
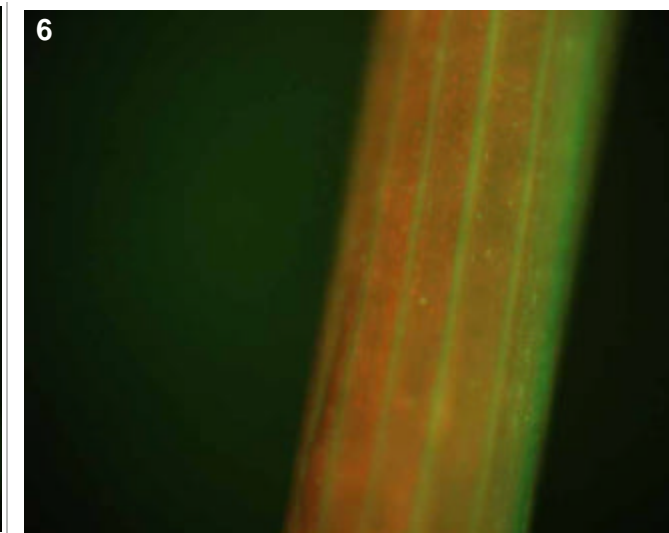
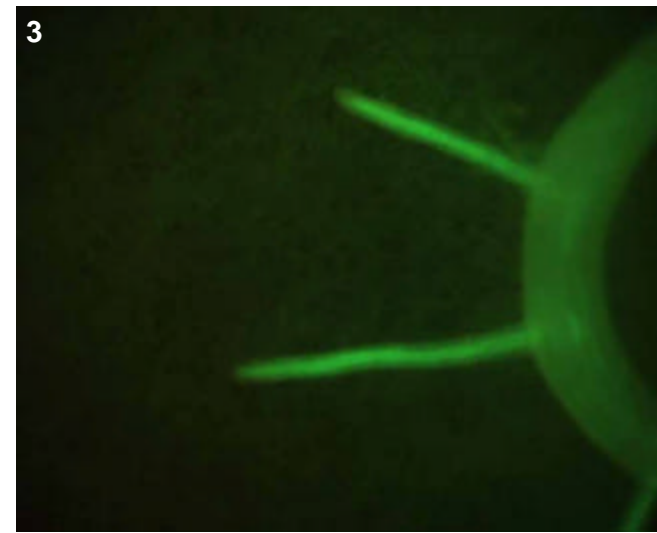
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 24



## T0 comments

## T1 seed comments

1/5 seeds had expression.

## T1 seedling comments

Very bright, small roots--perhaps a root mutant (pic 2). Maybe constitutive expression in roots. Bright vascular expression in shoot, particularly the sheath (pics 5-6). Note the trichome expression in leaf (pic 7).

# Genotype: ARX G01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

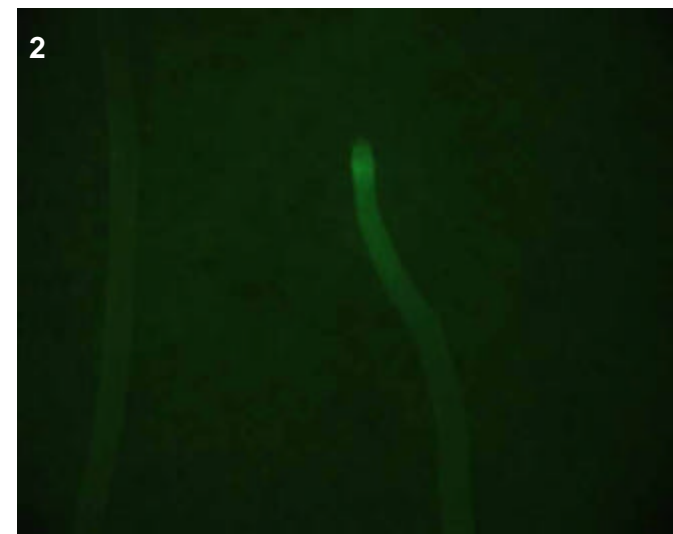
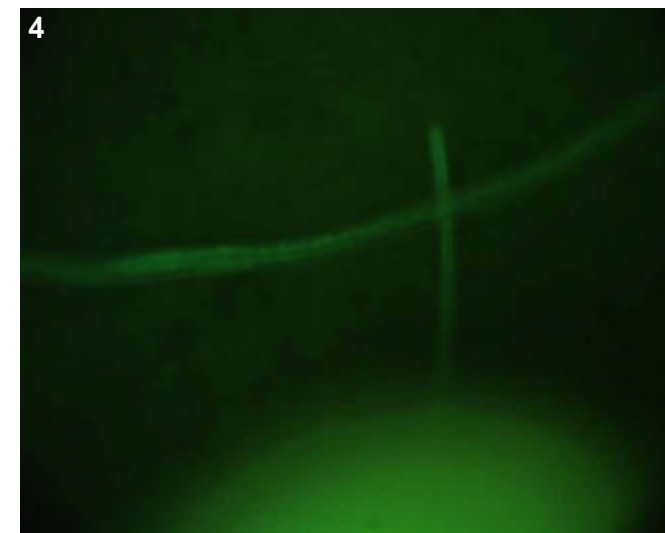
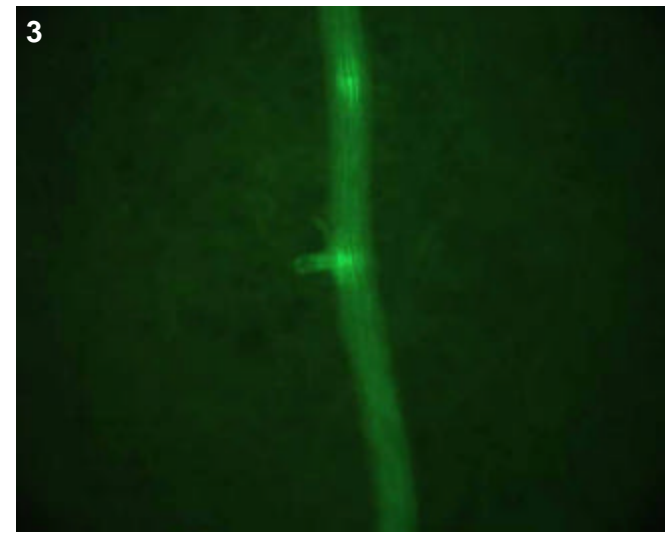
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 62



## T0 comments

## T1 seed comments

## T1 seedling comments

Interesting pattern in young crown roots (pic 1), characterised by expression in root apex and then something, perhaps cortical, in the cell elongation zone. Confocal would clarify the cell-types.

# Genotype: ARX G07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

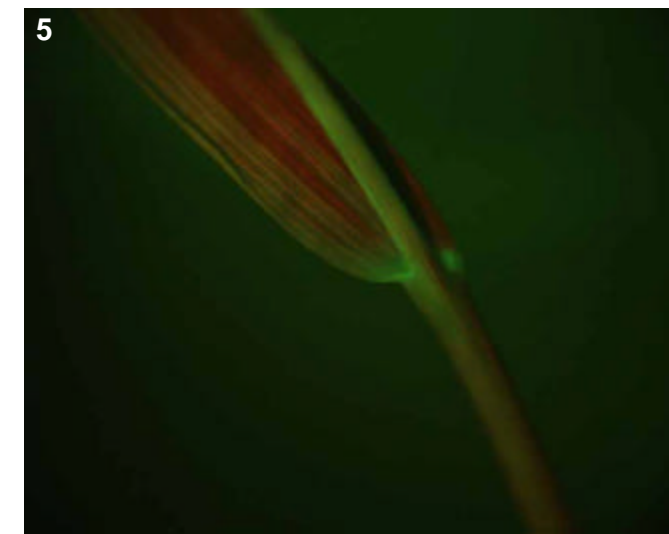
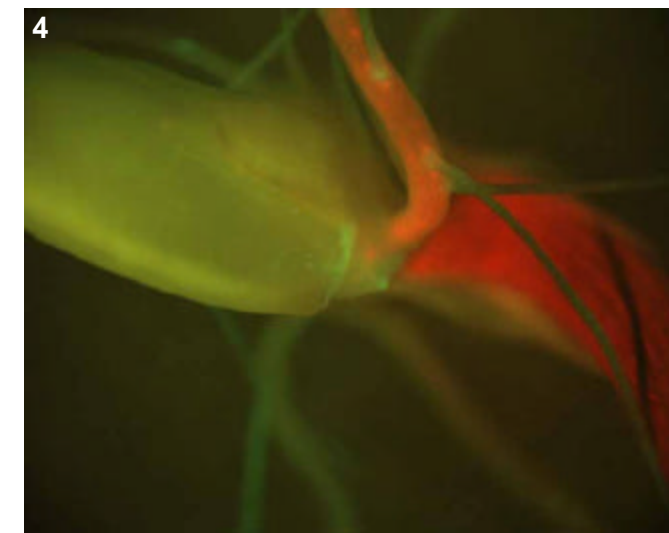
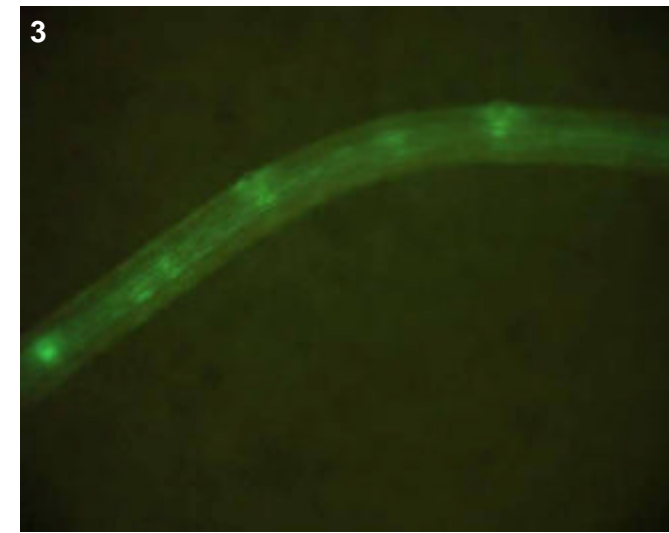
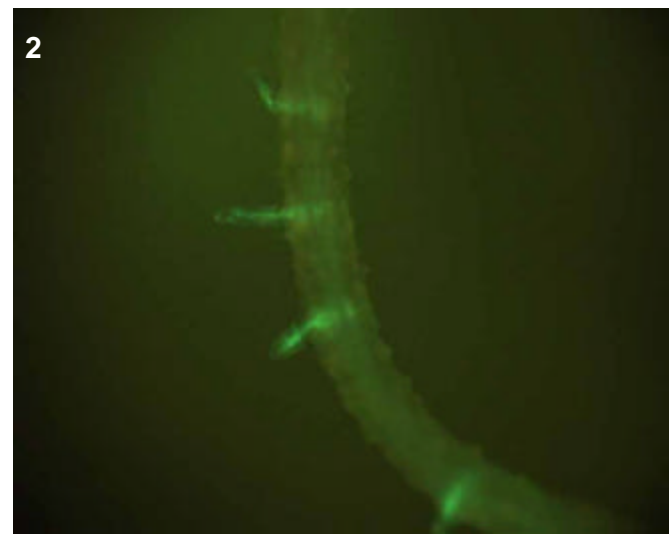
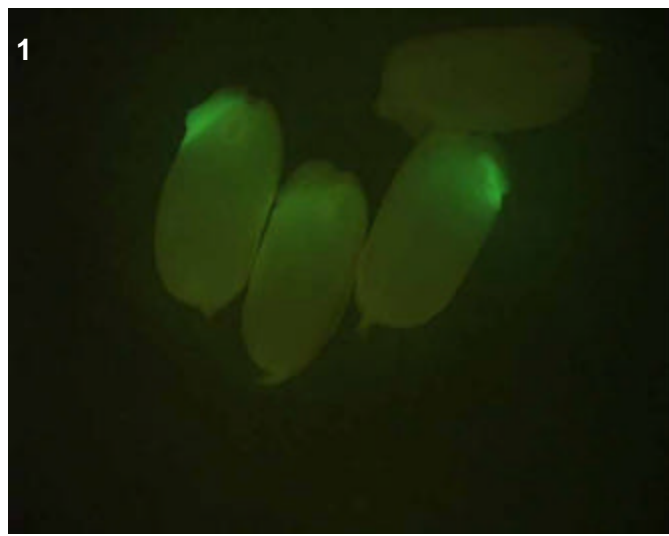
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 6



## T0 comments

## T1 seed comments

4/5 seeds had VERY bright expression in the embryo and coleorhiza.

## T1 seedling comments

Could be an interesting pattern to confocal in lateral roots (pic 2), looks specific to stele. From picture 5 it looks like there is quite a lot of expression in the shoot, perhaps in the sheath and leaf mesophyll/epidermis?

# Genotype: ARX G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

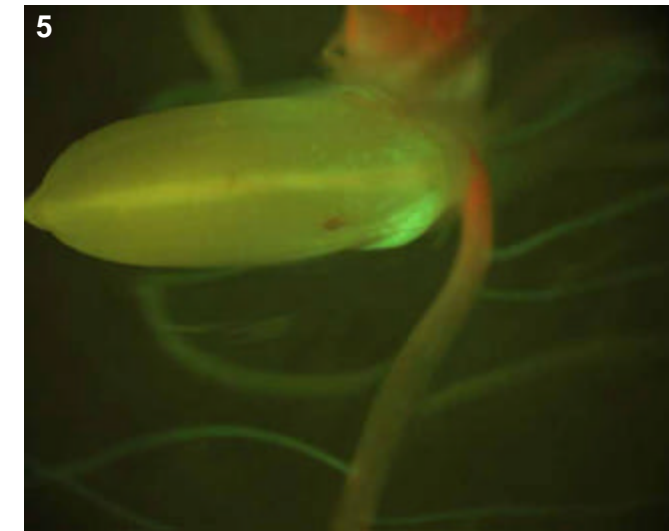
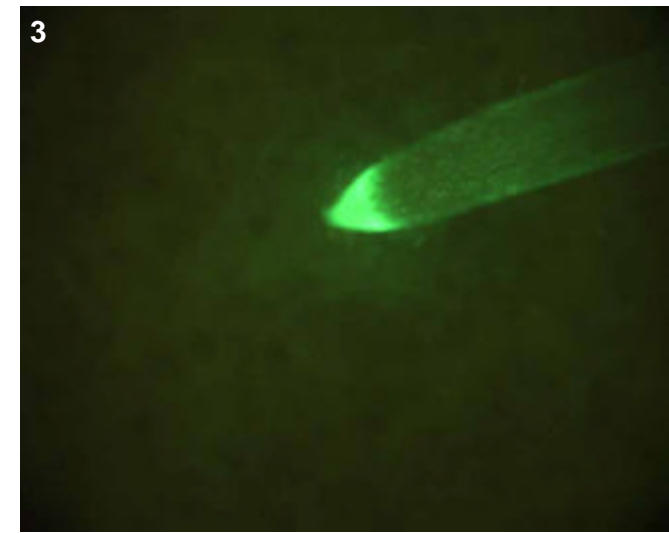
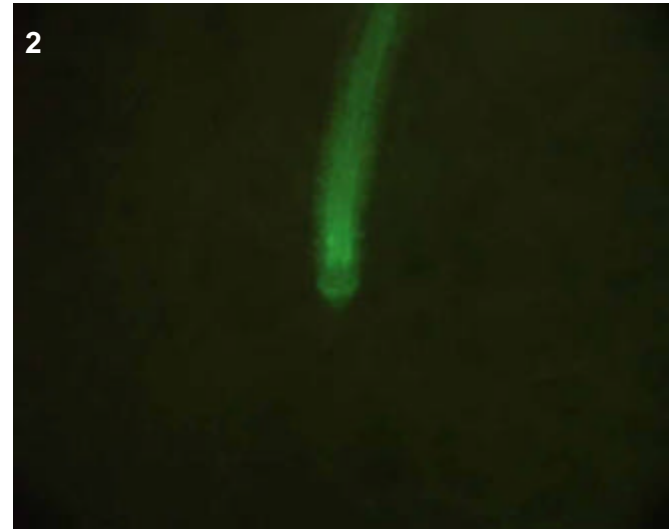
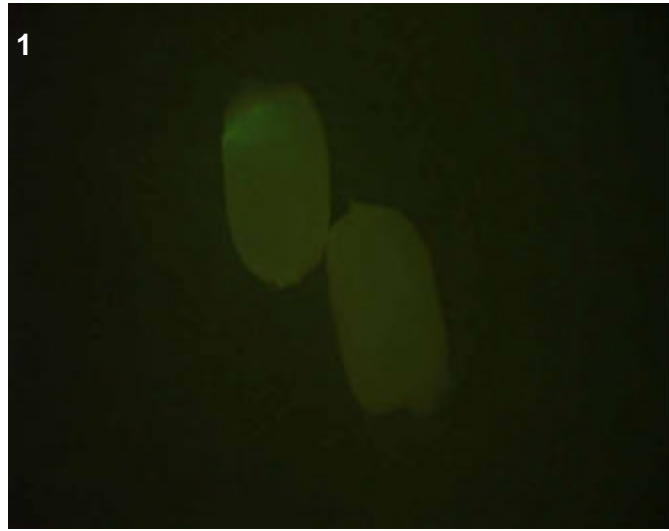
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 7



## T0 comments

## T1 seed comments

2/5 seeds had medium expression towards the lower left side of scutellum (right seed, pic 1).

## T1 seedling comments

Note the bright root cap (pic 3) and stelar expression beginning in elongation zone (pic 2).

# Genotype: ARY A05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

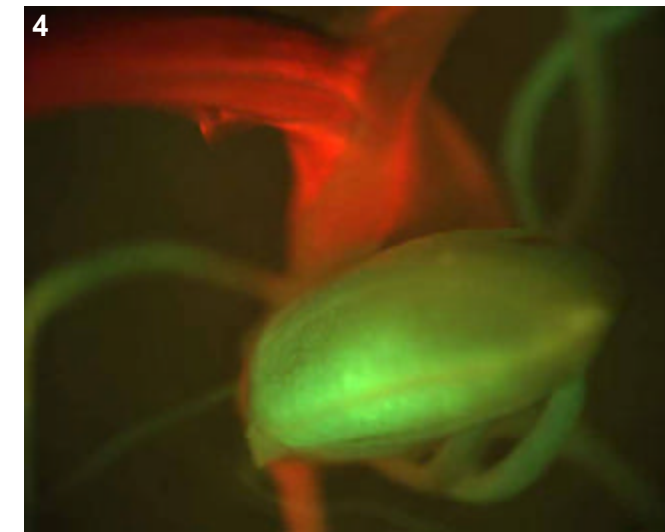
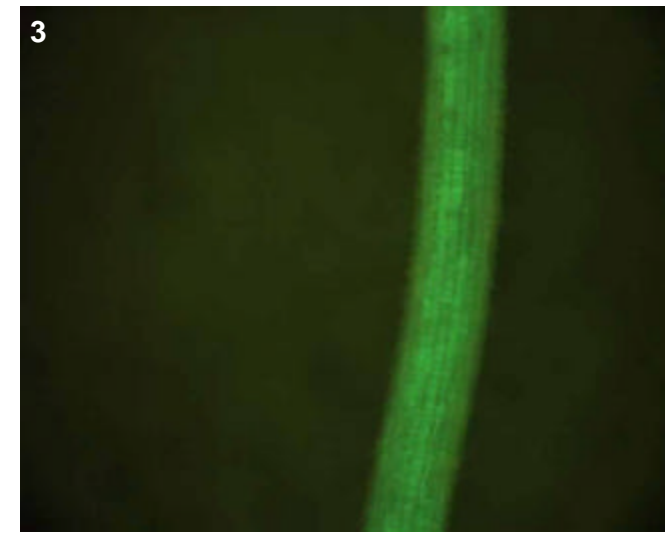
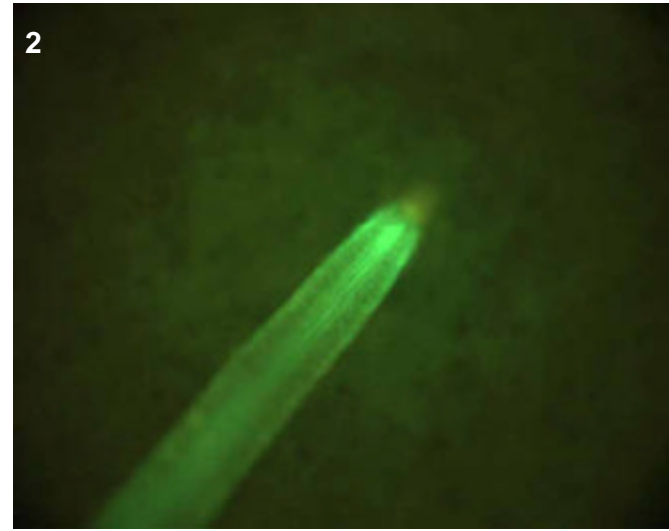
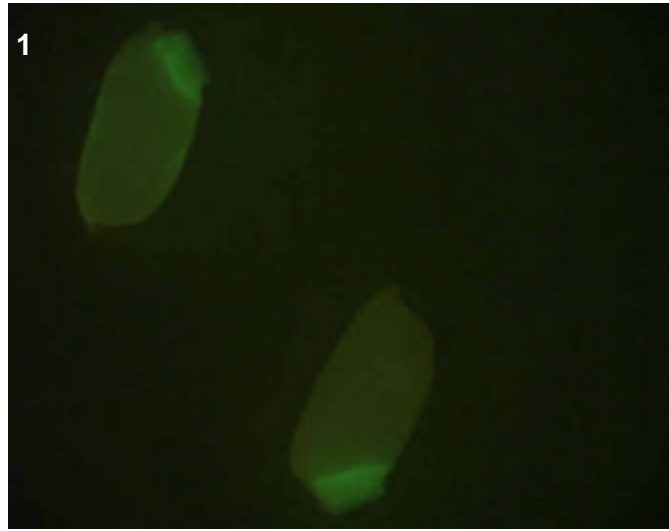
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 11



## T0 comments

## T1 seed comments

5/5 seeds had bright expression

## T1 seedling comments

# Genotype: ARY B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

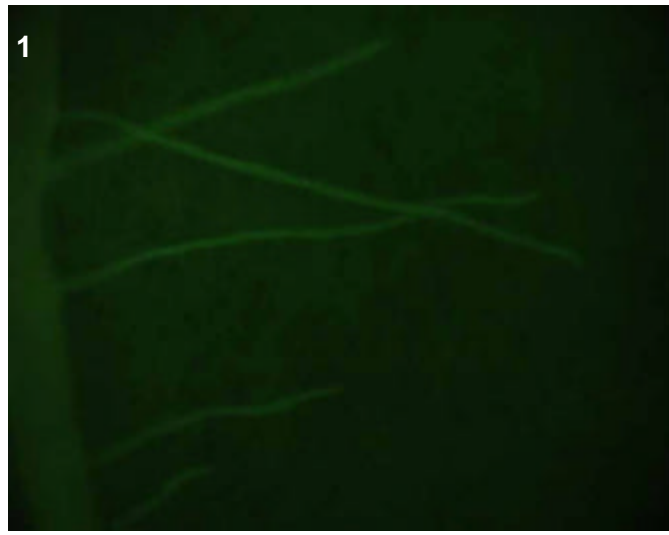
No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

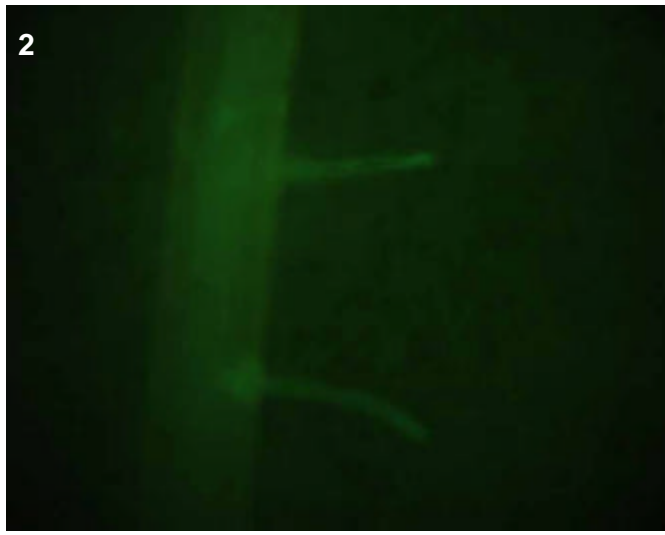
**Confocal?**

**Number T2 seed produced:** 13

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

There may have been shoot vascular as well, but not sure.

# Genotype: ARY B12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

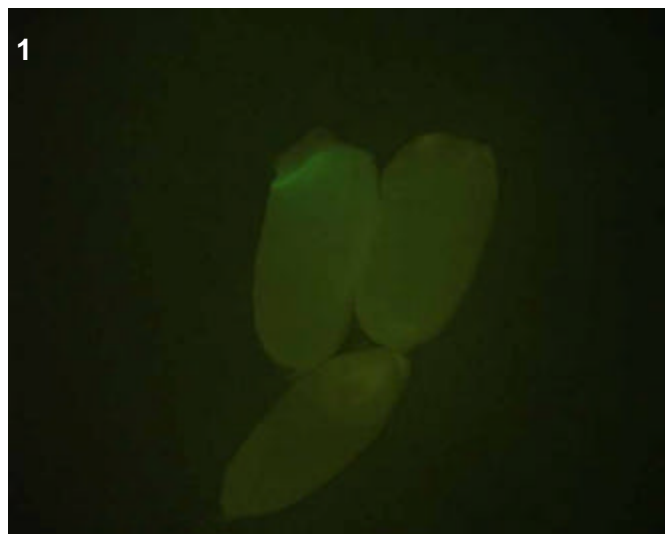
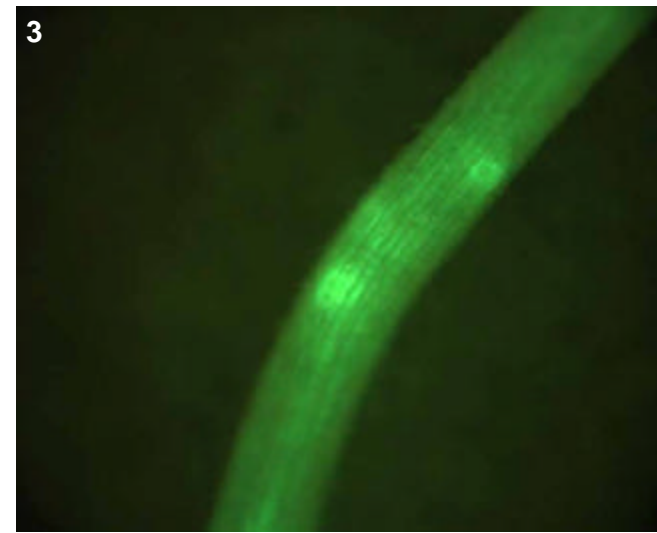
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 17



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

# Genotype: ARY D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

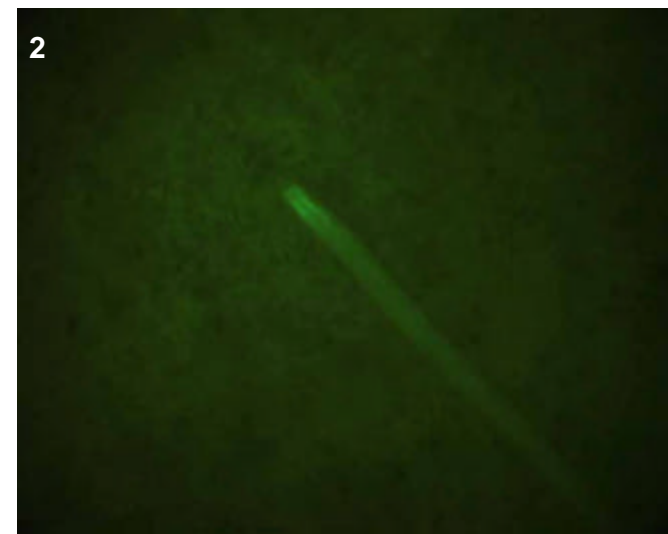
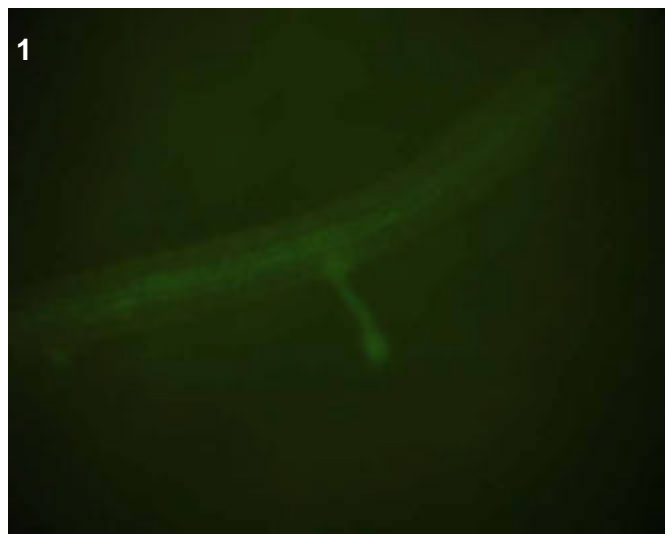
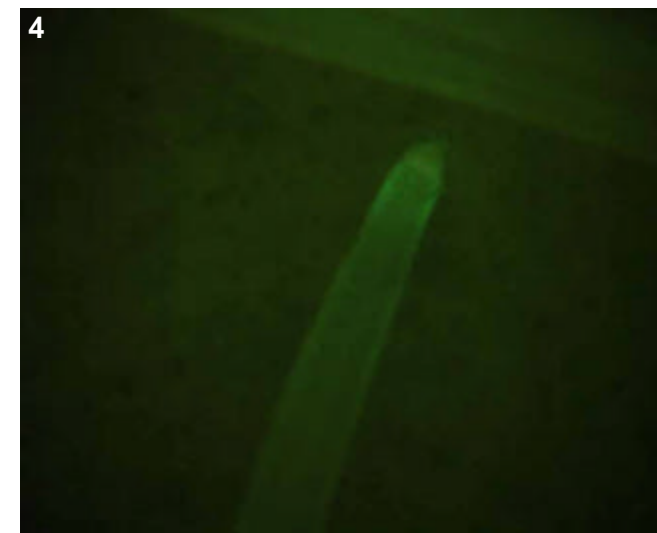
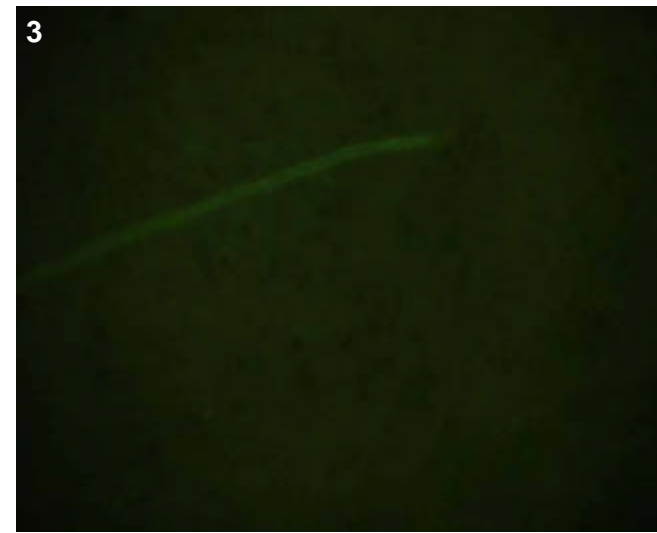
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 45



## T0 comments

## T1 seed comments

## T1 seedling comments

A root-specific line. Expression could be cortical or endodermal in laterals and crowns (pics 1-3). Only at the tips of crowns did expression appear to epidermal (pic 4).



# Genotype: ARY E06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

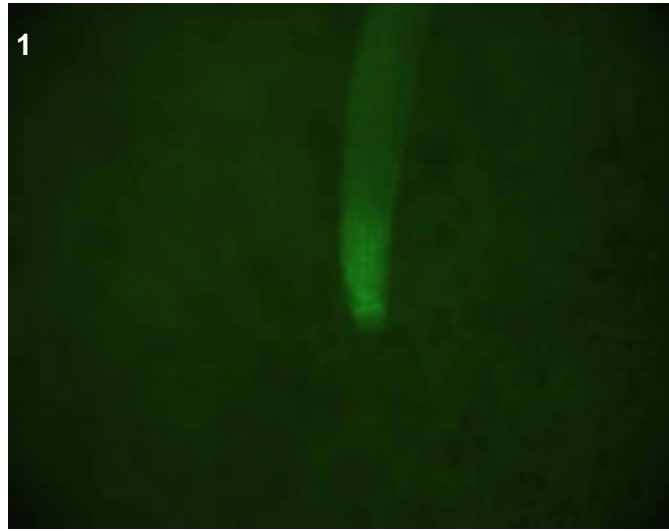
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Epidermal pattern specific to the tips of crown roots (pic 1).

# Genotype: ARY E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

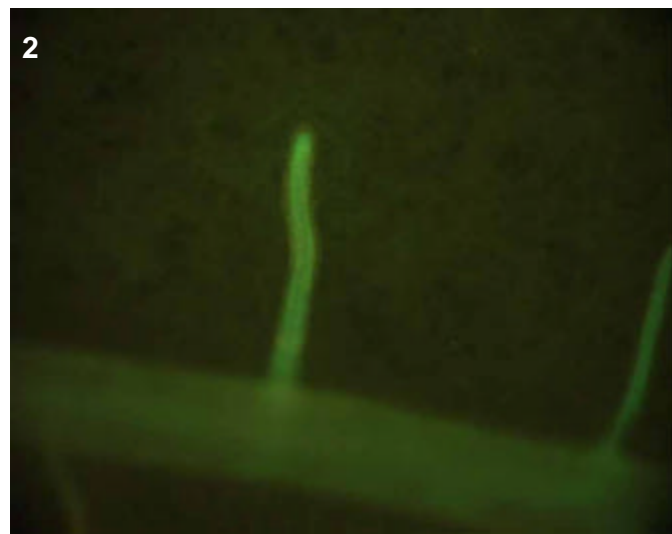
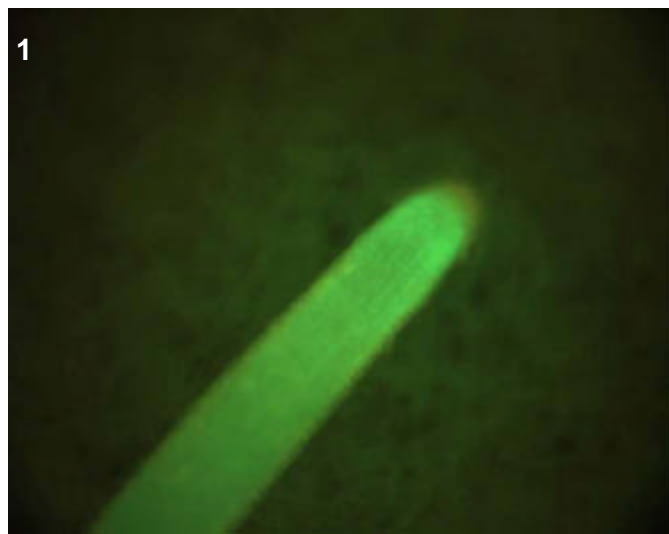
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 5



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ARY E10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

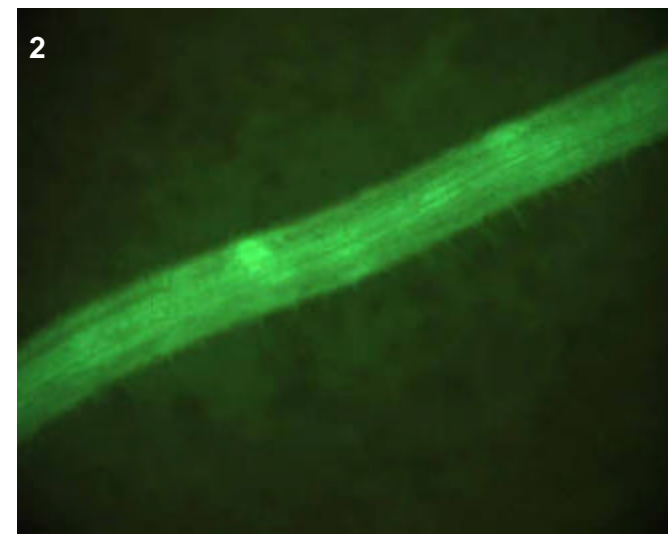
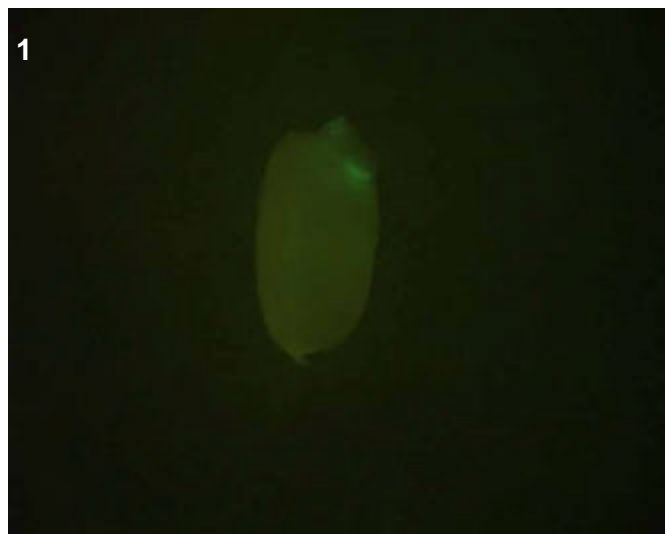
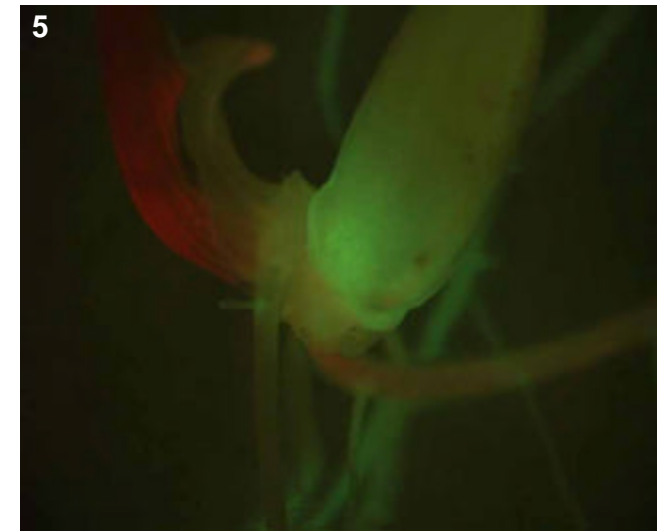
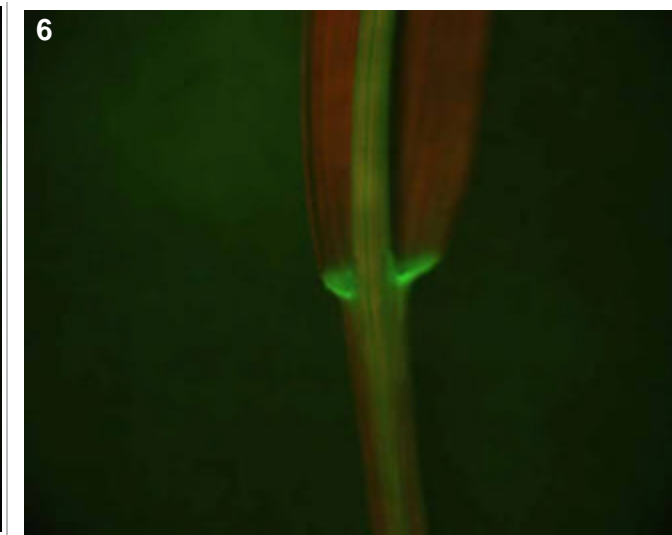
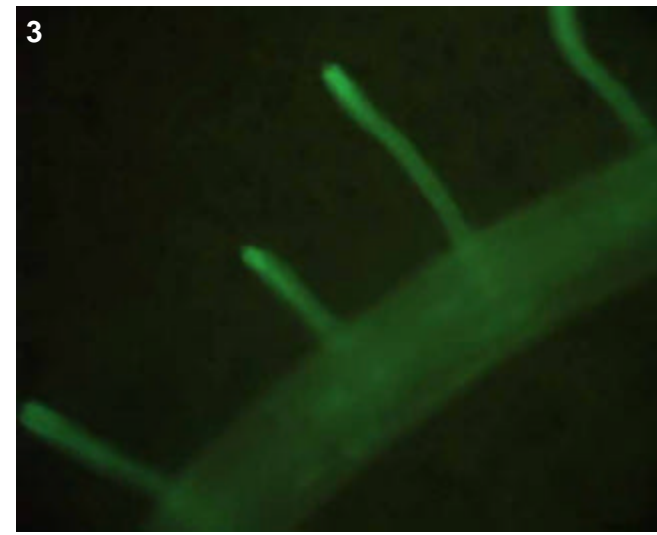
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 33



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

Could be a bright, epidermal root line (pics 2-5).

# Genotype: ARY F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

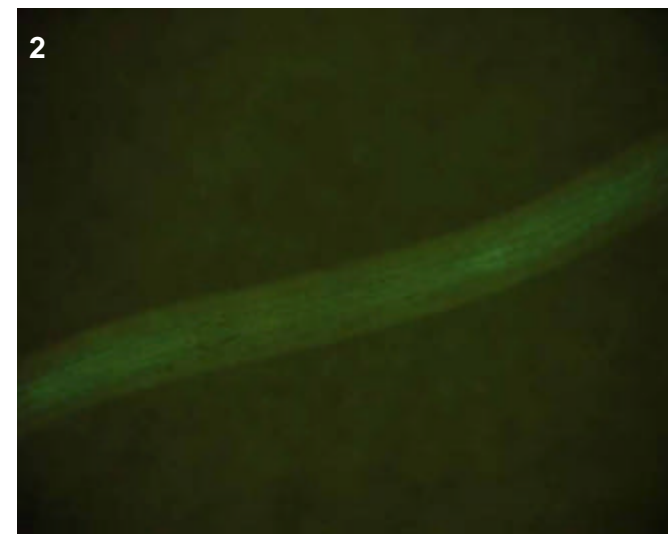
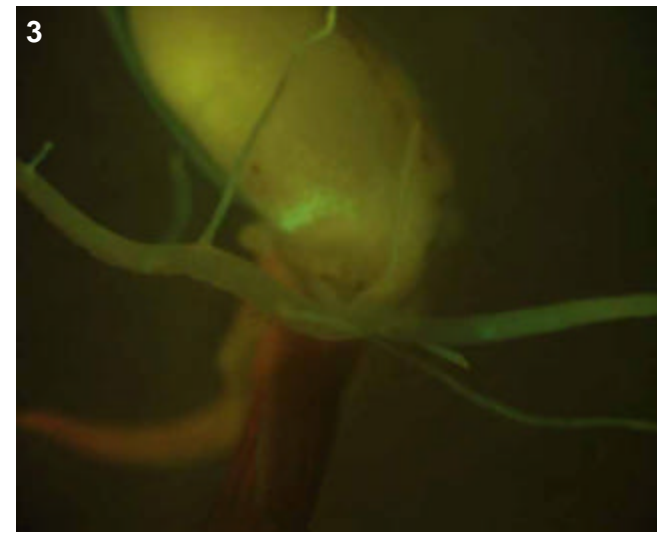
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 43



### T0 comments

### T1 seed comments

2/5 seeds had expression.

### T1 seedling comments

# Genotype: ARZ C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

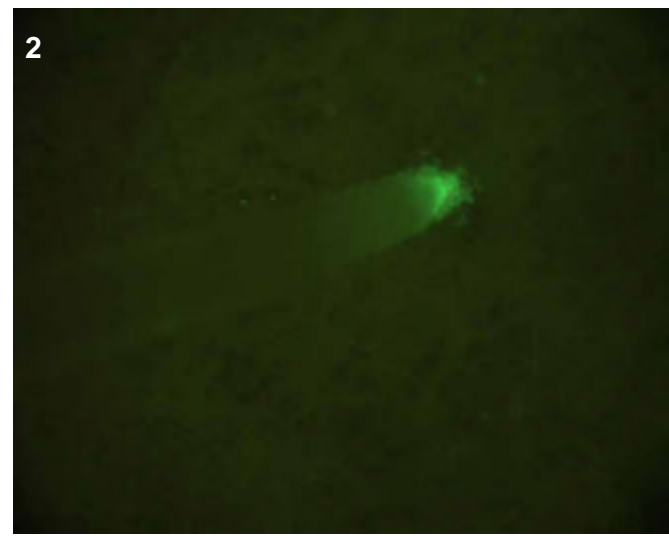
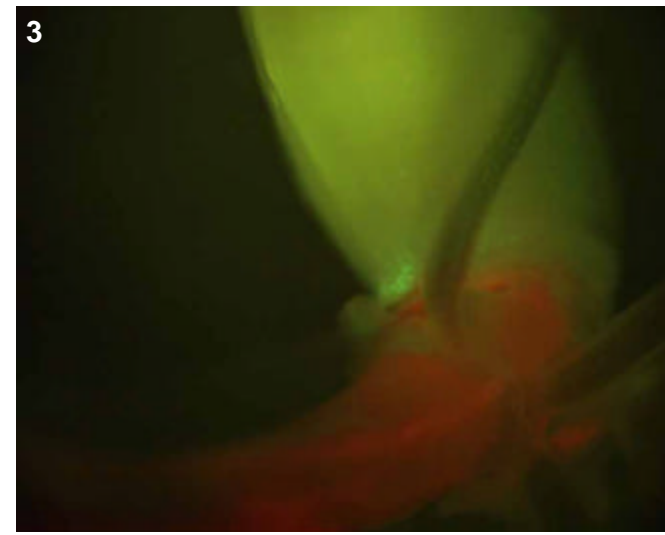
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 16



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

# Genotype: ARZ C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

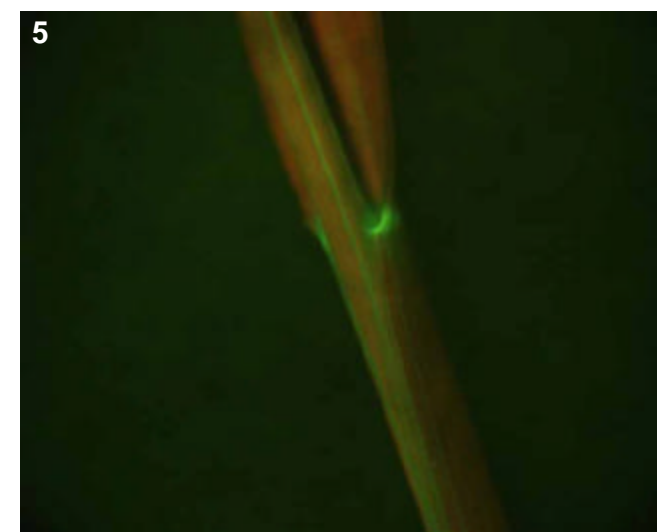
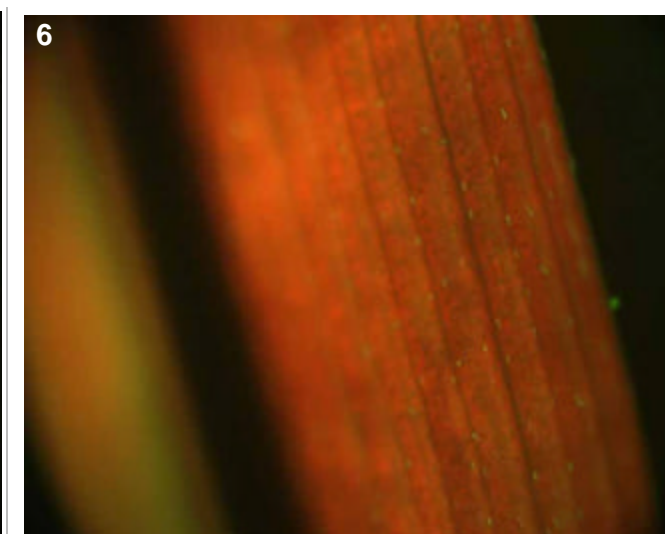
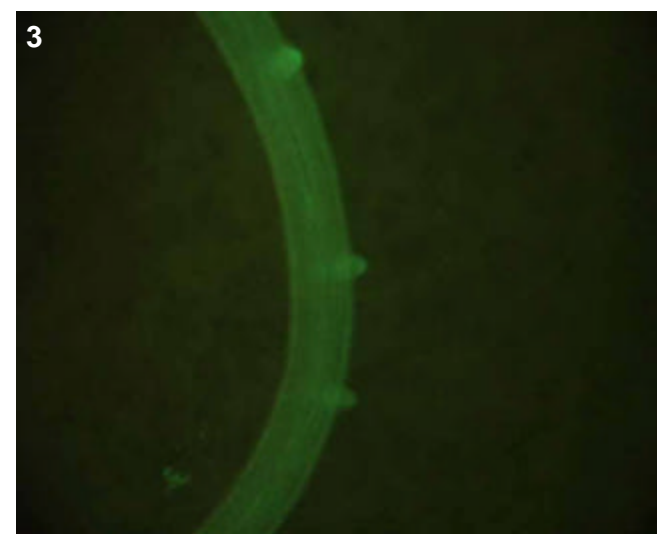
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/5 seeds (pic 1, seed on left) definitely had medium expression, perhaps others did more faintly.

## T1 seedling comments

Bright, perhaps constitutive, expression throughout the plant. Note the leaf trichomes in picture 6.

# Genotype: ARZ C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

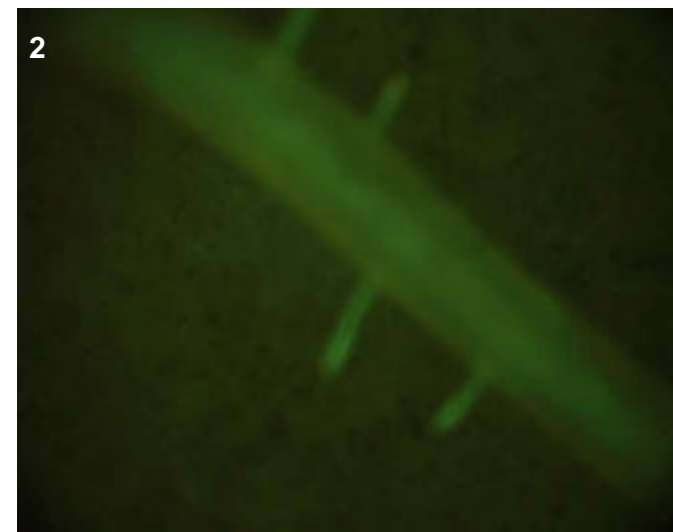
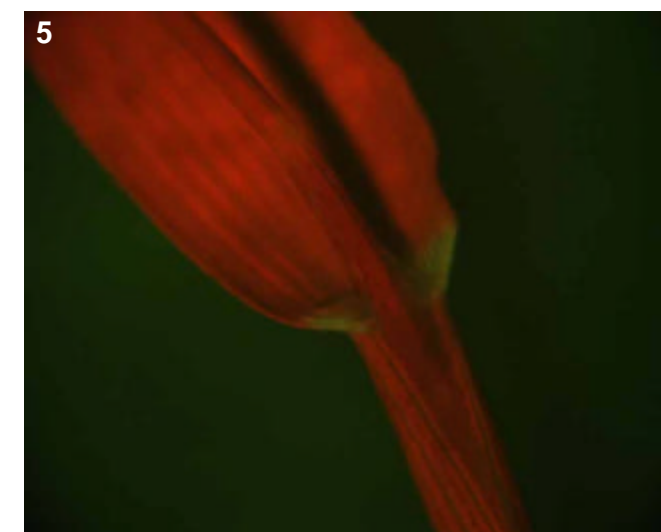
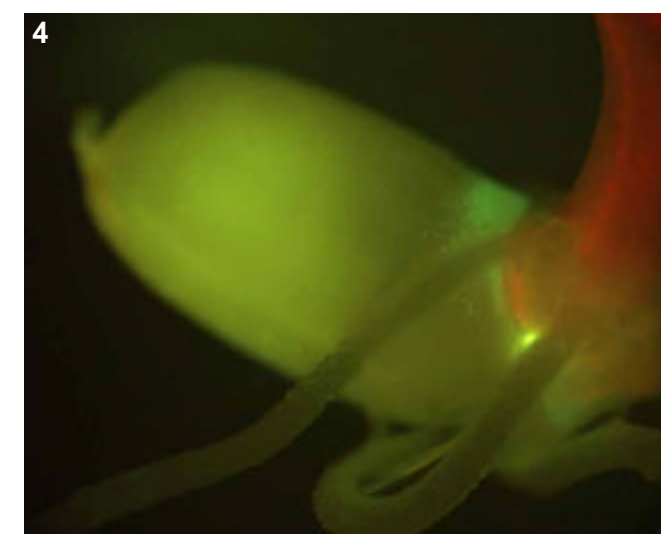
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 8



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ARZ C12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

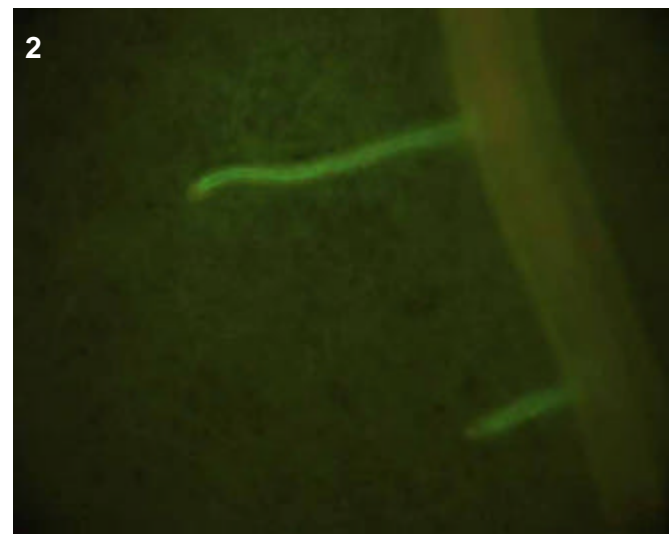
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

Number T2 seed produced: 0



## T0 comments

## T1 seed comments

2/5 seeds had weak expression.

## T1 seedling comments

Could be stelar expression in the lateral roots (pic 2).



# Genotype: ARZ D03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

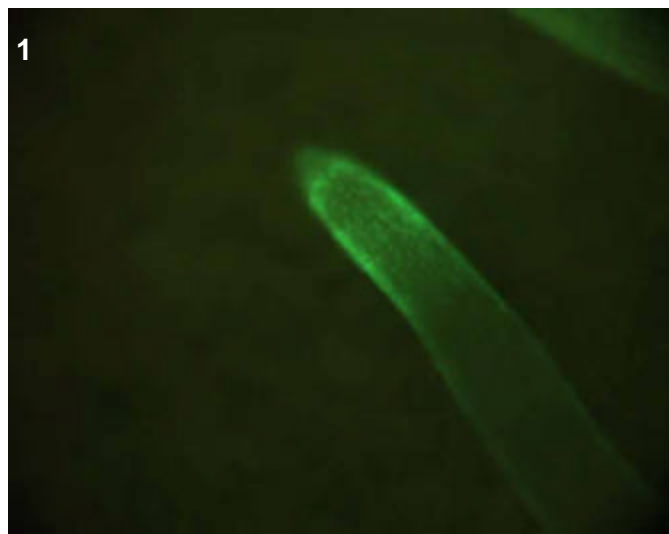
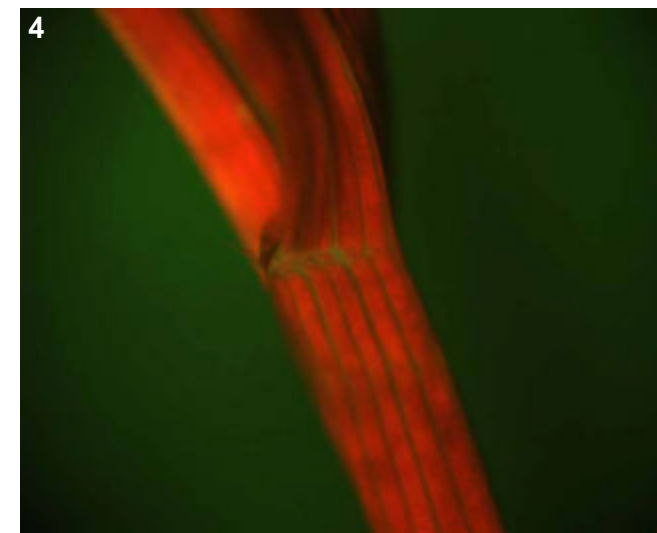
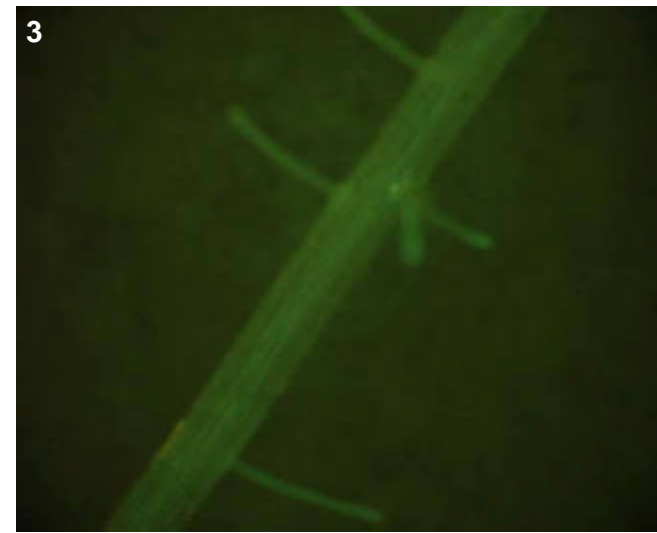
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Epidermal in crown roots (pics 1-2), perhaps the same and/or cortex in the laterals (pic 3). Bright shoot vascular expression (pic 4) with little or no collar.

# Genotype: ARZ D09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

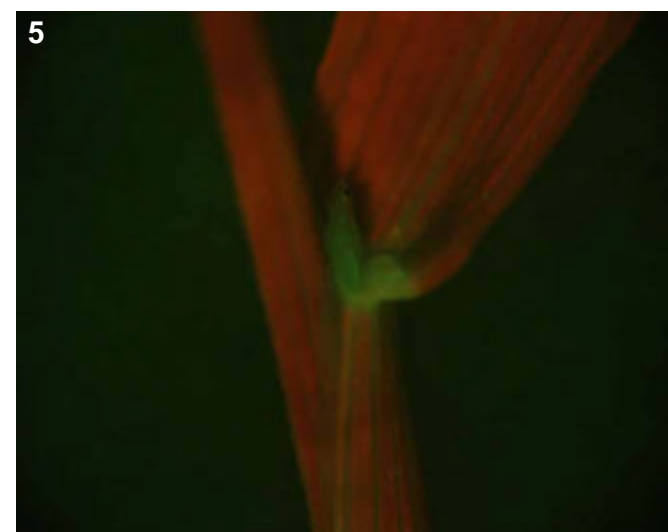
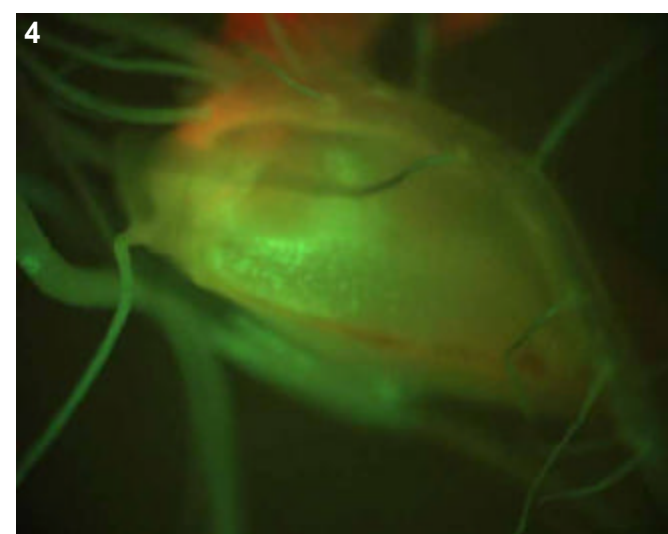
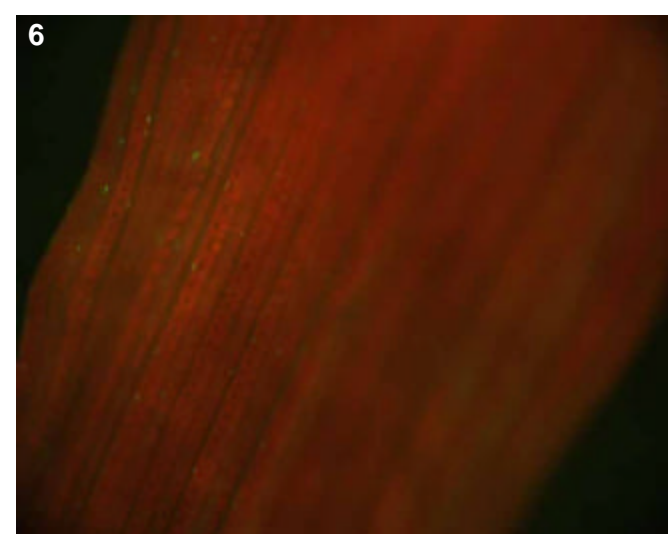
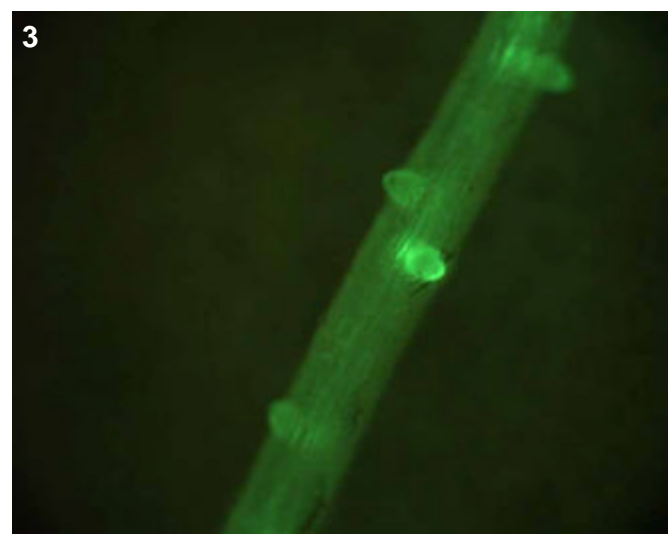
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 15



## T0 comments

## T1 seed comments

2/5 seeds had weak expression.

## T1 seedling comments

# Genotype: ARZ E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

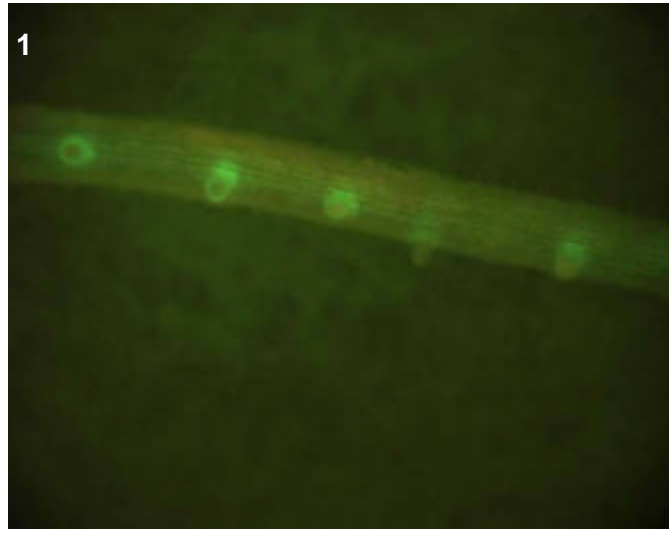
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 15



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression appeared specific to the emergence zone of lateral roots (picture 1).

# Genotype: ARZ E08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

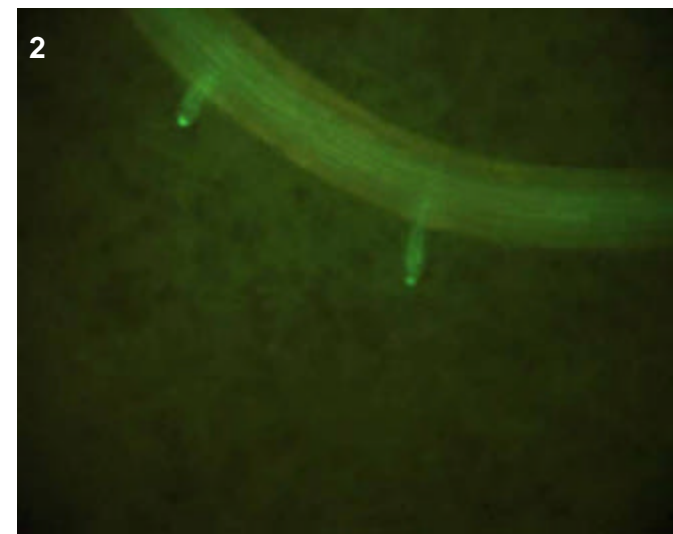
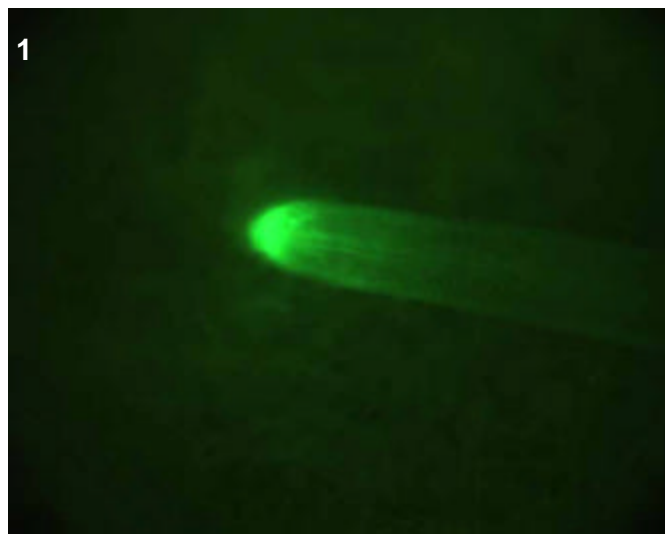
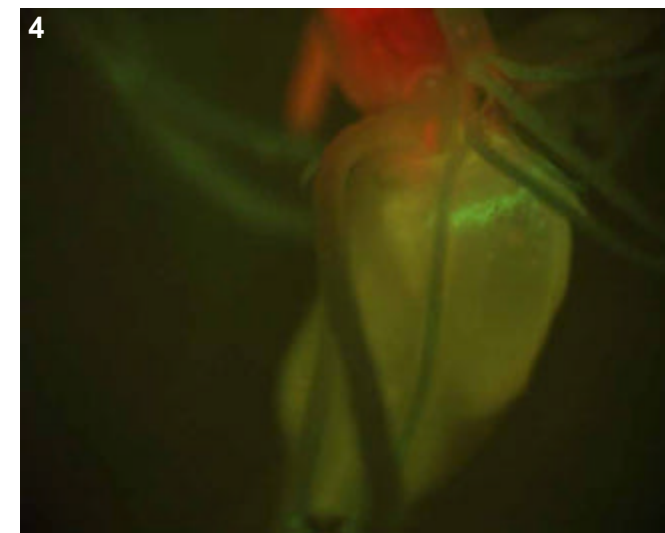
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 21



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks like root cap expression in crowns and lats, as well as epidermal/cortex (pics 1-3).

# Genotype: ARZ F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

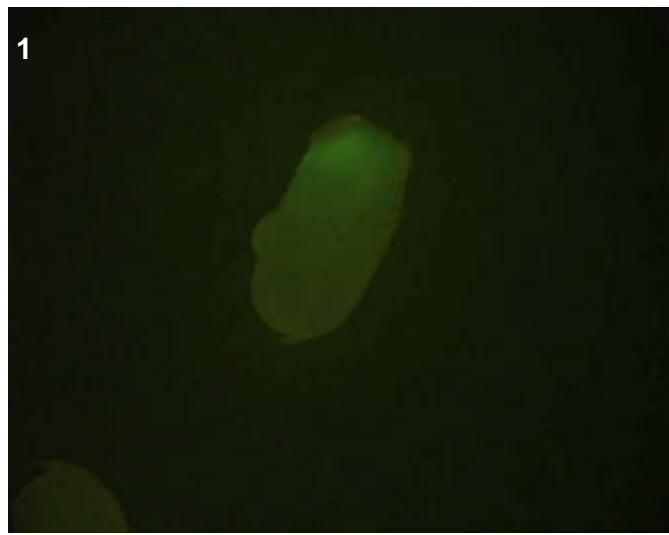
No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

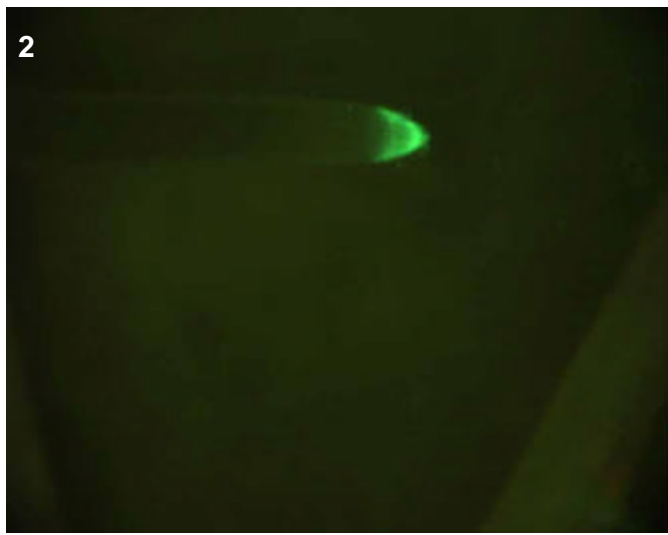
**Confocal?** WIP

**Number T2 seed produced:** 32

1



2



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

Appears to be bright epidermal expression at tips of crowns (pic 2). There was a similar expression in laterals but much more faint.

# Genotype: ARZ H10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

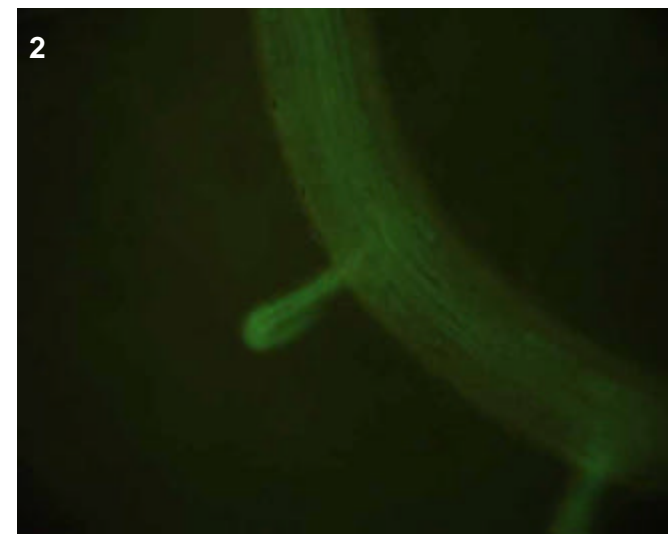
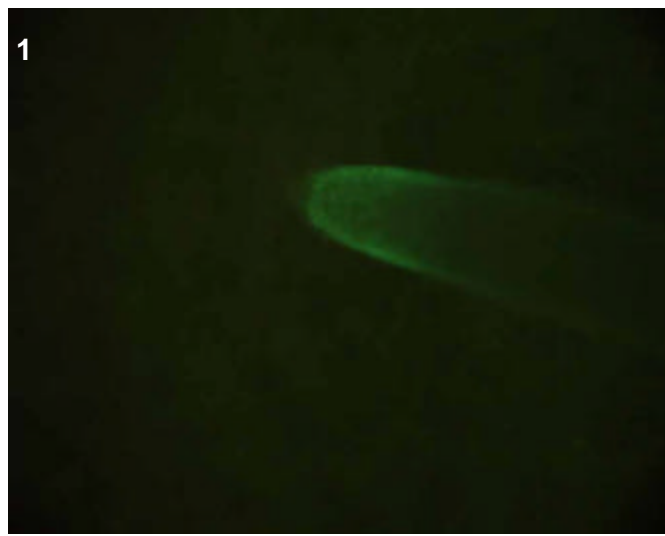
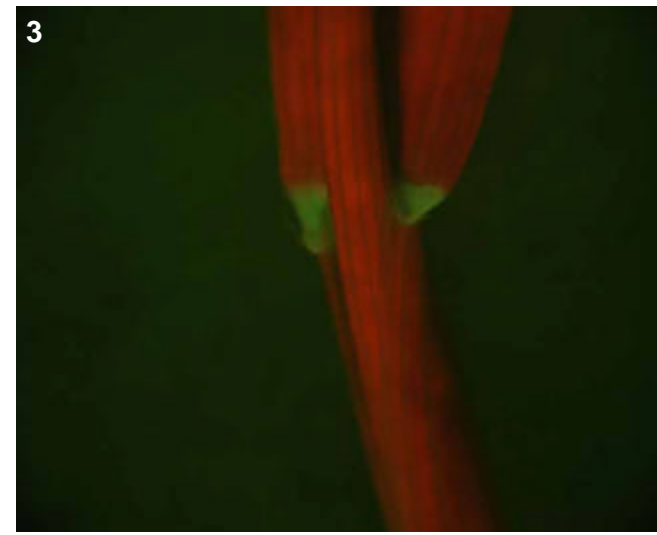
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 25



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASA A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

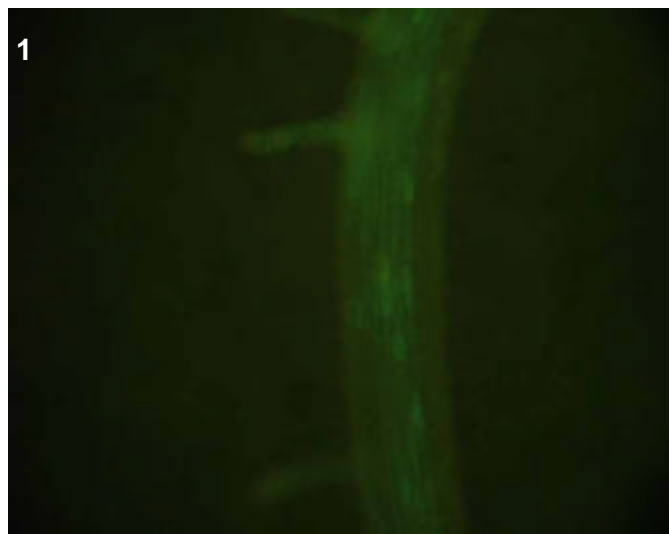
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 25



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASA B06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

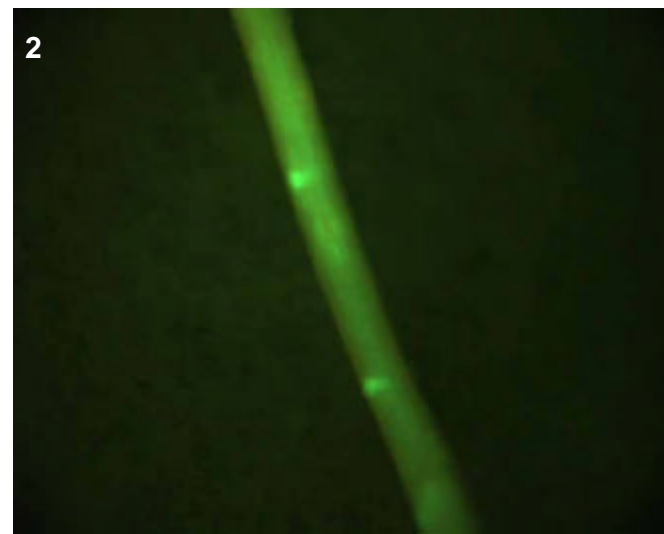
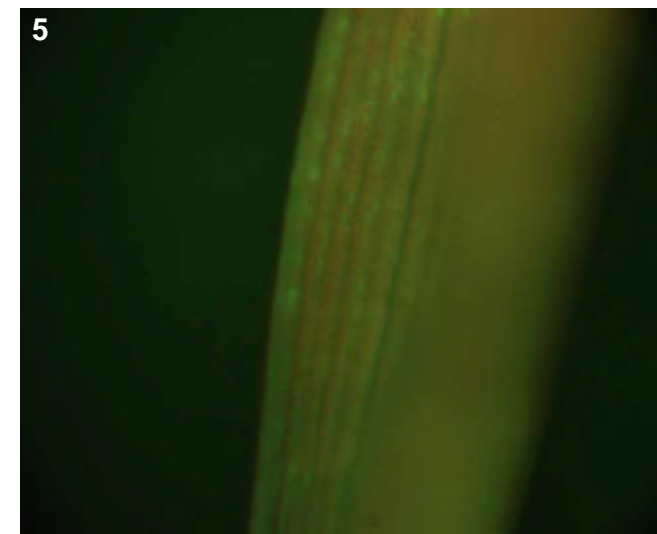
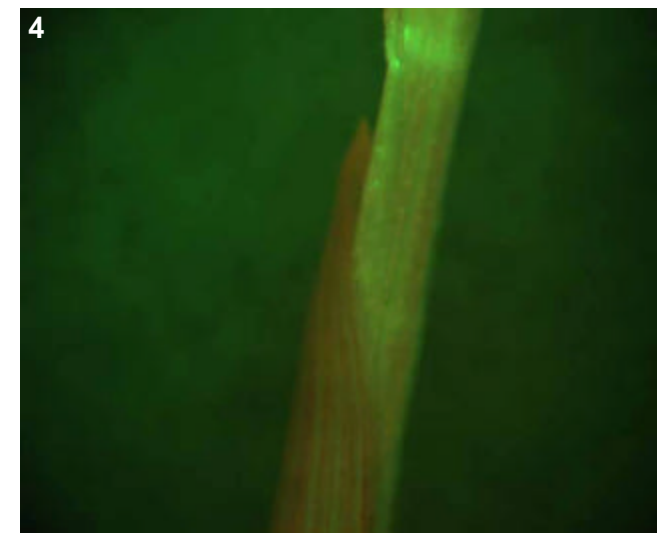
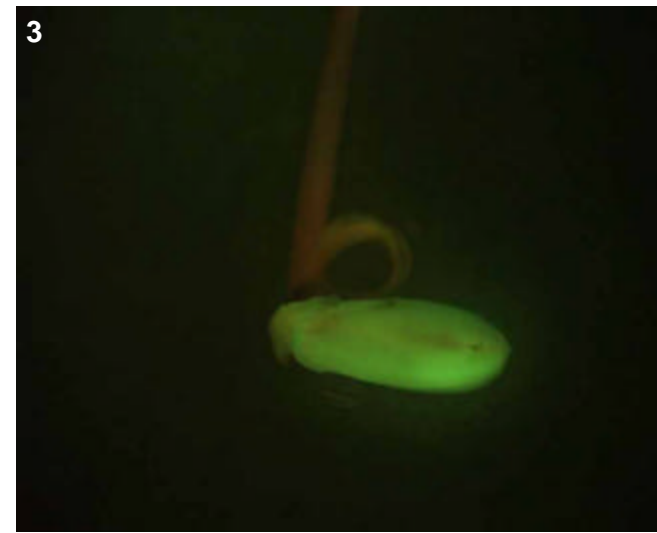
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

3/4 seeds had bright expression.

## T1 seedling comments

2/3 of the GFP positive plants had no root (pic 3). The 1 plant with roots had small roots with perhaps stelar expression (pic 2). The shoot was overall bright and could be epidermal or mesophyll expression in leaf and sheath tissue (pics 4-5).



# Genotype: ASA C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

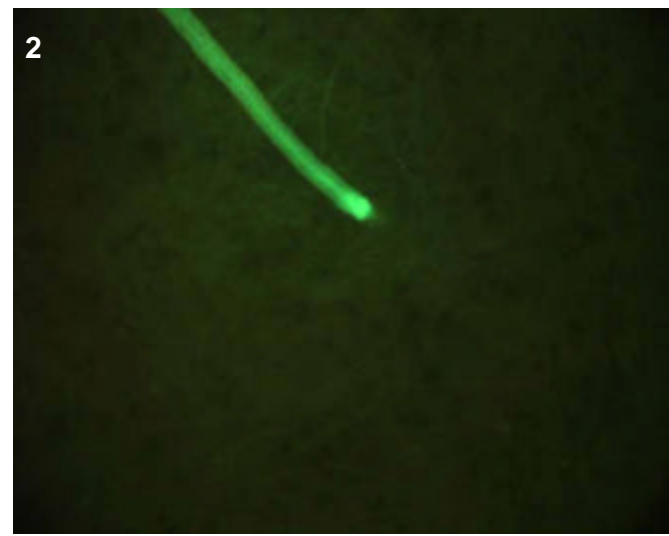
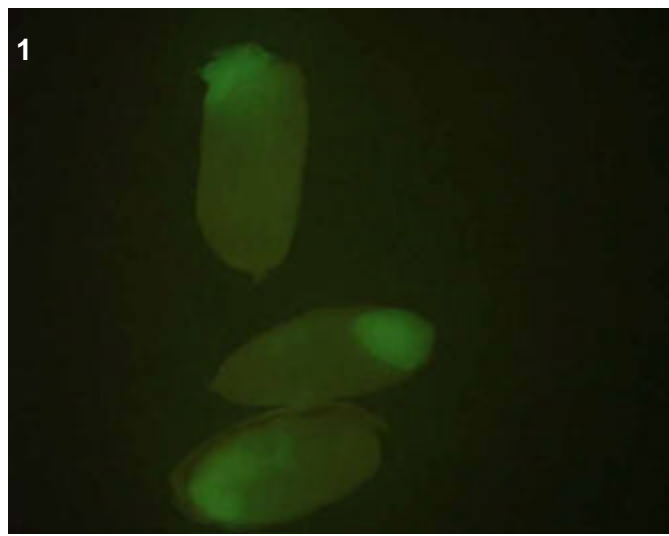
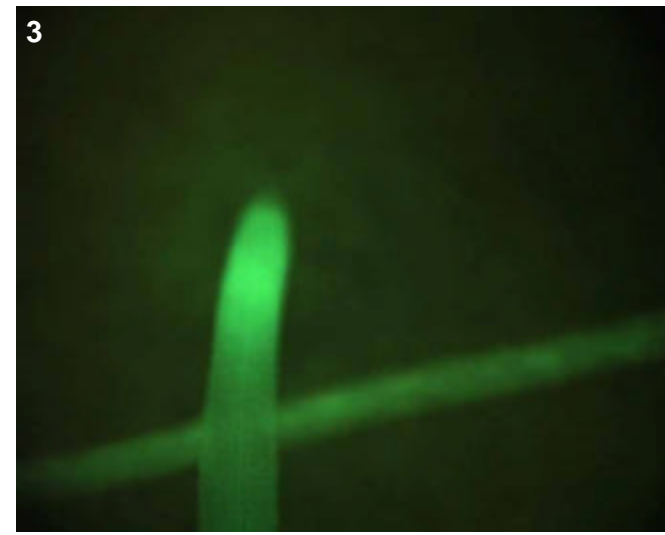
YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**

0



## T0 comments

## T1 seed comments

5/5 seeds had bright expression.

## T1 seedling comments

Appears to be a bright root-specific line (pics 2-3). It's brightness and width indicates either epidermal or cortical expression. Note the extra bright expression near cell elongation zone of lateral root tip (pic 2).

# Genotype: ASA D05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

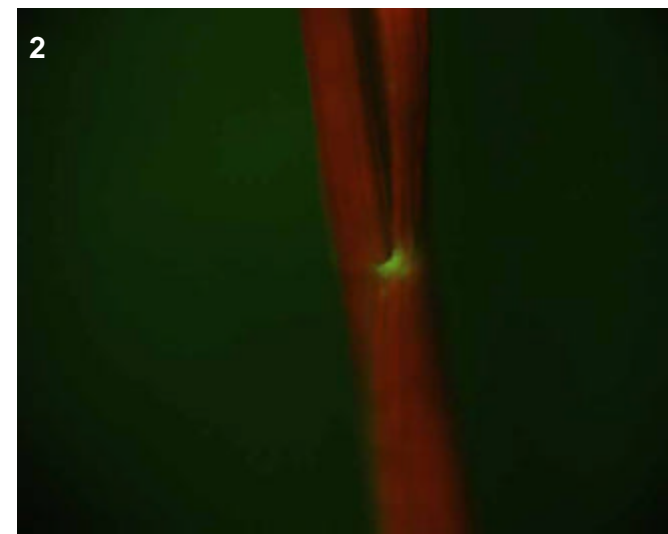
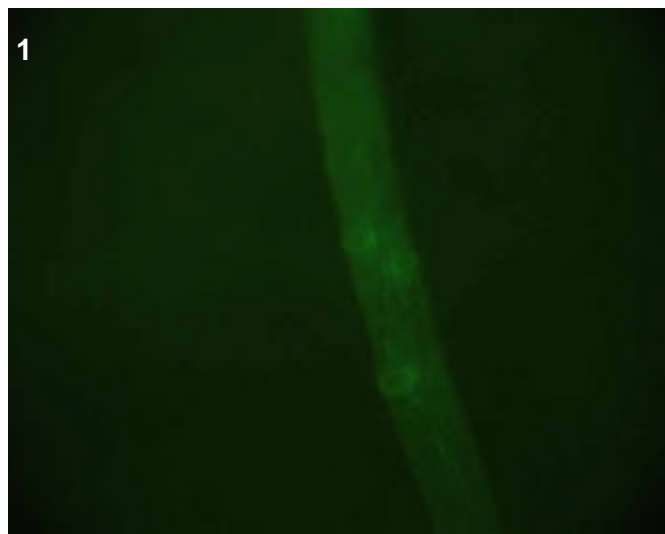
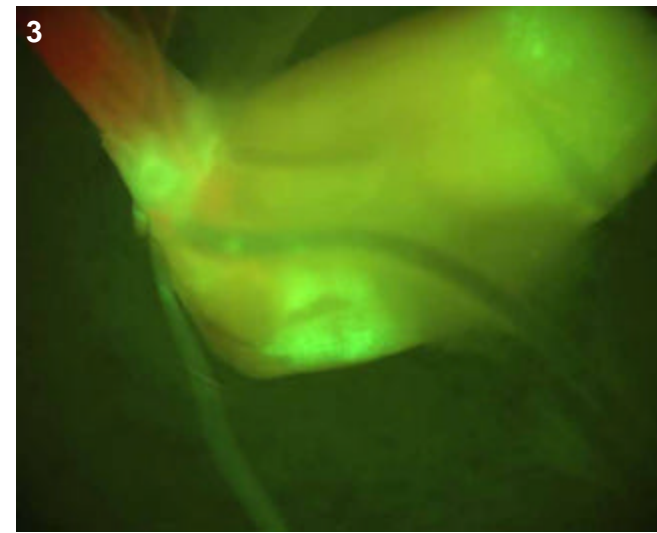
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 18



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression in roots is faint and could be cortical (pic 1). Brighter expression in the shoot in the collar (pic 2) and the sheath tissue just above the digesting seed (pic 3).

# Genotype: ASA E01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

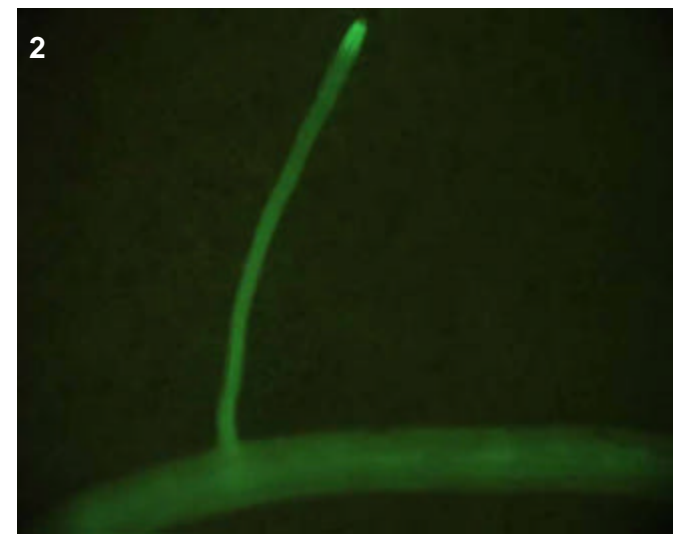
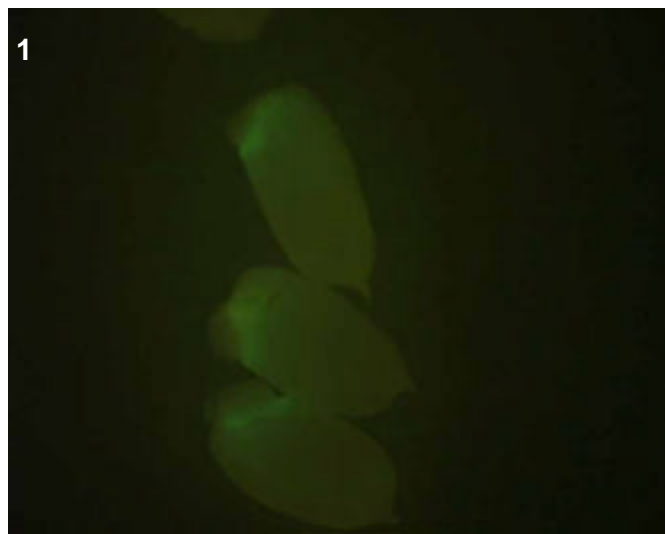
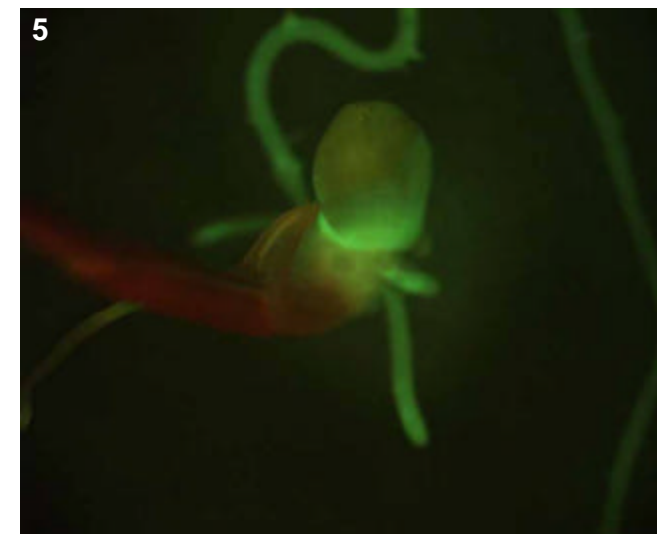
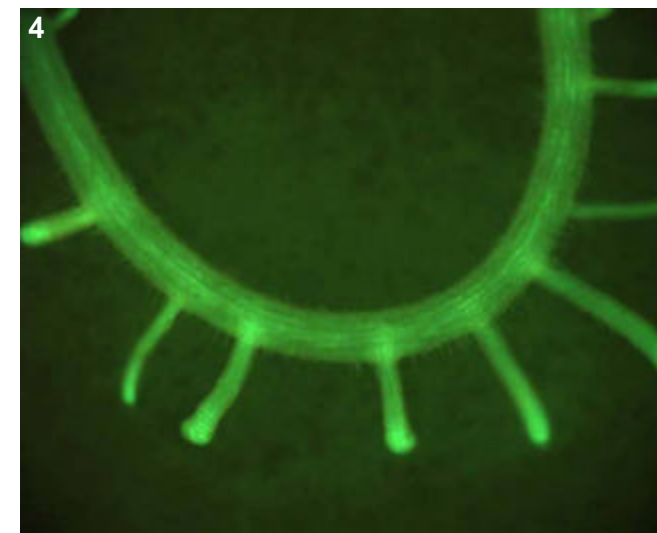
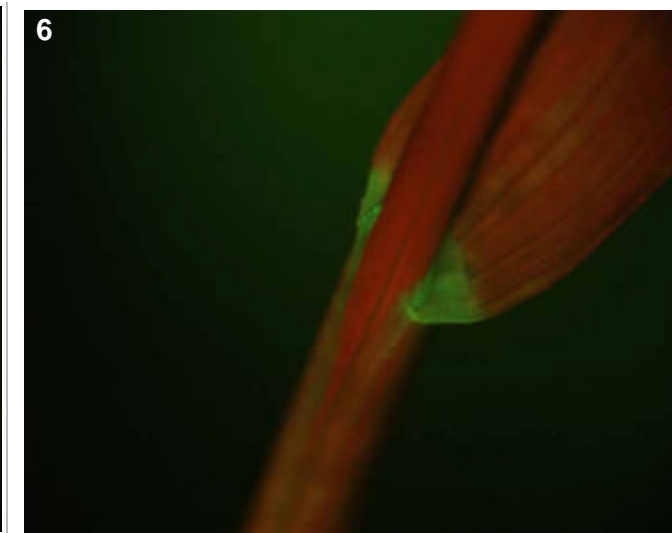
YES, 2 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**

0



## T0 comments

## T1 seed comments

4/5 seeds had medium expression.

## T1 seedling comments

This could be a bright cortical pattern in the root system (pics 2-4). This line had extremely long seminal roots, perhaps a phenotype?

# Genotype: ASA F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

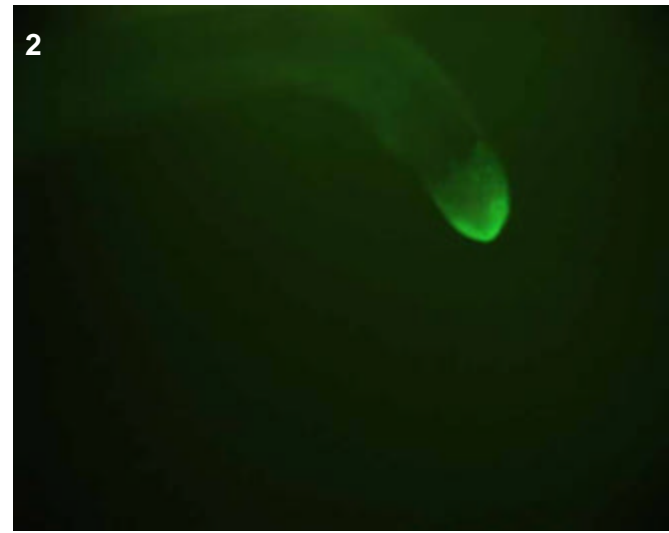
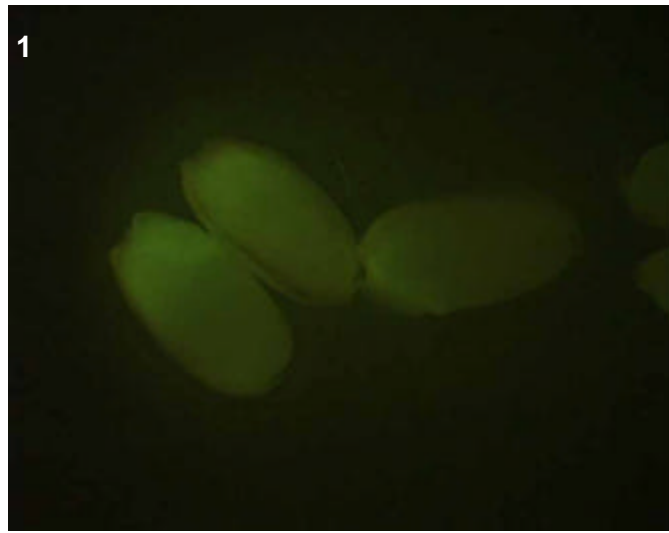
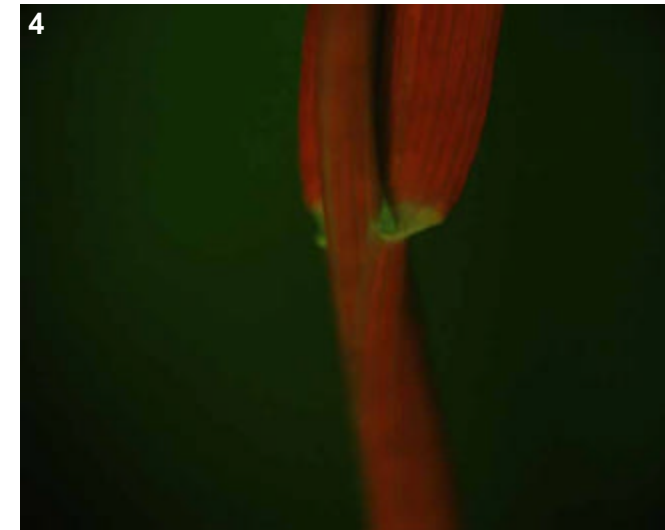
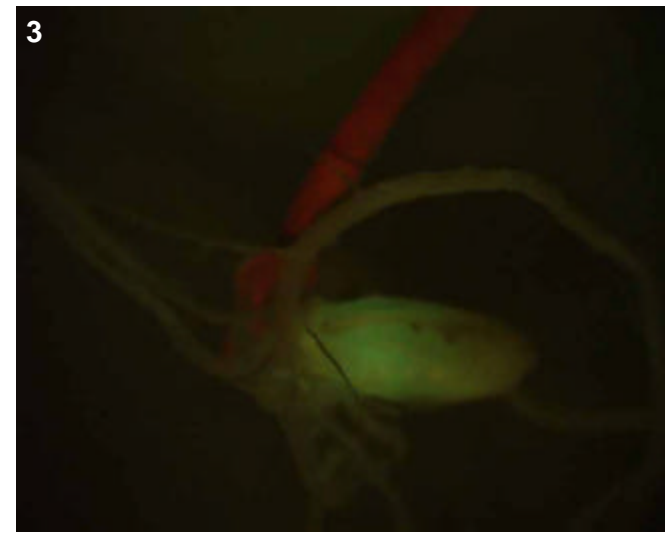
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



**T0 comments**

**T1 seed comments**  
4/5 seeds had weak expression.

**T1 seedling comments**

# Genotype: ASA G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

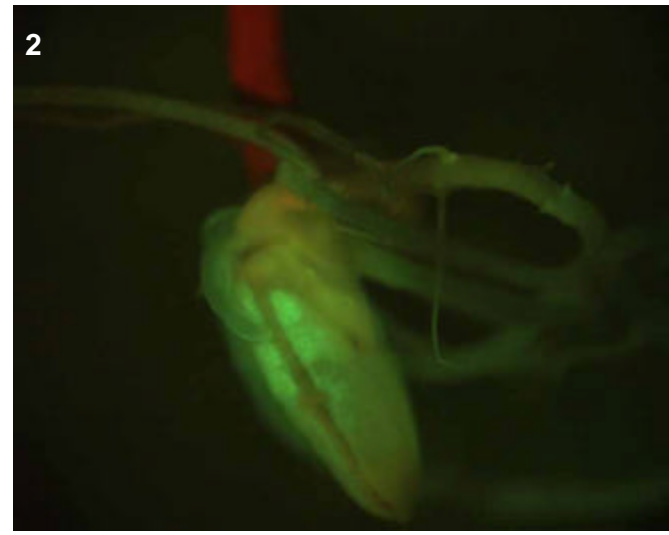
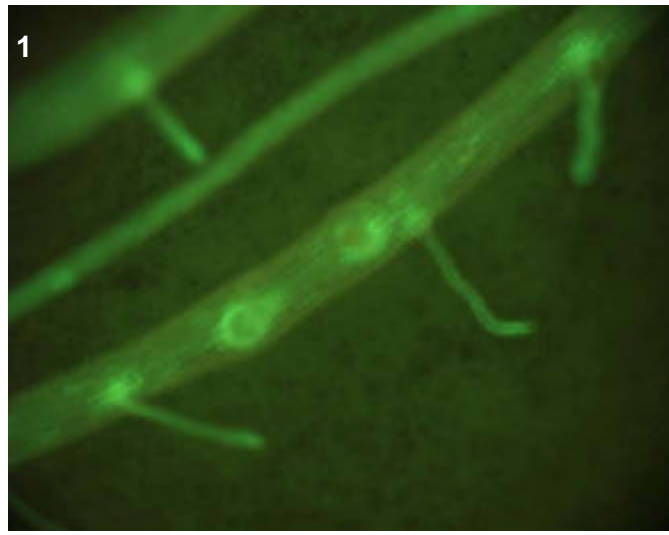
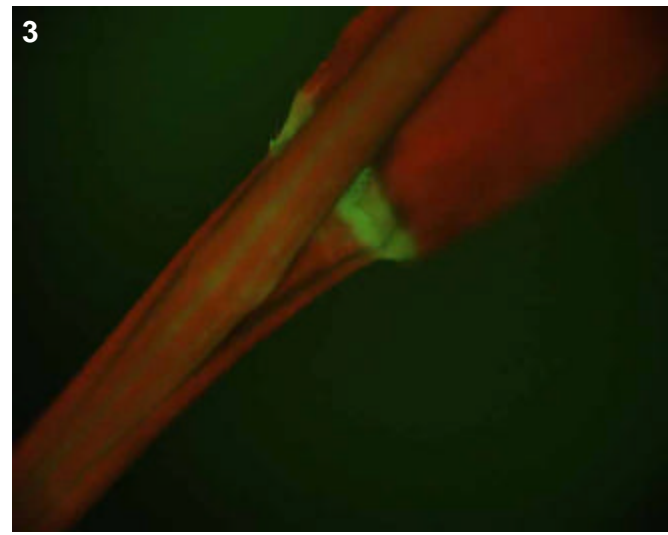
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 18



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASA H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

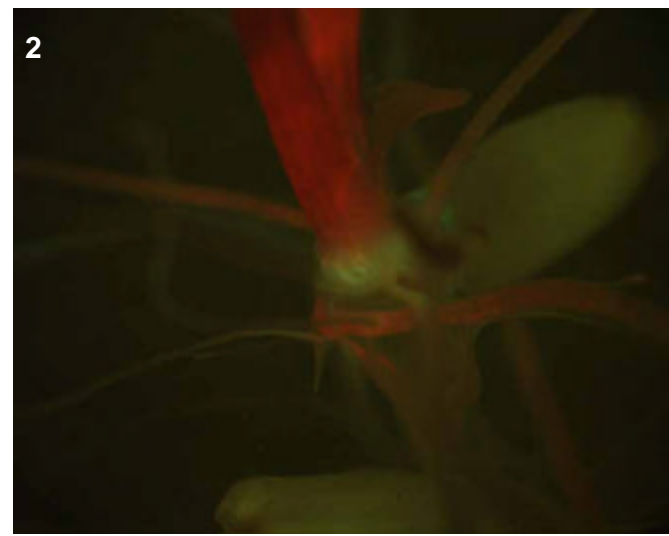
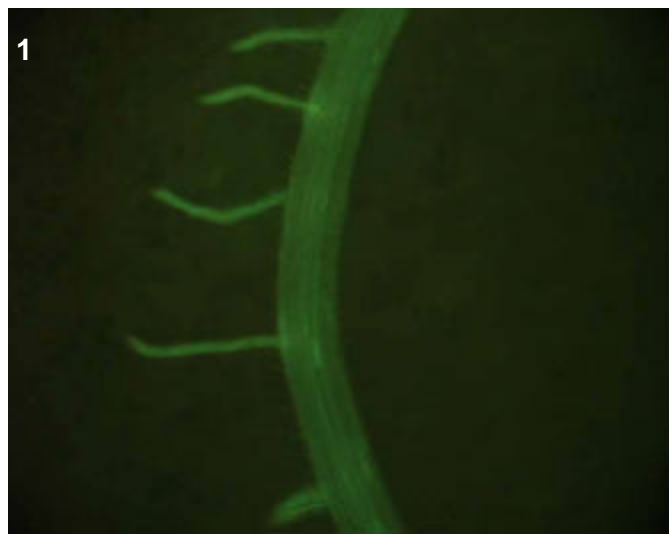
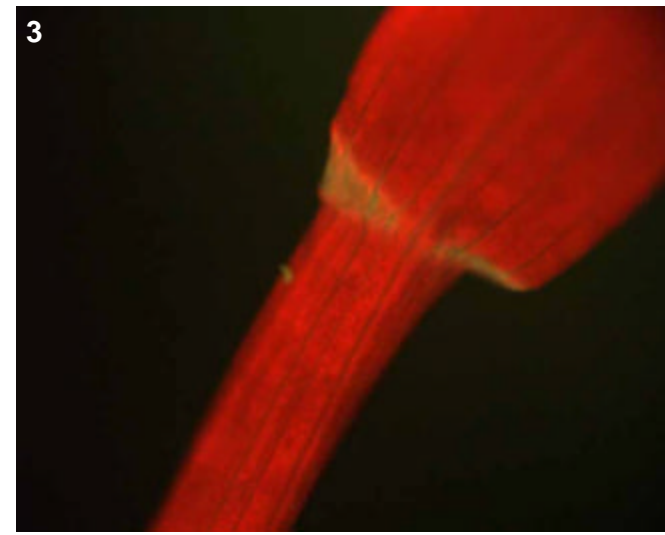
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 1



## T0 comments

## T1 seed comments

## T1 seedling comments

Note the distinctive band of expression at the very base of the shoot (pic 2).

# Genotype: ASA H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

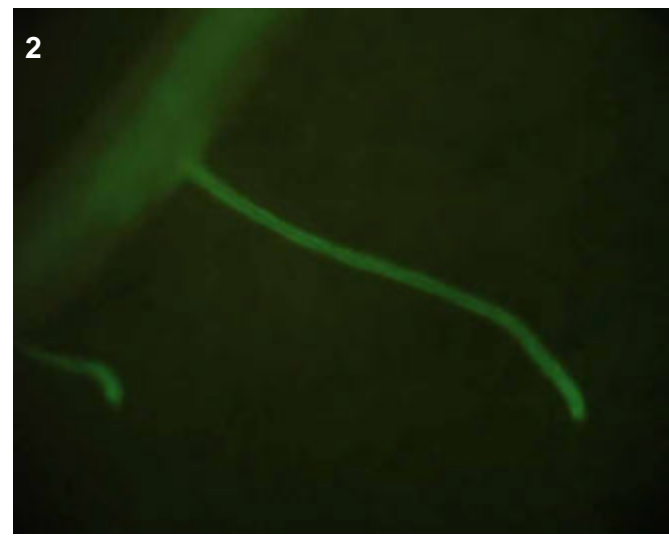
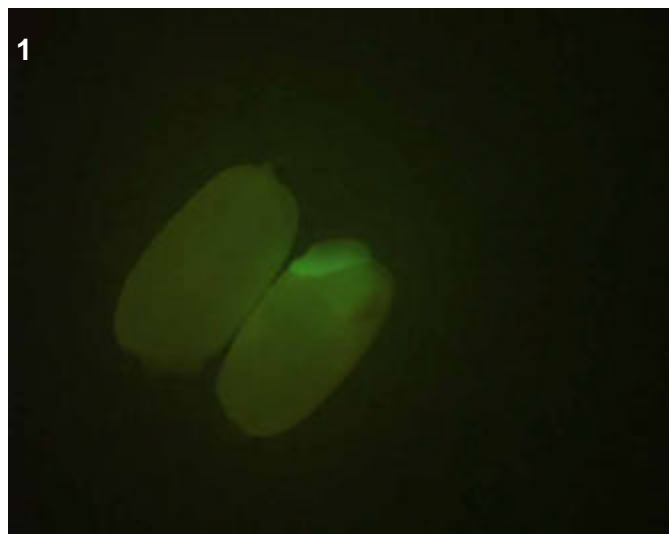
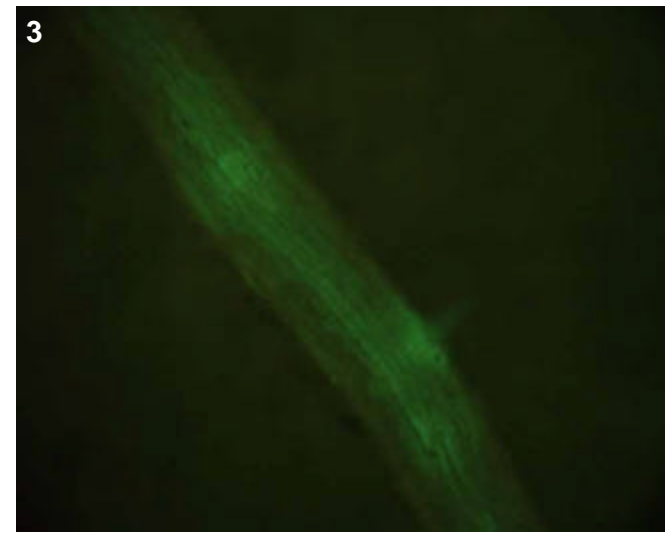
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

3/4 seeds had expression.

## T1 seedling comments

# Genotype: ASA H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

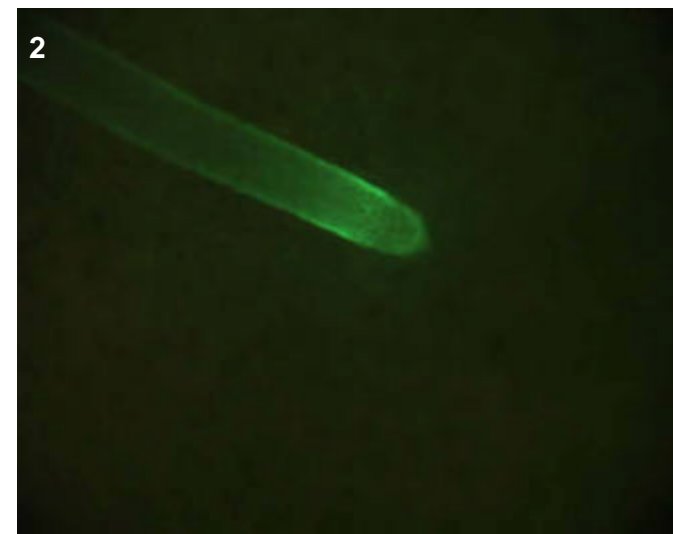
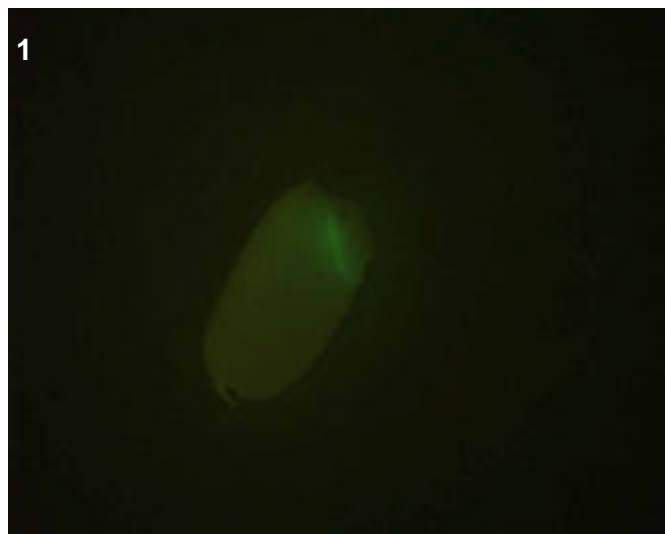
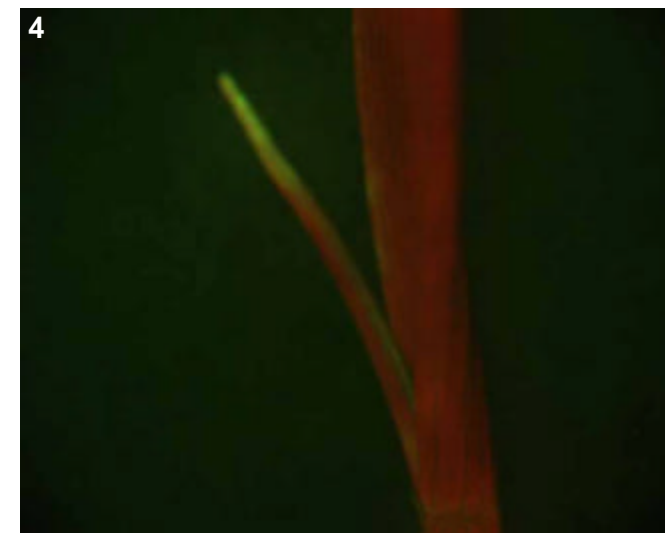
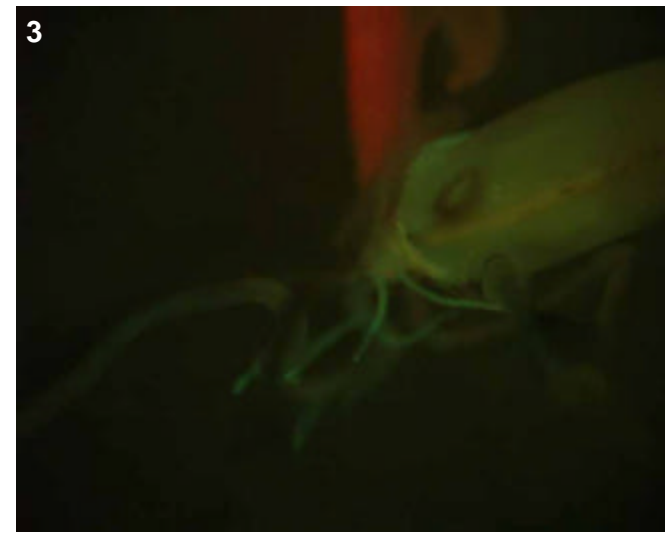
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

2/4 seeds had expression.

## T1 seedling comments

Epidermal expression observed only in the crown roots (pic 2), especially bright in the young, thin crowns emerging around 1 week (pic 2).



# Genotype: ASA H12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

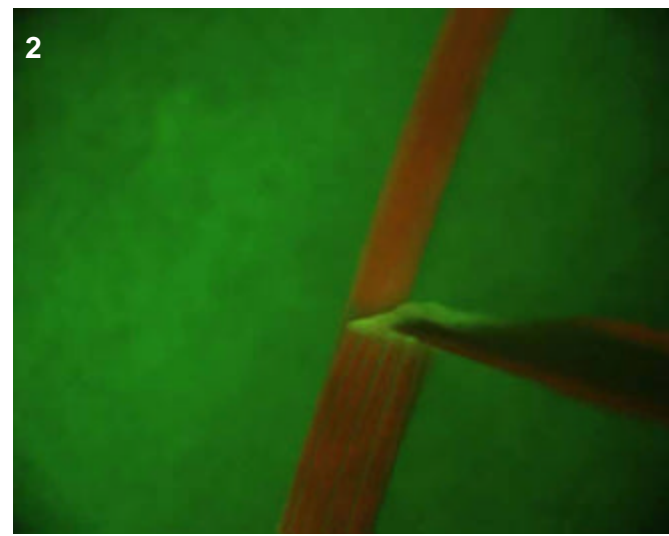
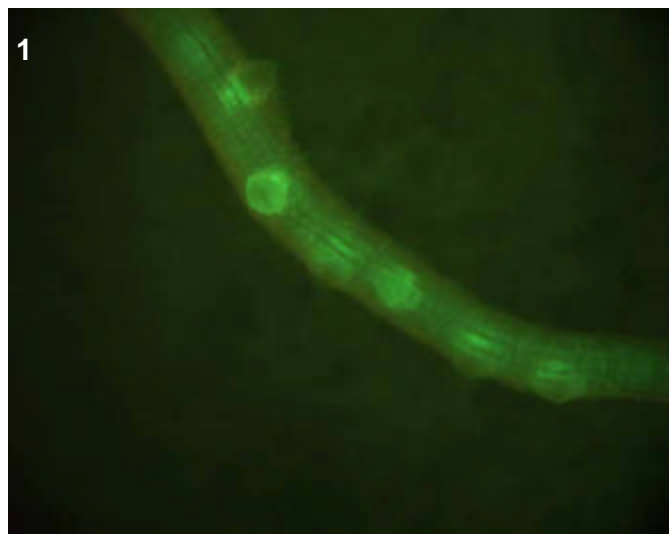
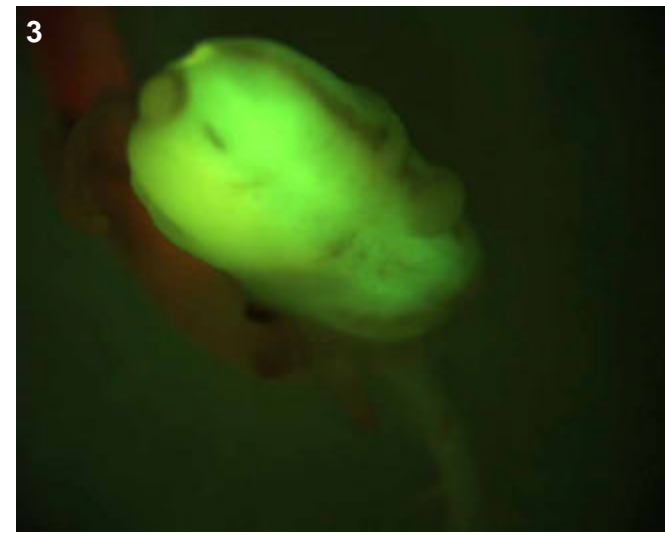
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 2



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASB A01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

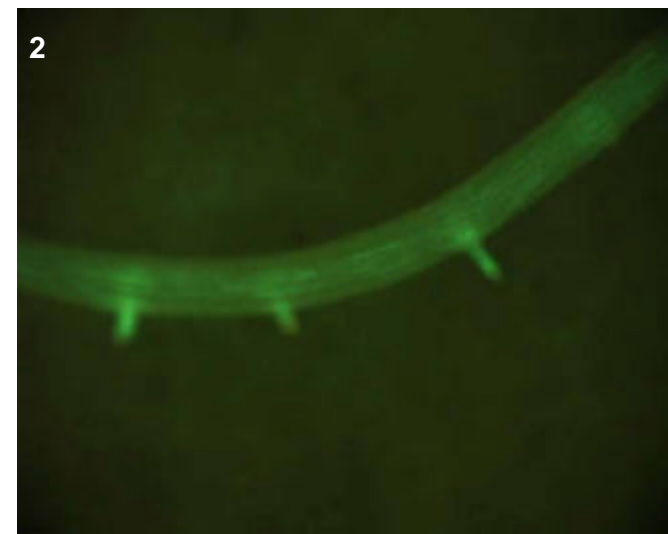
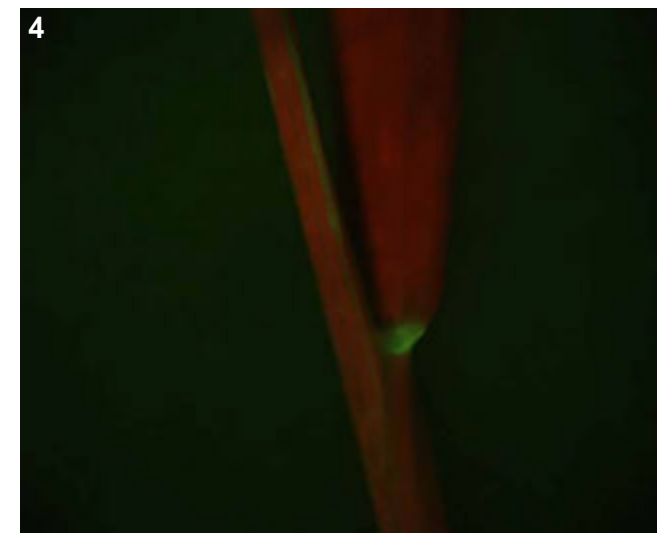
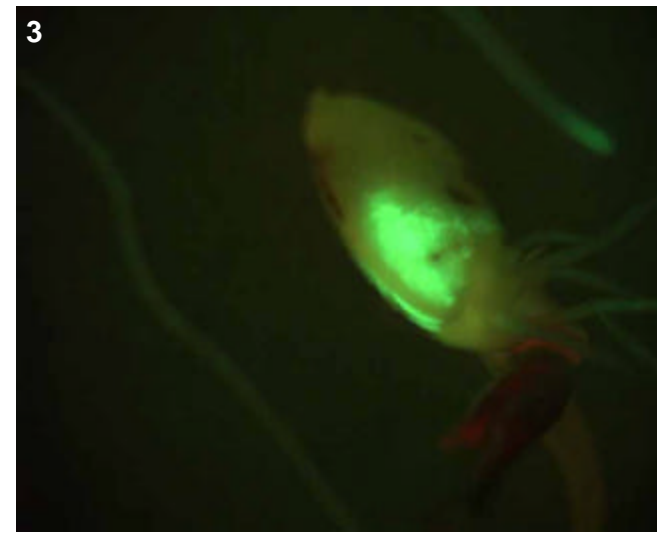
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 7



## T0 comments

## T1 seed comments

Possible that 1/5 seed had very faint expression in the embryo.

## T1 seedling comments

Note the very bright epidermal expression in crown roots (pic 1). Probably more cortical in the laterals (pic 2).

# Genotype: ASB A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

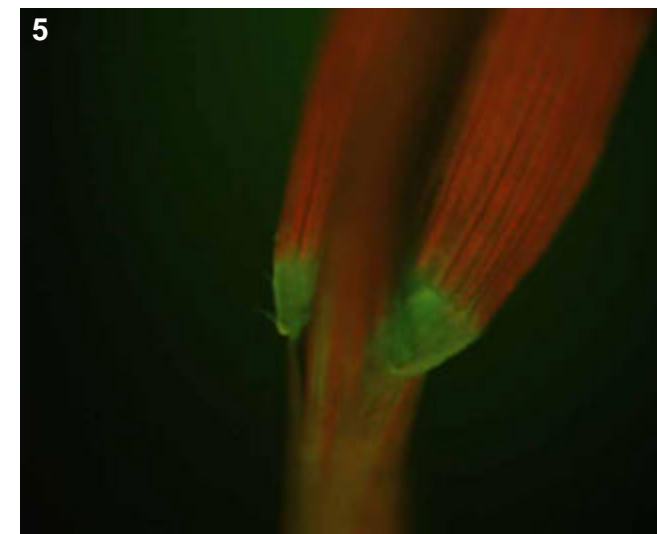
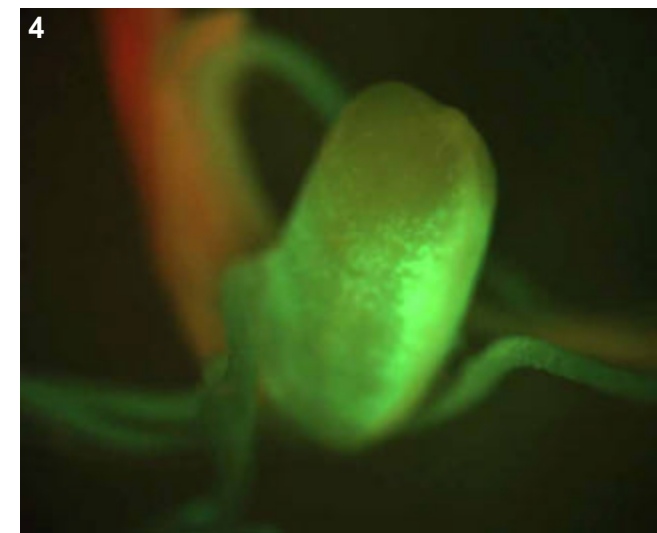
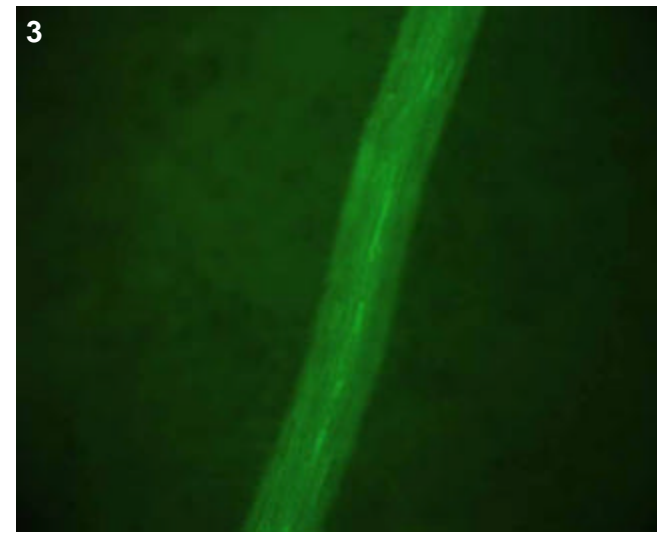
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

Bright expression in the embryo for 1/5 seed, but very localised, just a small bright circle.

## T1 seedling comments

From picture 5 there appears to be some activity in the leaf and sheath tissues in close proximity to the collar.

# Genotype: ASB A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

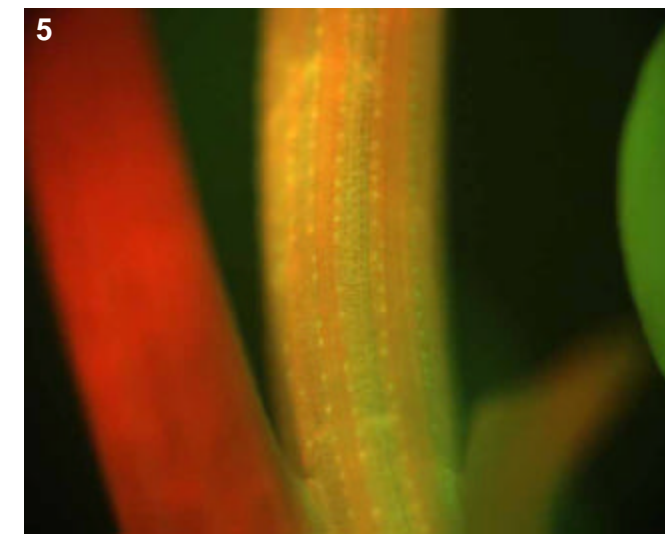
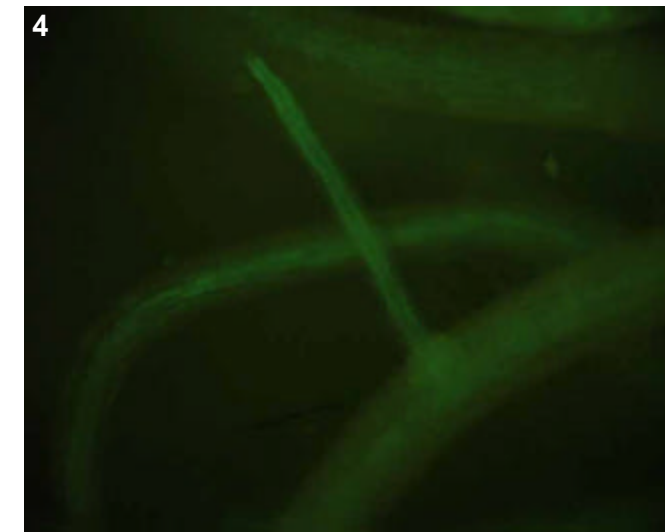
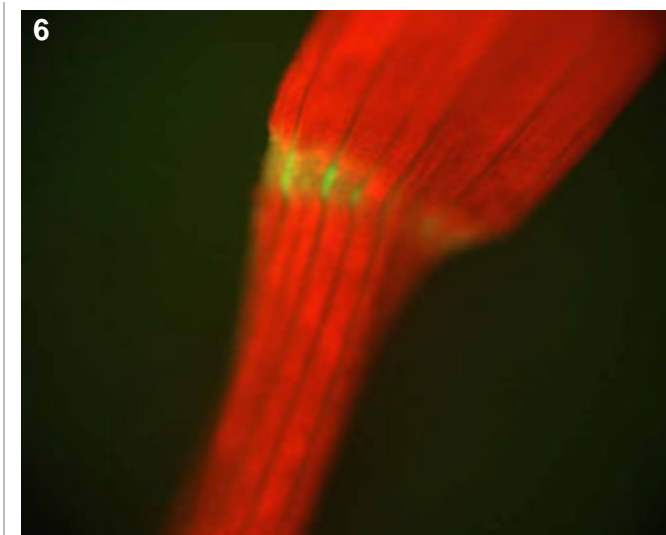
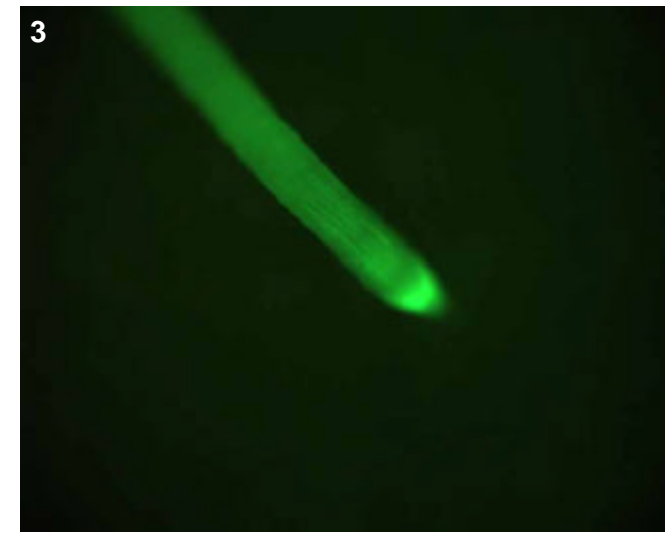
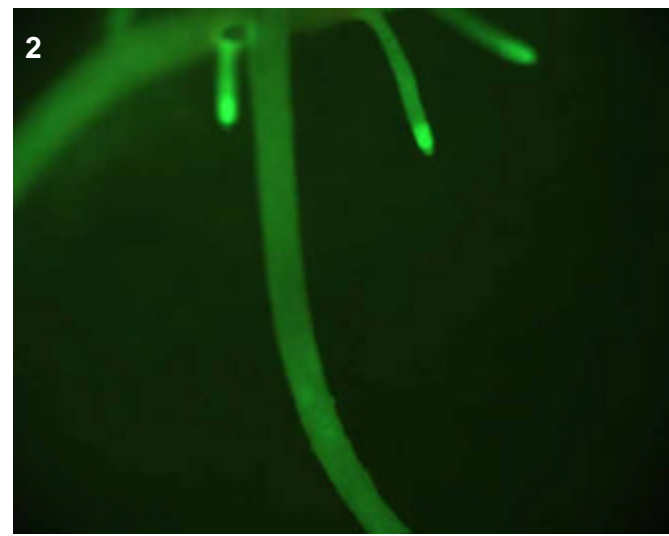
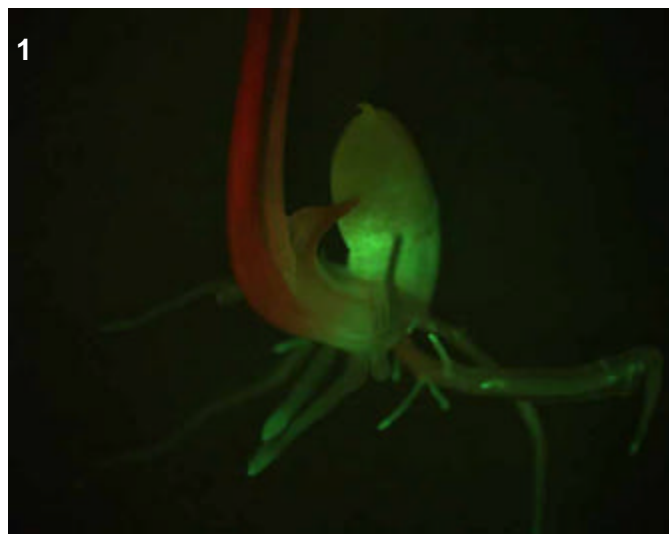
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Observed two GFP positive plants, one normal and one mutant (pics 1-3). The mutant was bright everywhere in root, while the normal-appearing plant had more faint expression in stele (pic 4). Also some activity in sheath (guard cells? pic 5) and collar (pic 6).

# Genotype: ASB B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

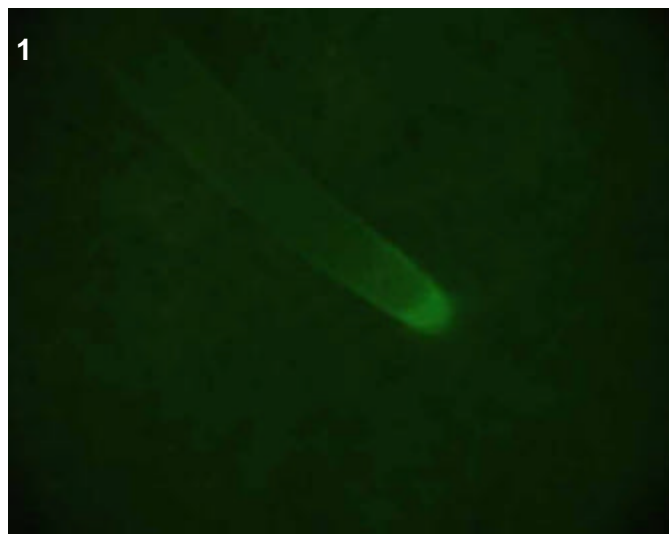
YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**

3



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression appears specific to the root cap, although there may be some epidermal expression in young portions of the root just above the cap (picture 1).

# Genotype: ASB C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

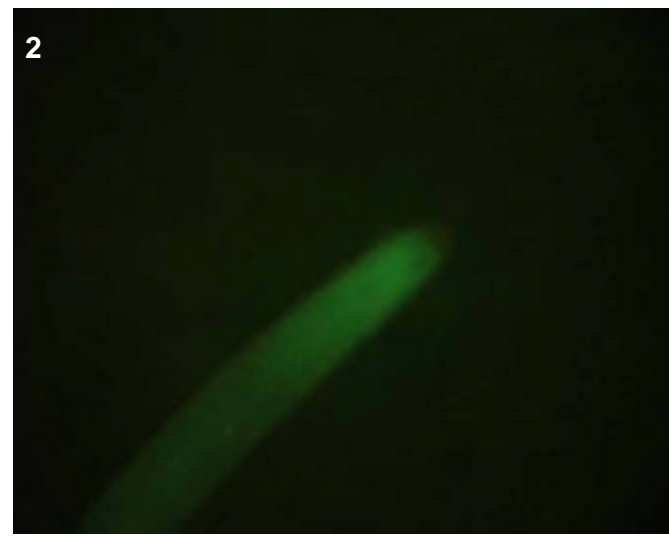
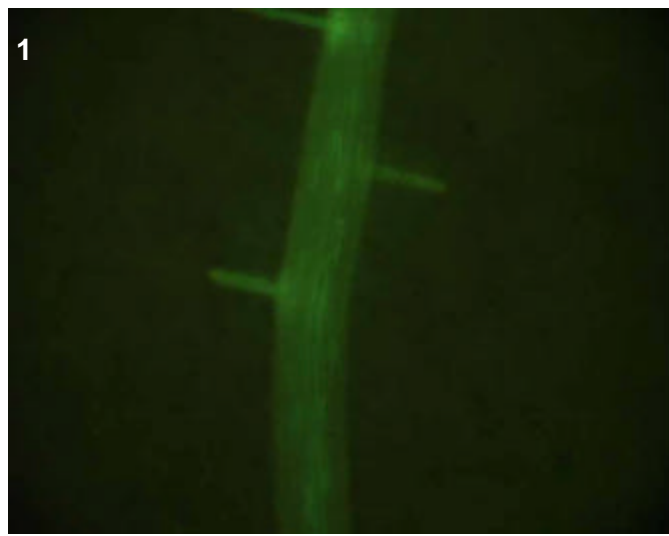
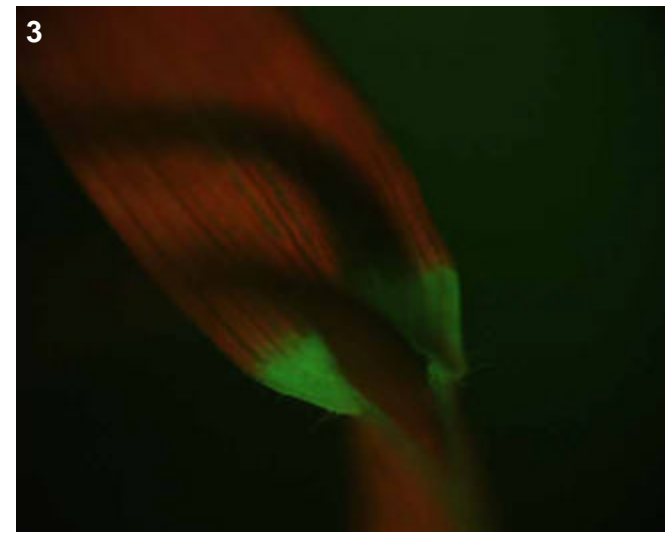
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASB C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

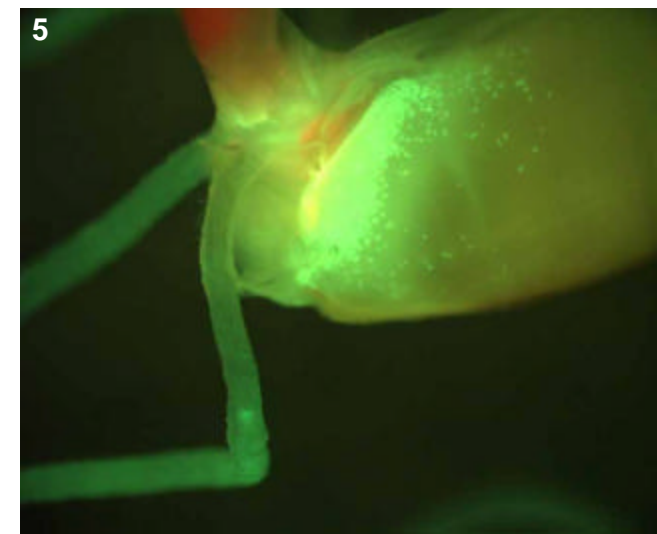
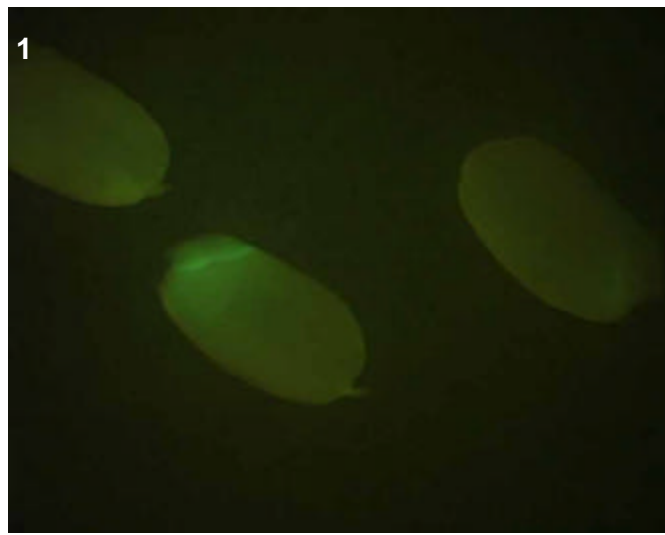
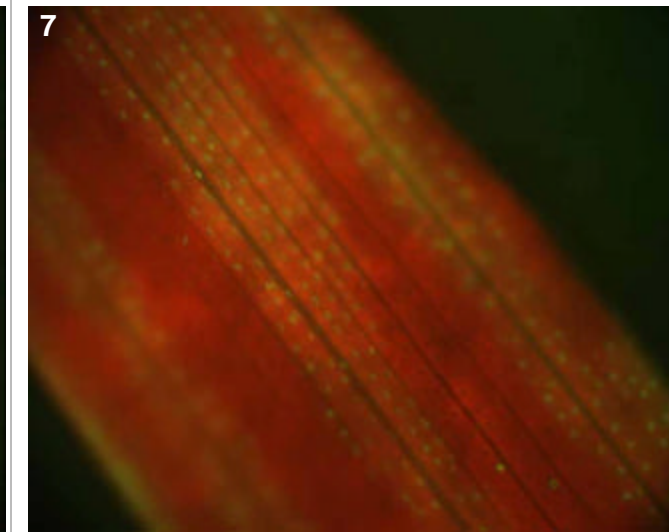
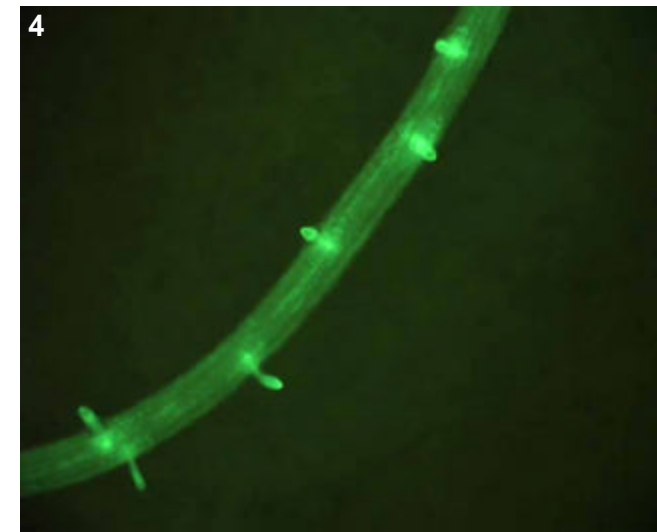
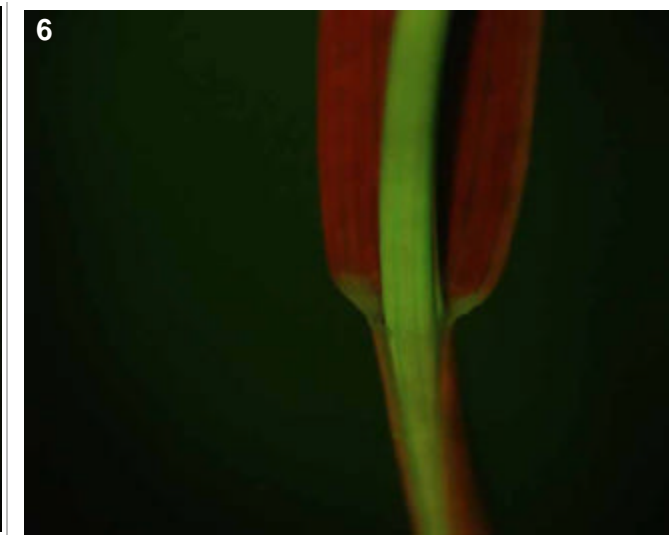
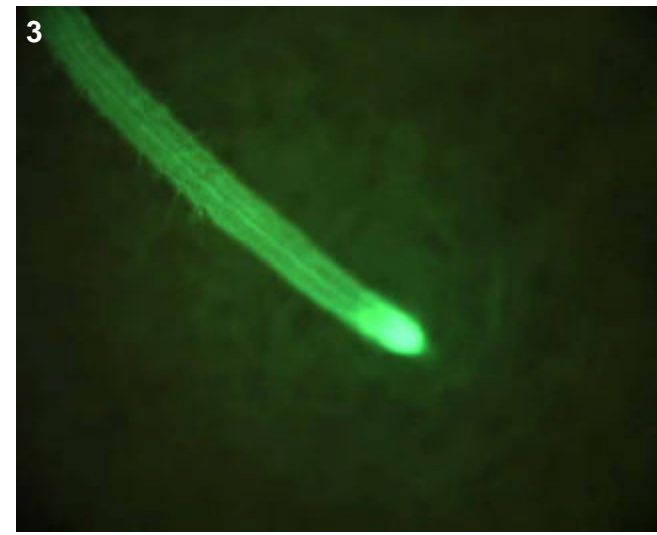
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 37



## T0 comments

## T1 seed comments

2/5 seed had expression.

## T1 seedling comments

Root expression very bright and probably epidermal (pics 2-4). The entire newly-emerging leaf looks GFP positive (pic 6). Note the leaf guard cells in picture 7.

# Genotype: ASB D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

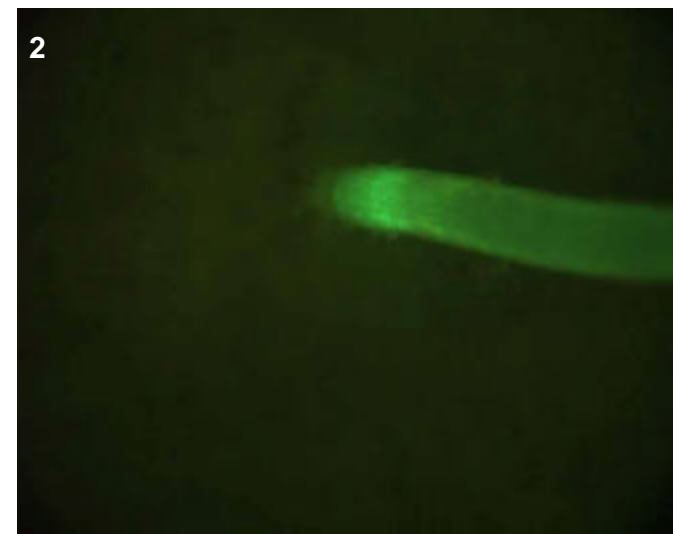
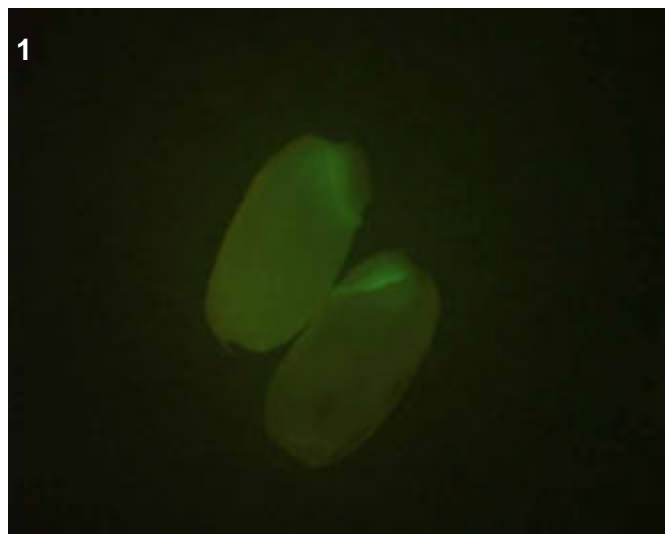
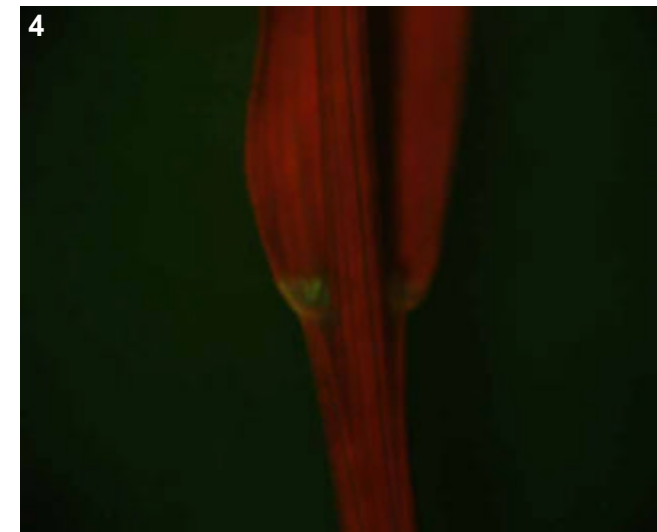
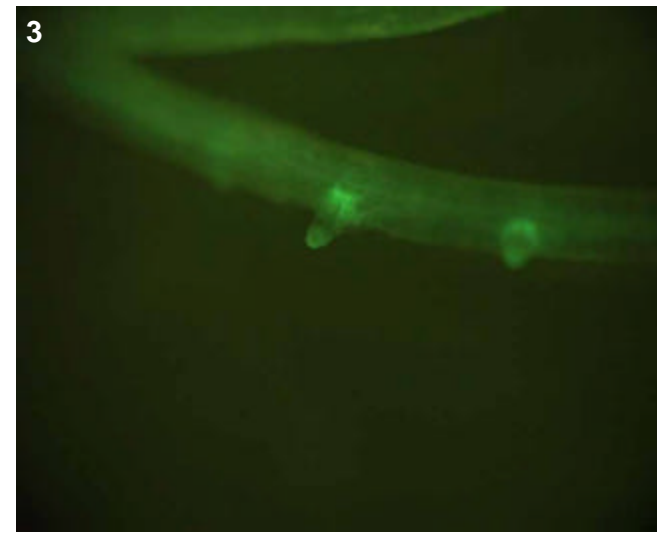
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

4/5 seed had expression.

## T1 seedling comments



# Genotype: ASB E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

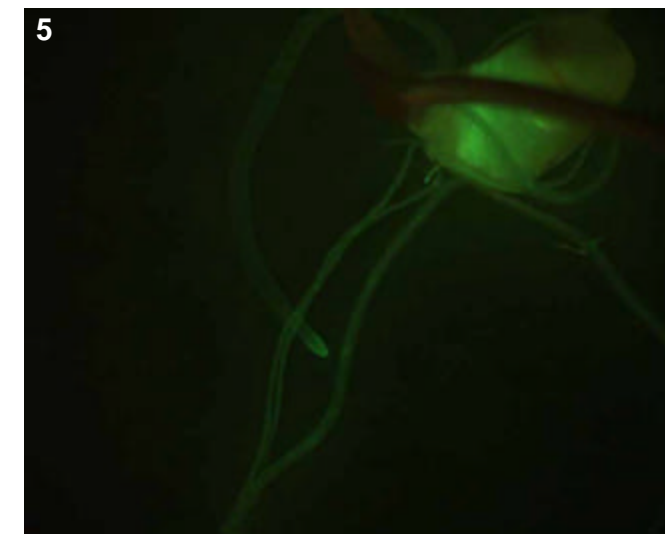
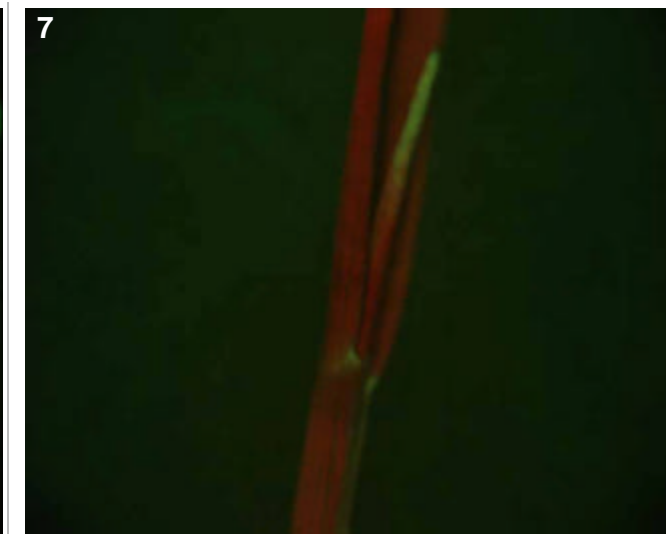
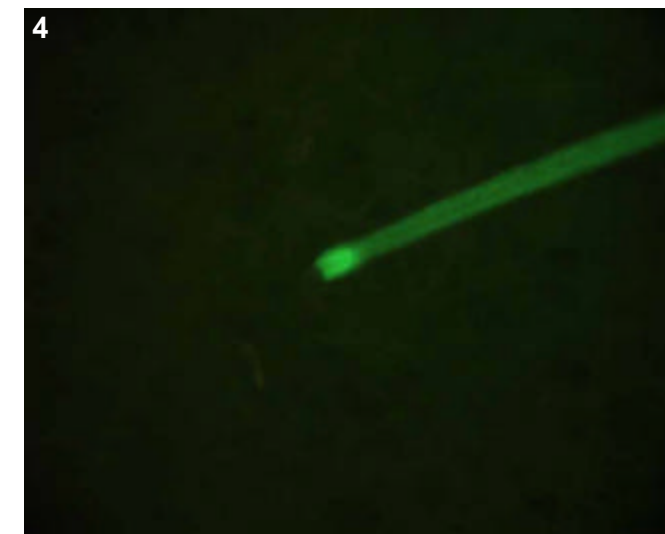
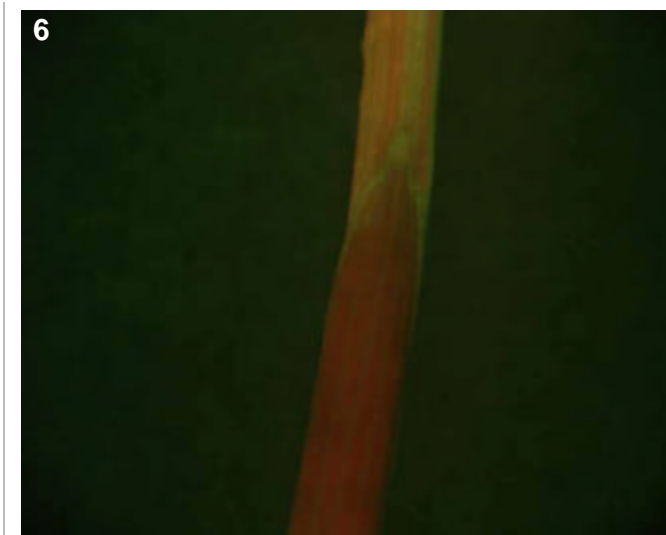
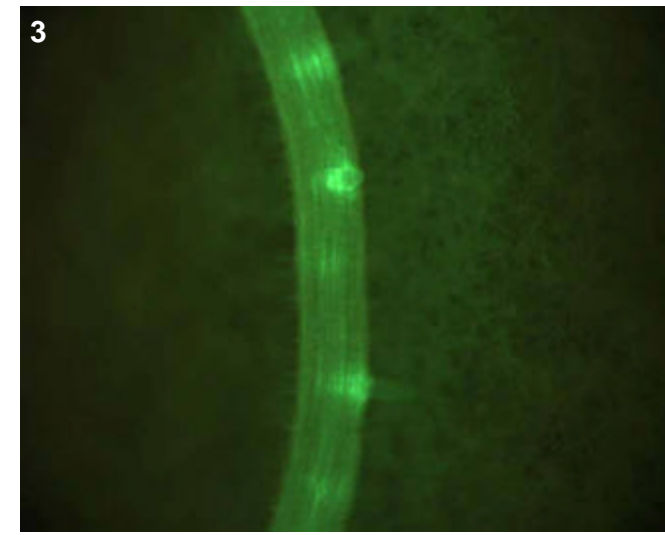
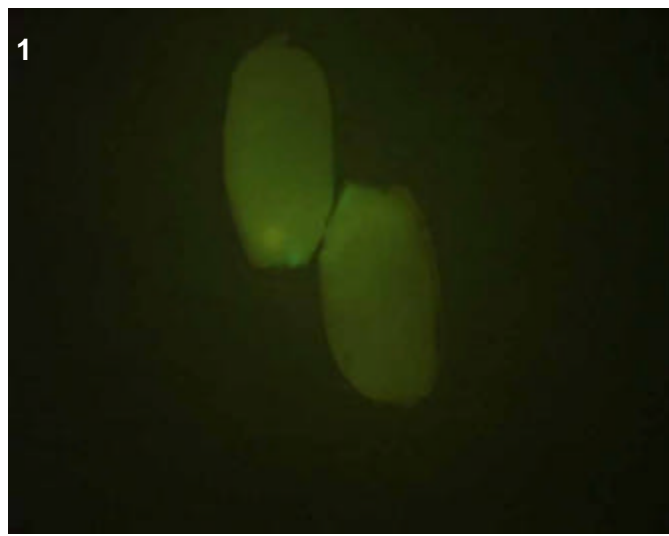
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 6



## T0 comments

## T1 seed comments

3/5 seed had expression. Interesting in that it appears to be a distinct "spot" at the top of the embryo, perhaps the emerging coleorhiza or coleoptile.

## T1 seedling comments

Bright epidermal expression in seminal and crowns (pics 2-3) while probably more cortical in lats (pic 4) with especially bright expression near the tip. Young sheath tissue appears to show general GFP expression (pic 6).

# Genotype: ASB G04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

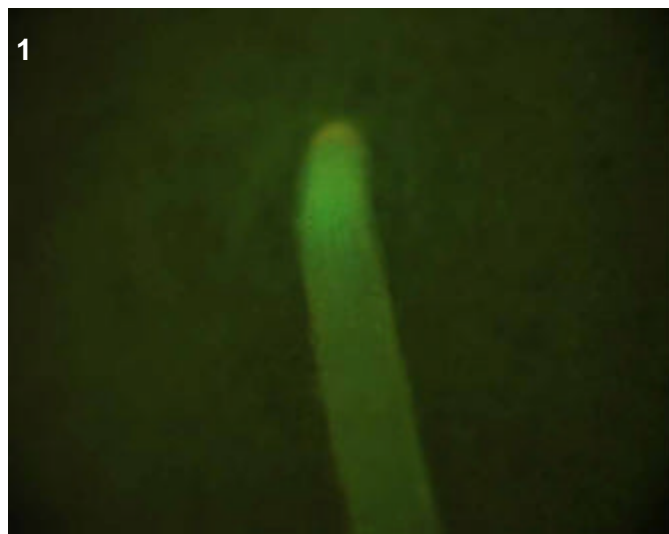
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced: 0



## T0 comments

## T1 seed comments

## T1 seedling comments

A weak root epidermal line (pic 1).

# Genotype: ASB H01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

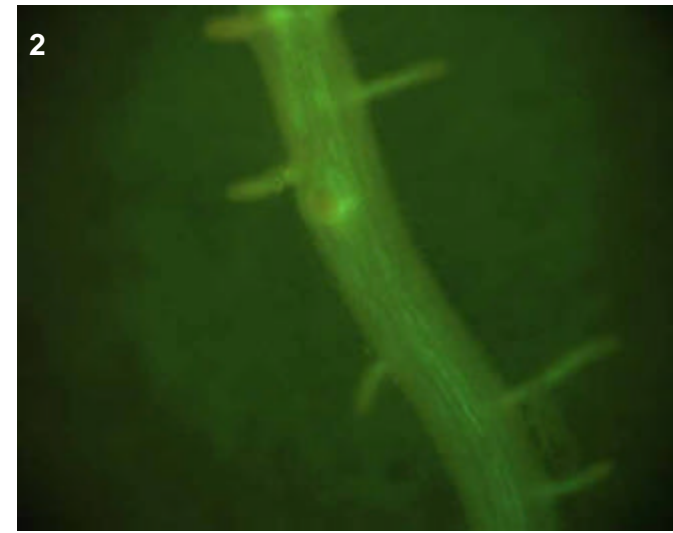
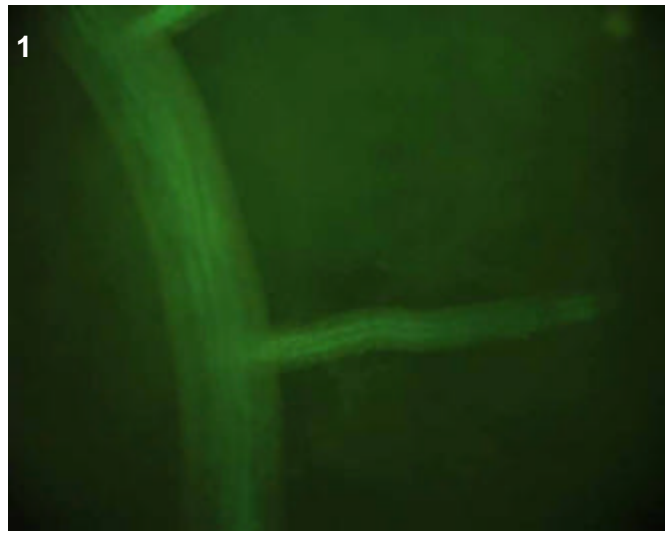
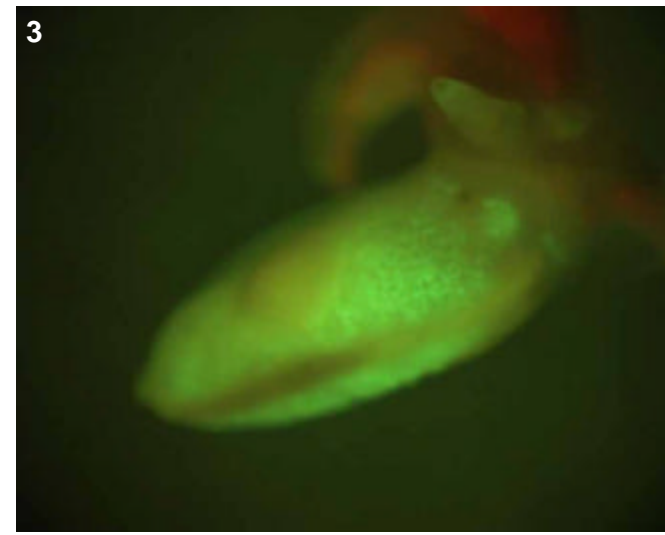
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 10



## T0 comments

## T1 seed comments

## T1 seedling comments

Could be stelar or cortical/endodermal expression in the roots. There are clearly two "lines" of GFP evident in the lateral root in picture 1.

# Genotype: ASB H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

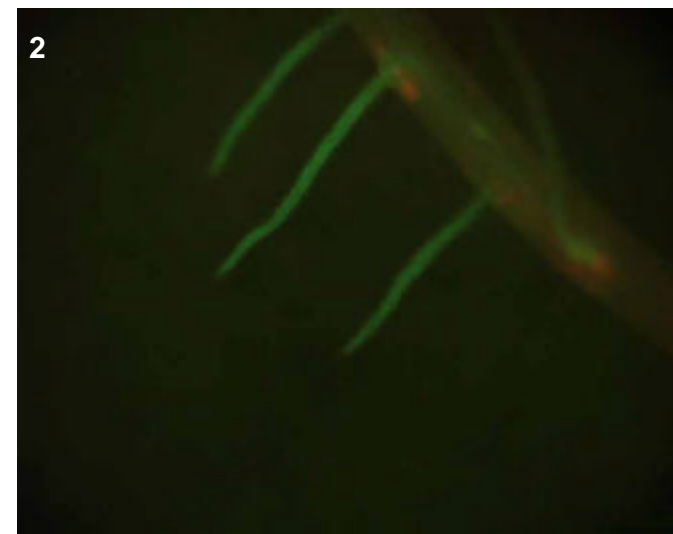
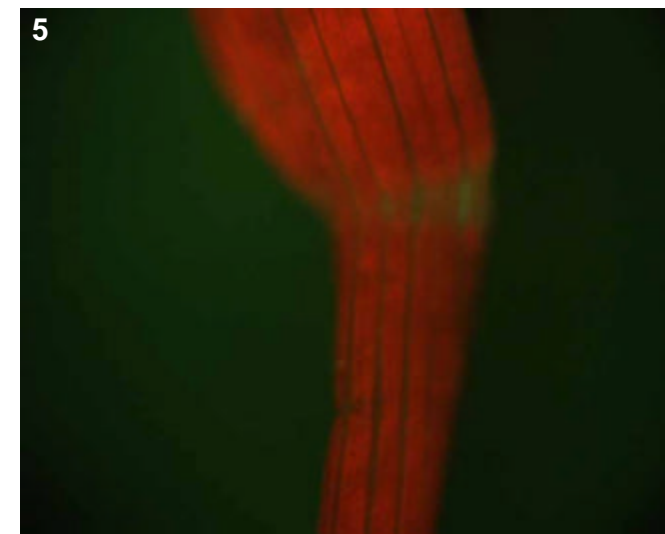
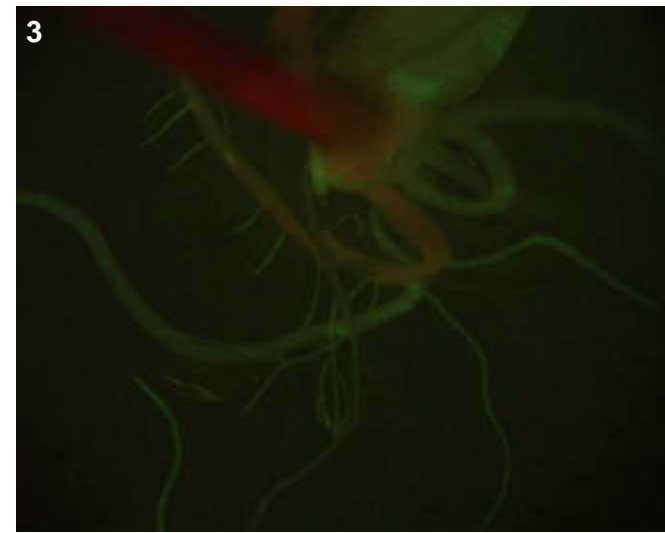
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Root system appears quite small and compact (pics 3-4), perhaps a mutant? Collar expression (pic 5) which possibly was accompanied by some vascular expression around the collar but not sure.

# Genotype: ASC A01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

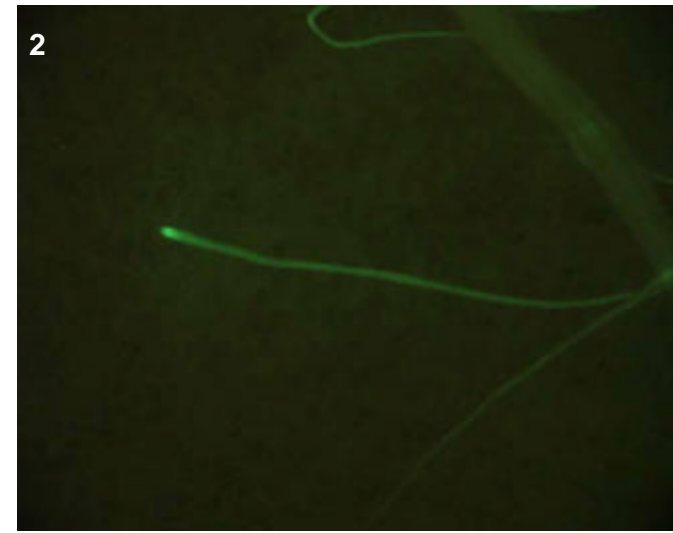
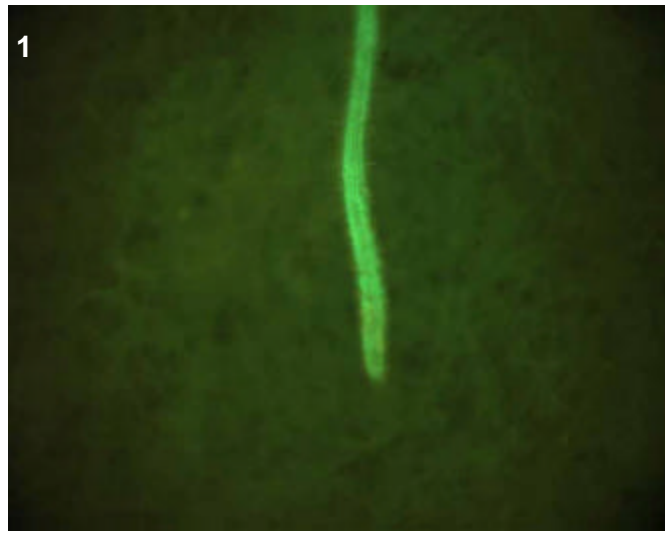
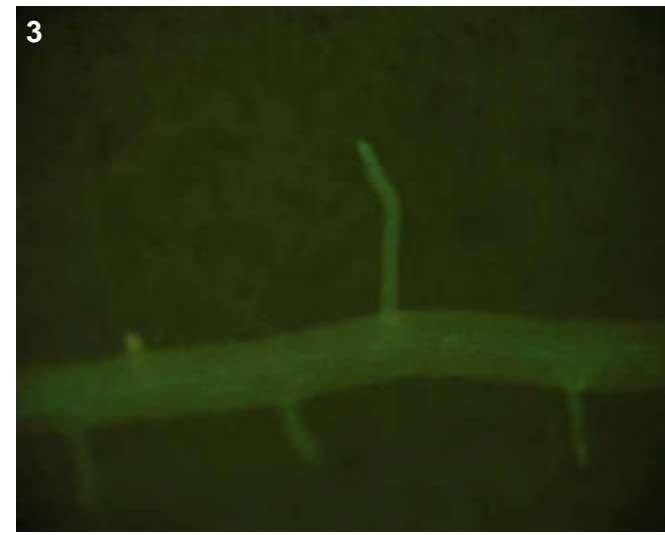
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASC A05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

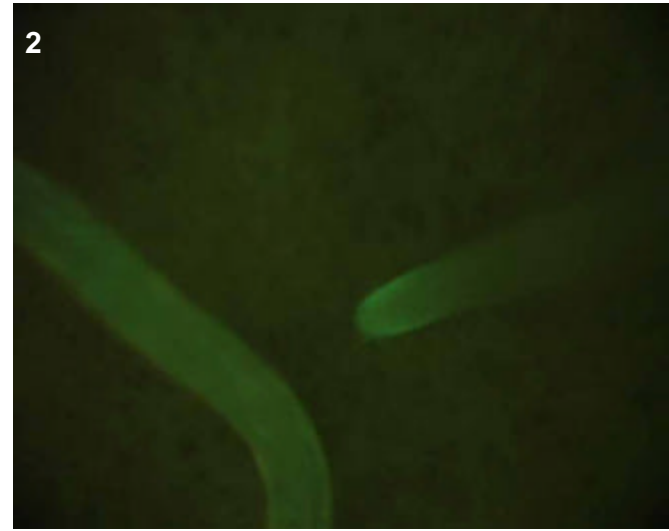
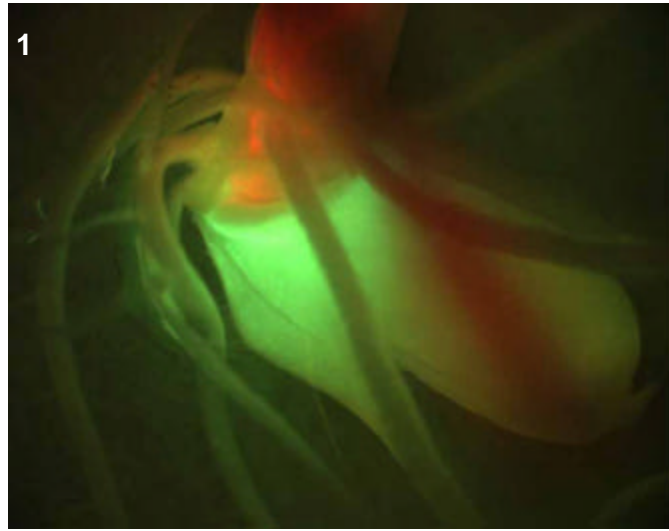
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASC A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

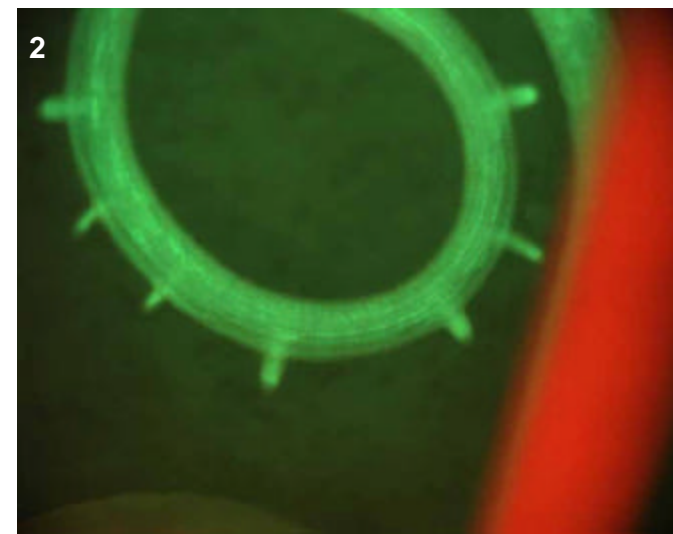
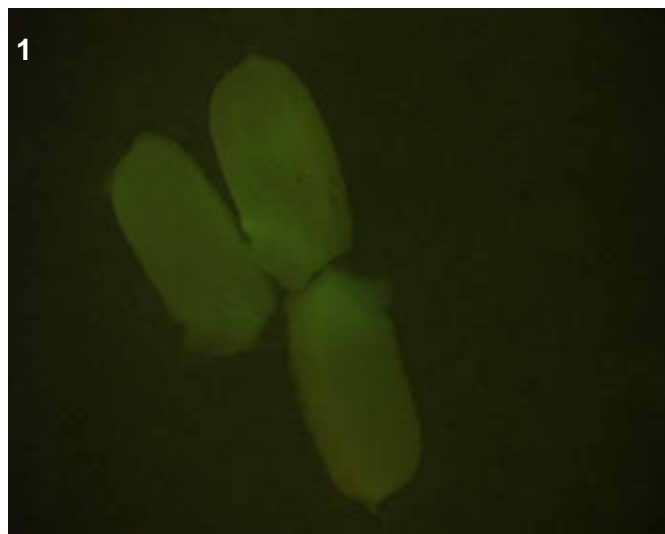
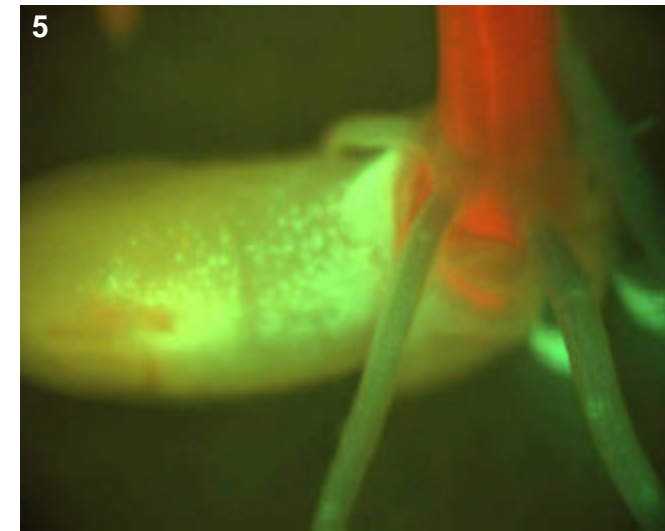
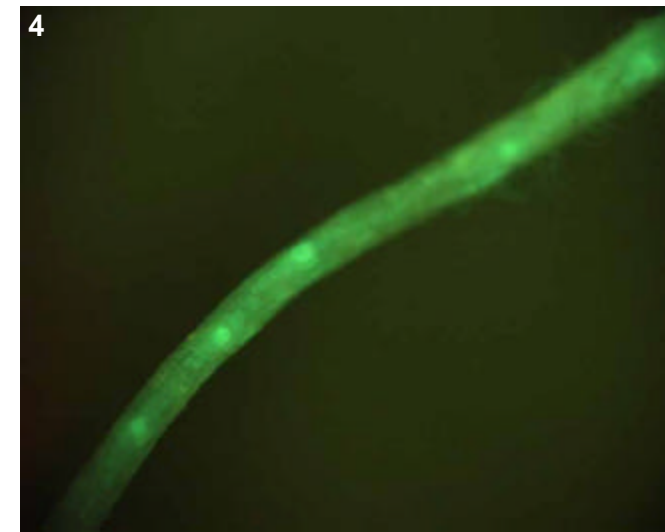
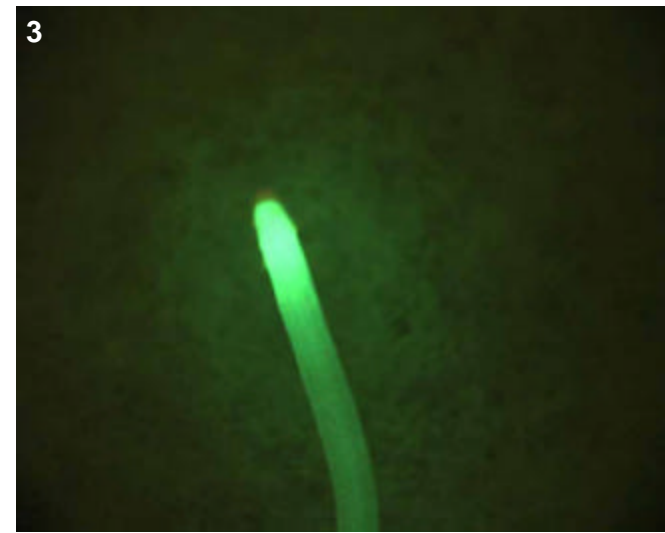
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

4/5 seeds had weak expression.

## T1 seedling comments

Shoot expression was limited to the base of the shoot in the sheath region.

# Genotype: ASC C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

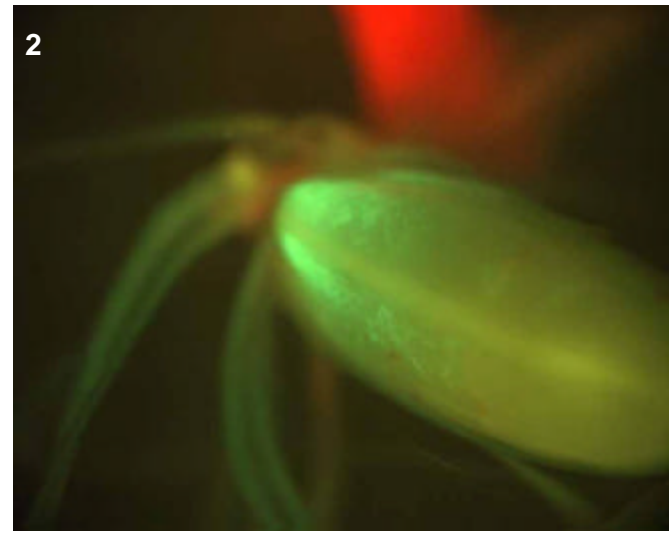
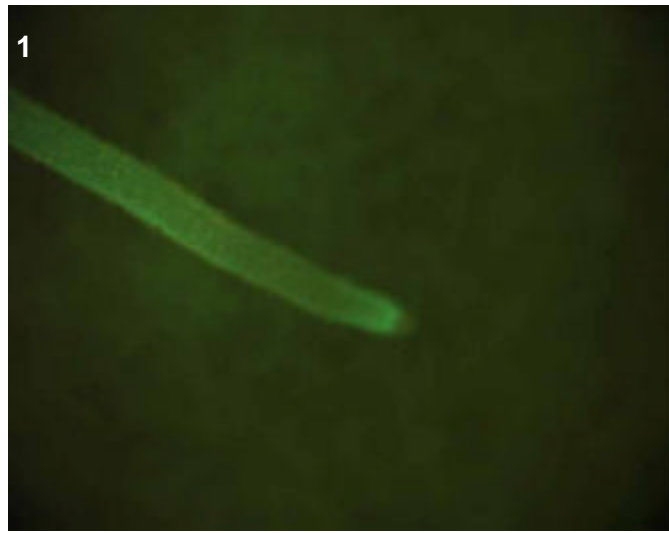
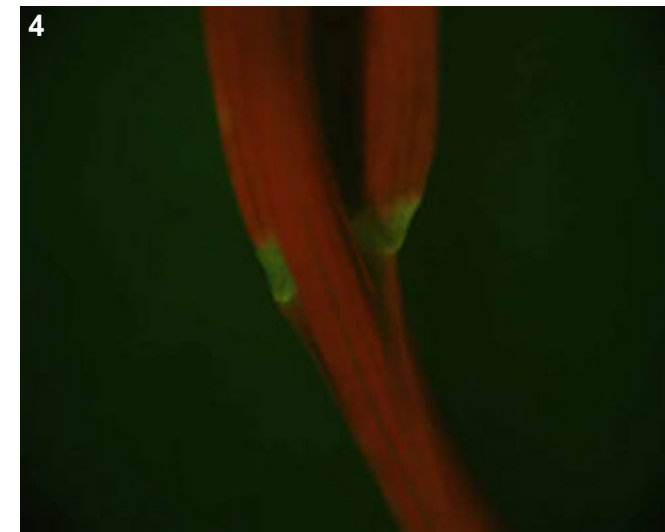
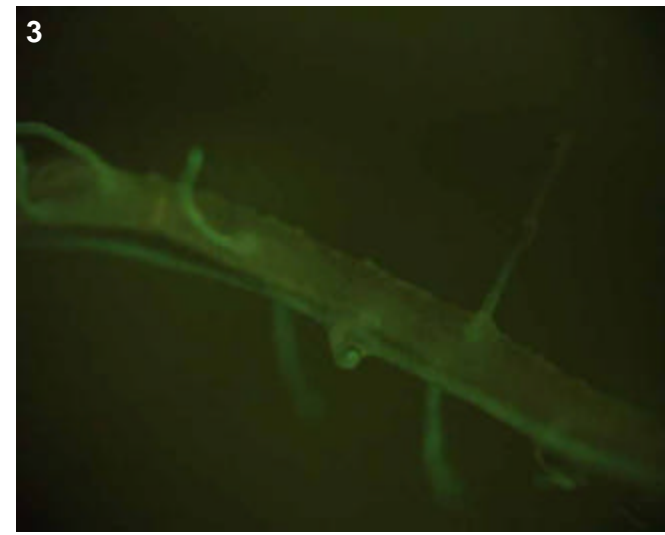
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASC C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

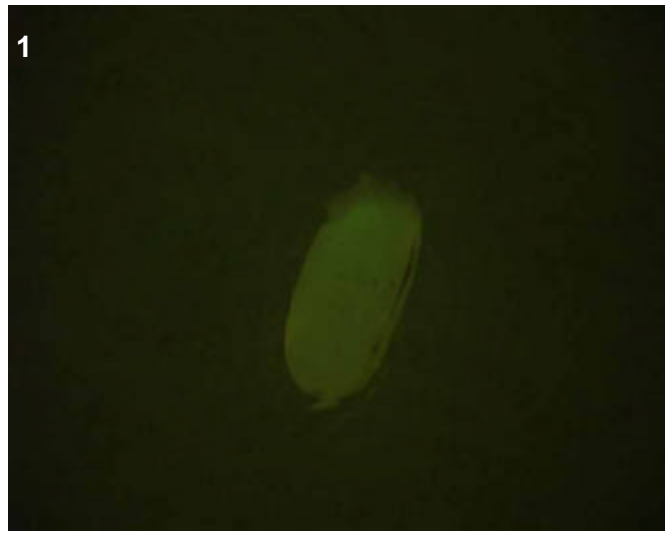
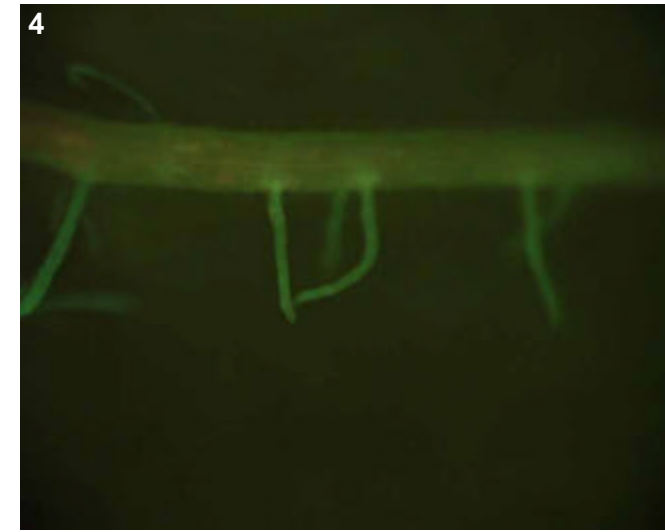
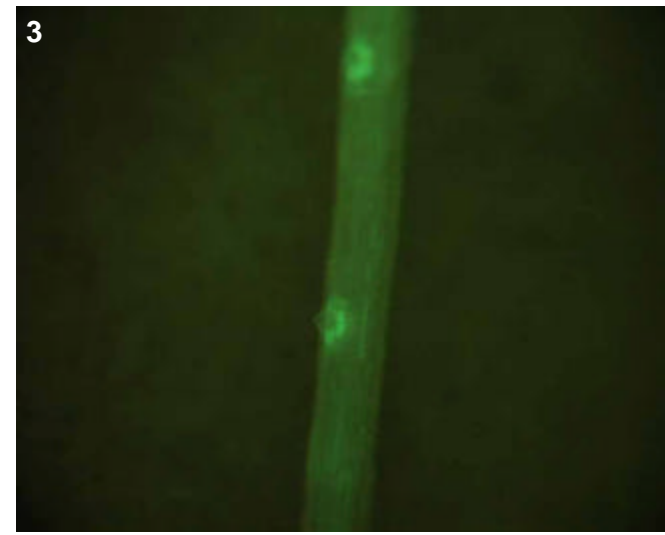
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

1/4 seeds had weak expression.

## T1 seedling comments

An interesting root-specific line with expression either in the stele or cortex/endodermis. Note how the expression in lateral root tips begins quite high up, apparently in the cell elongation zone (pic 2).

# Genotype: ASC C09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

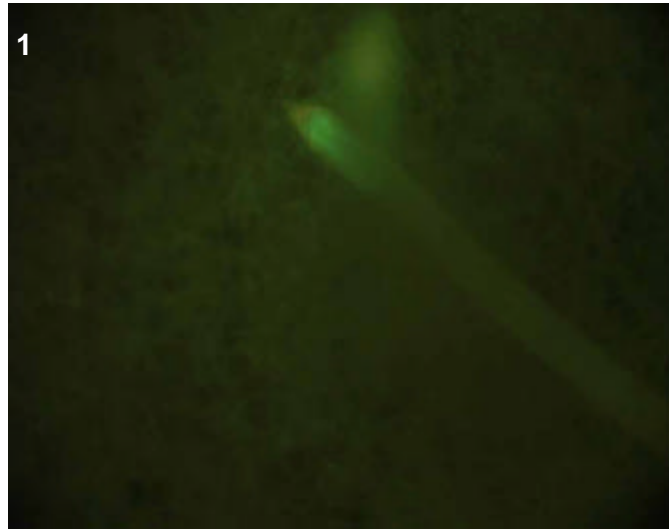
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression appeared specific to the zone of cell division (pic 1).

# Genotype: ASC E02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

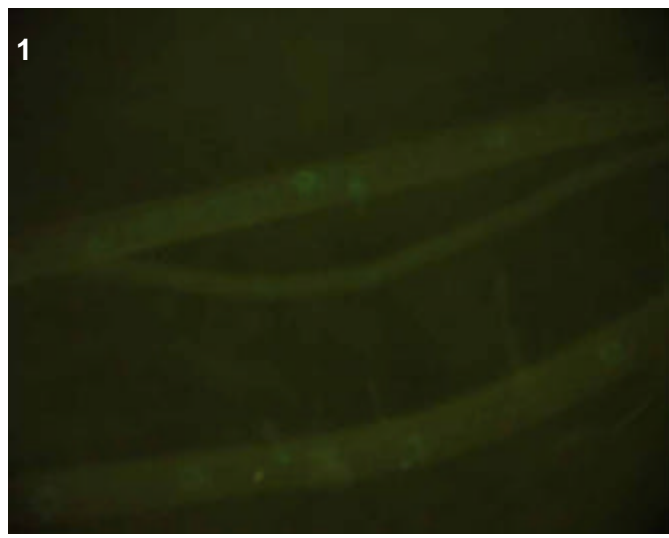
YES, 1 GFP+ plant

## Confocal?

WIP

Number T2 seed produced: 0

1



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression was brightest at the emergence zone of lateral roots, but there was also expression inside the root, probably in the stele (picture 1).

# Genotype: ASC E08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

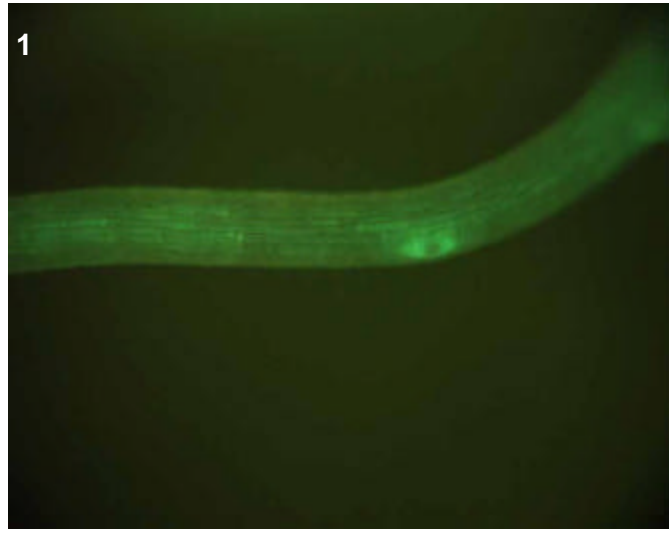
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 4



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASC G04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

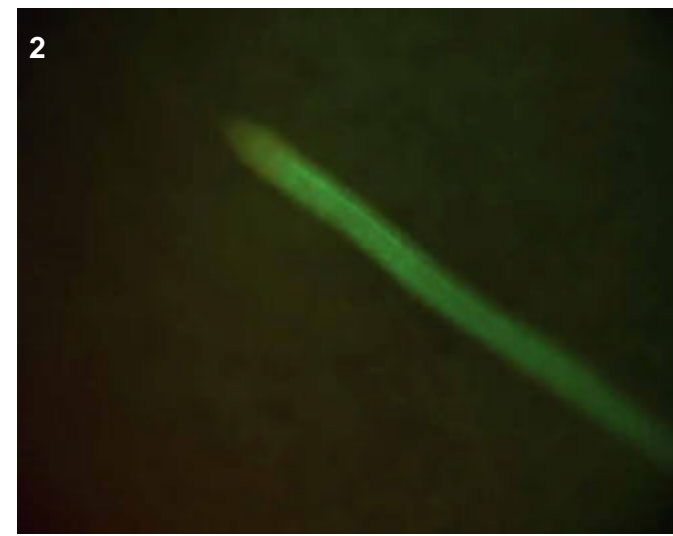
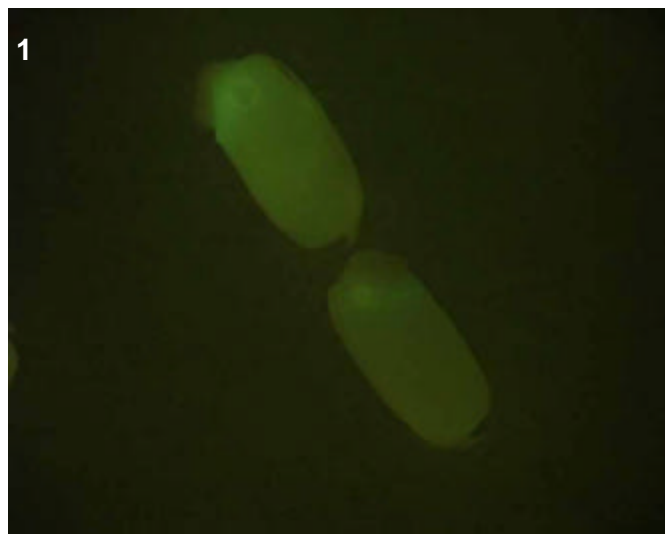
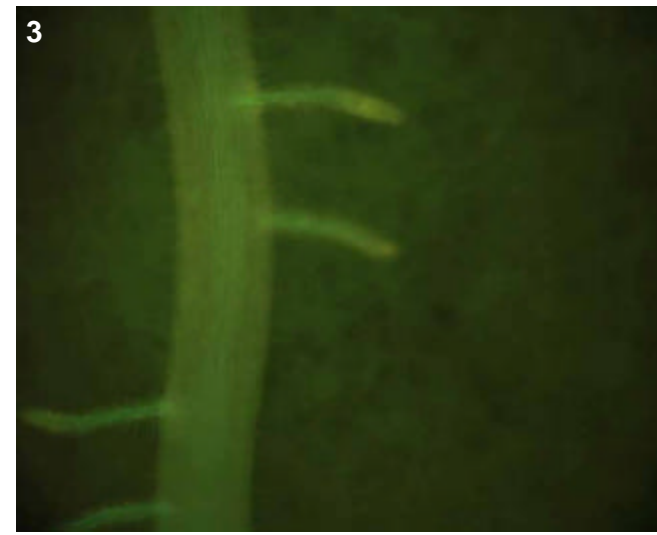
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 18



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

# Genotype: ASC G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

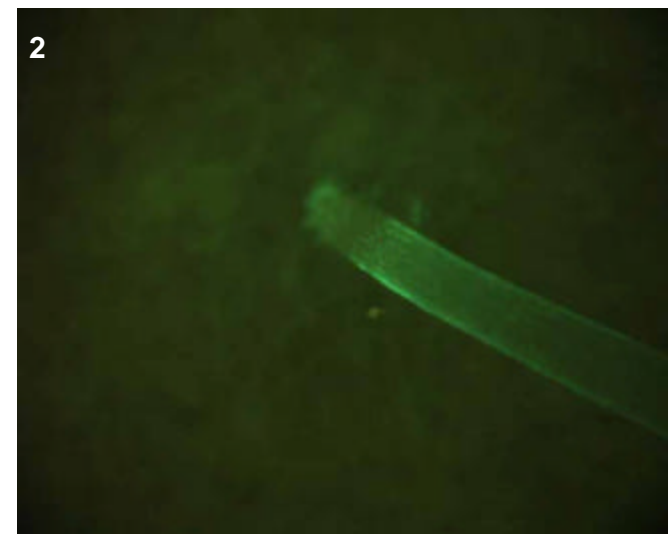
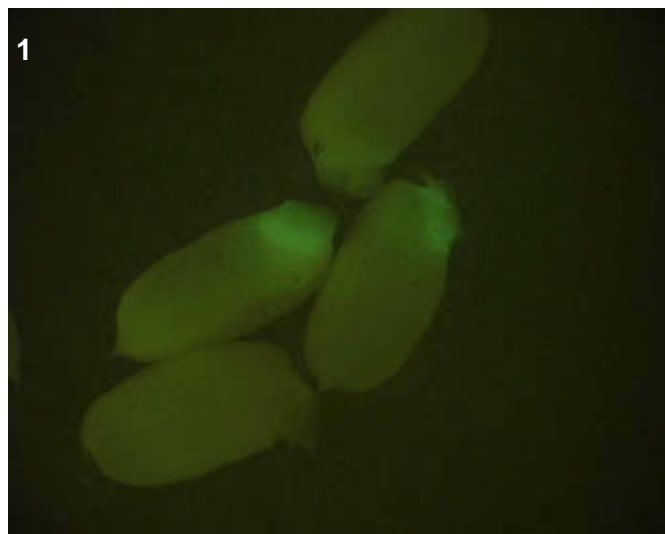
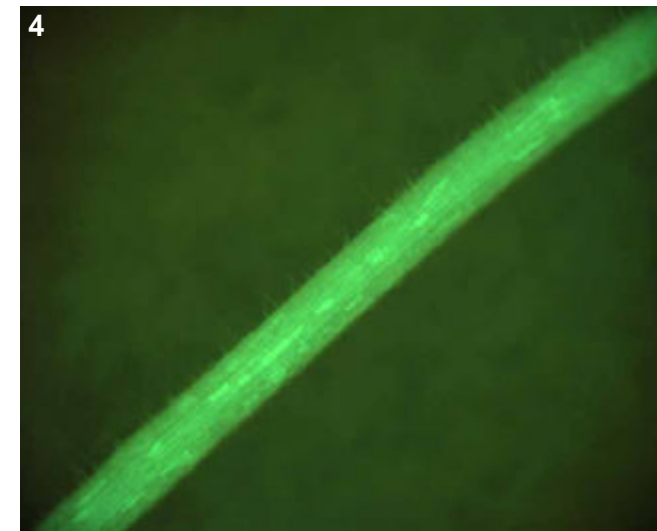
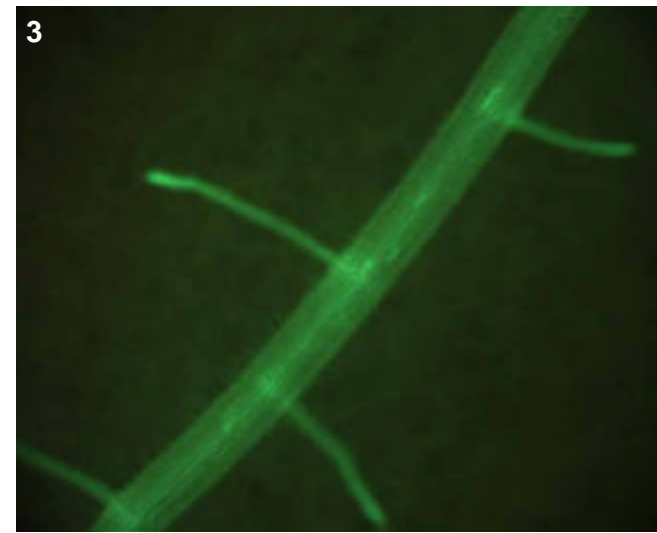
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

Surprising to find such bright expression in the root and not in the shoot. Could be an interesting line for confocal.

# Genotype: ASC H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

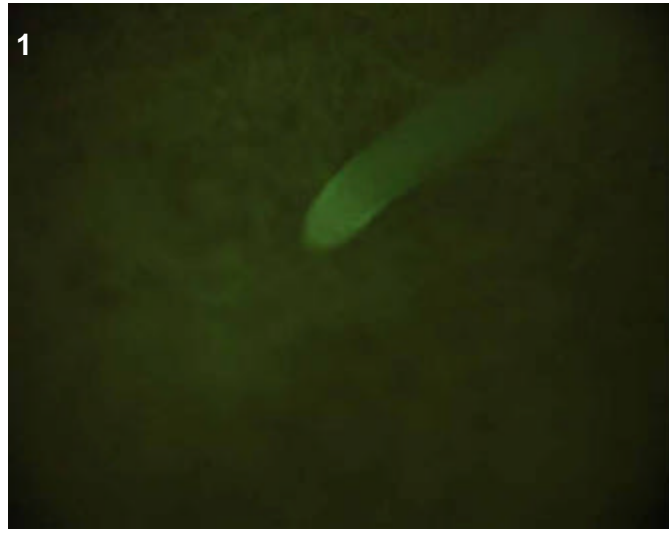
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks like a faint root epidermal-specific line (picture 1).

# Genotype: ASD A06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

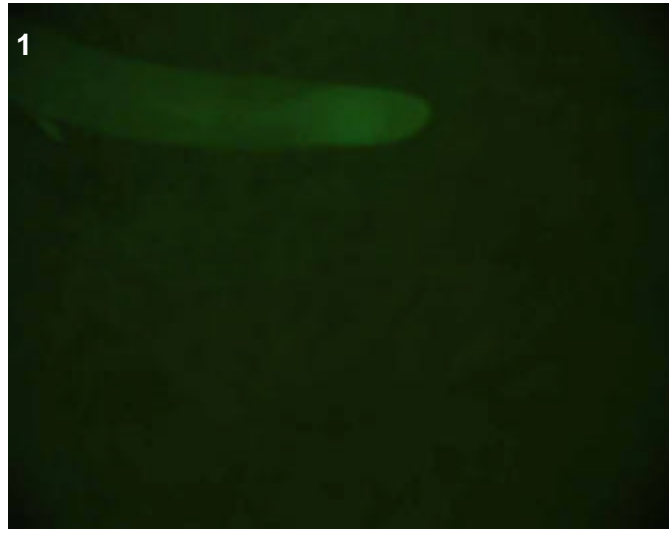
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 6



## T0 comments

## T1 seed comments

## T1 seedling comments

Just faint epidermal expression at the tip of young crown roots (picture 1).



# Genotype: ASD A07

## Screened

- T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

## Expression

- None  
 Bright  
 Medium  
 Weak  
 Unsure

## Pictures

- T0 mature plant:   
 T1 seed/seedling: 1-6  
 T1 mature plant:

## T0 Flower

- YES  
 POSSIBLE  
 Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

## T0 Blade

- YES  
 POSSIBLE  
 Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

## T0 Sheath

- YES  
 POSSIBLE  
 Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

## T1 Seed

- YES  
 POSSIBLE  
 Embryo  
 Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle

## T1 Seedling

- YES  
 POSSIBLE  
 SHOOT  
 ROOT  
 ENDOSPERM  
 Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells  
 S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis  
 Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

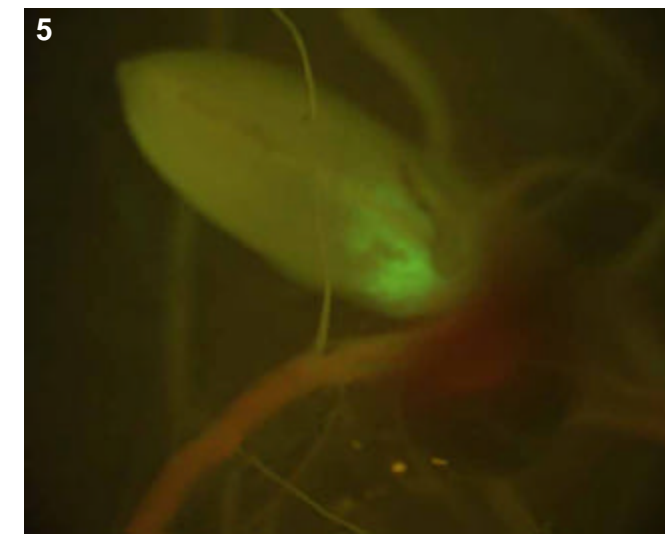
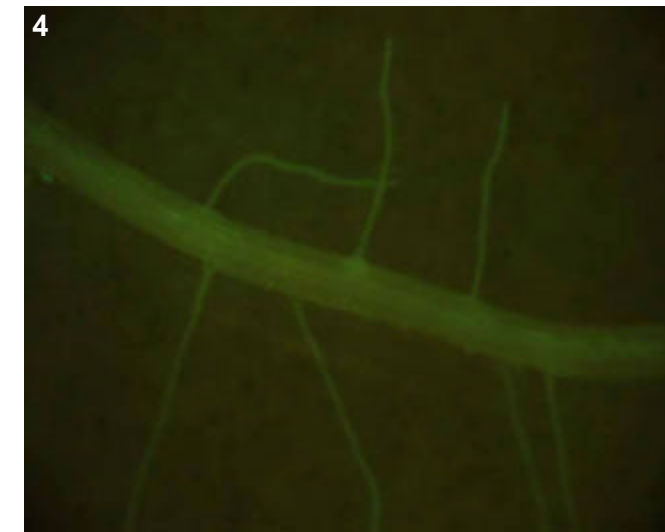
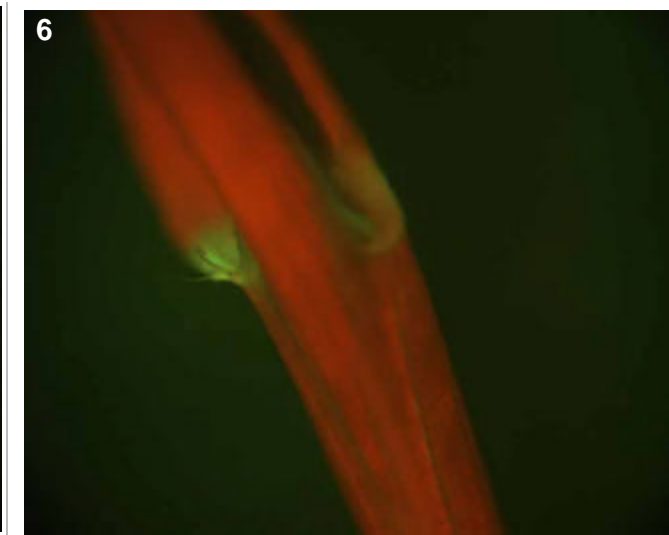
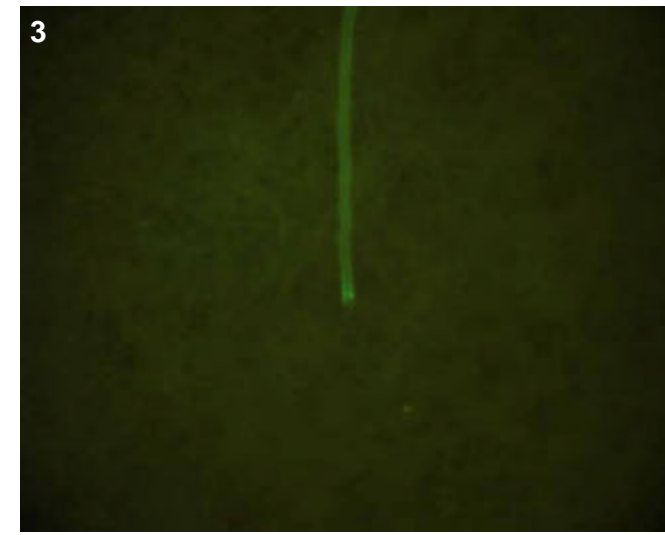
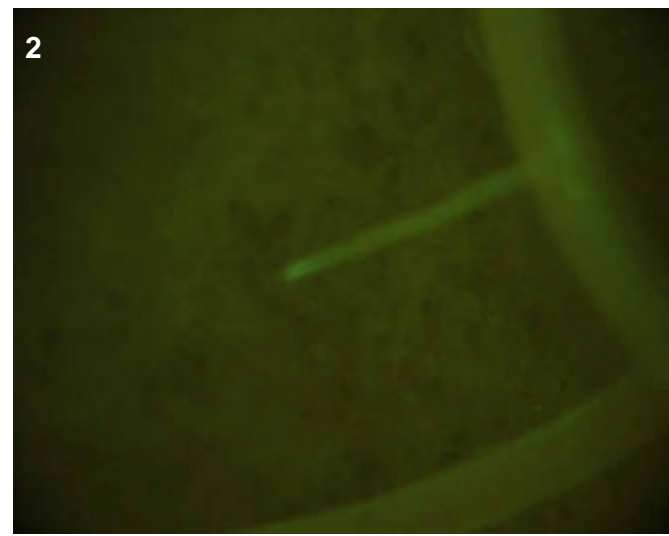
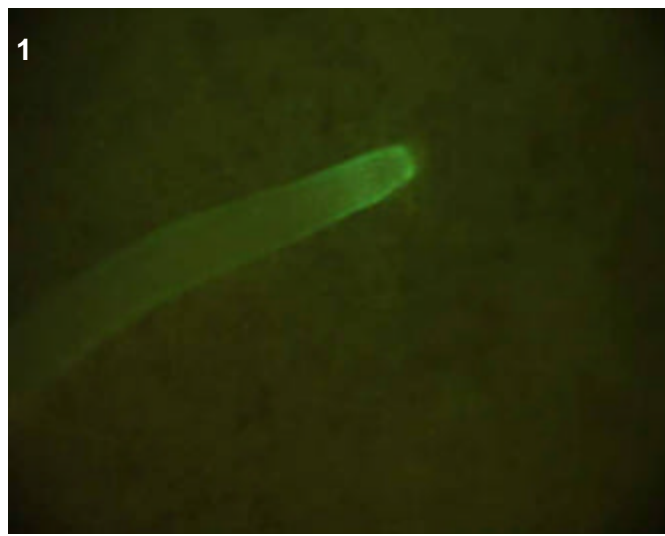
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 14



### T0 comments

### T1 seed comments

### T1 seedling comments

Root expression is epidermal near tips of crowns (pic 1), but I'm unsure of what is expressing in laterals (pics 2-4), could be in the stele or outside.

# Genotype: ASD A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

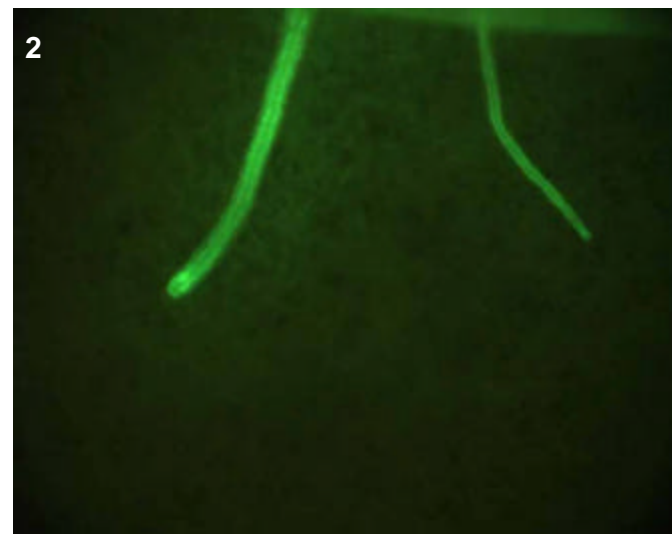
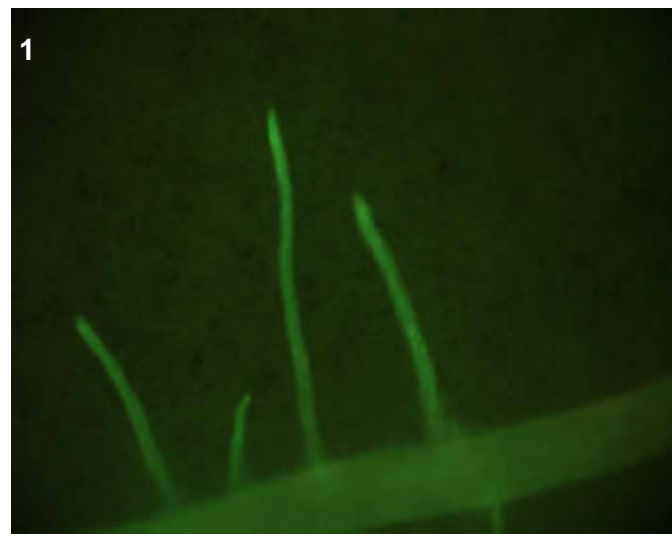
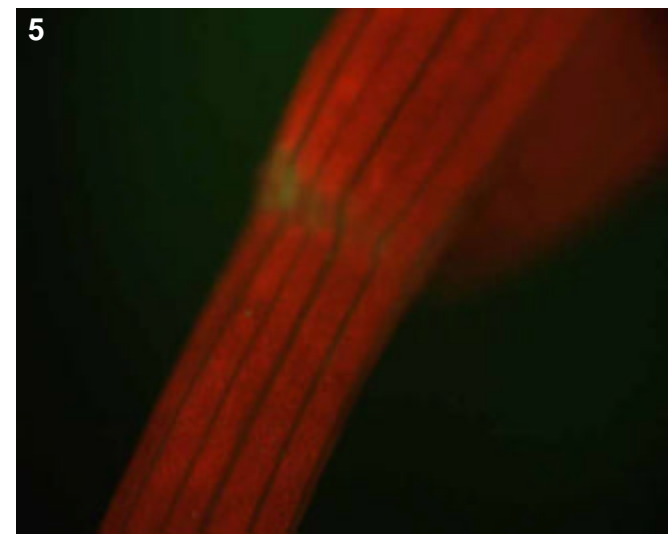
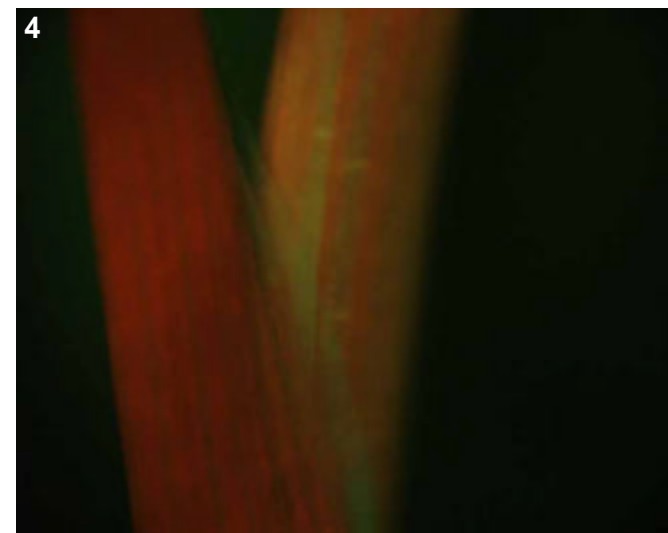
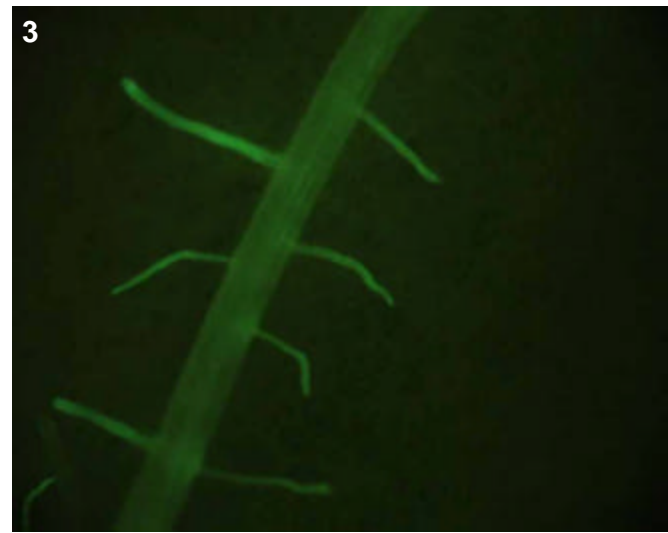
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression was brightest in the laterals and looked cortical (pics 1-3). Bright expression also observed near the base of shoot in the sheath (pic 4), perhaps those are horizontal vascular elements visible in the sheath?

# Genotype: ASD C01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

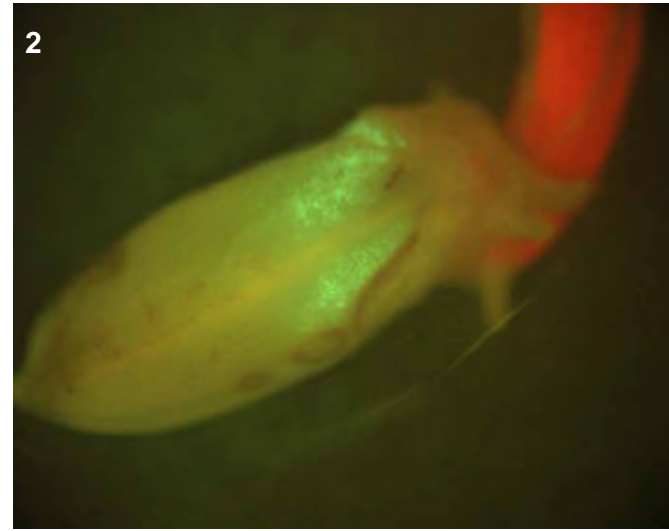
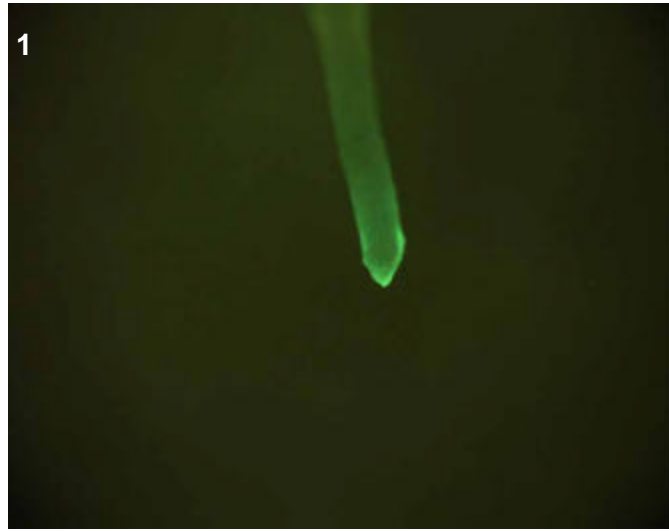
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASD C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling: 1-5
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

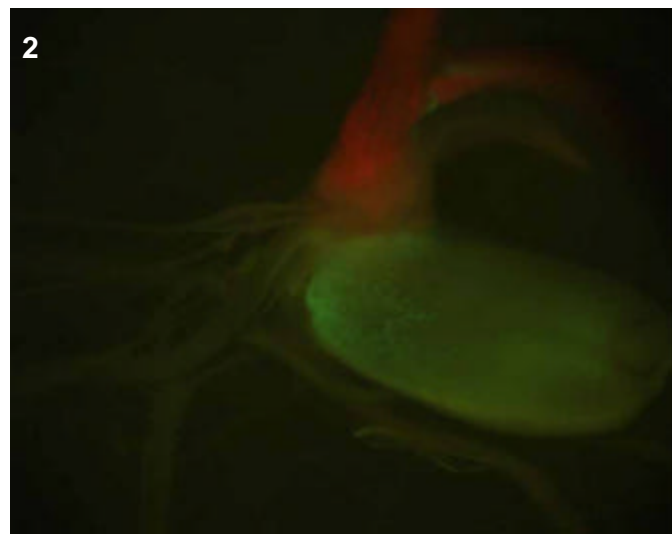
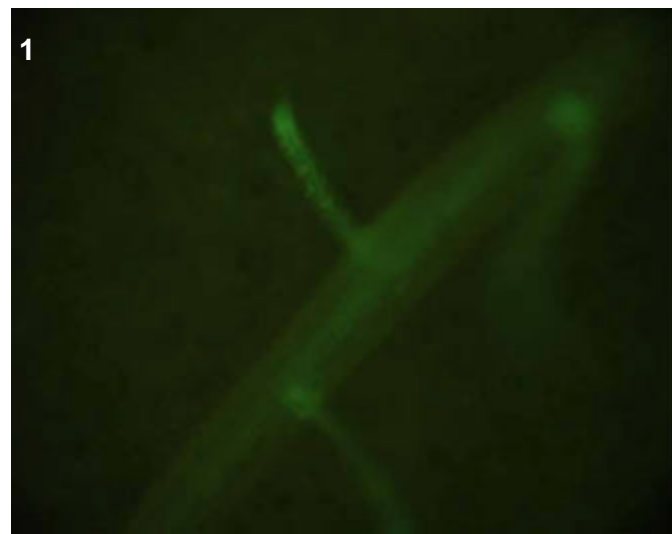
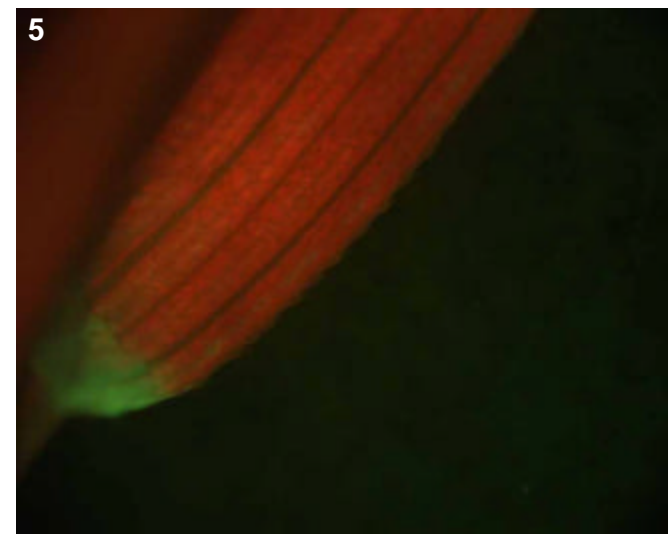
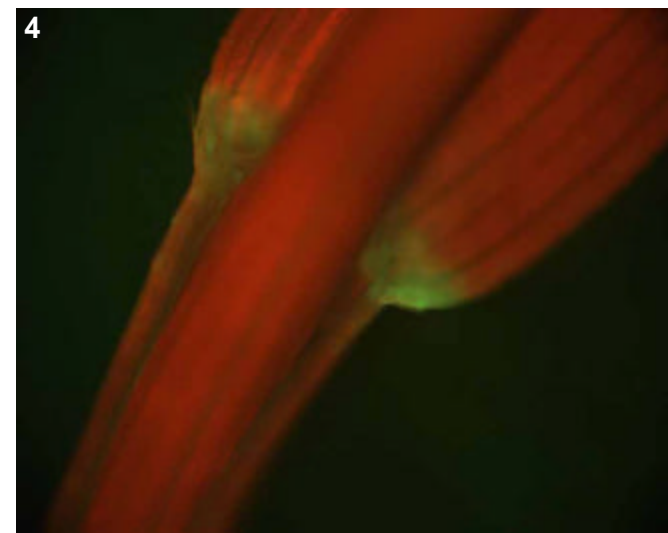
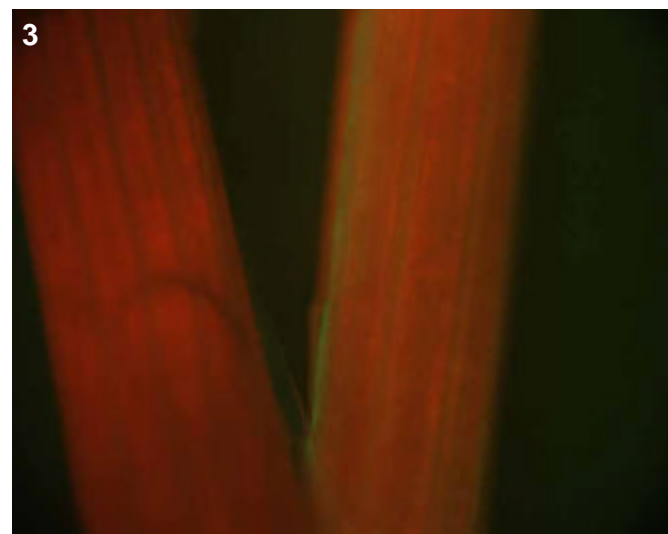
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

Confocal? WIP

Number T2 seed produced: 7



1

2

5

### T0 comments

### T1 seed comments

### T1 seedling comments

The shoot showed interesting expression other than just the collar (pics 3-5). There was a line visible running up margins of sheath (pic 3) and lines running up the leaf (visible above collar in pic 5) that did not appear to coincide with vascular tissue.

# Genotype: ASD C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-9  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

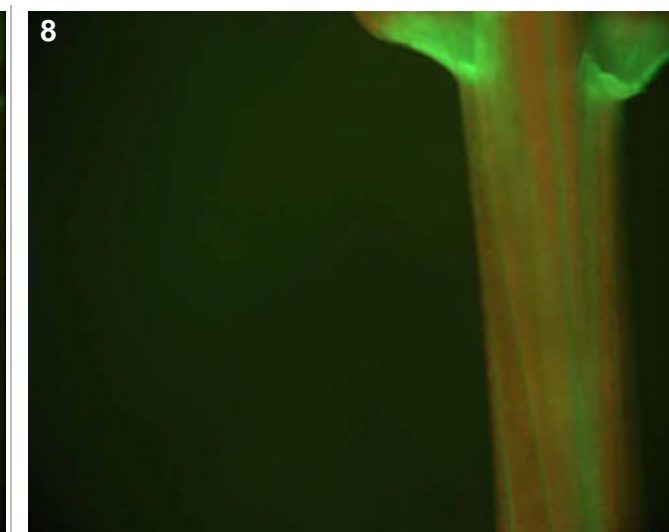
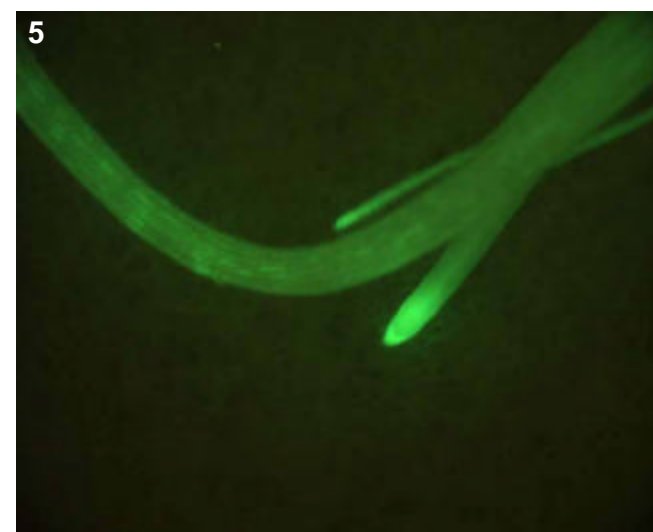
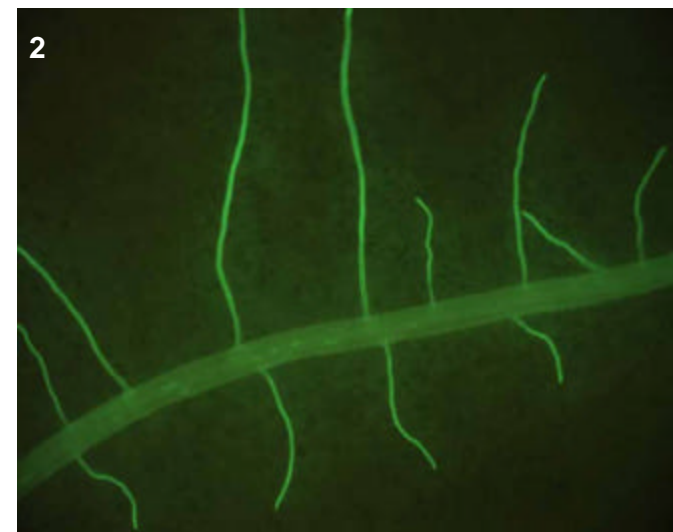
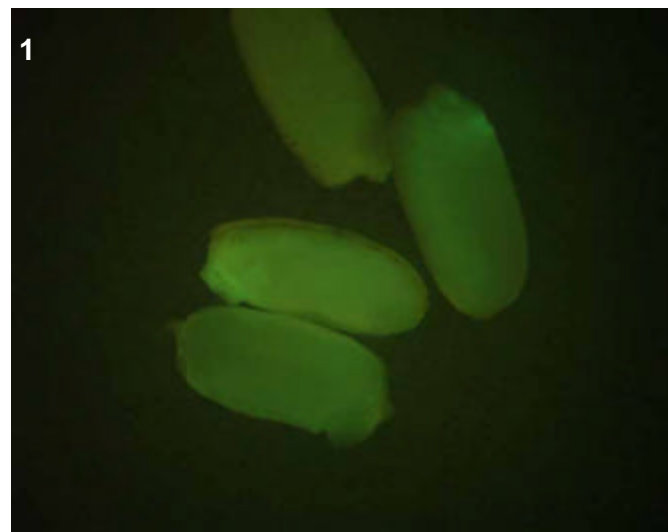
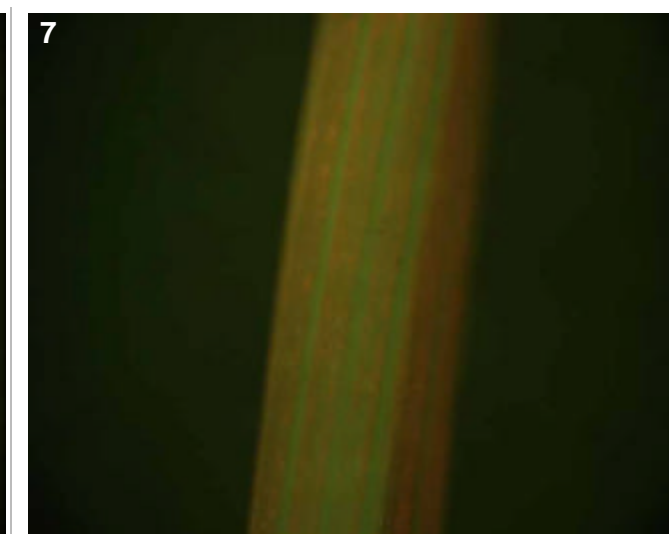
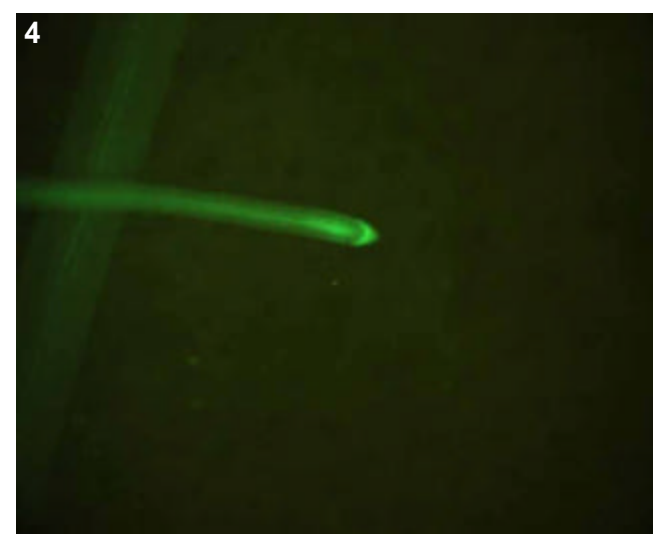
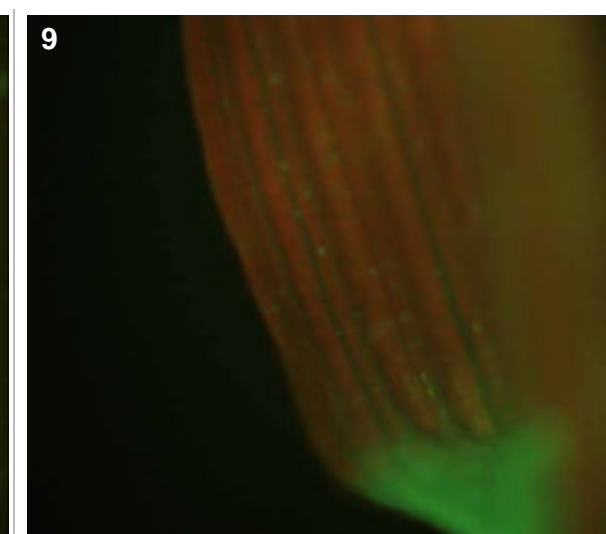
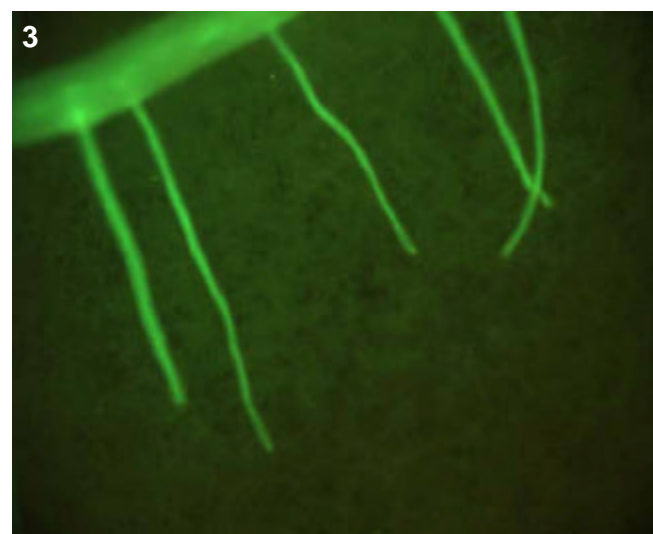
**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**

10



## T0 comments

## T1 seed comments

3/4 seeds had quite faint expression in the aleurone/endosperm layer (picture 1).

## T1 seedling comments

Extremely bright expression in root (pics 2-5), endosperm (pic 6), and shoot (pics 7-9). Perhaps this is constitutive expression?

# Genotype: ASD D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

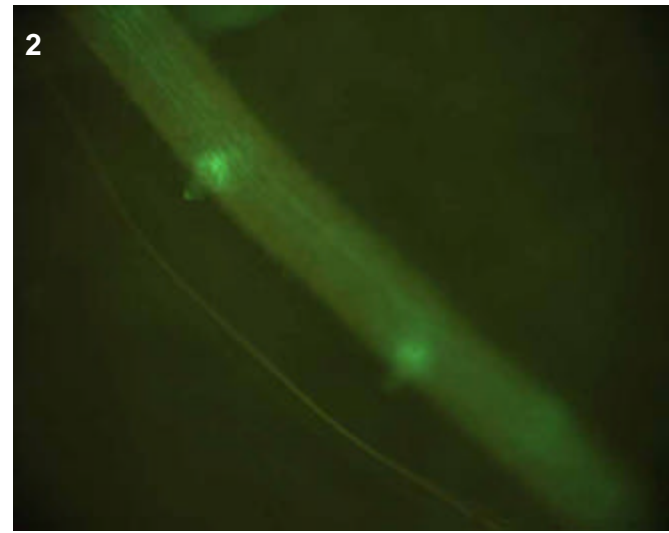
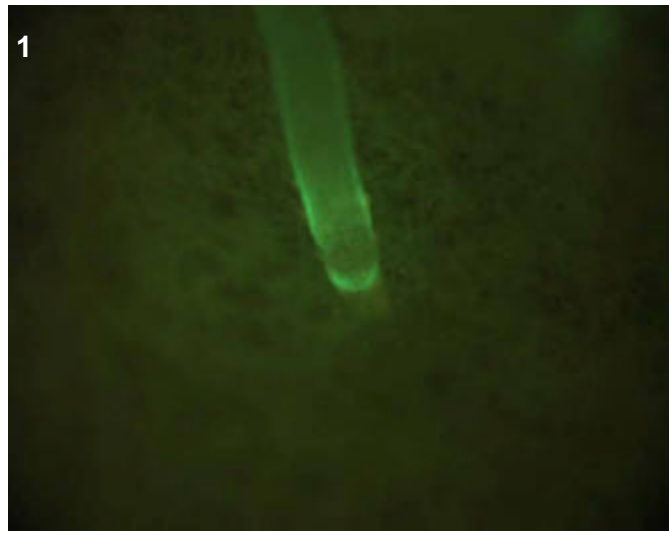
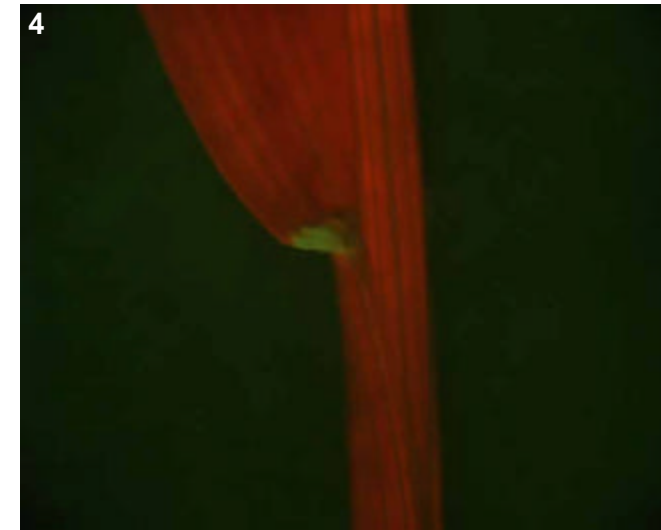
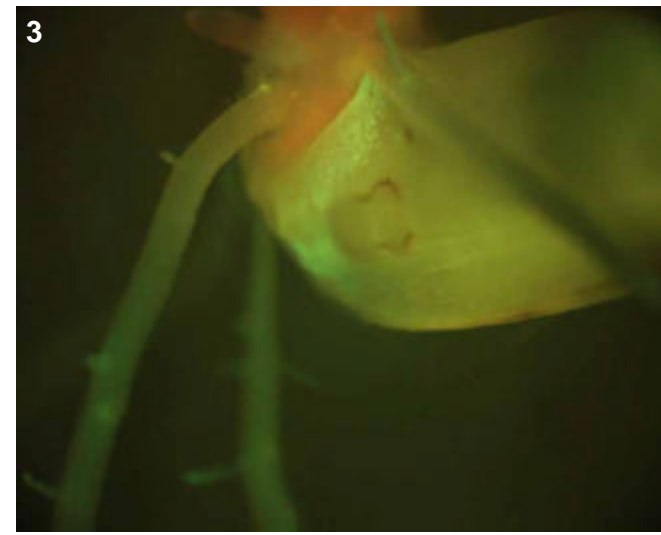
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

**Genotype: ASD E07**

**Screened**

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

**Expression**

- None
- Bright
- Medium
- Weak
- Unsure

**Pictures**

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

**T0 Flower**

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

**T0 Blade**

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

**T0 Sheath**

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

**T1 Seed**

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

**T1 Seedling**

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

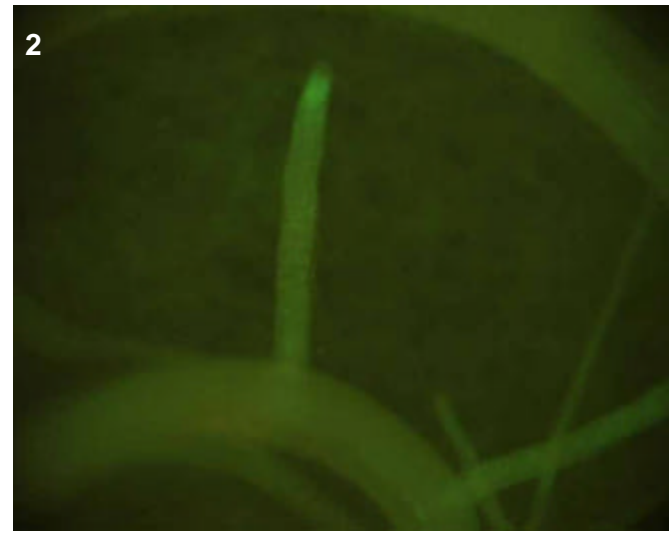
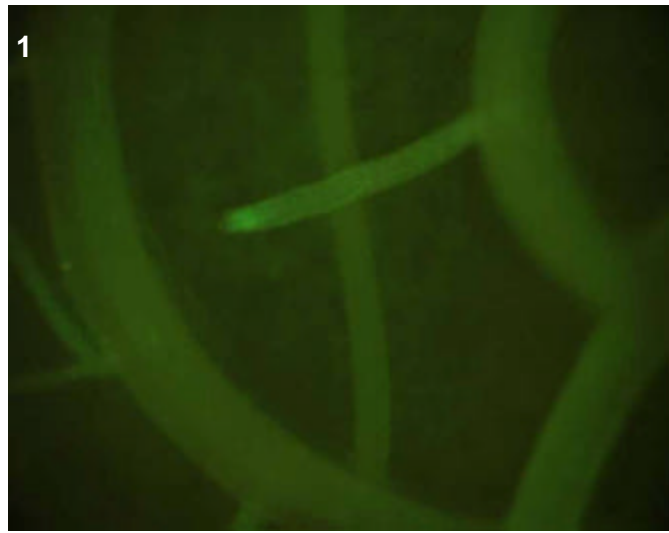
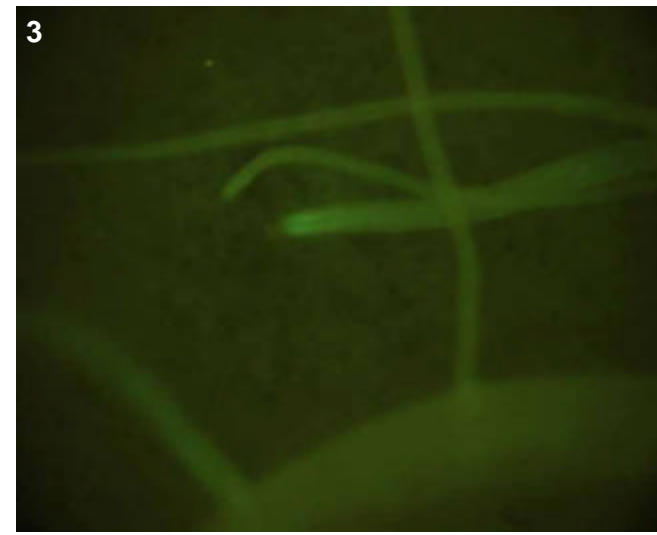
**T1 Mature**

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 11



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
Root expression interesting as it is most evident in the cell division zone of root tips of both laterals (pics 1-3) and crowns (pic 4). Collar and shoot vascular expression (pic 5) were faint.

# Genotype: ASD F10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling: 1-2
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

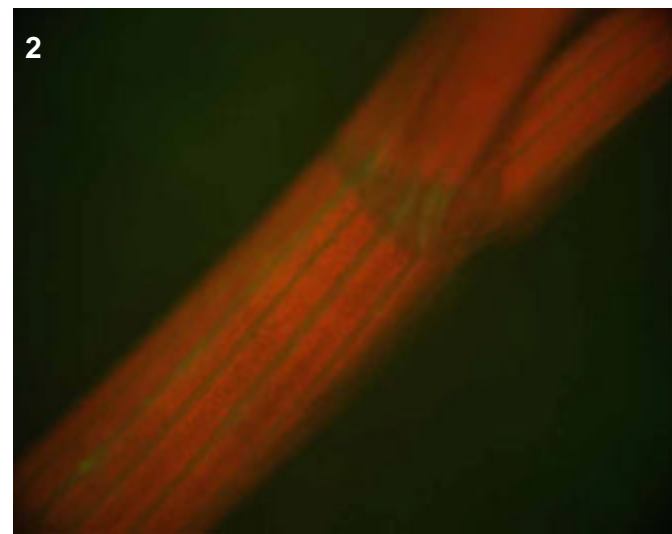
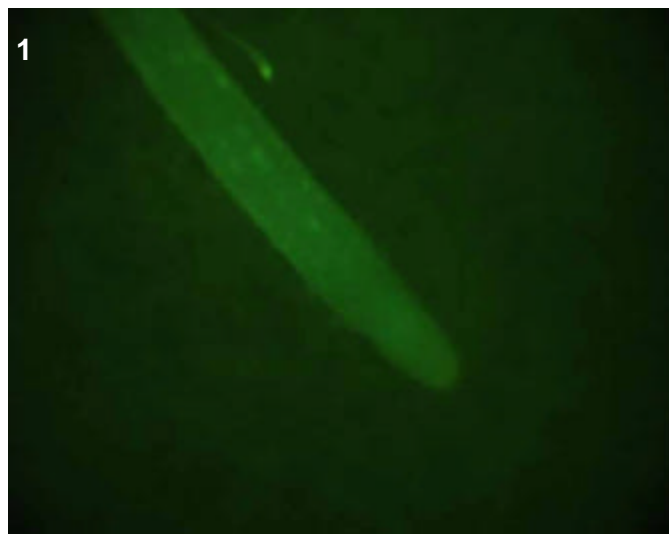
## T1 in greenhouse?

YES, 3 GFP+ plants

## Confocal?

WIP

Number T2 seed produced: 7



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint epidermal expression in roots (pic 1). In the shoot, collar expression was faint while vascular was much brighter (pic 2).



# Genotype: ASD G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

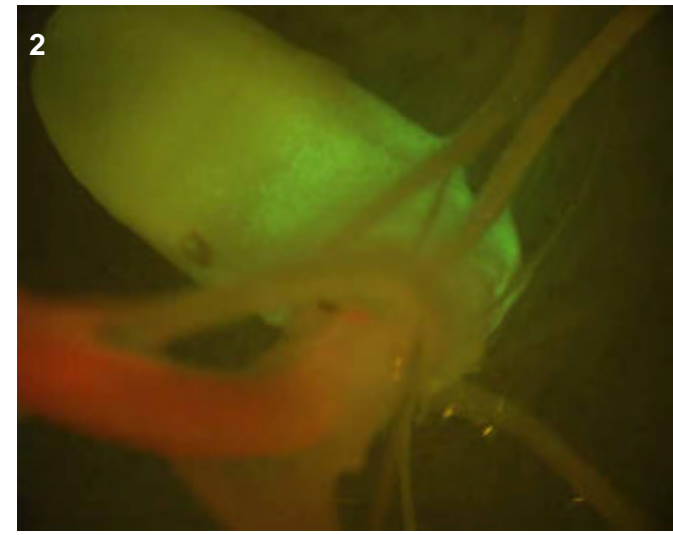
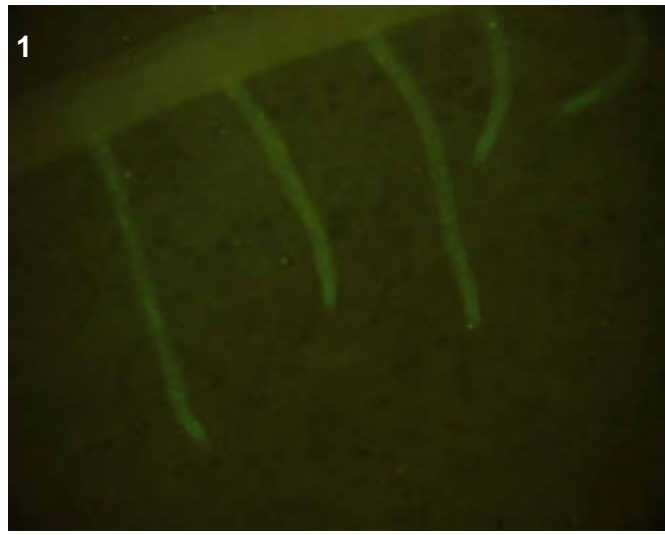
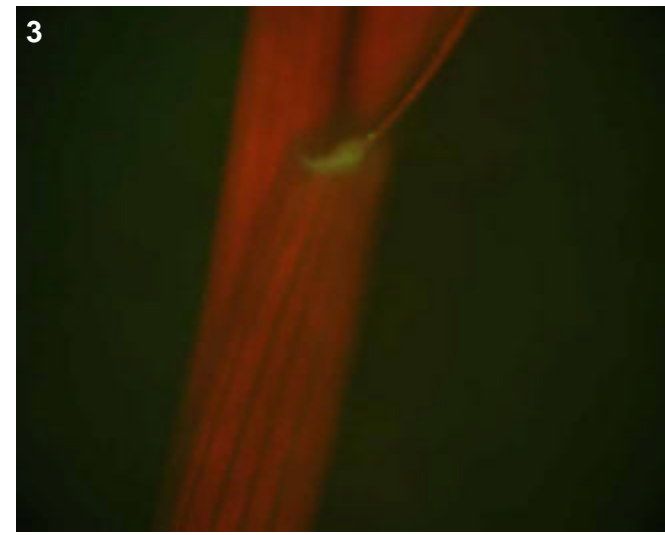
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 17



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression looked specific to the stele (pic 1), expression was brighter near the tips.

# Genotype: ASD H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

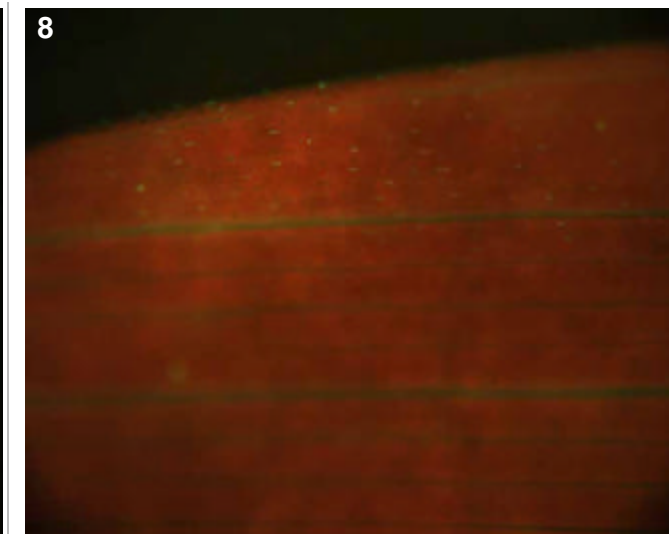
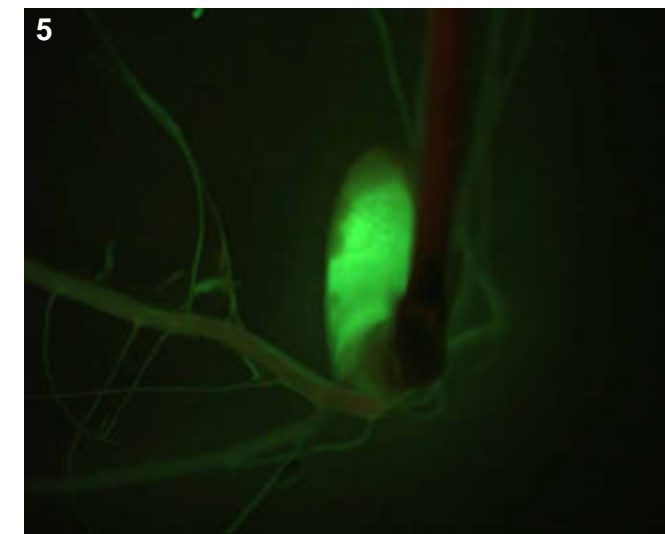
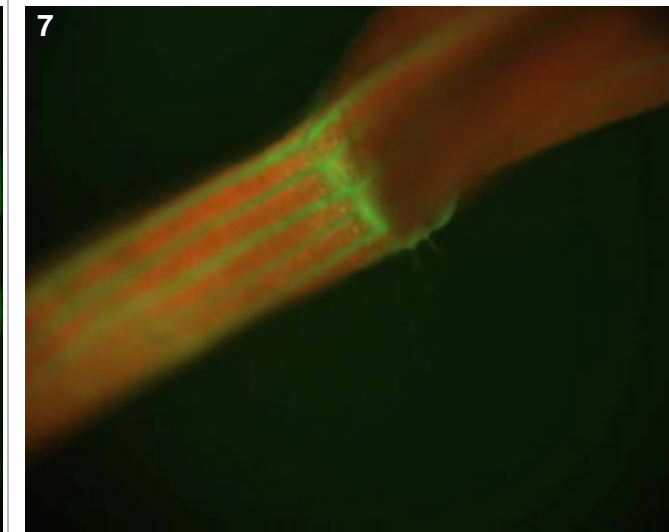
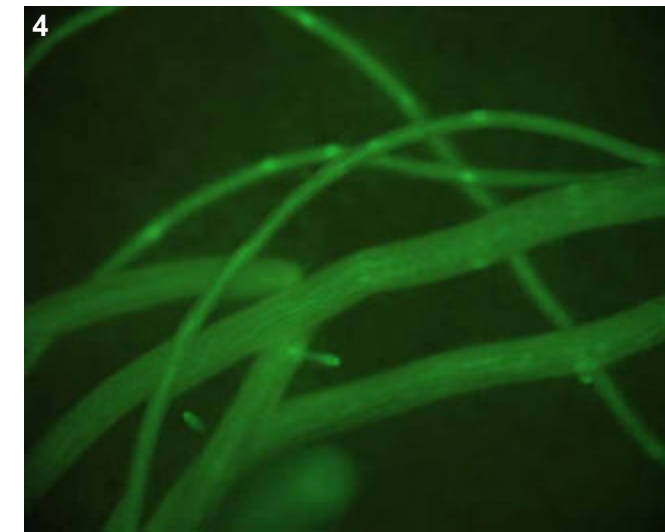
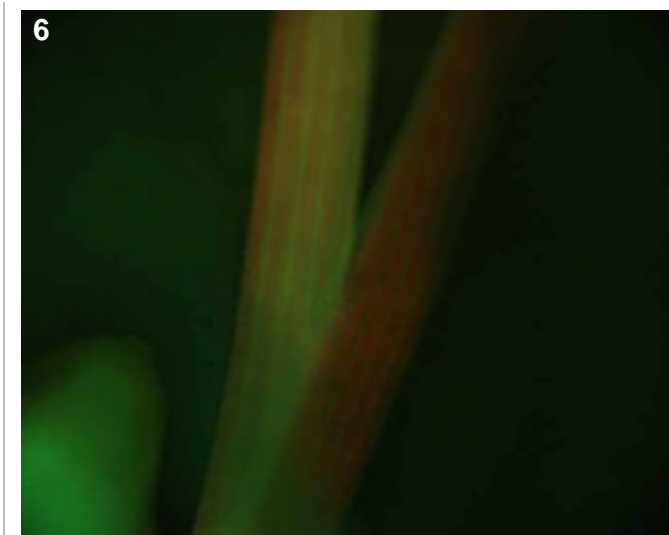
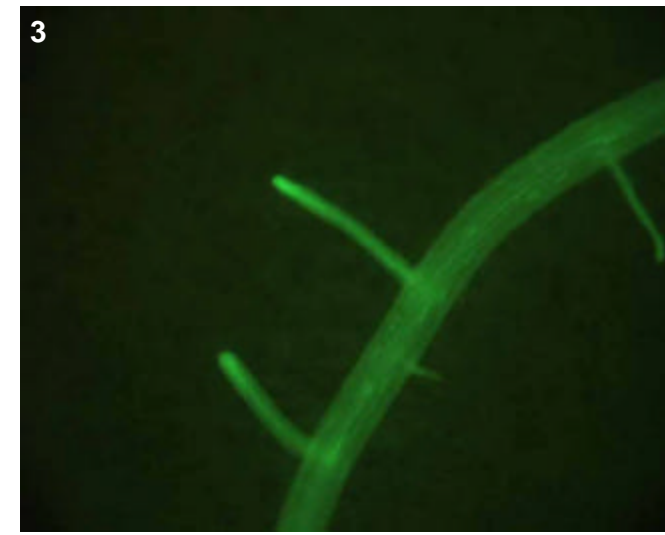
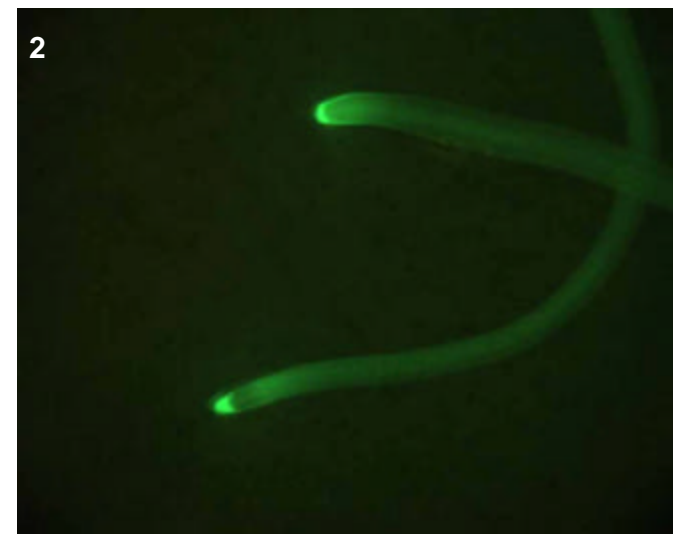
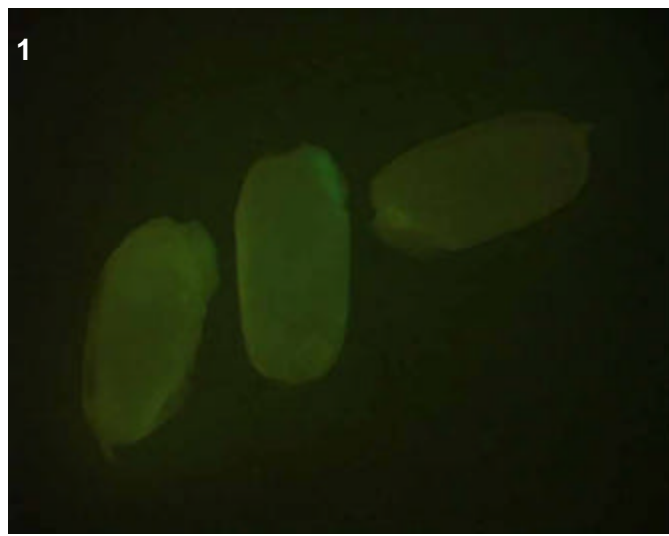
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 9



## T0 comments

## T1 seed comments

3/5 seeds had medium expression in the coleorhiza and, more faintly, in the aleurone/endo. layer.

## T1 seedling comments

Extremely bright expression in the root (pics 2-4), endosperm (pic 5) and shoot (pics 6-8). It is rare to see a line with vascular tissue as bright in the shoot as seen in pictures 6 and 7.

# Genotype: ASE B05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

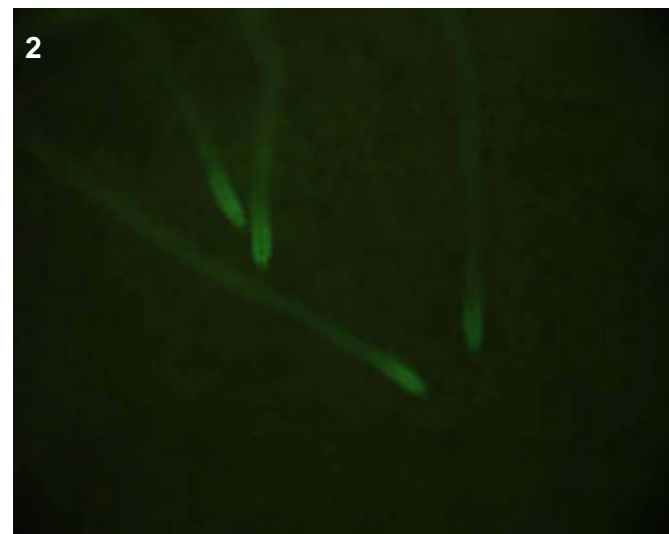
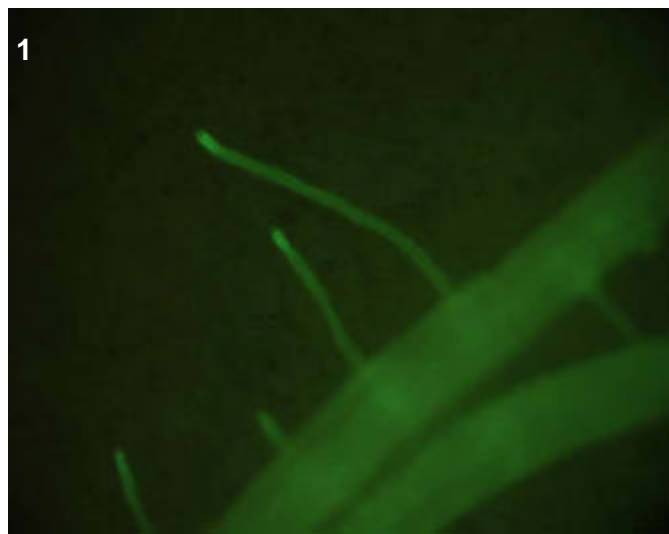
**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:** 5

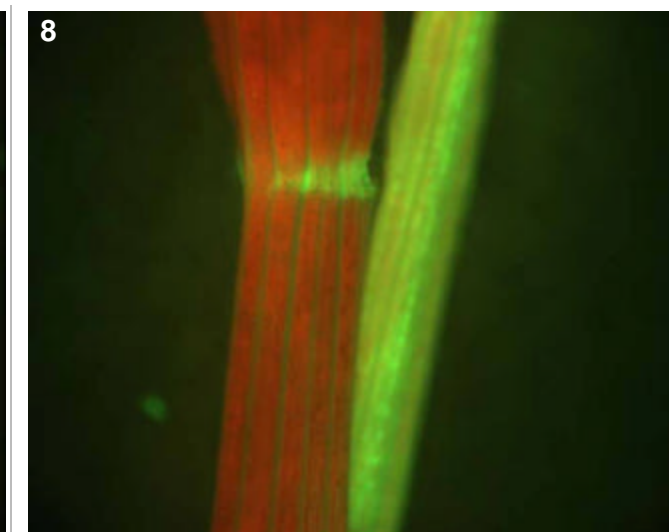
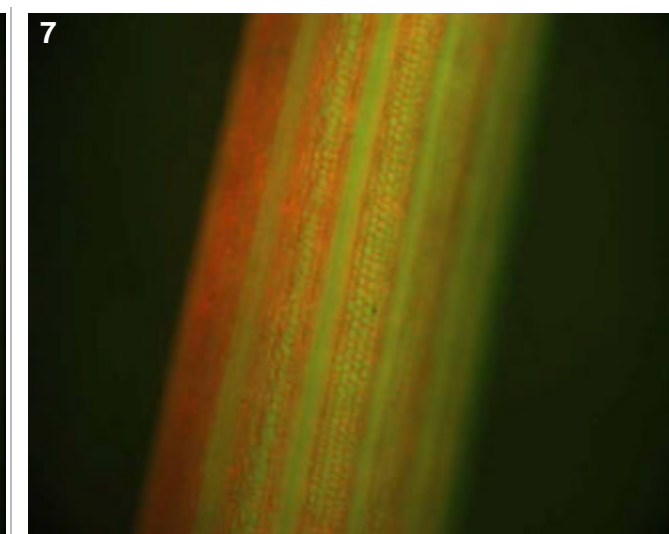
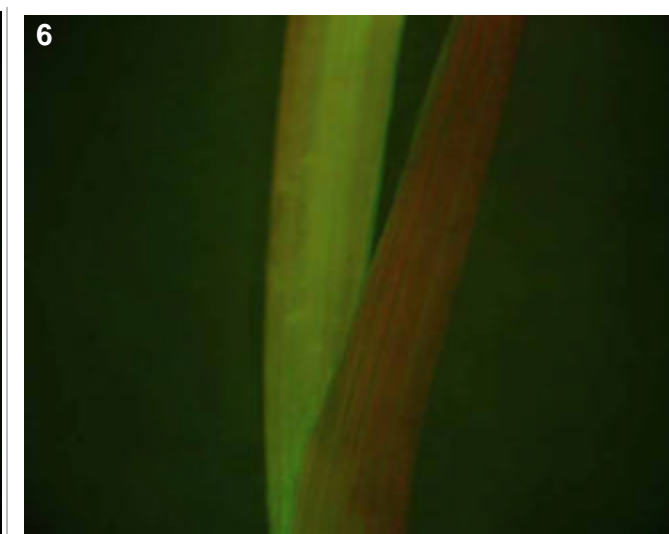


### T0 comments

### T1 seed comments

### T1 seedling comments

Root expression (pics 1-4) is probably cortical and gets much brighter at tips. Laterals roots such as those in picture 2 could be interesting to confocal. Sheath tissue is much brighter than leaf tissue (pics 7-9). The pattern on sheath (best seen in pic 7) could also be interesting to confocal.



# Genotype: ASE B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

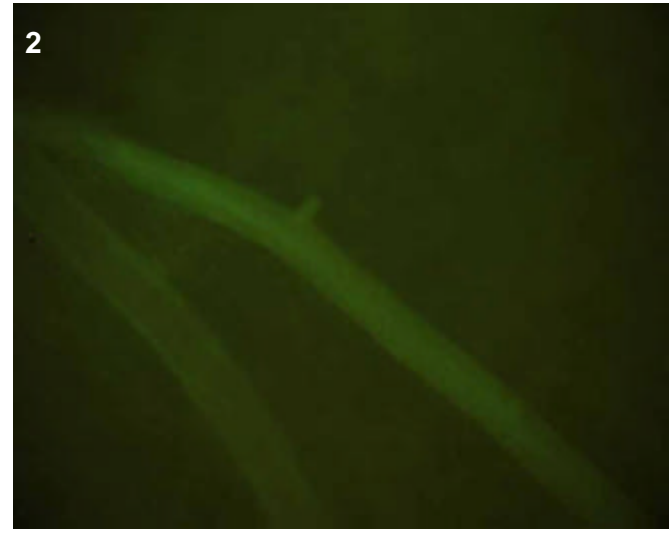
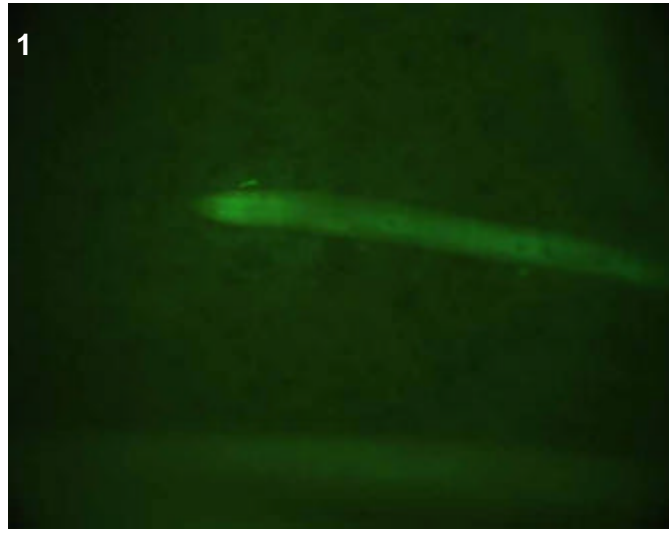
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 14



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASE B11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

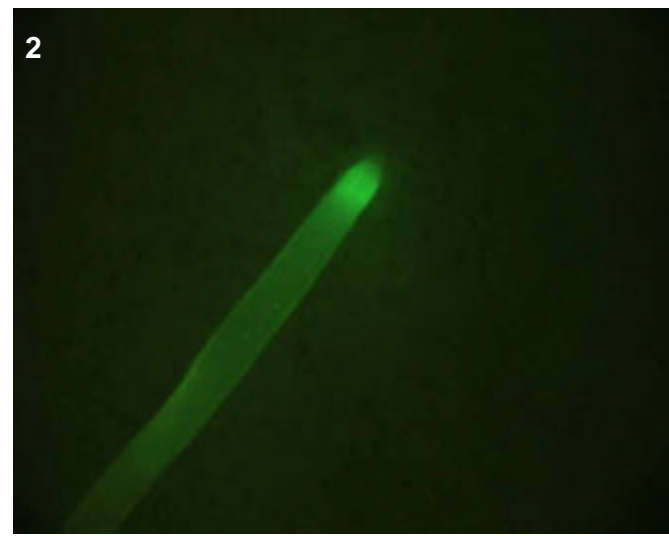
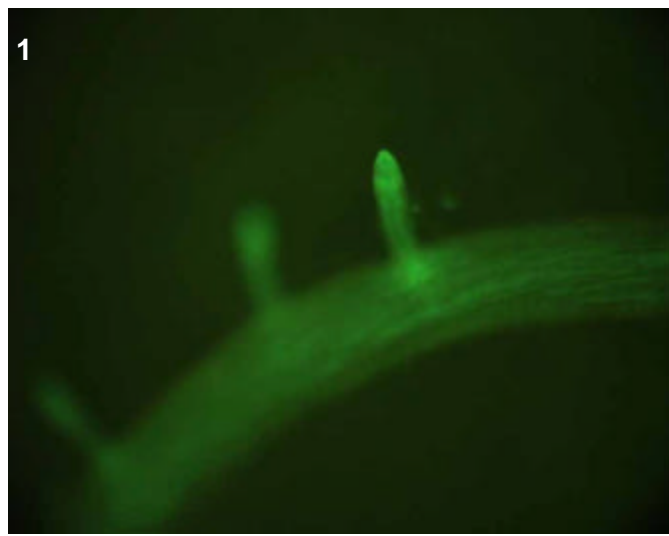
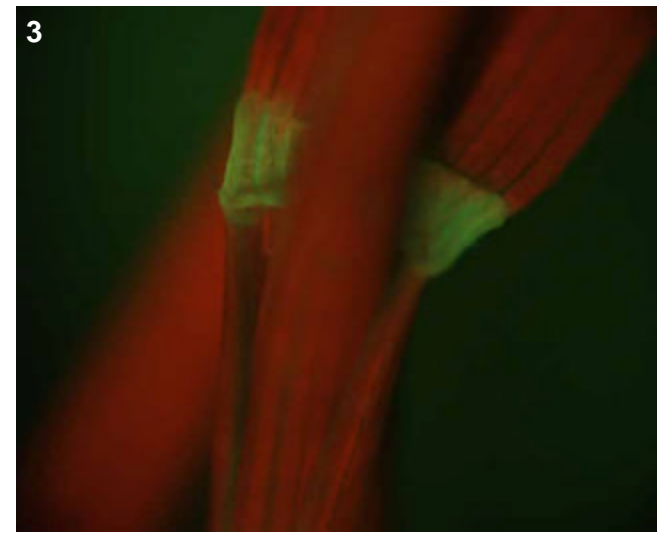
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Collar expression (pic 3) looks different than what is normally seen in that the vascular elements look unusually distinct and bright.

# Genotype: ASE C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

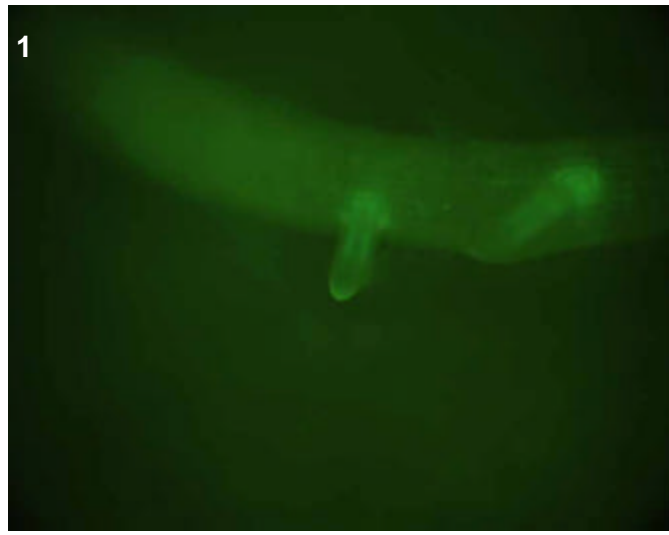
No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

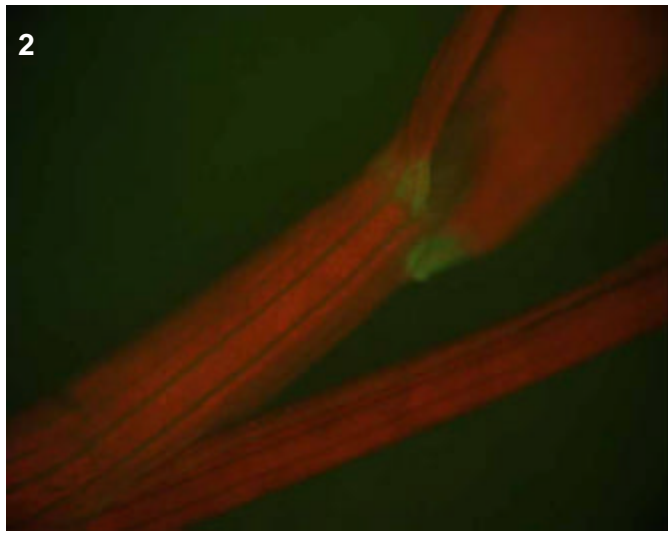
**Confocal?** WIP

**Number T2 seed produced:** 7

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

The expression in lateral roots (picture 1) looks very distinct and interesting in that it appears to begin in the cell elongation zone.

# Genotype: ASE E08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

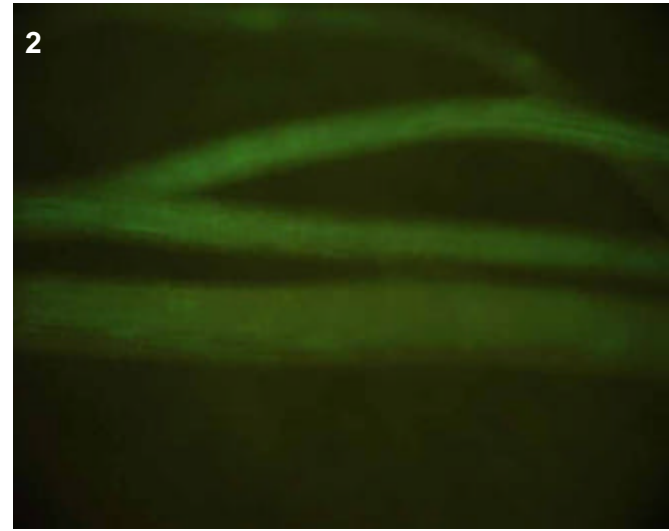
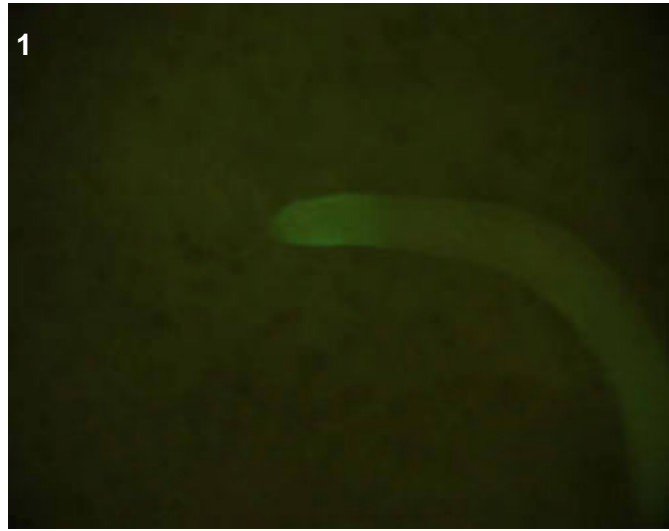
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 3



## T0 comments

## T1 seed comments

## T1 seedling comments

A root-specific line, with expression in the epidermis and/or cortex/endodermis (pics 1-2).

# Genotype: ASE G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

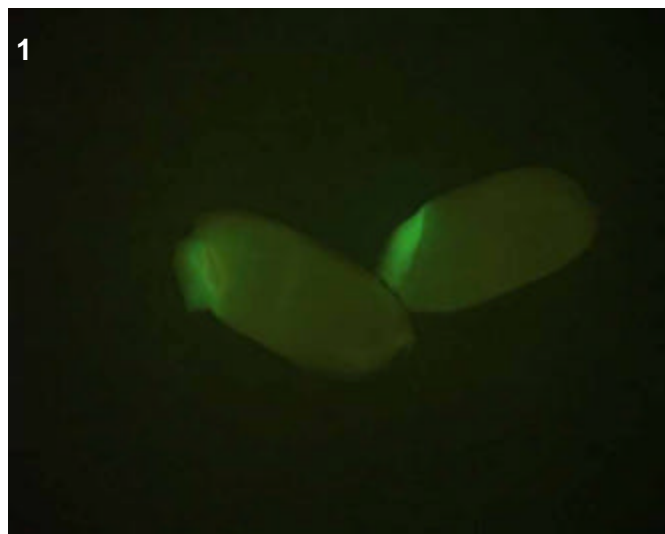
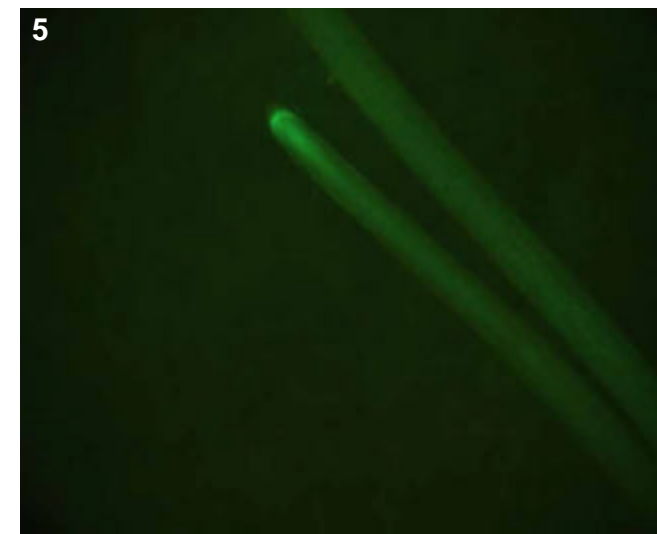
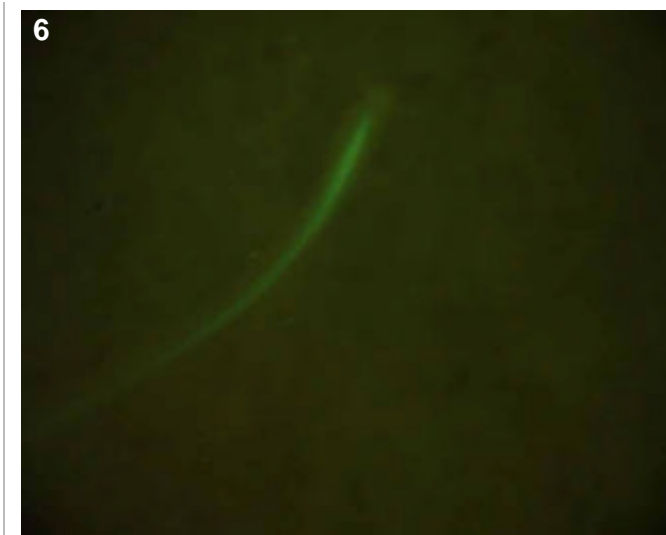
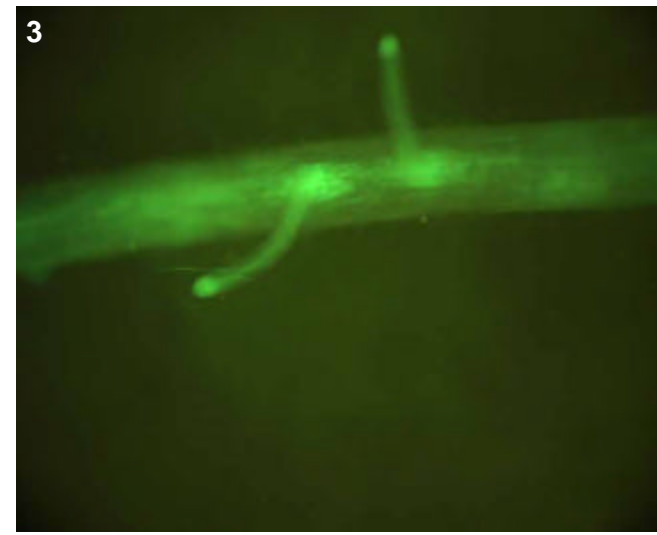
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had bright expression.

## T1 seedling comments

A fantastic root-specific line. The pattern in the seminal and crowns is clearly stelar, most evident by picture 2. In young crowns and all laterals, stelar expression is accompanied by a bright burst of activity near/in the root apex (pictures 3-5). One plant was normal, one very small, perhaps a mutant?



# Genotype: ASF A06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

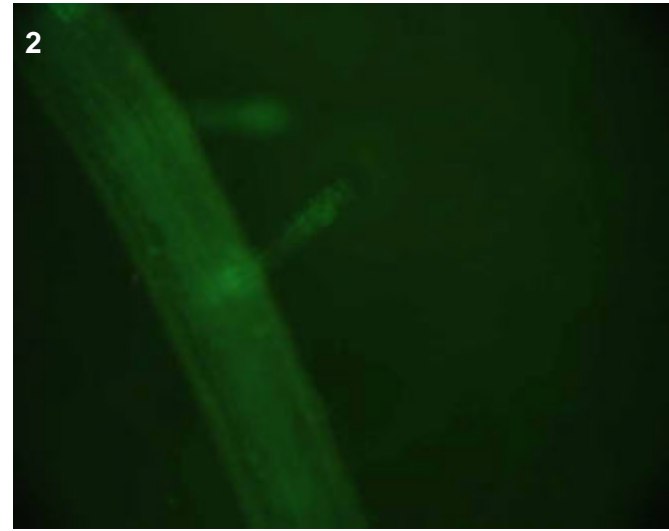
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASF B11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

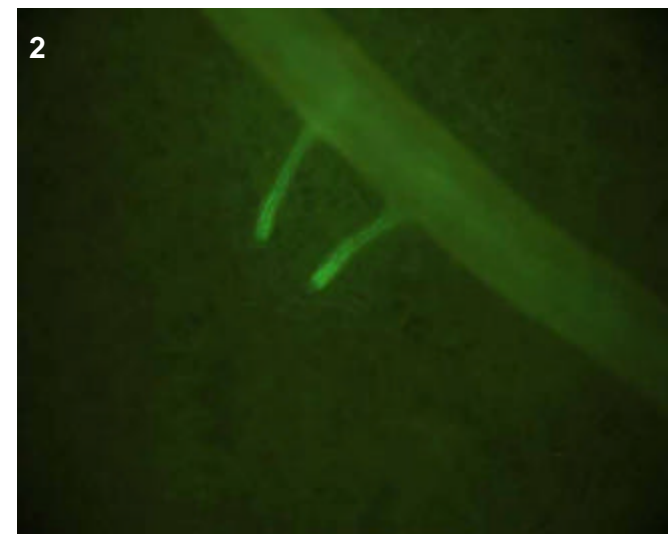
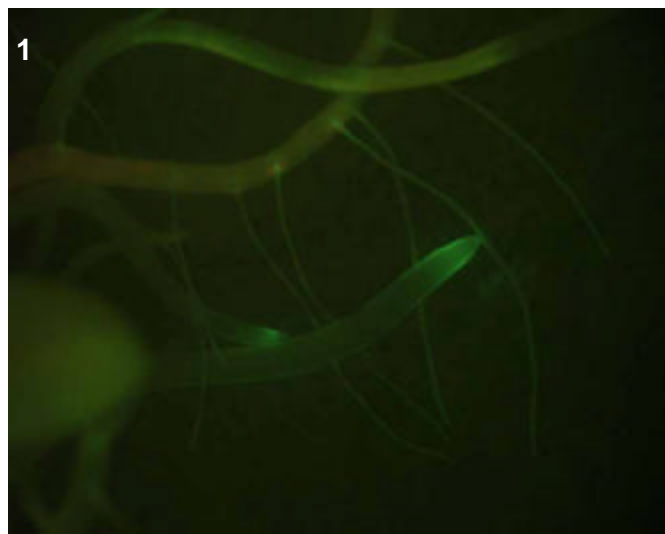
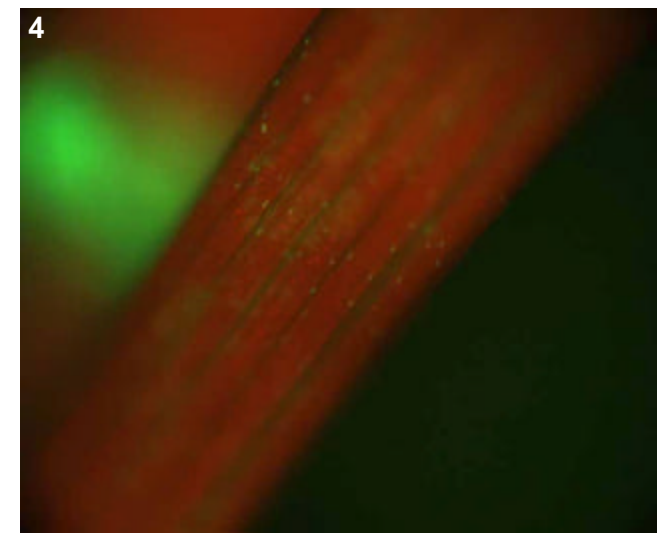
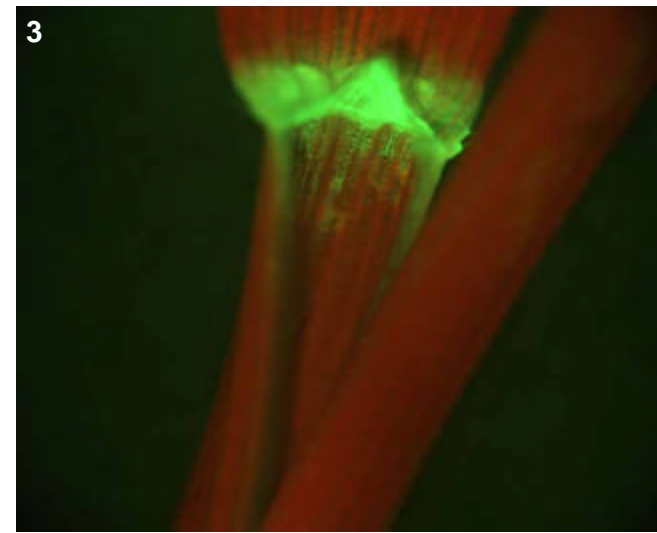
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

It was noted that this line may be a root mutant.

# Genotype: ASF C02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

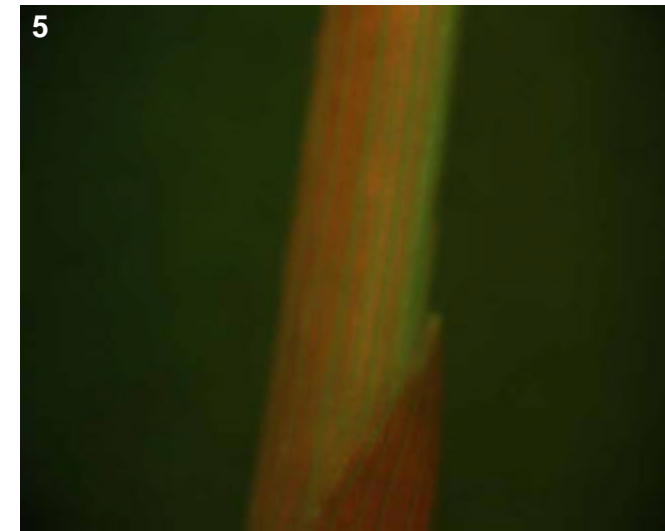
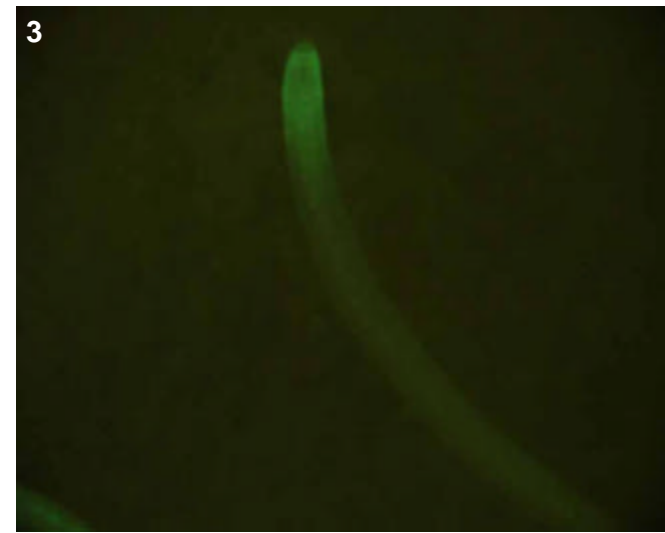
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Note the bright vascular elements in the sheath (picture 5).

# Genotype: ASF C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

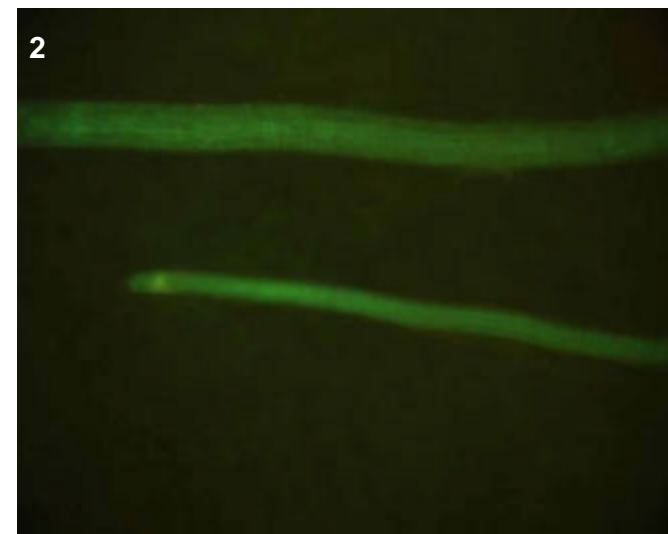
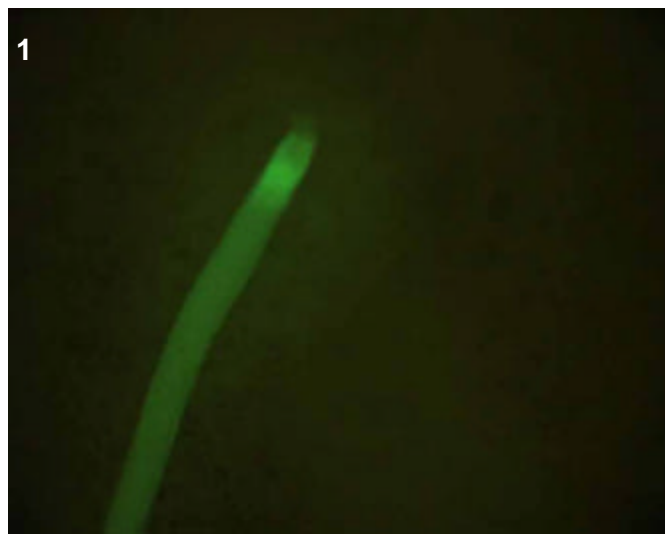
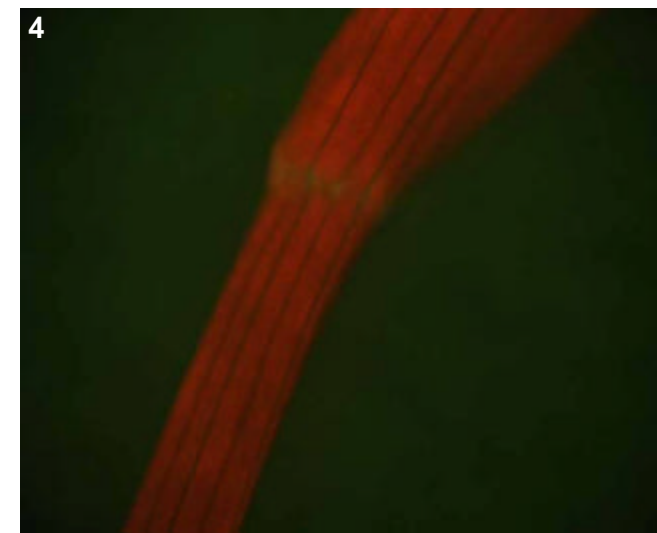
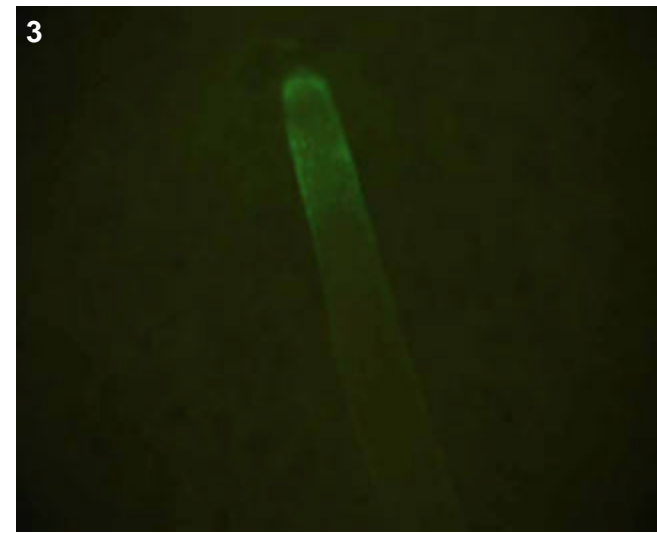
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 18



## T0 comments

## T1 seed comments

## T1 seedling comments

The collar expression in the shoot (pic 4) was very faint, whereas the root expression was bright (pics 1-3).

# Genotype: ASF C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

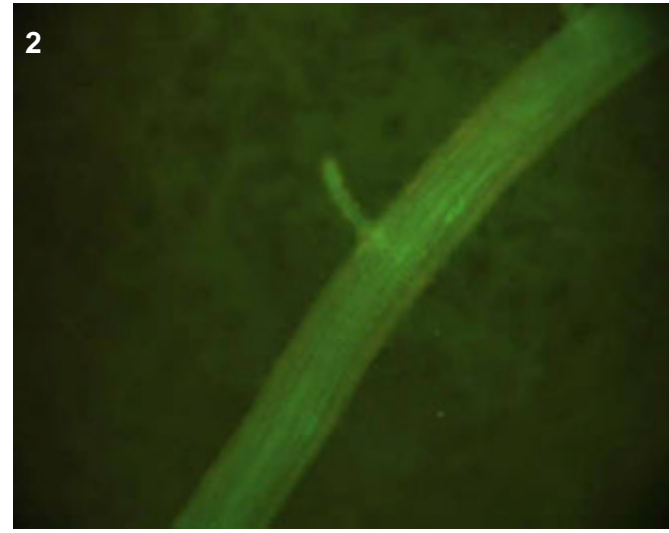
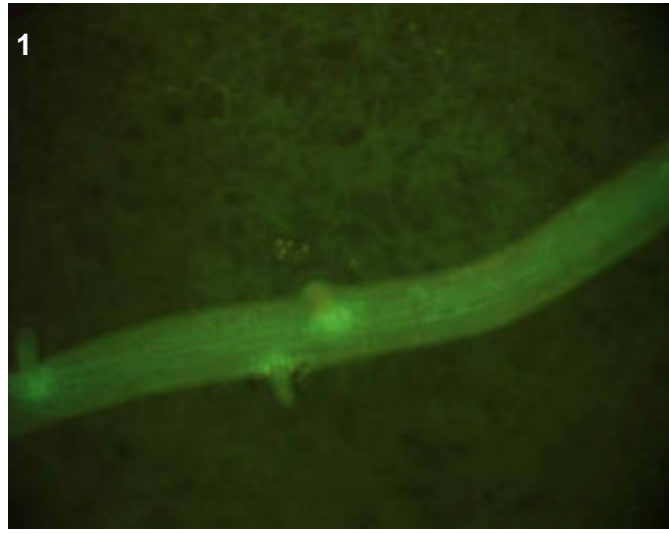
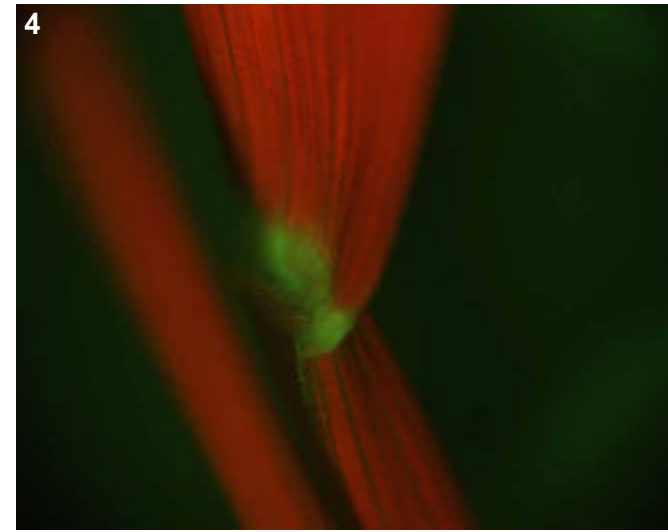
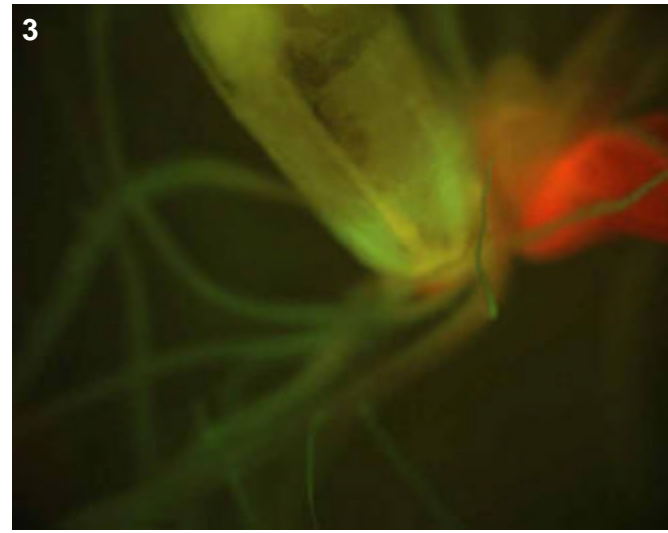
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASF C09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

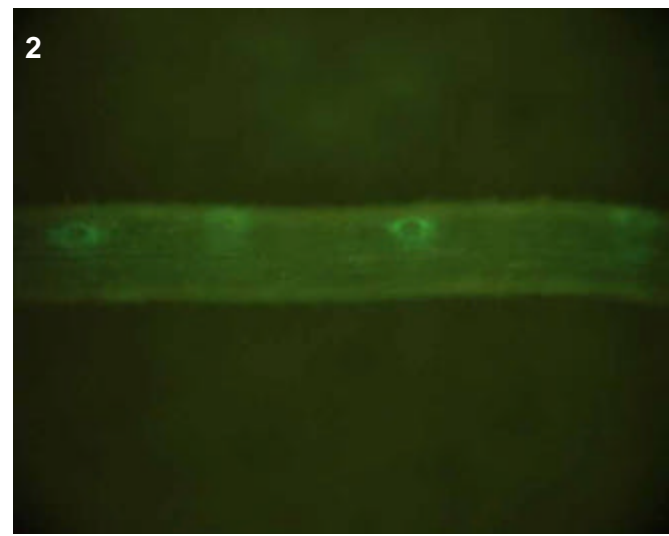
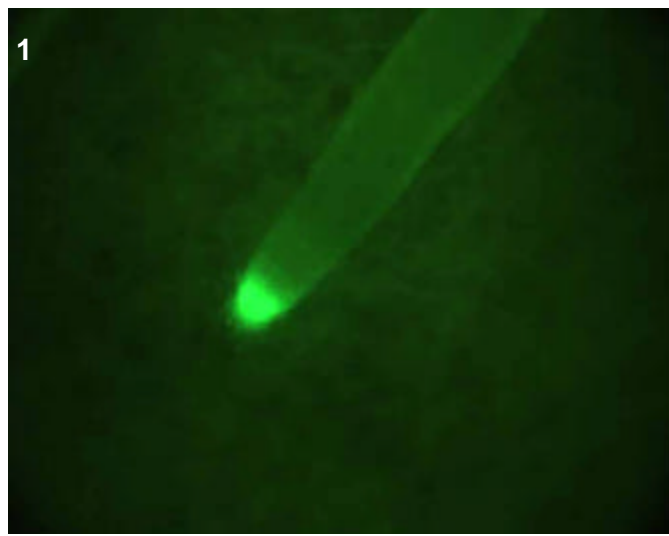
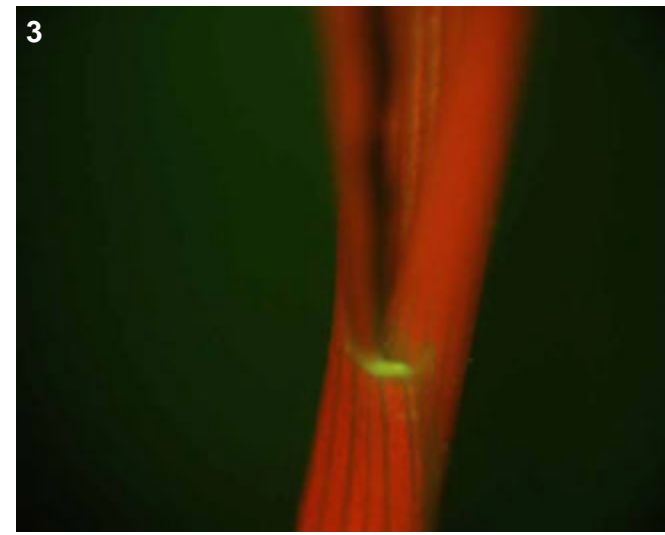
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASF D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

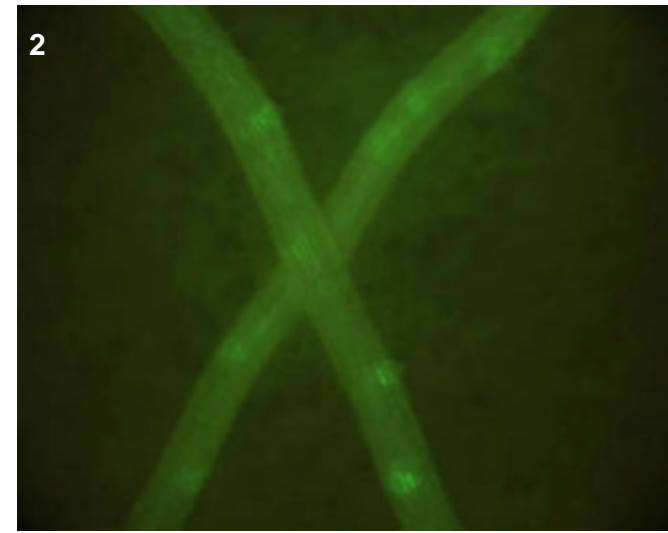
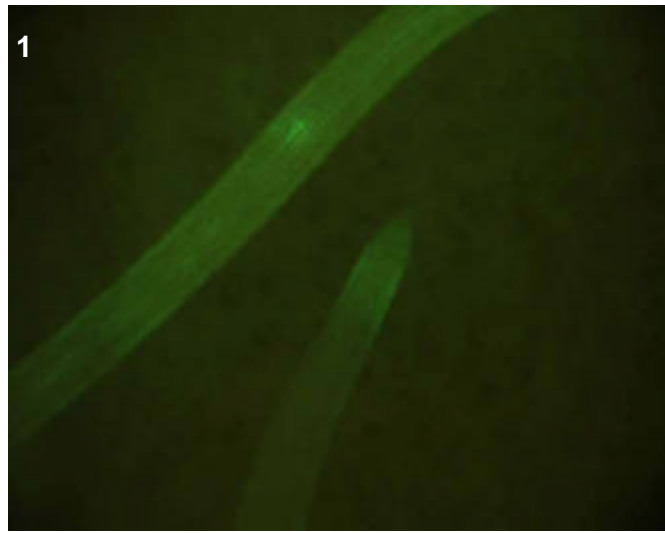
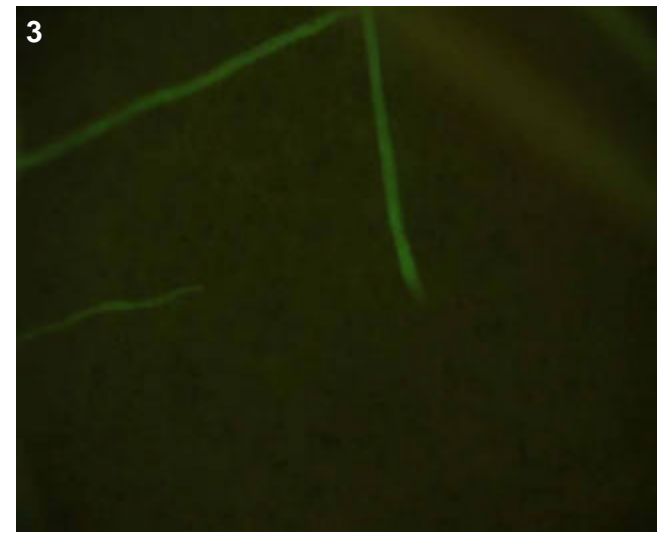
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 24



## T0 comments

## T1 seed comments

## T1 seedling comments

A root-specific line (pictures 1-3).

# Genotype: ASF E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

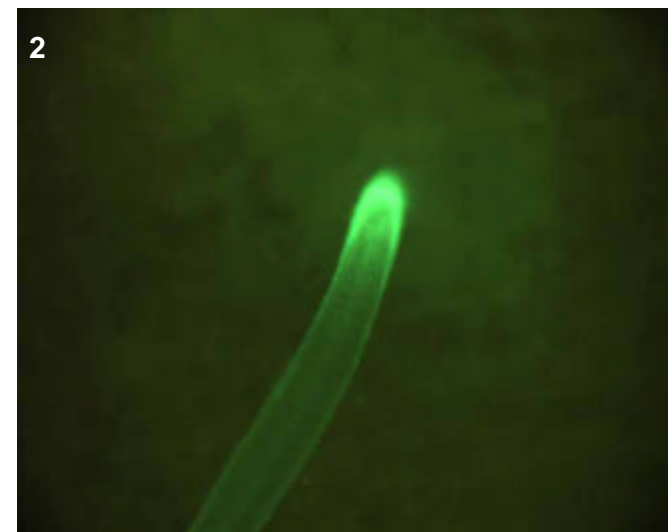
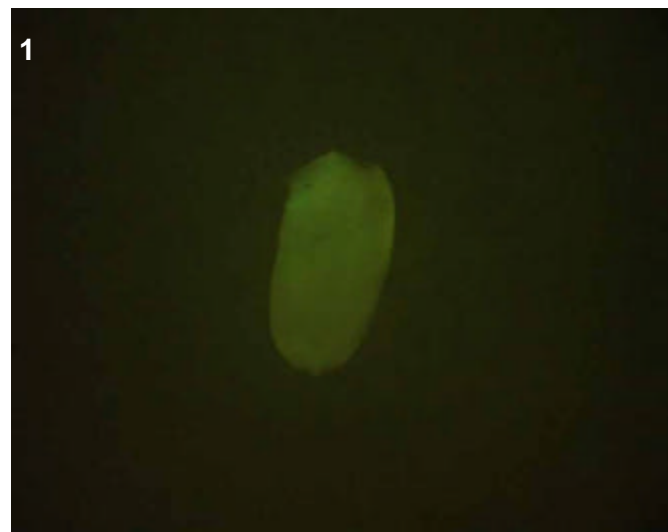
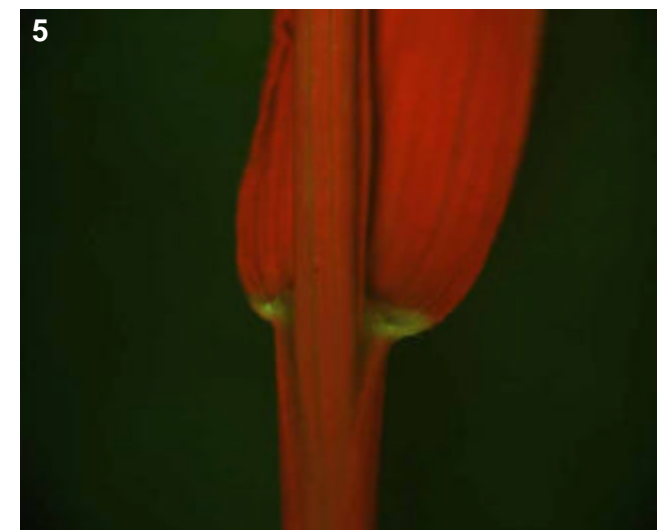
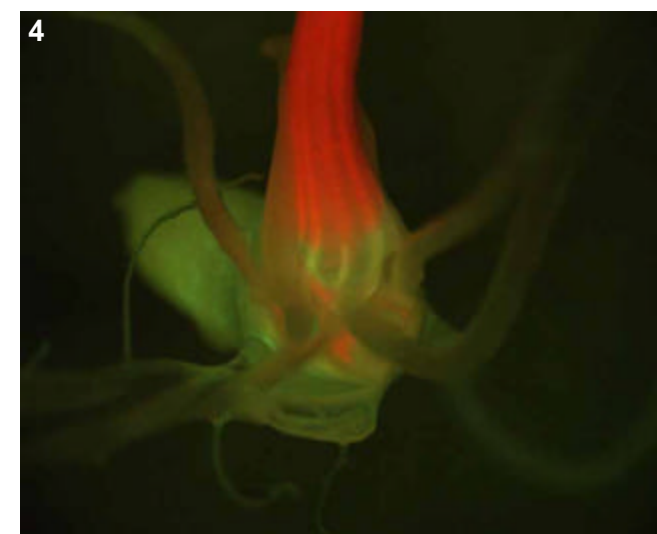
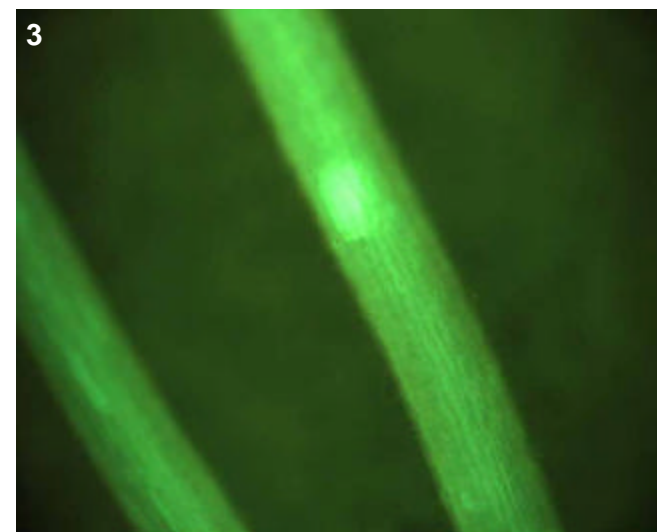
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

1/5 seeds had medium expression

## T1 seedling comments



# Genotype: ASF E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

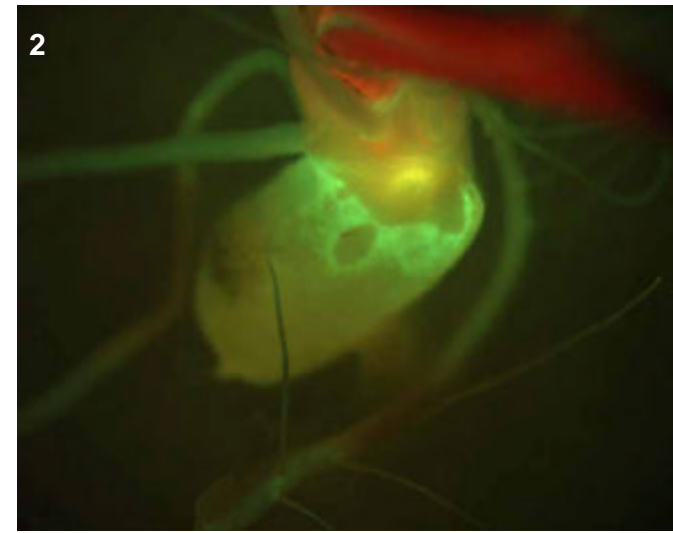
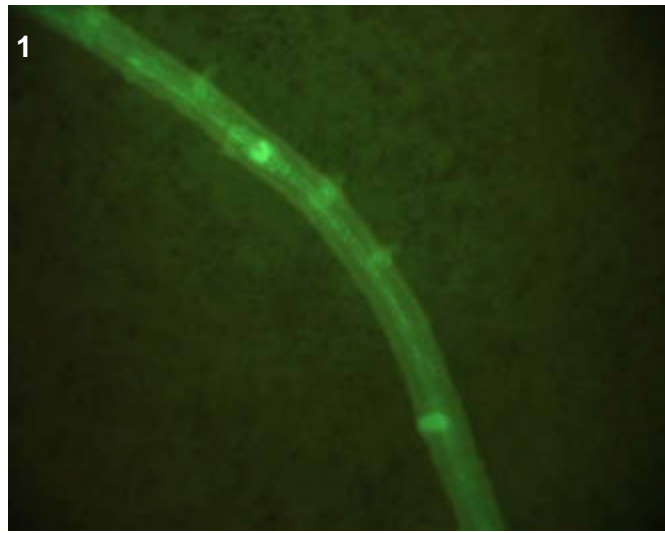
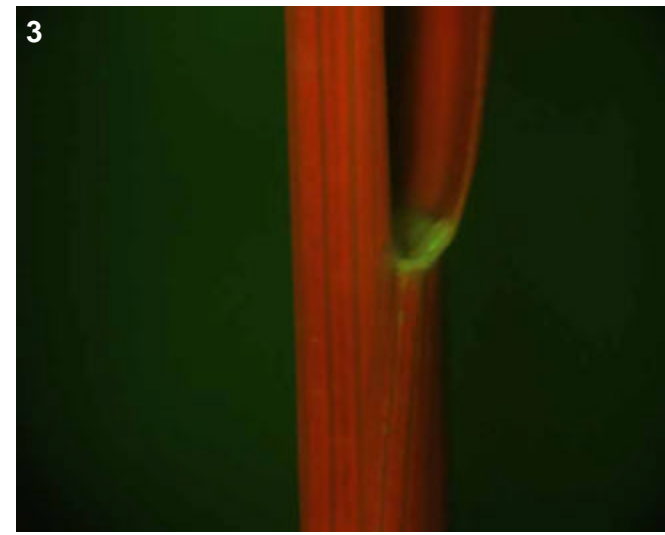
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASF F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 0



## T0 comments

## T1 seed comments

## T1 seedling comments

Appears to be a root-specific line, with expression noted mostly in just epidermis/cortex of young crown roots.

# Genotype: ASF F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

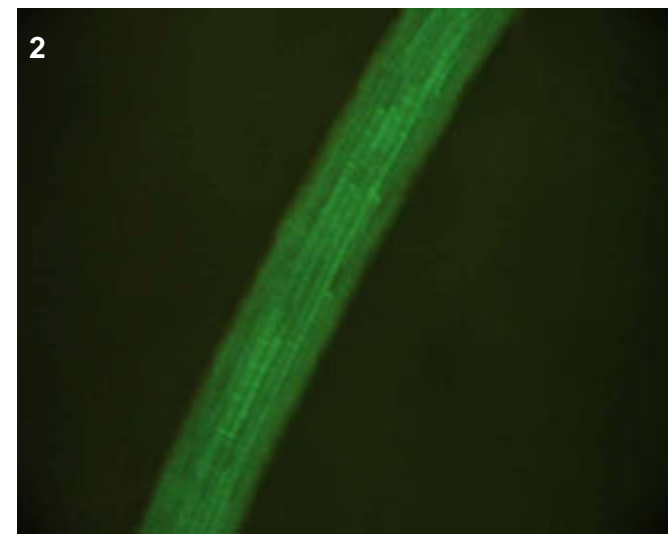
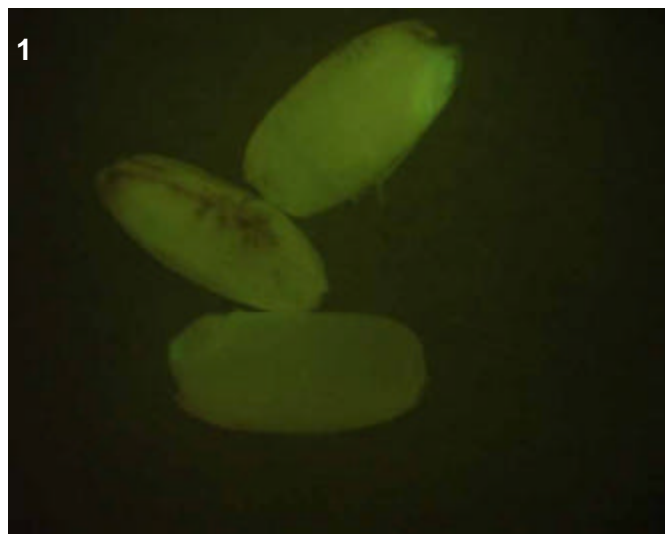
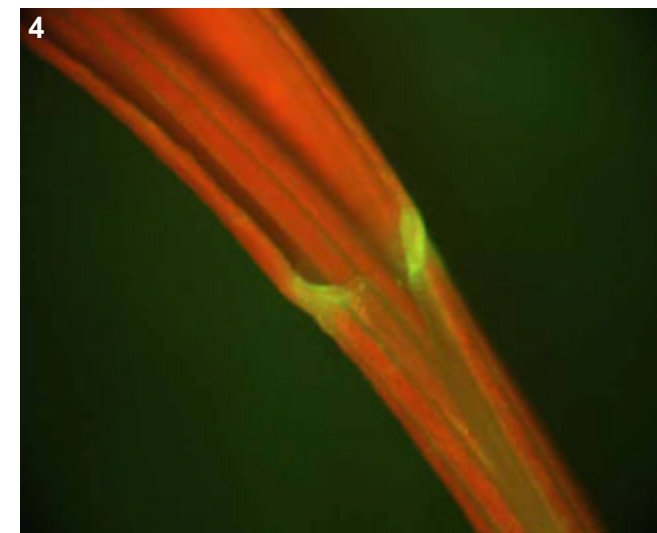
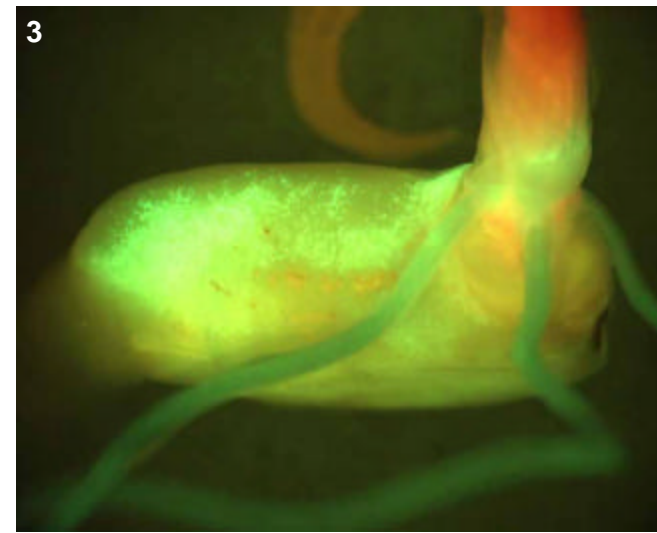
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had faint expression

## T1 seedling comments

Definitely epidermal pattern in roots (pics 2-3), maybe in the shoot as well. There was no seminal root evident in the two plants, perhaps a mutant?

# Genotype: ASF G02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

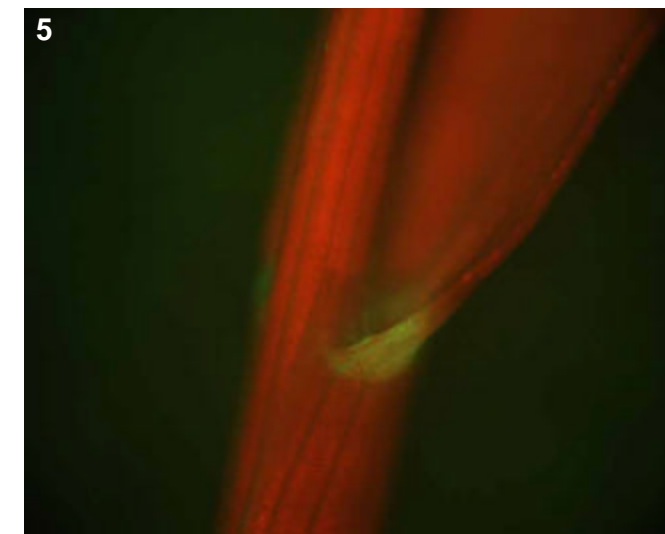
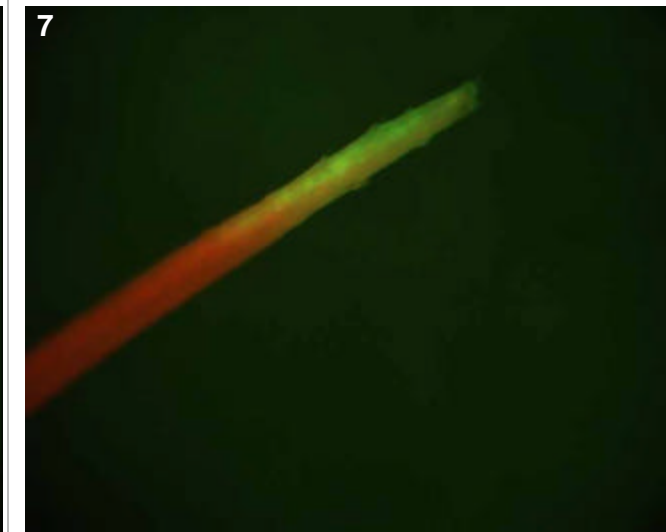
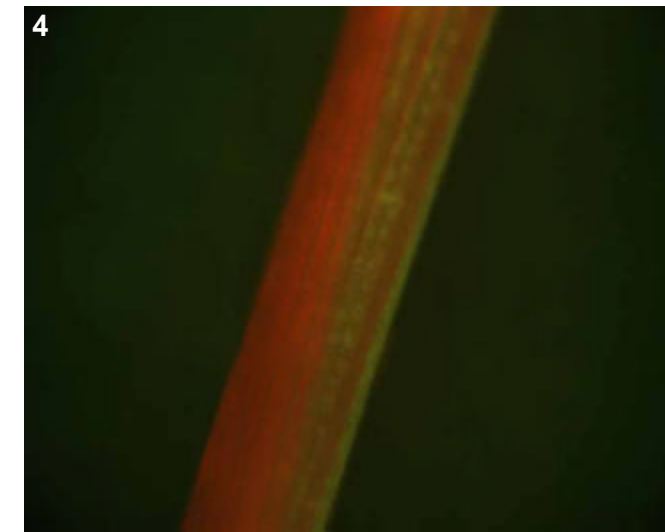
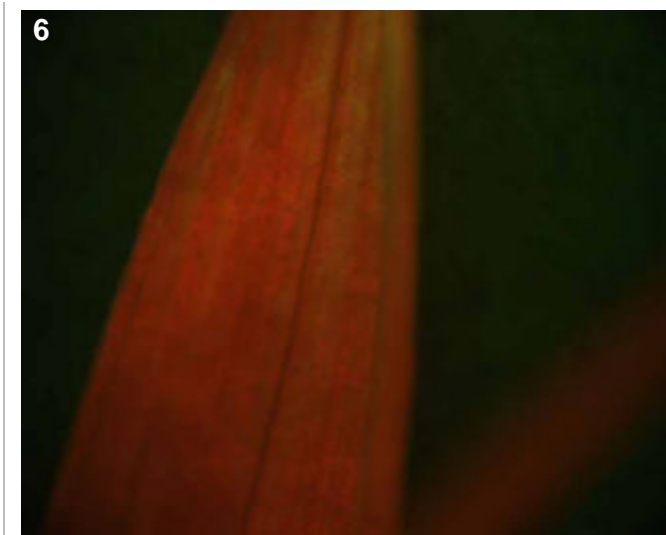
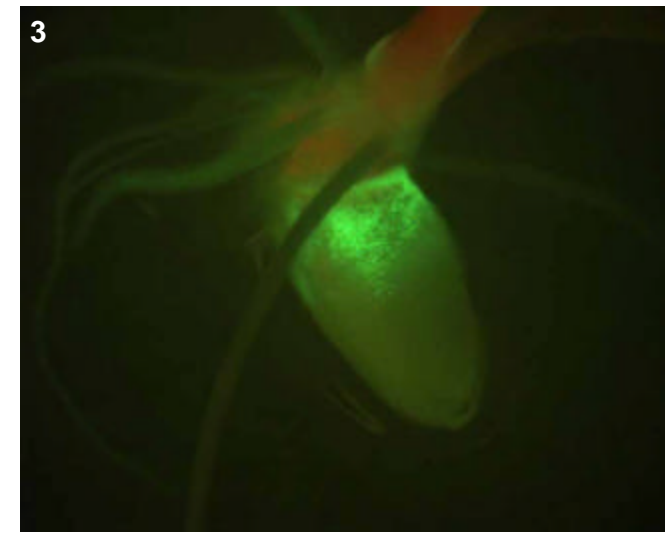
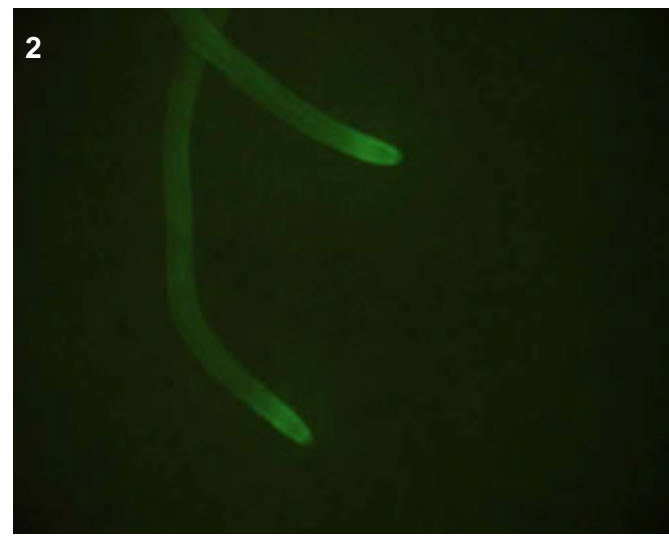
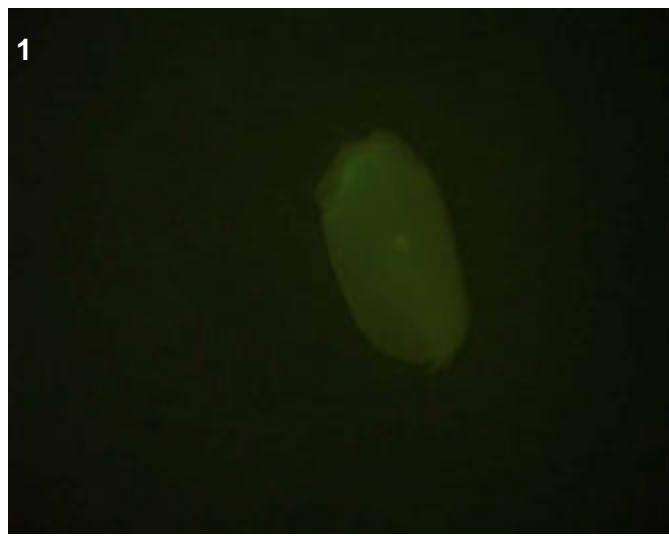
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:** 5



### T0 comments

### T1 seed comments

1/5 seeds had faint expression.

### T1 seedling comments

Nice epidermal expression at tips of seminal/crowns (pic 2), not sure about laterals because there were none to examine. I believe that there is some form of mesophyll or epidermal expression in the sheath (pic 4) and leaf (pic 6) that could be interesting for confocal.

# Genotype: ASF G06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

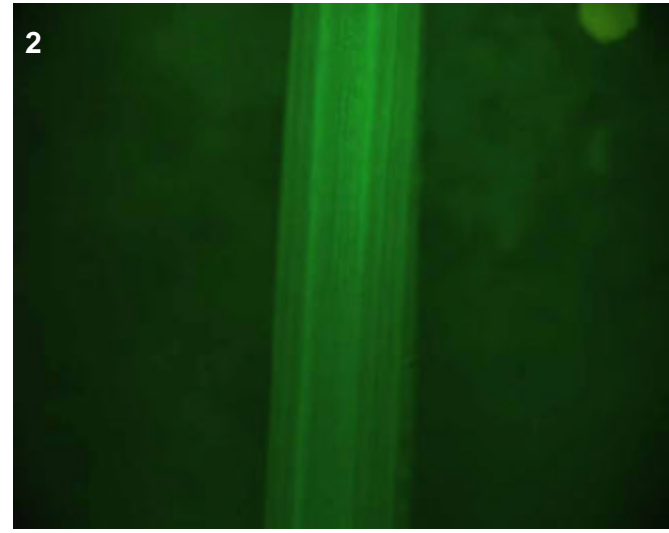
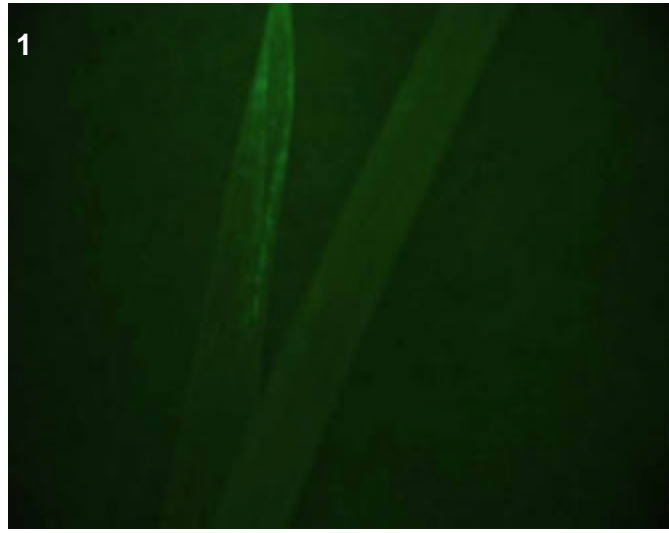
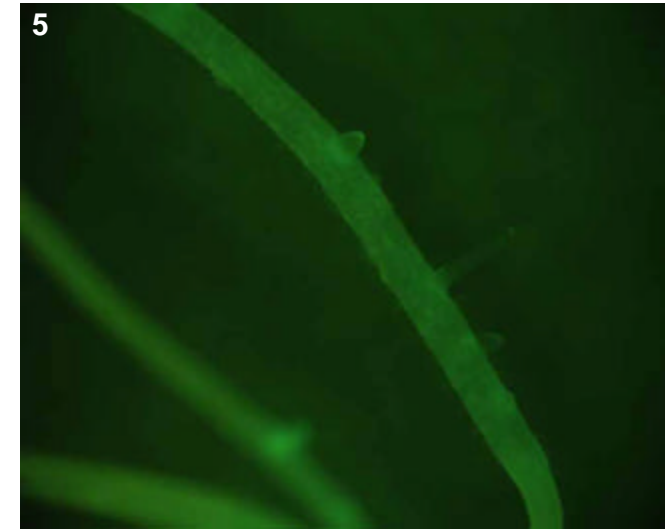
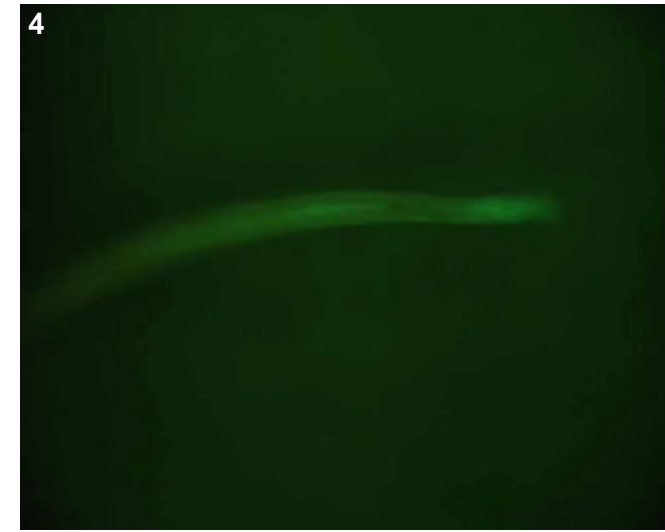
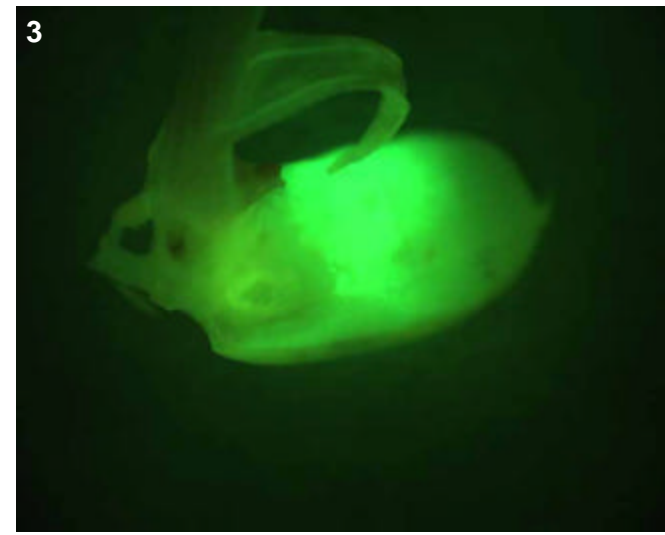
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?  
YES, 1 plant
- Confocal?
- Number T2 seed produced:



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
 Definitely some kind of chlorophyll mutant. 4/5 seedlings were GFP+ everywhere, and all 4 were albinos. With the hope that the one green, GFP- plant was heterozygous for the insert (though it should have been GFP+), I transferred it to the greenhouse.

# Genotype: ASG A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

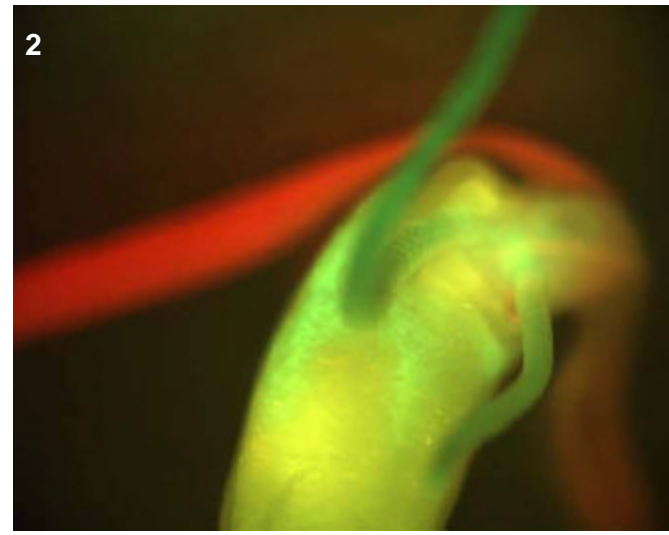
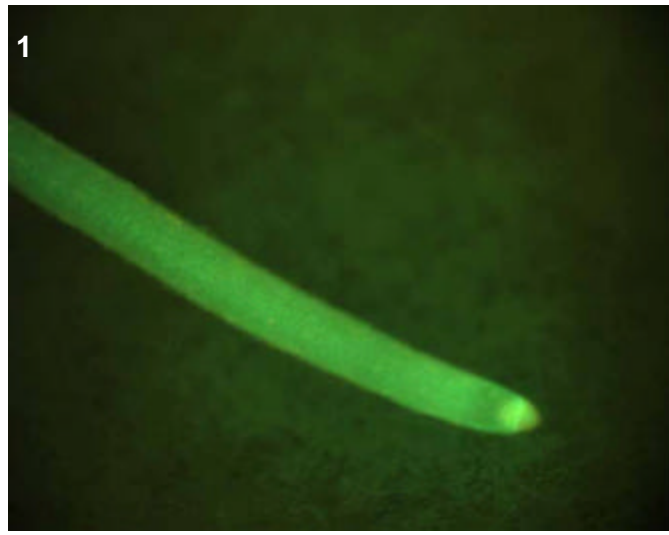
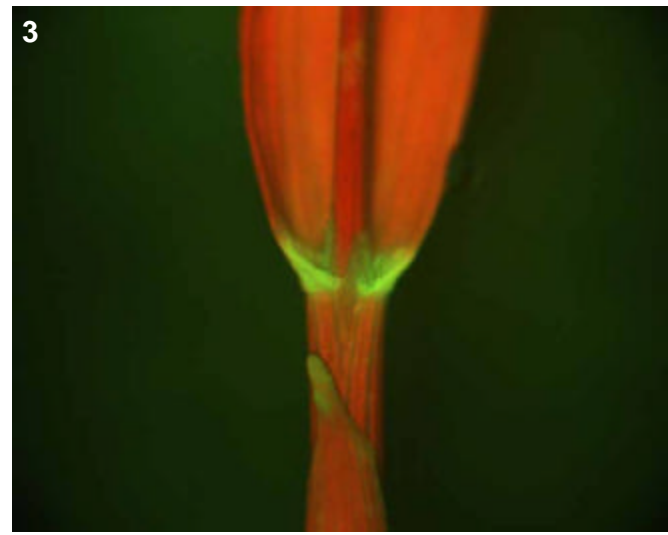
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ASG C11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

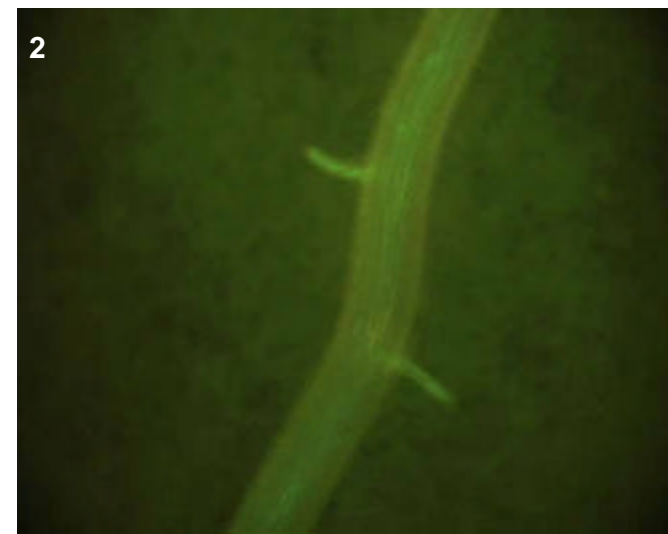
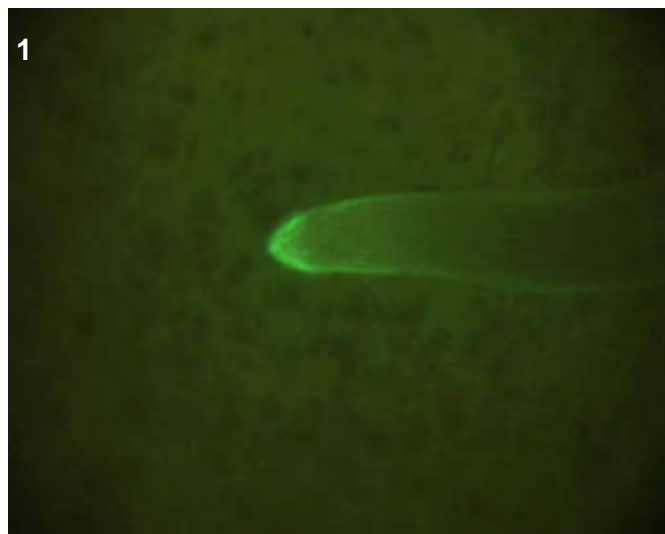
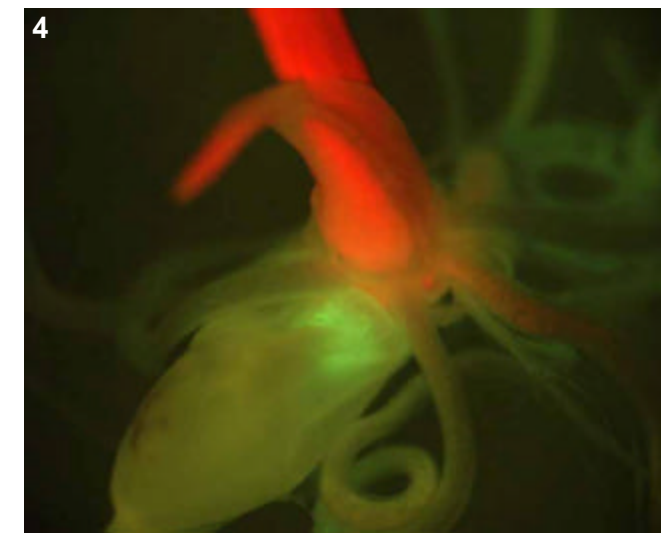
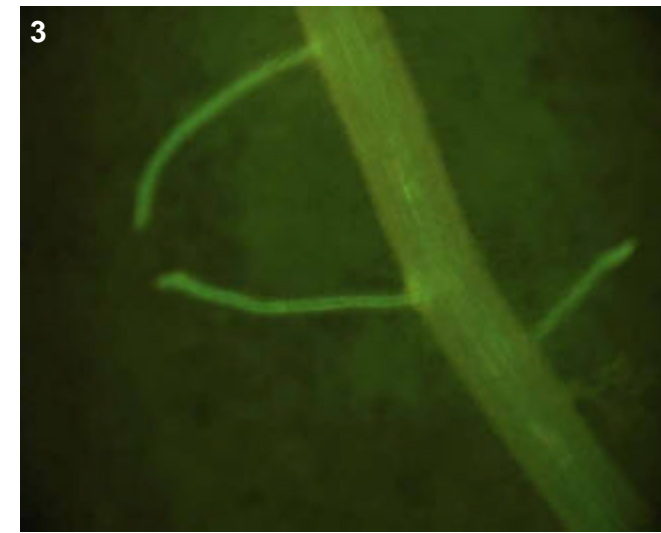
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks like basically a root-cortical pattern with just some epidermal expression near the tips of crowns (pic 1).

# Genotype: ASG E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

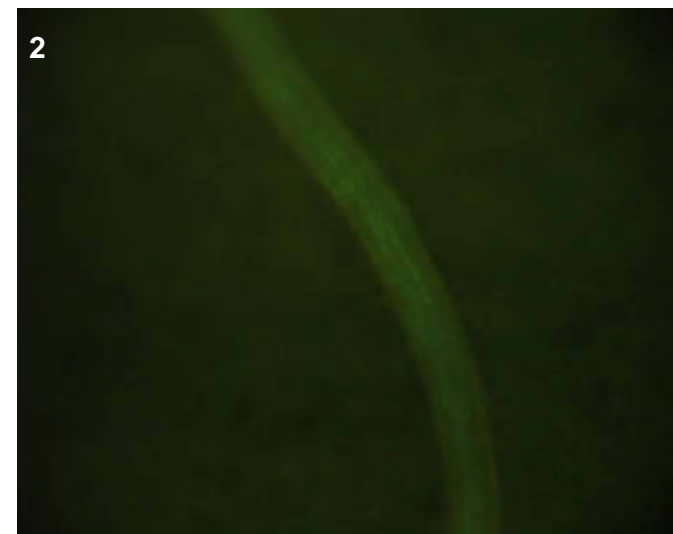
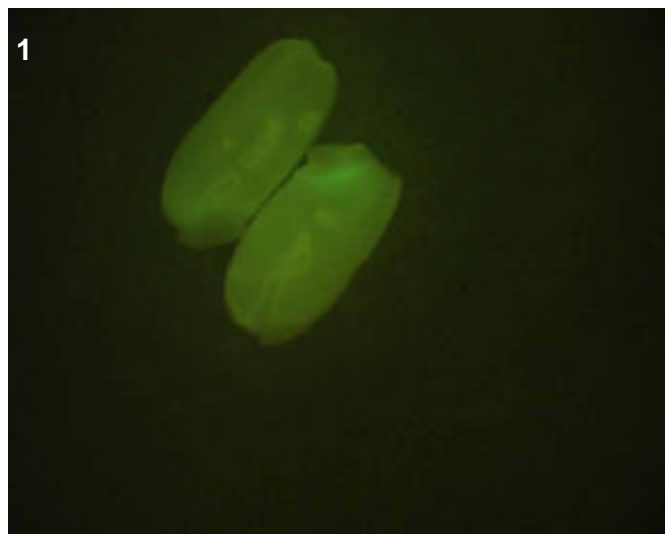
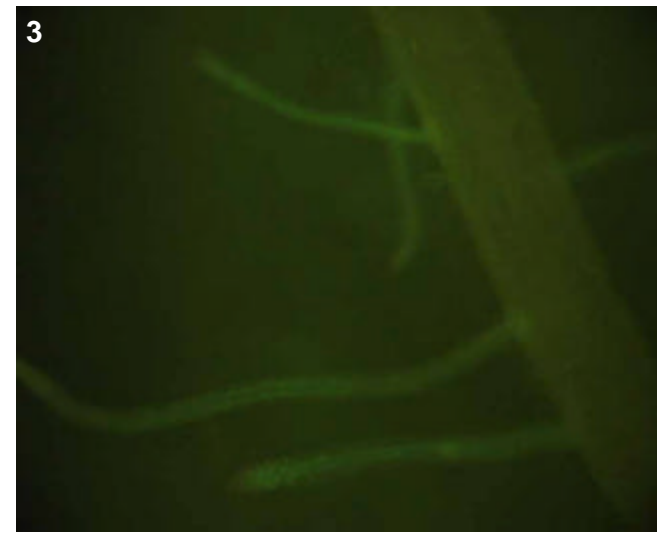
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression

## T1 seedling comments

Could be a root pattern in the cortex or endodermis (pics 2-3).



# Genotype: ASG F03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling: 1
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

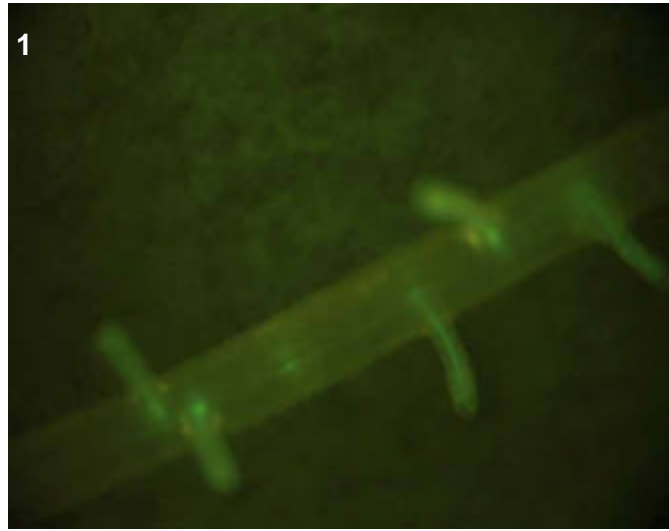
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks to be a nice lateral root-specific pattern, and perhaps something well inside the stele as there is not the usual two, but only one, stripe running up the center of the root (pic 1).

# Genotype: ASG F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

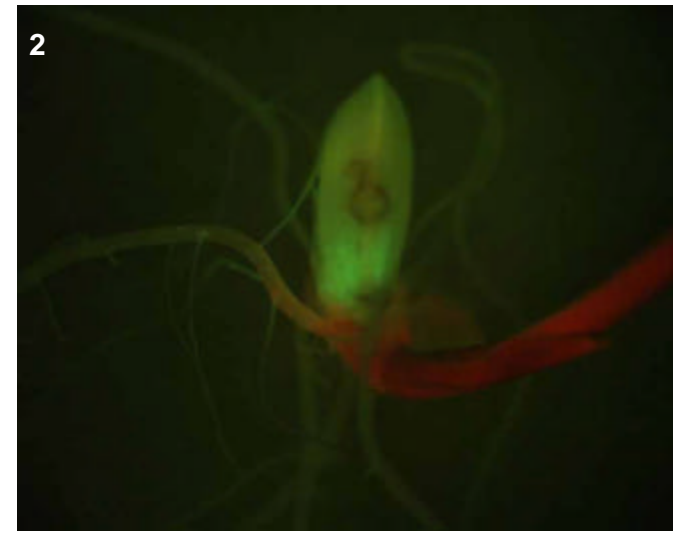
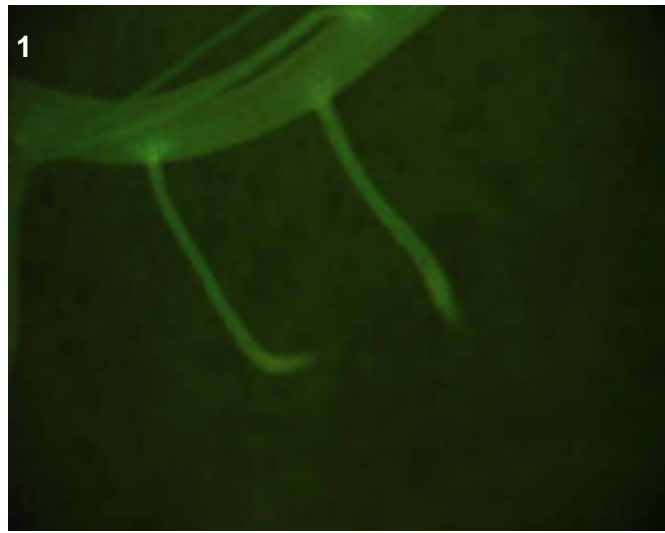
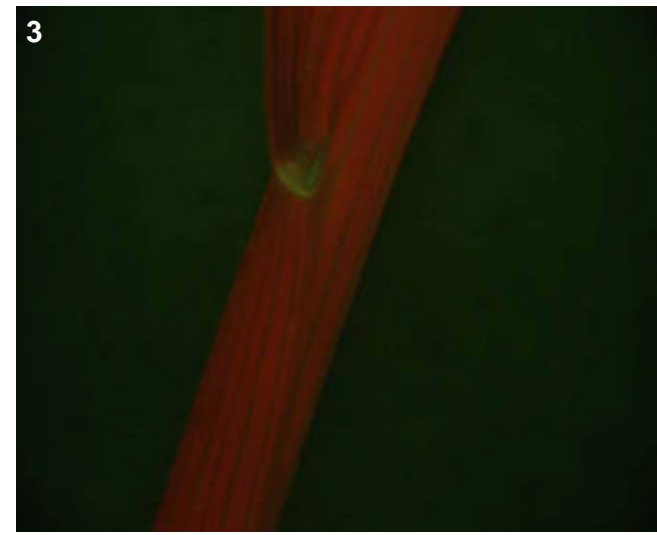
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASG F06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

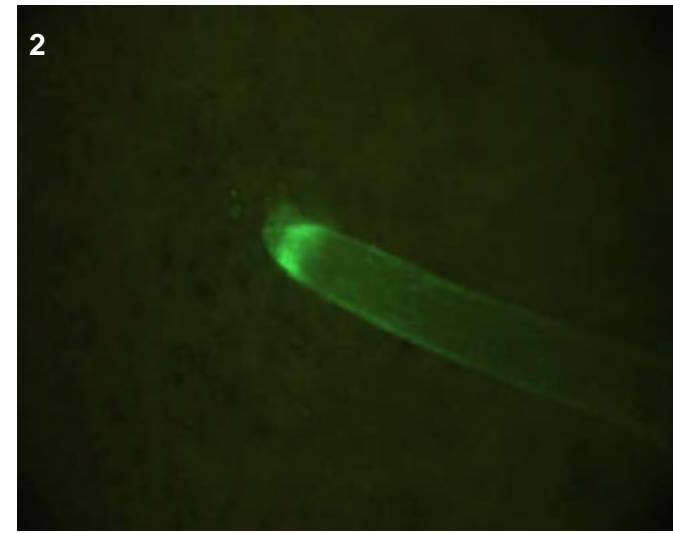
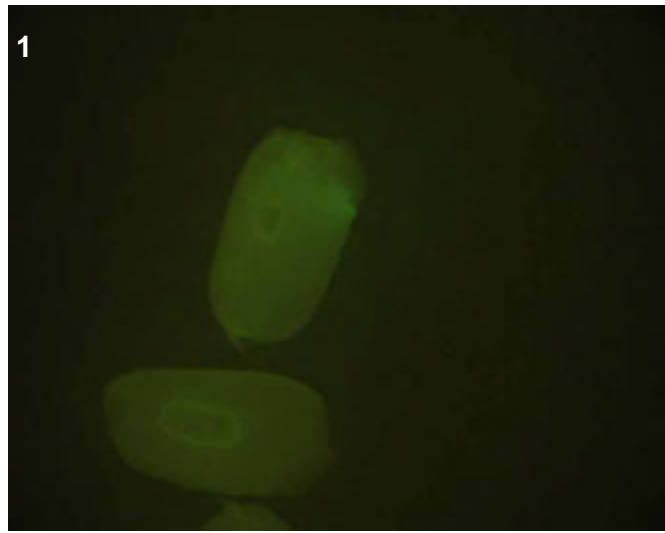
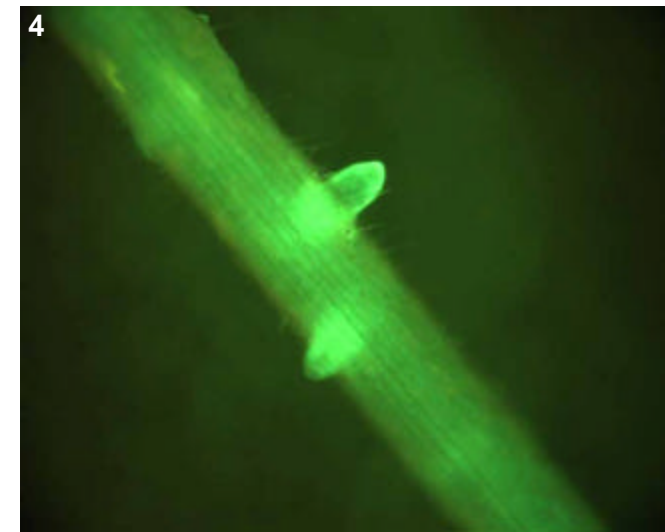
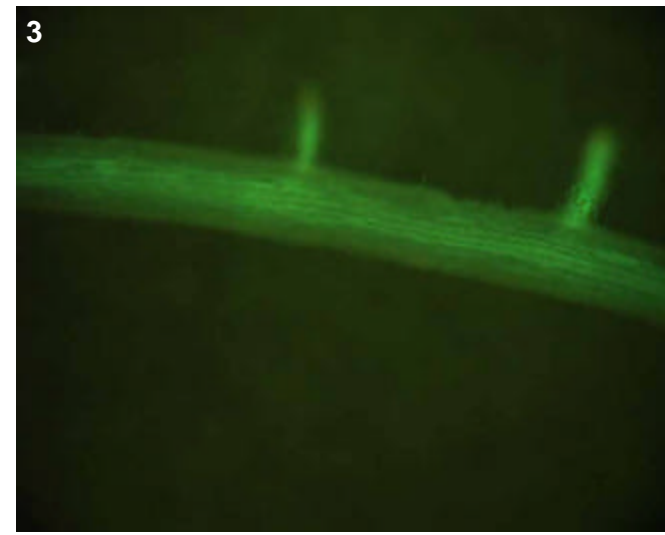
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/5 seed showed medium scutellum expression on the lower side of scutellum (pic 1)

## T1 seedling comments

# Genotype: ASG G10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

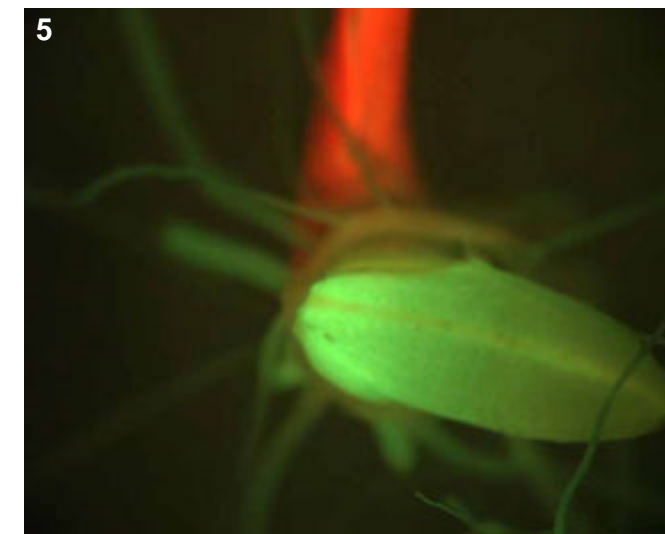
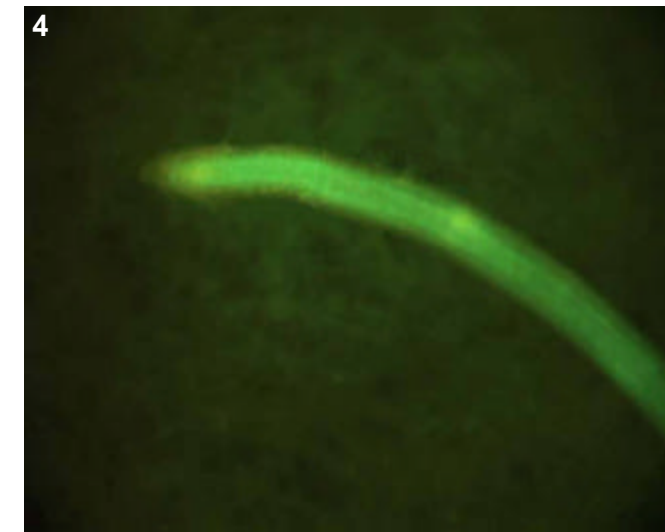
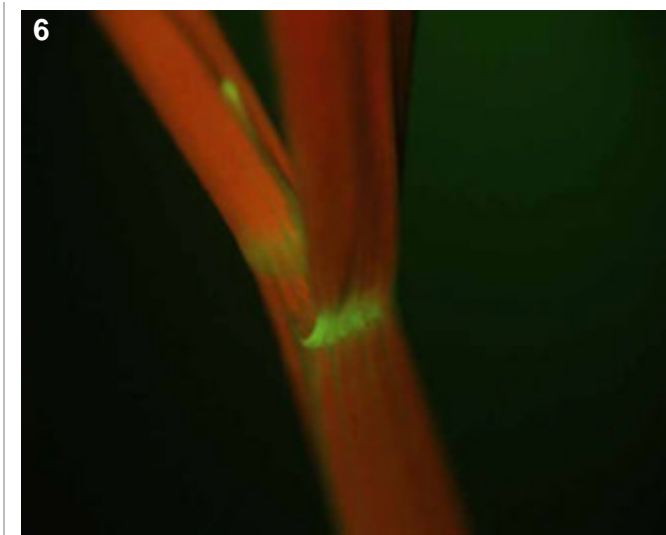
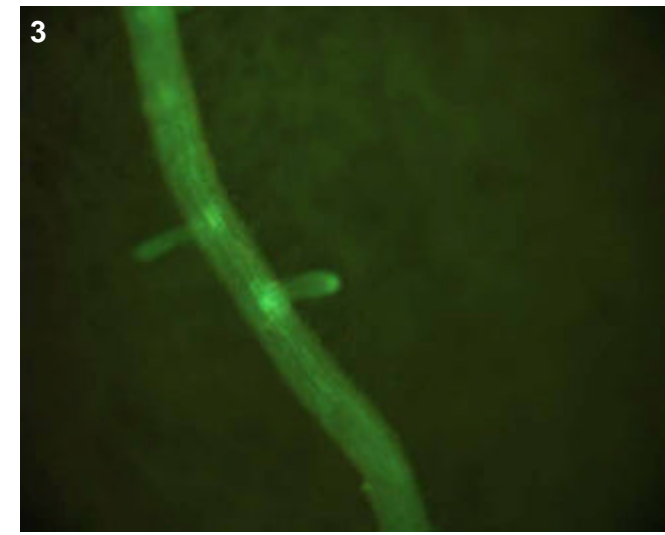
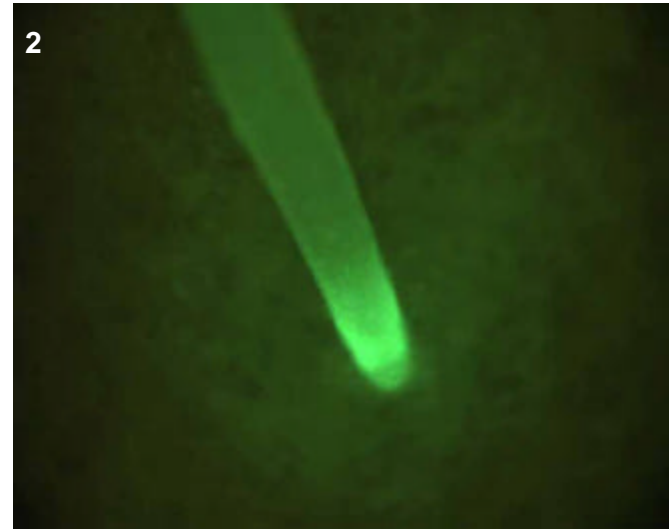
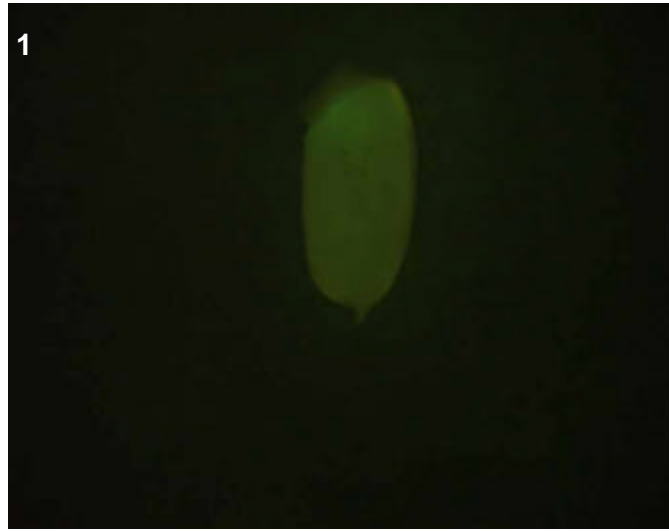
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
2/5 seeds had medium expression

**T1 seedling comments**

# Genotype: ASG G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

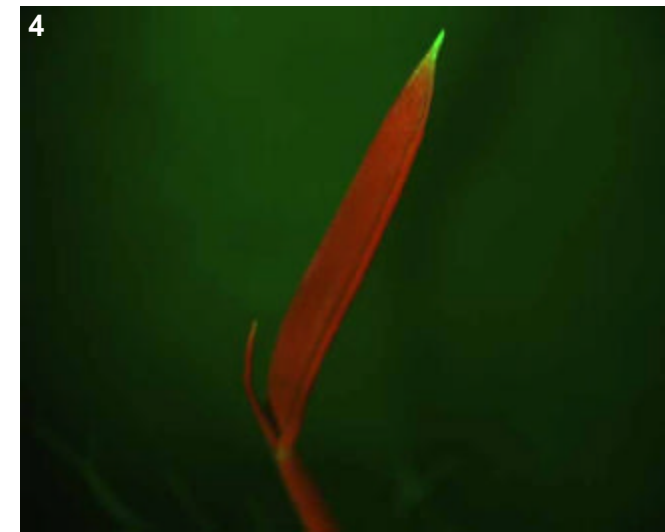
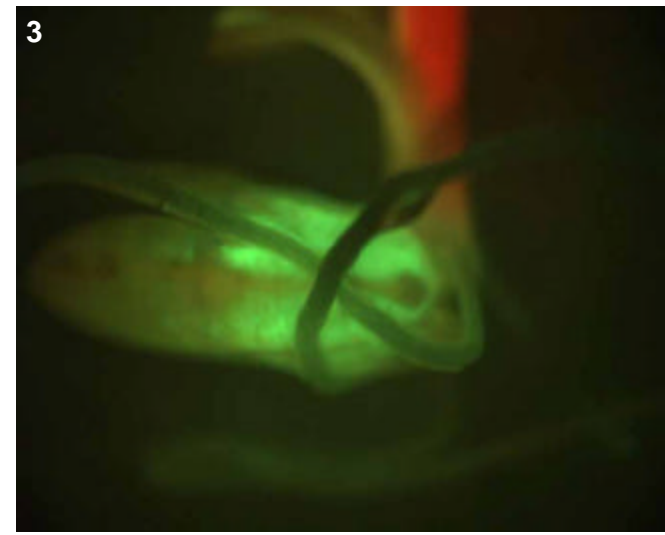
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/5 seeds had expression

## T1 seedling comments

# Genotype: ASG H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

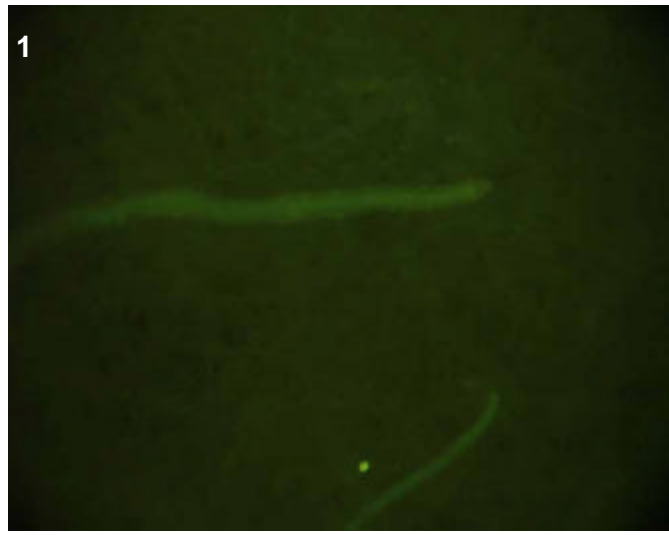
No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

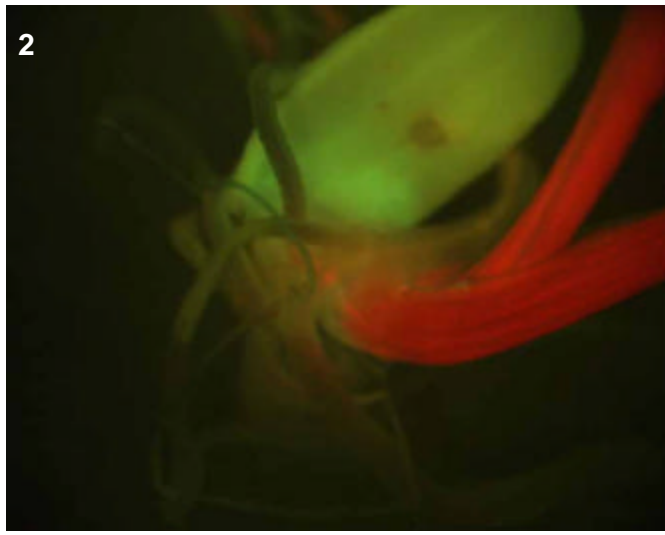
**Confocal?**

**Number T2 seed produced:**

1



2



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASH A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

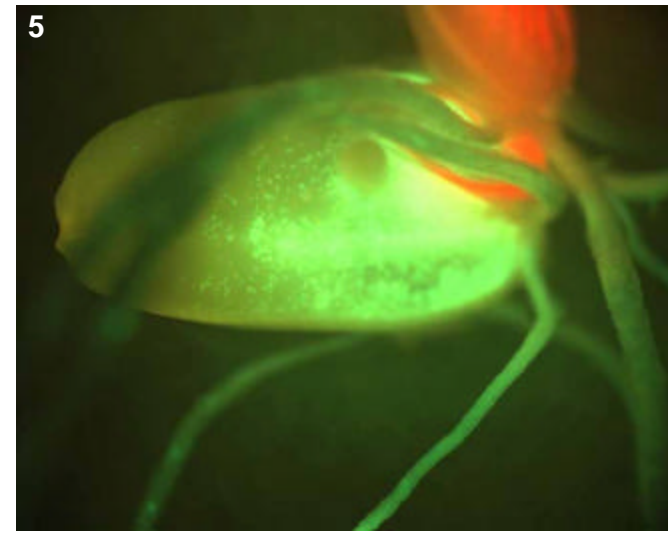
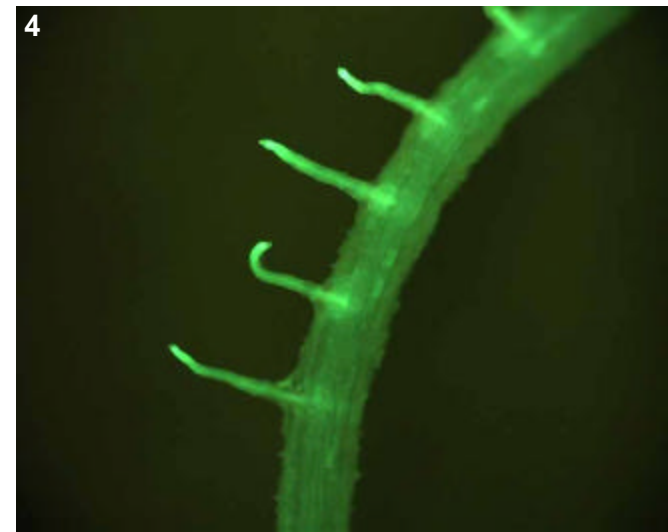
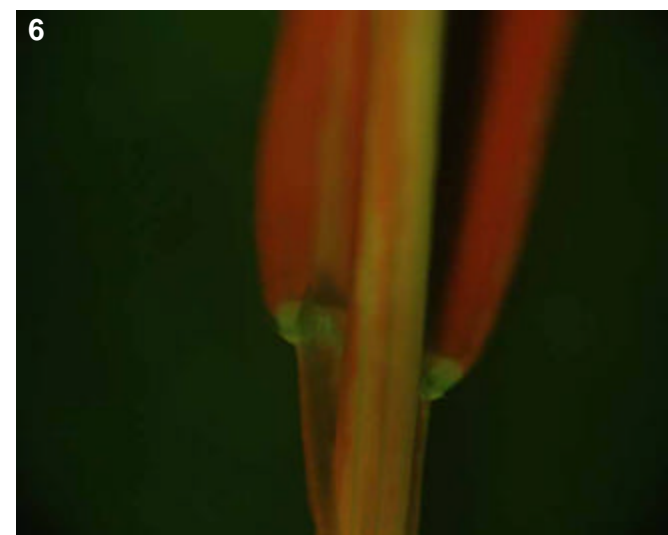
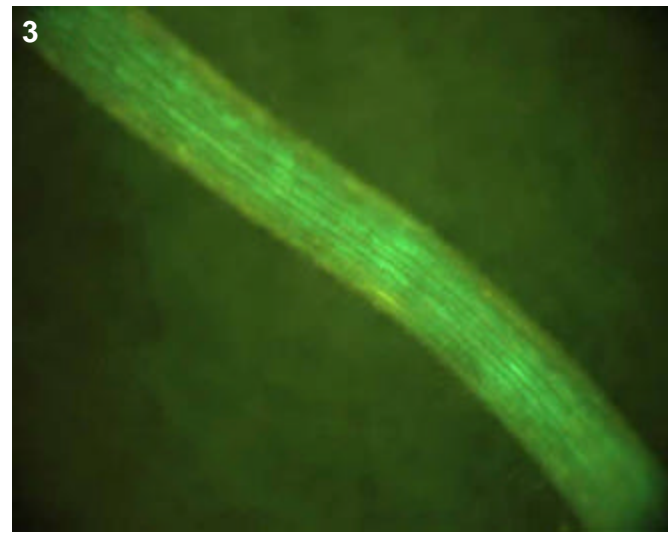
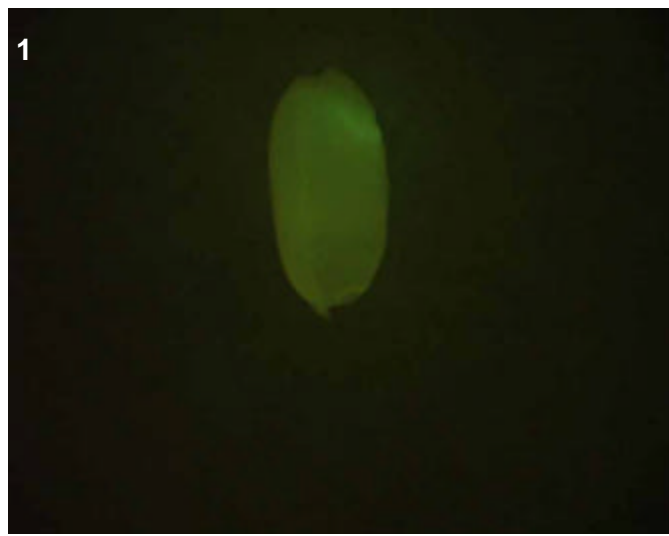
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

3/5 seeds had medium expression

## T1 seedling comments

# Genotype: ASH A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

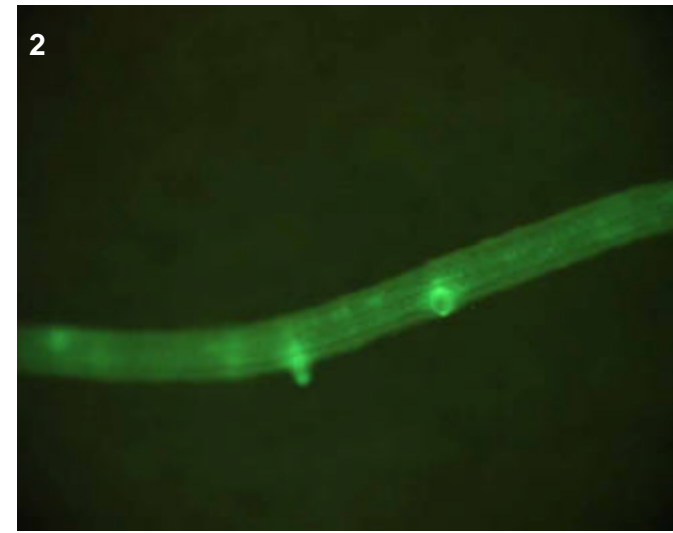
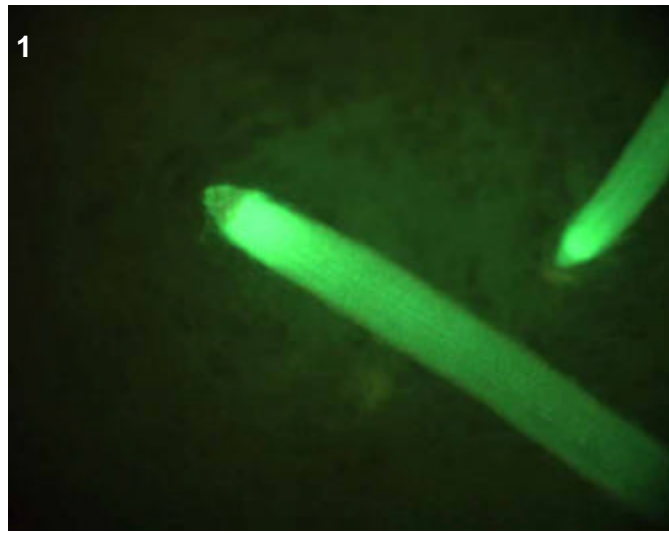
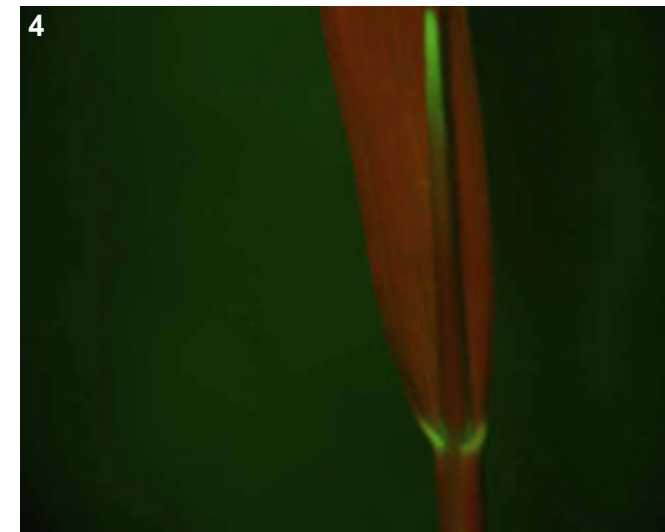
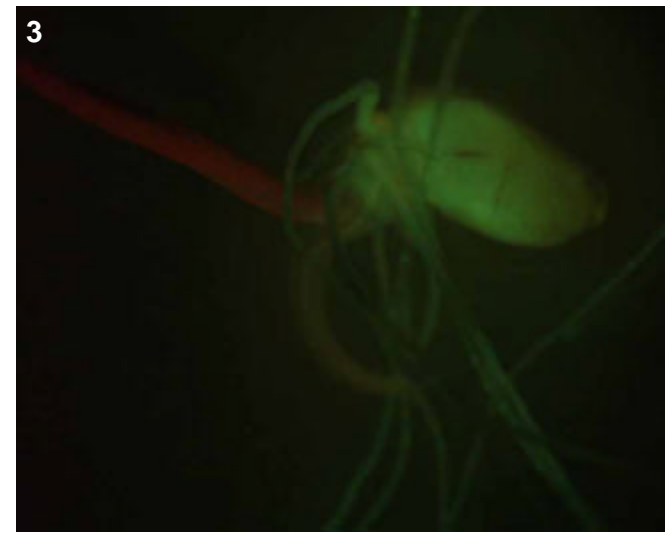
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

## T1 seedling comments



# Genotype: ASH B01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

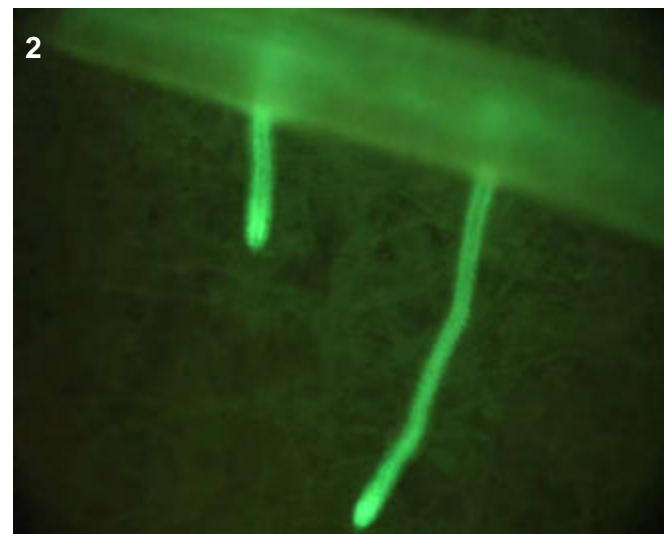
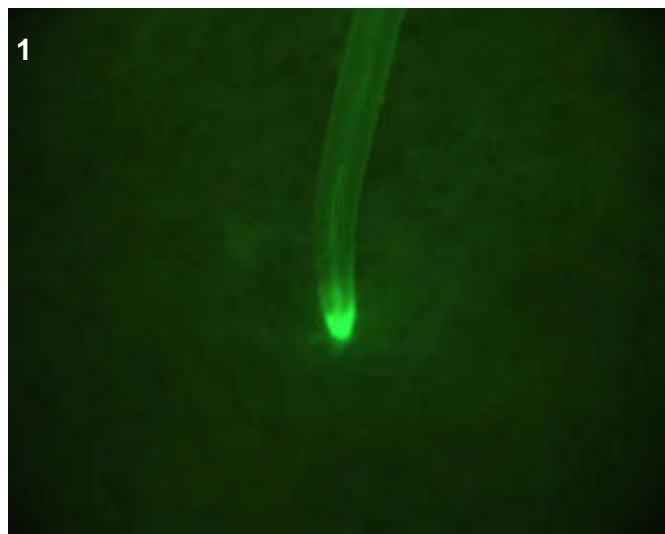
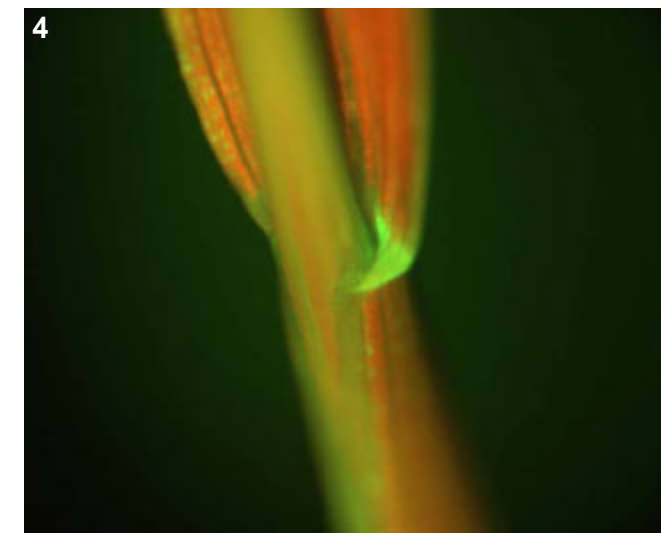
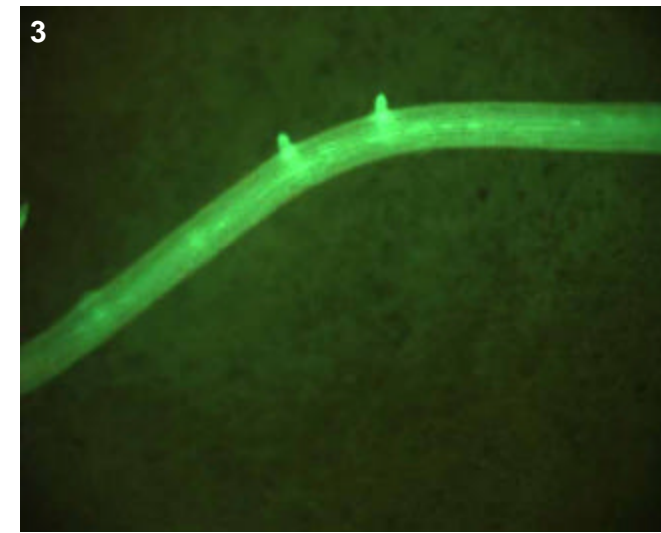
No GFP detected

T1 in greenhouse?

YES, 3 GFP+ plants

Confocal?

Number T2 seed produced:



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

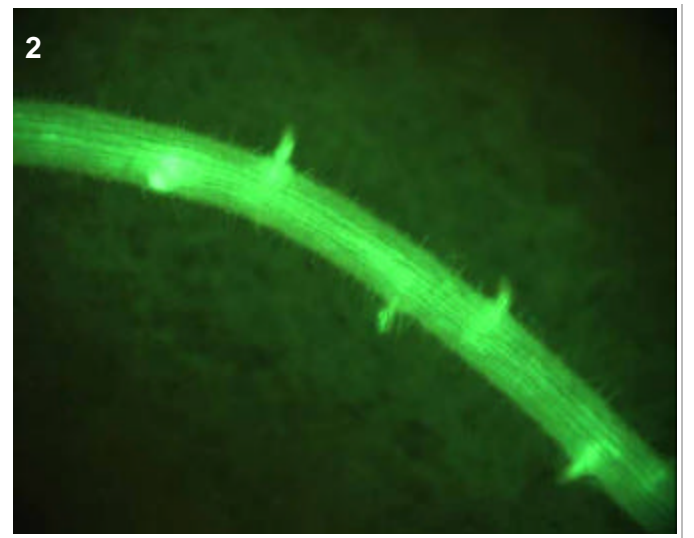
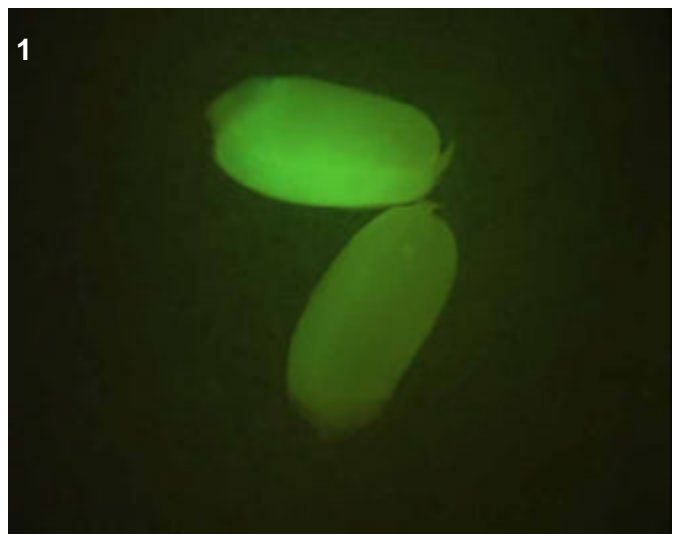
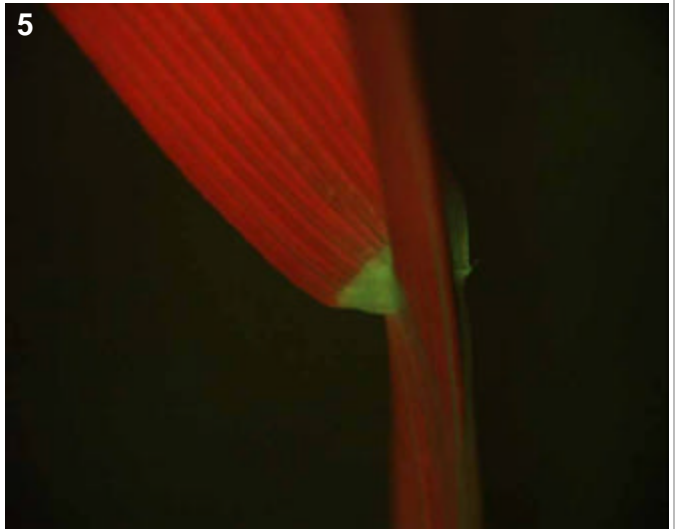
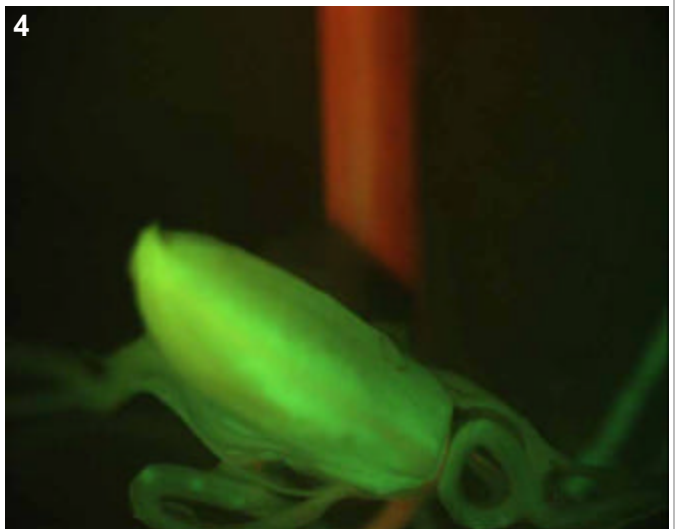
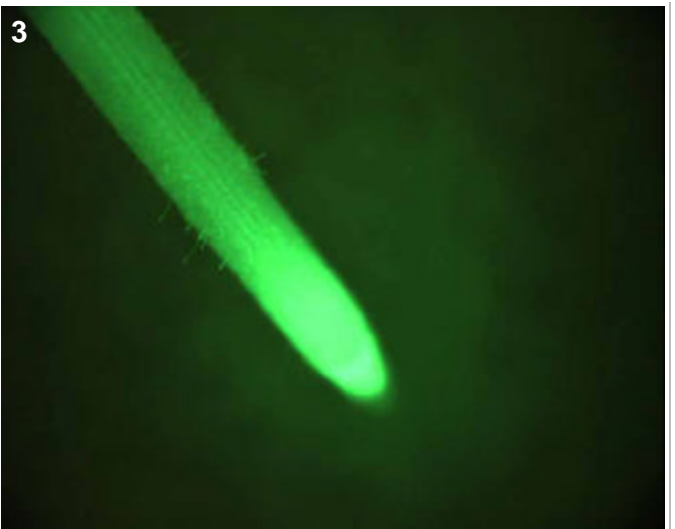
## T1 seed comments

## T1 seedling comments

# Genotype: ASH B02

Screened	Expression	Pictures
<input type="checkbox"/> T0 mature plant <input checked="" type="checkbox"/> T1 seed <input checked="" type="checkbox"/> T1 seedling <input type="checkbox"/> T1 mature plants	<input type="checkbox"/> None <input checked="" type="checkbox"/> Bright <input type="checkbox"/> Medium <input type="checkbox"/> Weak <input type="checkbox"/> Unsure	T0 mature plant: <input type="text"/> T1 seed/seedling: 1-5 T1 mature plant: <input type="text"/>

T0 Flower	T0 Blade	T1 Seed	T1 Mature		
<input type="checkbox"/> YES <input type="checkbox"/> POSSIBLE <input type="checkbox"/> Stamen: anther <input type="checkbox"/> Stamen: filament <input type="checkbox"/> Carpel: stigma <input type="checkbox"/> Carpel: style <input type="checkbox"/> Carpel: ovary <input type="checkbox"/> Carpel: base <input type="checkbox"/> Lemma/palea <input type="checkbox"/> Lodicule <input type="checkbox"/> Rachilla <input type="checkbox"/> Sterile lemma <input type="checkbox"/> Pedicel <input type="checkbox"/> Guard cells <input type="checkbox"/> Trichomes <input type="checkbox"/> Vascular	<input type="checkbox"/> YES <input type="checkbox"/> POSSIBLE <input type="checkbox"/> Vascular <input type="checkbox"/> Guard cells <input type="checkbox"/> Trichomes <input type="checkbox"/> Mesophyll  <th>T0 Sheath</th> <td> <input type="checkbox"/> YES  <input type="checkbox"/> POSSIBLE  <input type="checkbox"/> Collar  <input type="checkbox"/> Vascular  <input type="checkbox"/> Trichomes  <input type="checkbox"/> Guard cells  <input type="checkbox"/> Mesophyll       </td> <td> <input checked="" type="checkbox"/> YES  <input type="checkbox"/> POSSIBLE  <input type="checkbox"/> Embryo  <input checked="" type="checkbox"/> SHOOT  <input checked="" type="checkbox"/> ROOT  <input checked="" type="checkbox"/> ENDOSPERM  <input type="checkbox"/> Coleoptile  <input type="checkbox"/> Sheath tissue  <input type="checkbox"/> Blade tissue  <input type="checkbox"/> Leaf tip  <input checked="" type="checkbox"/> Collar  <input type="checkbox"/> Trichomes  <input type="checkbox"/> Guard cells       </td> <td> <input type="checkbox"/> T0 pattern verified:  <input type="text"/>  <input type="checkbox"/> T0 pattern verified plus:  <input type="text"/>  <input type="checkbox"/> New pattern:  <input type="text"/>  <input type="checkbox"/> No GFP detected    <input checked="" type="checkbox"/> T1 in greenhouse?          YES, 3 GFP+ plants       </td>	T0 Sheath	<input type="checkbox"/> YES <input type="checkbox"/> POSSIBLE <input type="checkbox"/> Collar <input type="checkbox"/> Vascular <input type="checkbox"/> Trichomes <input type="checkbox"/> Guard cells <input type="checkbox"/> Mesophyll	<input checked="" type="checkbox"/> YES <input type="checkbox"/> POSSIBLE <input type="checkbox"/> Embryo <input checked="" type="checkbox"/> SHOOT <input checked="" type="checkbox"/> ROOT <input checked="" type="checkbox"/> ENDOSPERM <input type="checkbox"/> Coleoptile <input type="checkbox"/> Sheath tissue <input type="checkbox"/> Blade tissue <input type="checkbox"/> Leaf tip <input checked="" type="checkbox"/> Collar <input type="checkbox"/> Trichomes <input type="checkbox"/> Guard cells	<input type="checkbox"/> T0 pattern verified: <input type="text"/> <input type="checkbox"/> T0 pattern verified plus: <input type="text"/> <input type="checkbox"/> New pattern: <input type="text"/> <input type="checkbox"/> No GFP detected  <input checked="" type="checkbox"/> T1 in greenhouse? YES, 3 GFP+ plants
		<input type="checkbox"/> Coleorhiza <input type="checkbox"/> Scutellum <input checked="" type="checkbox"/> Aleurone/Endo. <input type="checkbox"/> Vasc. bundle <input checked="" type="checkbox"/> S. vascular <input checked="" type="checkbox"/> Seminal root <input checked="" type="checkbox"/> Crown roots <input checked="" type="checkbox"/> Lateral roots <input type="checkbox"/> Root cap <input type="checkbox"/> Root apex <input type="checkbox"/> R. stele <input checked="" type="checkbox"/> R. cortex/end. <input checked="" type="checkbox"/> R. epidermis <input type="checkbox"/> Constitutive	<input type="checkbox"/> Confocal? <input type="text"/>		
Number T2 seed produced: <input type="text"/>					



**T0 comments**  
 This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

**T1 seed comments**  
 At least 2/5 seeds had medium aleurone expression, perhaps more (more faintly)

**T1 seedling comments**

# Genotype: **ASH D01**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

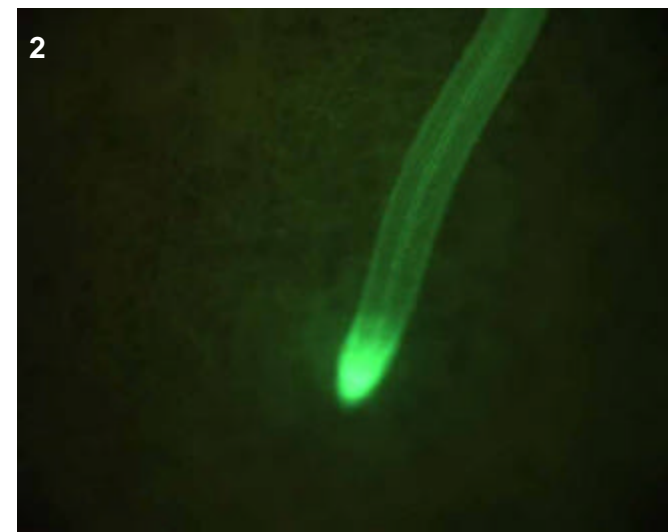
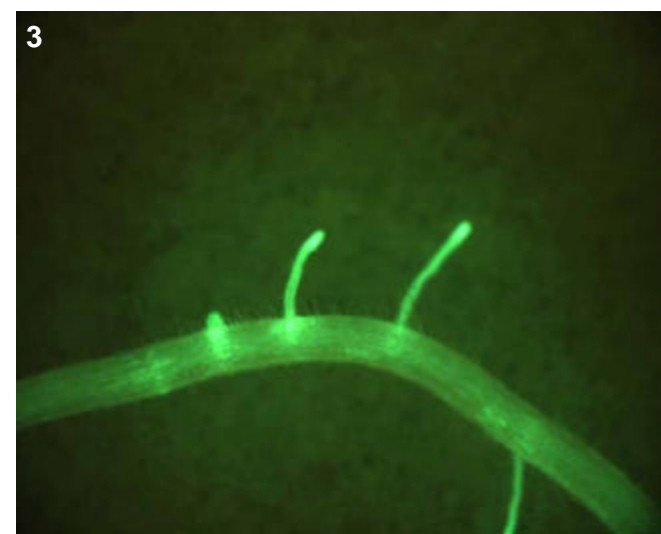
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

### T1 seed comments

1/5 seeds had expression

### T1 seedling comments

# Genotype: ASH D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

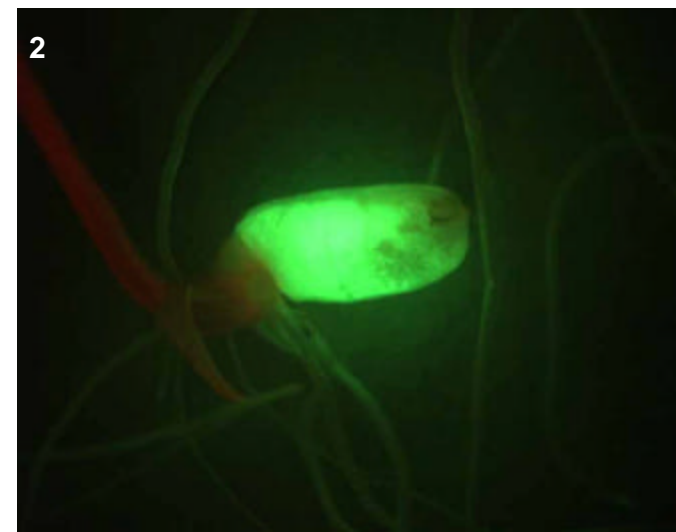
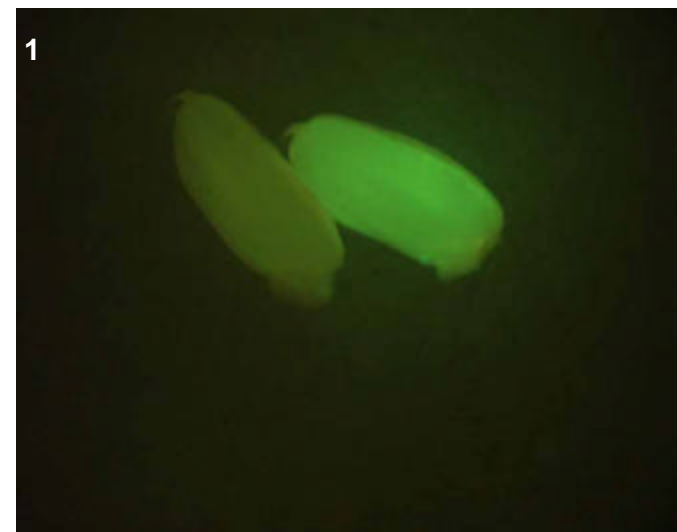
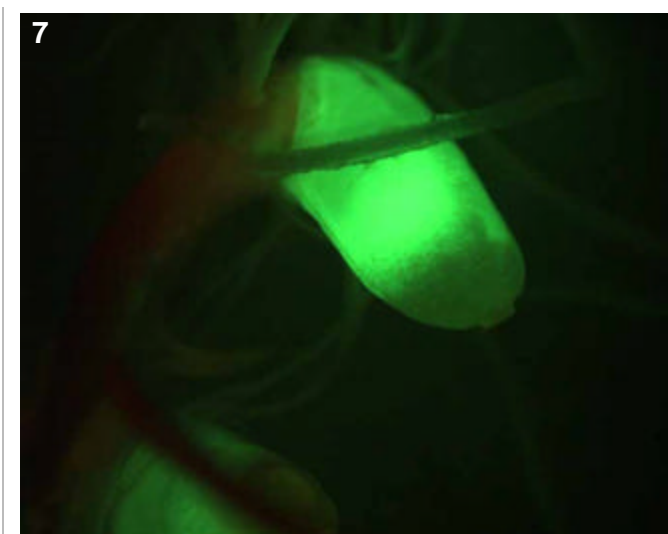
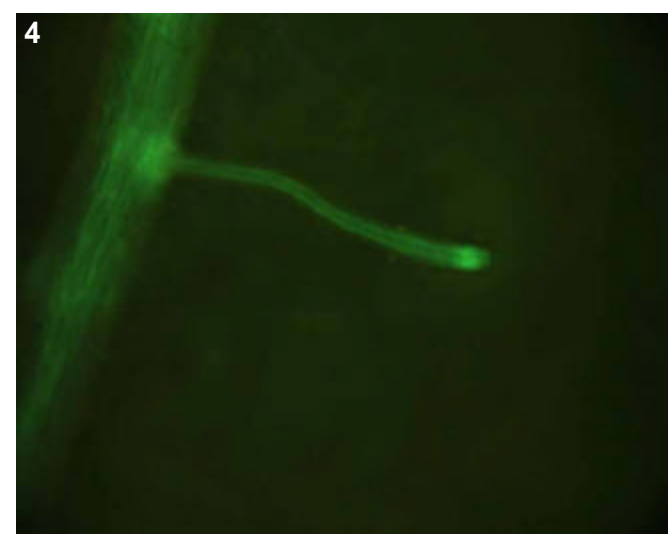
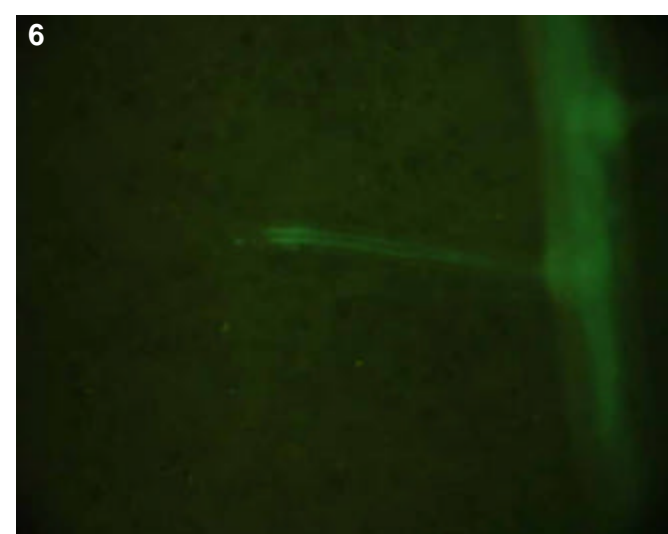
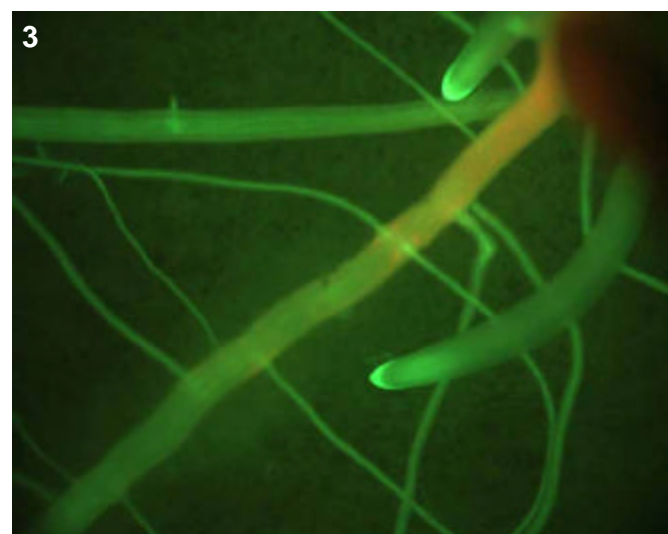
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

Confocal? WIP

Number T2 seed produced:



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

4/5 seeds had expression

## T1 seedling comments

Incredibly bright endosperm (pic 2) and nice, bright vascular pattern in roots which could be stelar or extra-stelar (pics 4-6). This line is rare in that the aleurone was bright after imbibition, but the pattern in seedlings is limited to the endosperm/roots, and not constitutive throughout the plant.

# Genotype: ASH D10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-10

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

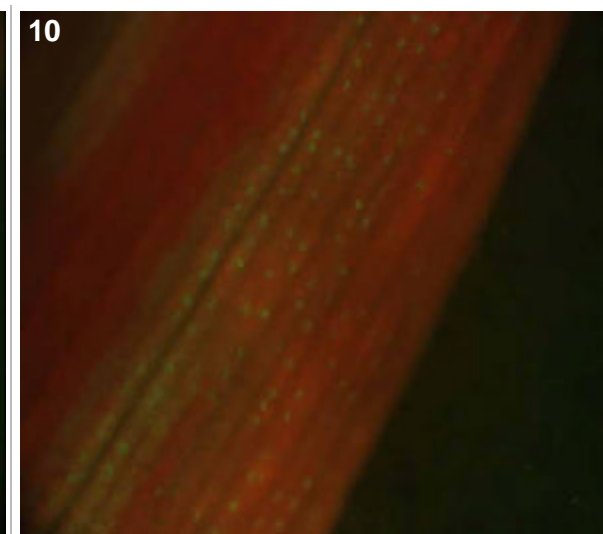
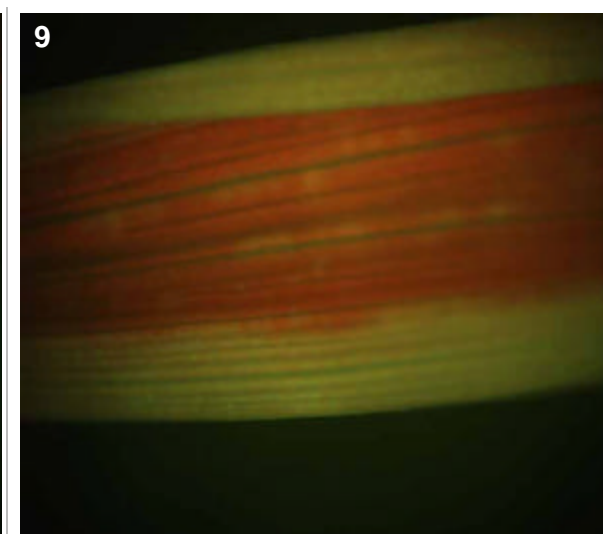
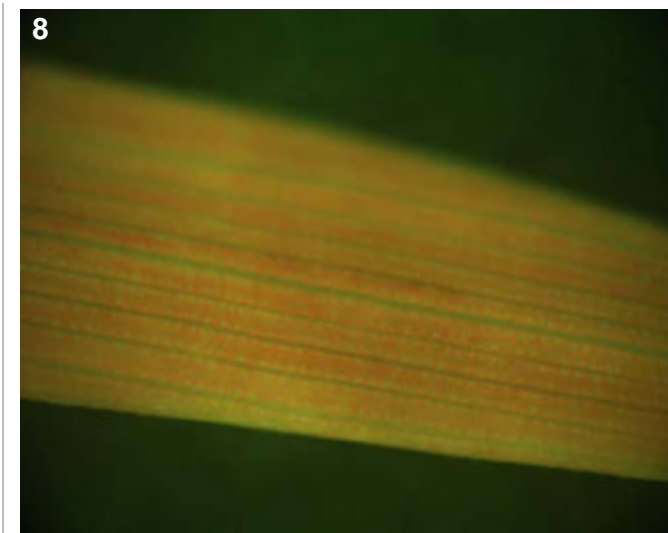
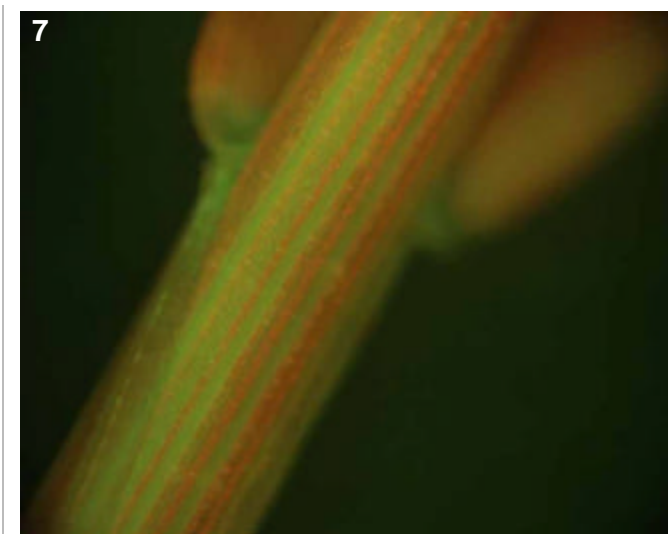
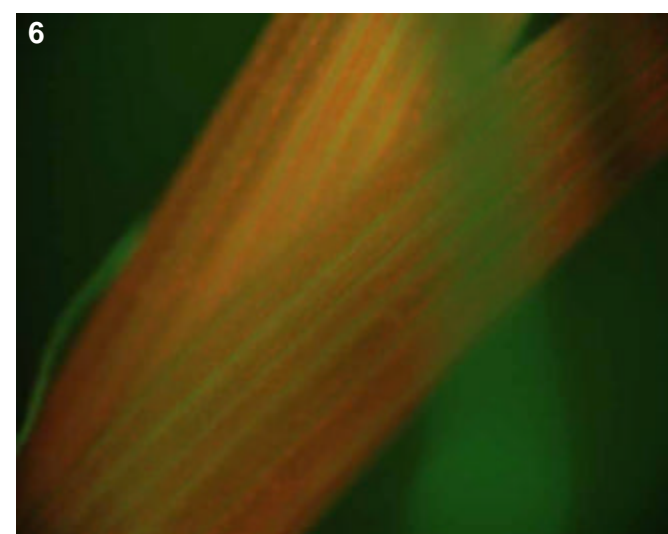
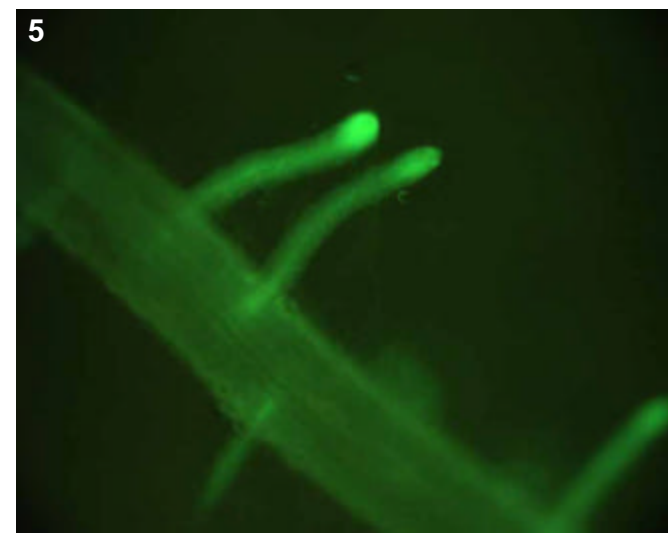
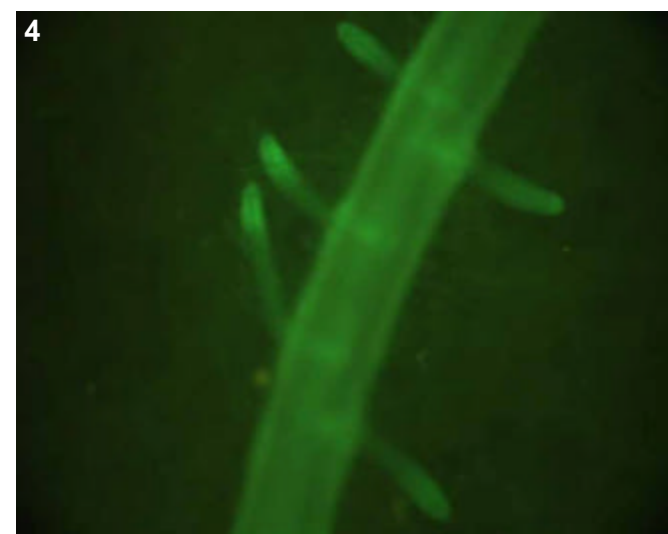
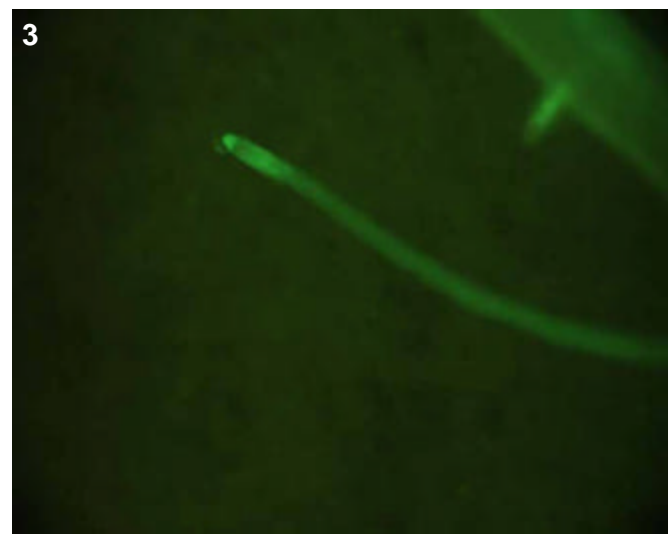
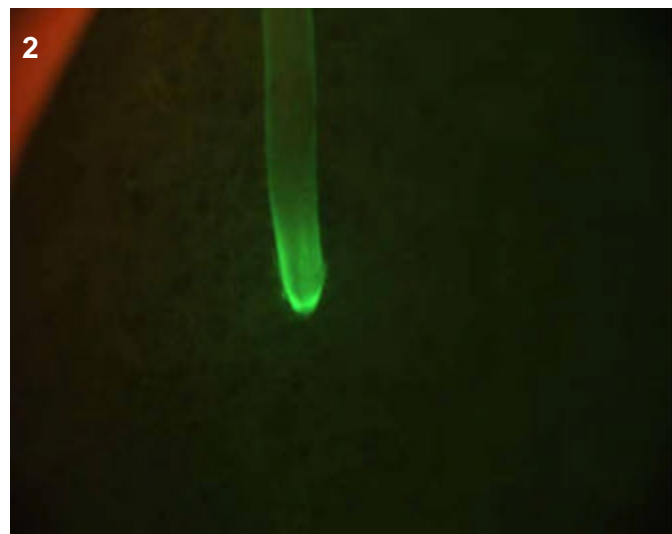
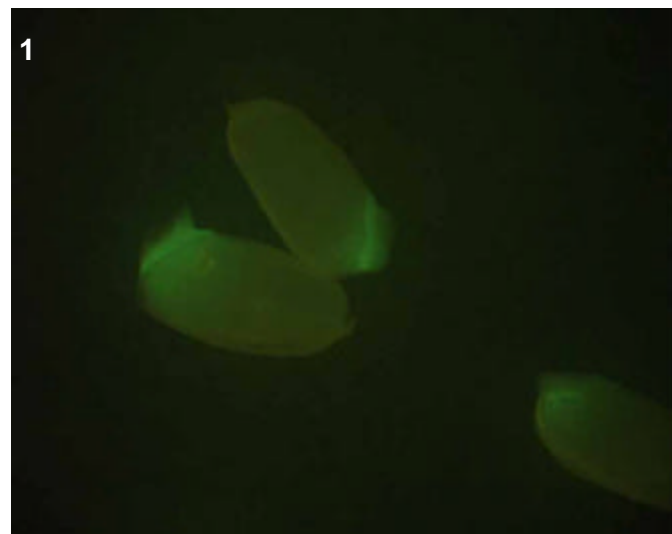
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

### T1 seed comments

5/5 seeds had bright expression

### T1 seedling comments

Bright expression in root and shoot, only 1/3 GFP+ seedlings had expression in the endosperm as well. There may be epidermal expression in the sheath and leaf tissue (pics 6-10), note that epidermal expression appears first towards leaf margins and then moves in towards center (pic 9).

# Genotype: ASH E07

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant:   
T1 seed/seedling: 1-4  
T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle

Embryo

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis

Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

Constitutive

**T1 Mature**

T0 pattern verified:

T0 pattern verified plus:

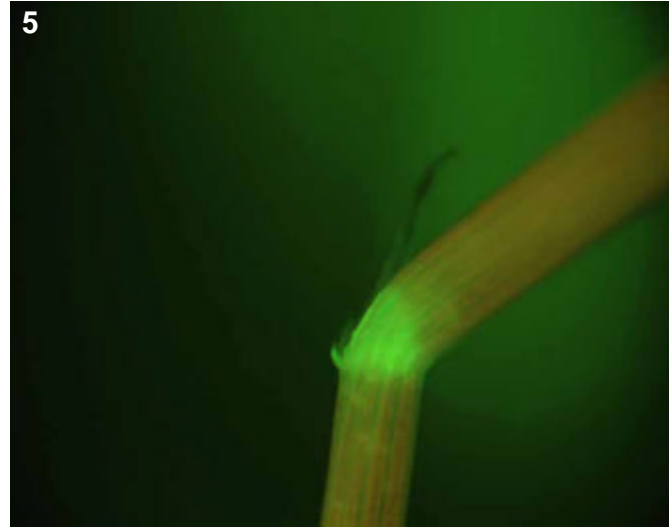
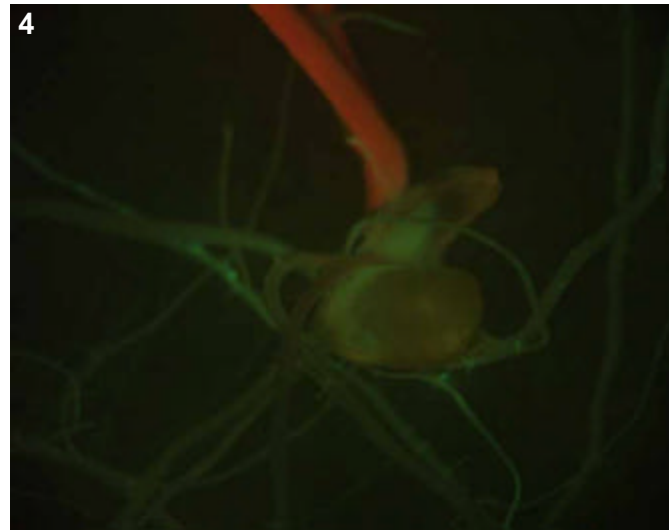
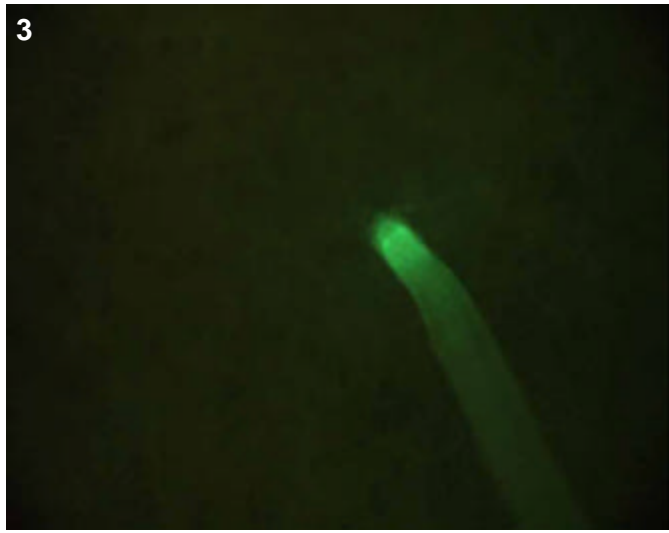
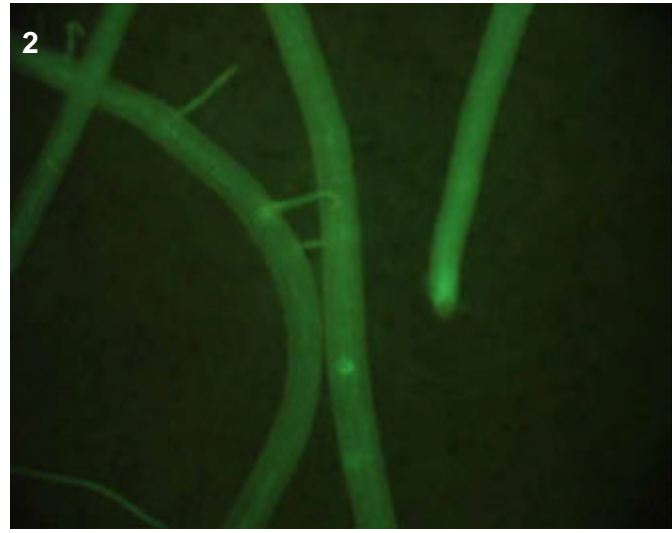
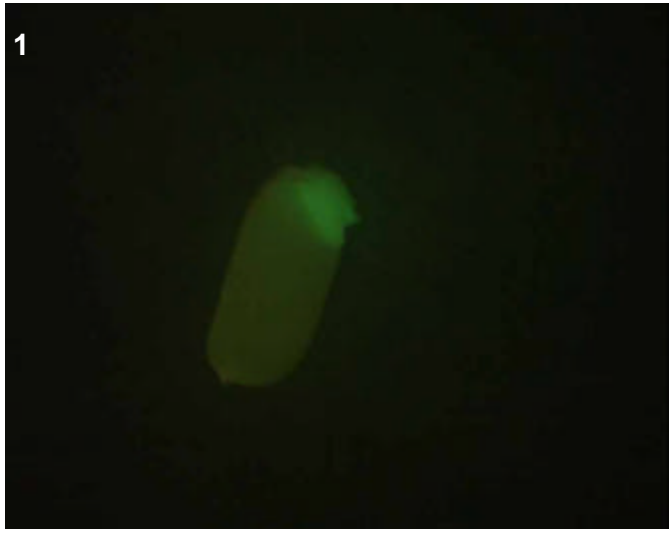
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**  
This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

**T1 seed comments**  
4/5 seeds had bright expression

**T1 seedling comments**

# Genotype: ASH E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

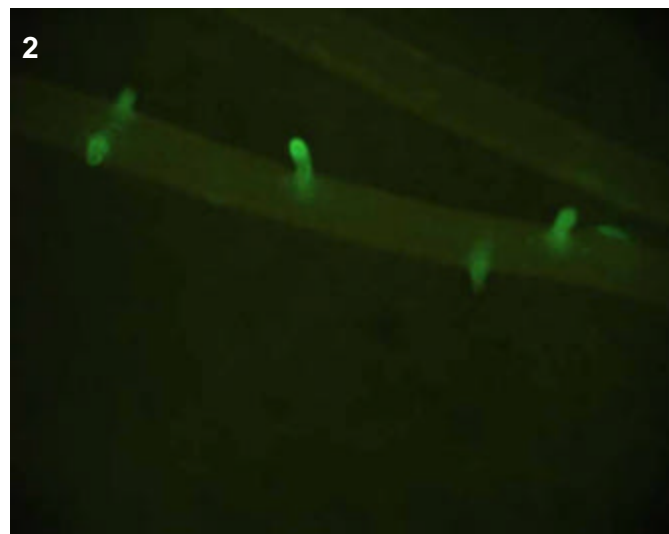
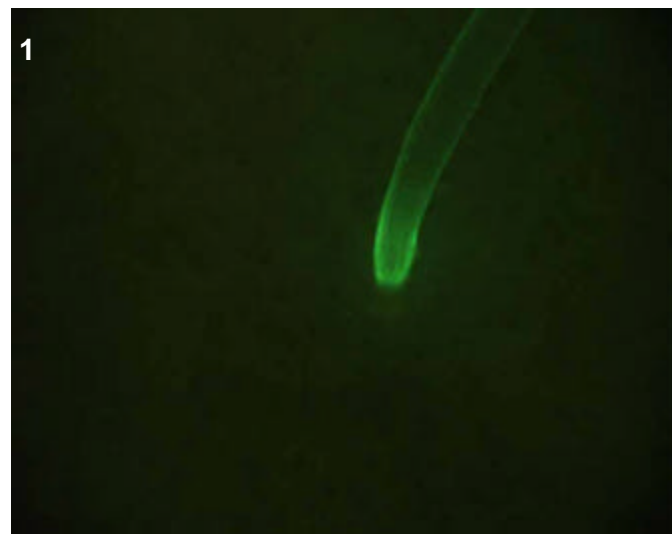
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

Number T2 seed produced:



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

## T1 seedling comments

A nice root-specific line, with expression limited to epidermal in crown tips (pic 1) and perhaps cortex in the lateral roots (pic 2). Note the specificity of expression to the lateral roots in picture 2.

# Genotype: ASH F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

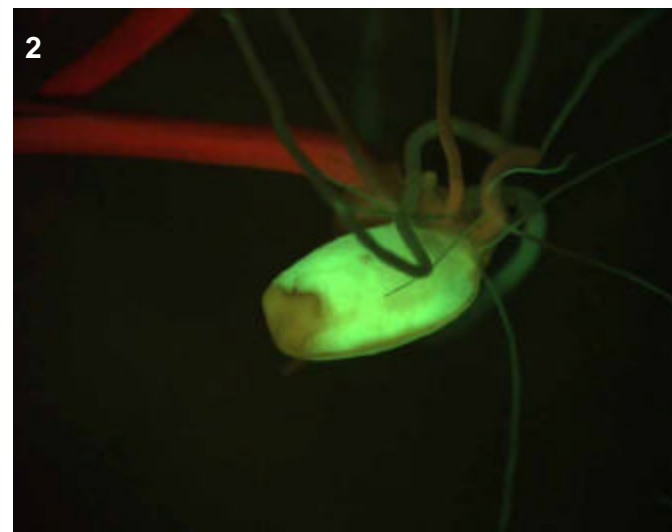
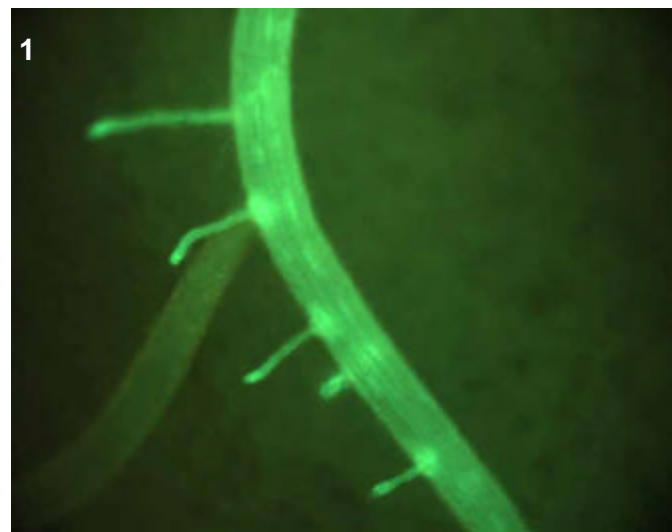
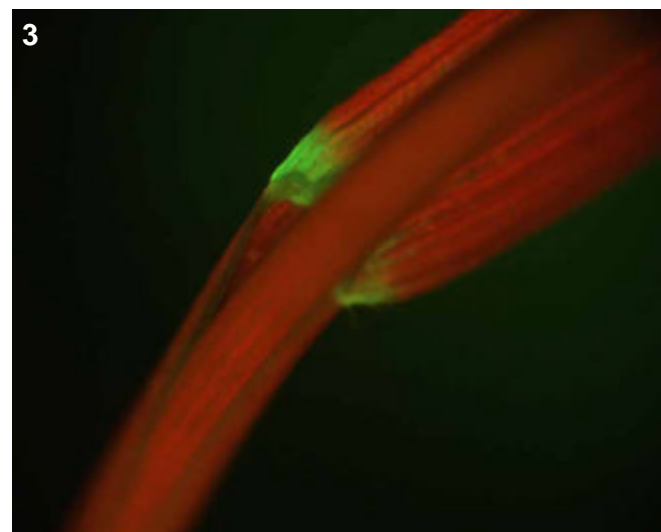
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

### T1 seed comments

1/5 seeds had faint expression, no picture taken

### T1 seedling comments



# Genotype: ASH F06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

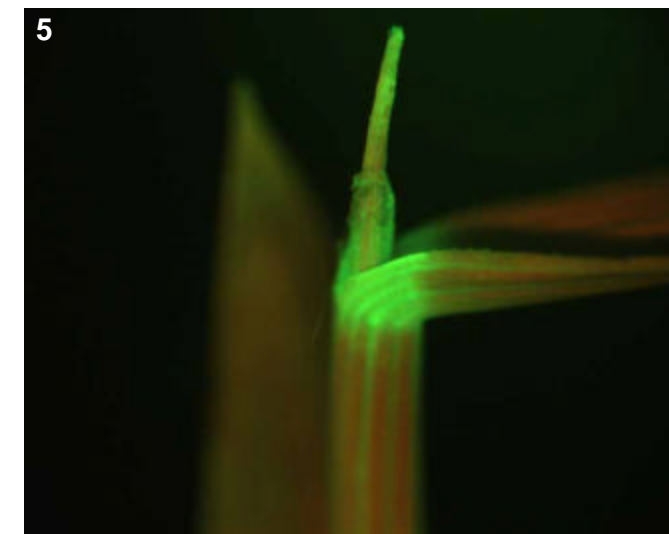
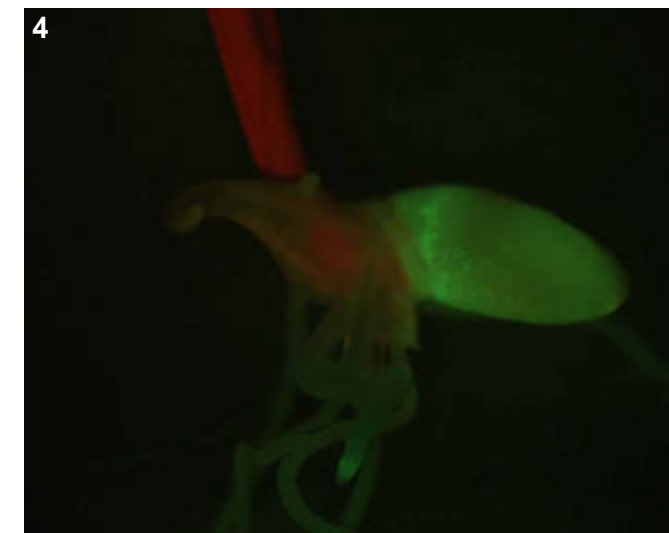
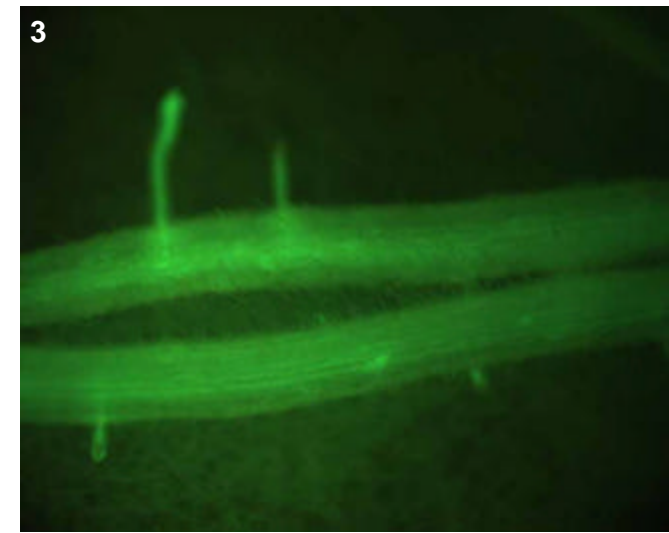
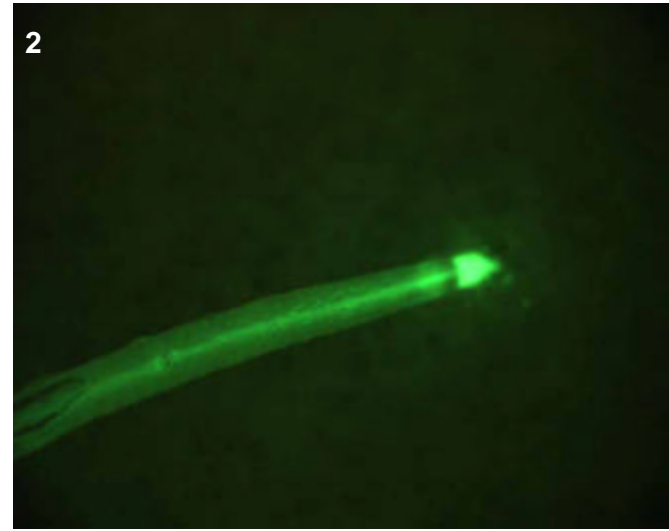
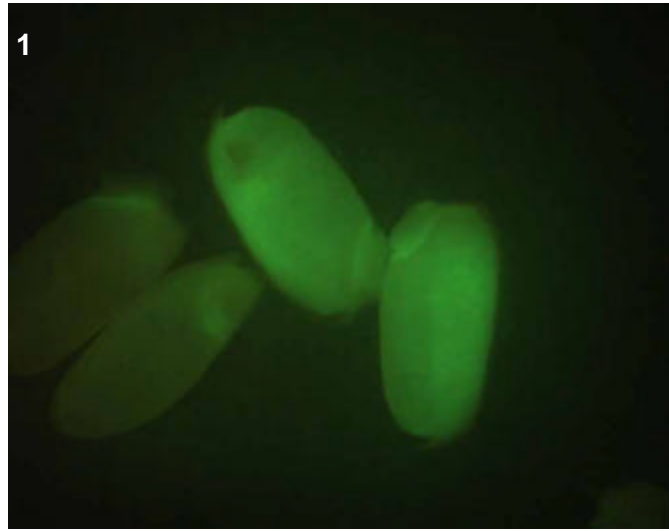
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**  WIP

**Number T2 seed produced:**



### T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

### T1 seed comments

At least 2/5 seeds had expression

### T1 seedling comments

The pattern in crown roots (pic 2) looks to be within the stele and could be interesting to confocal.

# Genotype: ASH G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

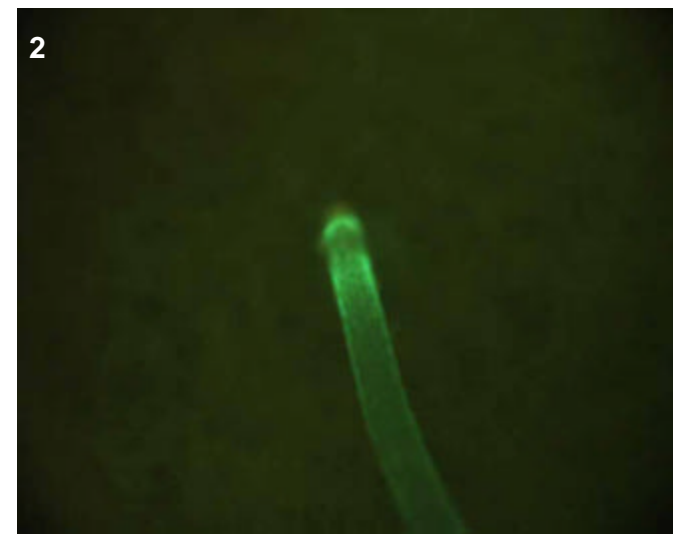
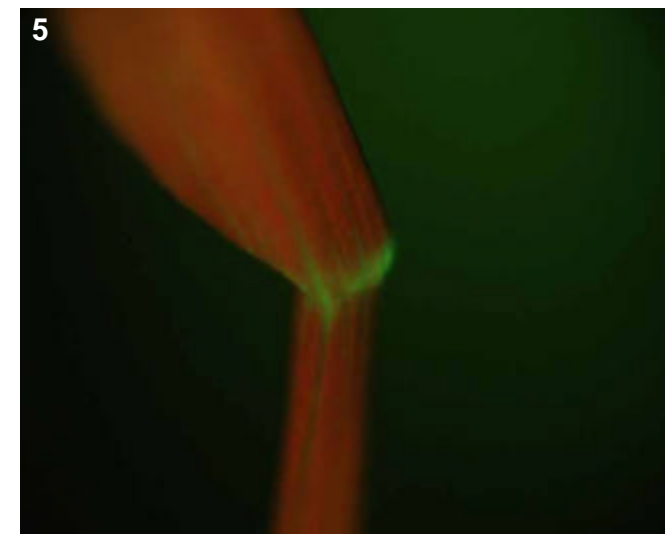
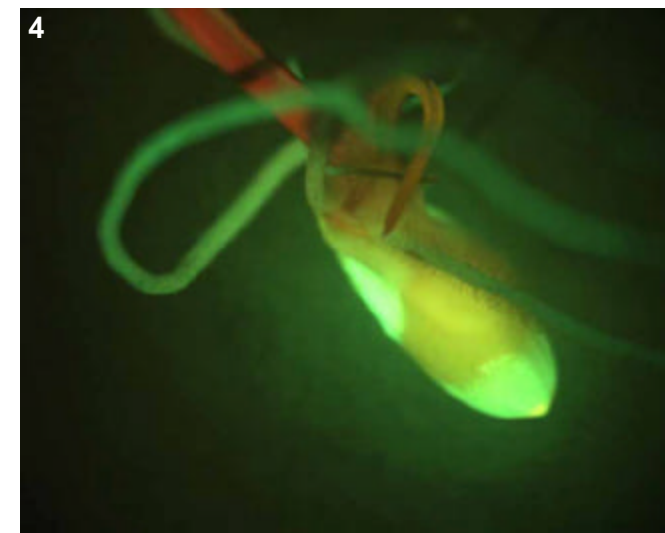
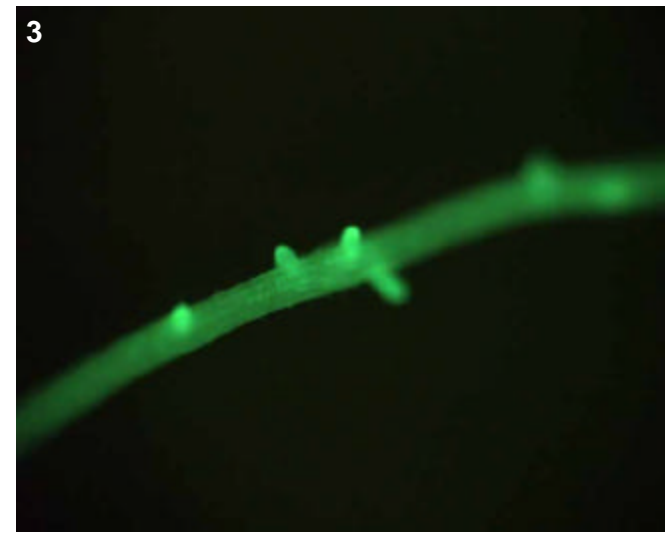
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

### T1 seed comments

3/5 seeds had medium expression (picture 1).

### T1 seedling comments

# Genotype: ASH G10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

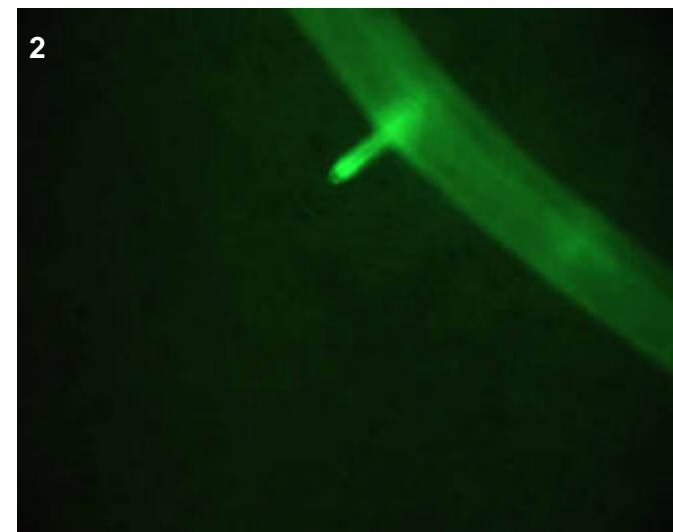
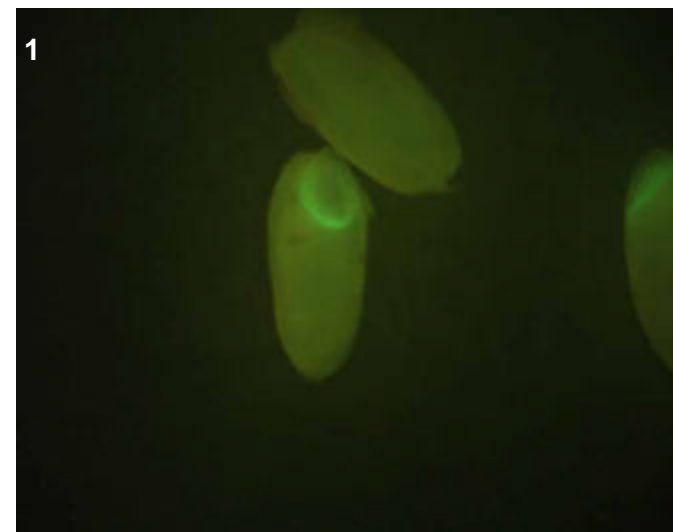
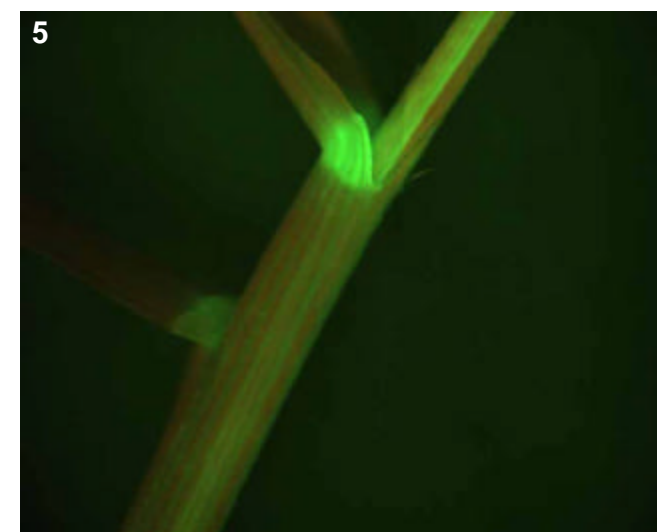
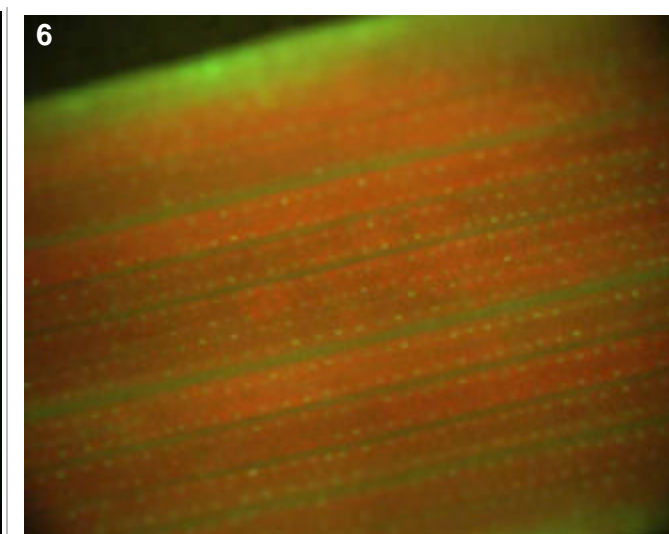
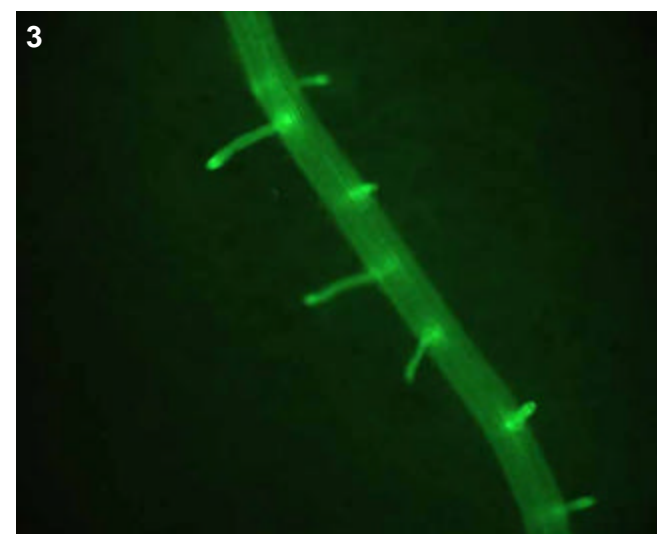
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

4/5 seeds had medium expression

## T1 seedling comments

There were two GFP+ plants, one extremely bright and the other about half so. Perhaps dosage effect of the transgene?

# Genotype: ASH G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

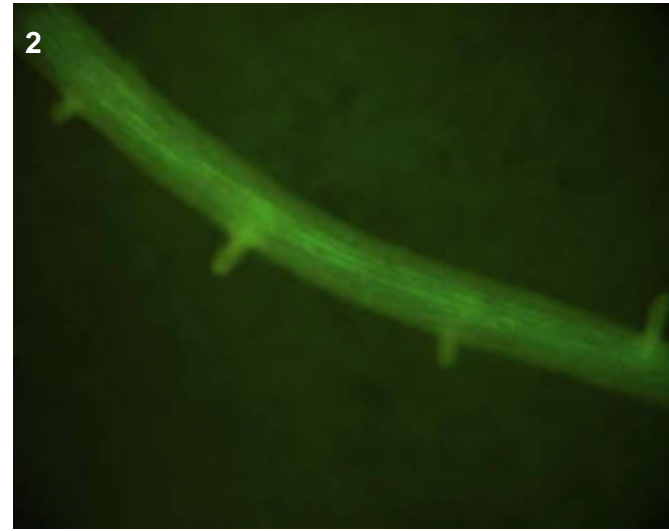
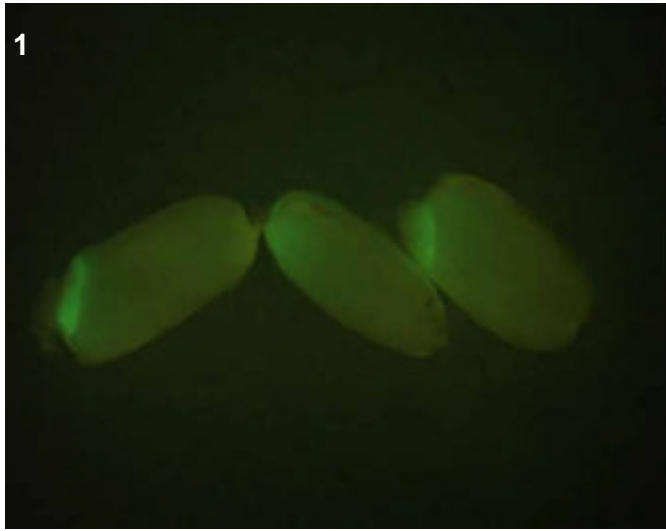
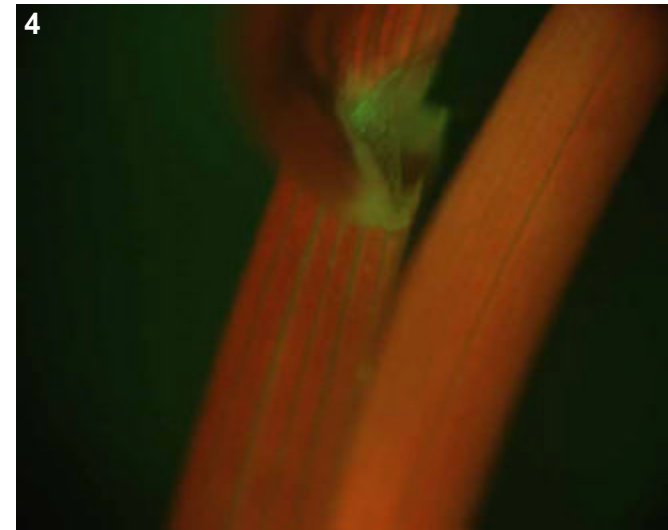
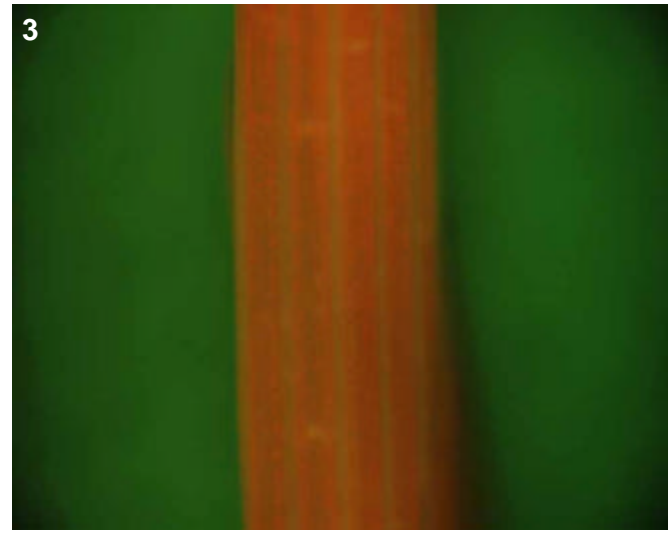
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

3/5 seeds had expression

## T1 seedling comments

# Genotype: ASH G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

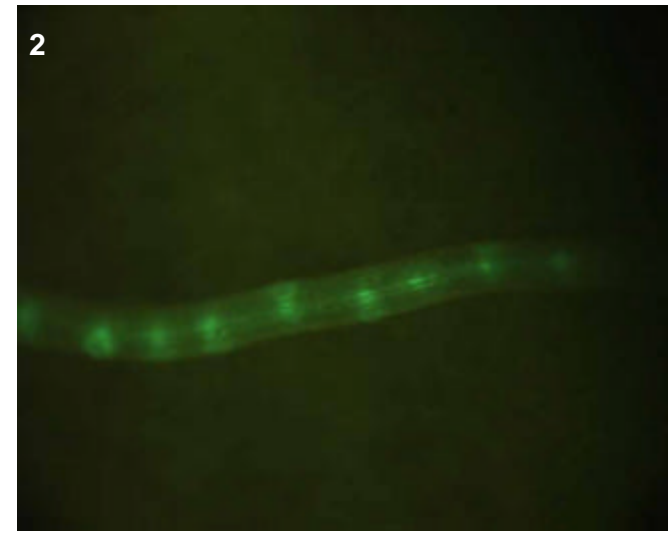
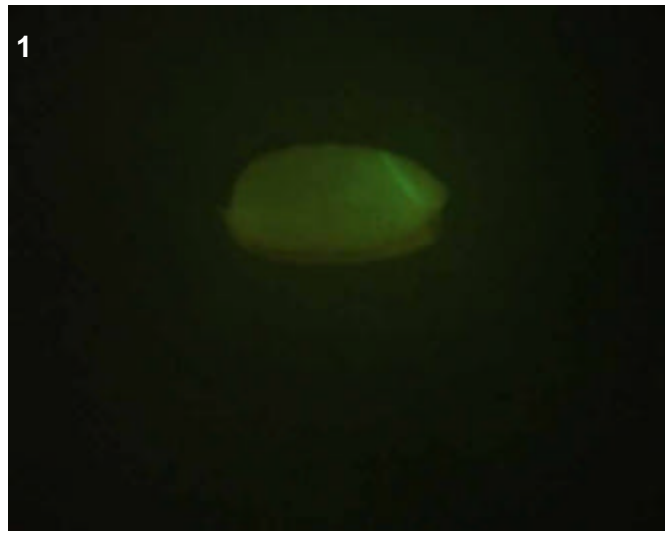
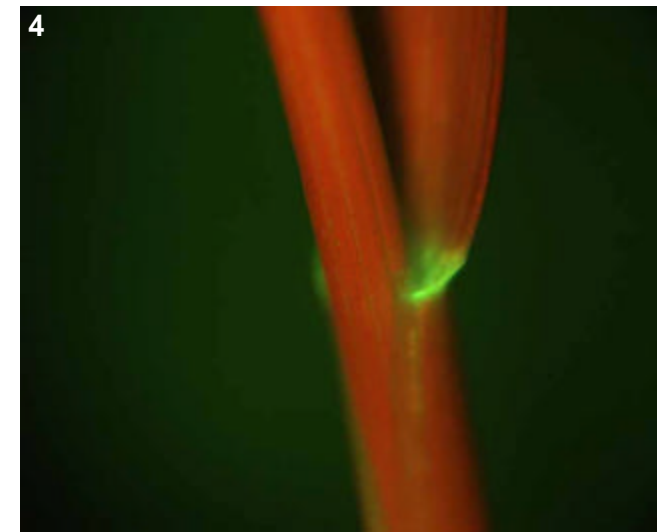
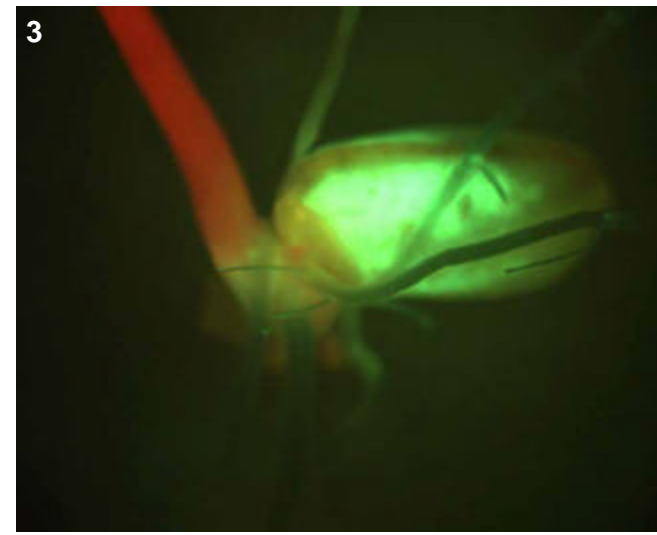
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

5/5 seeds had medium expression

## T1 seedling comments

# Genotype: ASH H02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

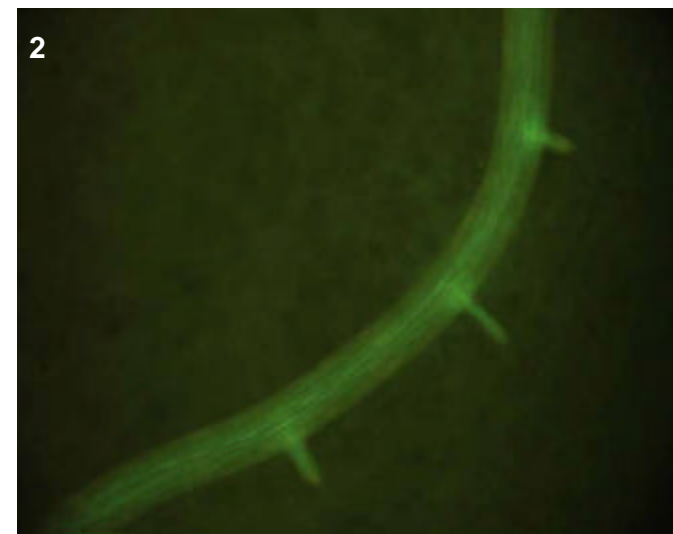
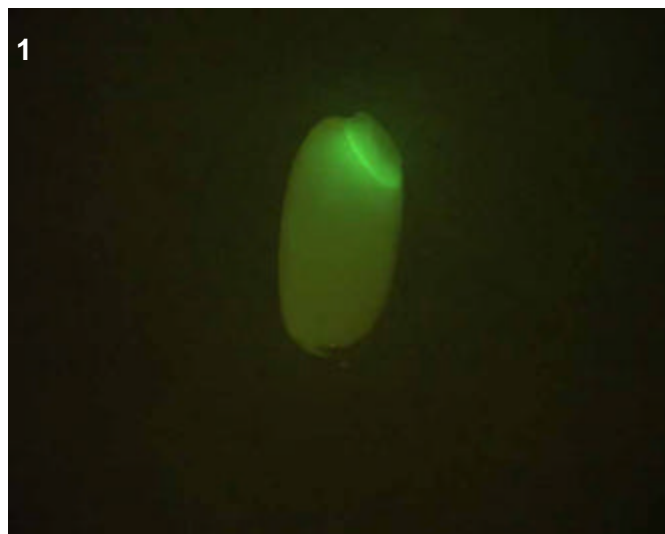
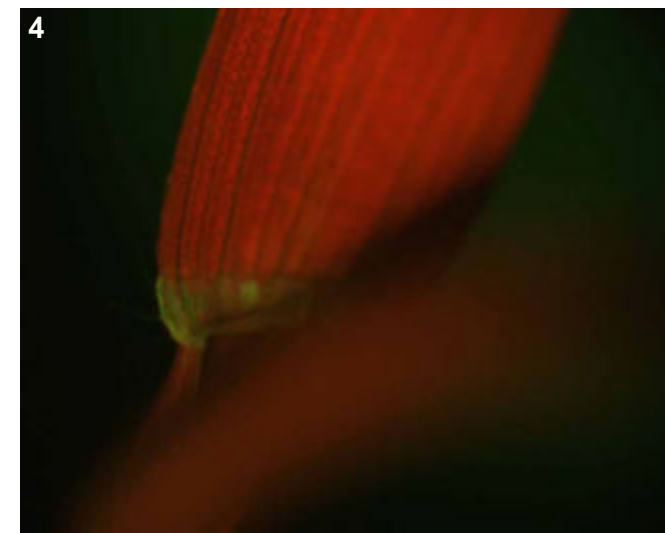
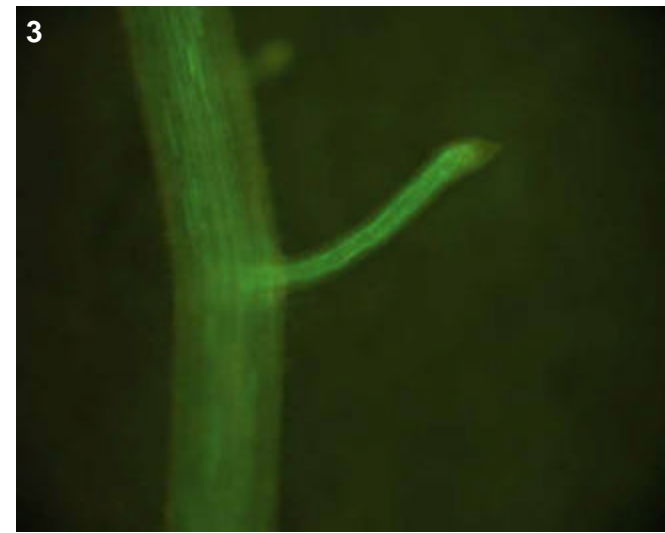
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

4/5 seeds had expression

## T1 seedling comments

# Genotype: ASH H09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

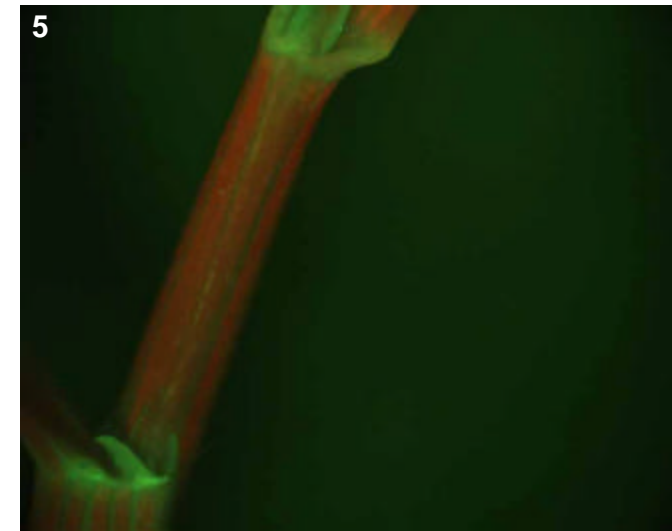
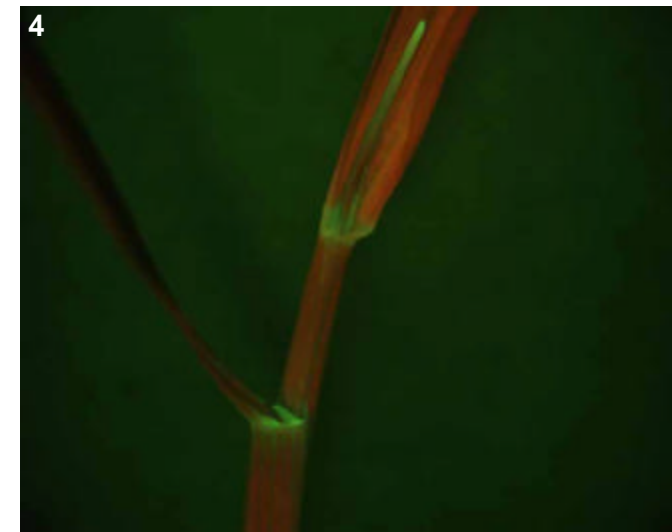
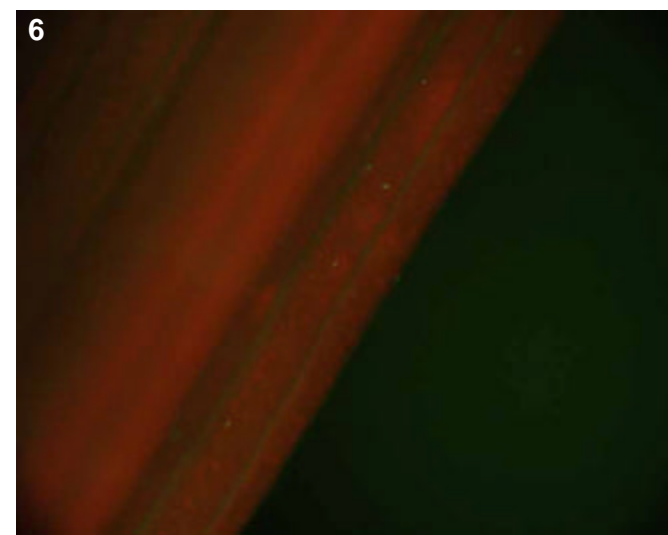
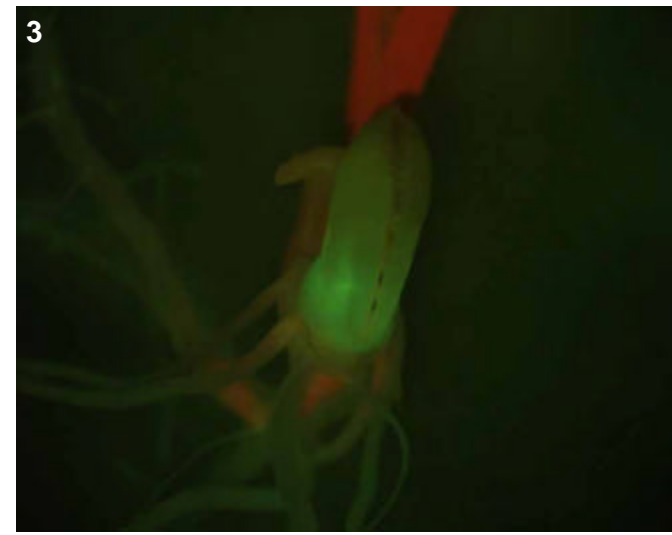
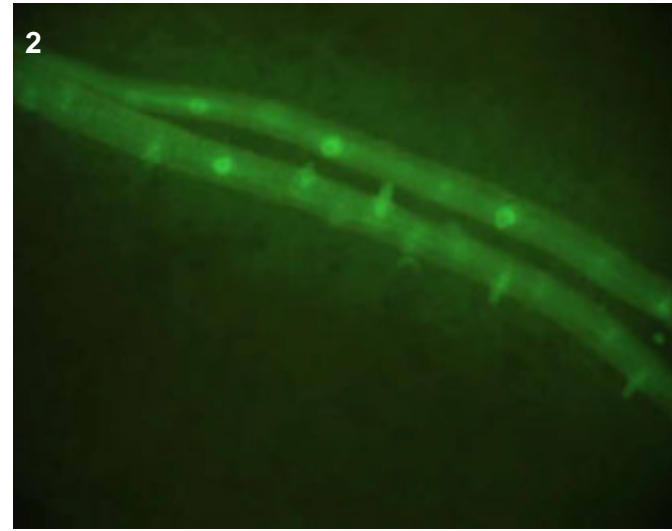
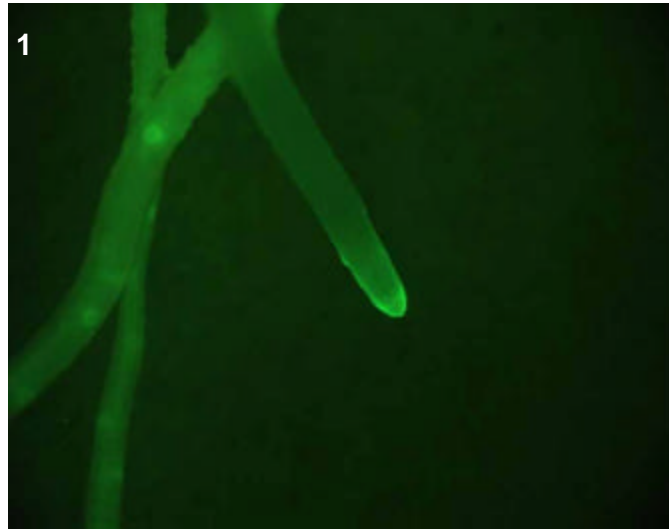
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

Number T2 seed produced:



## T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

## T1 seed comments

## T1 seedling comments

# Genotype: ASH H10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

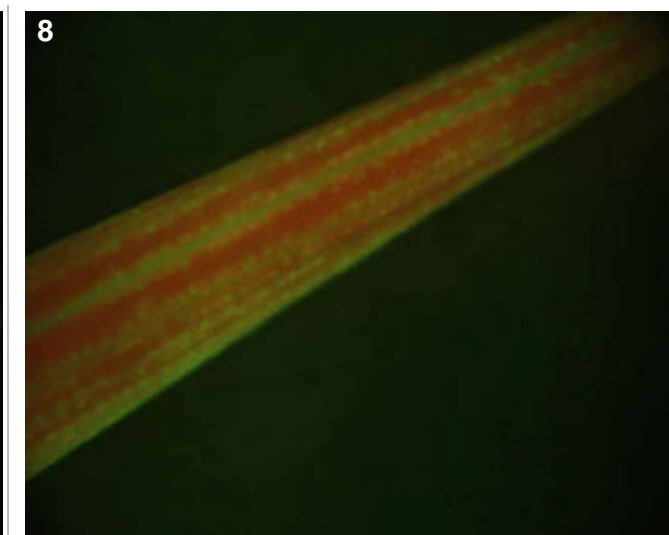
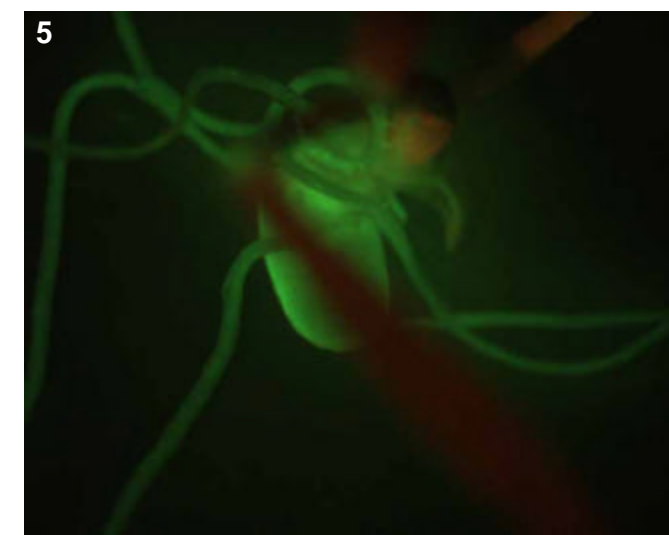
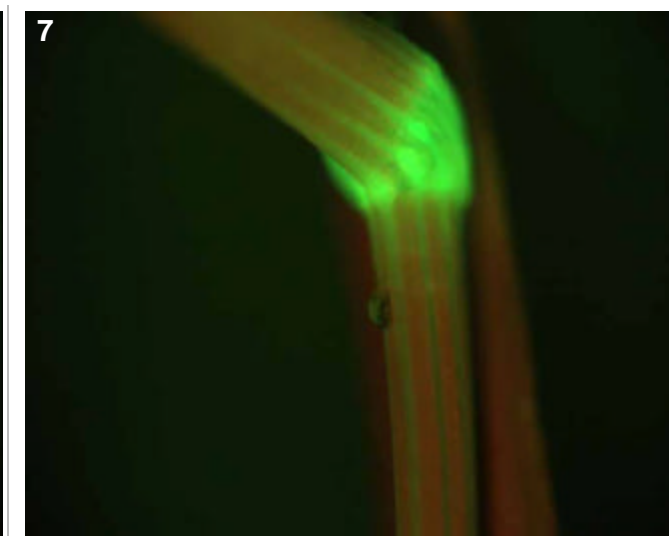
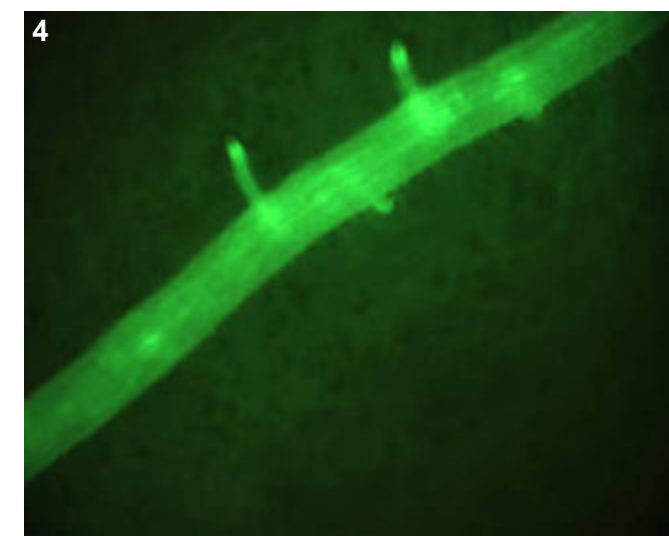
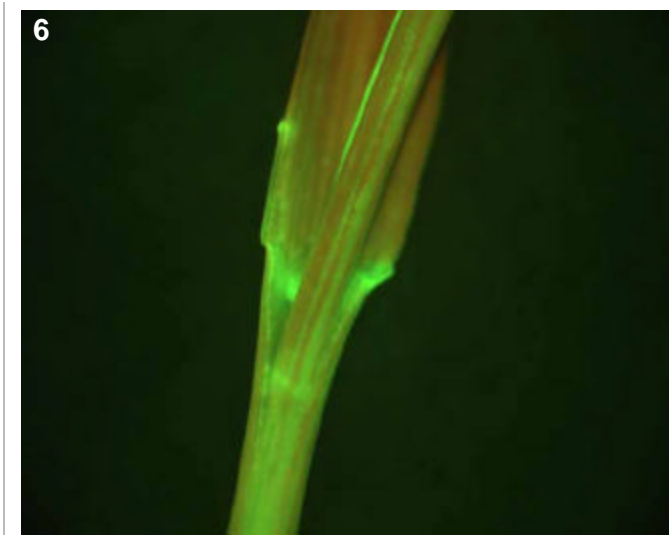
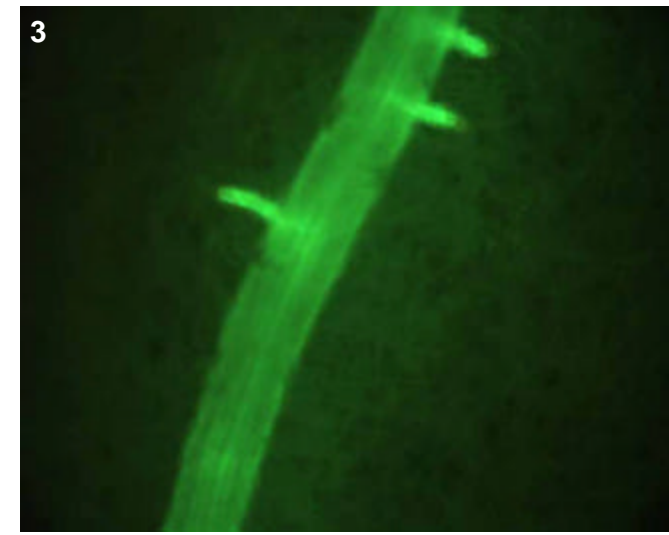
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?**  
YES, 3 GFP+ plants
- Confocal?**
- Number T2 seed produced:**



**T0 comments**  
This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

**T1 seed comments**  
3/5 seeds had expression

**T1 seedling comments**  
Extremely bright expression (see pics 2-8), most likely constitutive.



# Genotype: ASH H12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

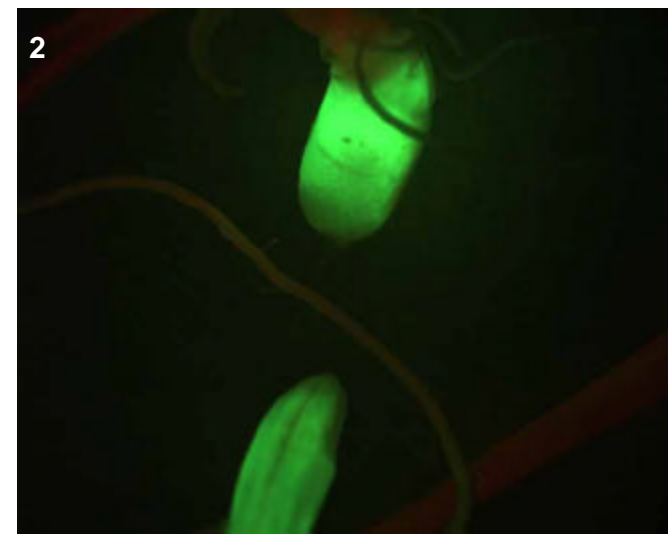
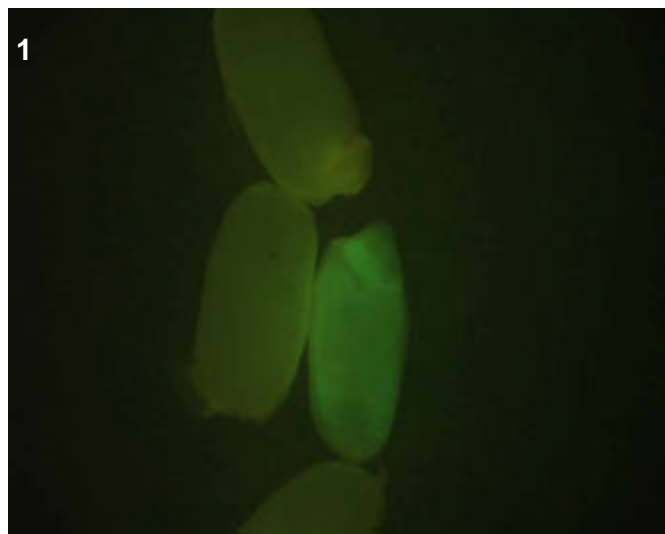
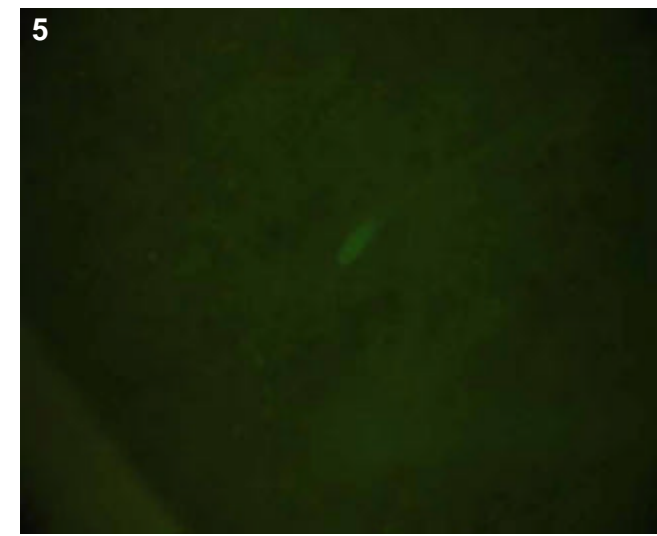
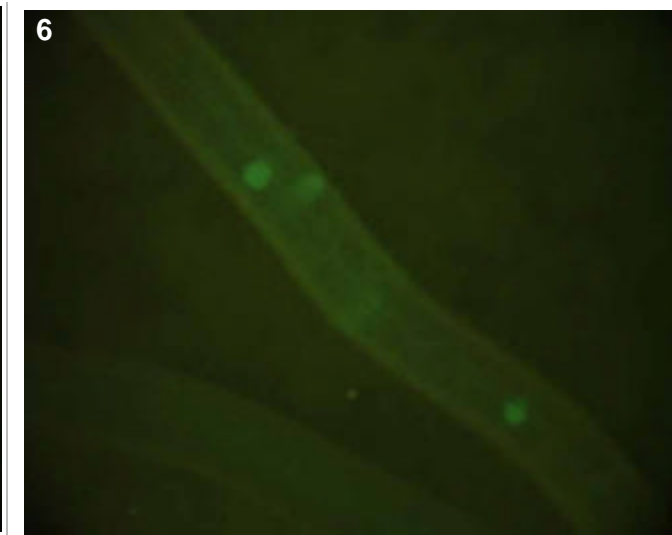
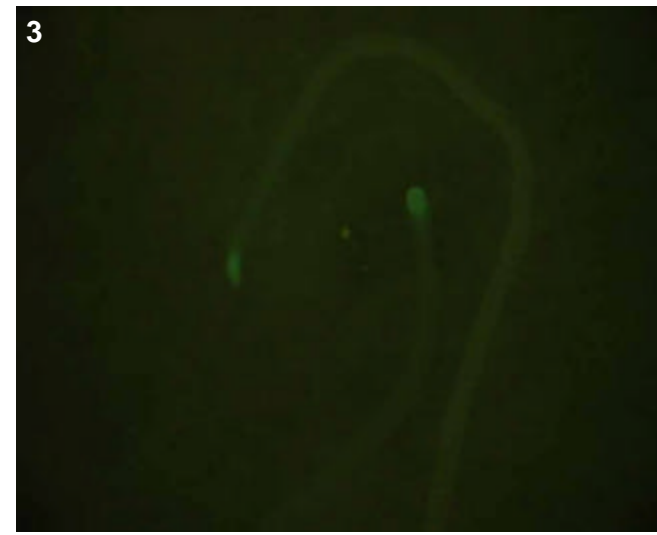
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



### T0 comments

This line, like all of the ASH lines, was derived from a glowing callus selected during regeneration.

### T1 seed comments

2/5 seeds had expression

### T1 seedling comments

The root pattern (pics 3-6) was not nearly as bright as the endosperm expression (pic 2), but still was very interesting and consisted of a small burst of expression in the cell division zone of crown and lateral roots. Also some expression at the zone of lateral root emergence (pic 6).

# Genotype: ASI B01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

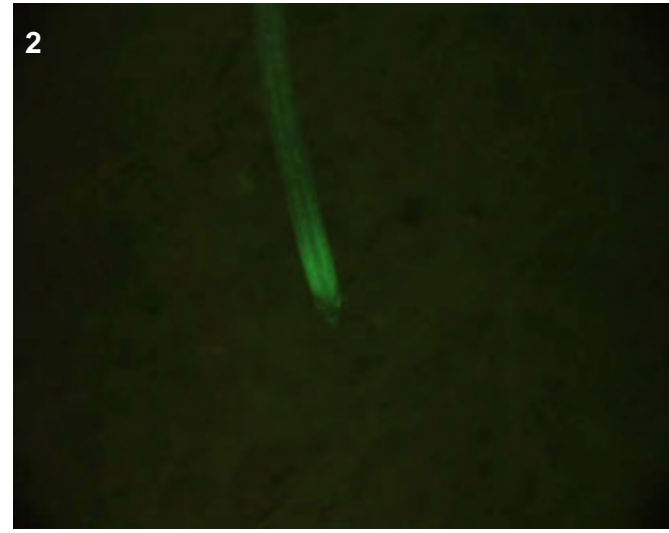
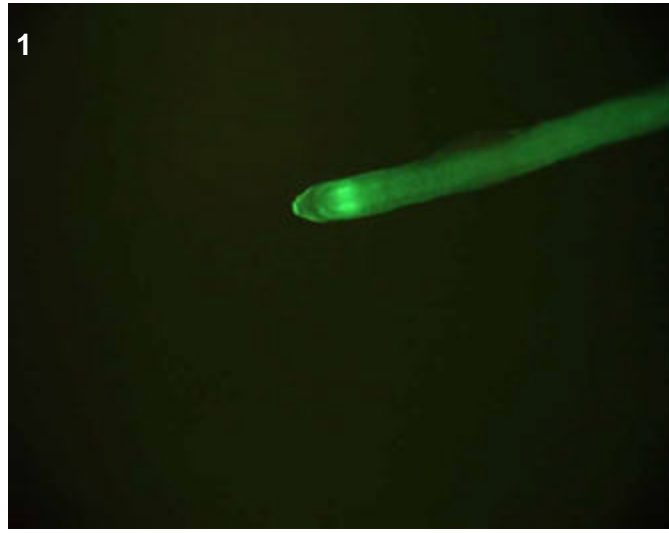
## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

WIP

Number T2 seed produced:



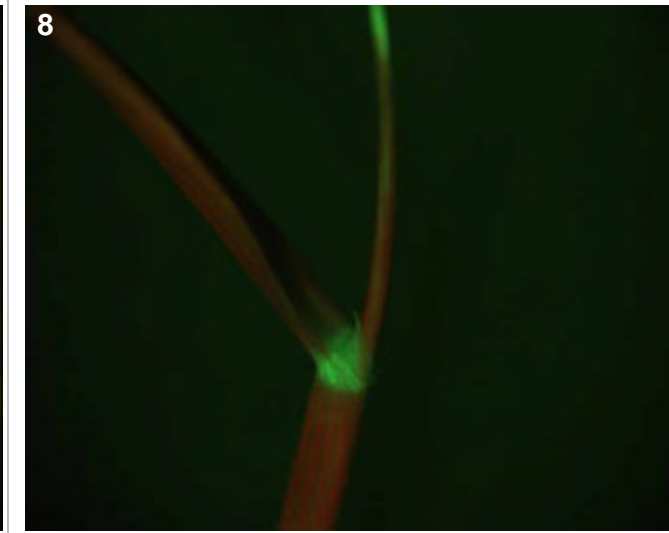
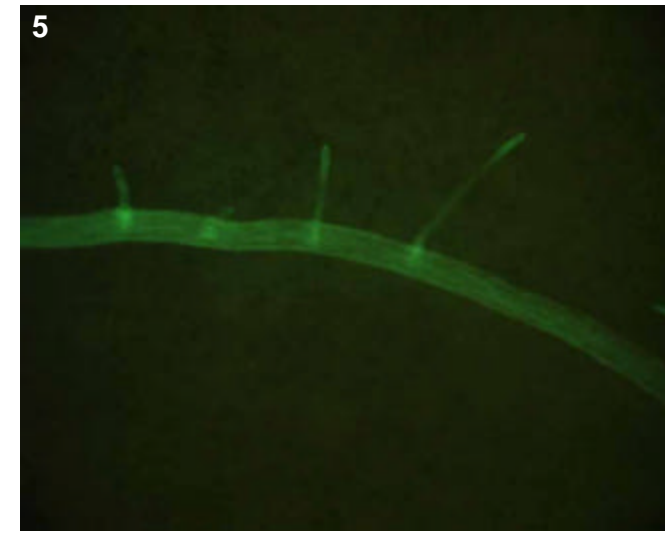
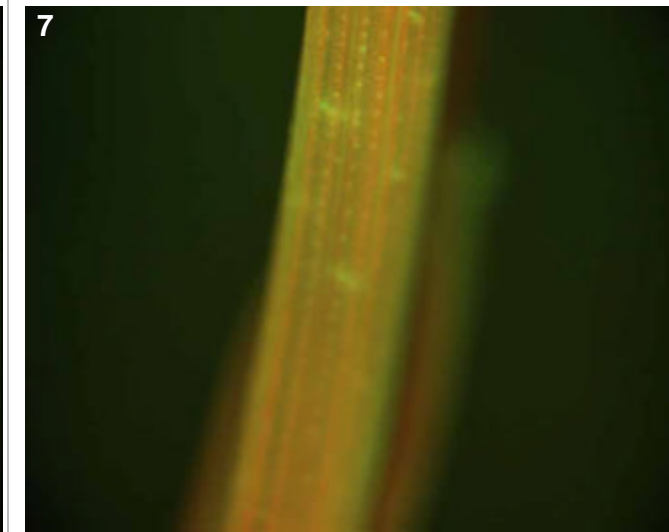
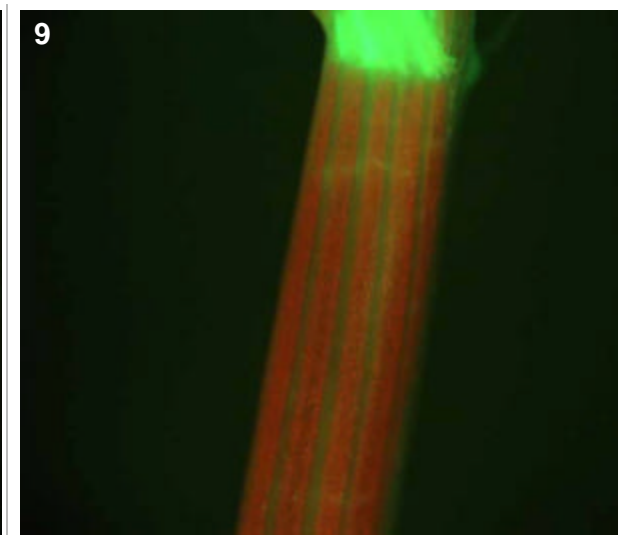
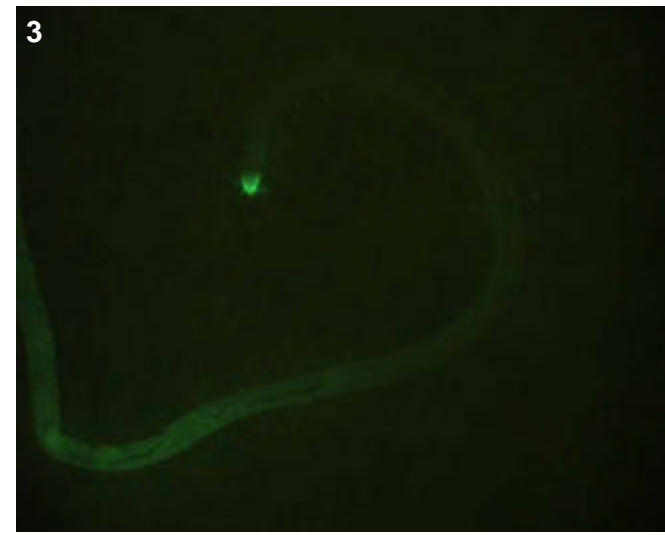
## T0 comments

This line was derived from a glowing callus selected during regeneration.

## T1 seed comments

## T1 seedling comments

Root expression was very bright and looks cortical (pics 1-2) with extra brightness in the cell division zone.



# Genotype: ASI B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

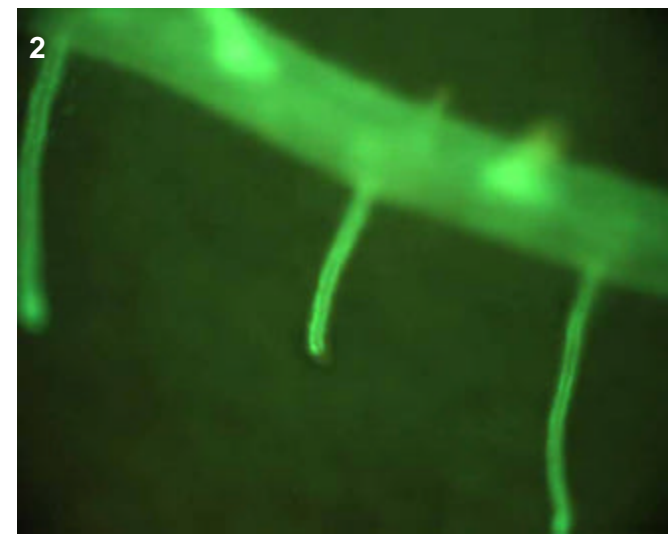
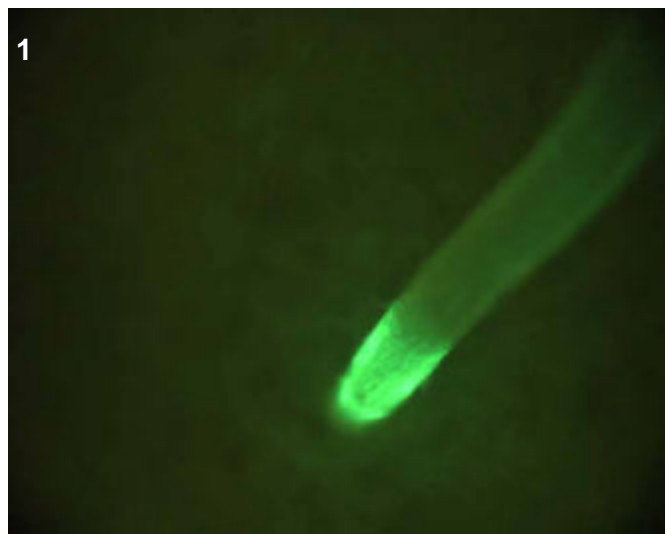
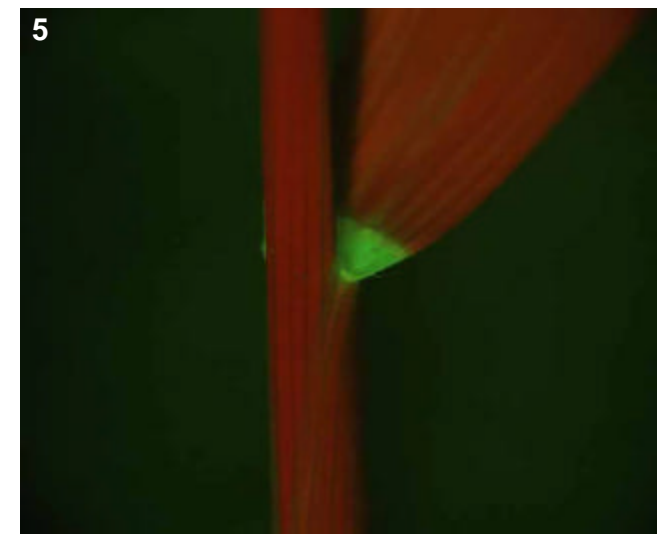
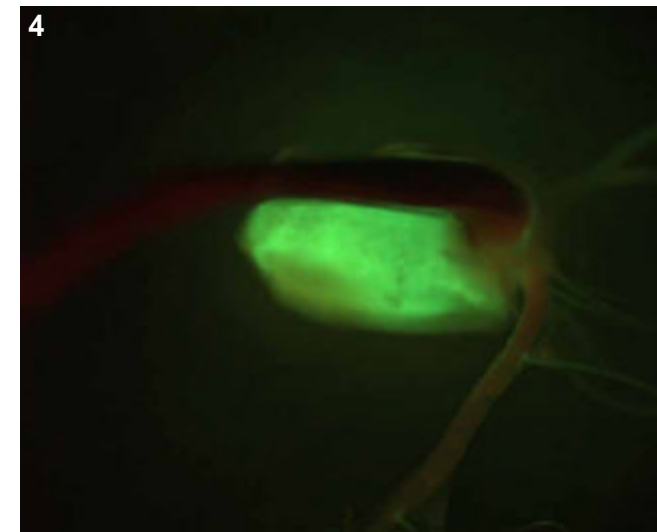
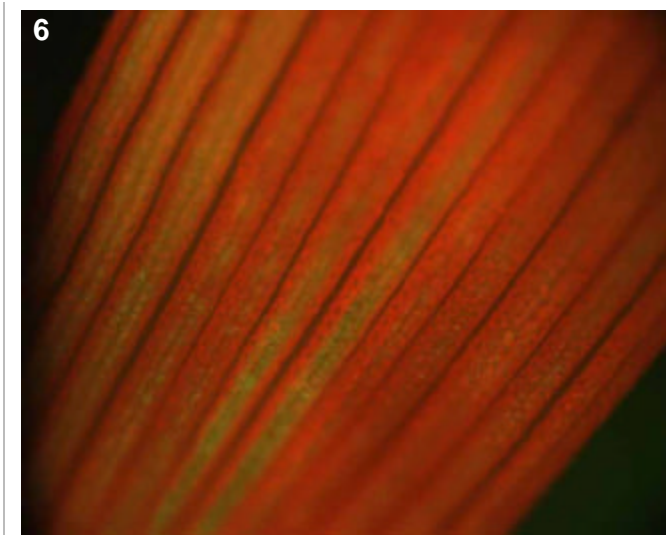
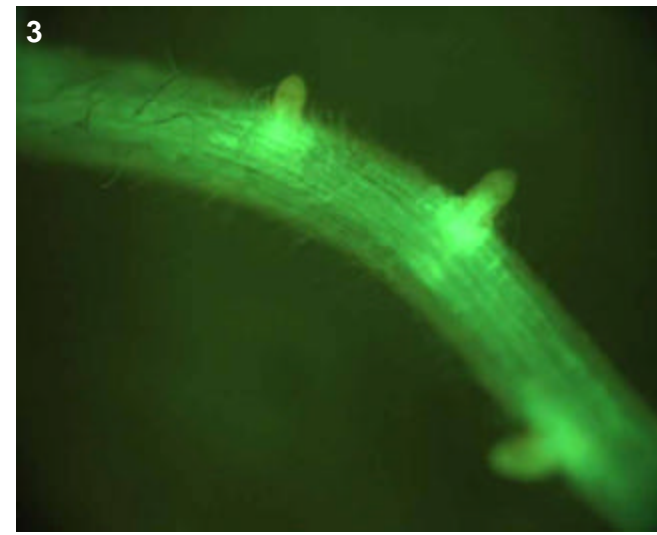
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Note the interesting stripes of expression on the young leaf tissue (pic 6).

# Genotype: ASI C02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

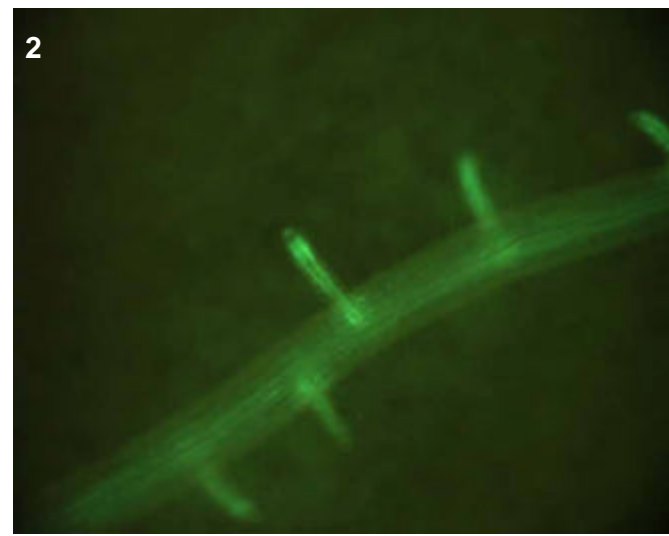
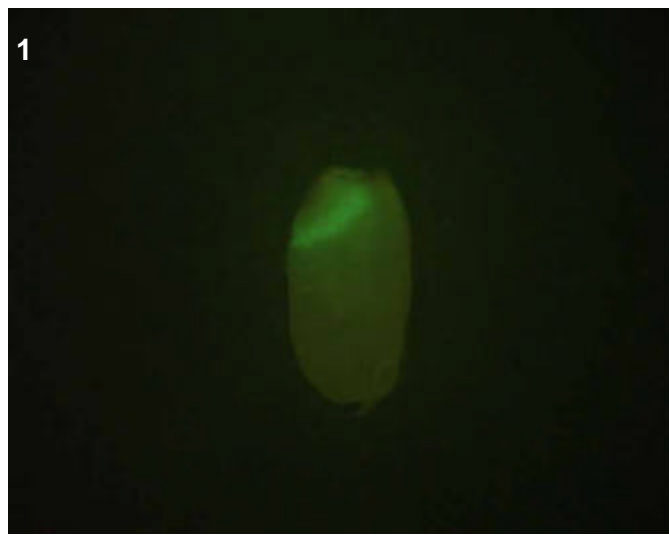
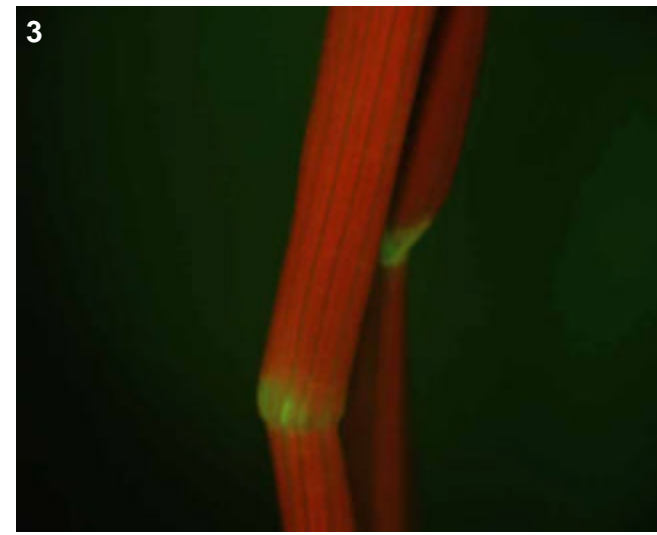
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

This line was derived from a glowing callus selected during regeneration.

## T1 seed comments

3/4 seeds had expression

## T1 seedling comments

# Genotype: ASI C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

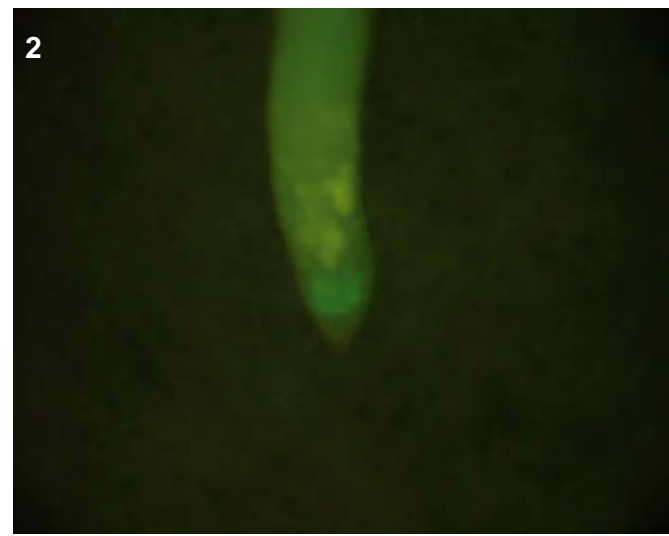
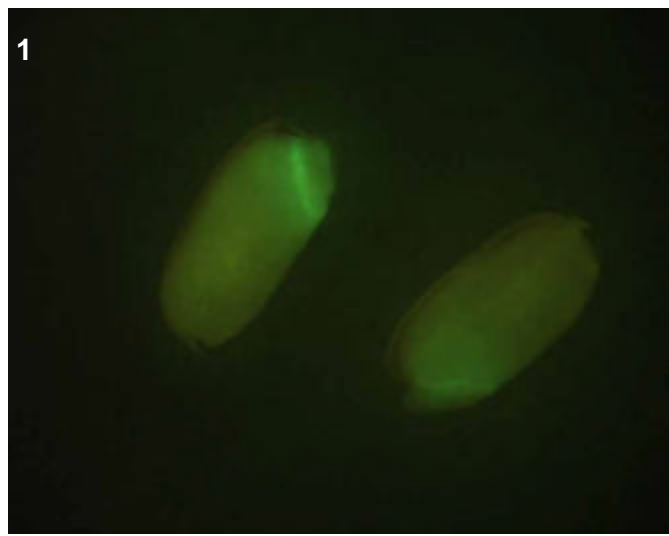
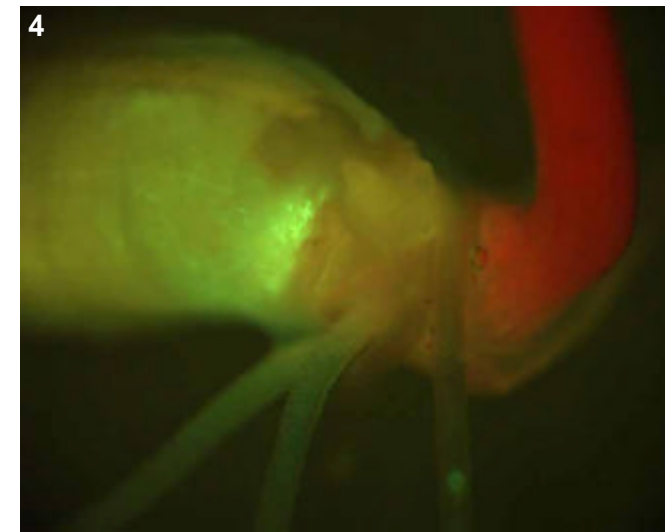
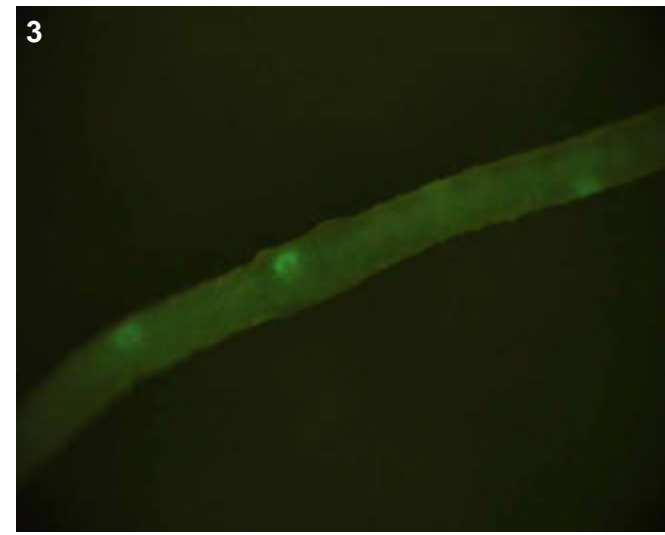
**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

WIP

**Number T2 seed produced:**



### T0 comments

This line was derived from a glowing callus selected during regeneration.

### T1 seed comments

2/5 seeds had expression

### T1 seedling comments

The most interesting aspect regarding root expression is the bright initials in the apex of crown roots (pic 2), and could be interesting to confocal. There may be a phenotype, as no seminal root was present. The 1 GFP+ plant, as well as two GFP- (hoping they are heterozygous) were moved to GH.

# Genotype: ASI C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

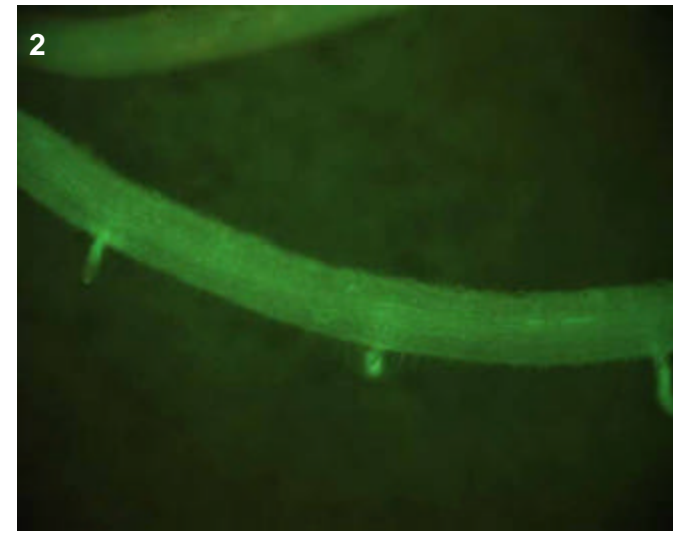
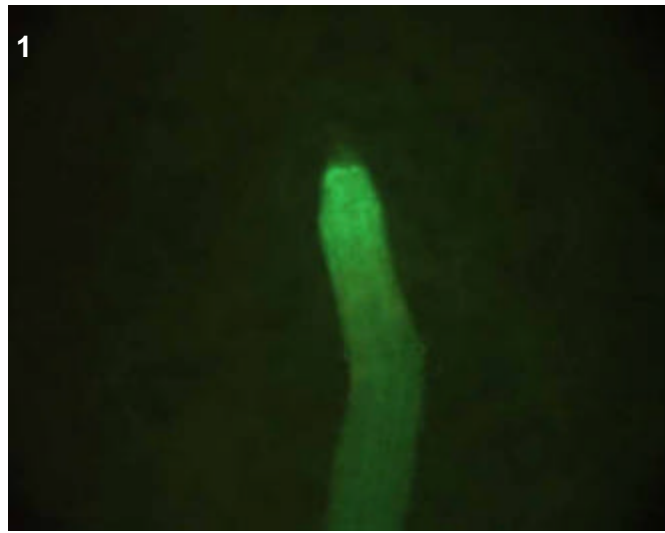
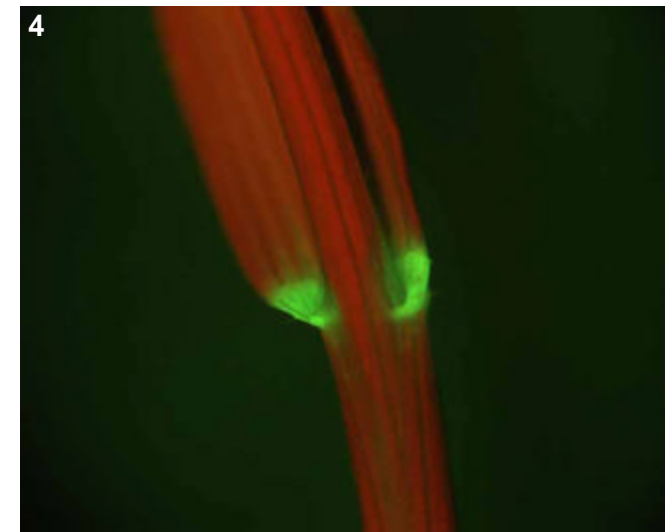
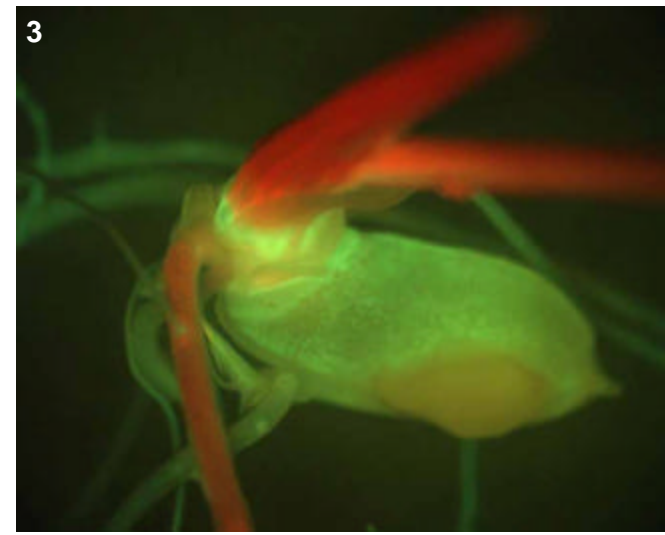
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASI E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

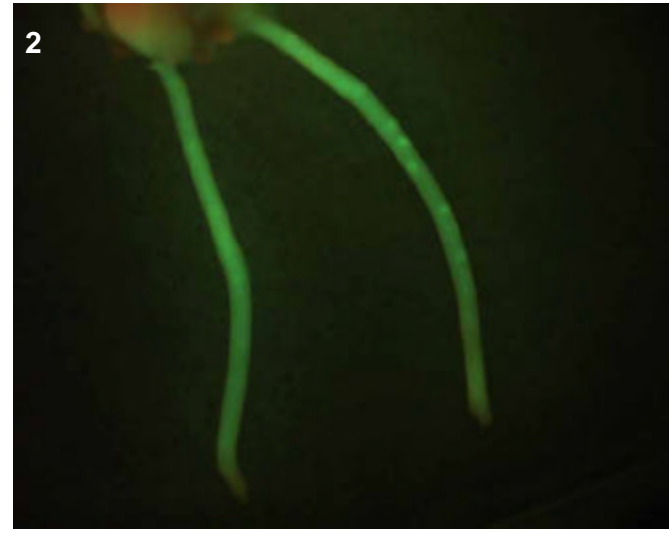
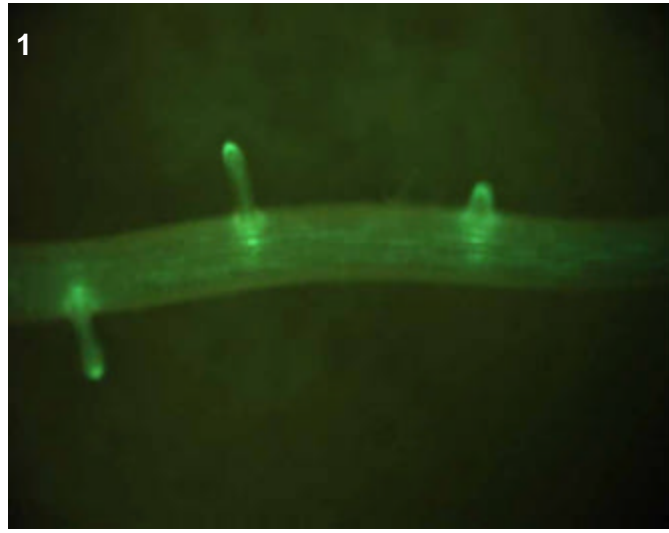
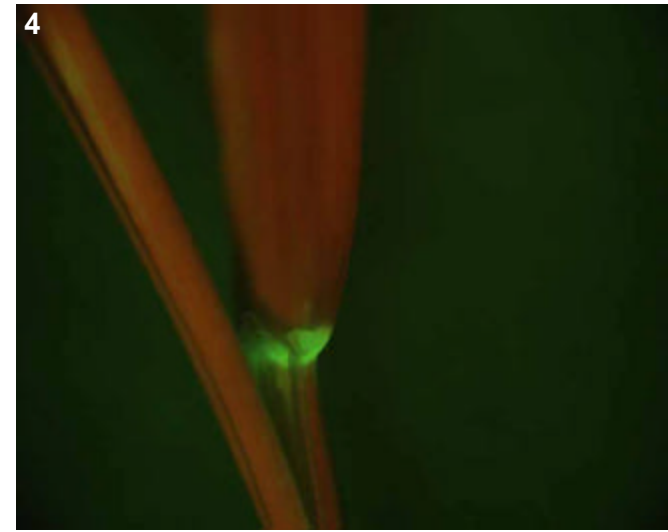
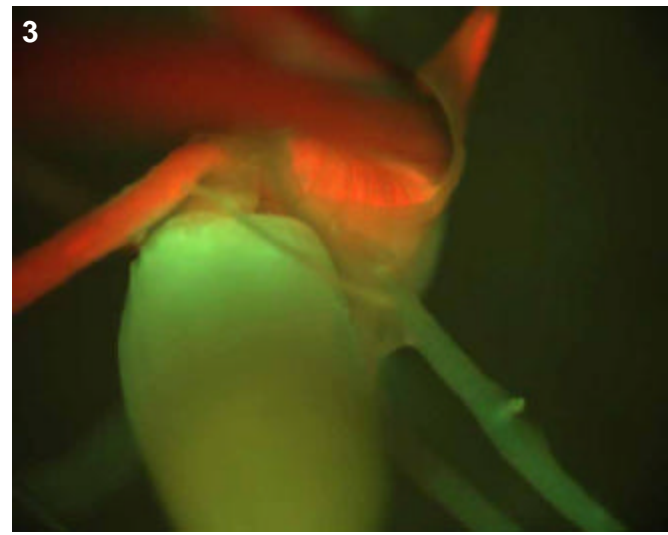
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASI F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

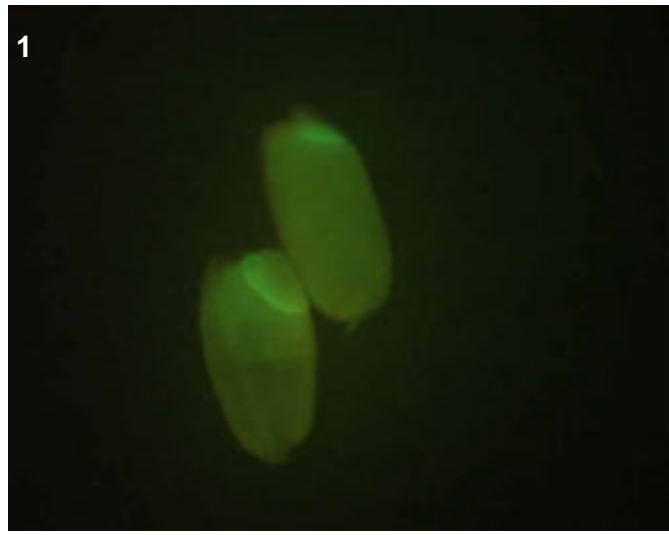
No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

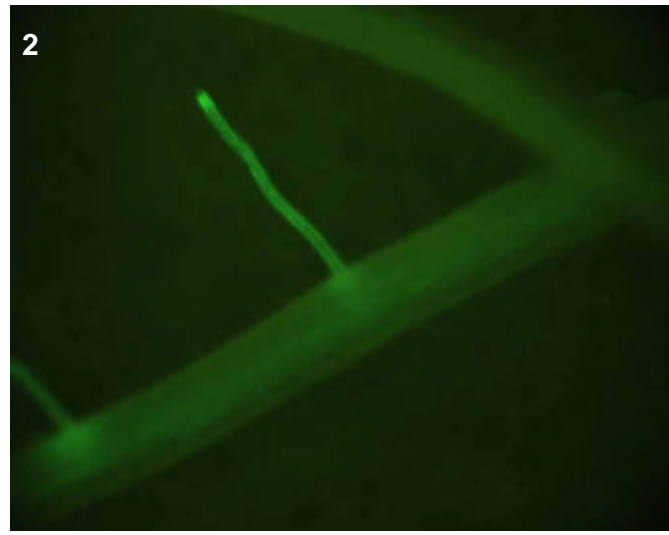
**Confocal?**

**Number T2 seed produced:**

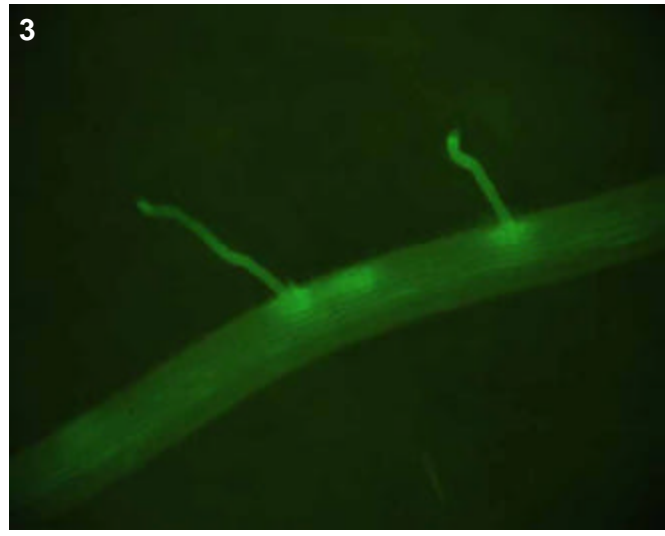
1



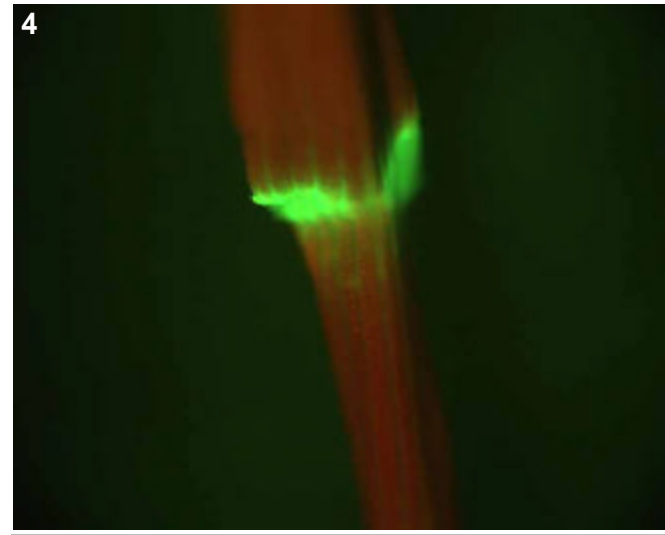
2



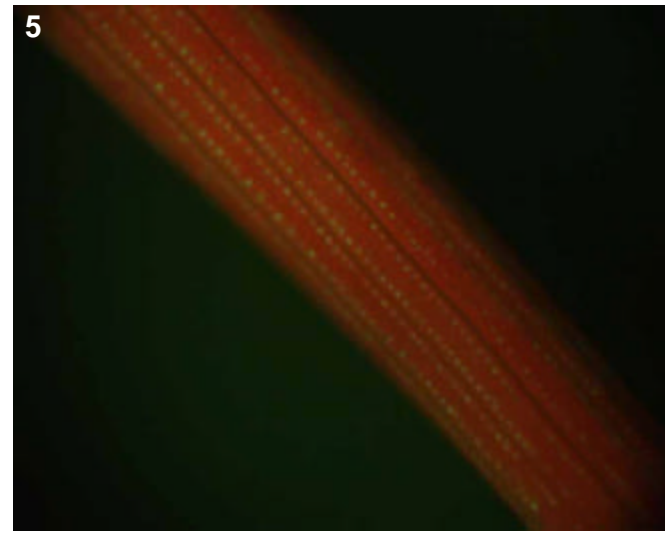
3



4



5



## T0 comments

This line was derived from a glowing callus selected during regeneration.

## T1 seed comments

4/5 seeds had expression

## T1 seedling comments



# Genotype: ASI G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

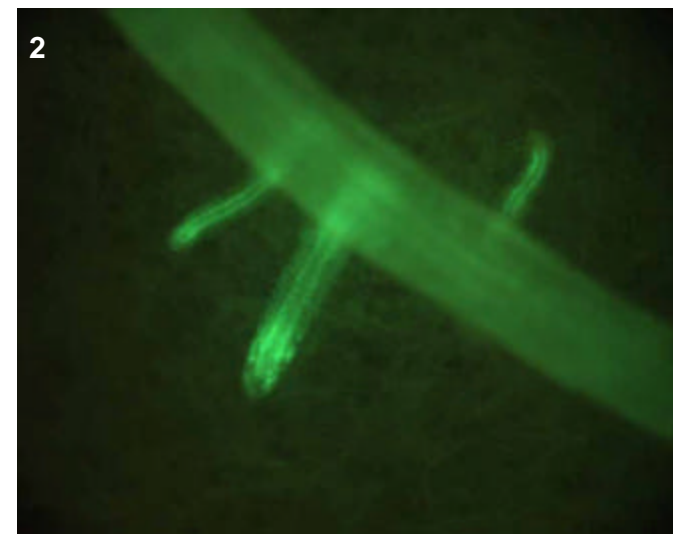
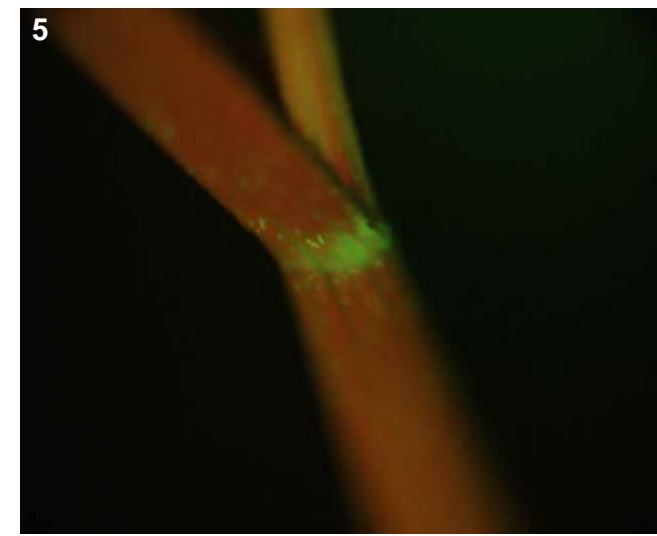
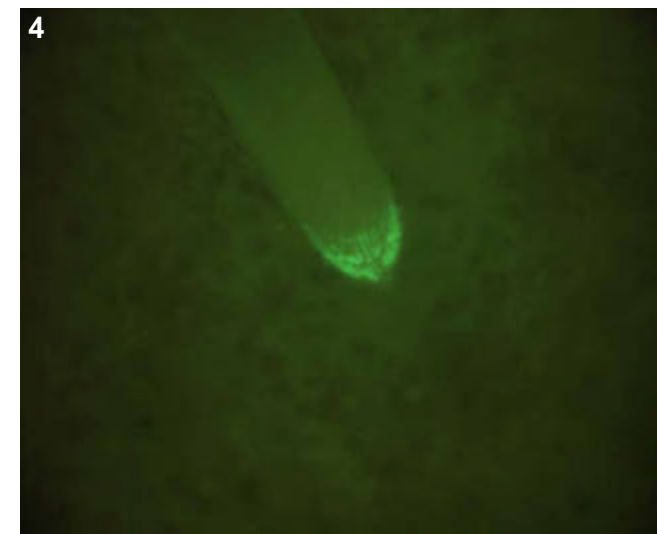
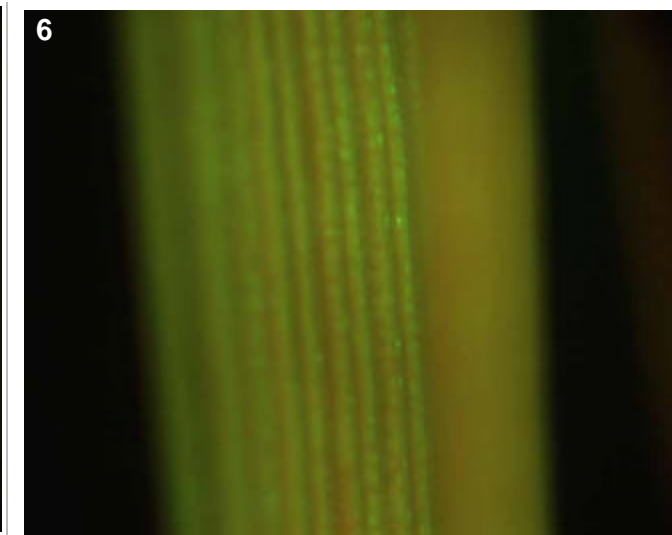
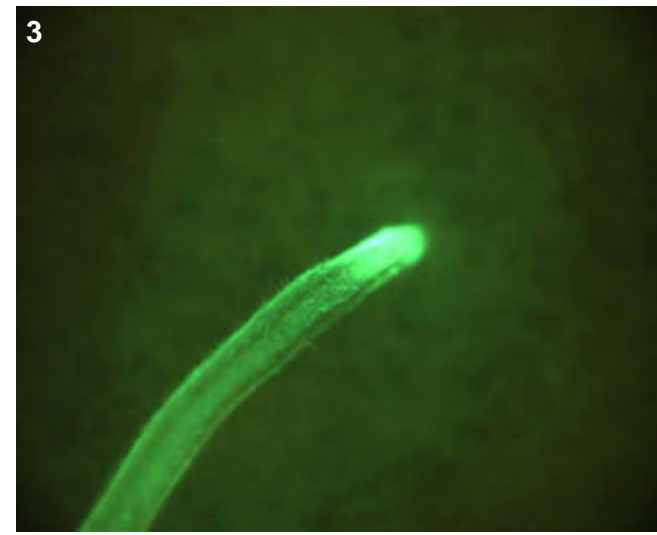
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had medium expression

## T1 seedling comments

# Genotype: ASI G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

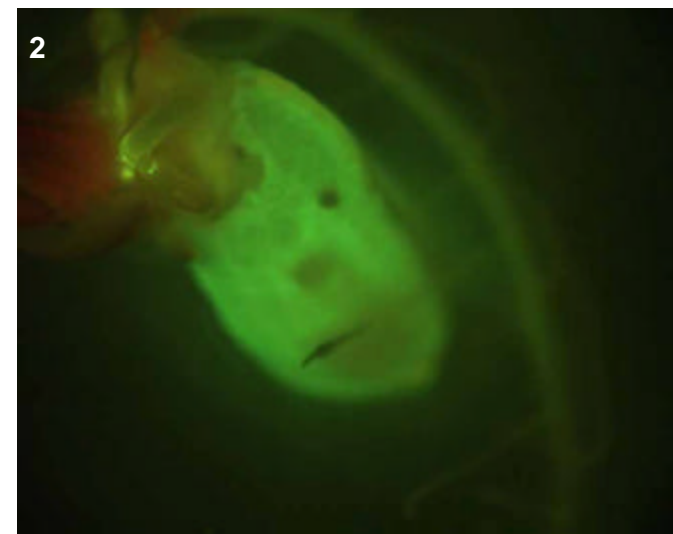
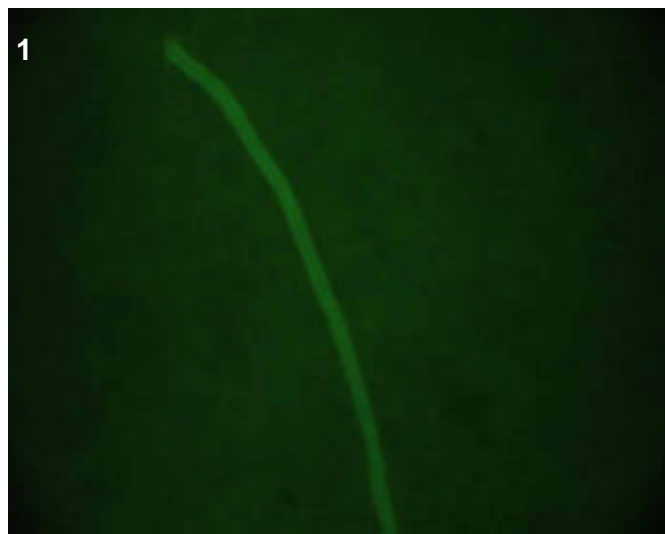
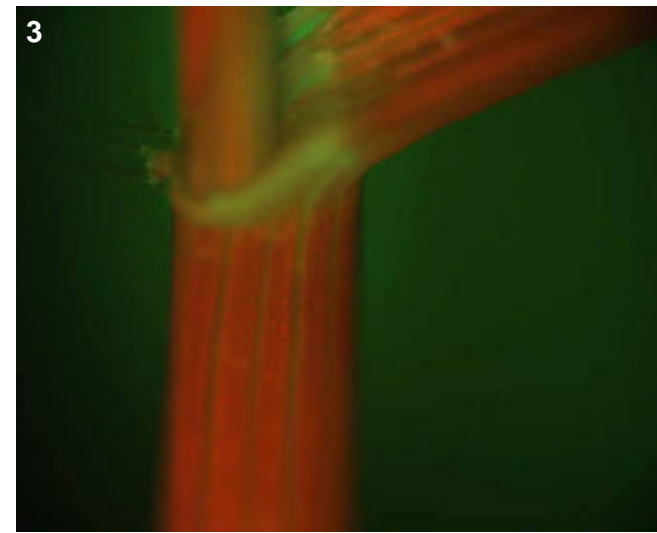
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Only 1/5 seeds germinated, yielding this GFP+ plant.

# Genotype: ASI H01

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant:   
T1 seed/seedling: 1-9  
T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle  
 Embryo

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis  
 Constitutive

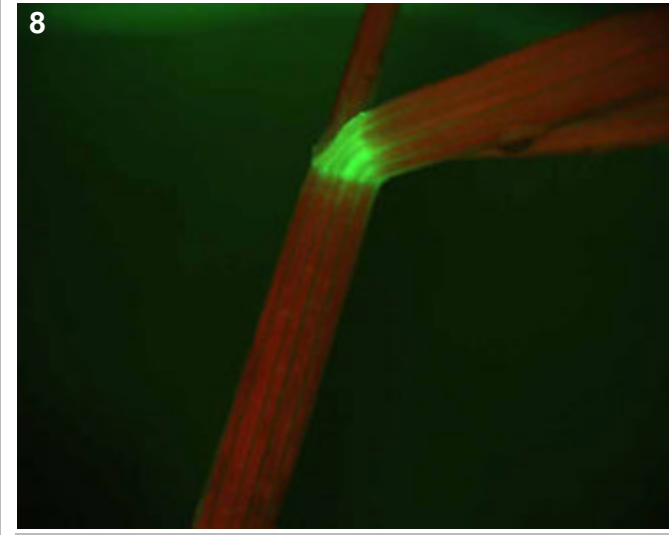
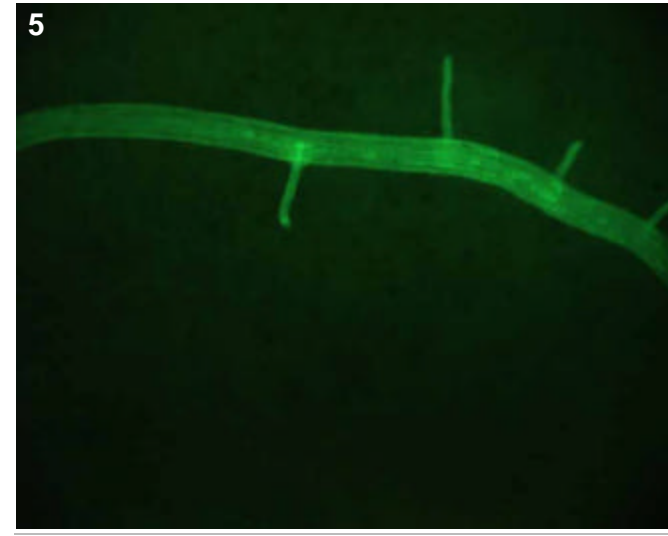
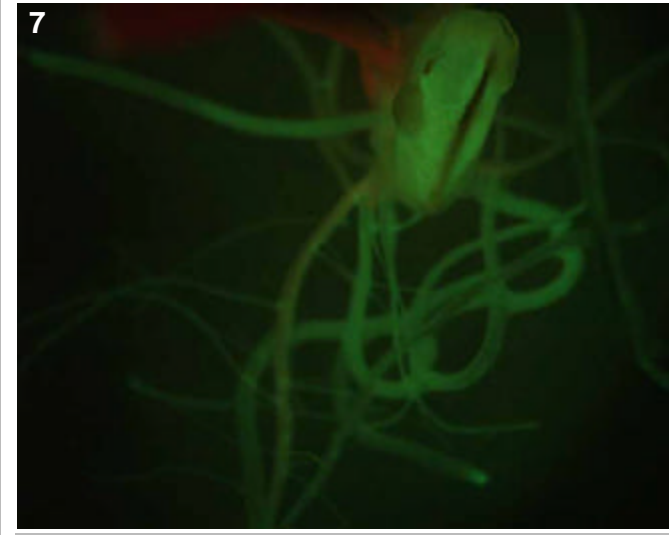
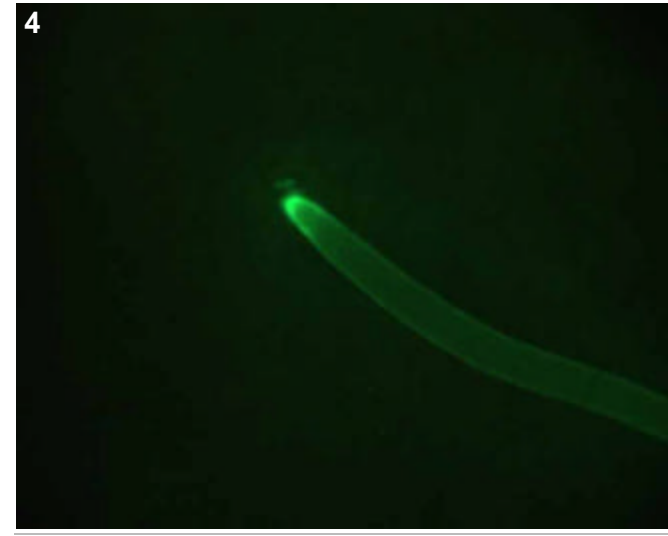
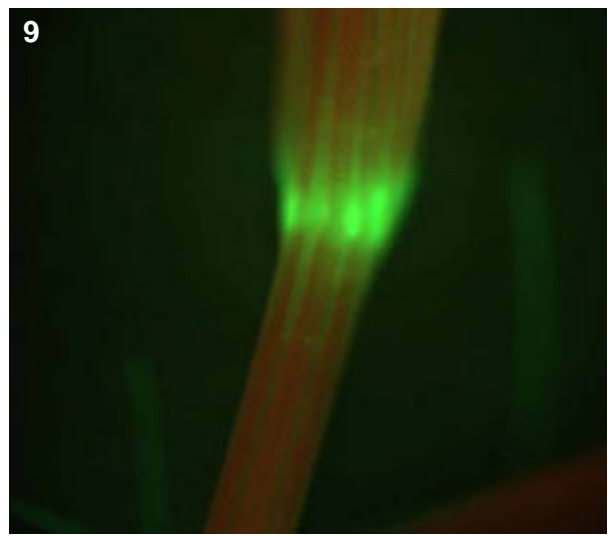
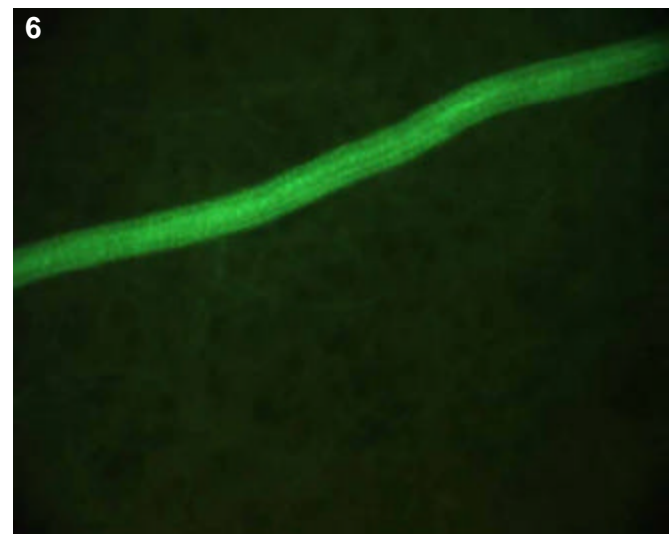
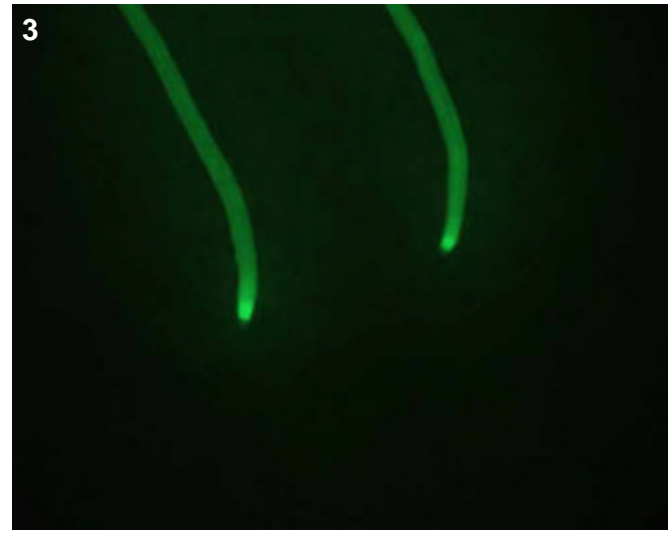
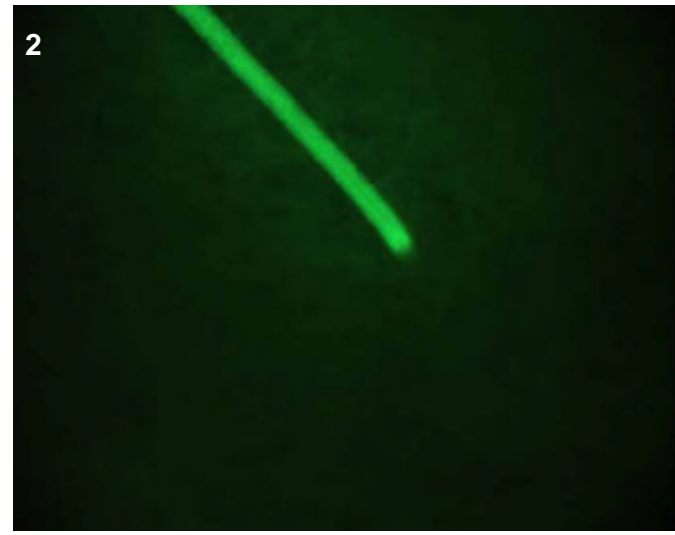
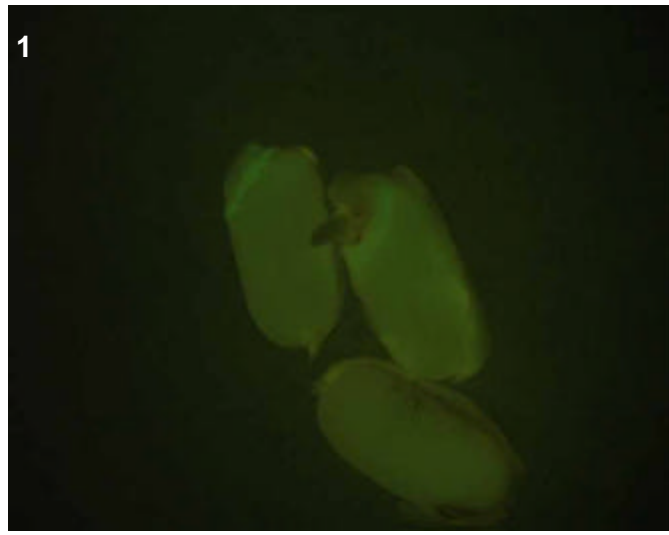
Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

**T1 Mature**

T0 pattern verified:  
 T0 pattern verified plus:  
 New pattern:  
 No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants **Confocal?** WIP

Number T2 seed produced:



**T0 comments**  
This line was derived from a glowing callus selected during regeneration.

**T1 seed comments**  
2/4 seeds had faint expression

**T1 seedling comments**  
This looks like a very bright epidermal or cortical expression in roots (pictures 2-6).

# Genotype: ASI H12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

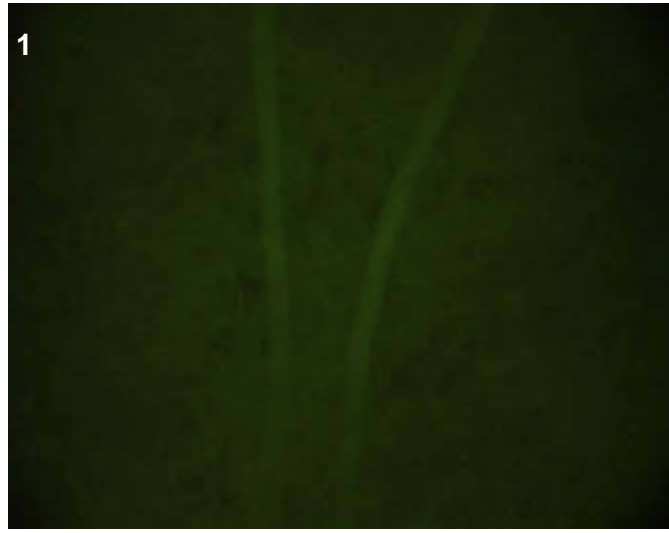
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Very faint expression, consisting of a thin line running up the center of lats, most visible in more mature portions of roots. Probably in the stele, could be interesting to confocal.

# Genotype: ASJ A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

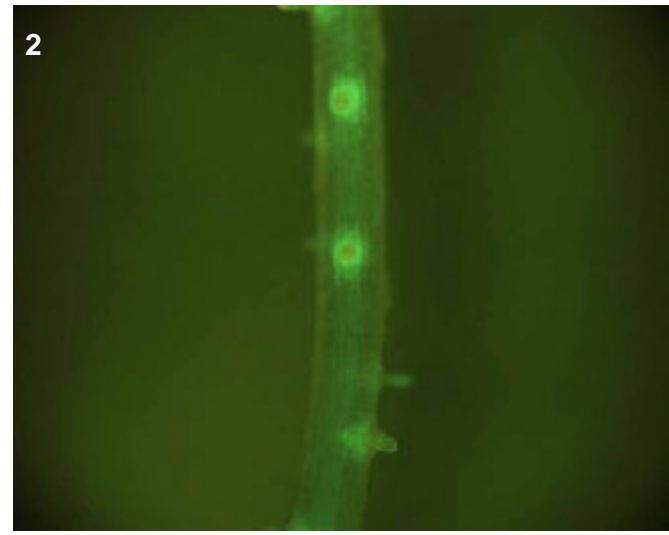
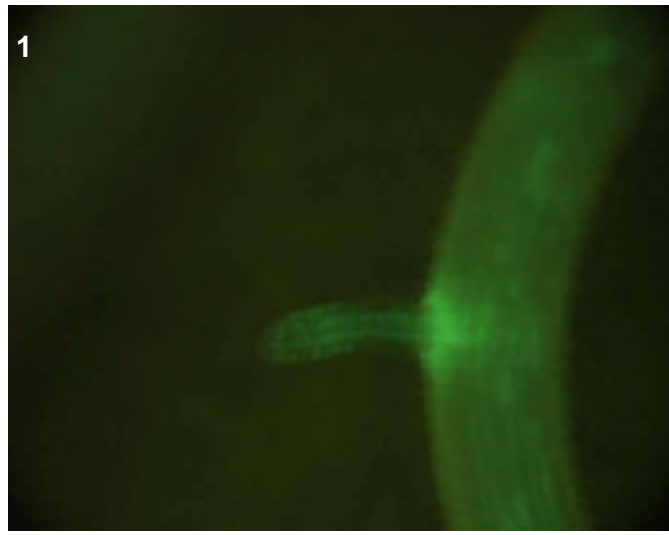
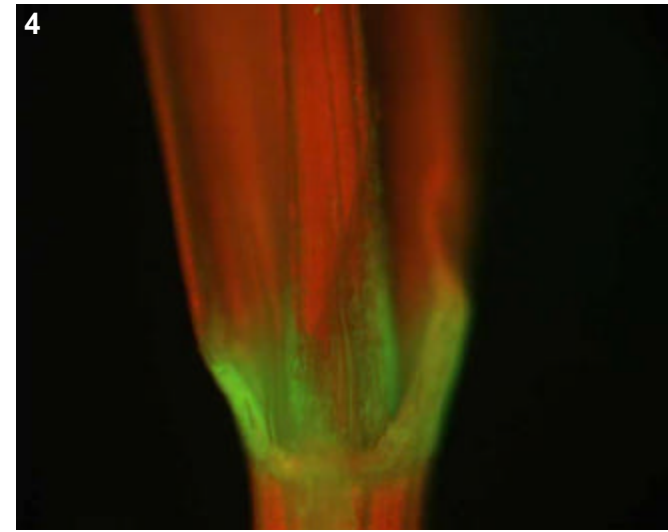
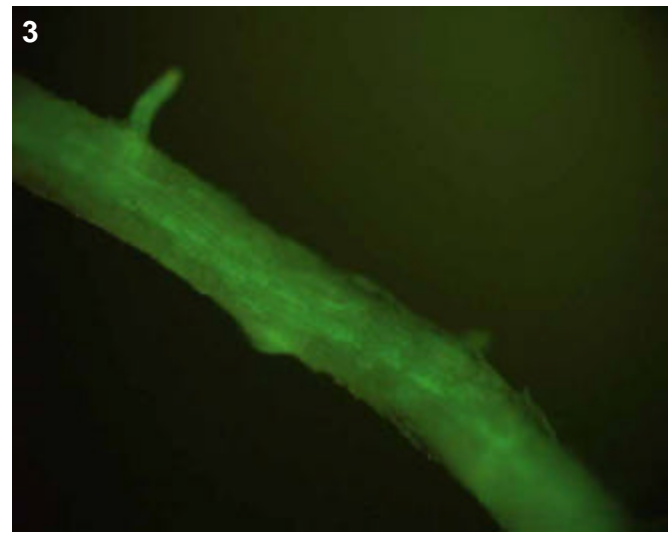
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASJ A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

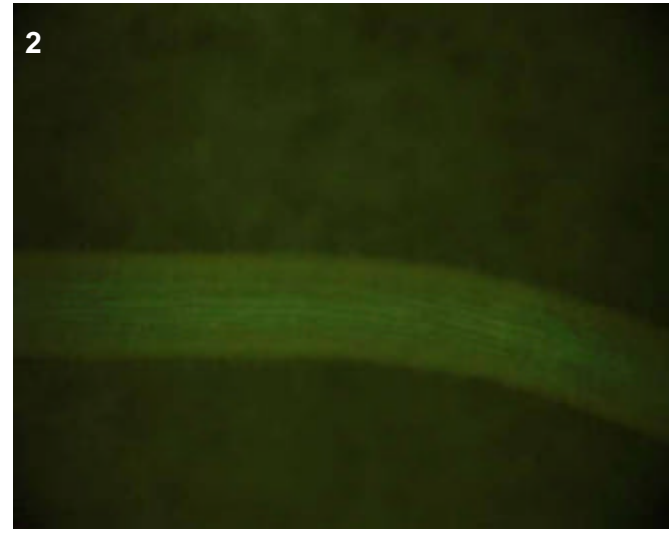
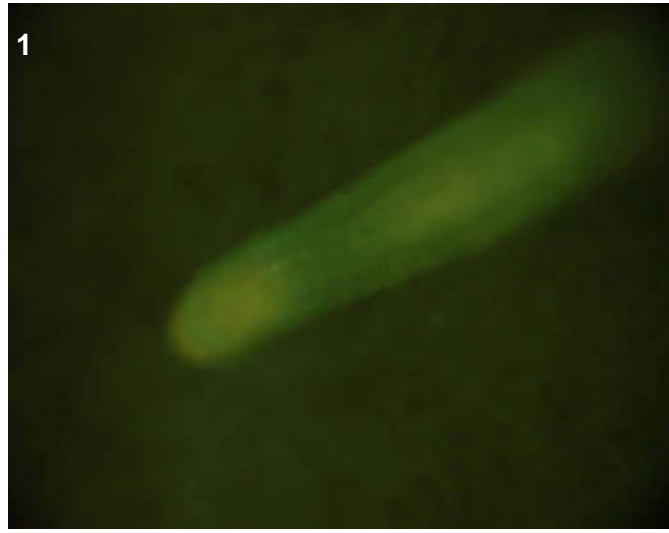
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASJ B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

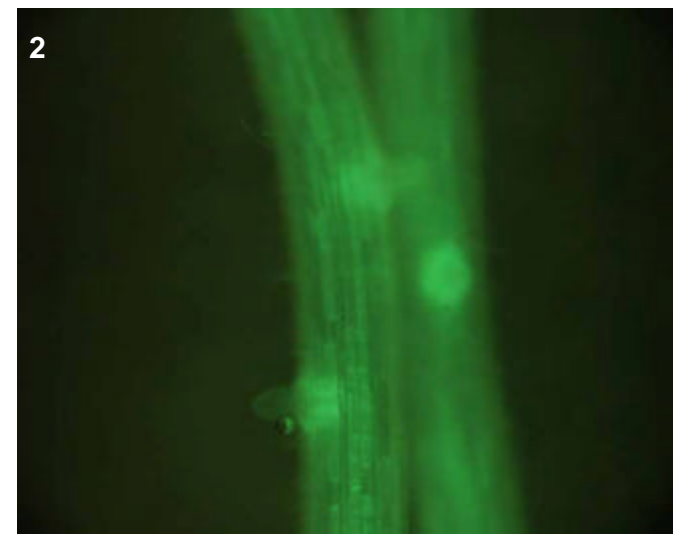
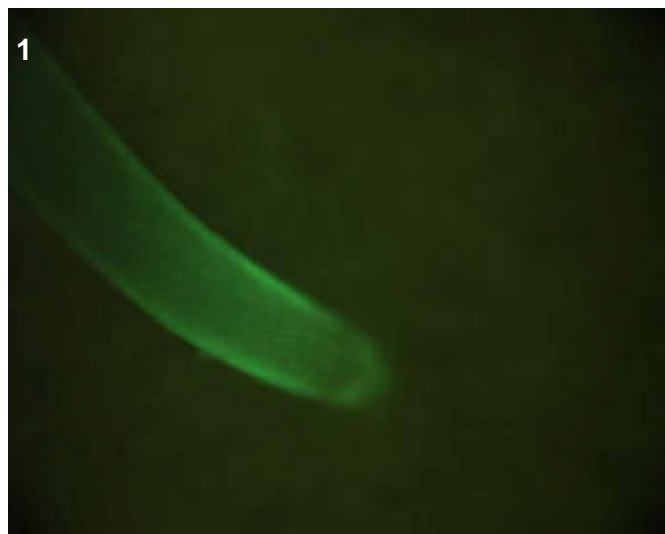
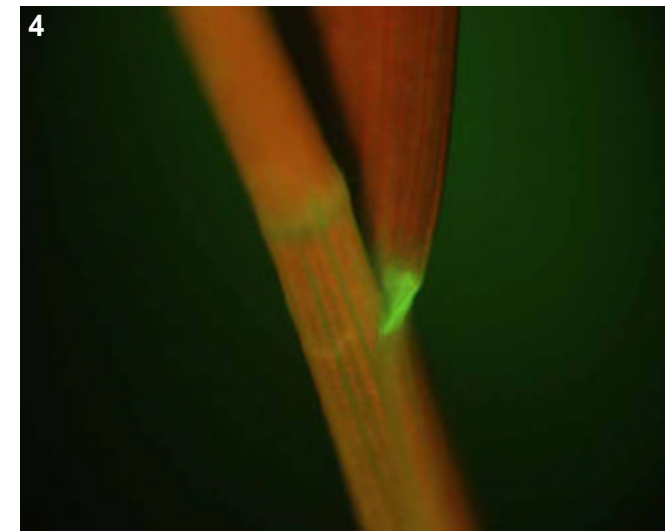
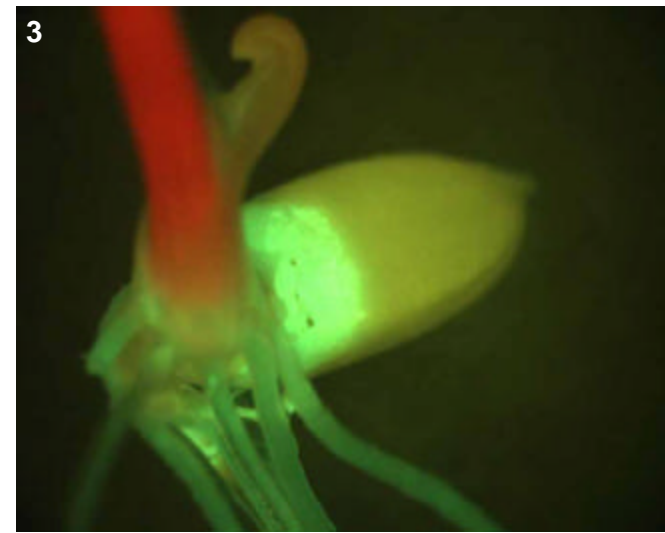
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASJ C04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

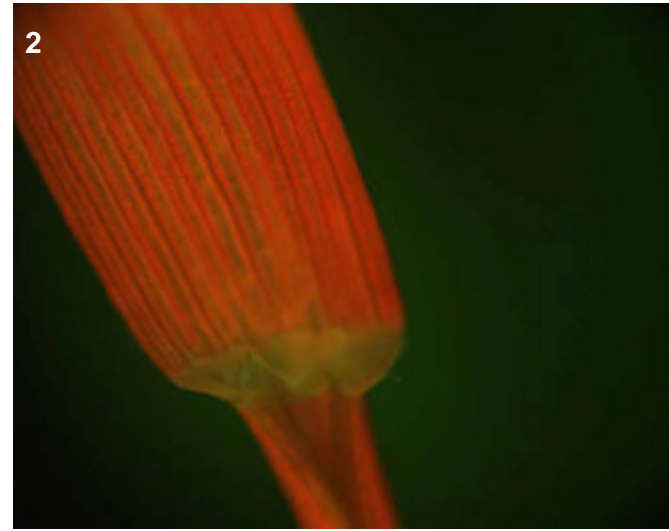
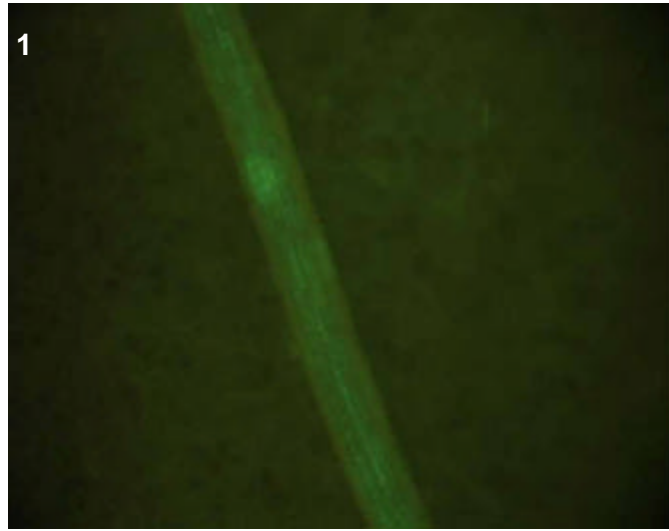
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments



# Genotype: ASJ C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

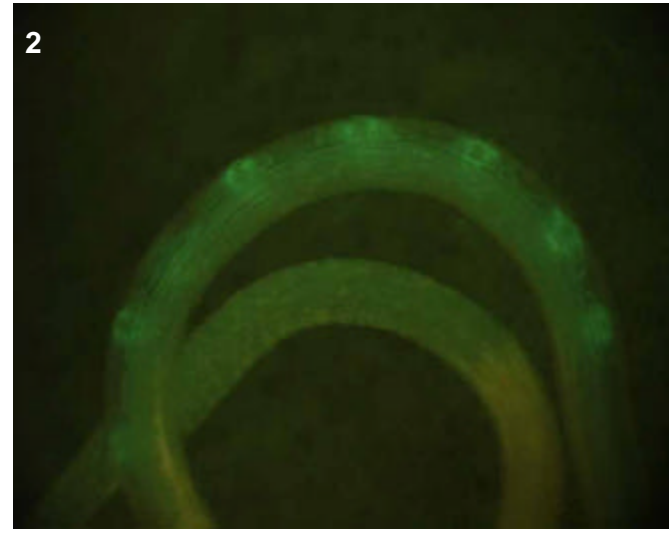
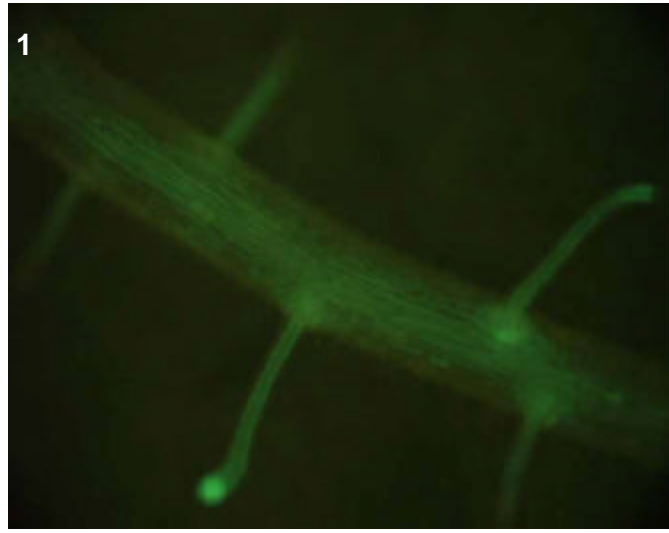
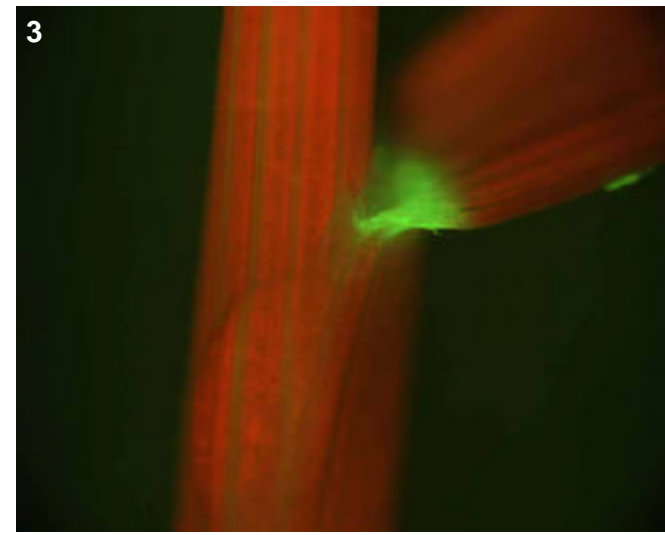
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ASJ C11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

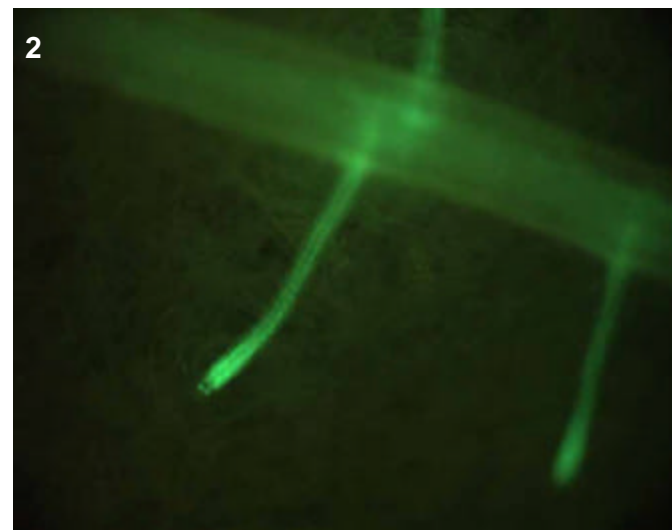
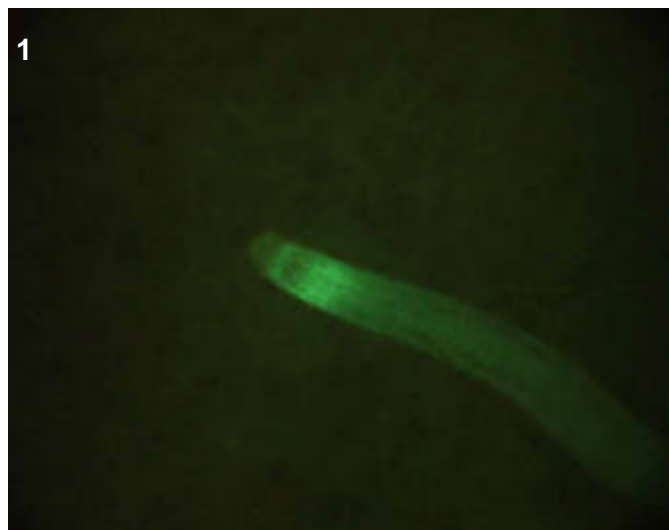
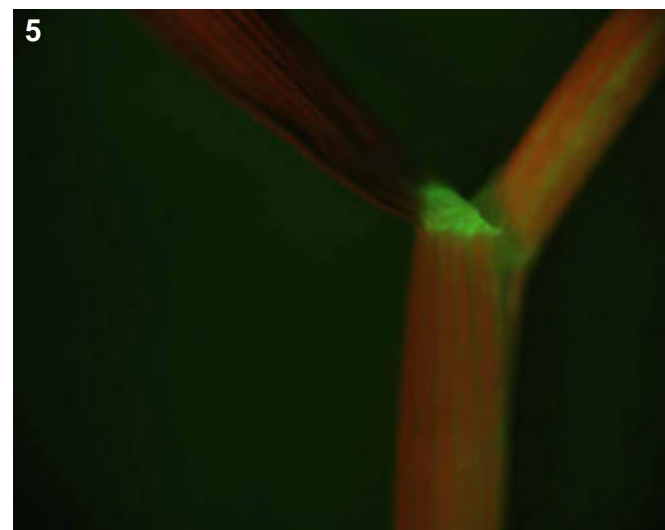
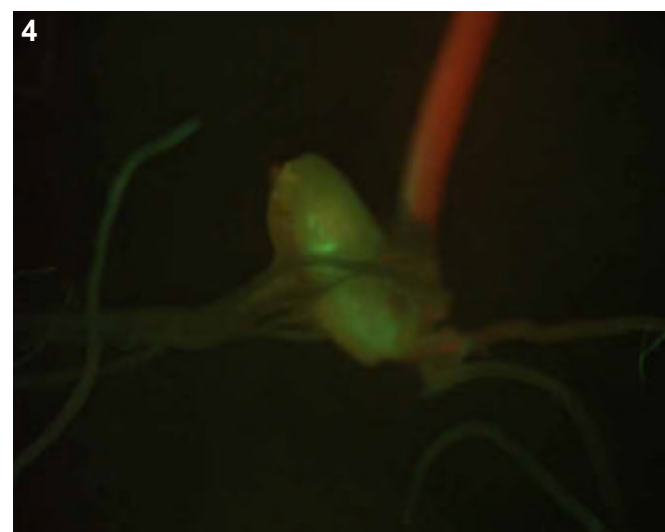
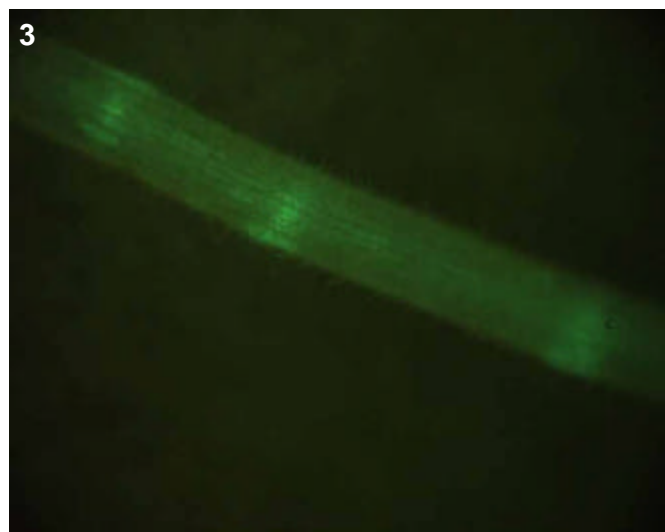
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASJ E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

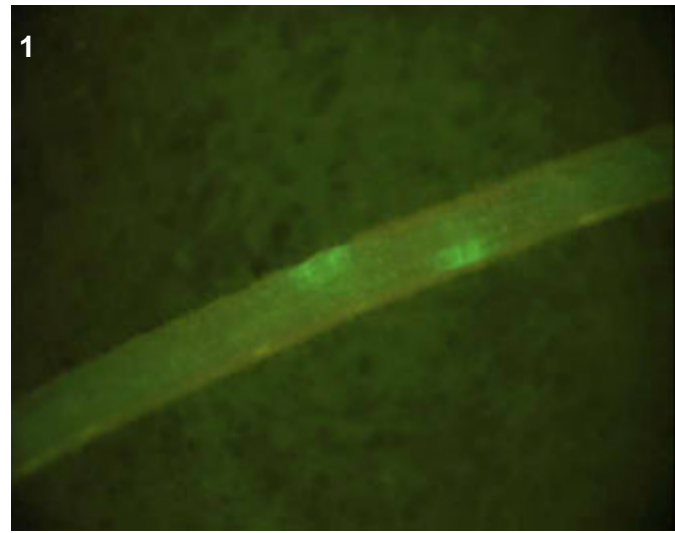
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

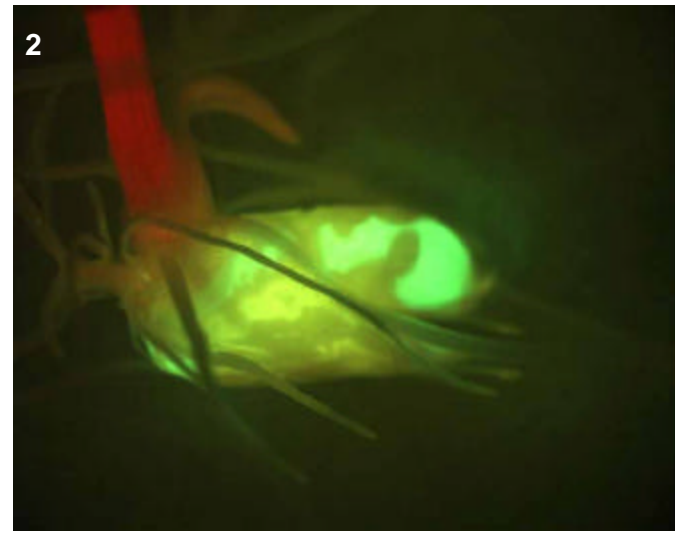
YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced:



1



2

## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression was limited to the zone of emerging lateral roots (pic 1).

**Genotype: ASJ E06**

**Screened**

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

**Expression**

- None
- Bright
- Medium
- Weak
- Unsure

**Pictures**

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

**T0 Flower**

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

**T0 Blade**

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

**T0 Sheath**

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

**T1 Seed**

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

**T1 Seedling**

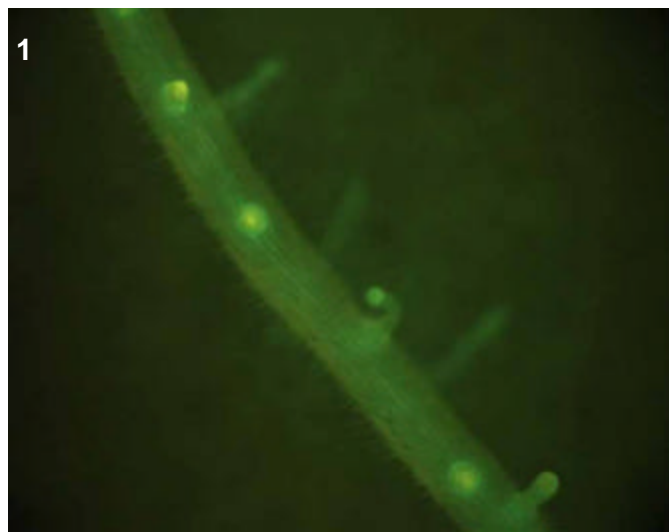
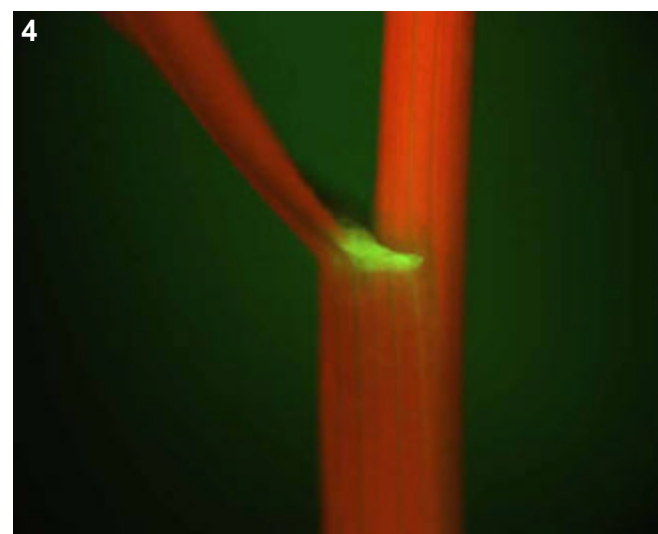
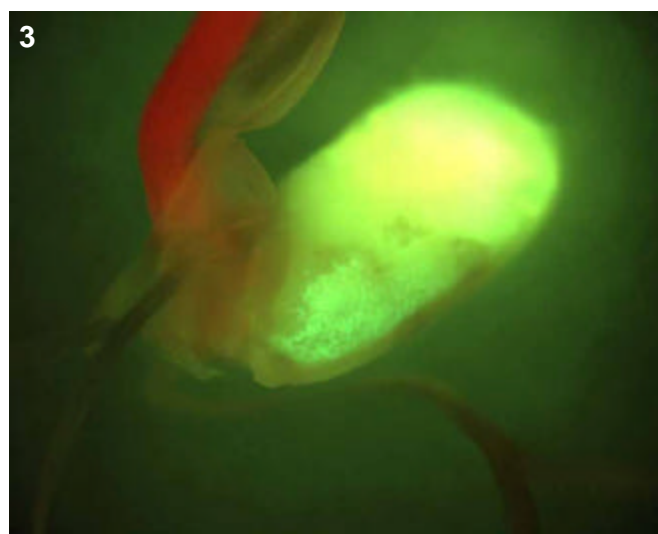
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells

**T1 Mature**

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants  Confocal?

Number T2 seed produced:



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASJ E08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

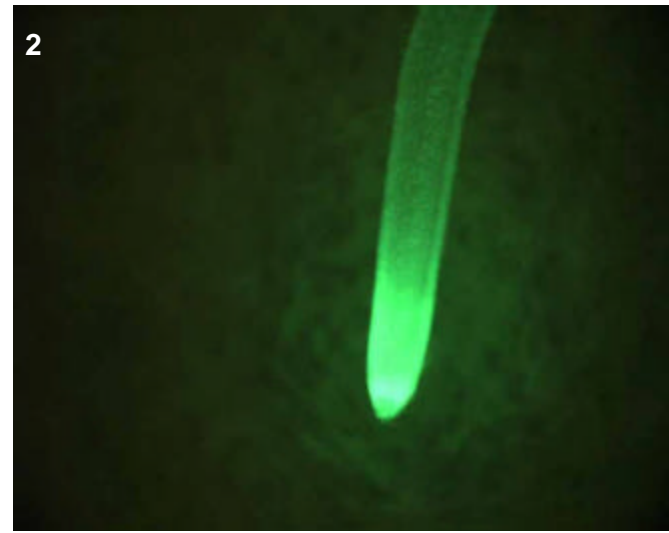
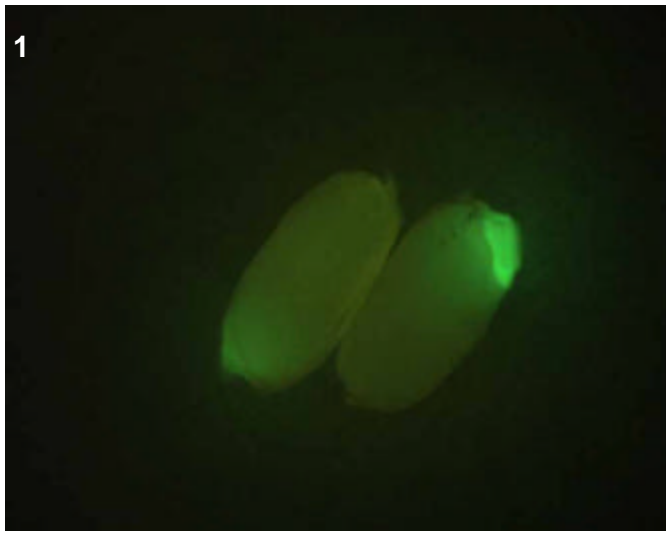
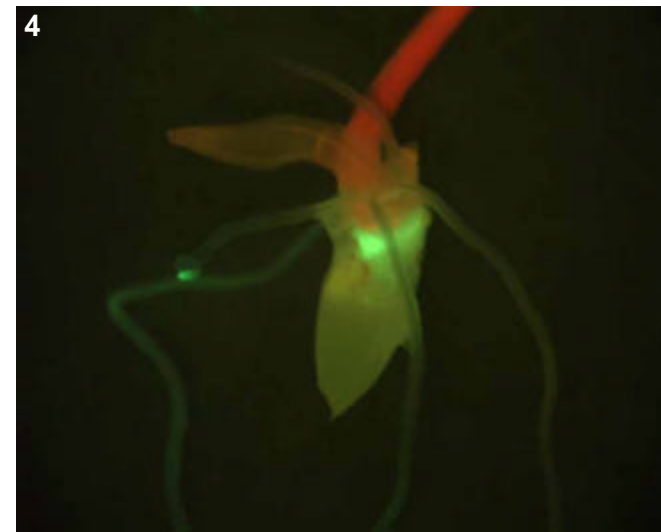
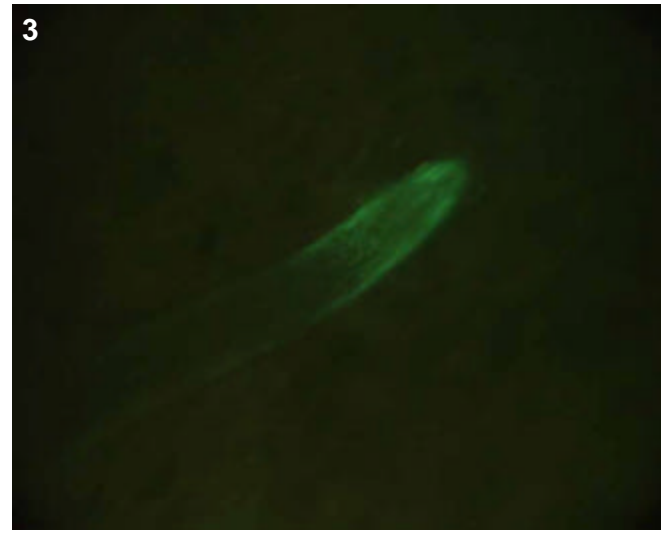
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

Number T2 seed produced:



### T0 comments

### T1 seed comments

5/5 seeds had bright expression (pic 1).

### T1 seedling comments

A bright root-specific line (pics 2-4).

# Genotype: ASJ E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

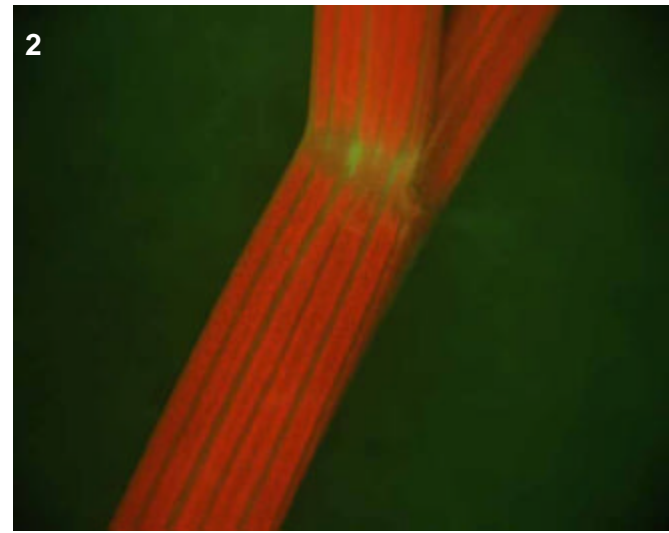
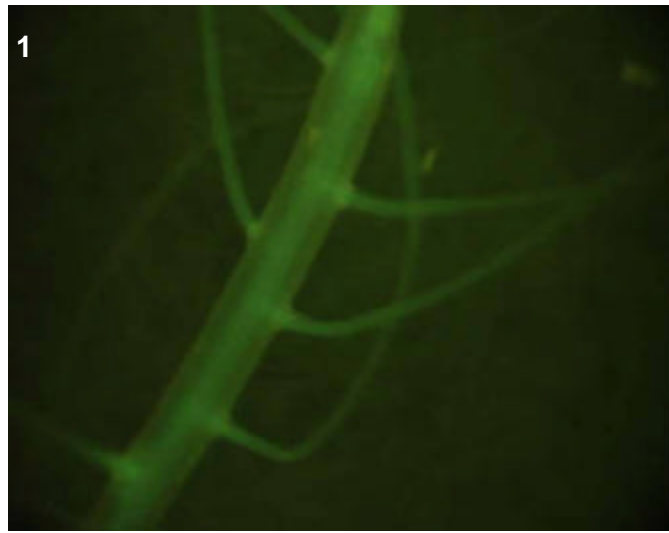
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
YES, 2 GFP+ plants

Confocal?

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression was brightest in the seminal and crown roots (see pic 1). In lateral roots the expression was faint and limited more towards the base.

# Genotype: ASJ F08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
  
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
  
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
  
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

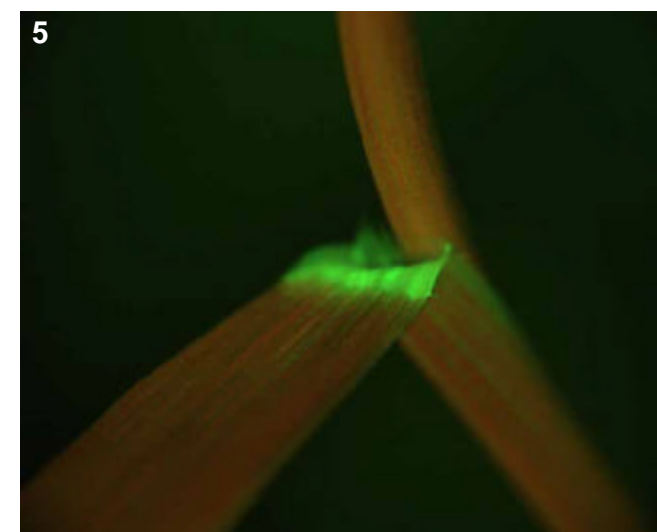
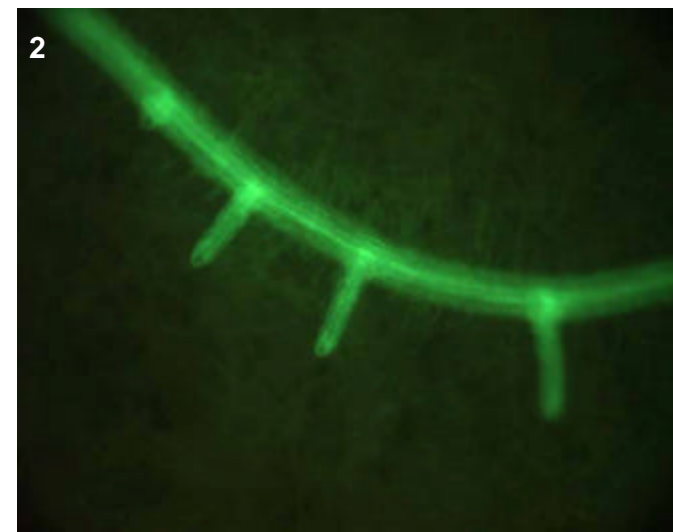
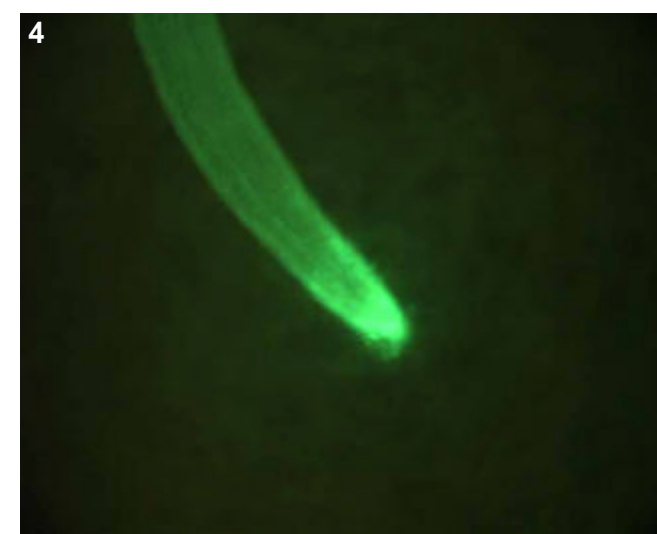
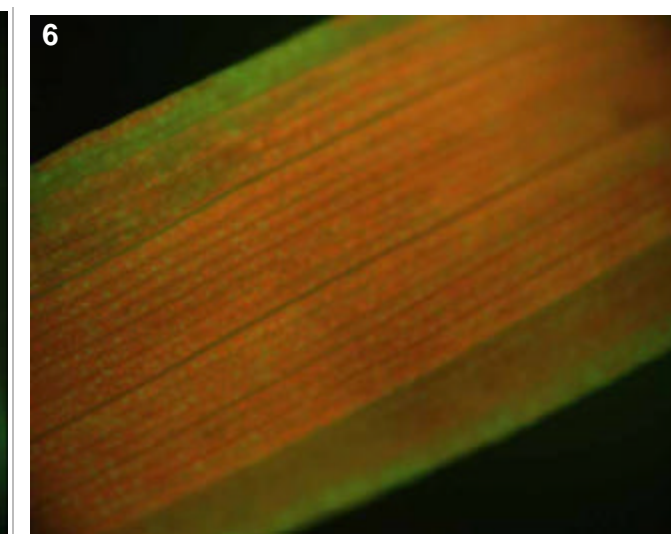
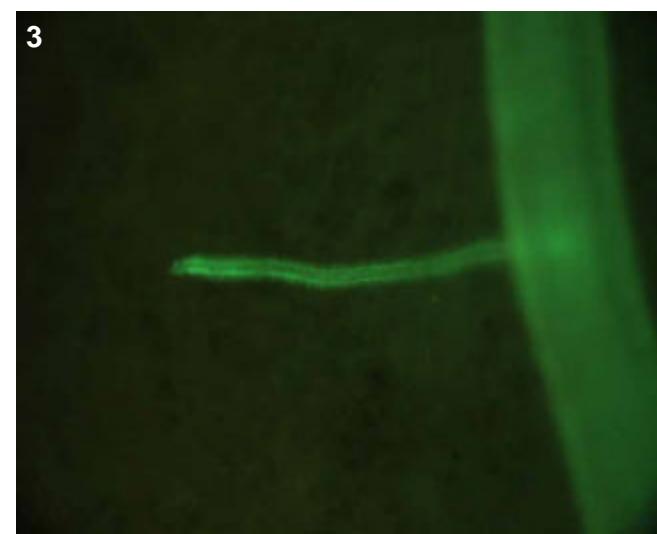
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

2/3 seeds had medium expression (pic 1).

### T1 seedling comments

# Genotype: ASJ F09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

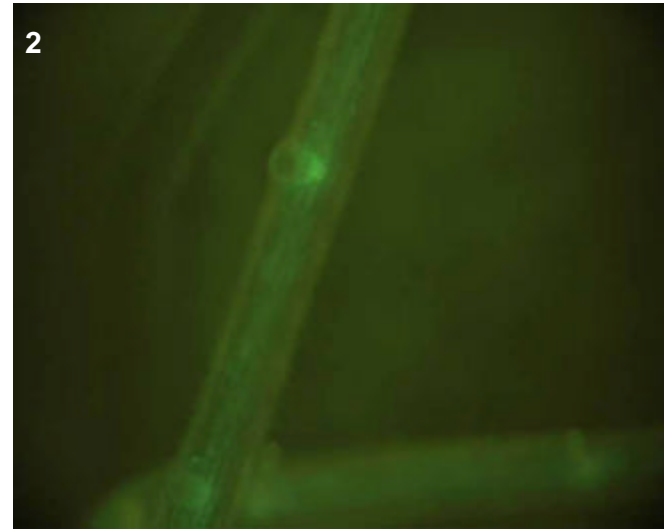
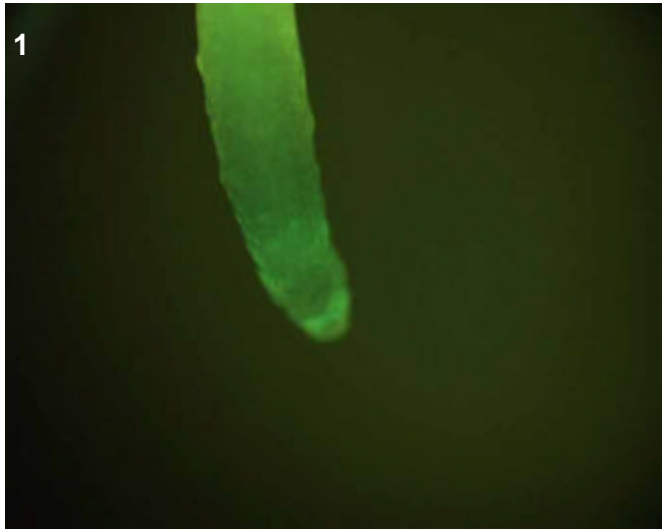
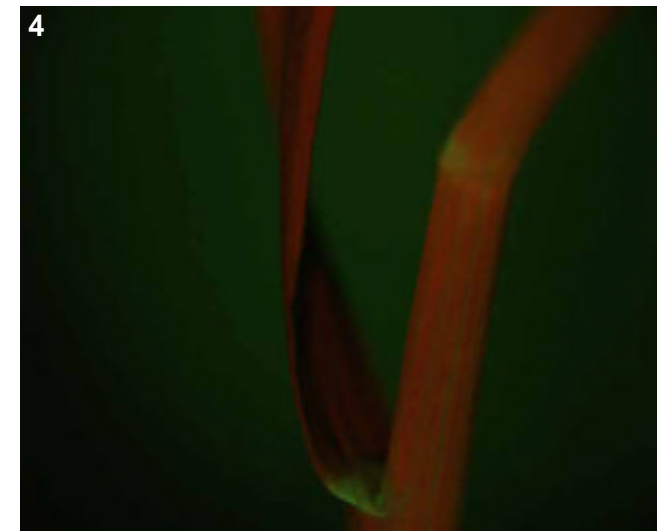
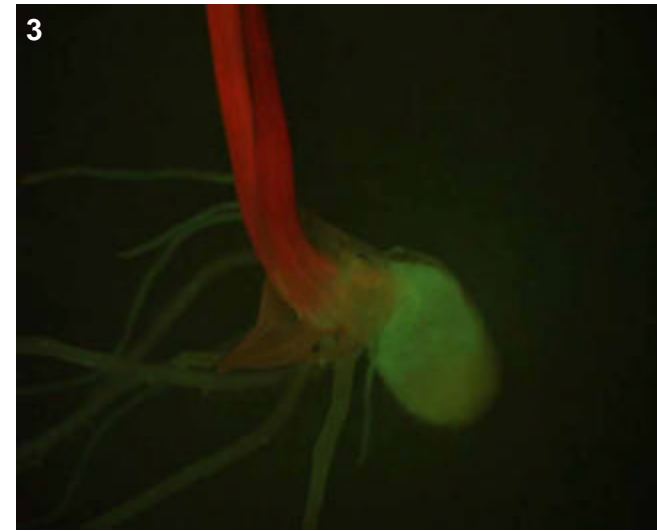
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments



# Genotype: ASJ G08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

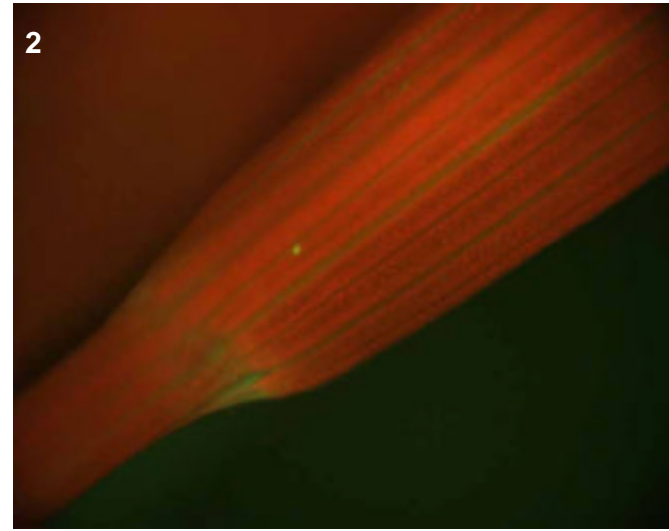
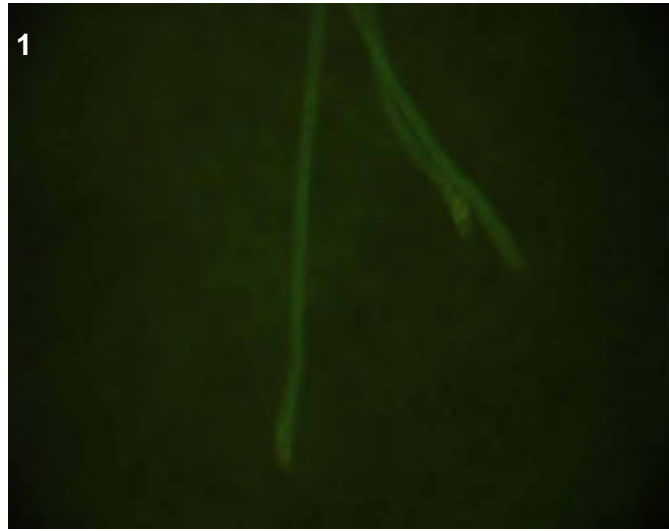
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

The shoot vascular expression was brightest in the leaf (pic 2).

# Genotype: ASJ G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

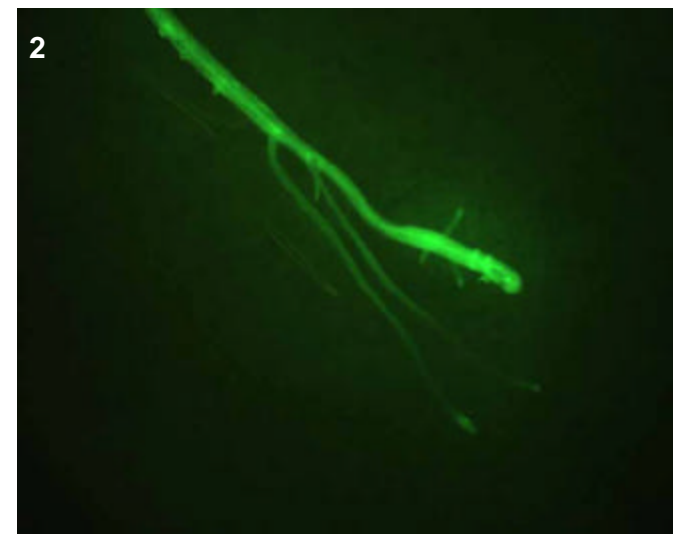
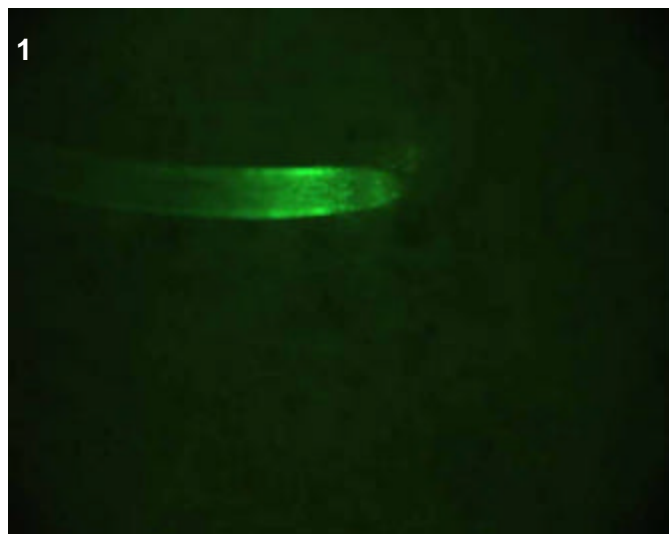
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



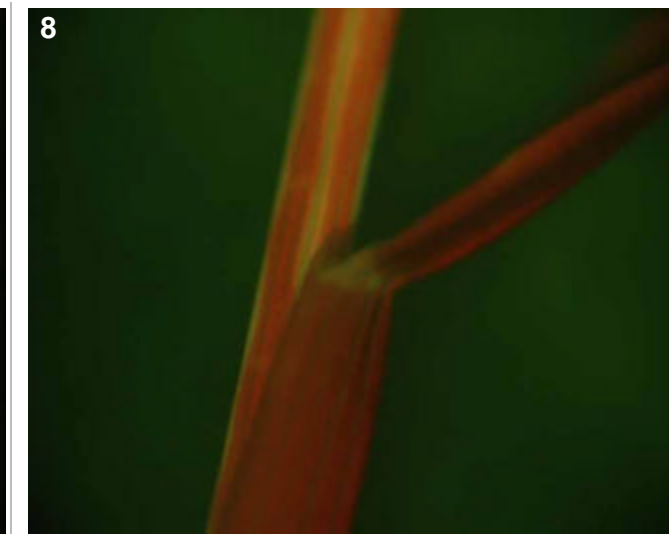
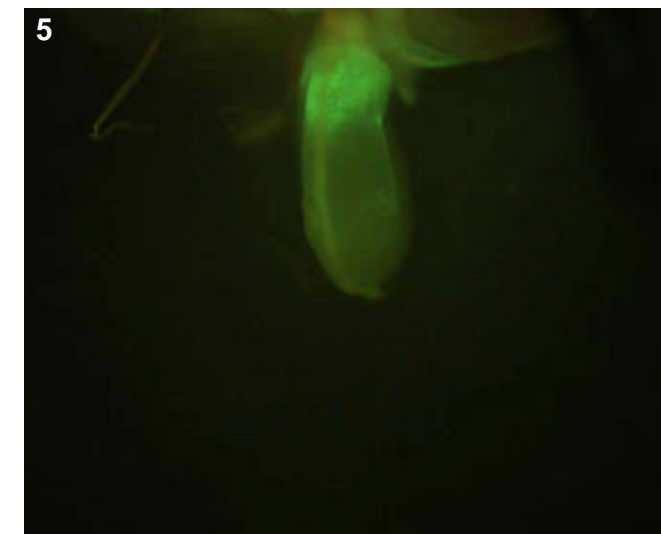
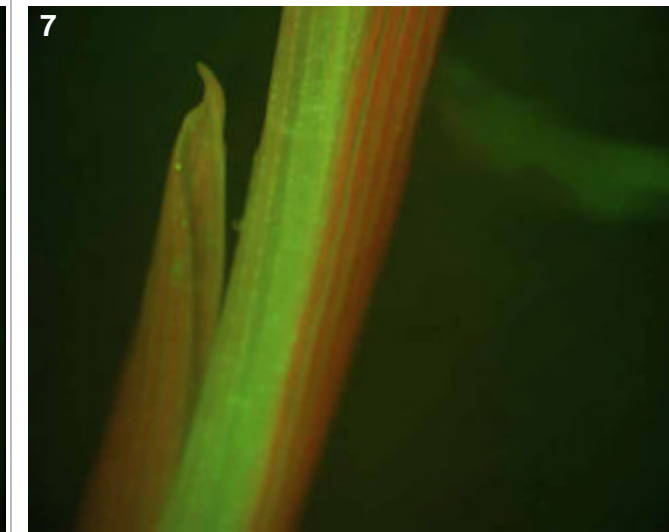
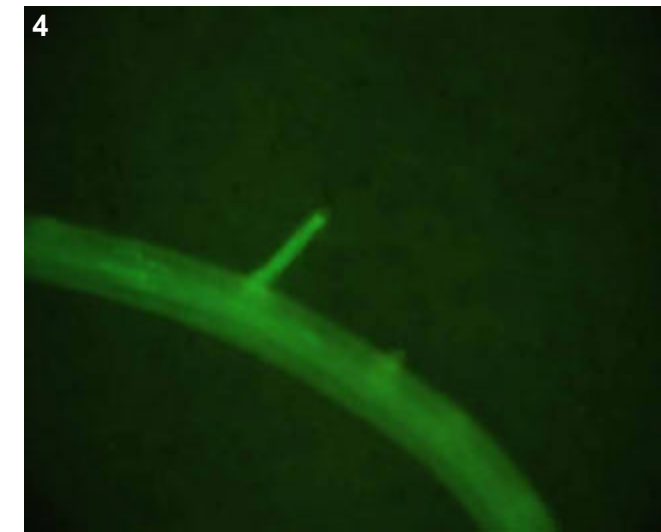
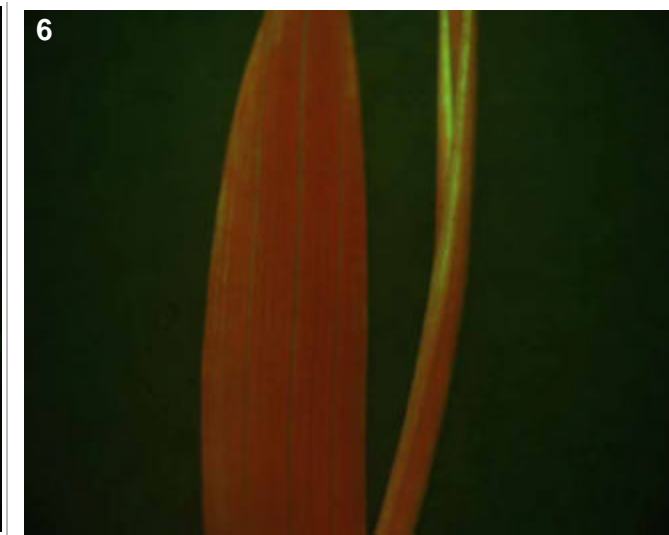
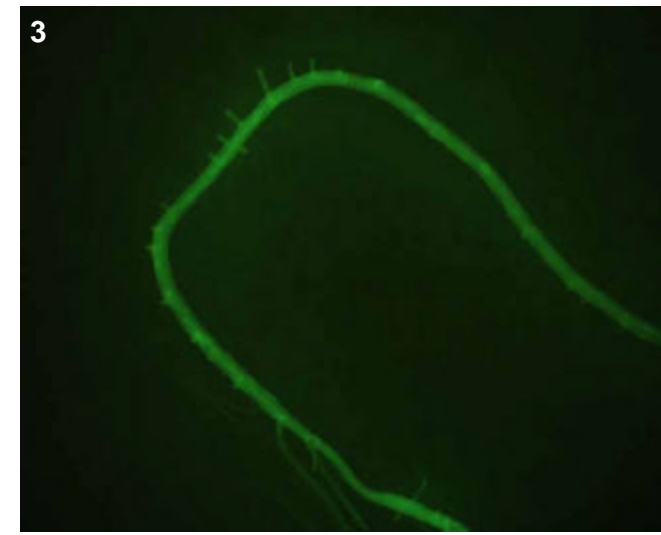
## T0 comments

## T1 seed comments

2/5 seeds had faint expression, no picture taken

## T1 seedling comments

Perhaps a root mutant--no crown roots were visible, just a long seminal root with extensive lateral root development near the root tip (see pic 2).



# Genotype: ASJ H09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

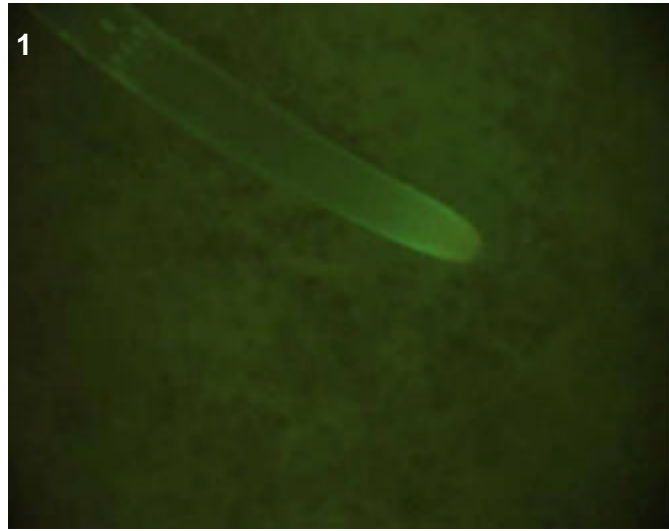
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Epidermal expression specific to the tips of crown roots (pic 1).

# Genotype: ASJ H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

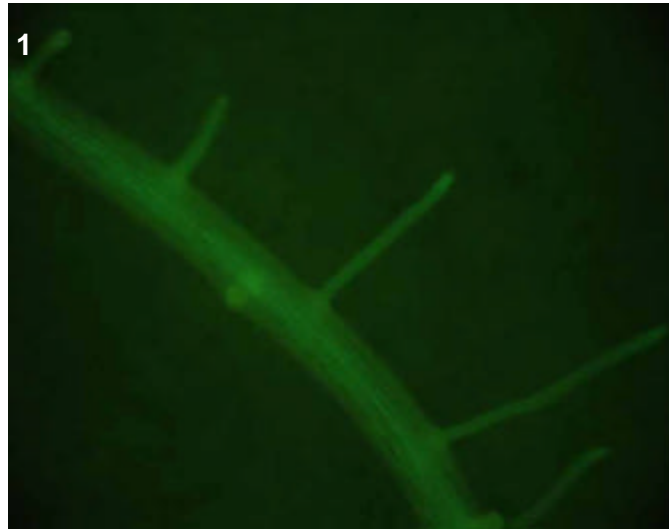
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Only 1/3 plants put in the greenhouse was GFP positive.

# Genotype: ASK A05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

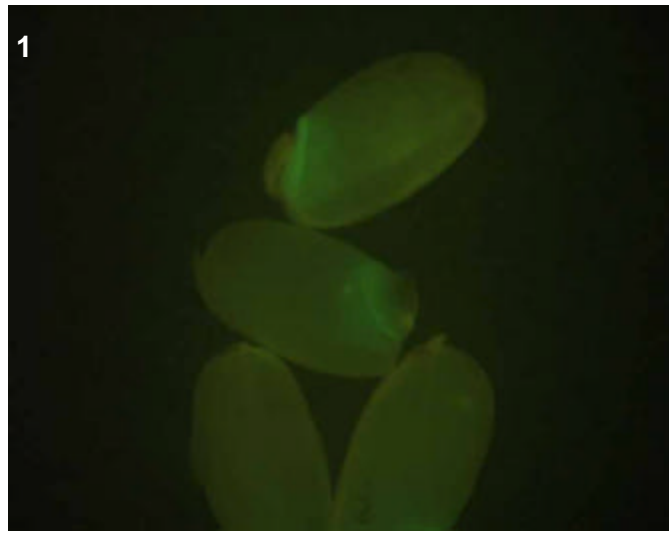
No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

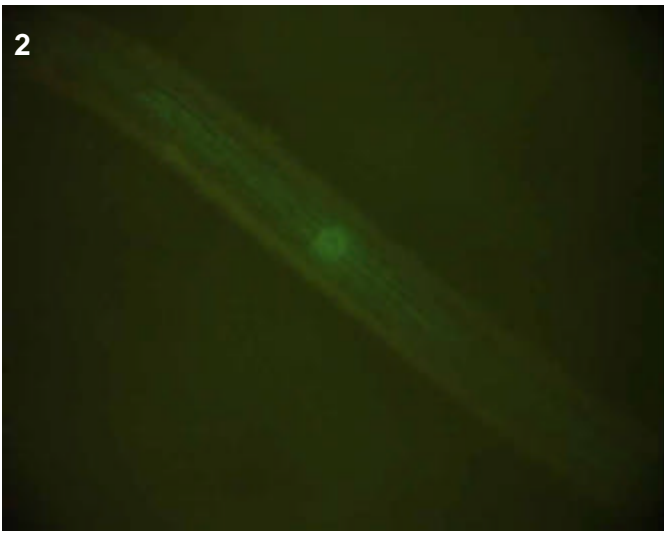
**Confocal?** WIP

**Number T2 seed produced:**

1



2



## T0 comments

## T1 seed comments

4/5 seeds had expression

## T1 seedling comments

This plants were very small, perhaps mutant?

# Genotype: ASK B04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

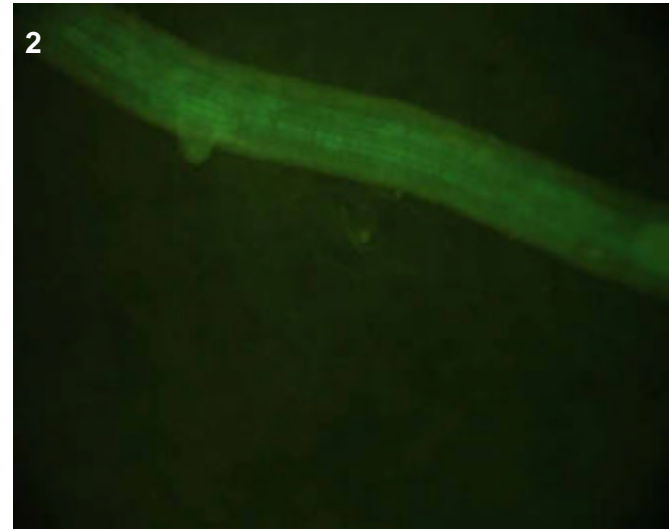
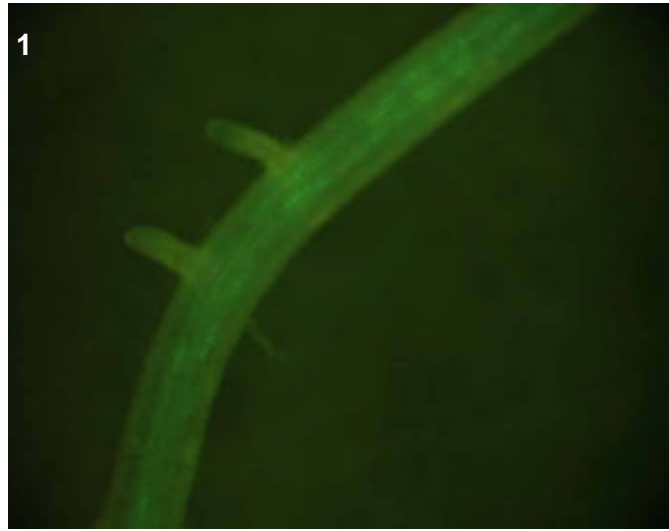
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASK B11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

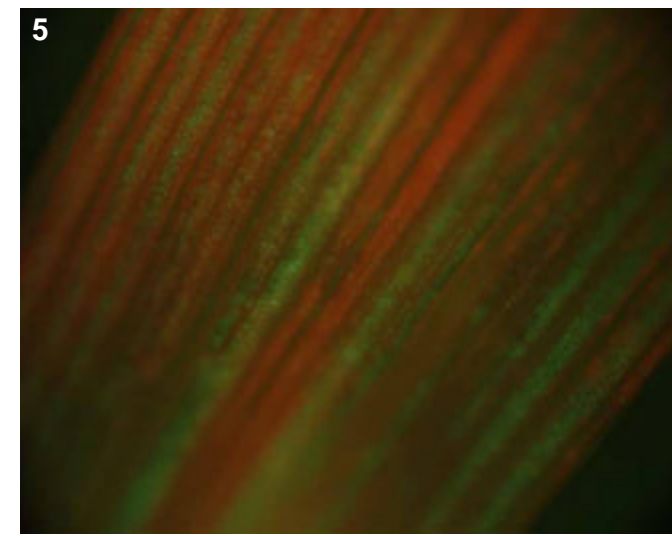
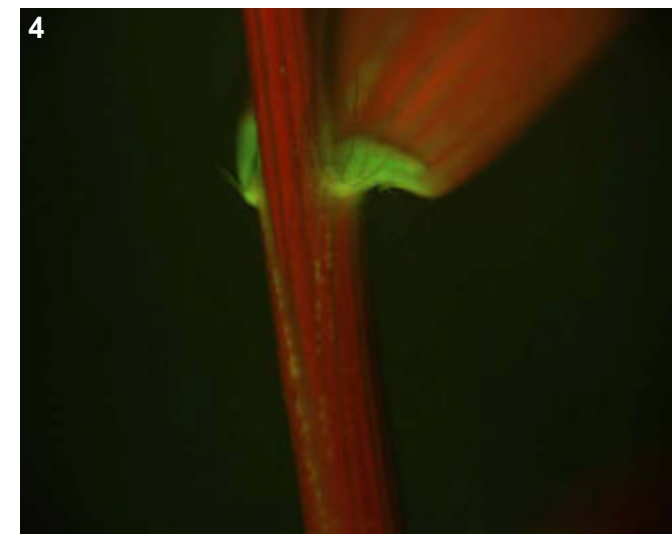
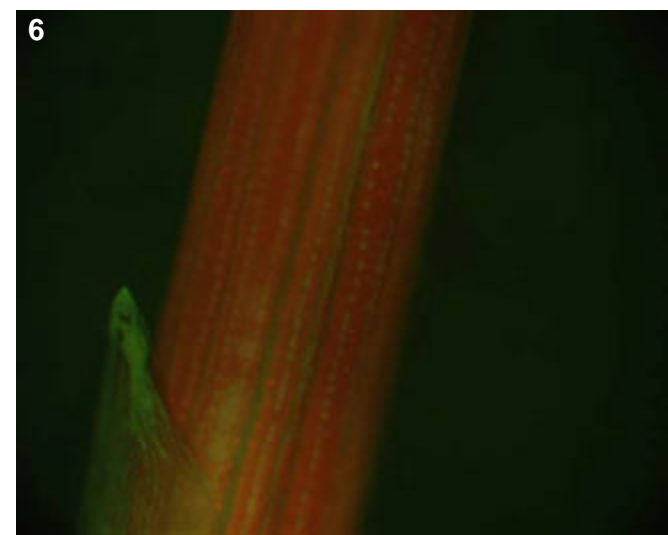
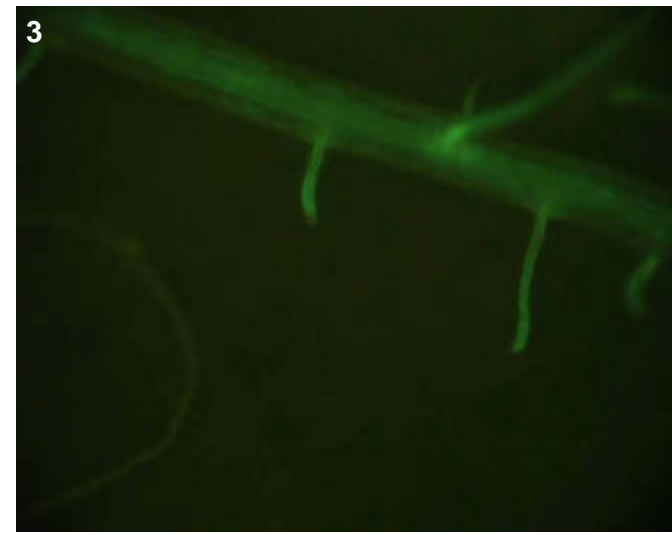
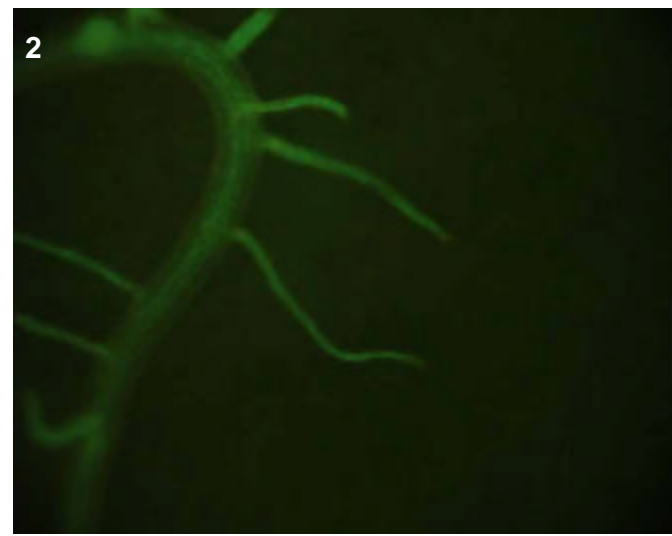
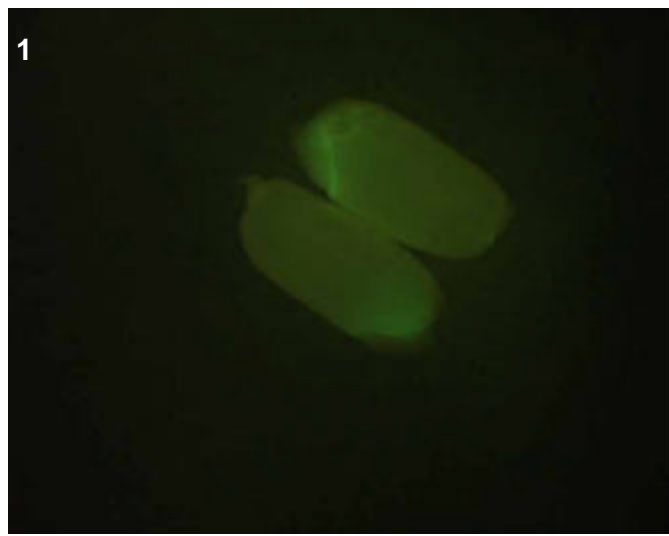
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

4/5 seeds had expression

## T1 seedling comments

Interesting leaf pattern (see picture 5).

# Genotype: ASK C04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

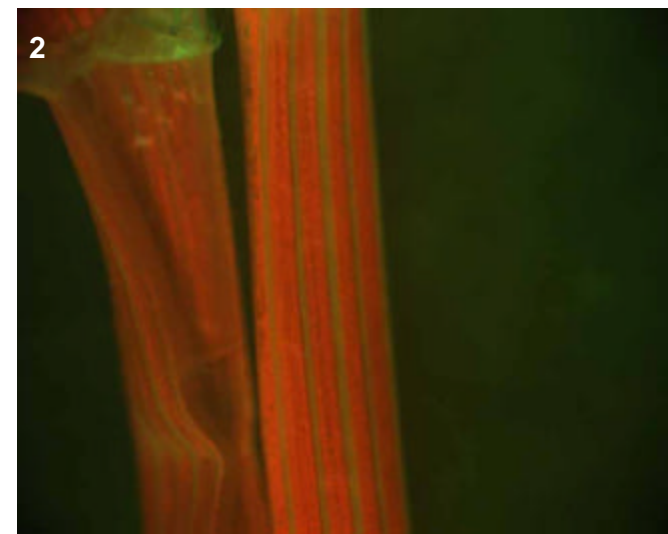
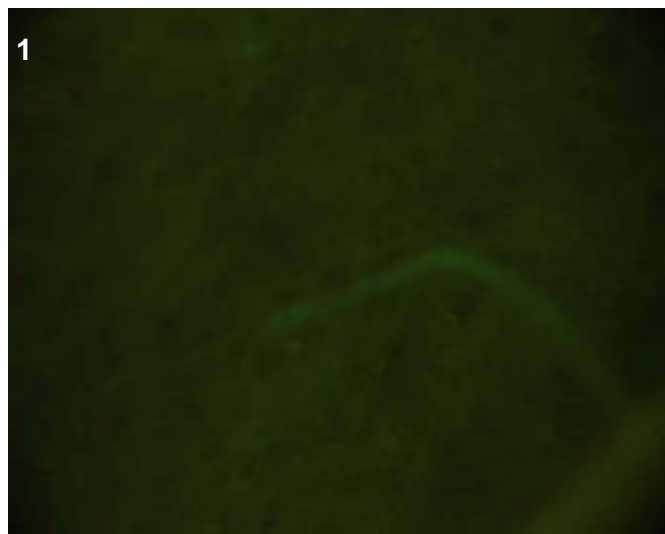
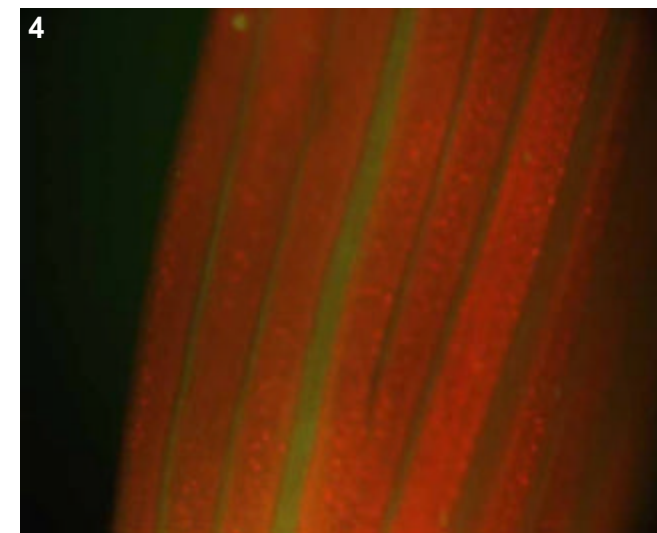
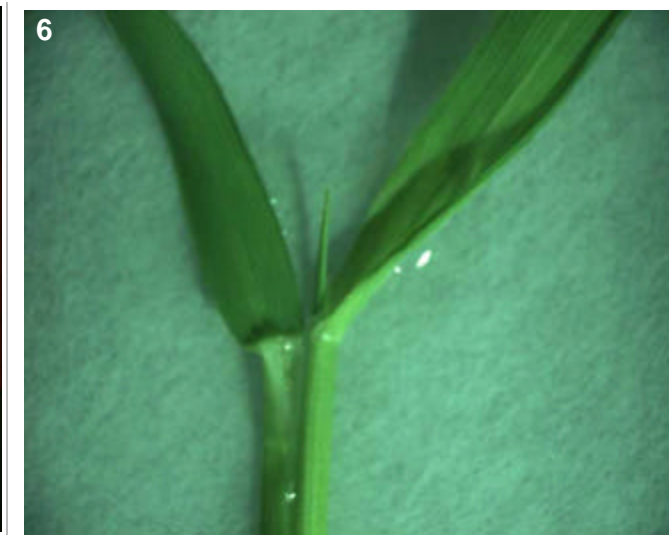
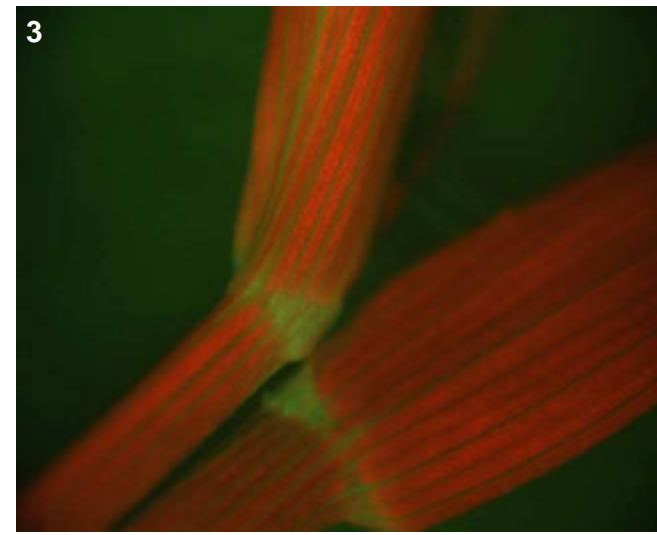
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Very little root expression, only faintly in stele of laterals (pic 1). Expression in shoot, however, was very bright and particularly strong in the vascular (pics 2-4). This line may be a mutant because the coleoptile was very long and stiff (pic 5) and the leaves seemed unusually thick (pic 6).



# Genotype: ASK D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

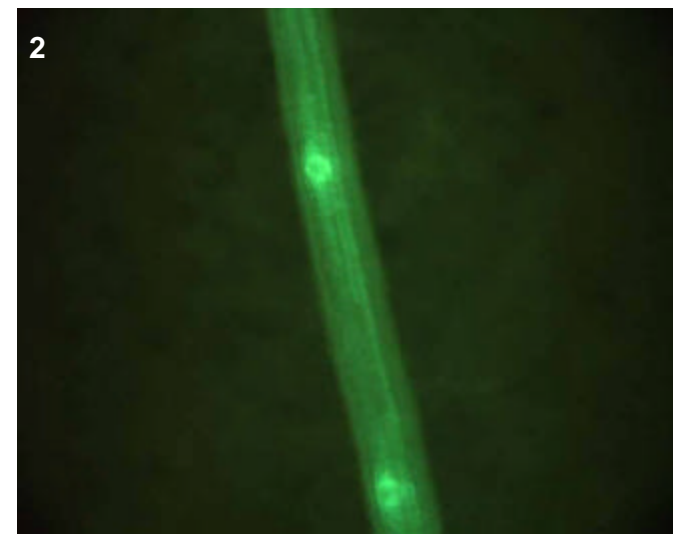
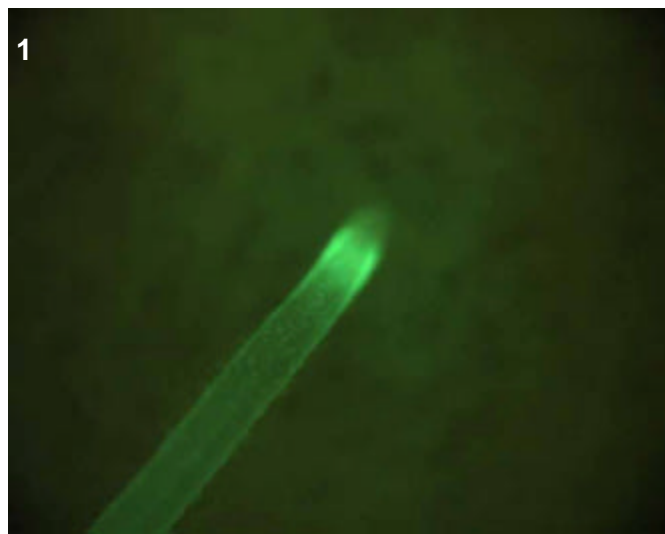
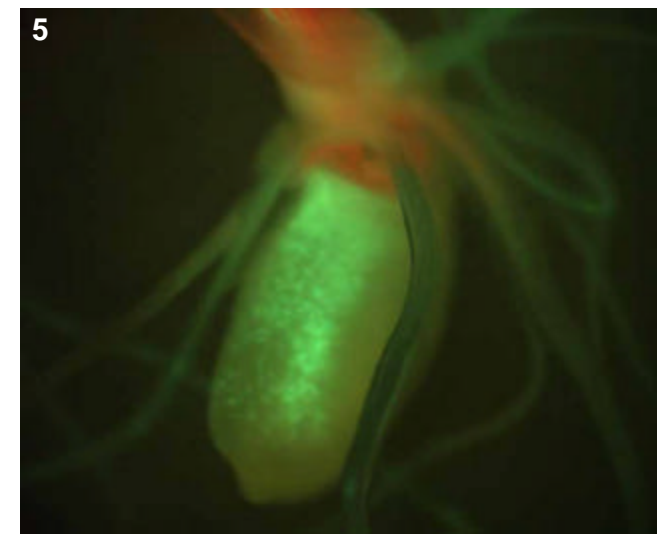
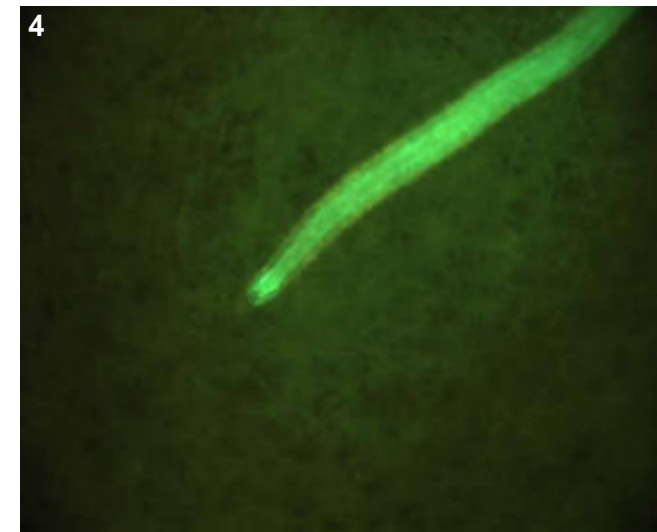
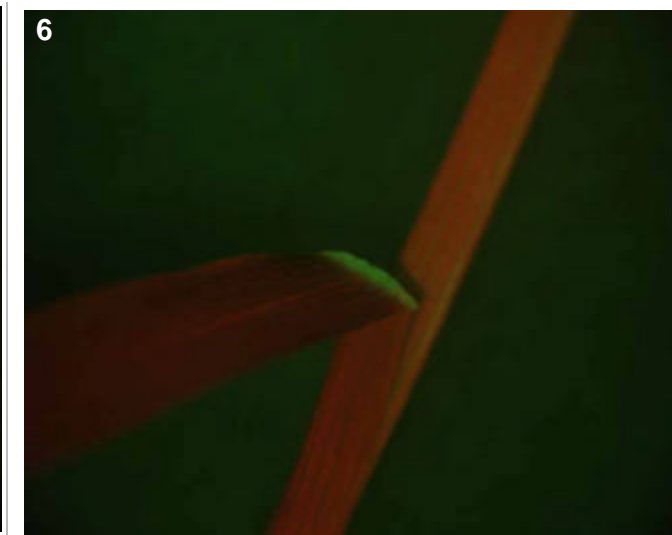
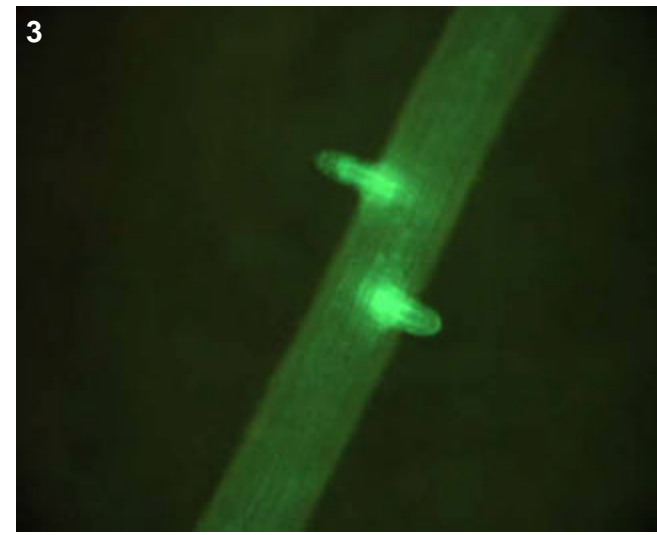
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASK D11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

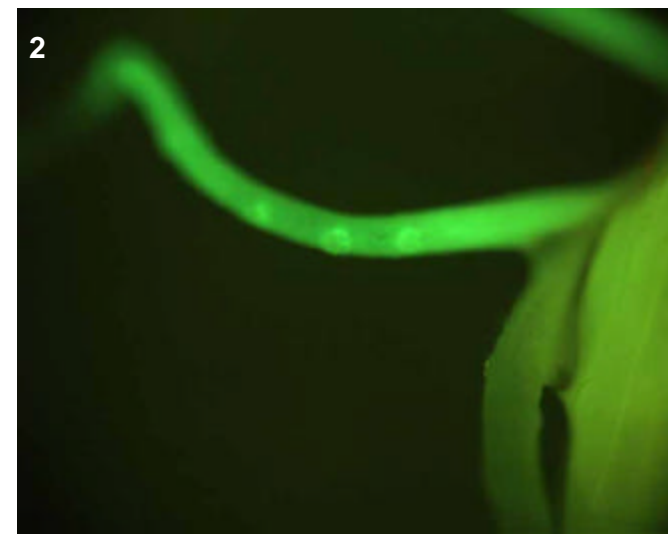
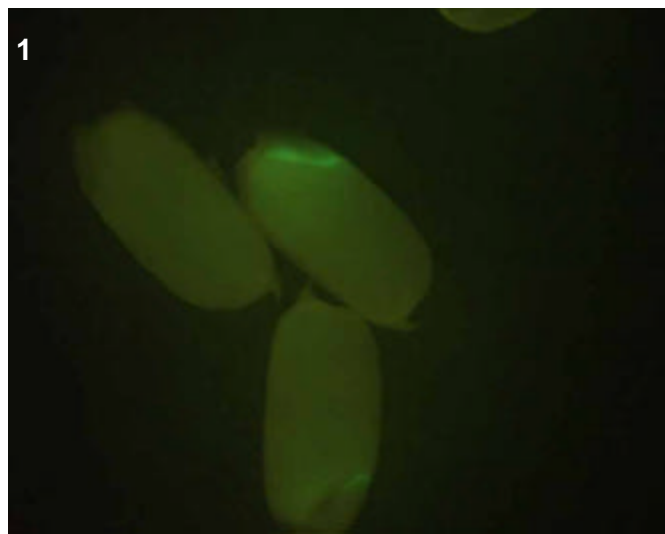
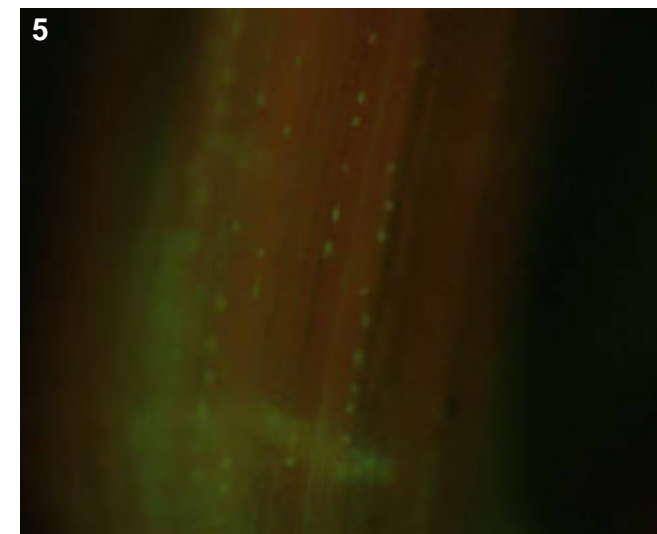
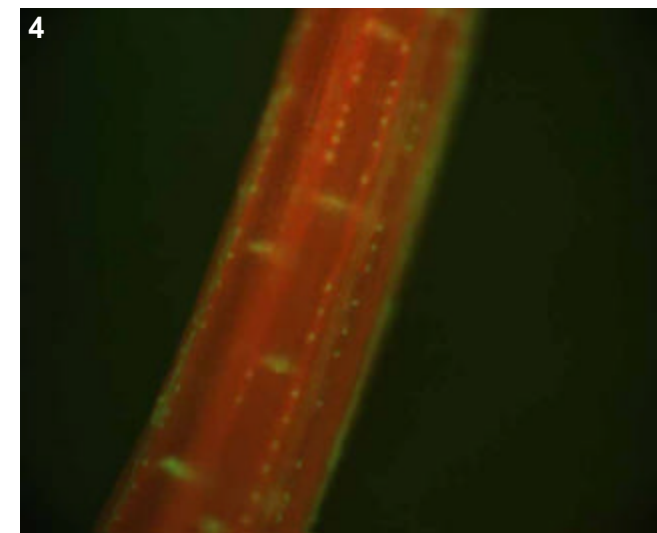
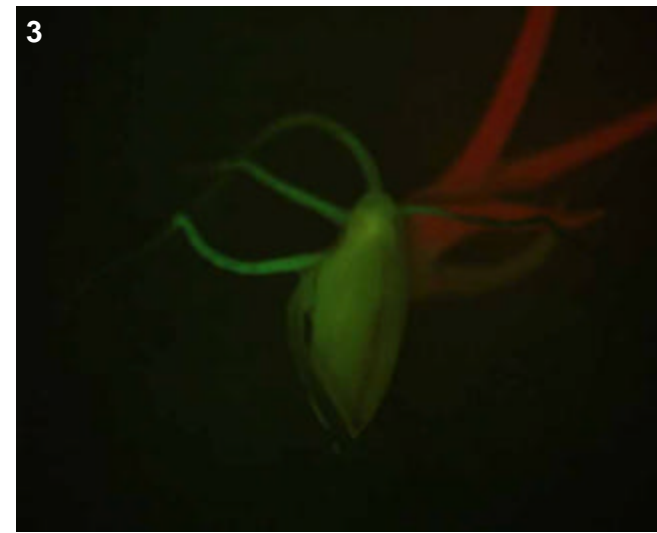
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had expression

## T1 seedling comments

This line appears to be mutant--the single GFP+ plant had a dwarf root system (pics 2-3) and shoot (pics 4-5). Note the particularly bright horizontal vascular elements and guard cells in the shoot.

# Genotype: ASK E02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

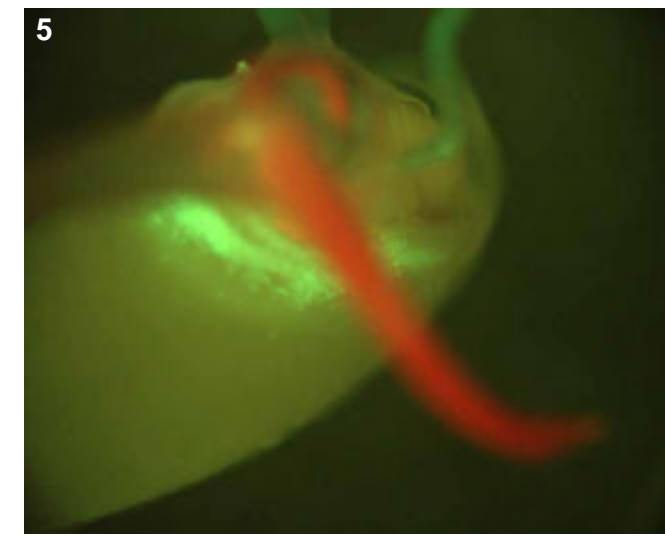
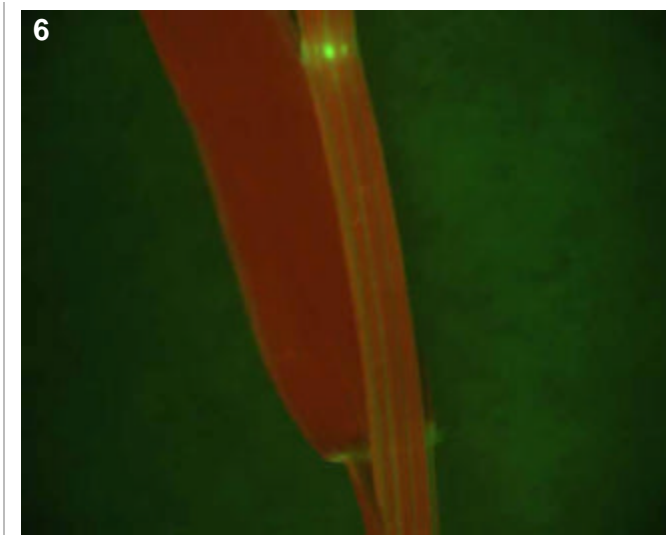
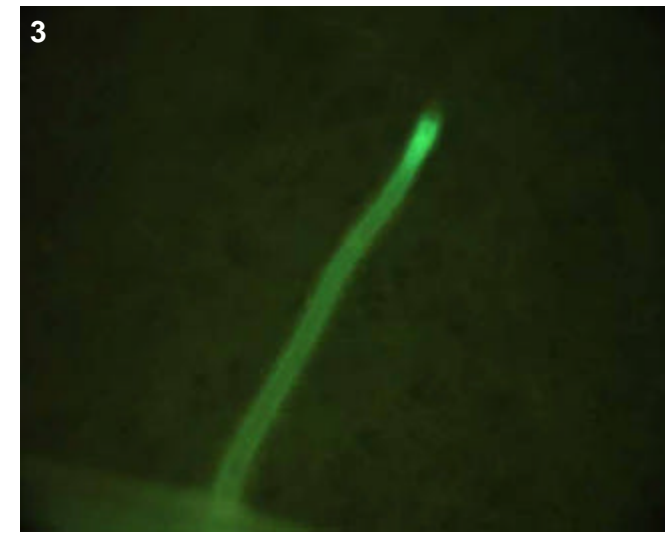
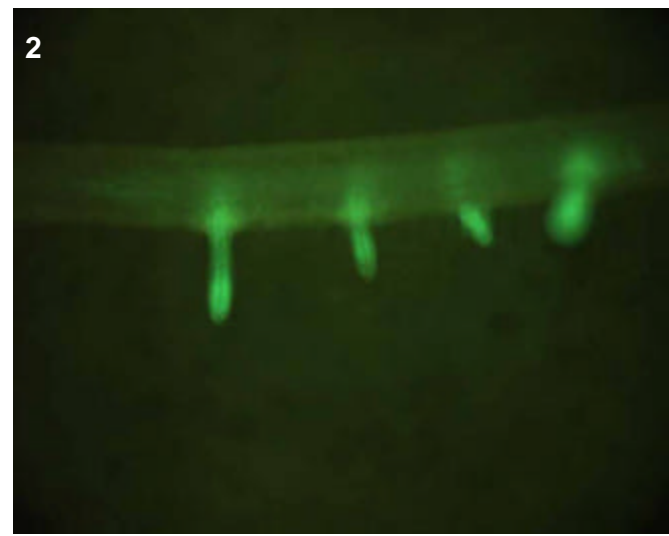
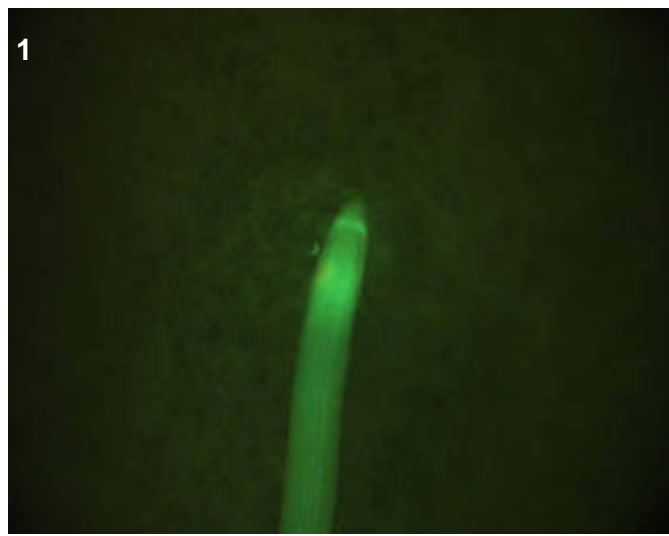
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ASK E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

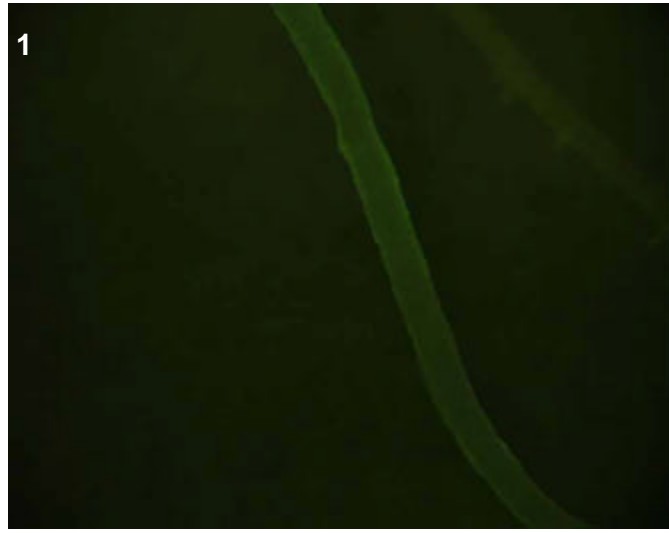
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Weak epidermal expression in older portions of crowns (pic 1).

# Genotype: ASK E05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

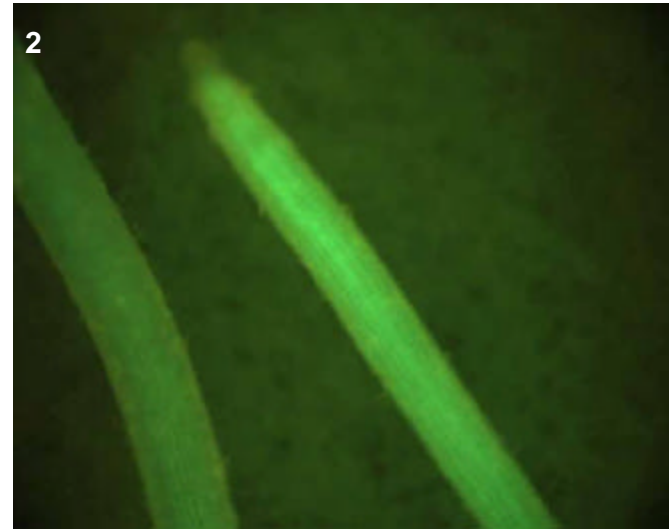
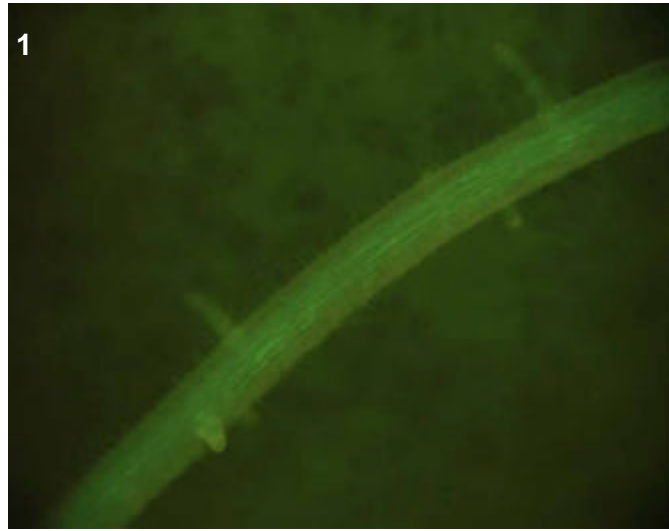
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASK E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

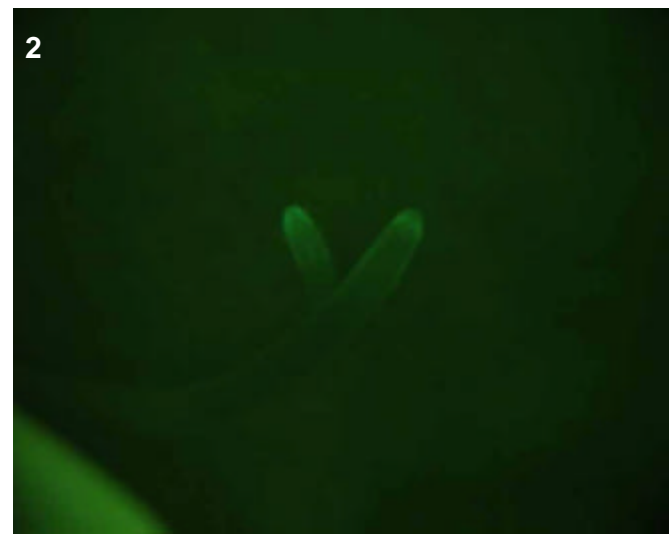
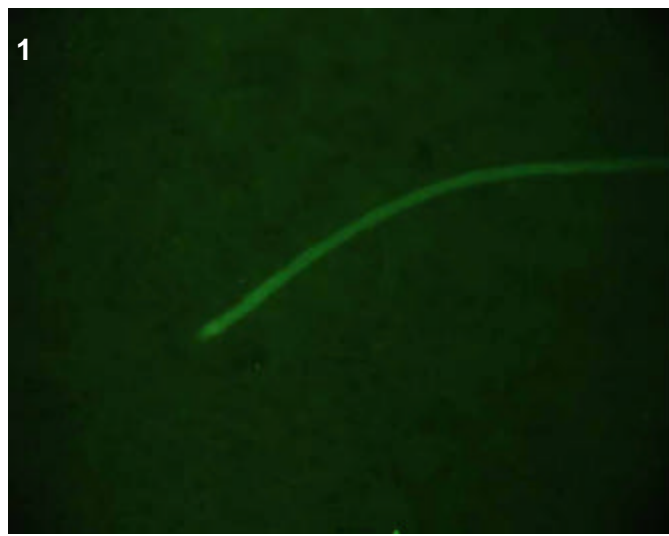
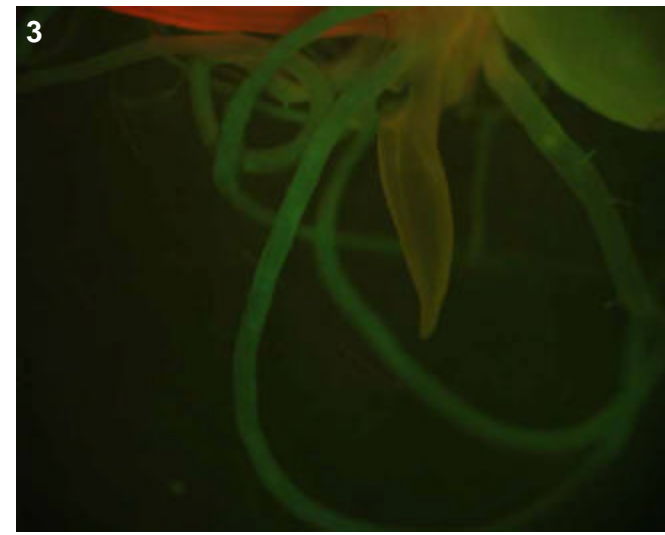
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

There may be weak shoot vascular expression as well.

# Genotype: ASK F04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

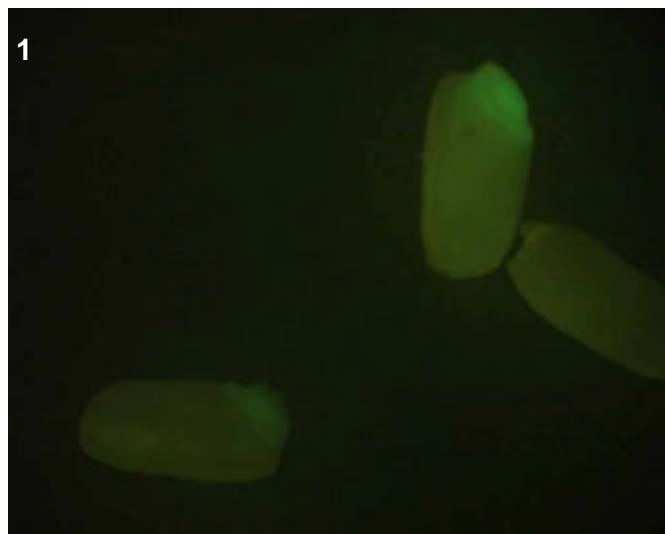
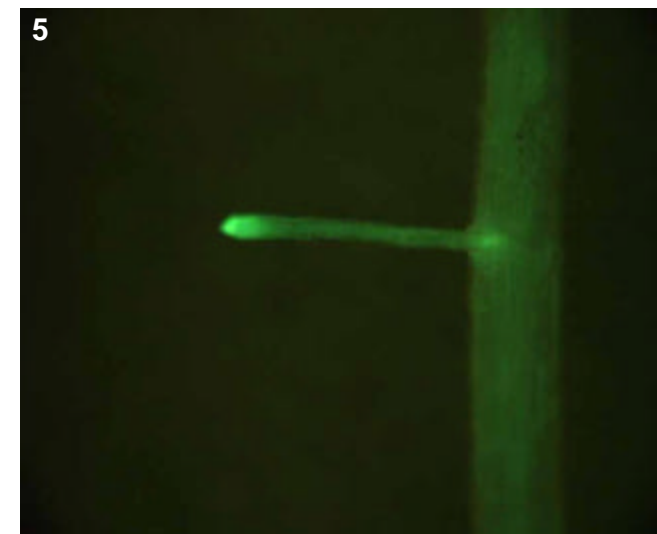
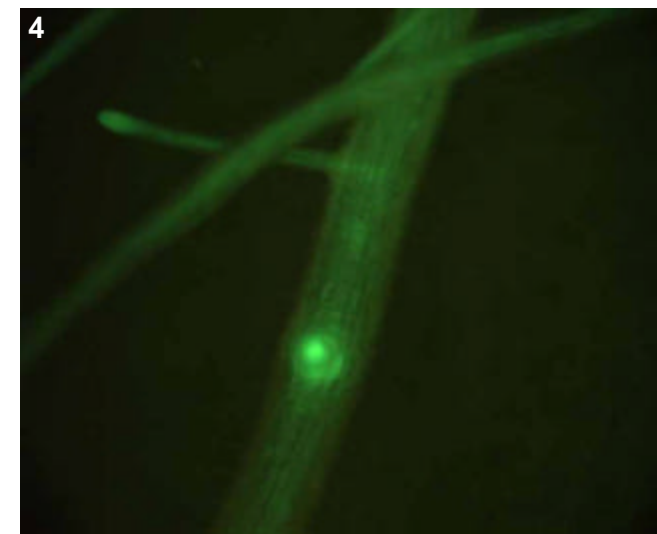
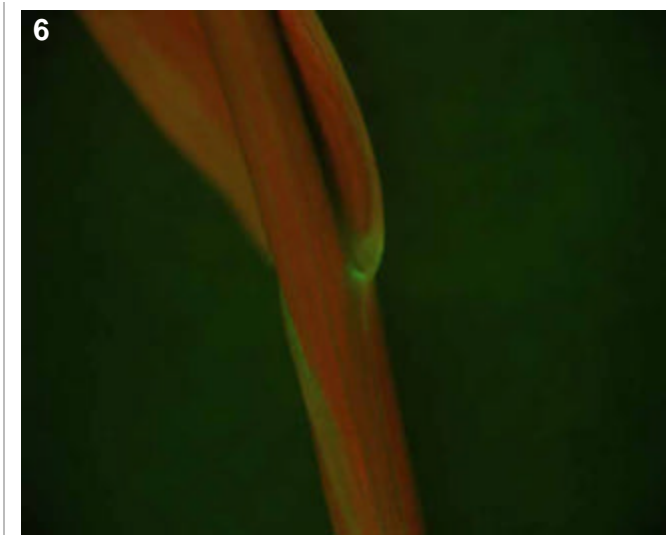
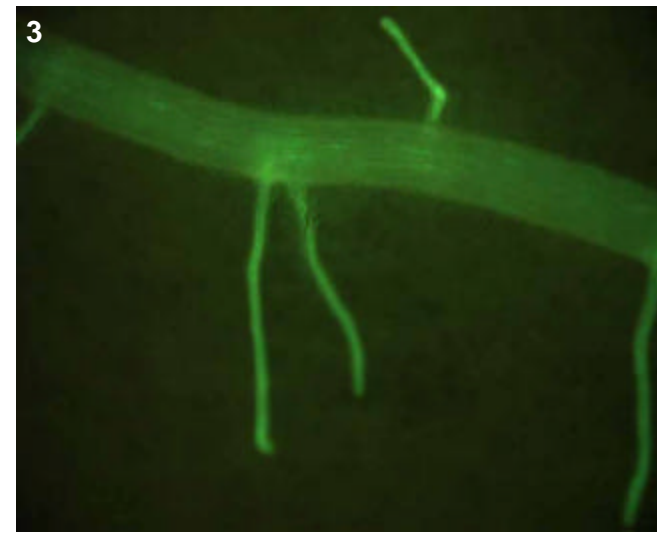
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had medium expression (pic 1)

## T1 seedling comments

# Genotype: ASK F11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

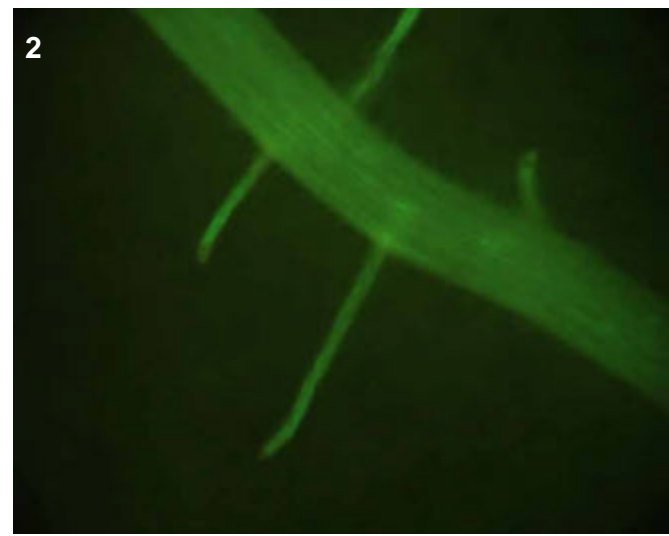
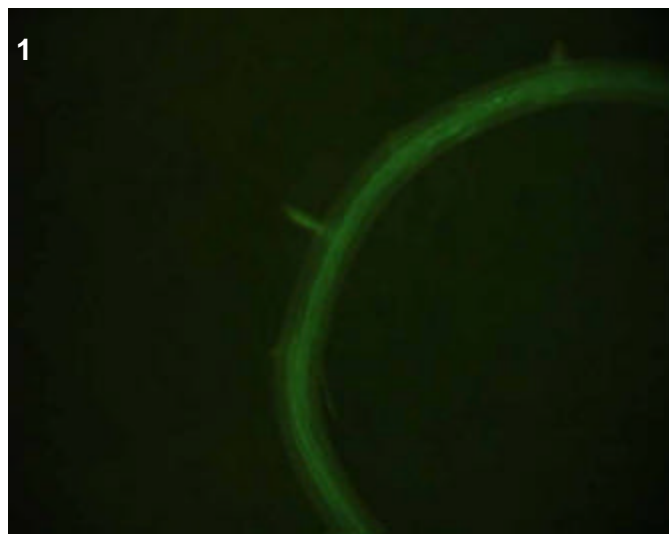
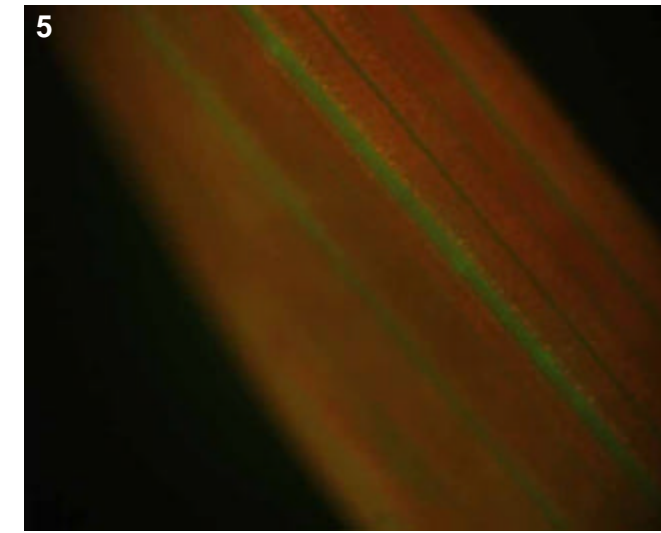
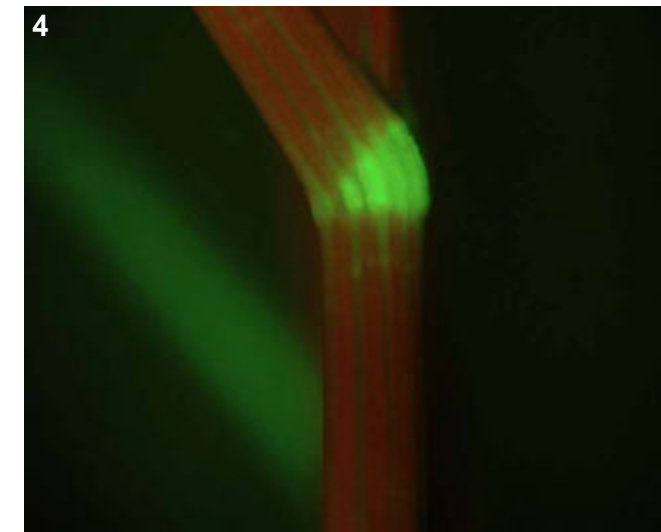
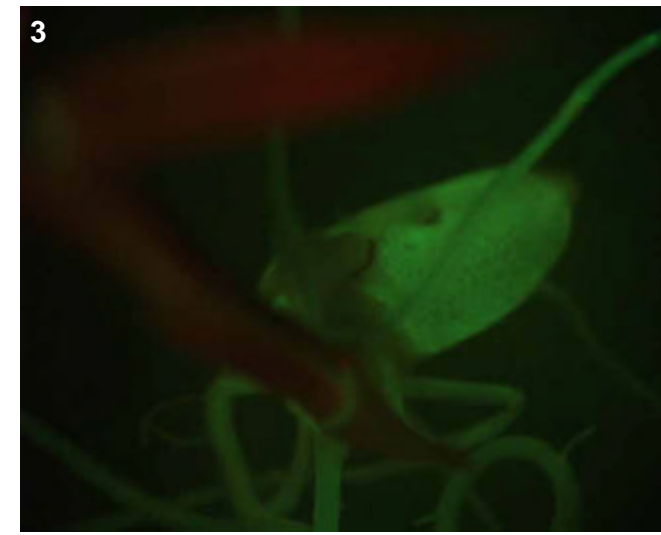
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASK G06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

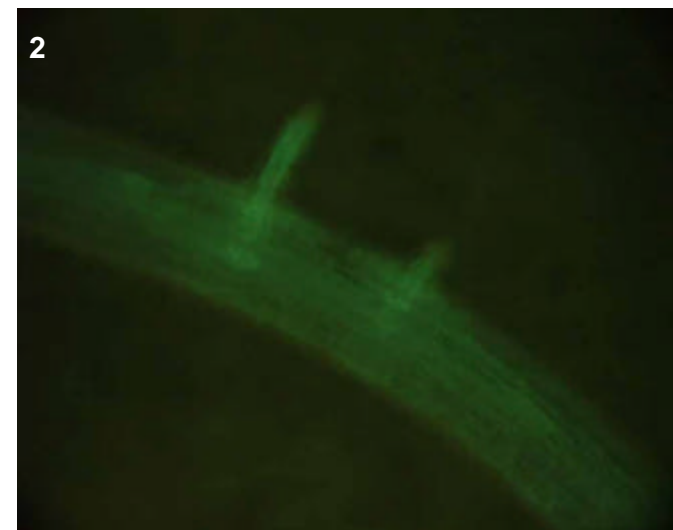
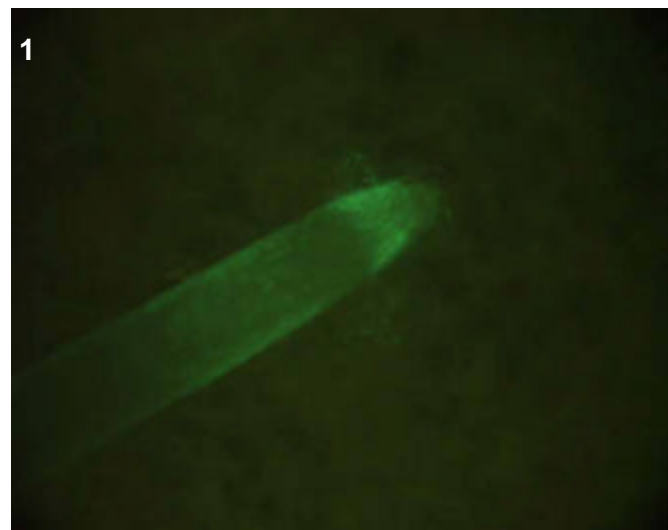
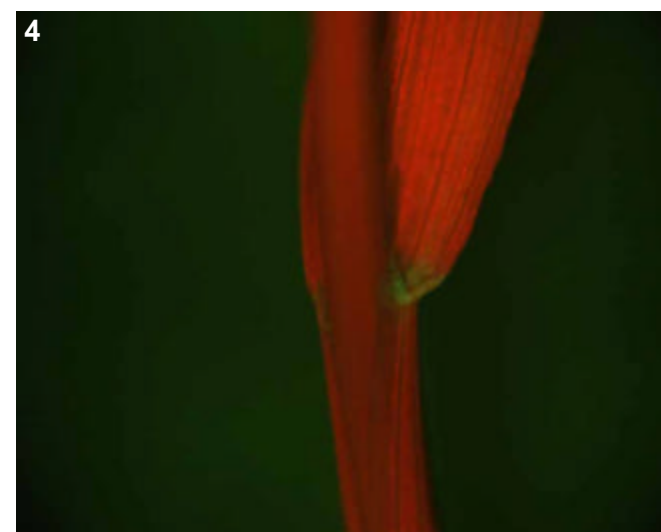
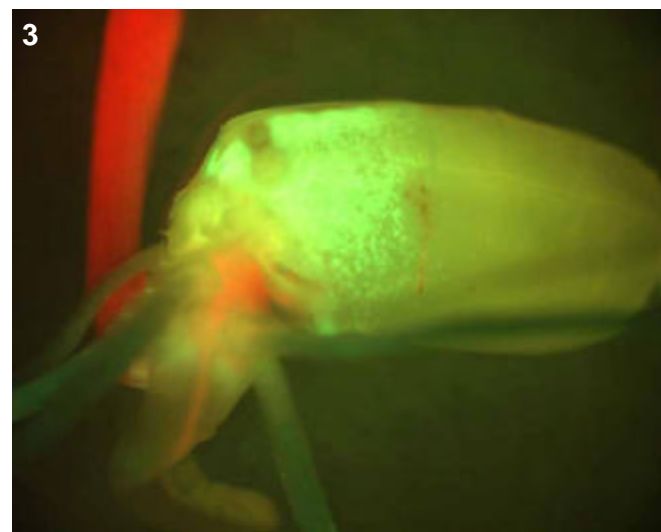
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASK G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

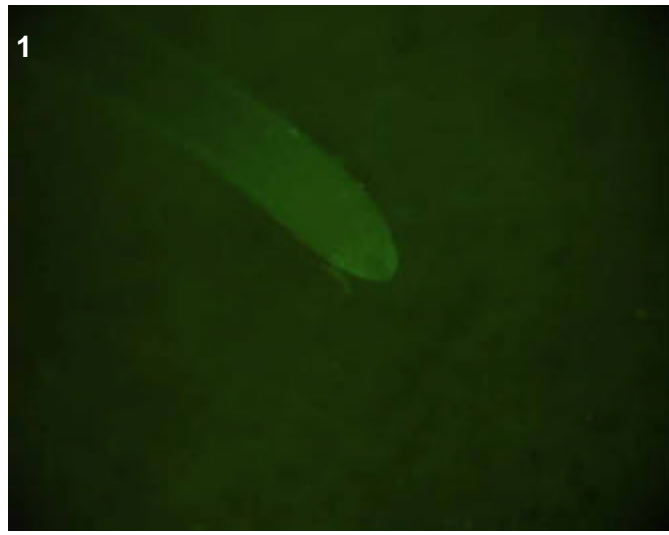
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression limited to initials of crown root tips (pic 1), and perhaps vascular expression in lats (pic 2). The lats were very small so impossible to determine pattern in more mature laterals.

# Genotype: ASK G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

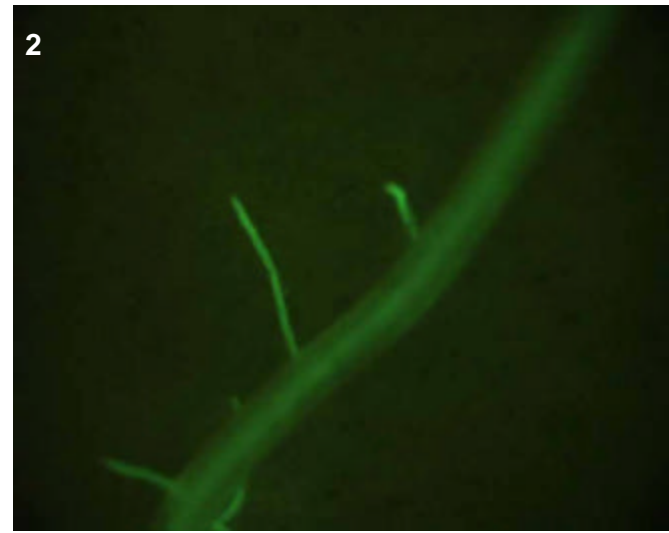
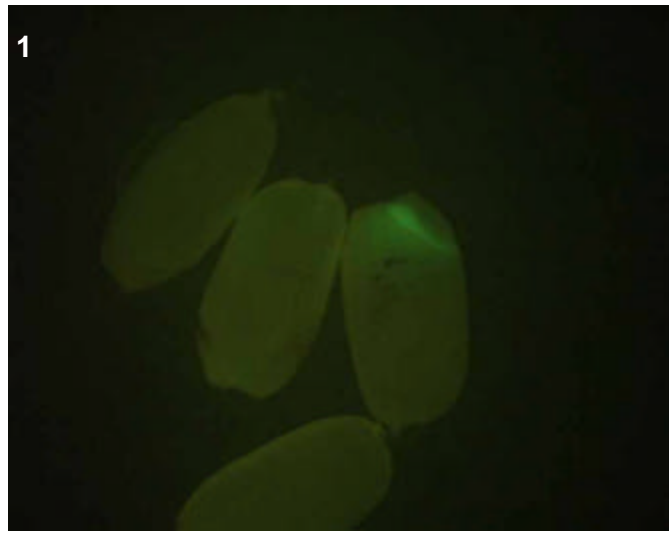
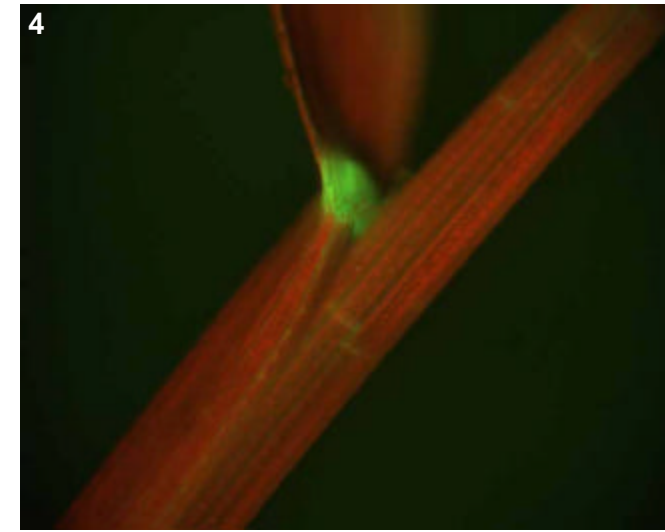
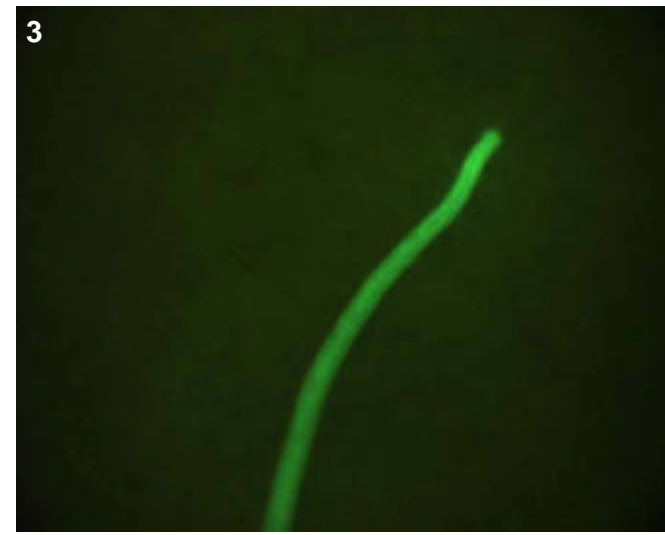
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had medium expression

## T1 seedling comments

Root expression was most bright in the young, thin crown roots (pics 2-3) and looks like cortical expression.

# Genotype: ASK G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

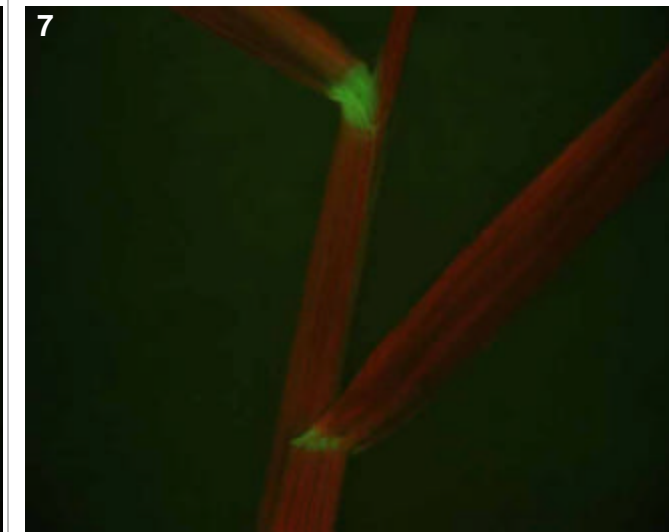
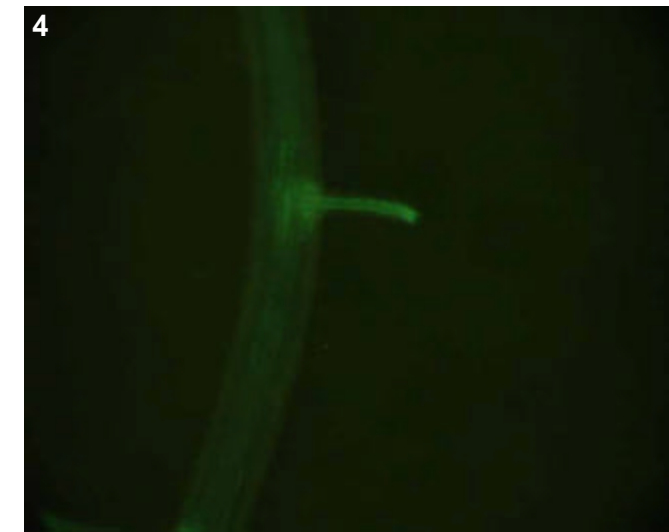
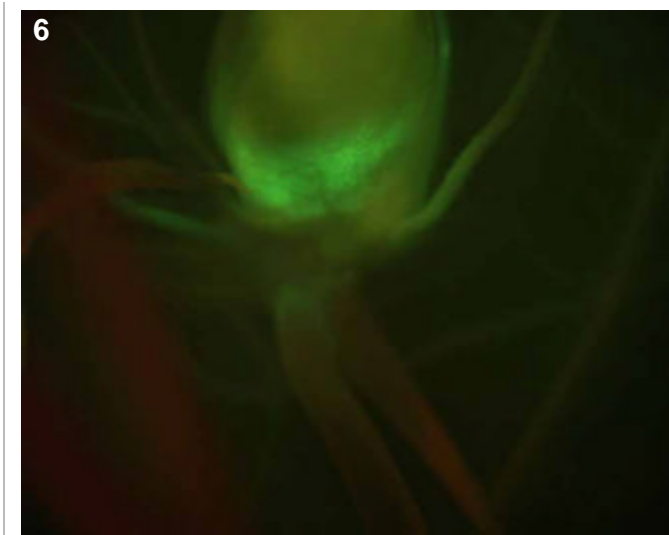
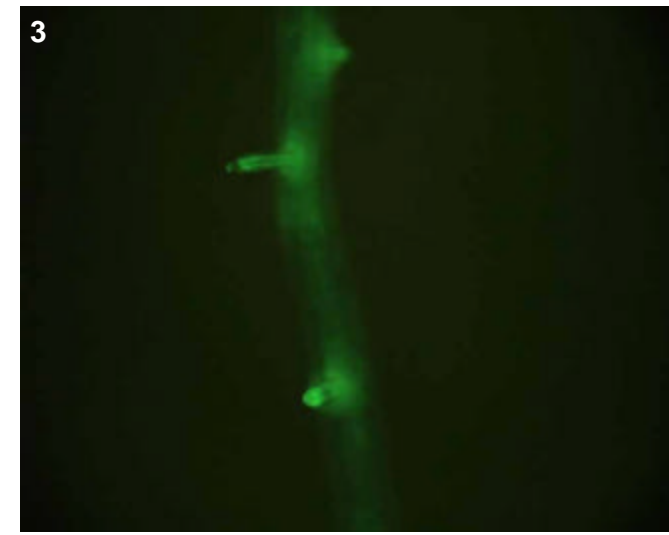
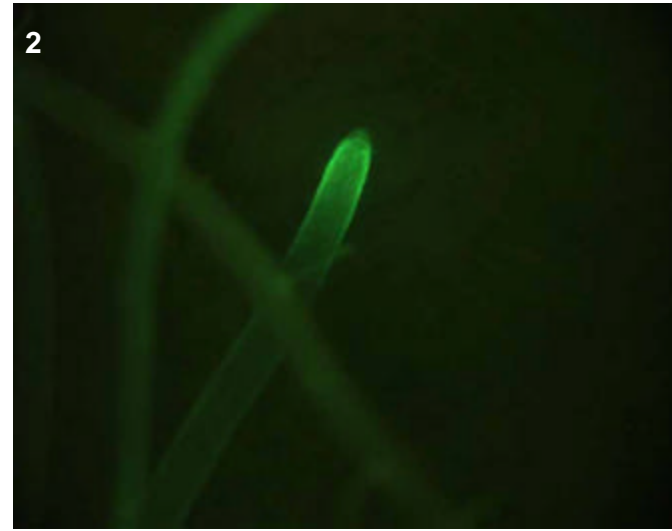
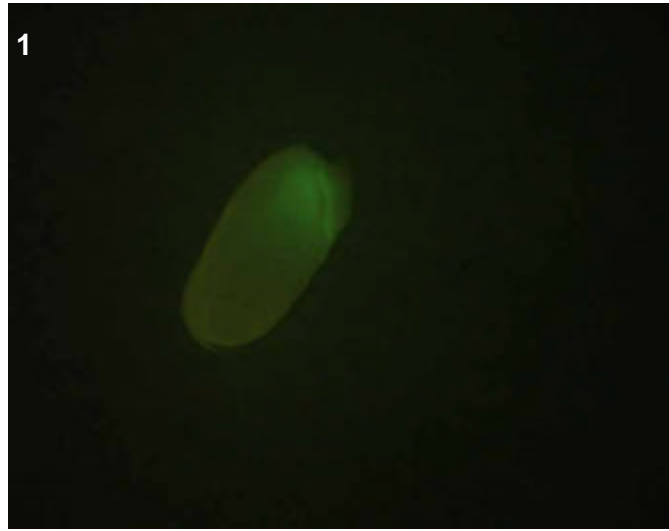
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

5/5 seeds had expression

## T1 seedling comments

Root expression was brightest at the root apex (pics 2-5).

# Genotype: ASL A01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

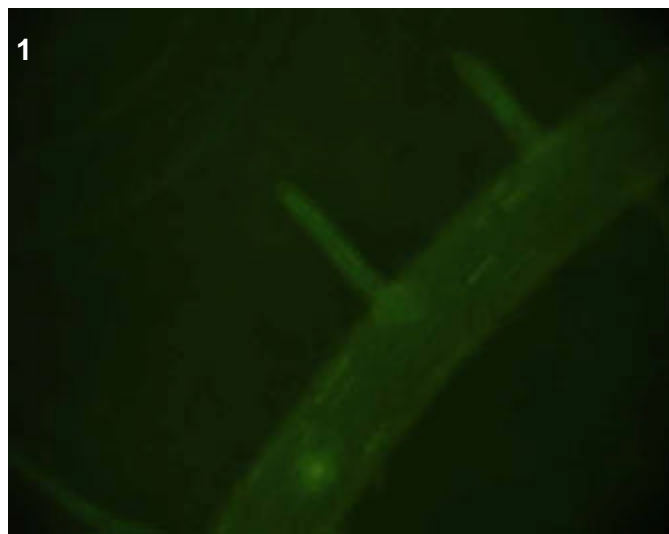
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASL A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

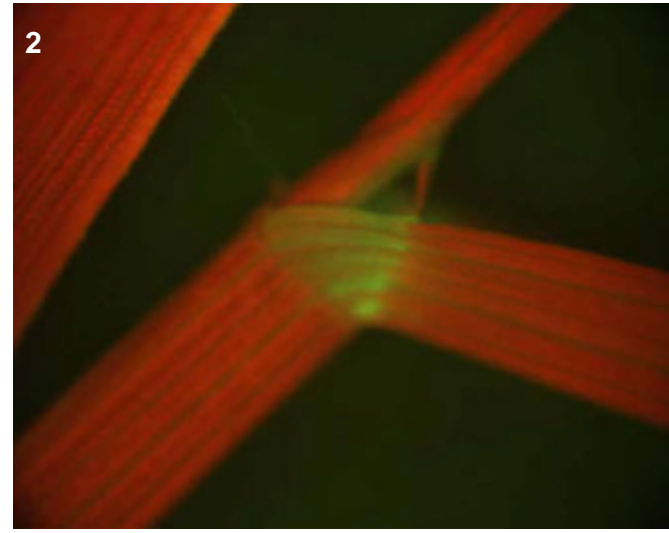
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression was most weak in the laterals (pic 1) and could be stelar expression.

# Genotype: ASL C02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

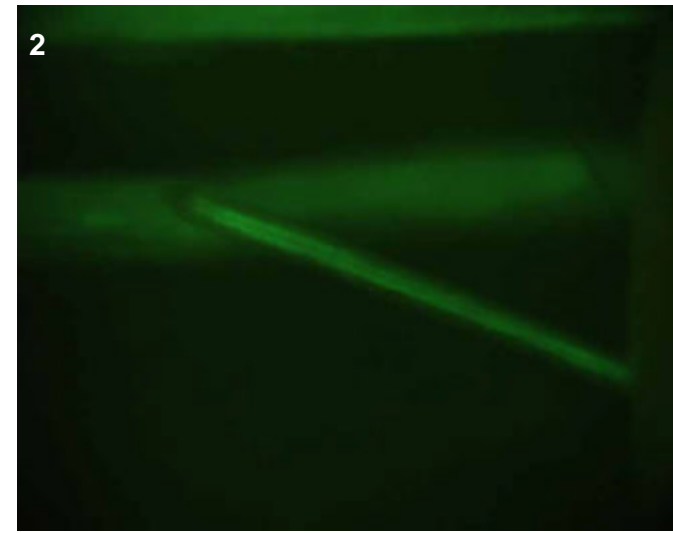
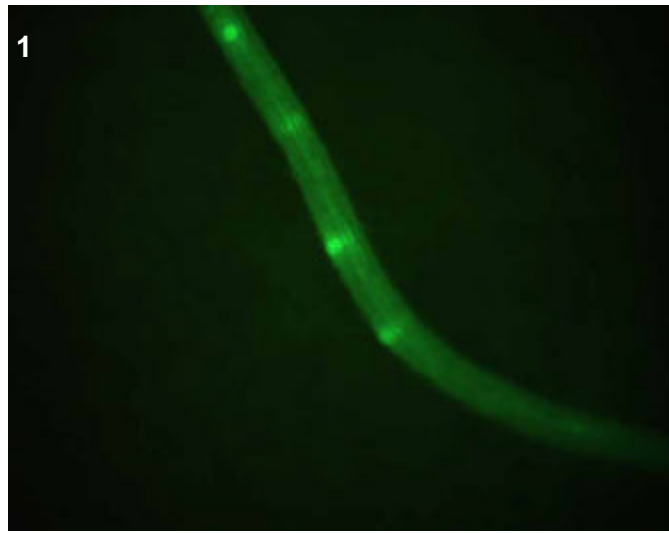
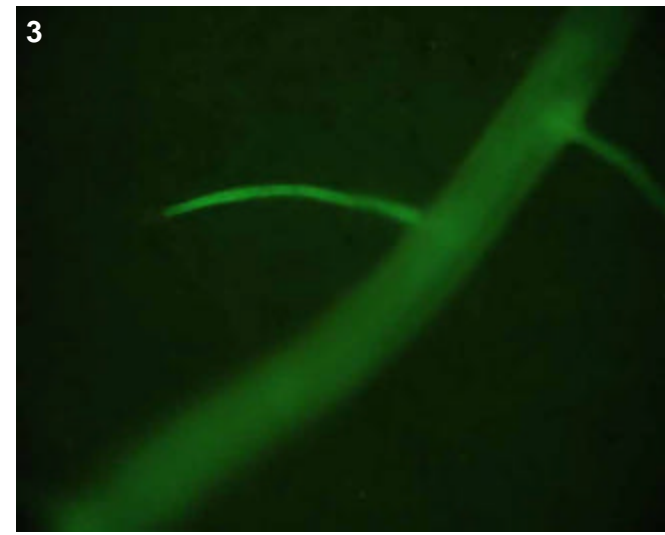
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASL C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

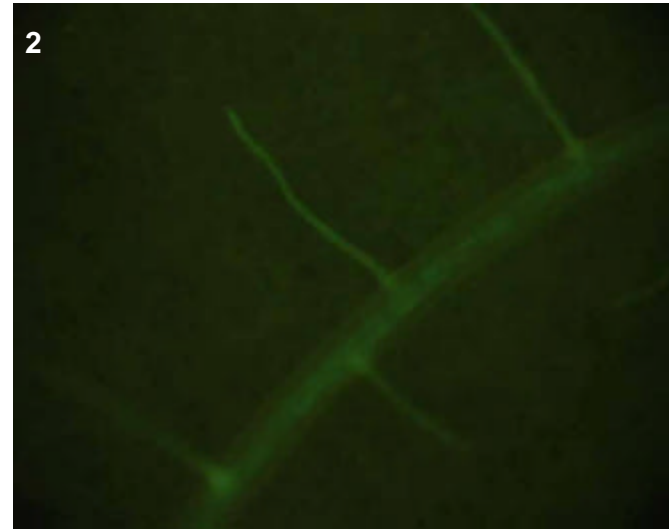
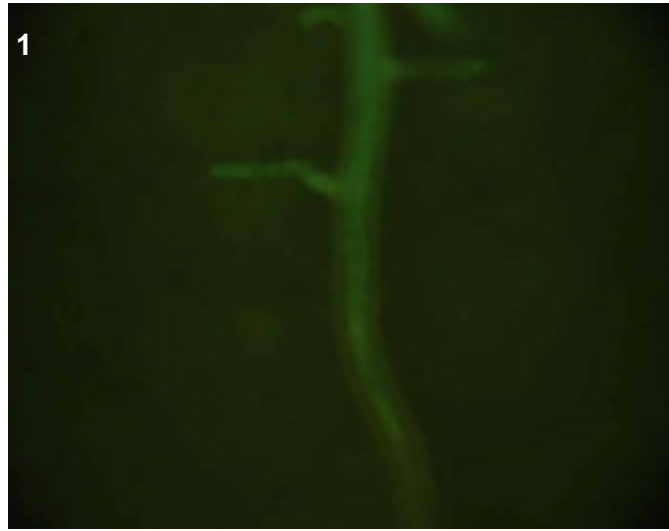
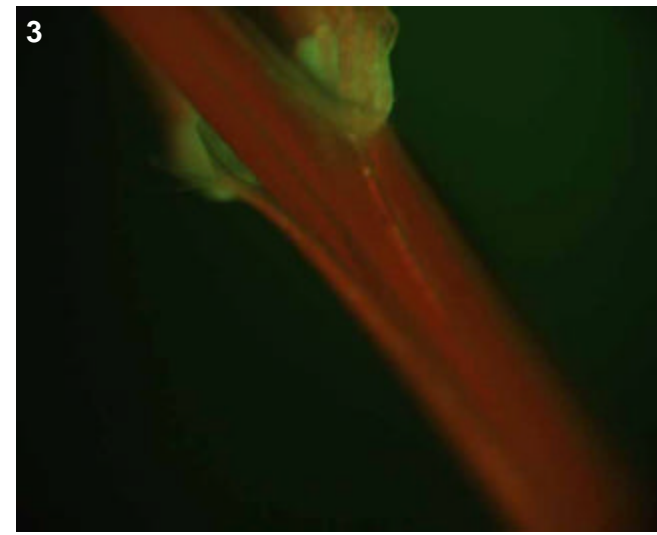
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASL E01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

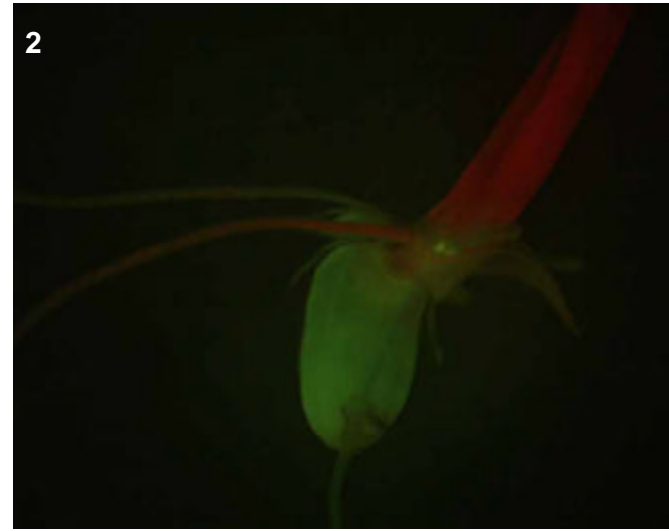
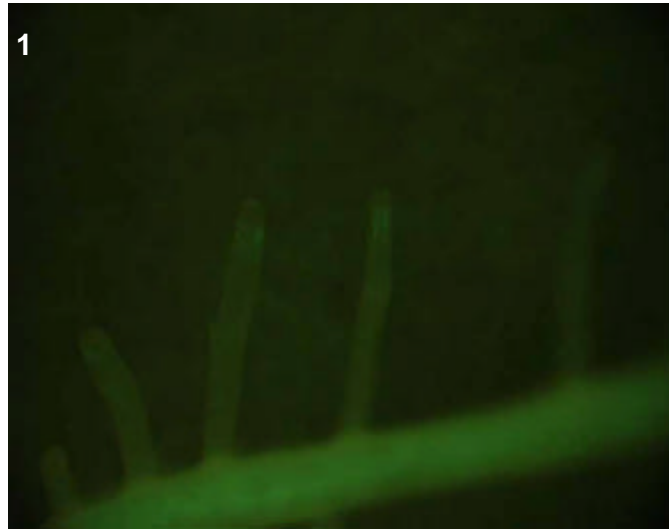
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

The GFP+ plants were very small (see pic 2) and perhaps mutant? Expression was faintly epidermal in crowns/seminal, while in laterals there was some form of expression more internal in the cell division zone (pic 1).

# Genotype: ASL F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

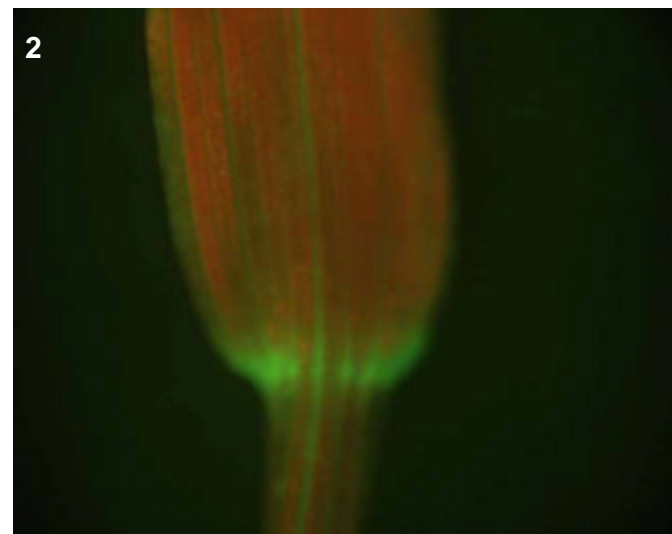
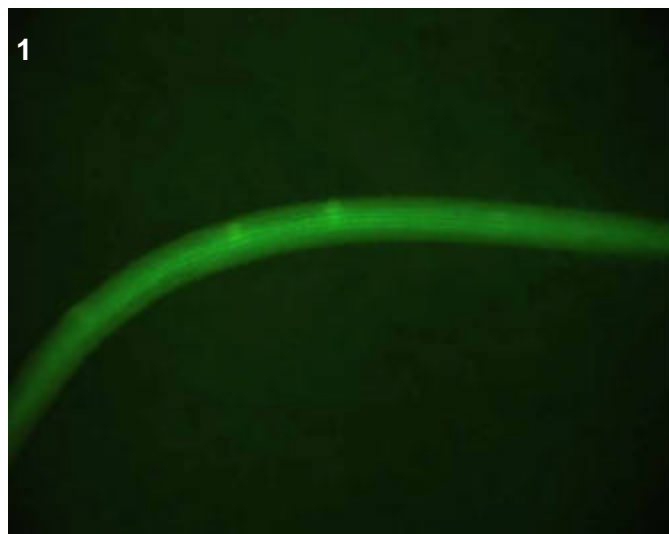
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

The plant was abnormally small and perhaps mutant.

# Genotype: ASL F09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

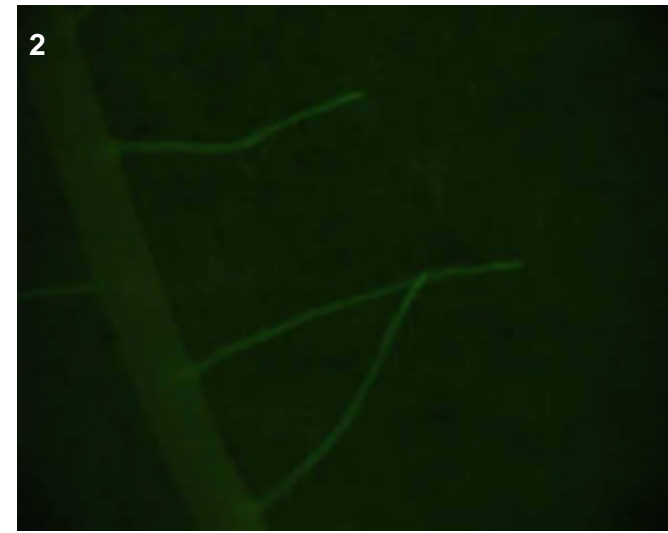
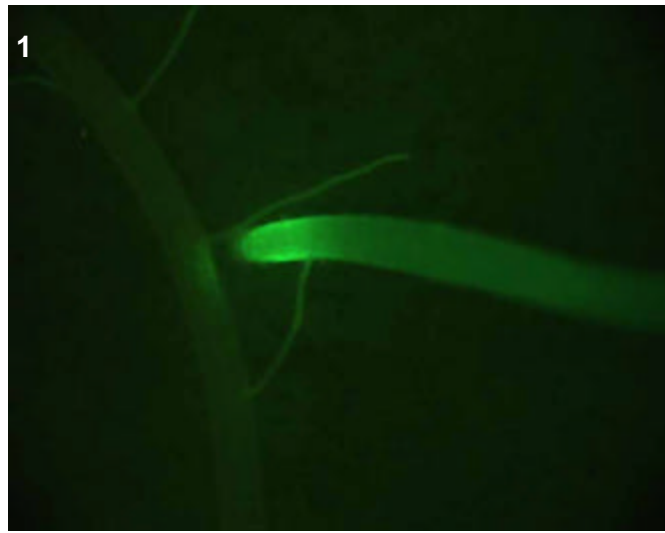
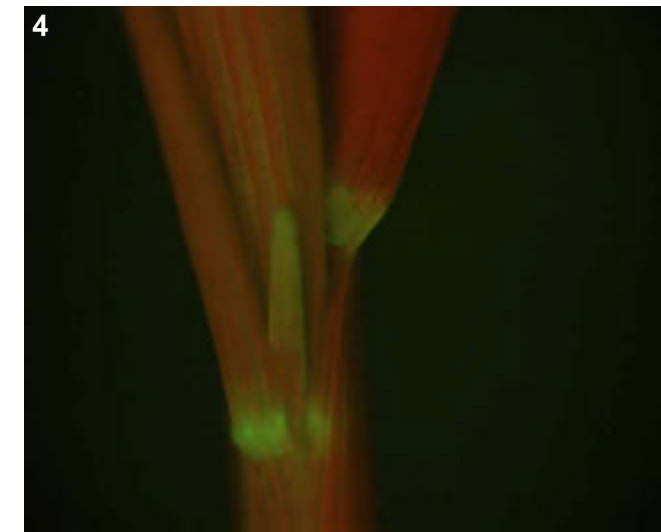
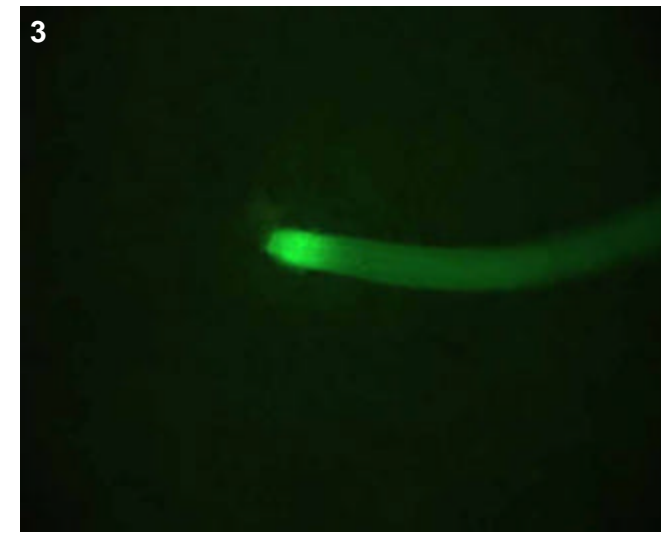
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright, distinct cortical expression in young crown roots (pic 3).

# Genotype: ASL G02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

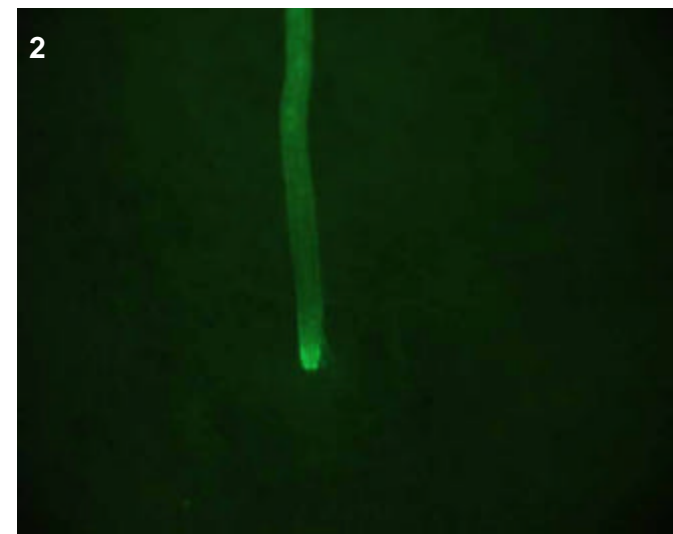
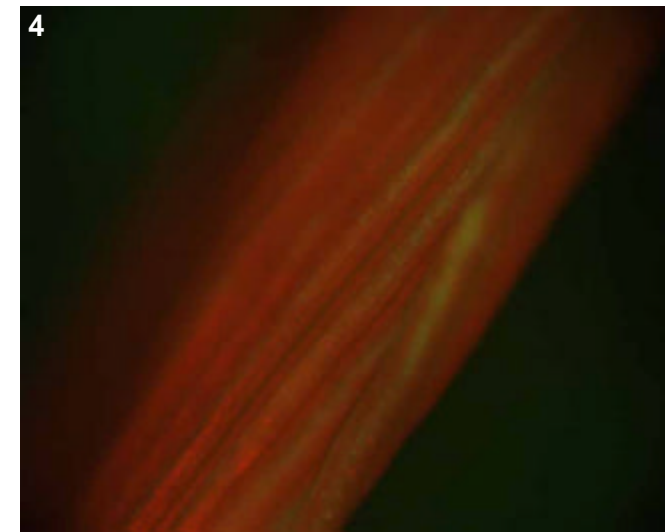
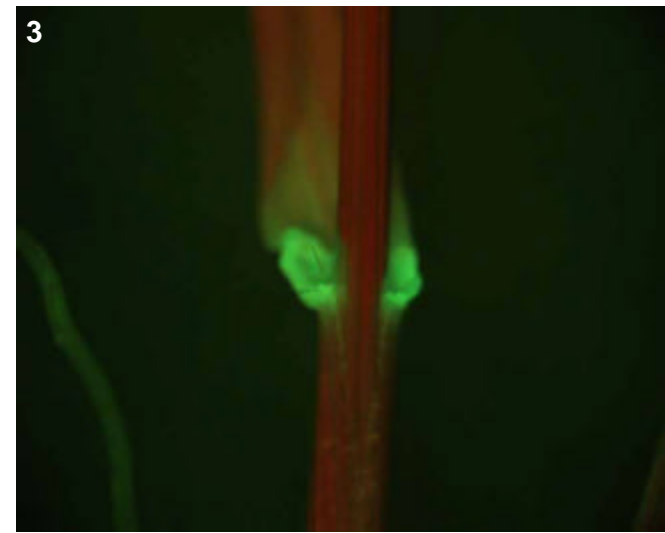
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASL G06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

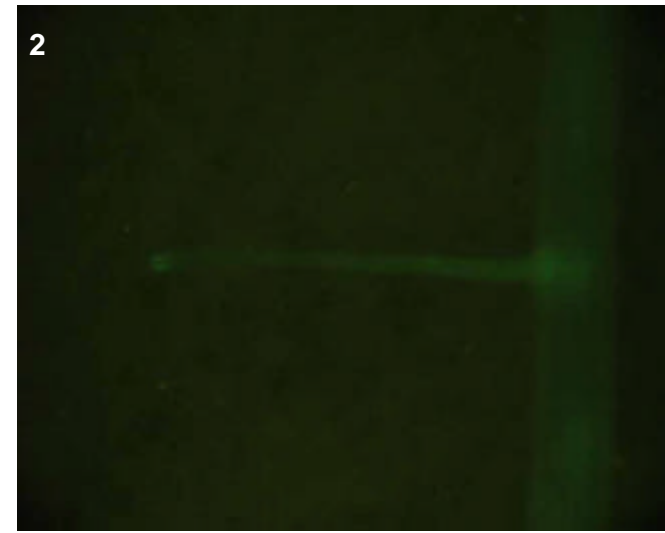
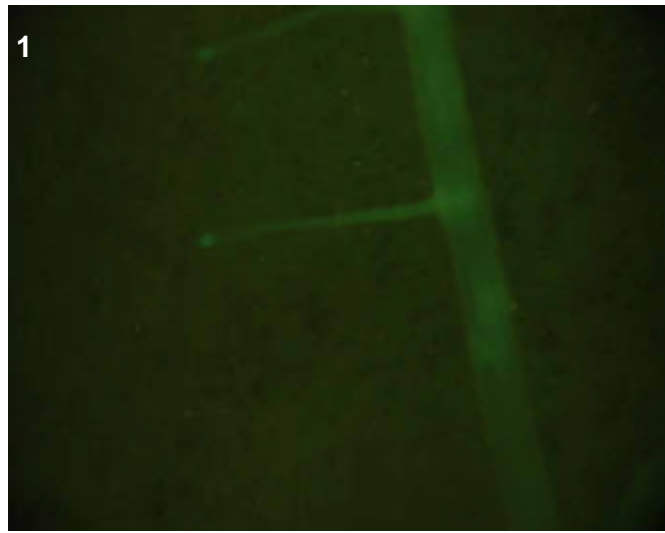
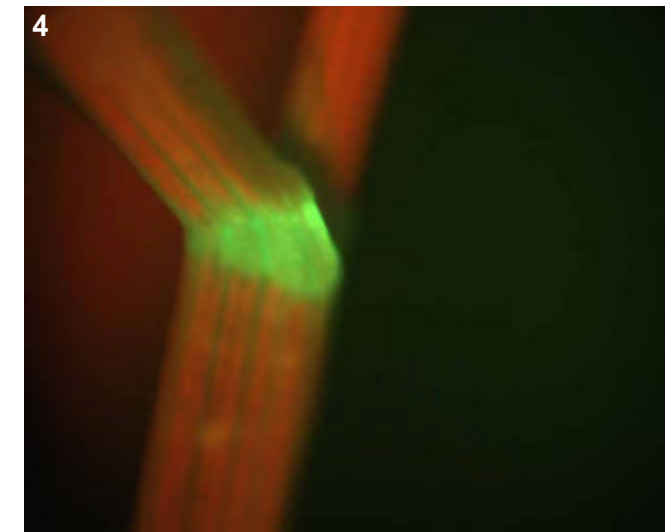
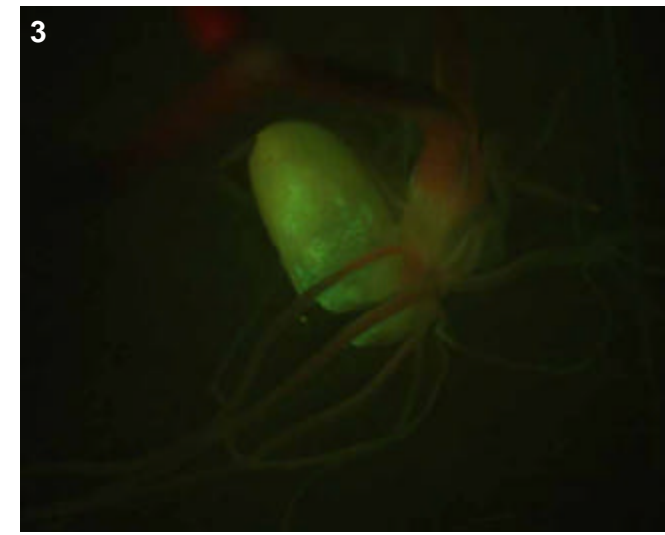
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASL G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASL H02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

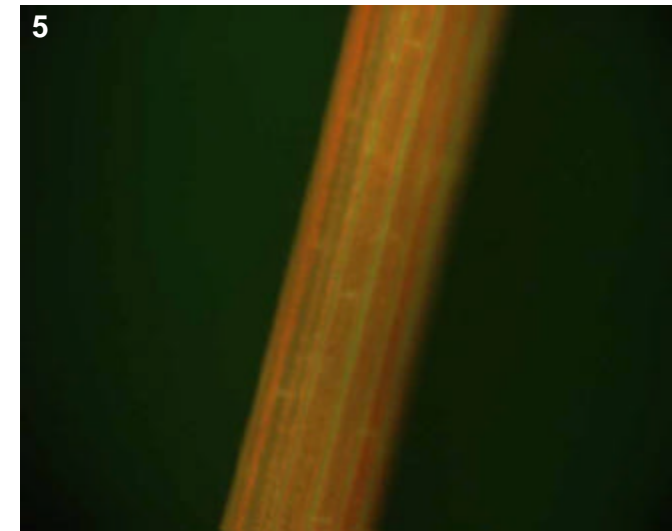
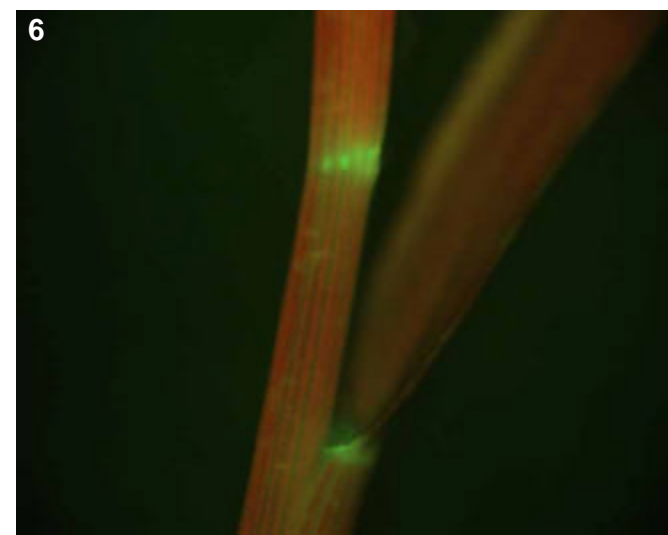
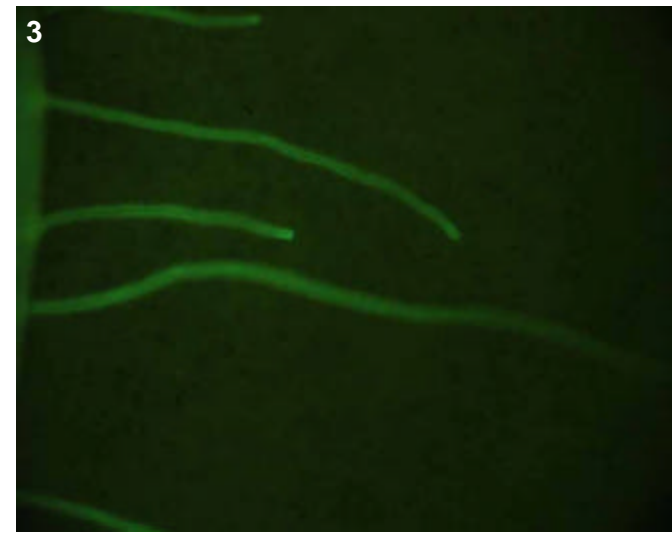
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright expression throughout the plant. The seminal root (pics 2-3) looks mutant--stunted looking with many lateral roots near the tip.

# Genotype: ASL H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

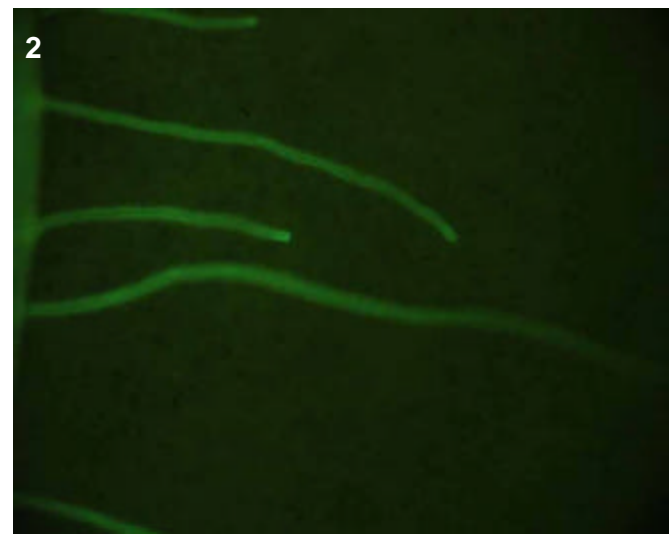
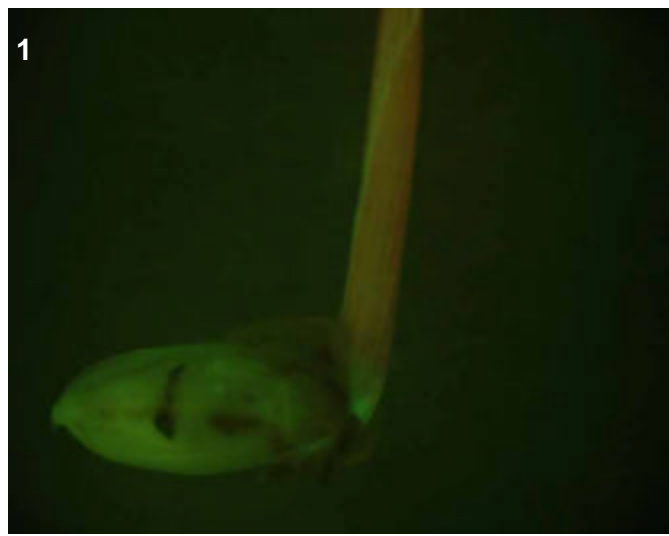
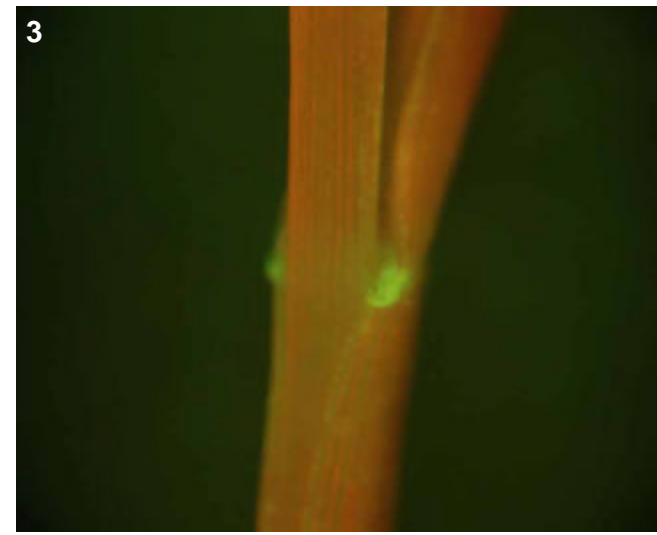
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

1/2 plants had no roots at all (pic 1), while the the other had only a seminal root (pic 2), perhaps a root mutant line?



# Genotype: ASL H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?  
YES, 1 GFP+ plant
- Confocal?
- Number T2 seed produced:

## T0 comments

## T1 seed comments

## T1 seedling comments

Just faint expression towards the tips of lateral roots, difficult to photograph.

# Genotype: ASM A02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

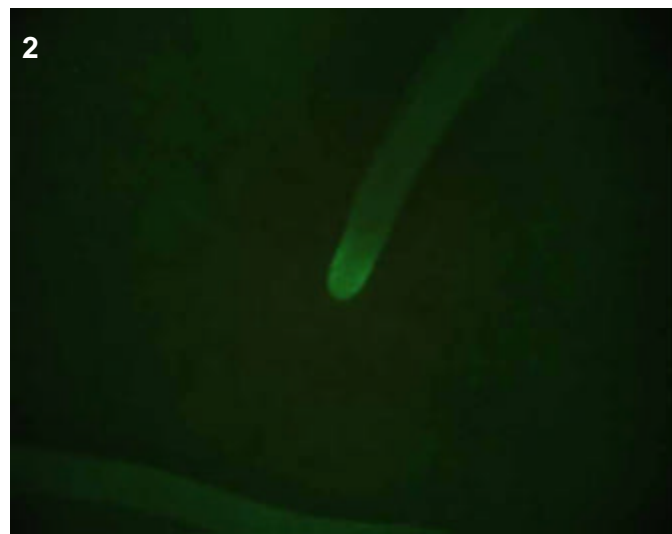
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASM A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

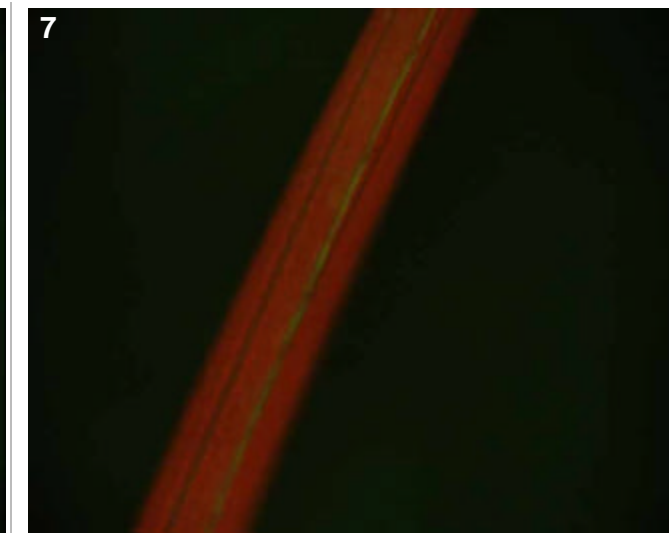
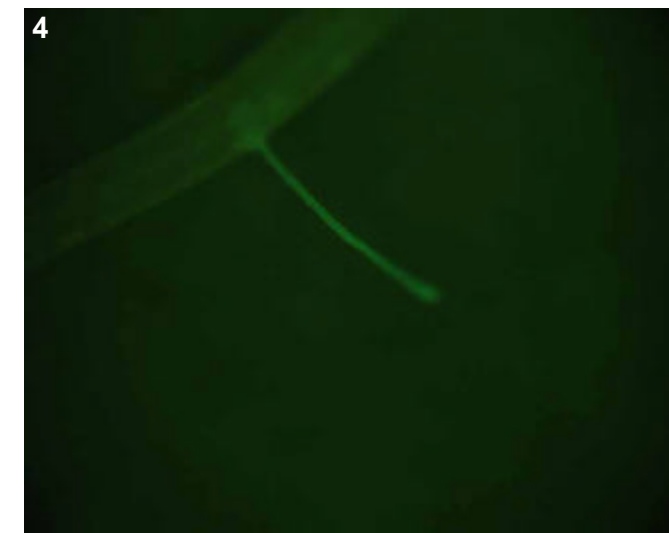
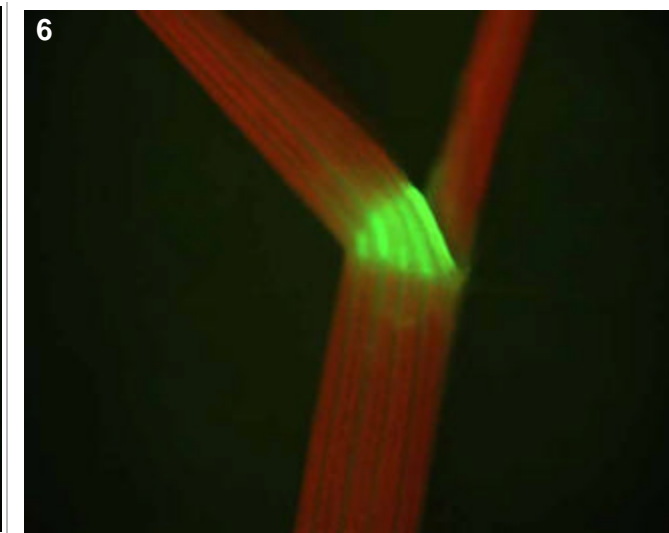
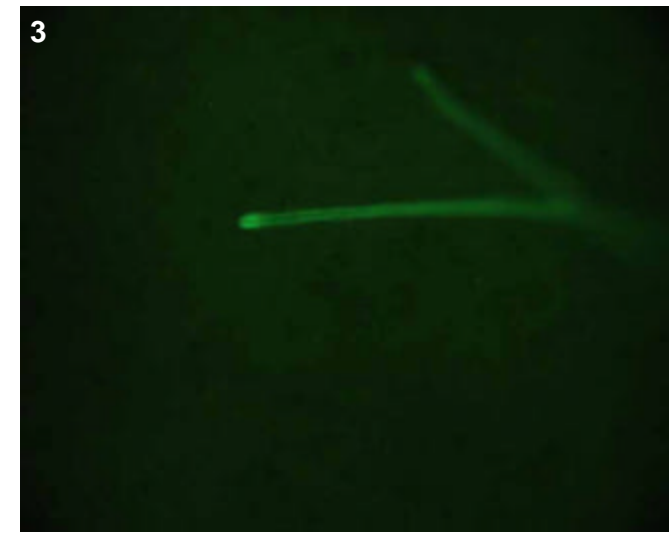
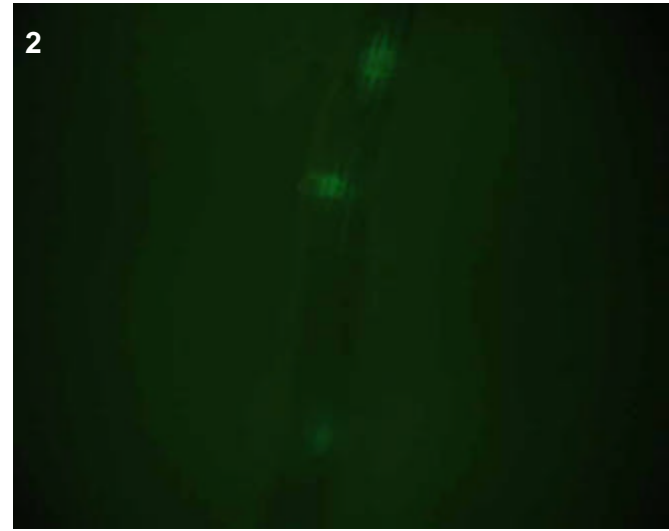
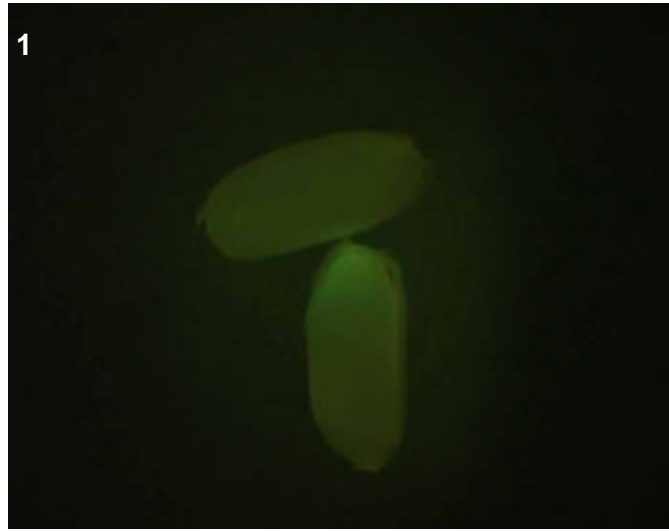
## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

WIP

## Number T2 seed produced:



## T0 comments

## T1 seed comments

2/5 seeds had expression

## T1 seedling comments

Root expression is strictly limited to the lateral roots, clearly evident at both lateral root emergence (pic 2) and in the elongated lateral roots (pics 3-5).

# Genotype: ASM B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?**  
YES, 1 GFP+ plant
- Confocal?**
- Number T2 seed produced:**

## T0 comments

## T1 seed comments

## T1 seedling comments

Just faint expression in initials of crown roots, no pictures taken.

# Genotype: ASM C07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-6  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

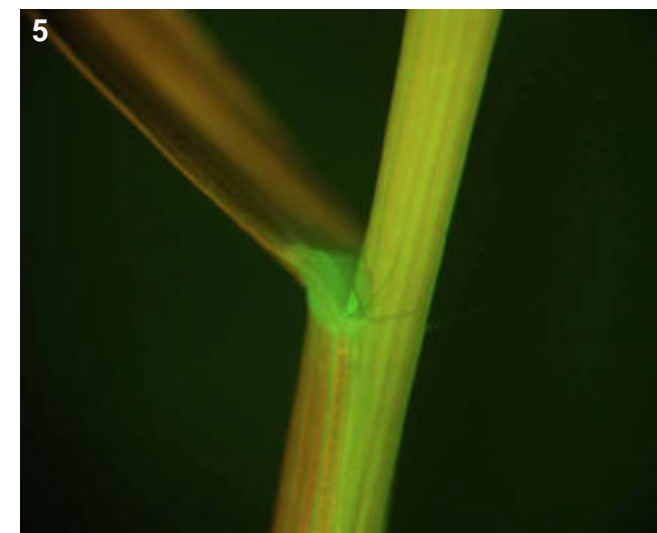
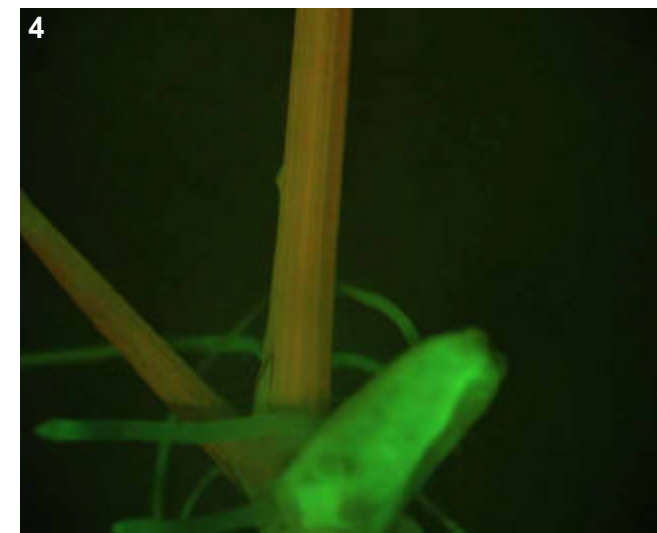
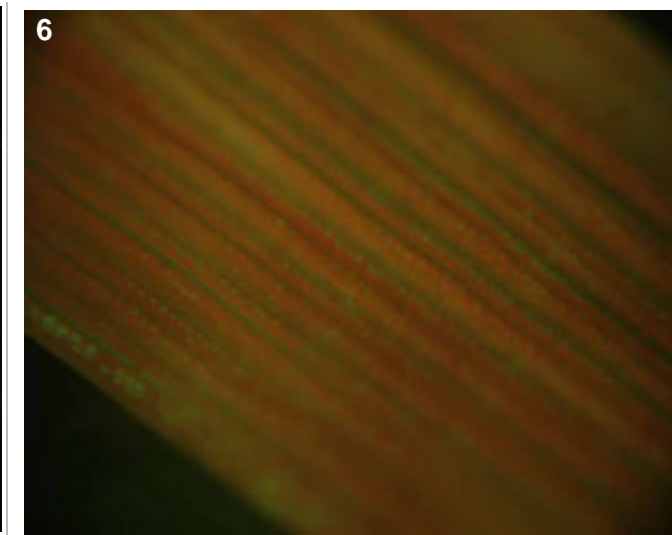
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had medium expression. Just a small spot of expression near tip of embryo region (pic 1).

## T1 seedling comments

Extremely bright expression in the seedlings (pics 2-6), probably constitutive.

# Genotype: ASM D09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

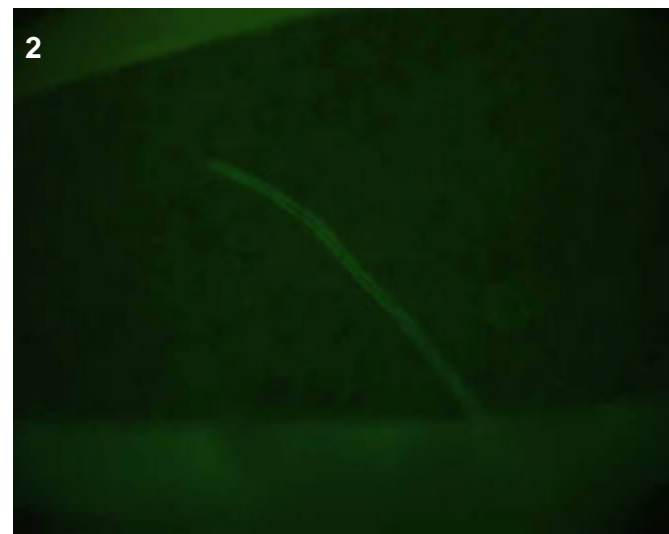
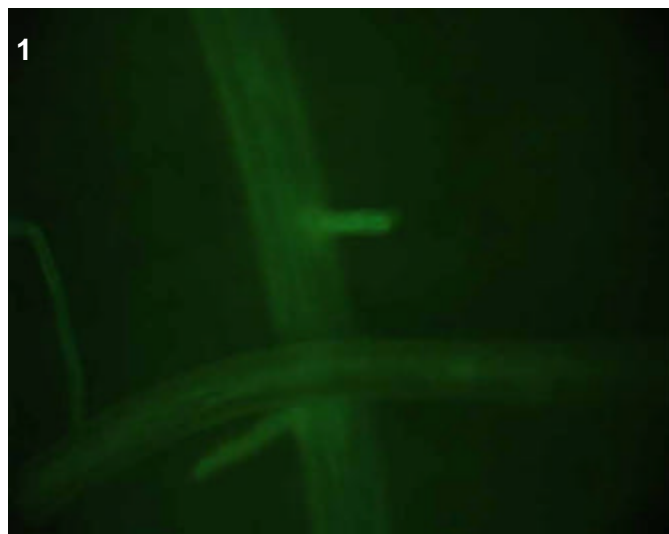
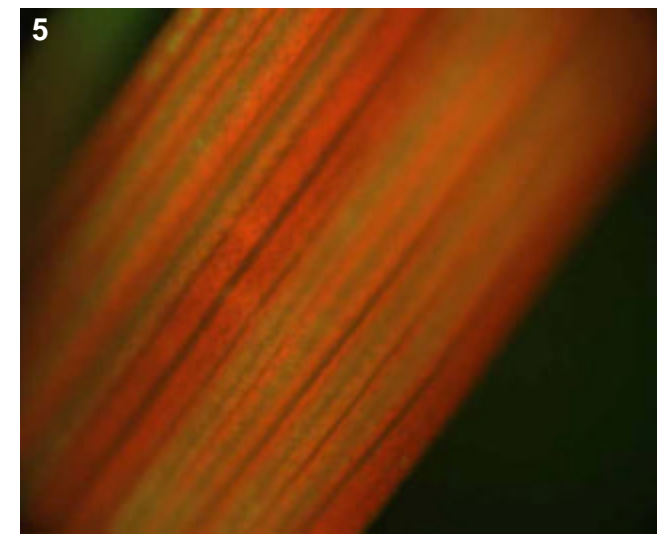
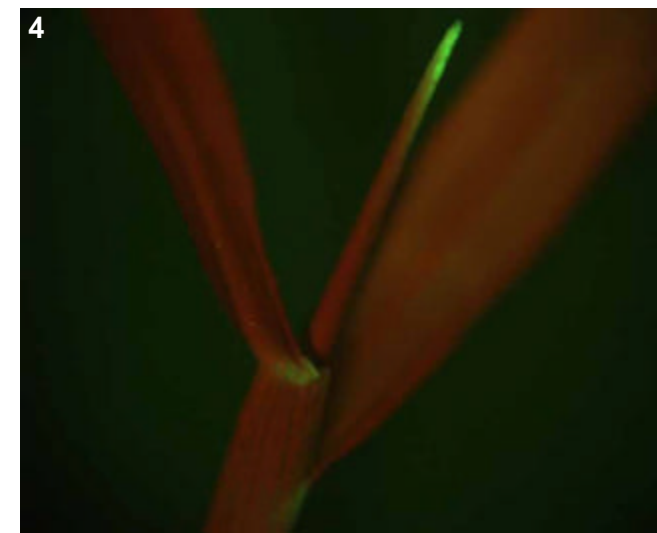
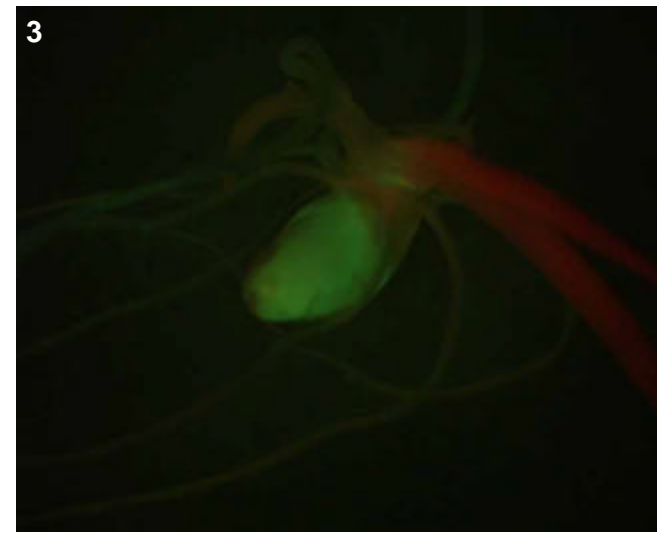
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

In addition to the stelar expression in lateral roots (pics 1-2), the crown roots showed expression in root apex initials.

# Genotype: ASM E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

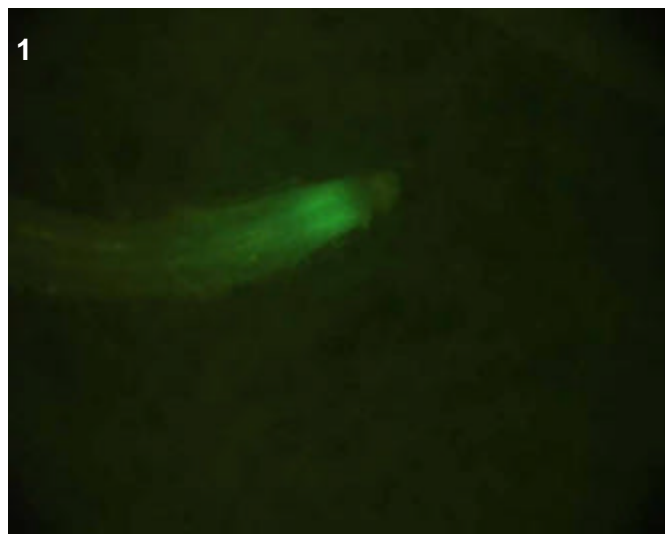
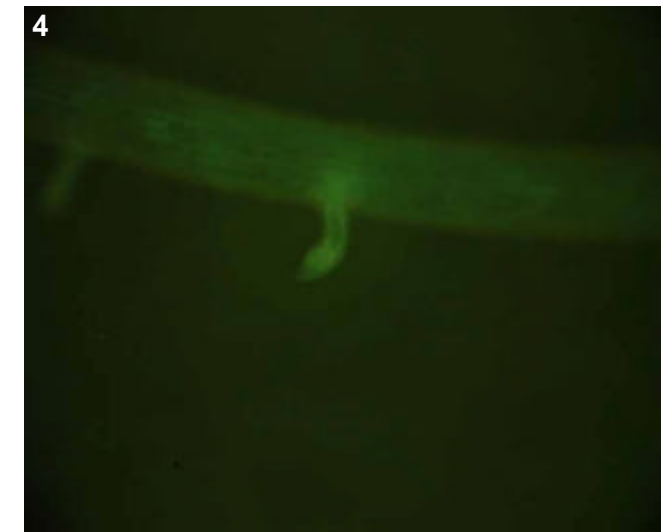
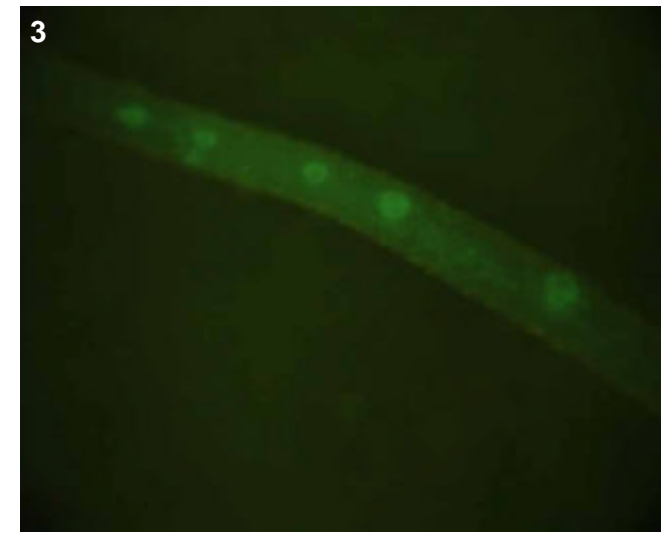
**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Great expression near tips of crown roots, consisting of a burst of GFP expression in the cell division zone, dying out by the cell elongation zone (pics 1-2). Also some type of expression in emerging and young lateral roots (pics 3-4).

# Genotype: ASM F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

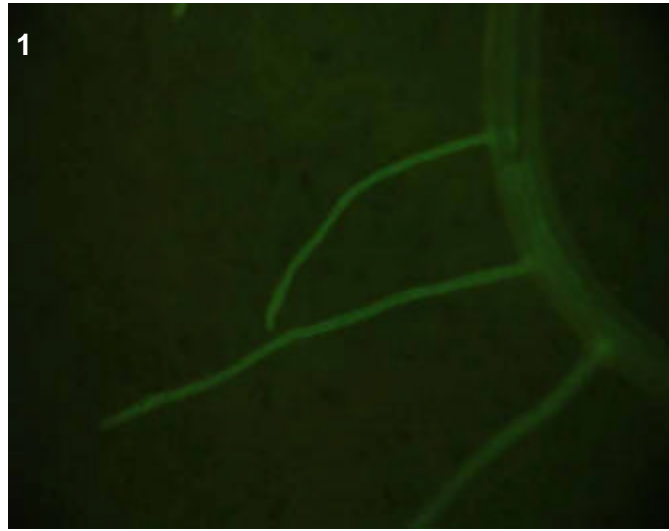
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments



# Genotype: ASM F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

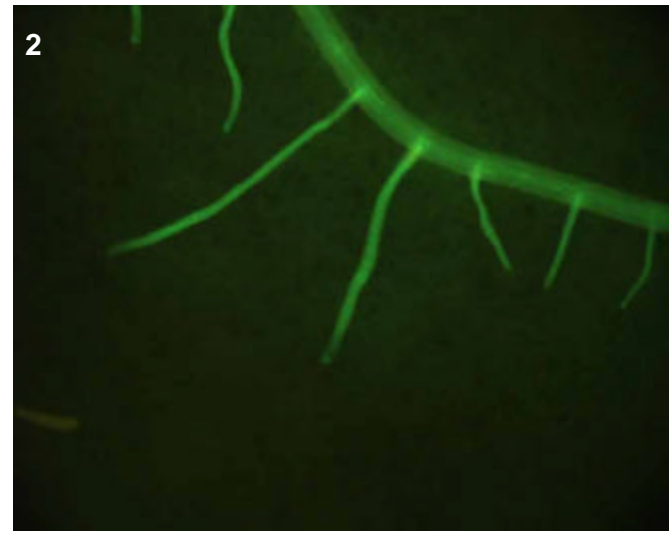
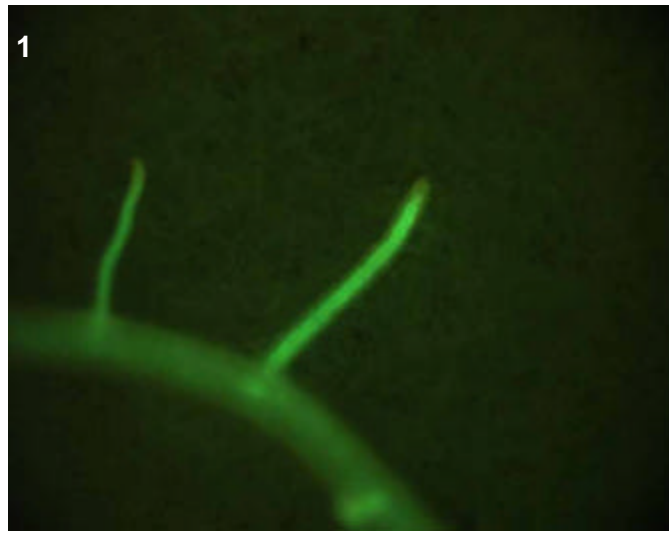
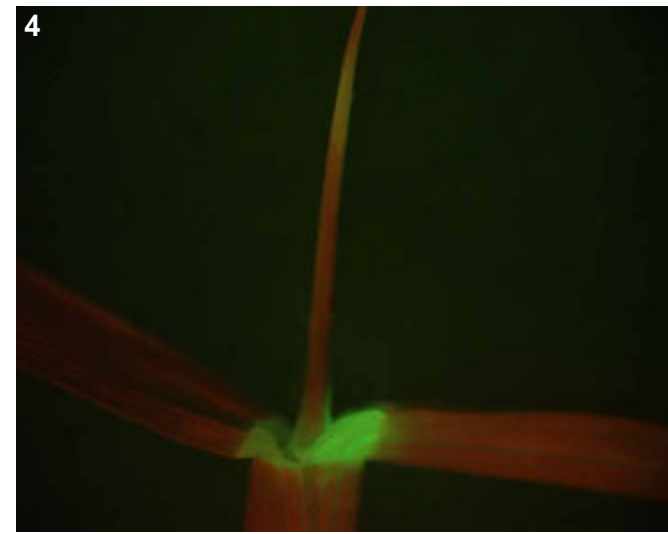
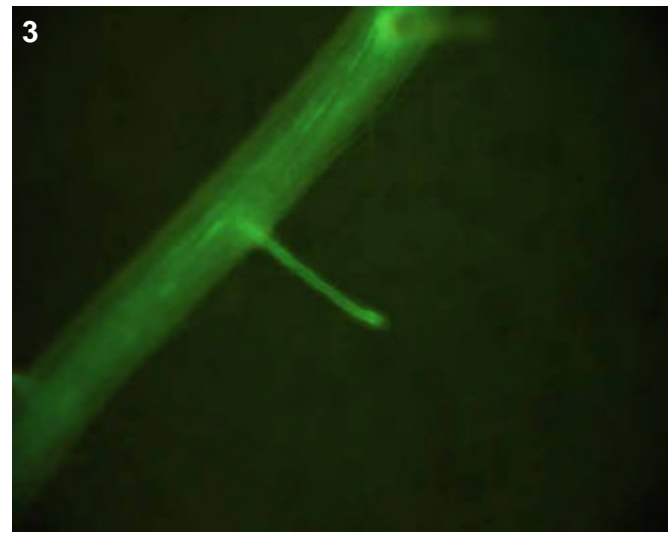
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression extremely bright in the roots (pics 1-3) and collar (pic 4).

# Genotype: ASM F08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

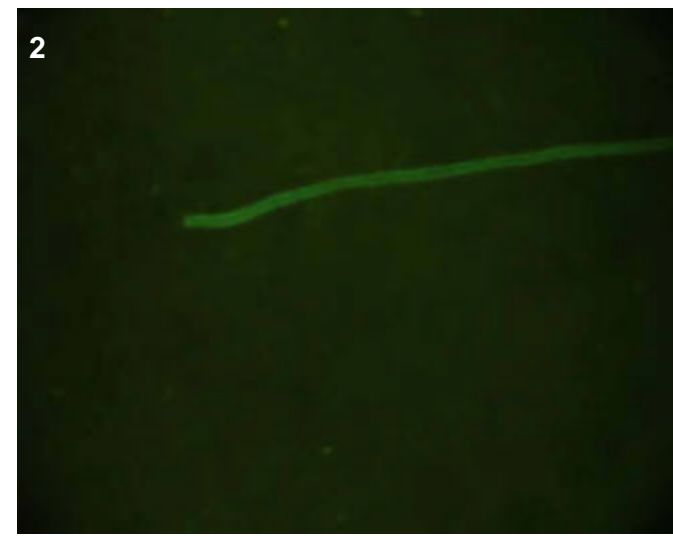
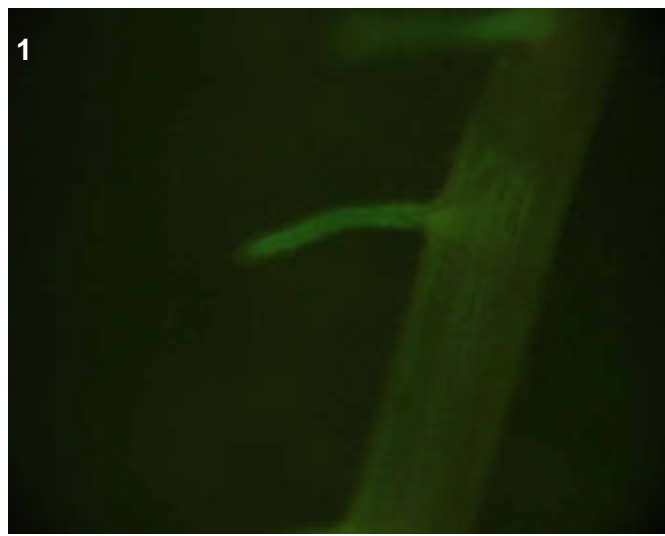
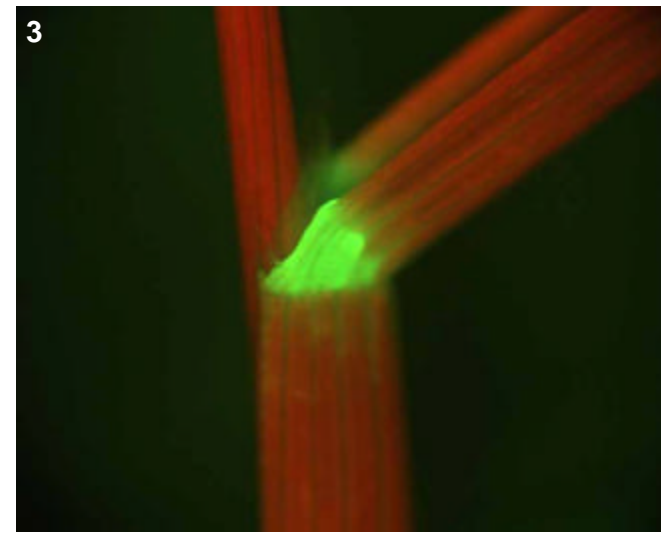
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Medium root stelar expression most evident in lateral roots (pics 1-2), very bright collar expression (pic 3).

# Genotype: ASM G08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

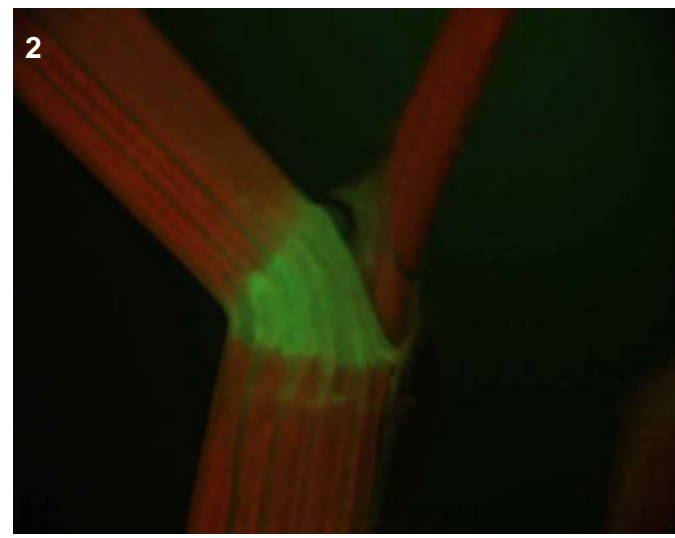
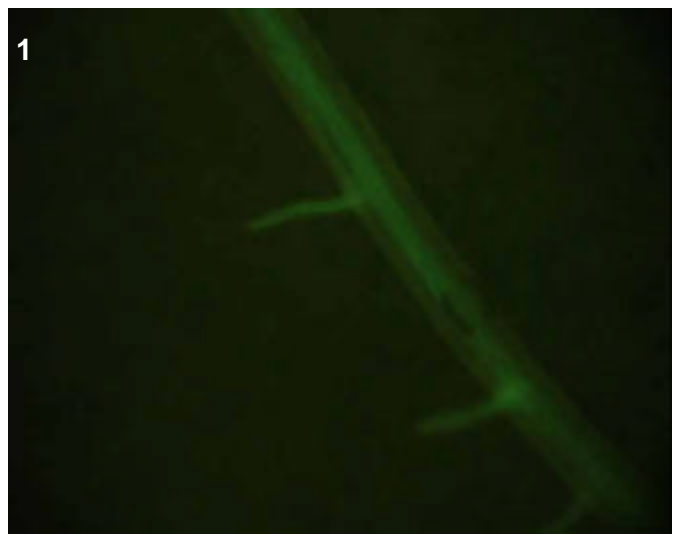
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASM H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

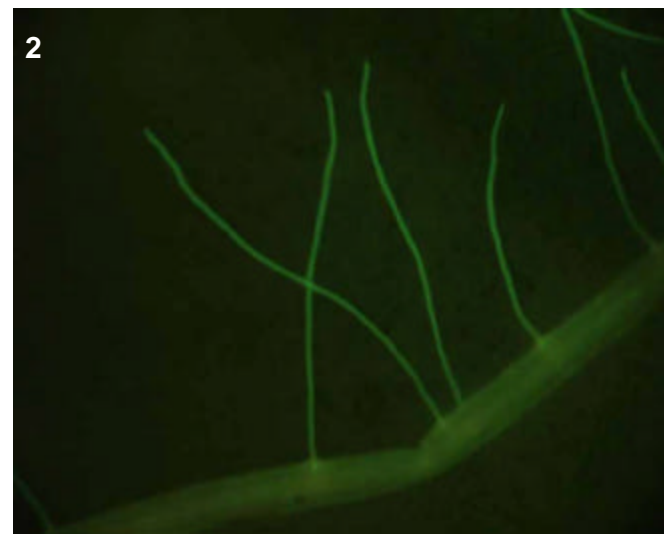
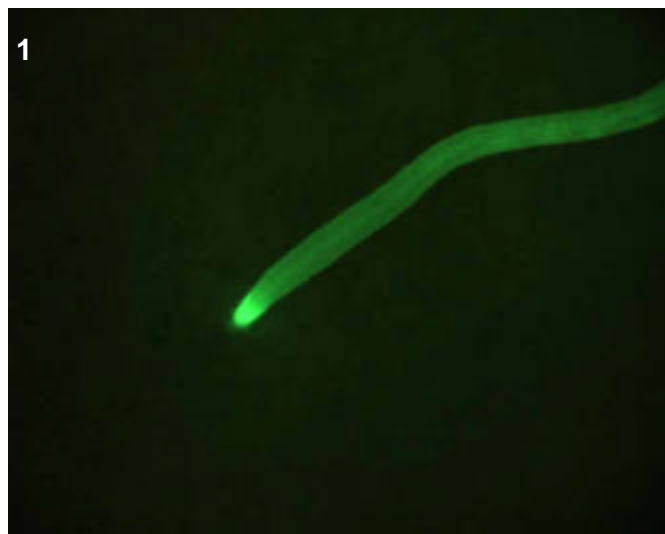
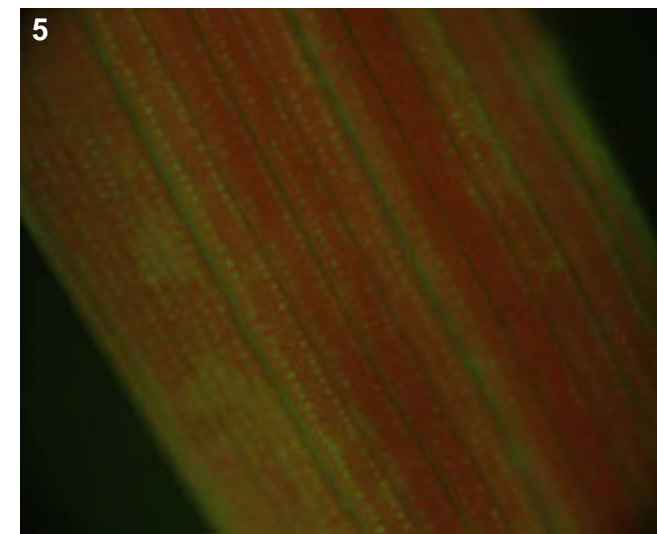
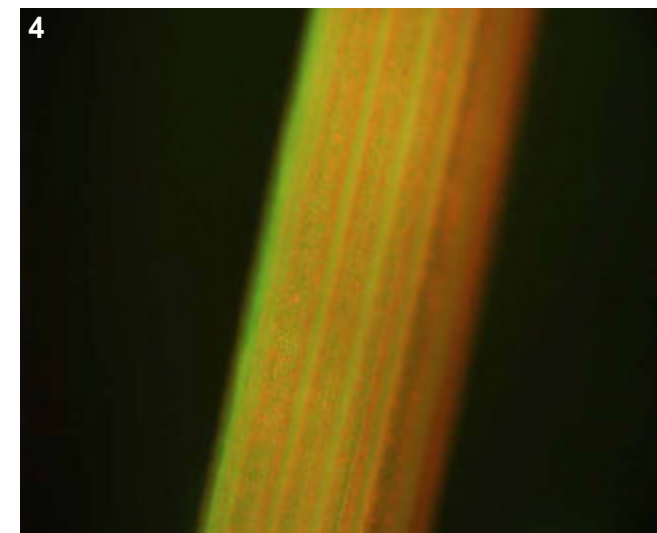
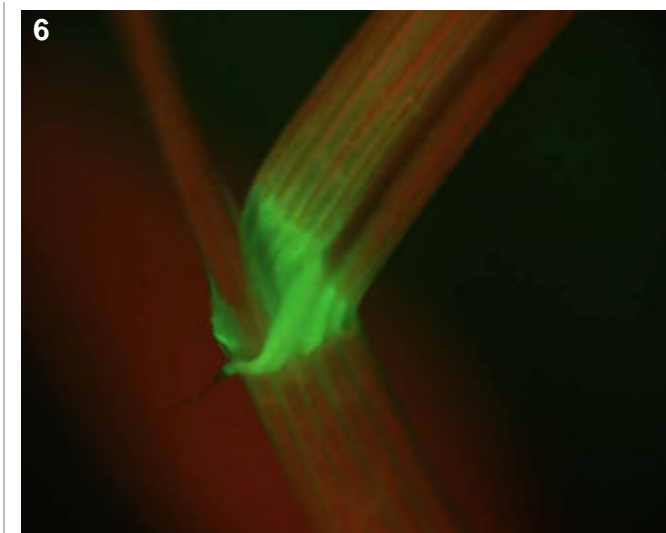
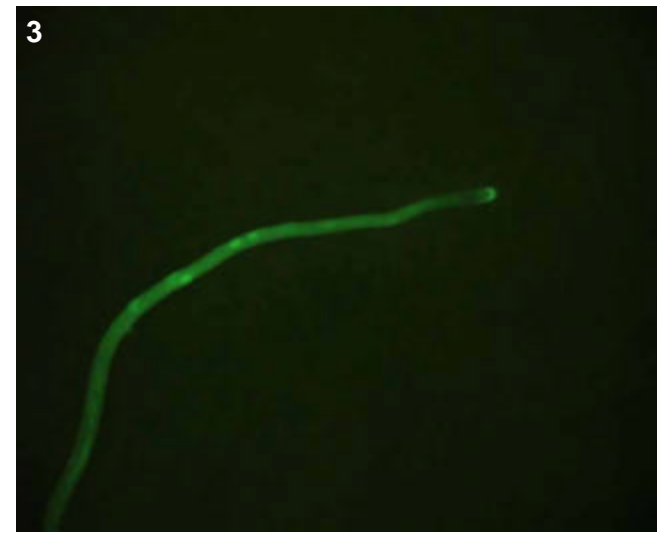
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASM H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

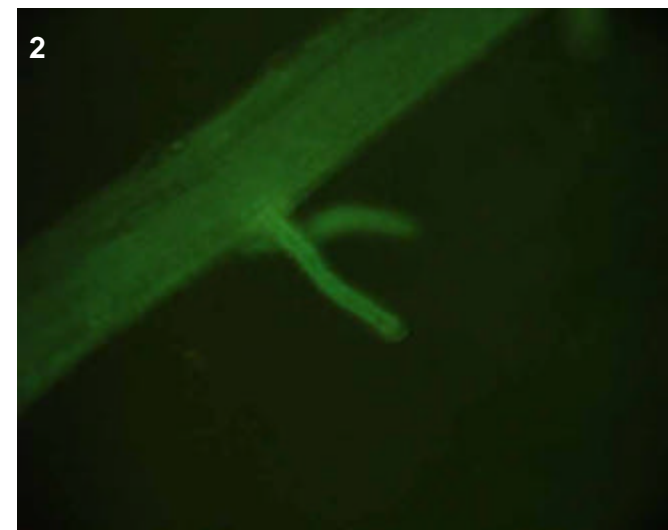
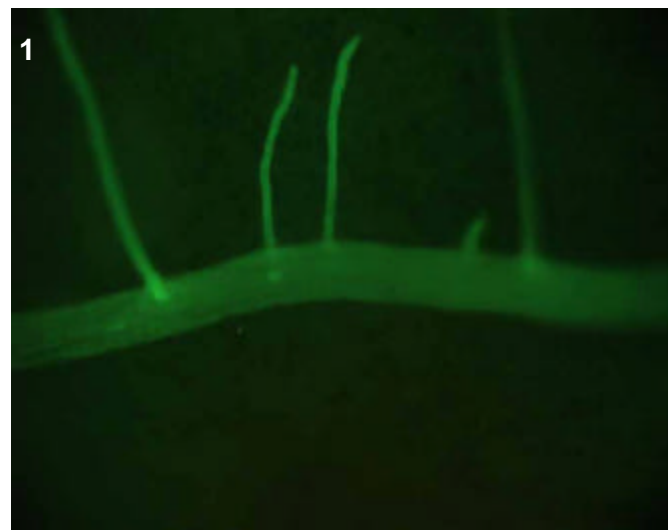
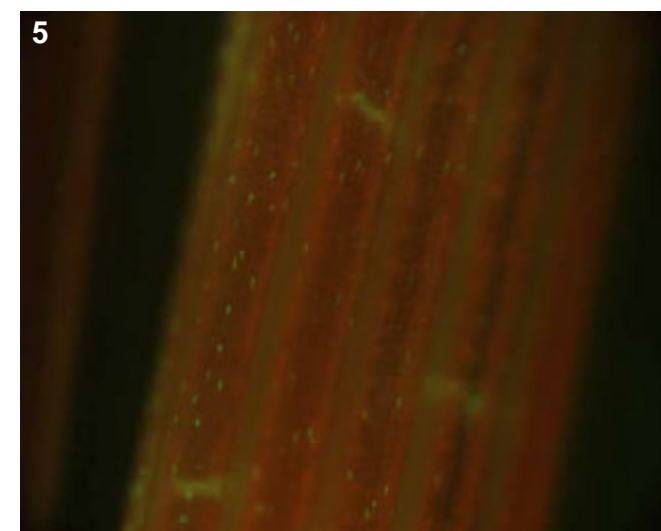
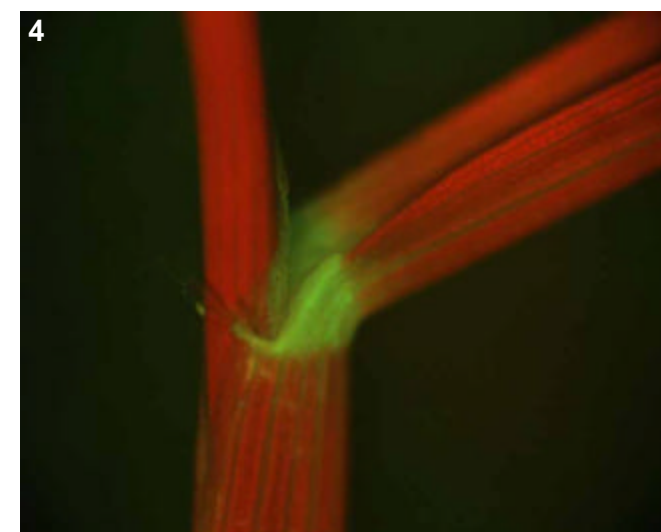
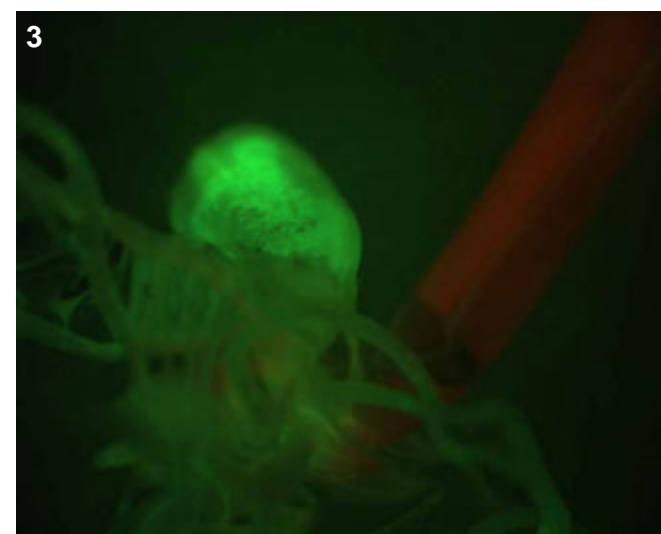
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



T0 comments

T1 seed comments

T1 seedling comments

# Genotype: ASM H05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

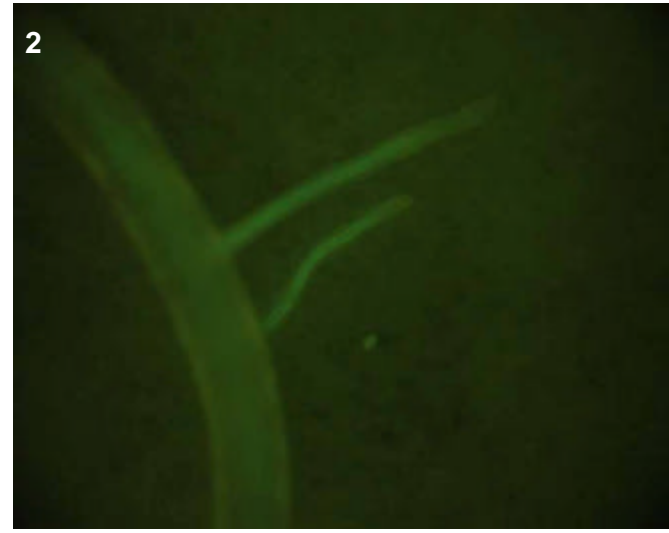
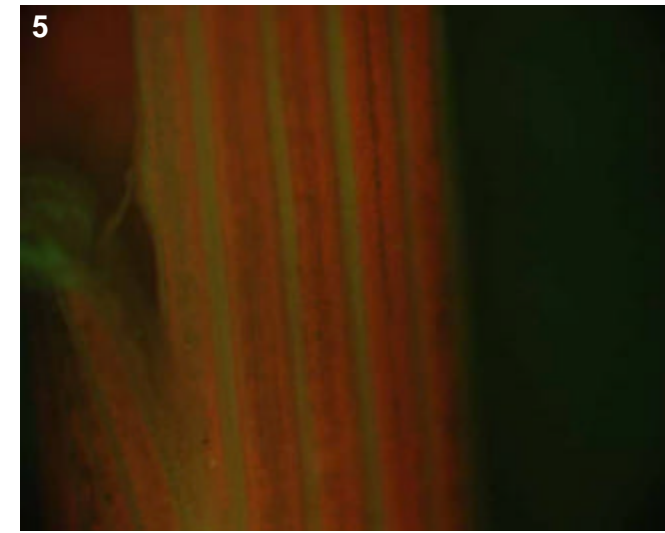
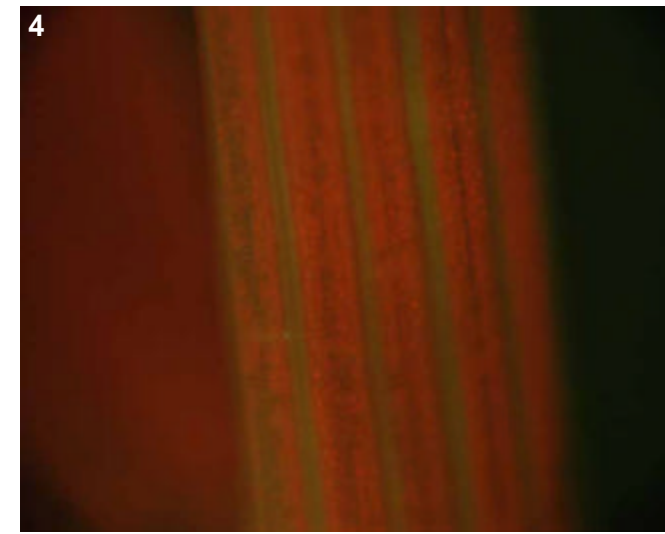
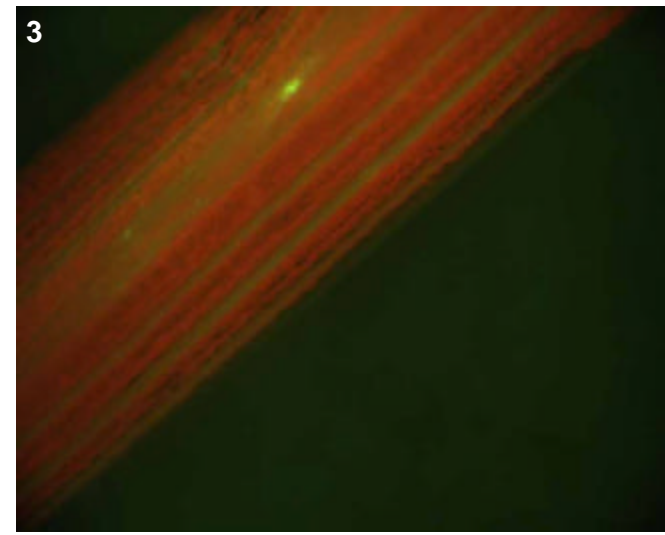
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

The shoot vascular expression (pics 3-5) was brighter than the root vascular (pics 1-2). Note that the shoot vascular pattern is NOT accompanied by collar expression.

# Genotype: ASM H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

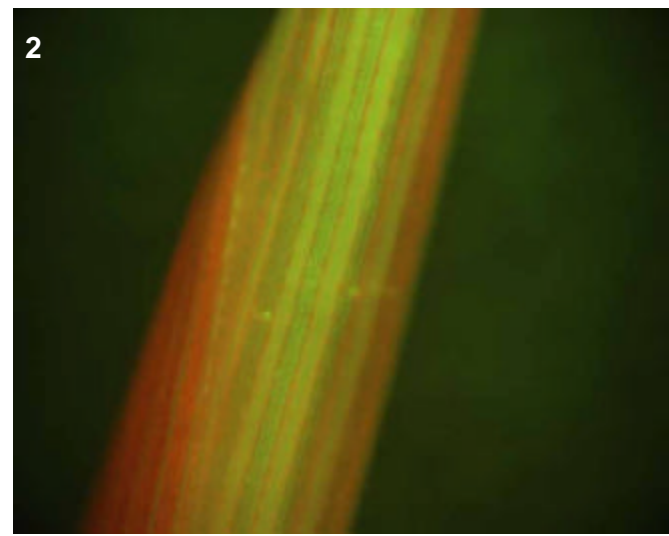
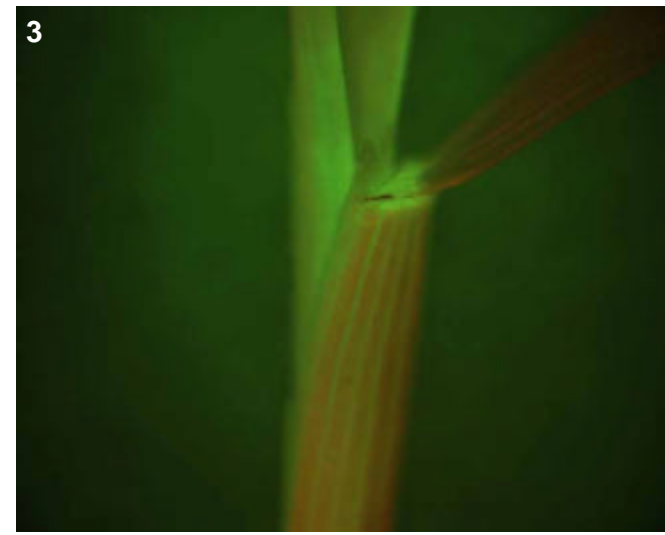
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Plants were very bright everywhere, also very small with dwarf root system (see pic 1). These could be mutant?

# Genotype: ASM H08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

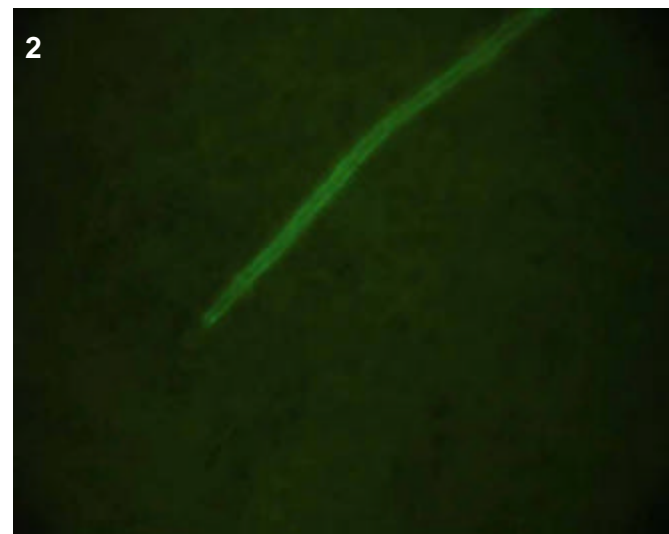
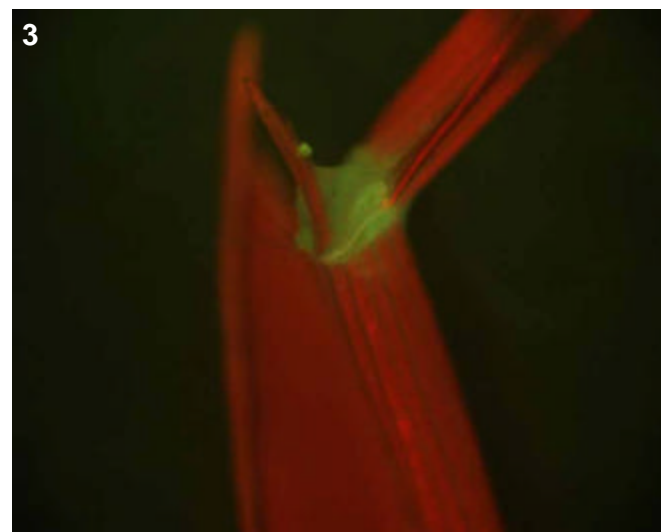
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments



# Genotype: ASM H09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

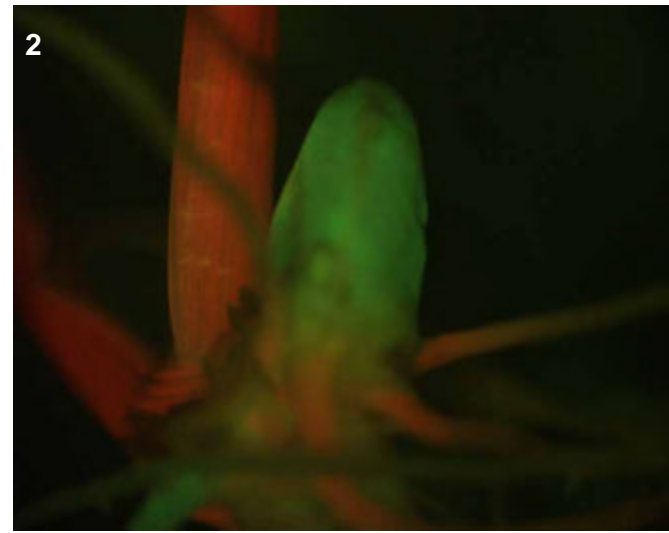
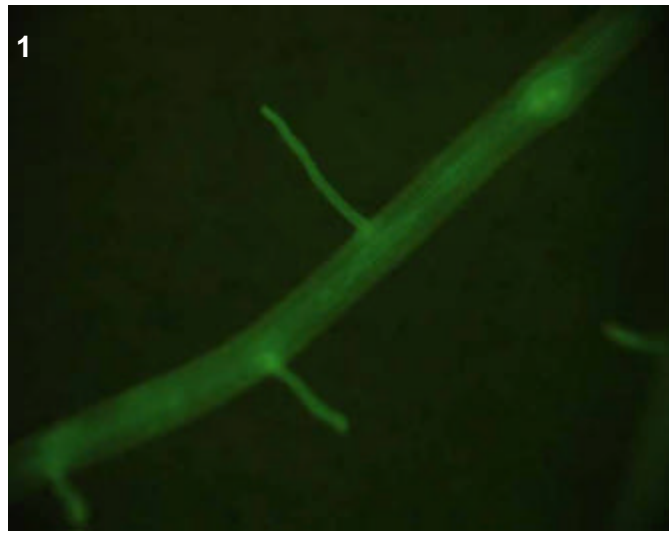
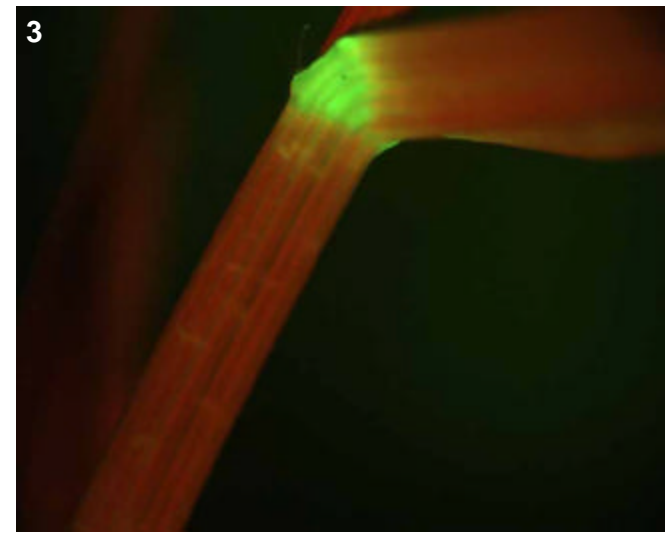
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASM H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

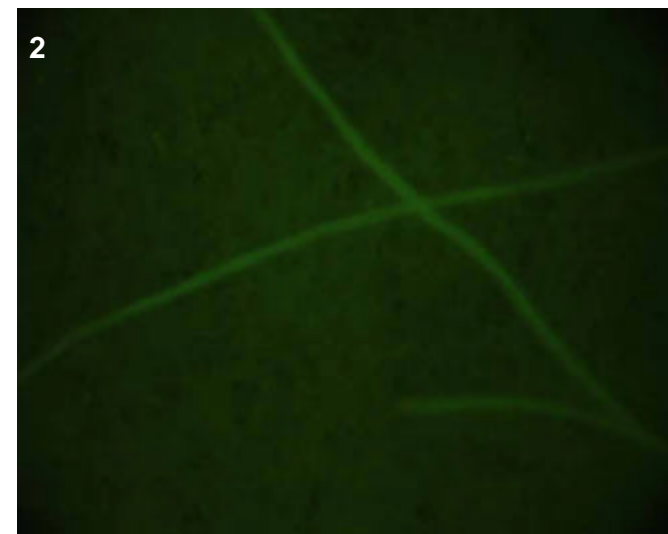
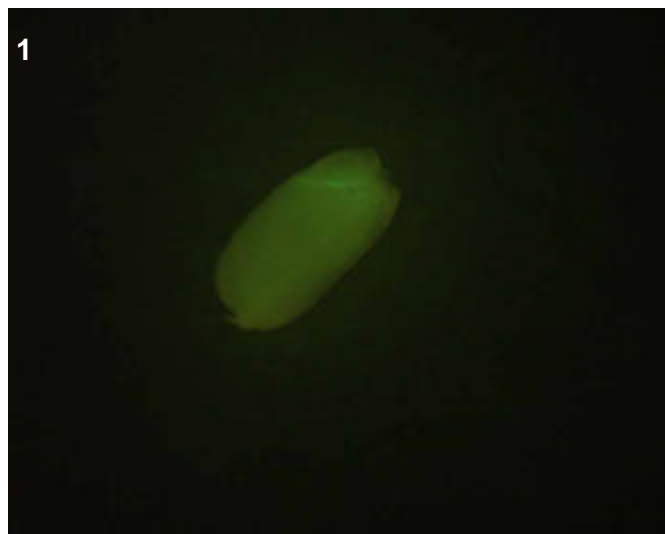
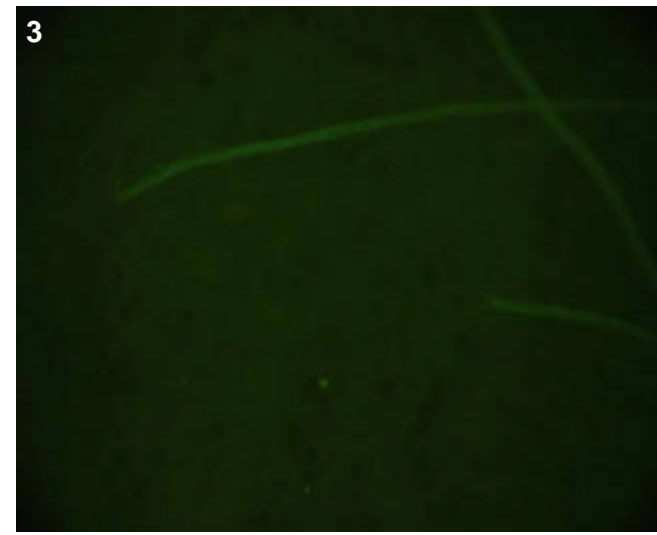
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had expression

## T1 seedling comments

Root expression appeared stelar and was limited to the lateral roots (pics 2-3).

# Genotype: ASN B01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

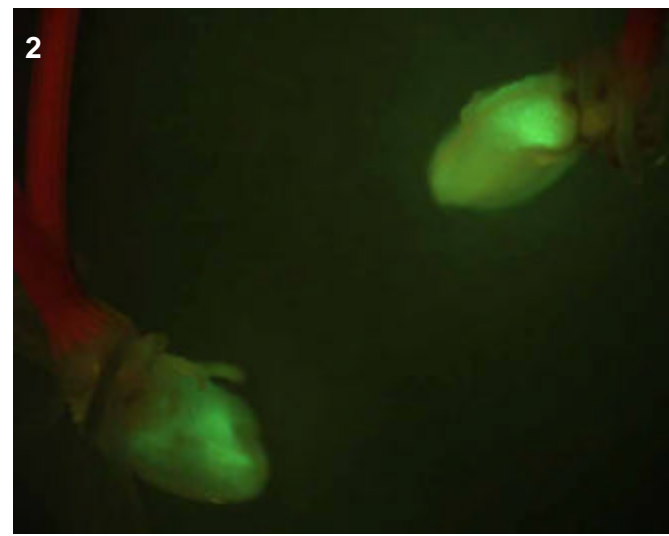
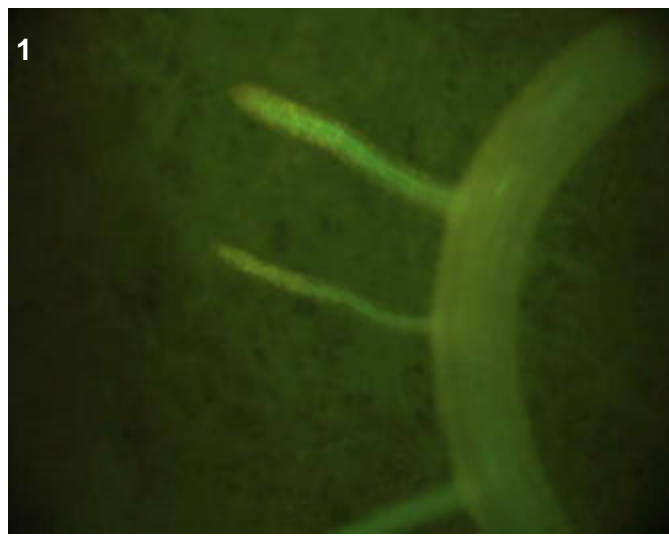
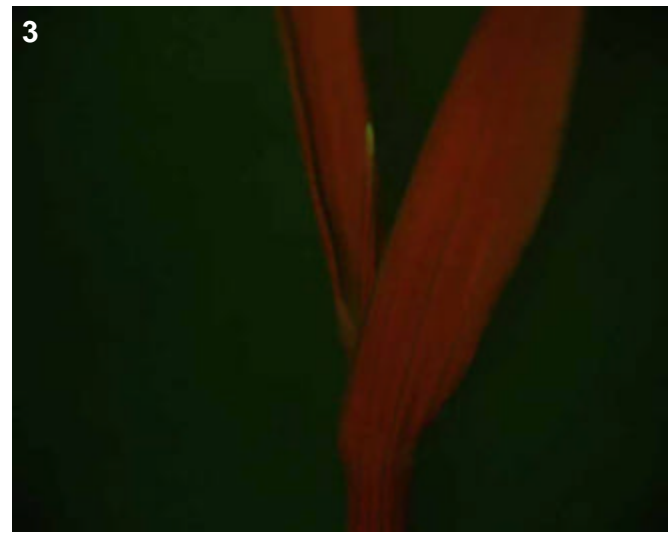
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Interesting shoot expression in that the leaf tip is bright but not the collar (see pic 3).

# Genotype: ASN B04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

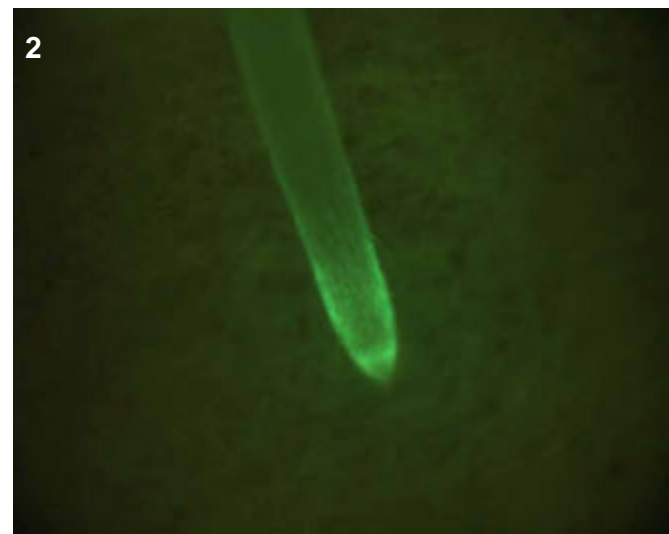
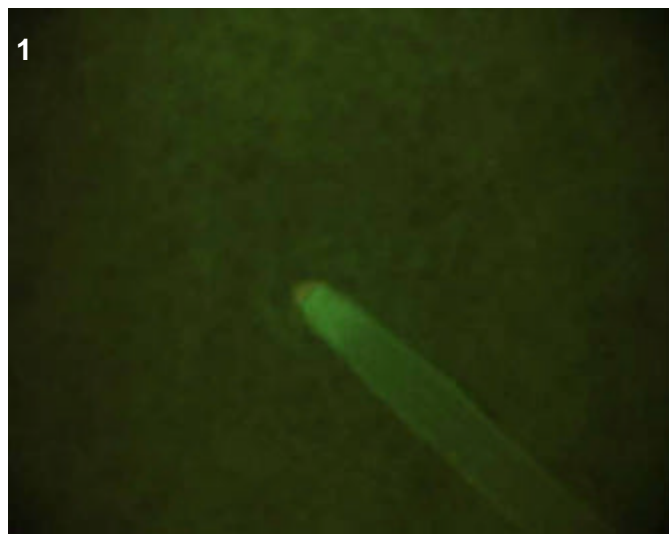
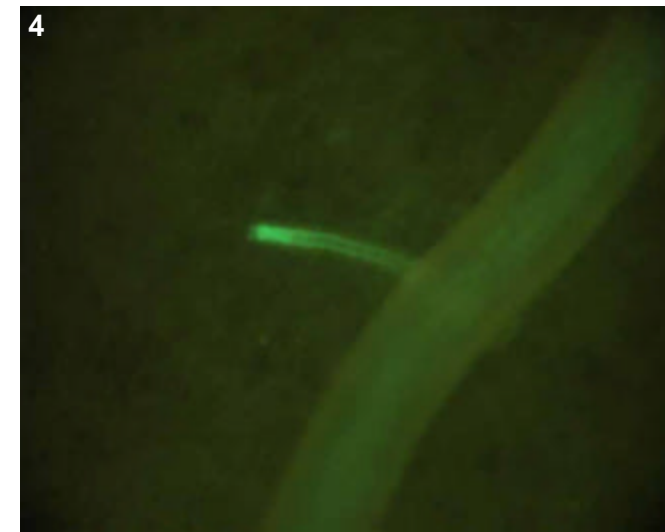
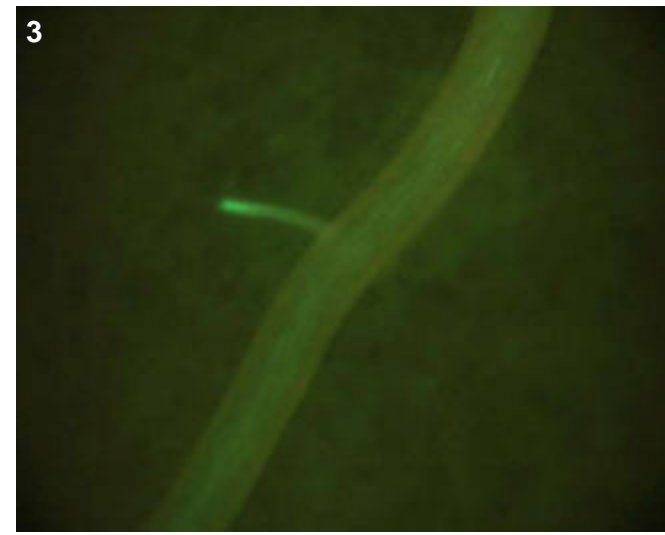
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASN B06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

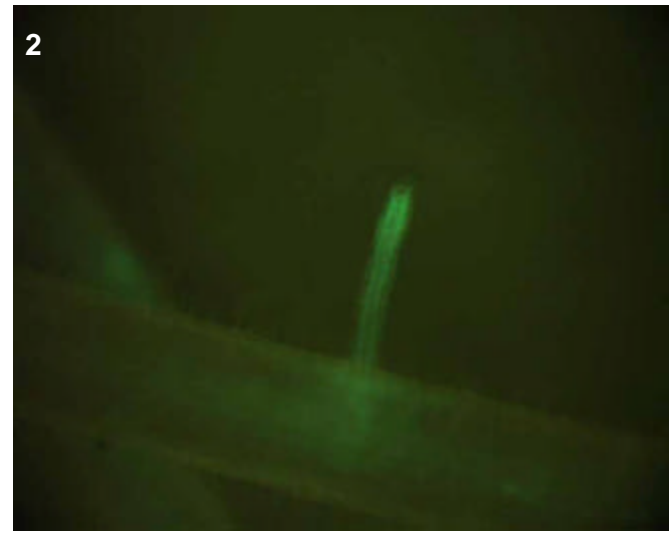
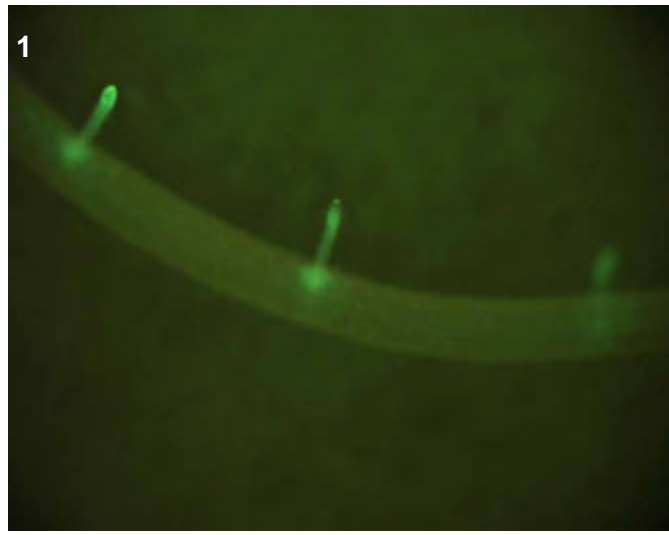
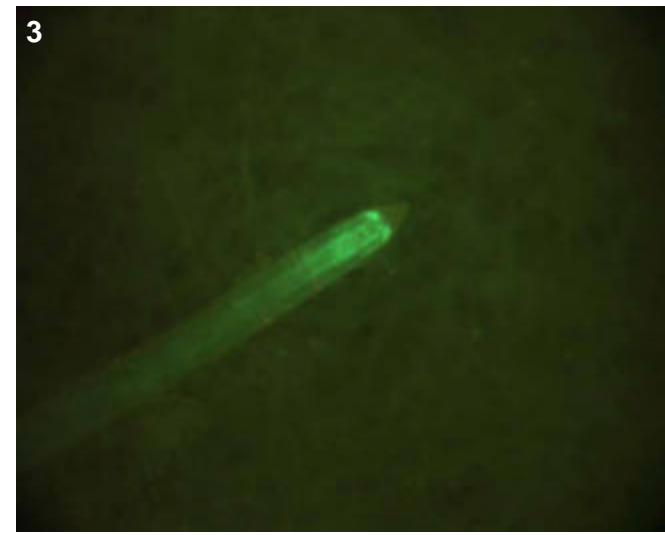
**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright expression at lateral root emergence zone and in what appears to be the stele of lats (pics 1-2). Crown roots have bright expression at root apex, followed by small region of bright stele (pic 3).

# Genotype: ASN C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

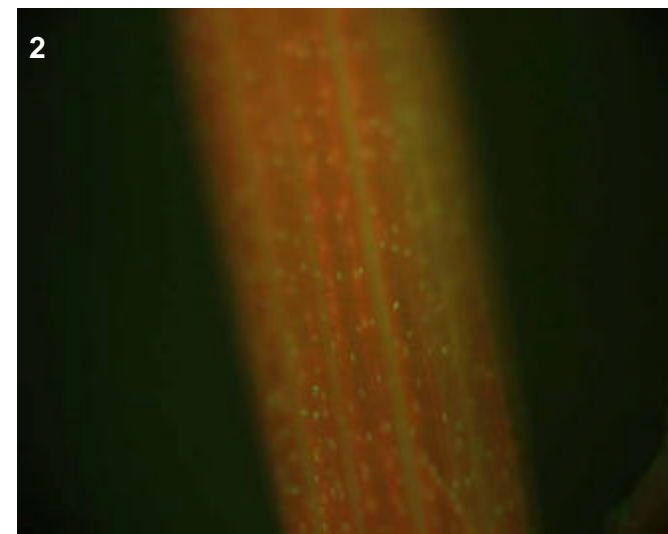
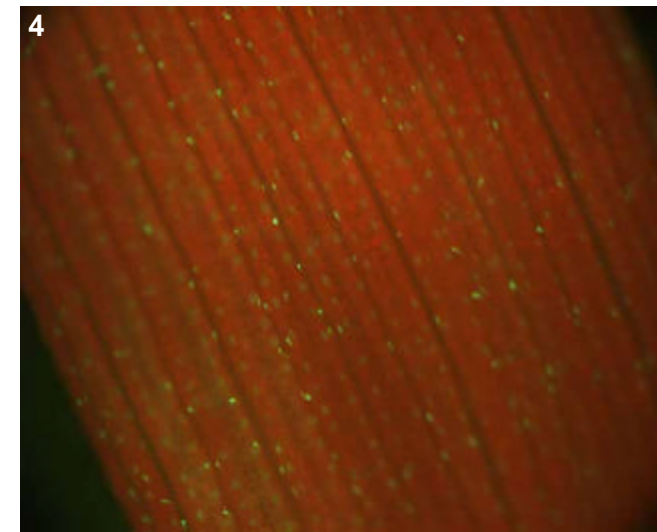
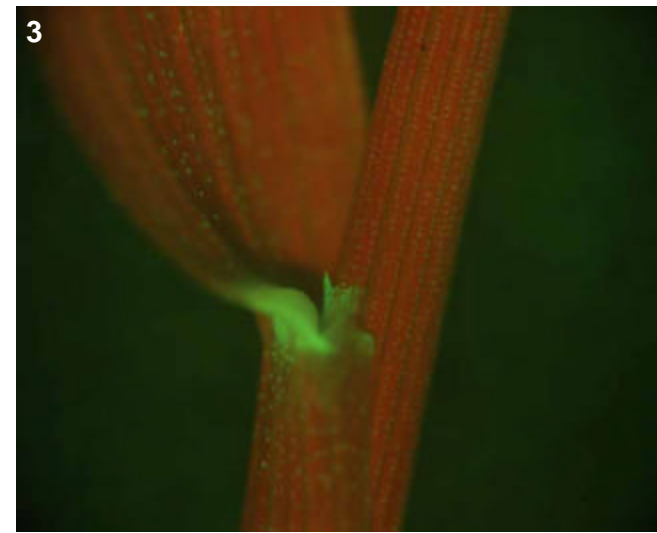
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Extremely bright trichomes and guard cells on all tissues of the leaf (pics 2-4).

# Genotype: ASN D07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

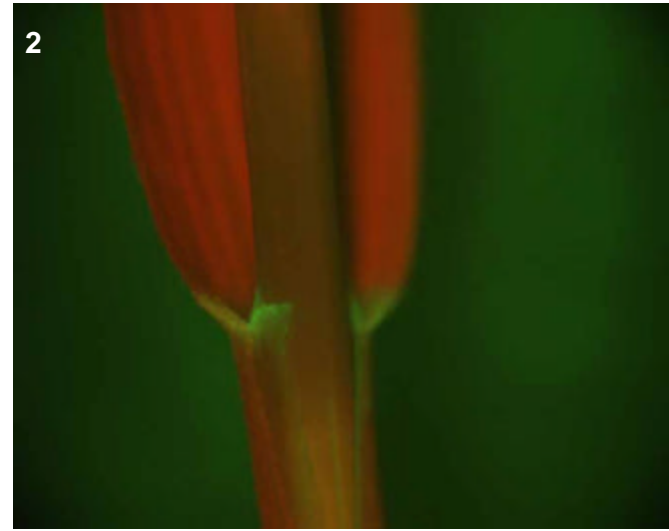
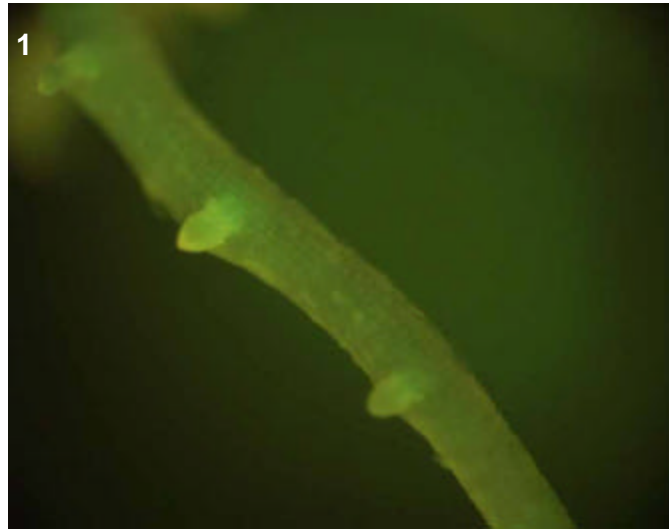
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

No crown roots were apparent in the one GFP+ plant, as well as two other GFP negatives. All three were moved to the greenhouse.

# Genotype: ASN E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

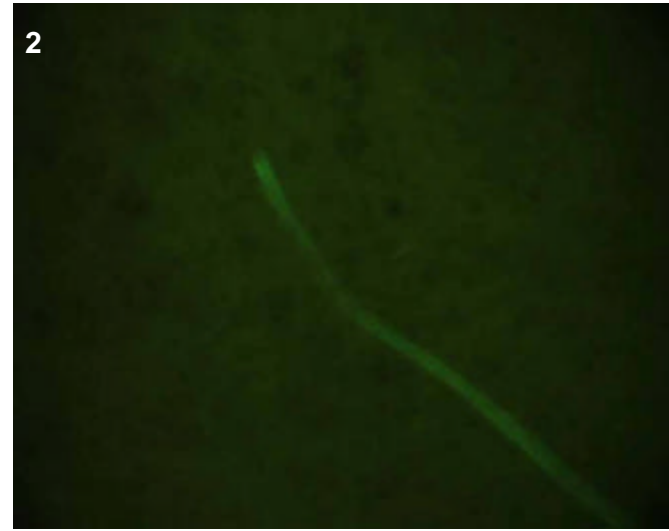
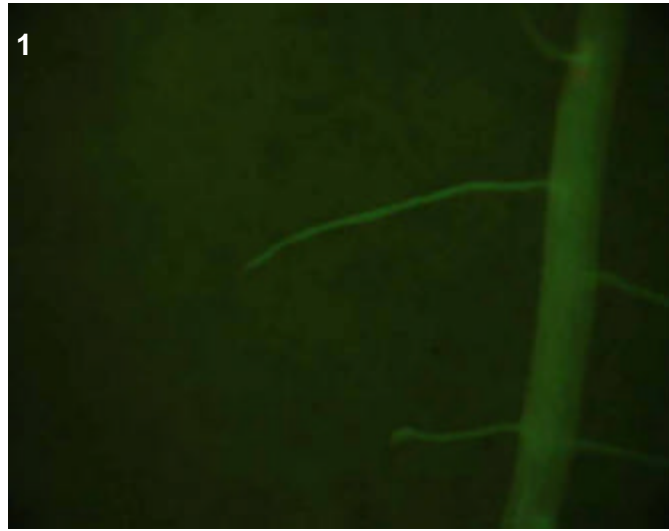
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASN F04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

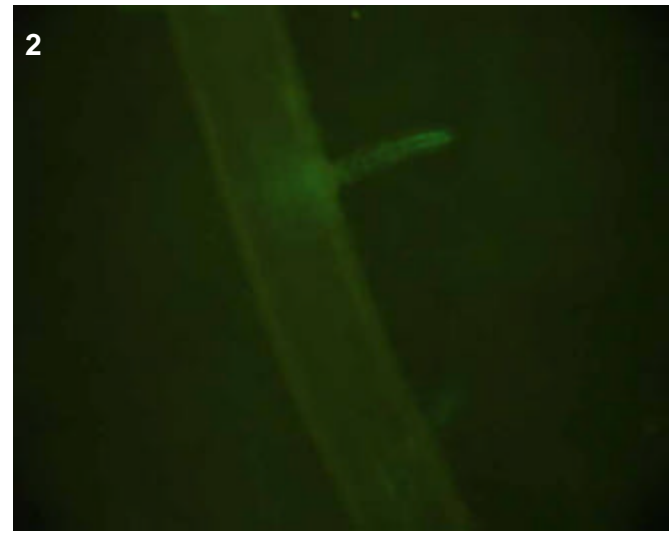
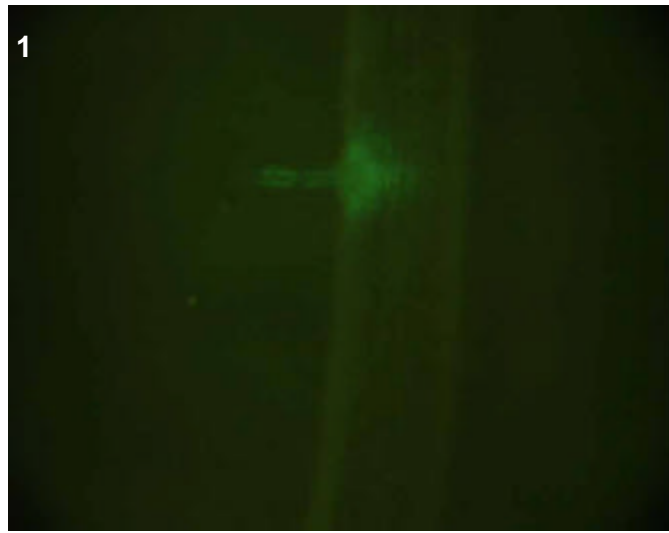
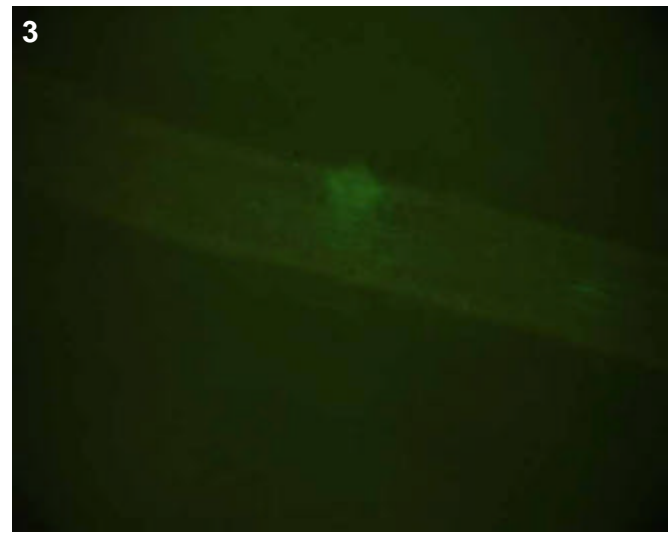
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
Nice example of a lateral root-specific line.

# Genotype: ASN F05

### Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

### Expression

- None
- Bright
- Medium
- Weak
- Unsure

### Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

### T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

### T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

### T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

### T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

### T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

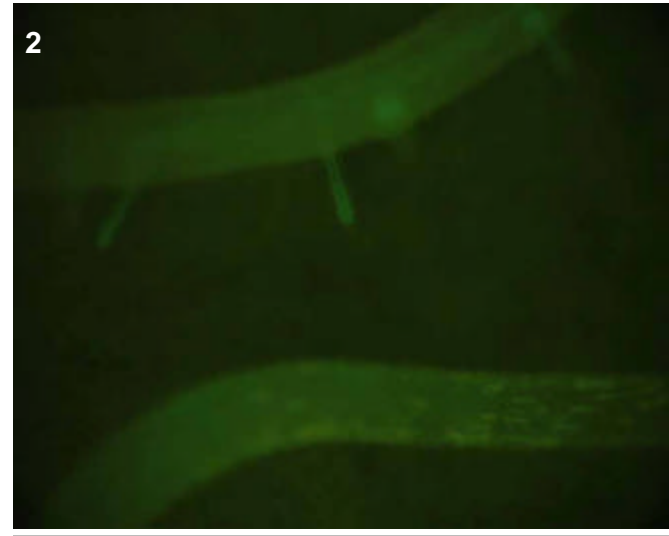
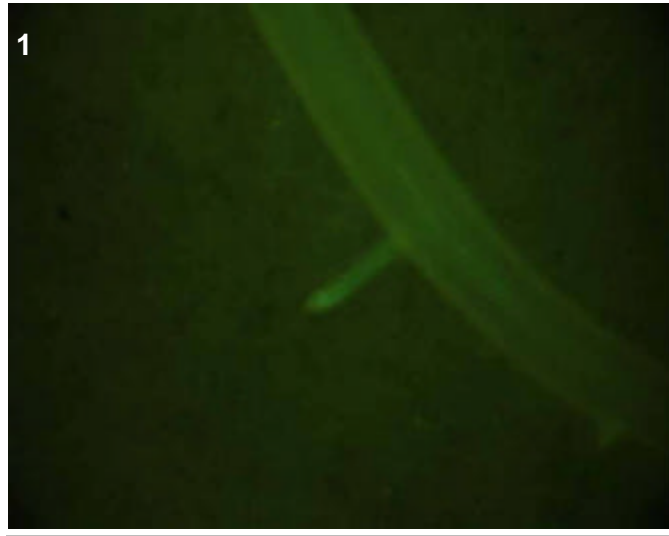
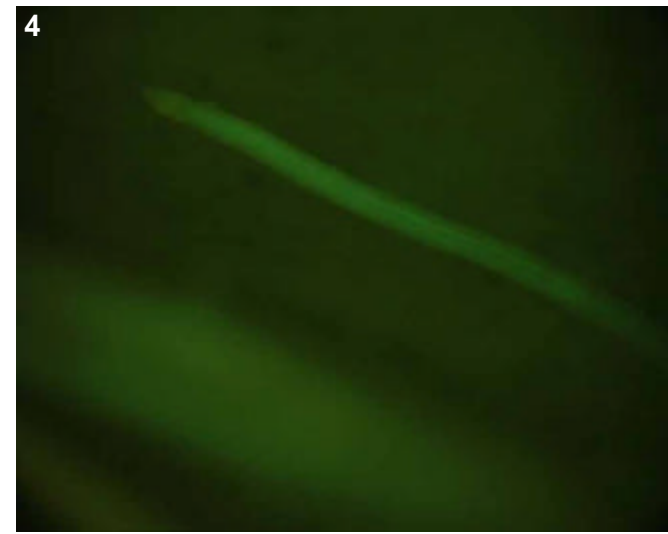
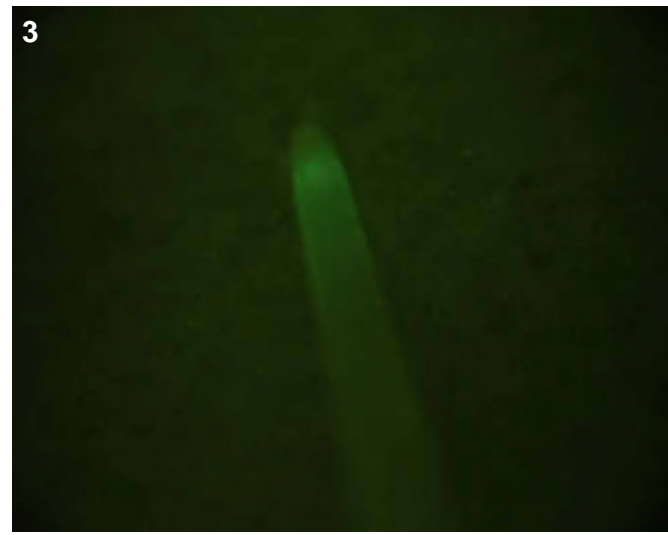
### T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

Looks like some faint expression in the initials of crown tips (see picture 3).

# Genotype: ASN G04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

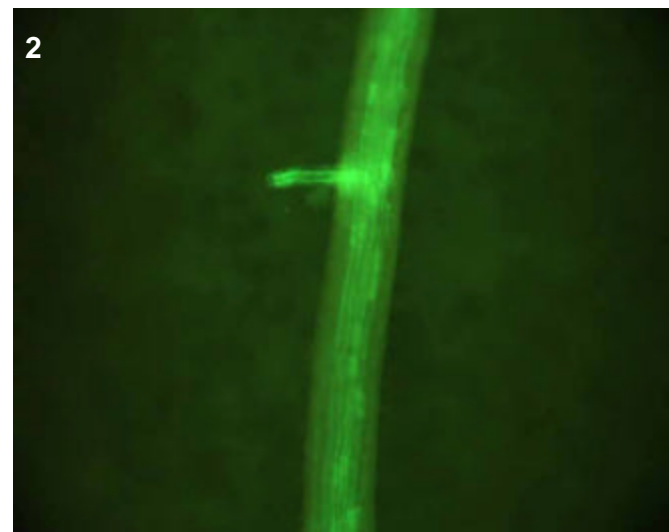
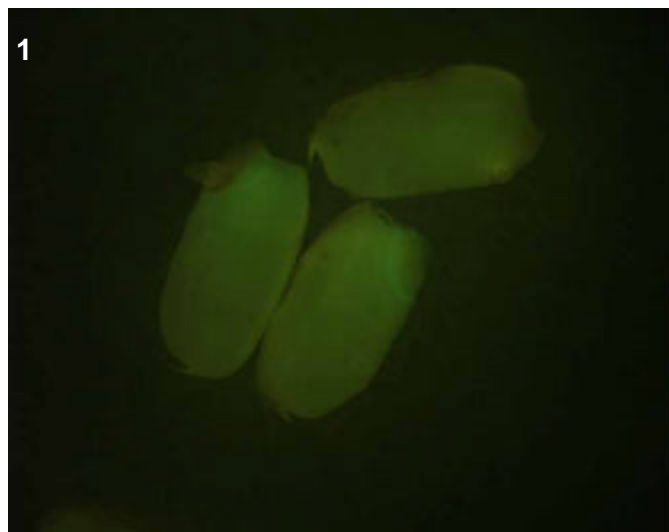
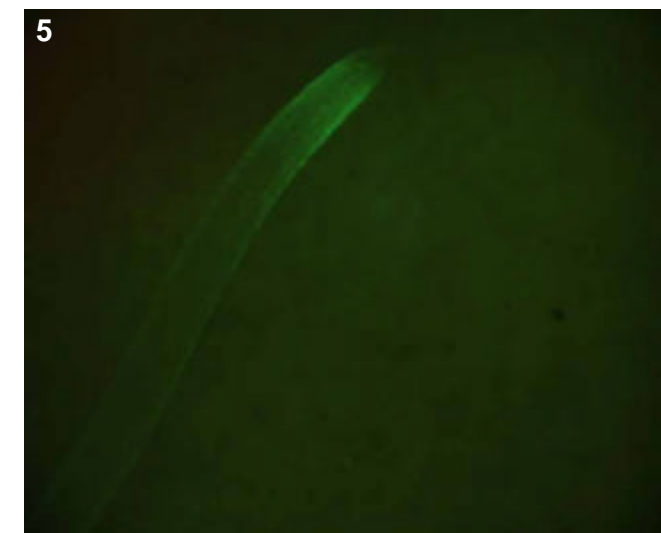
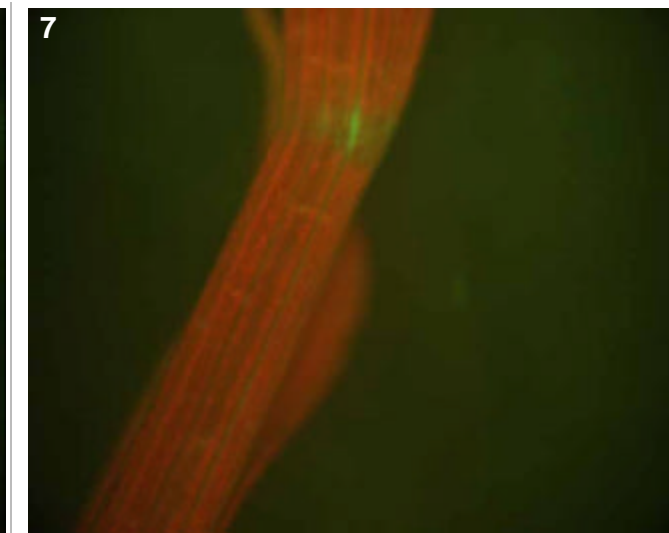
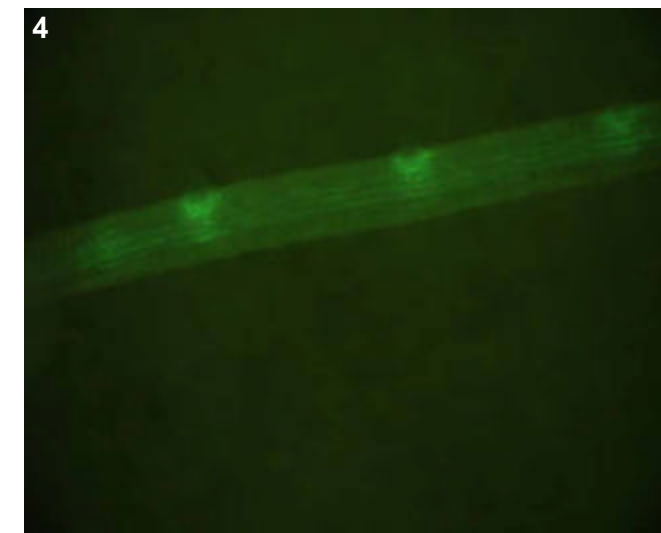
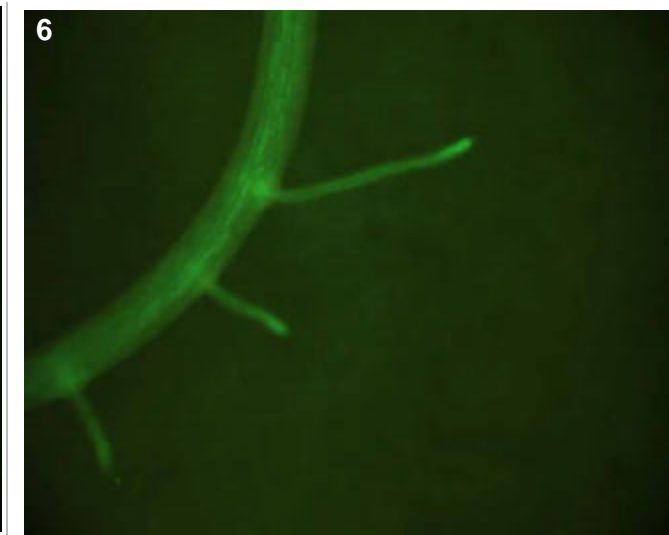
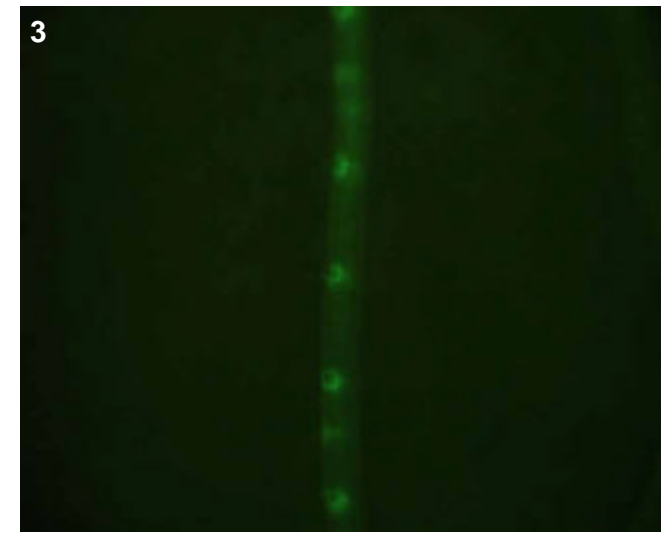
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

2/4 seeds had medium expression

## T1 seedling comments

The root expression (pics 2-6) was much brighter than the shoot (pic 7).

# Genotype: ASN G08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

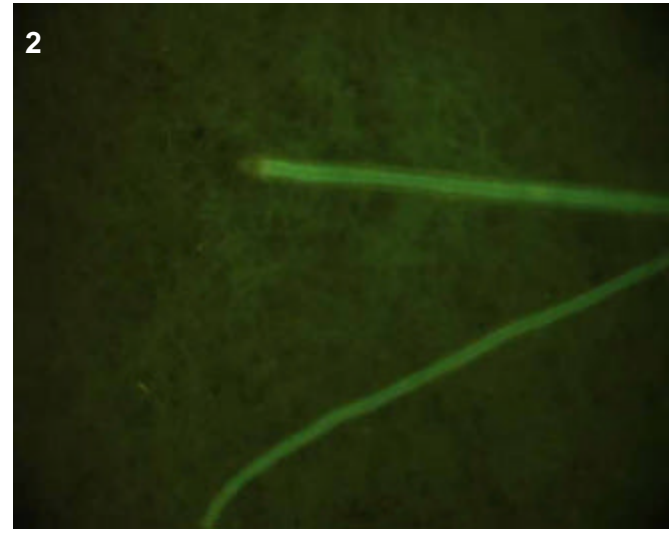
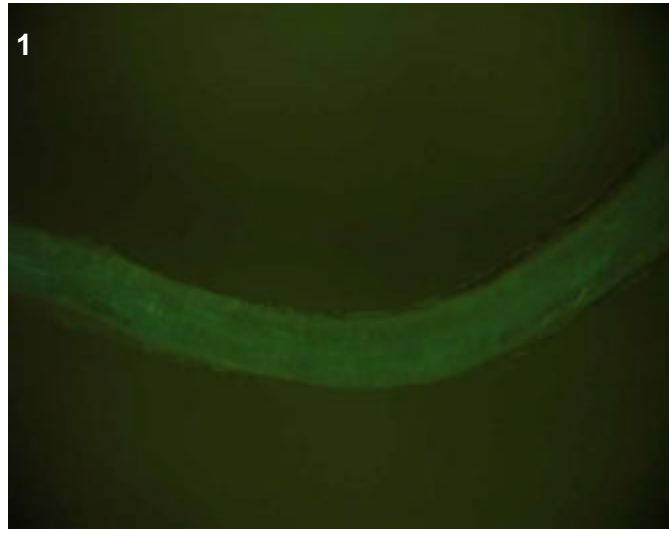
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASN H02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

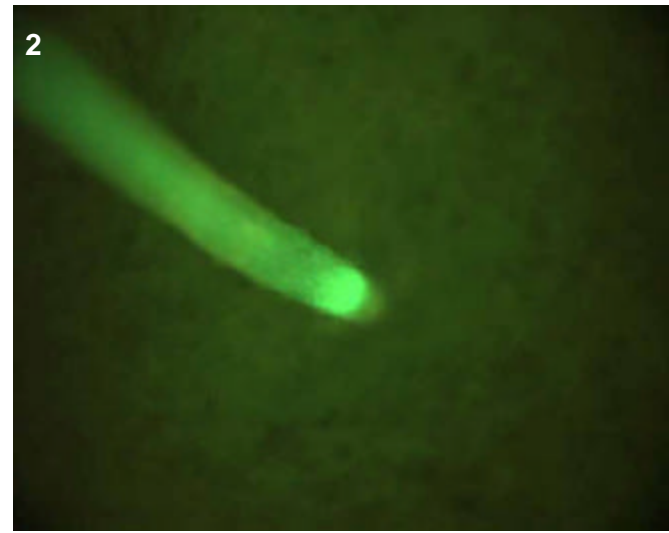
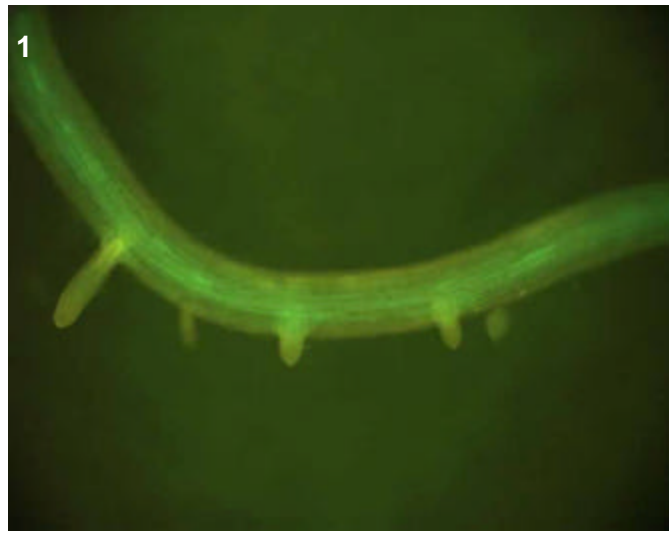
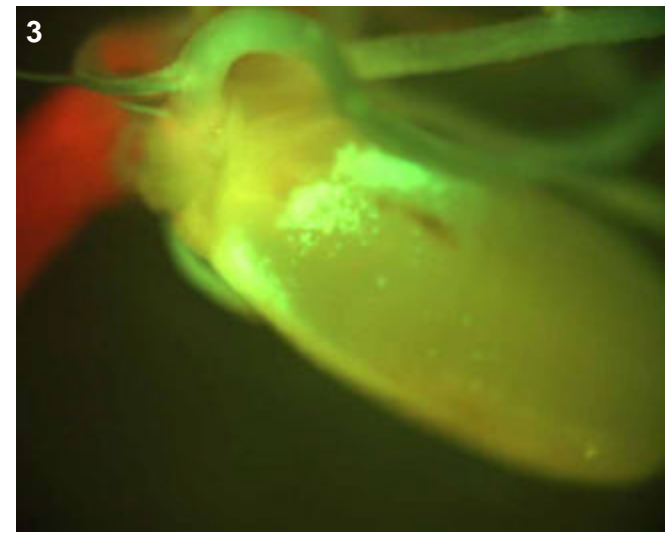
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASO B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

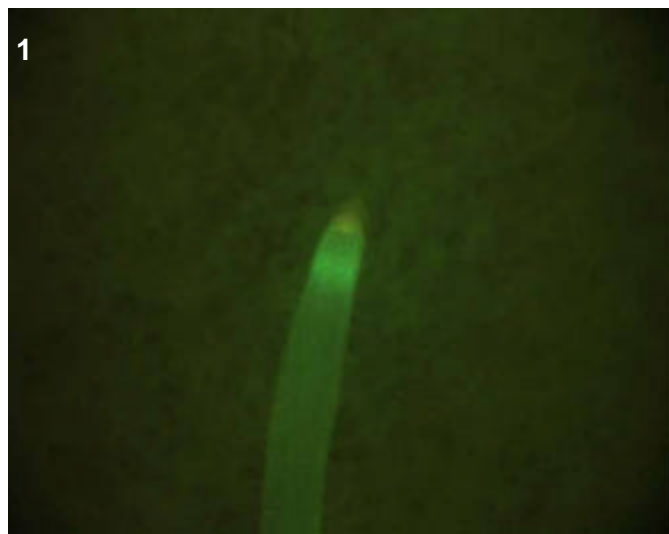
No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

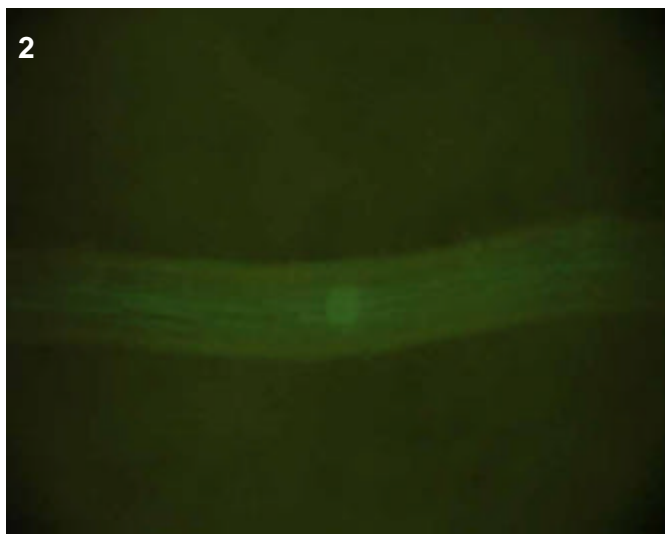
**Confocal?**

**Number T2 seed produced:**

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

There were no lateral roots to be examined.

# Genotype: ASO E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

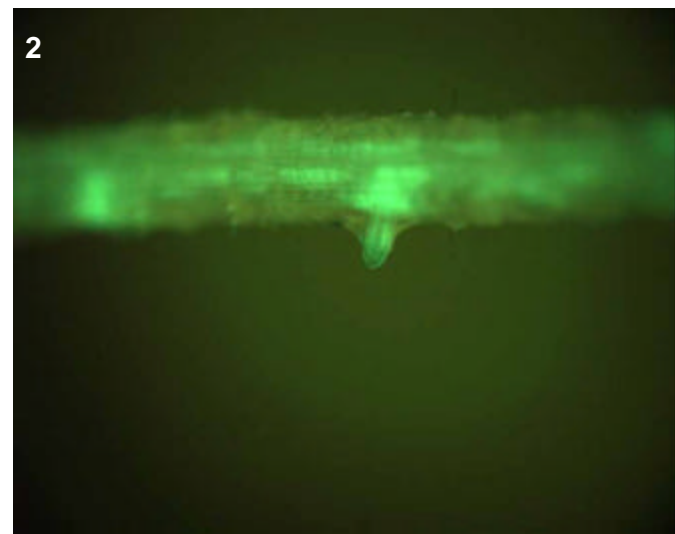
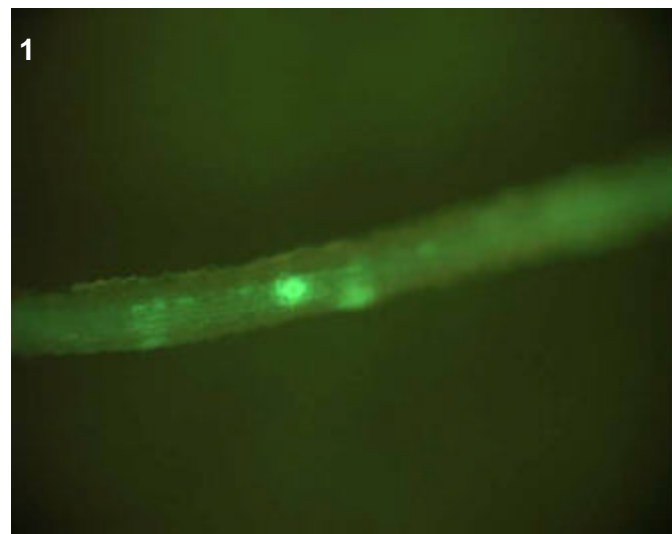
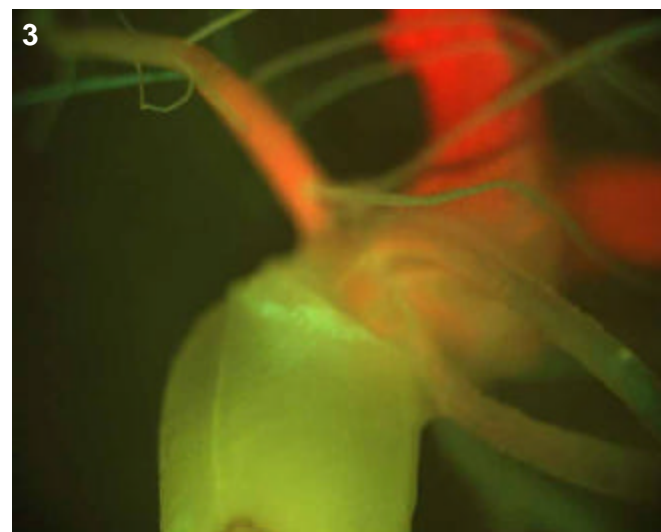
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant    **Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASO H09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

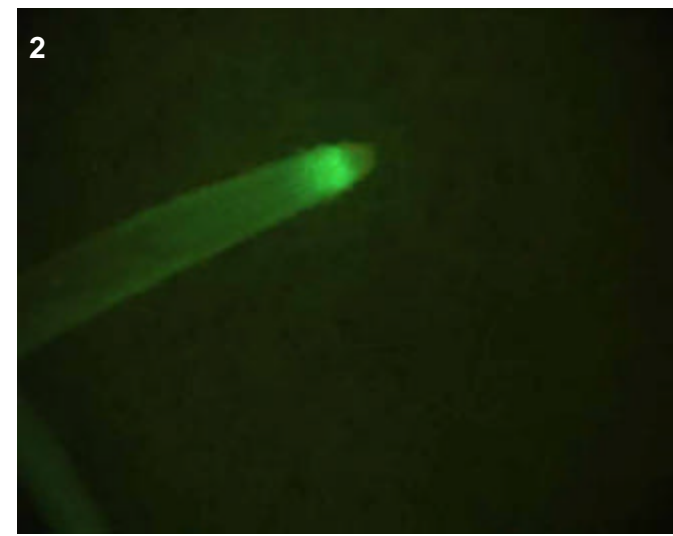
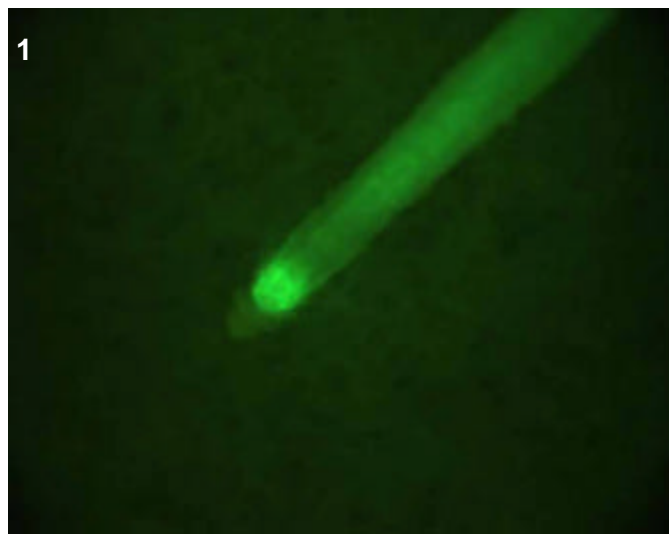
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**

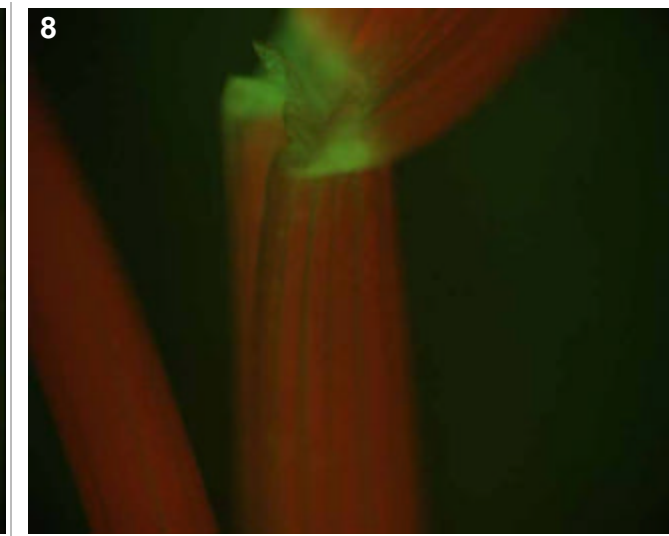
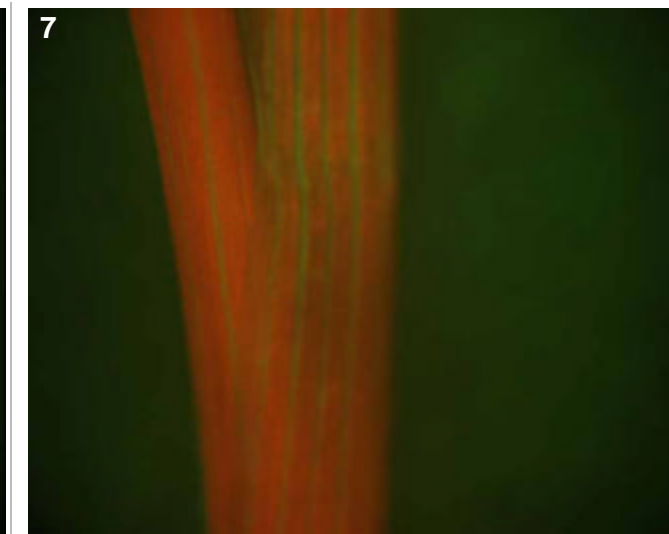
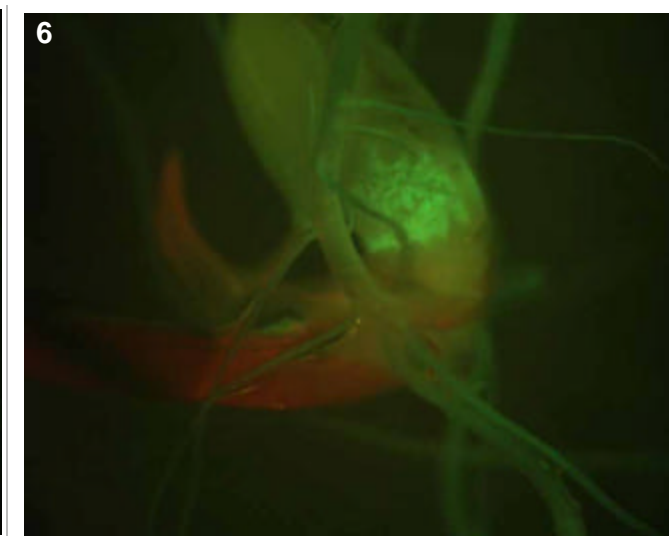
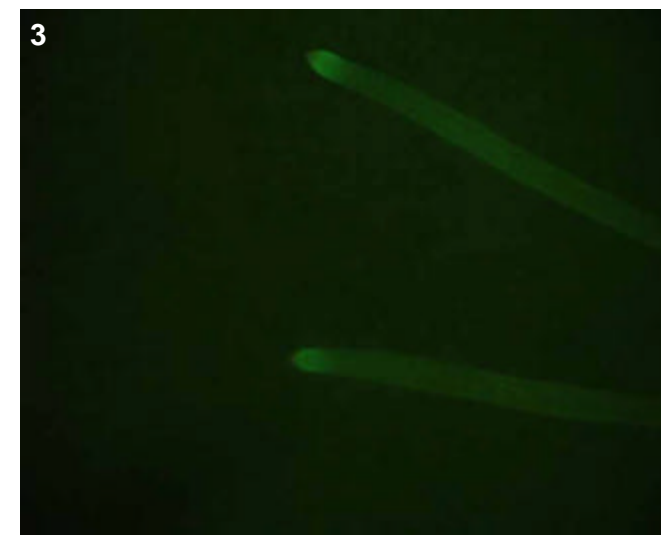


**T0 comments**

**T1 seed comments**

**T1 seedling comments**

The bright expression in initials at the tips of crown roots (see pics 1-3) would be interesting to confocal.





# Genotype: ASP A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

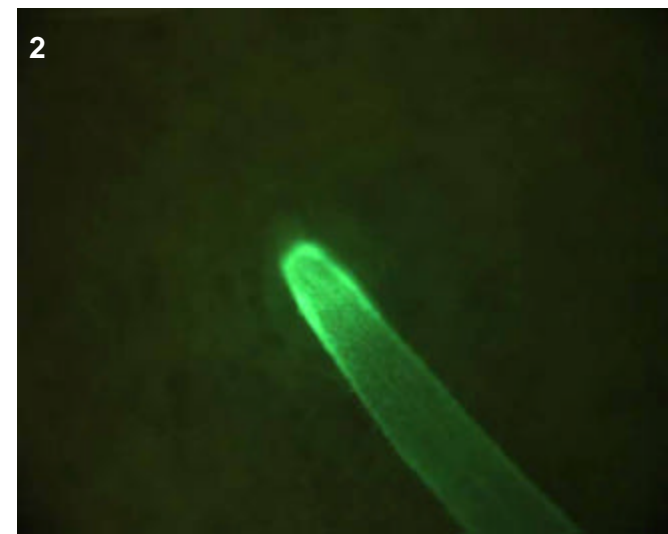
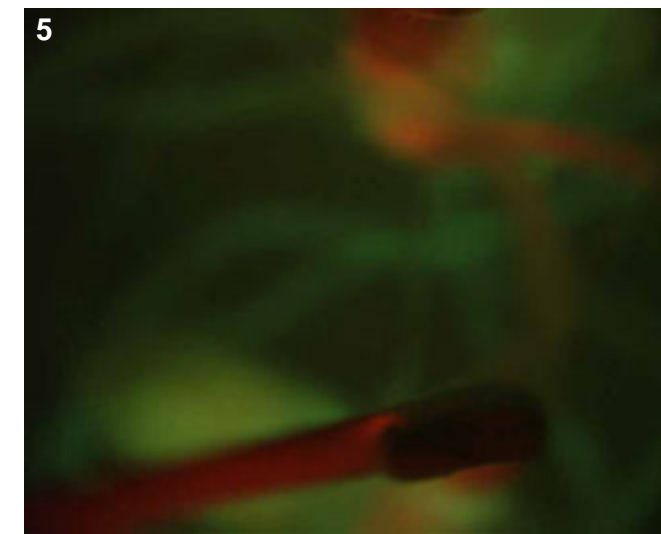
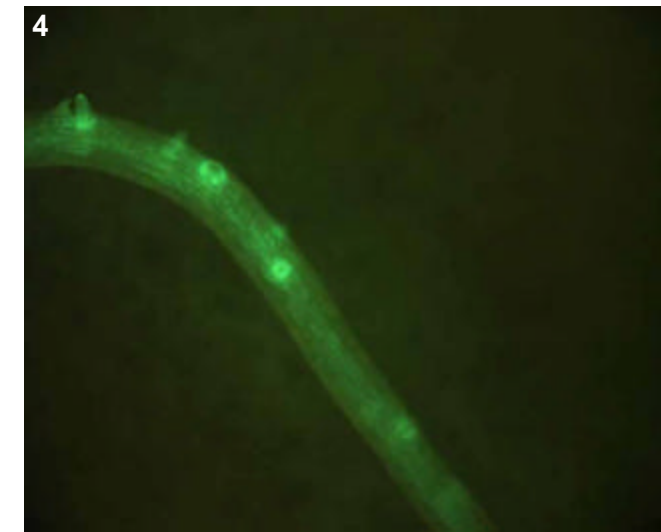
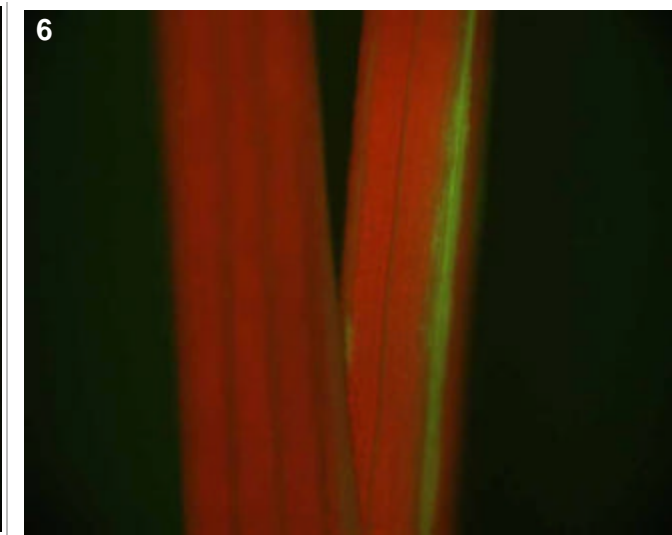
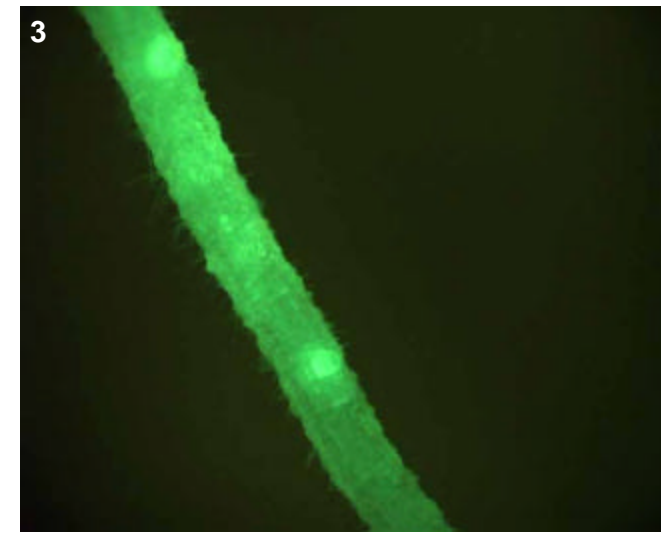
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression

## T1 seedling comments

# Genotype: ASP B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

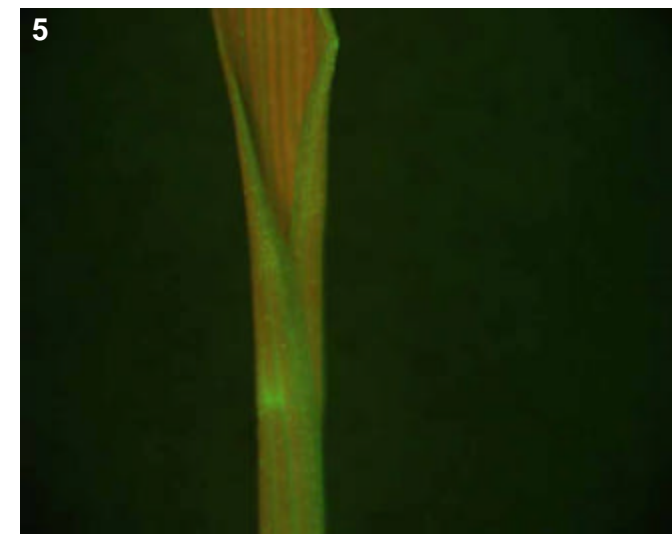
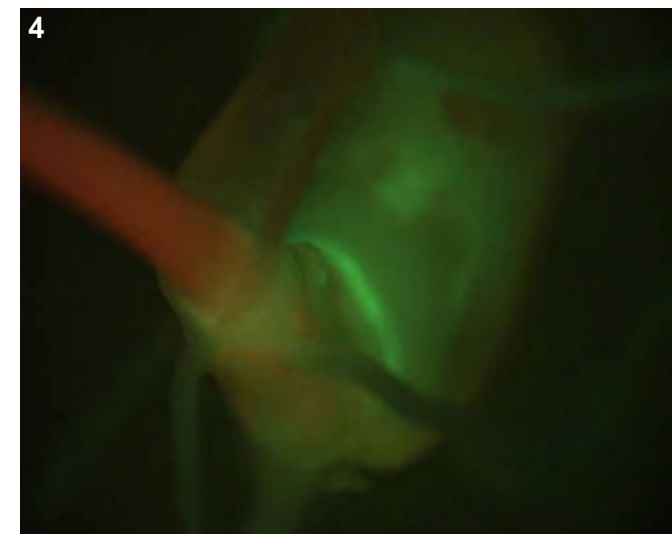
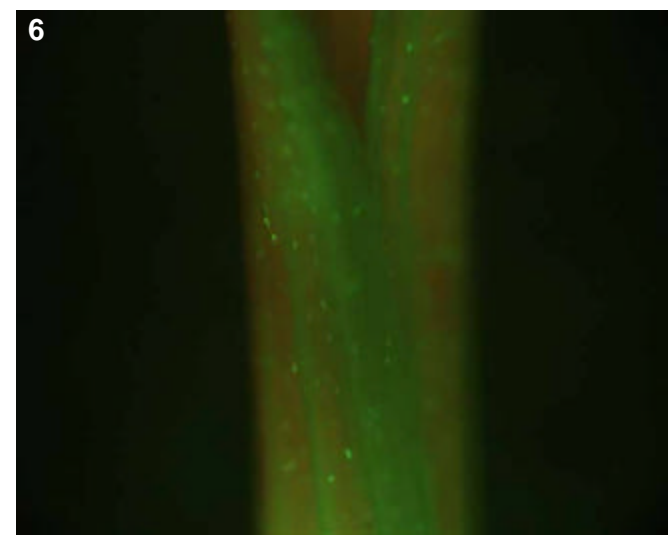
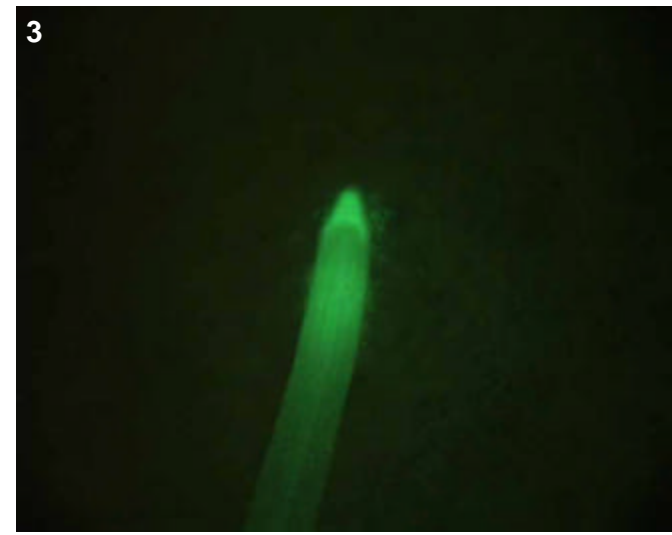
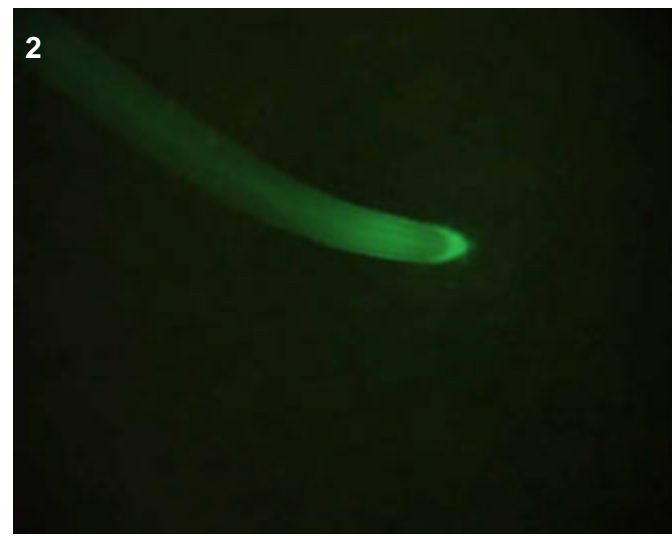
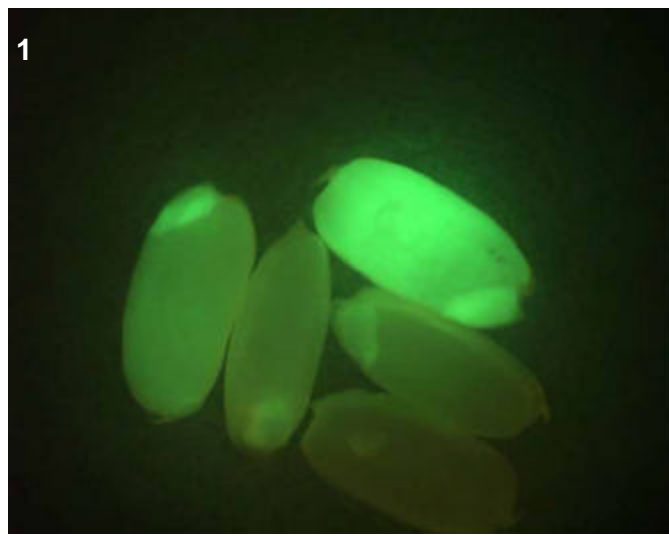
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

4/5 seeds had expression ranging from aleurone, coleorhiza and embryo, to just embryo.

## T1 seedling comments

# Genotype: ASP C04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

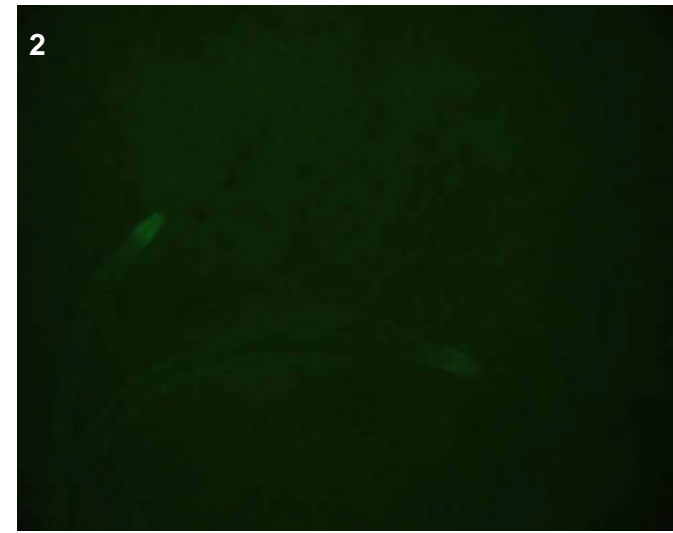
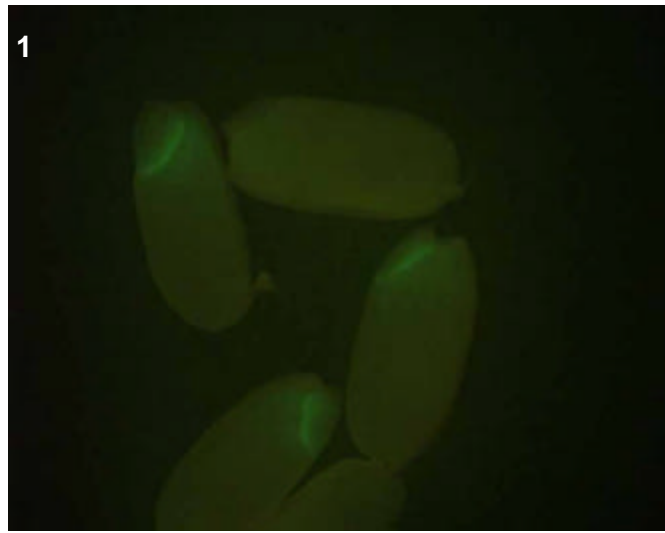
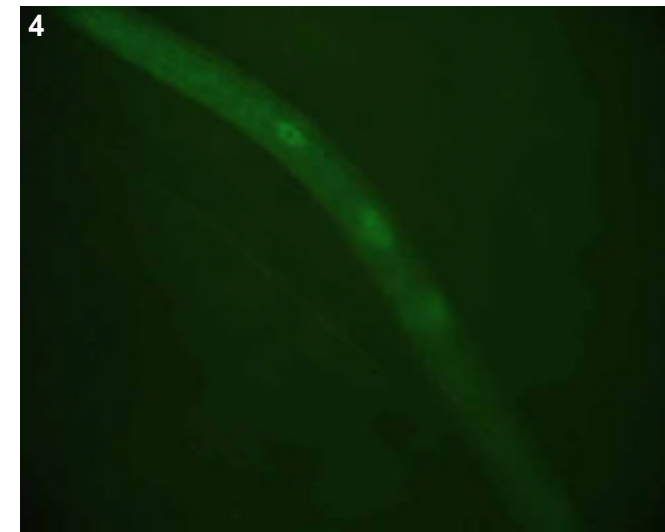
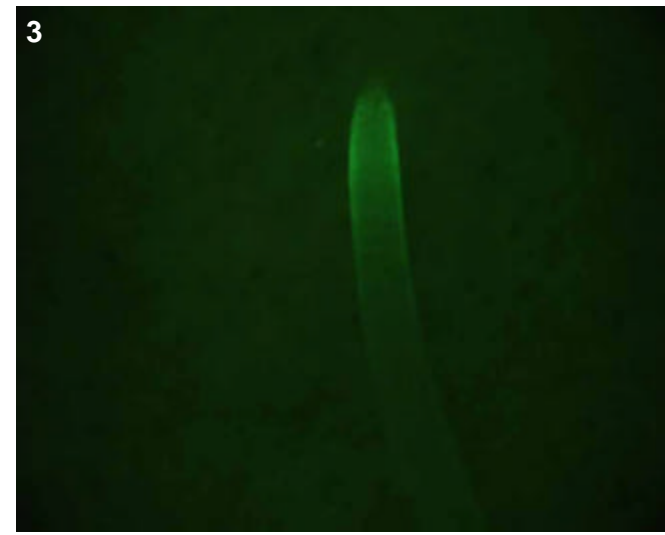
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression

## T1 seedling comments

A nice epidermal-specific line in roots (pics 2-4). The plants were abnormally small, perhaps mutant?

# Genotype: ASP F04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

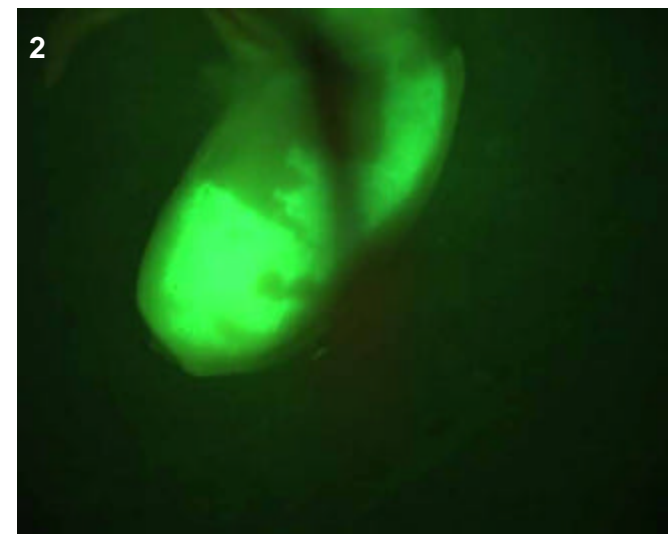
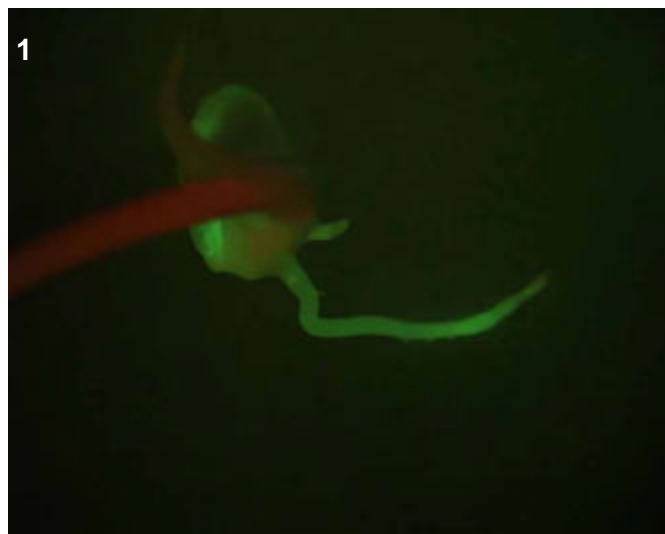
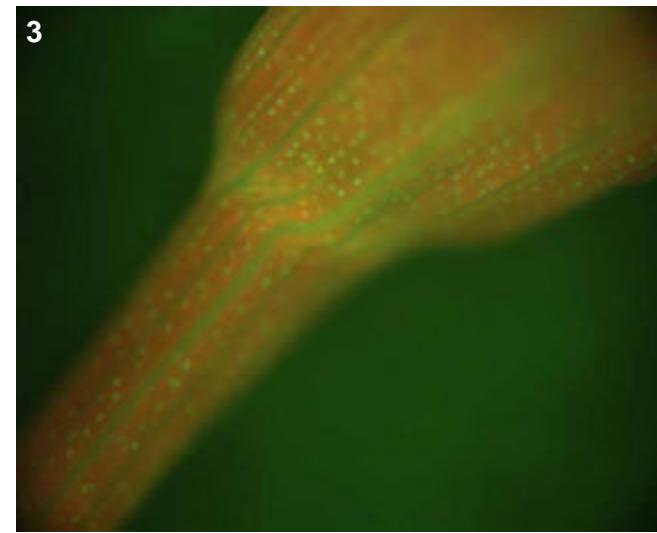
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/5 seeds had faint expression in the scutellum (no picture taken)

## T1 seedling comments

This line appears to be mutant--there were no seminal or lateral roots, just a few small crown roots (pic 1). Endosperm was very bright (picture 2), as was the shoot vascular and guard cells (pic 3).

# Genotype: ASP F10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

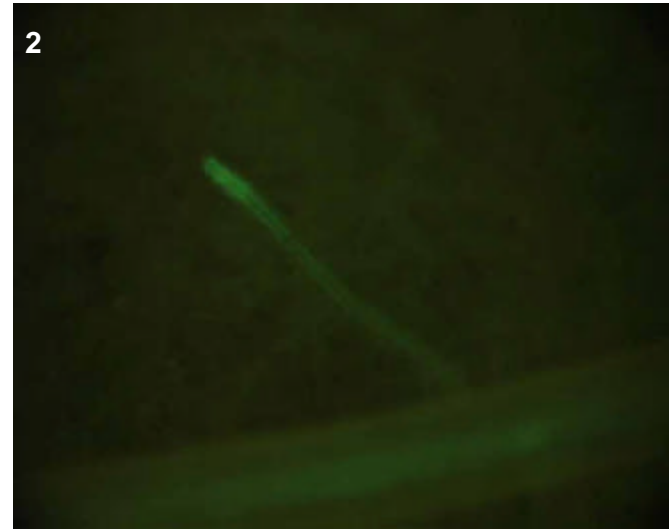
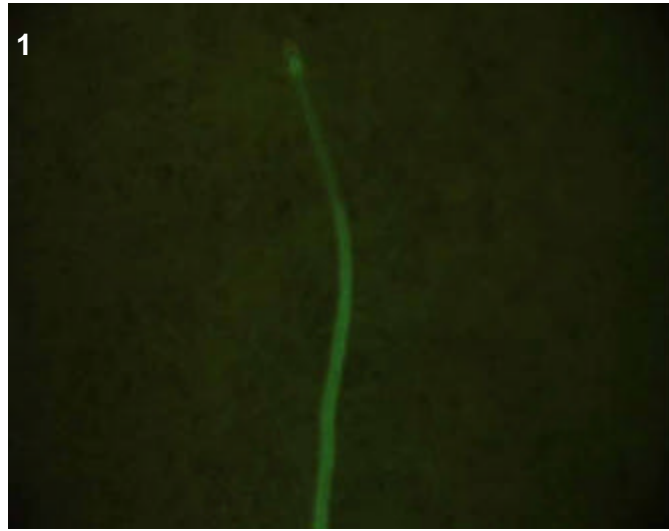
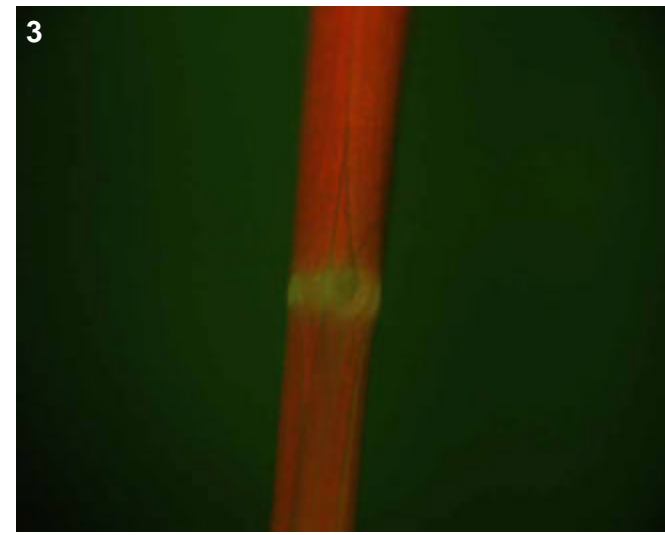
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASP G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

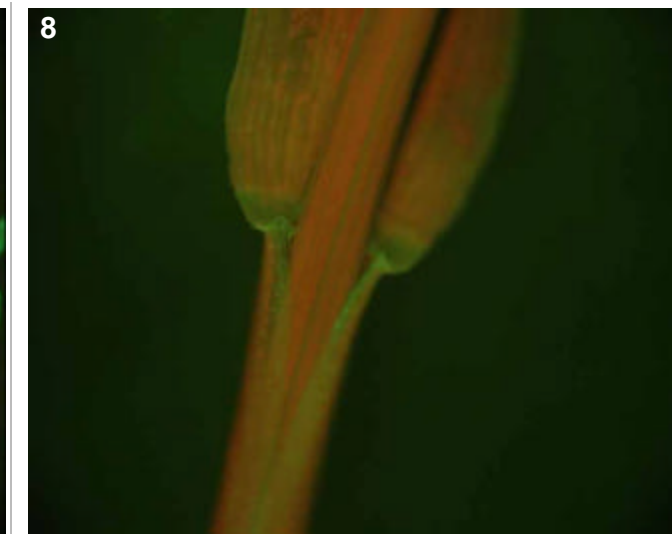
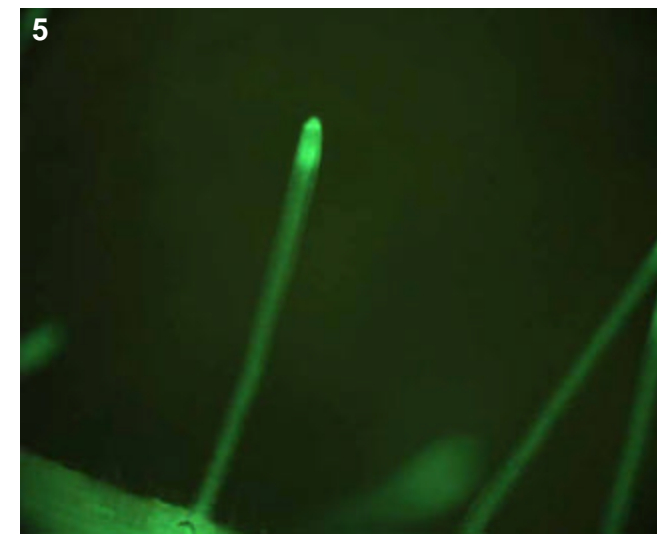
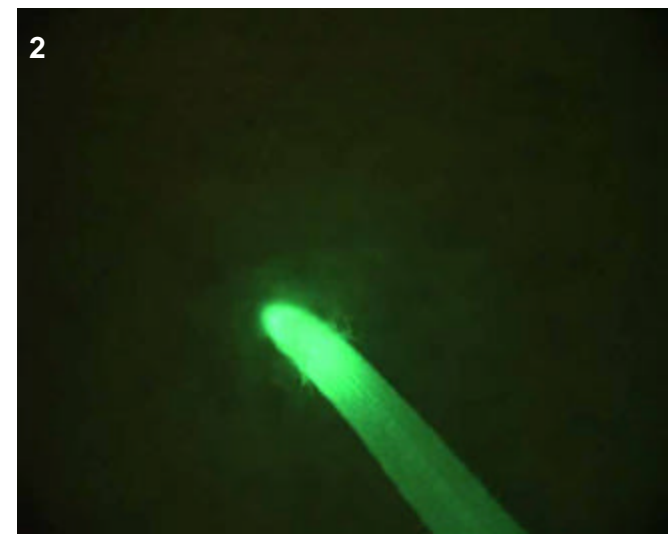
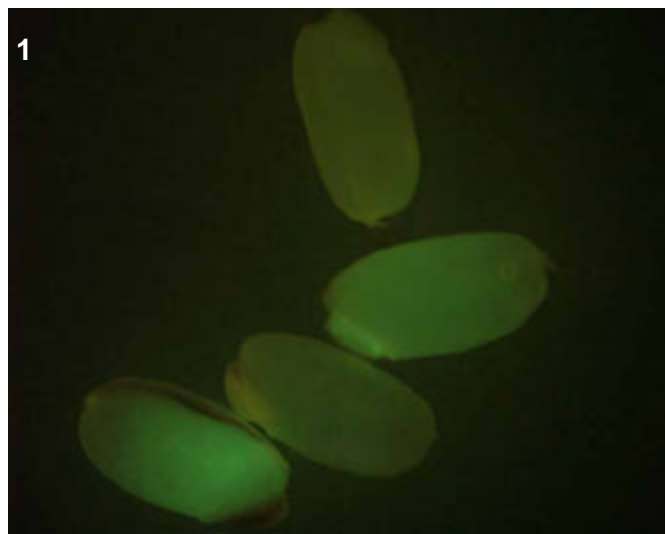
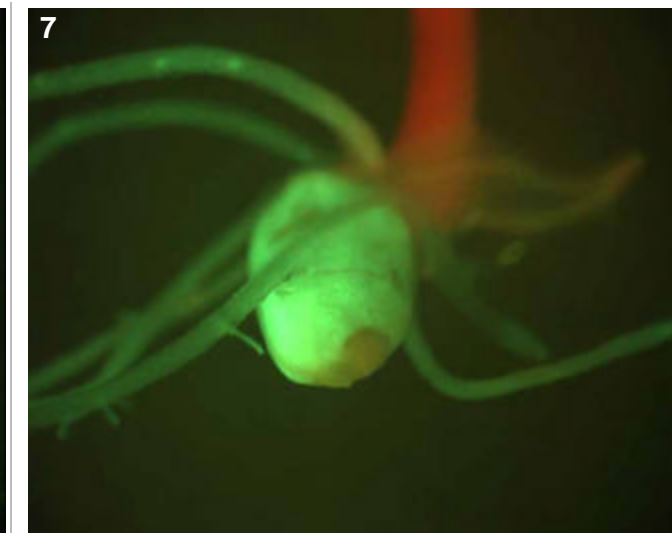
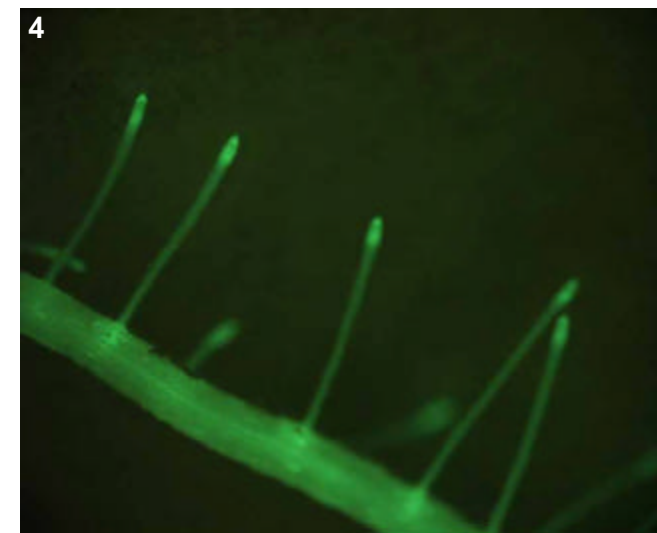
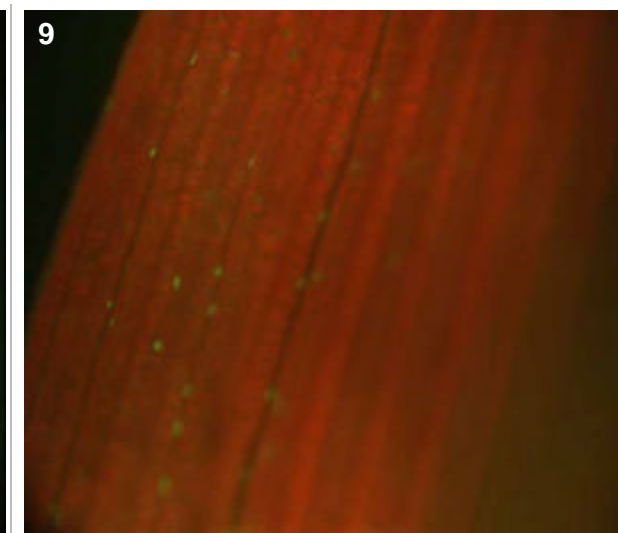
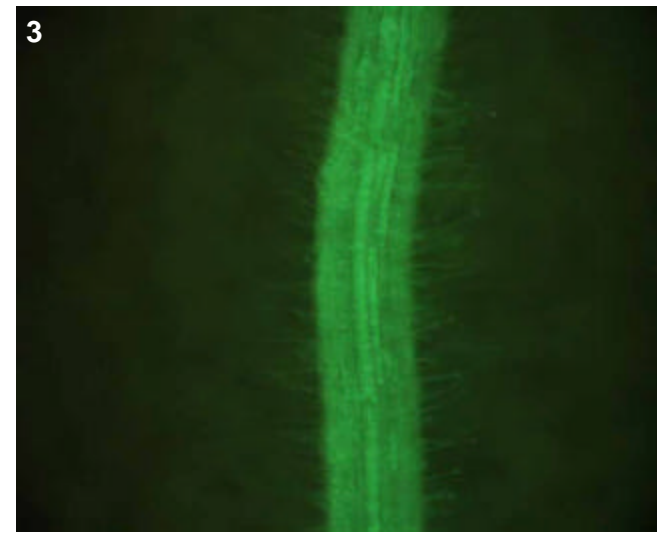
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/4 seeds had medium aleurone/endosperm expression

## T1 seedling comments

Extremely bright expression in root and endosperm (pics 2-7), perhaps in a constitutive manner. The root hairs in pic 3 appear to be GFP positive.

# Genotype: ASP G10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

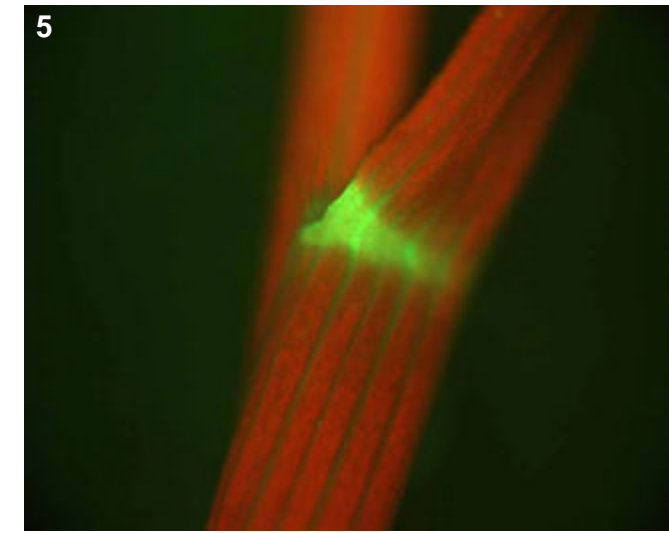
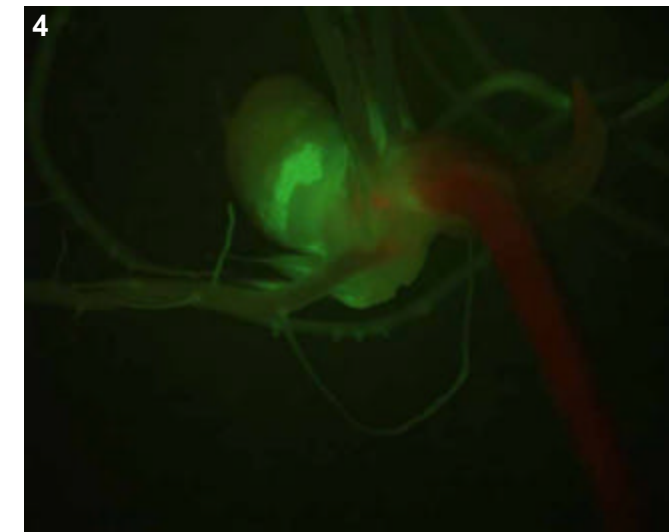
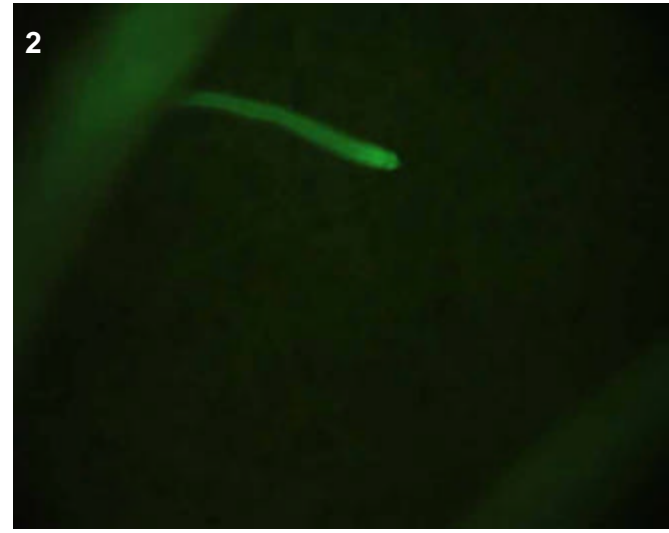
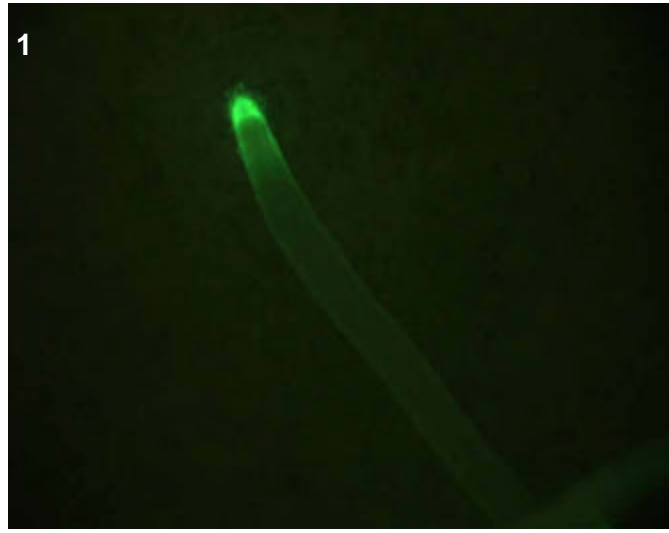
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASP H08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

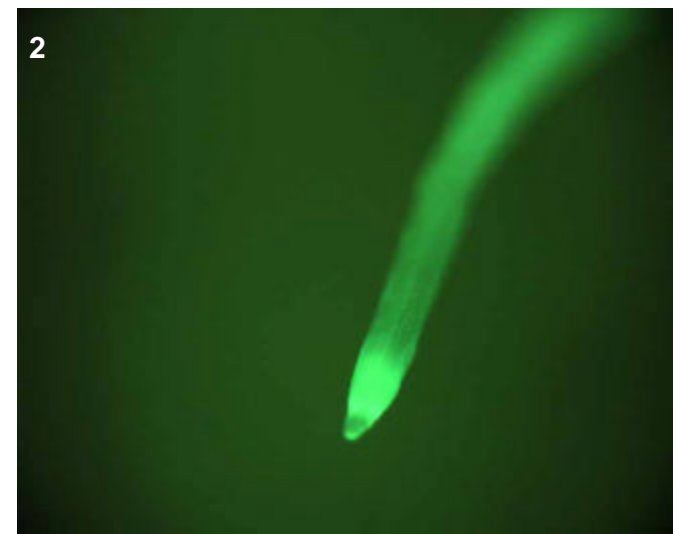
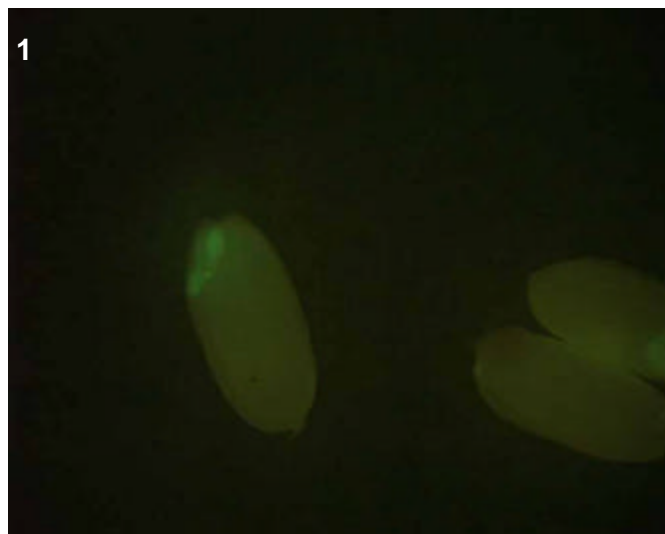
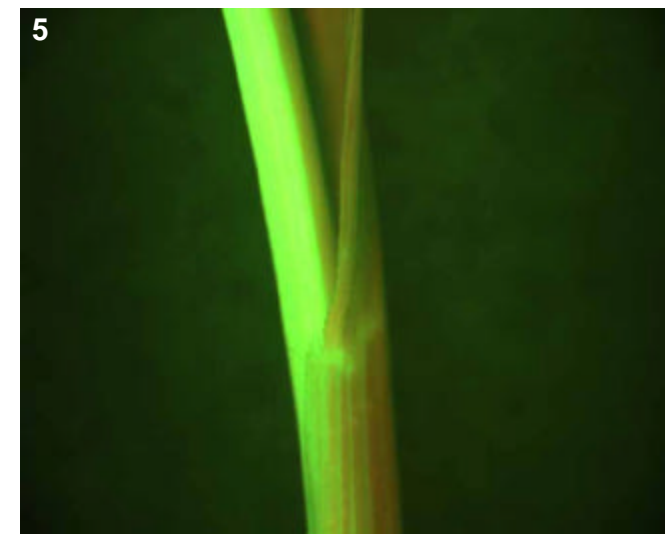
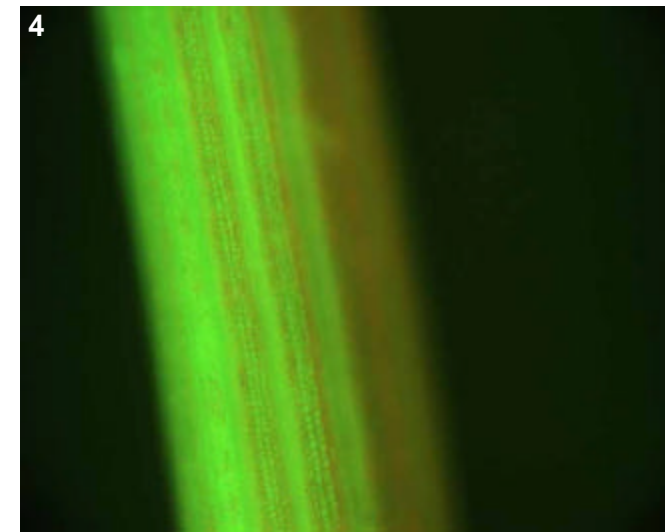
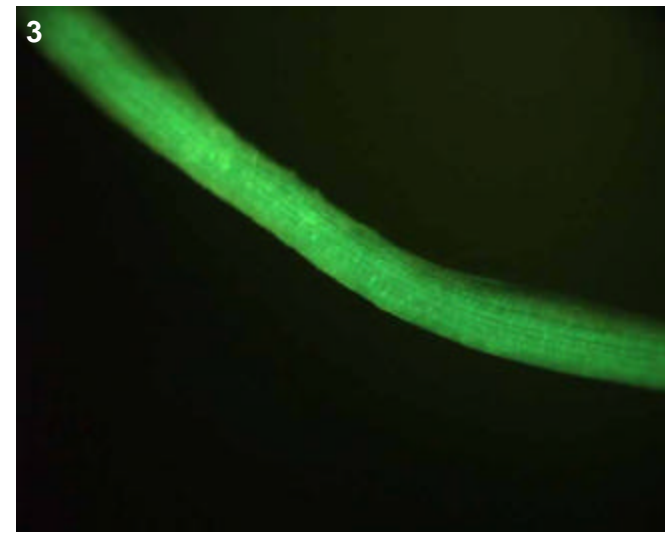
No GFP detected

**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had medium expression

## T1 seedling comments

This looks like a bright epidermal pattern in both root (pics 2-3) and shoot (pics 4-5).



# Genotype: ASP H10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

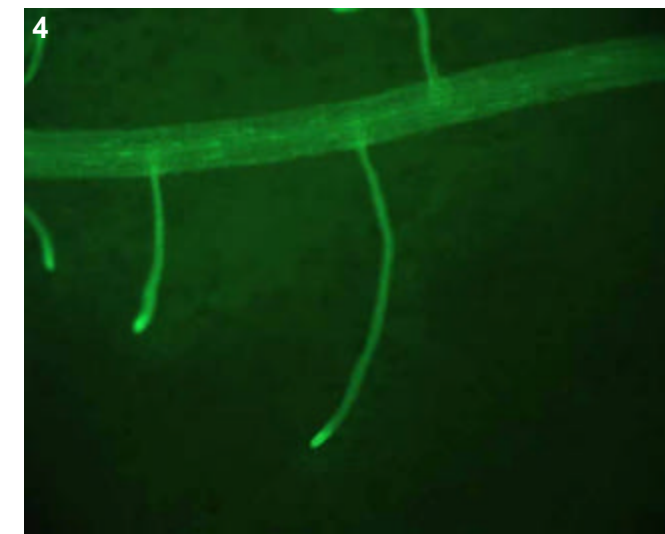
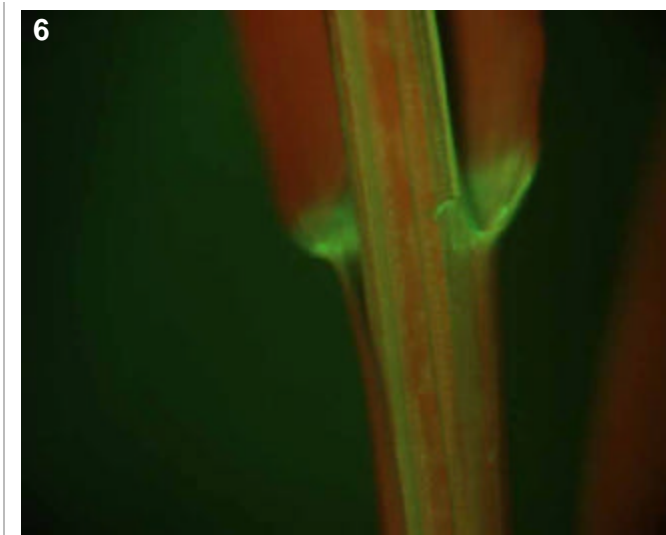
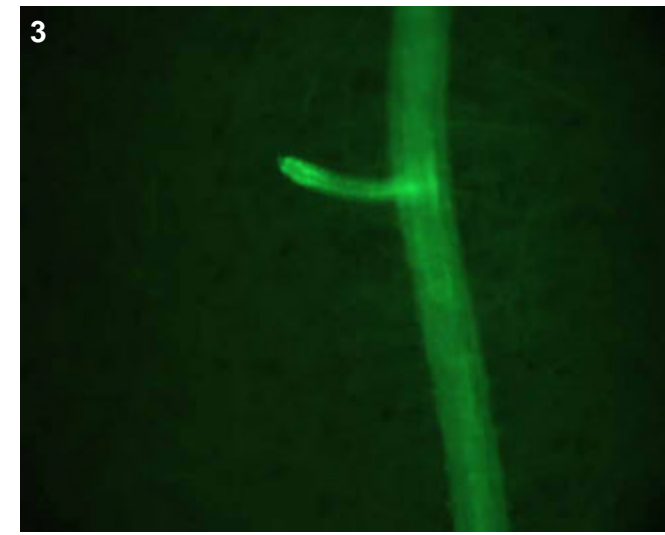
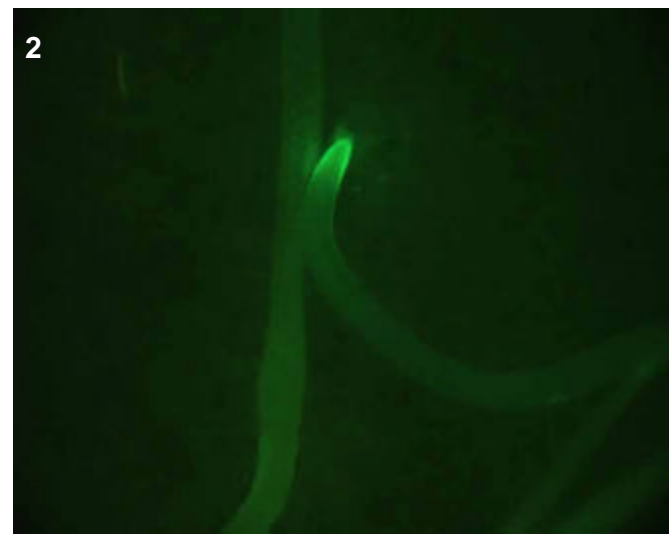
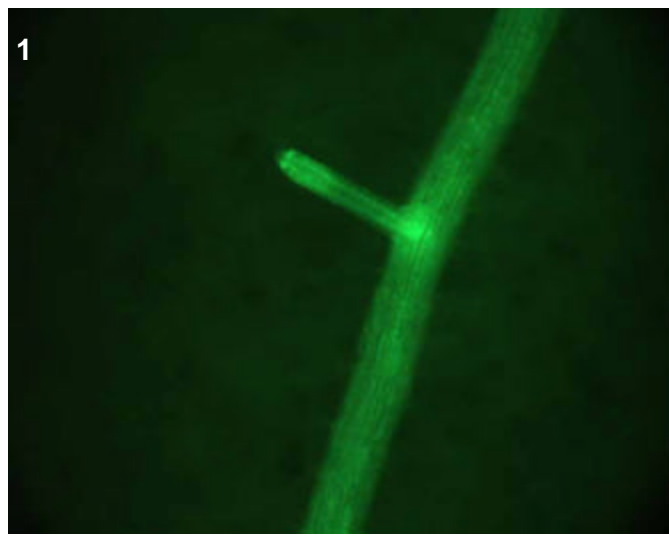
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Extremely bright epidermal/cortical expression in roots (pics 1-4). Perhaps also some epidermal expression in the leaf blade (see pic 6).

# Genotype: ASQ B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

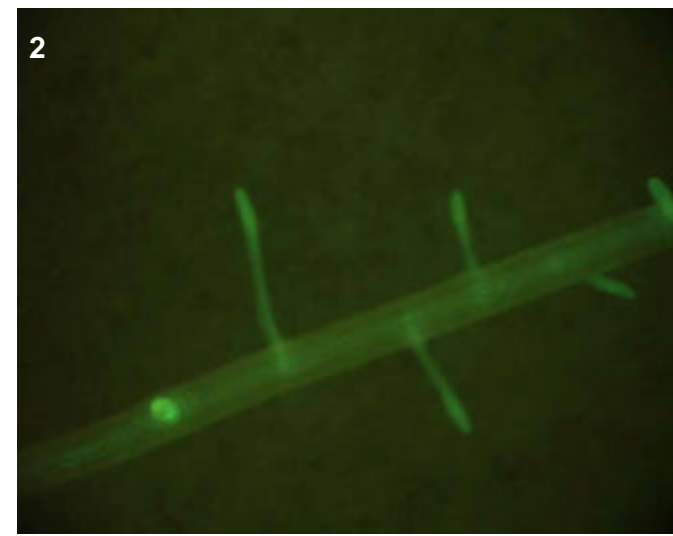
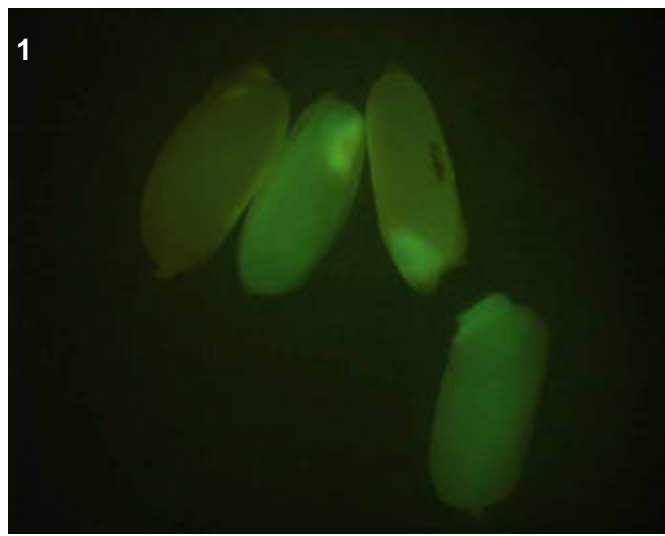
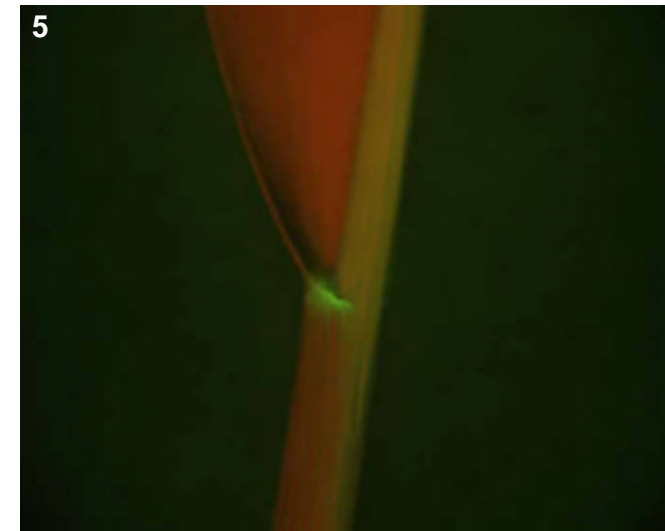
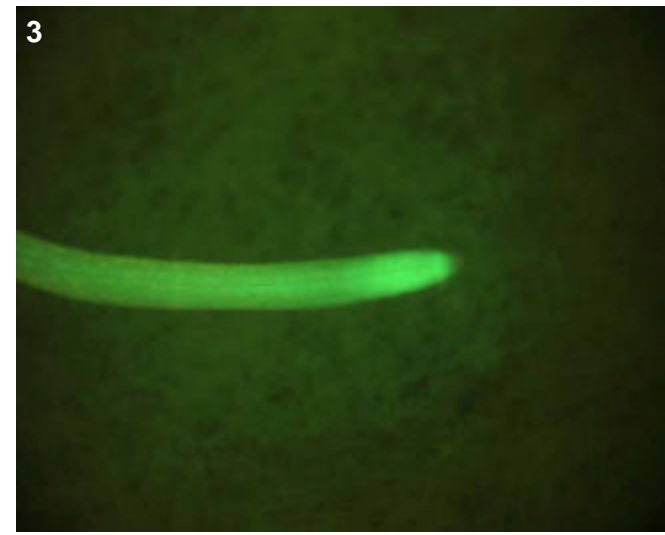
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression

## T1 seedling comments

# Genotype: ASQ B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

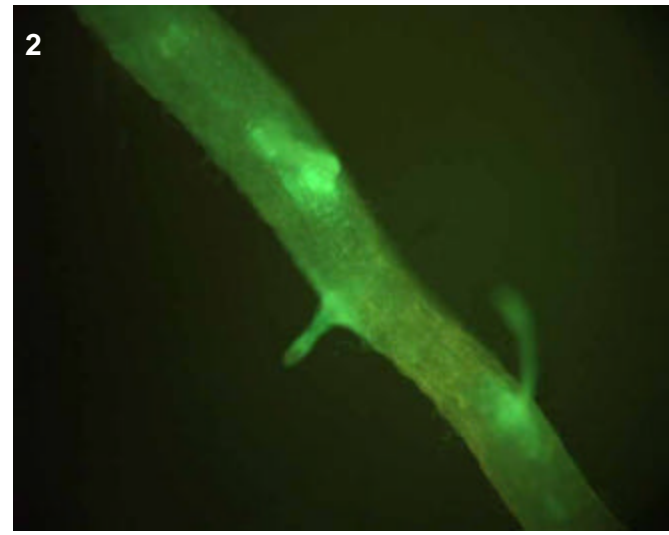
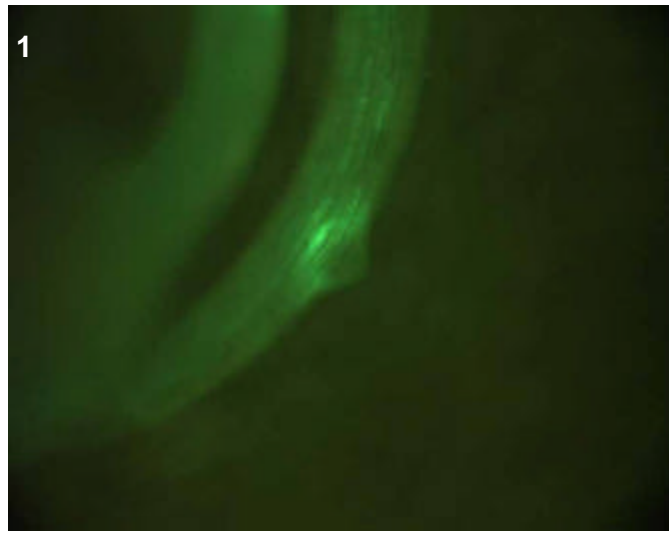
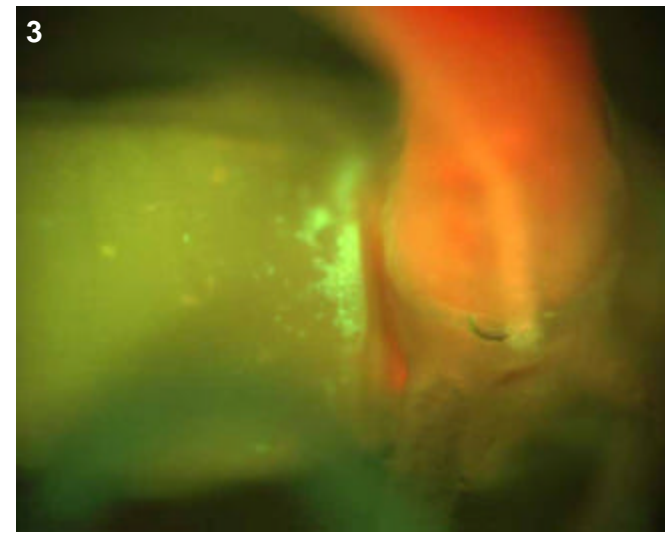
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ASQ C12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

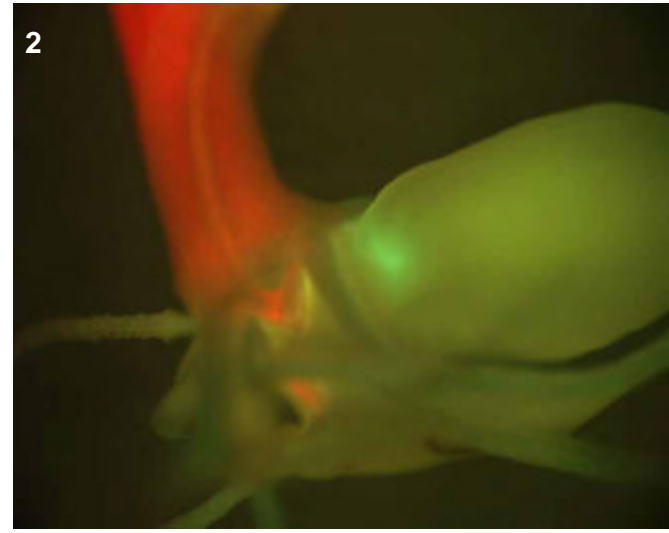
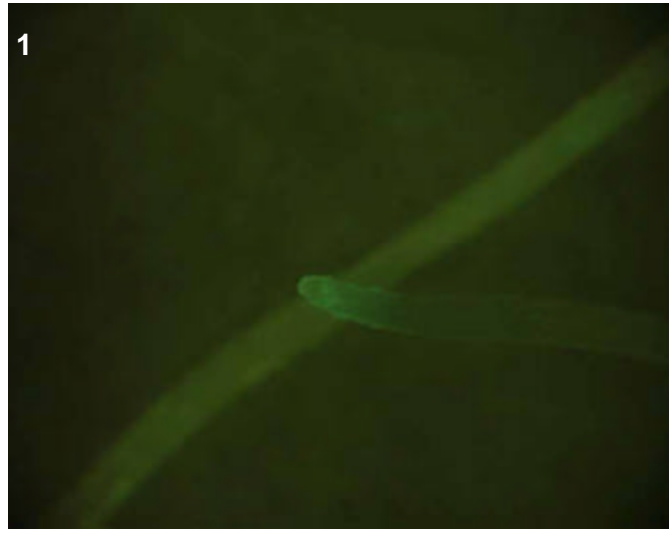
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ASQ D11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

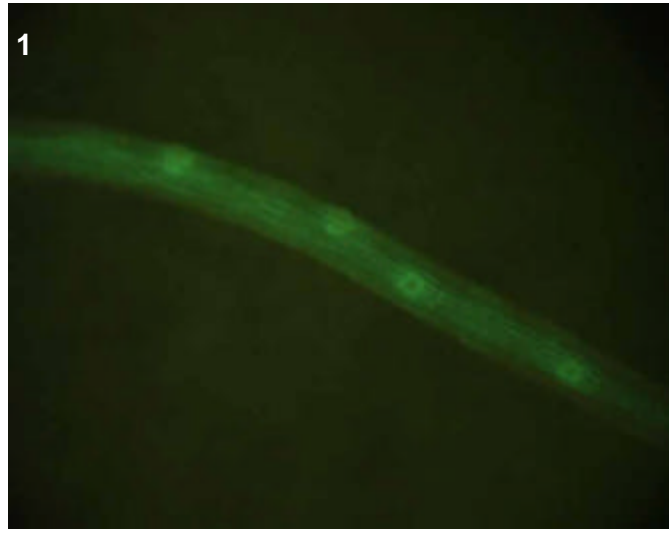
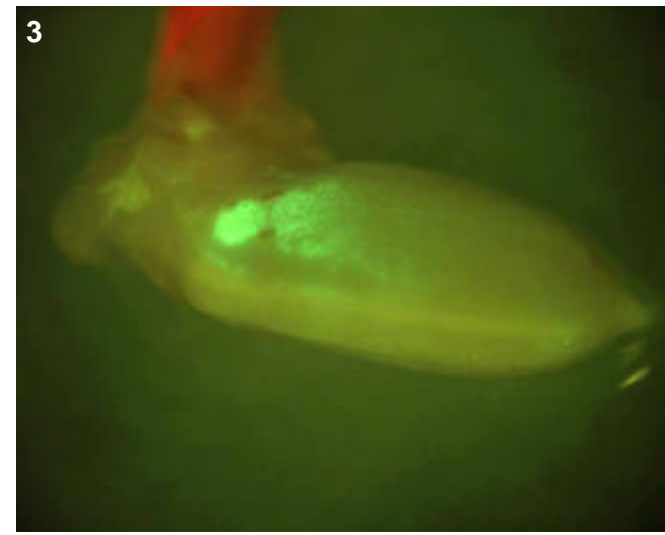
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

Long seminal root, while the growth of crown roots was arrested prematurely.

# Genotype: ASQ E03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

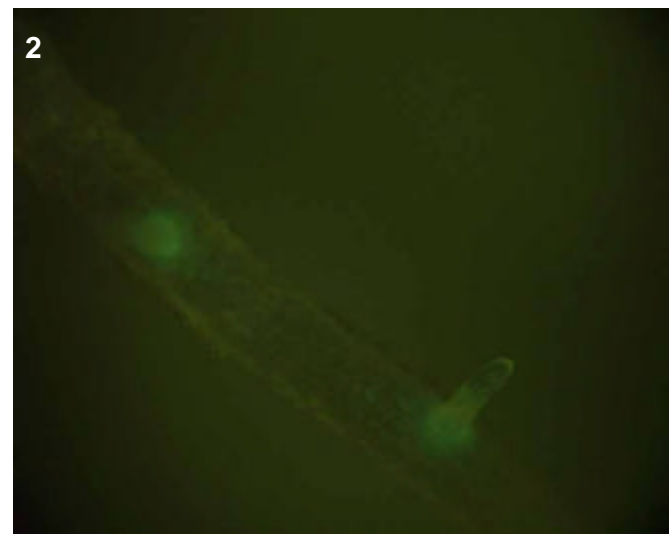
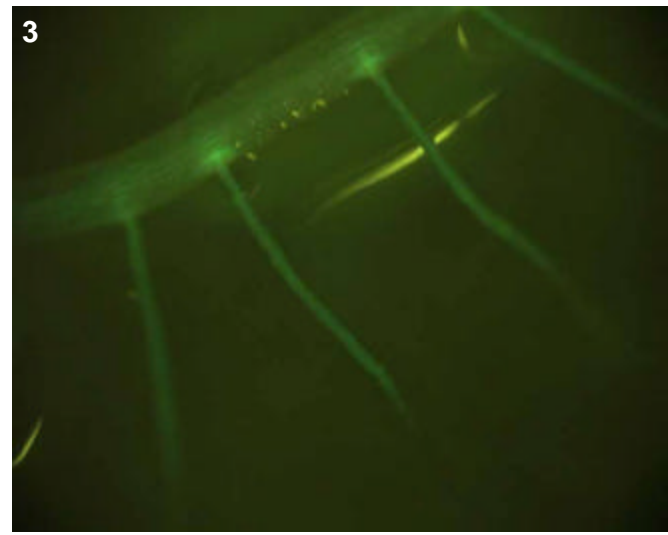
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants  Confocal?

Number T2 seed produced:



**T0 comments**

**T1 seed comments**  
 1/5 seeds had faint expression

**T1 seedling comments**

# Genotype: ASQ F03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

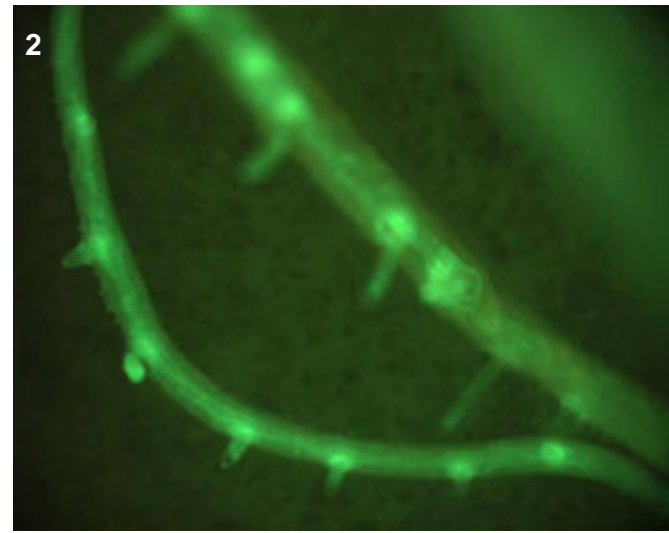
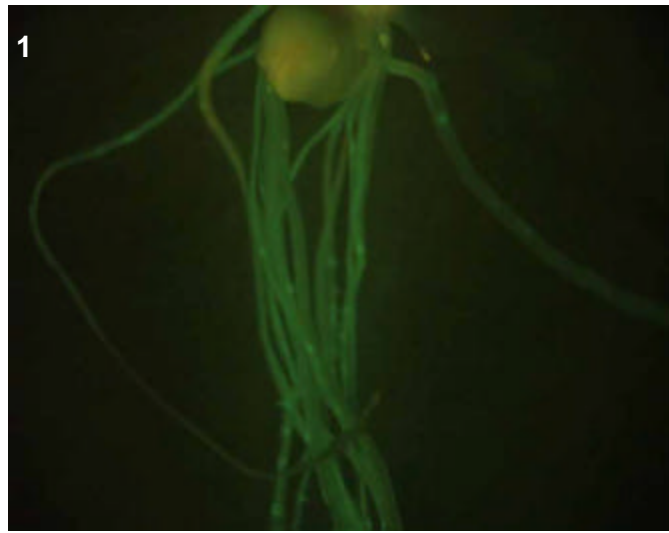
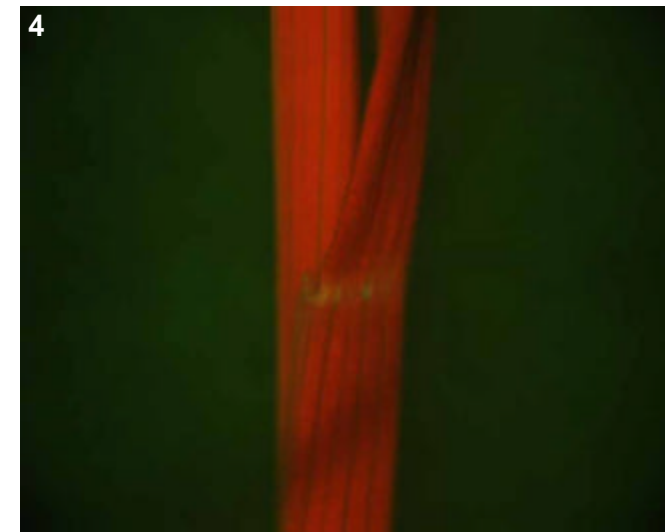
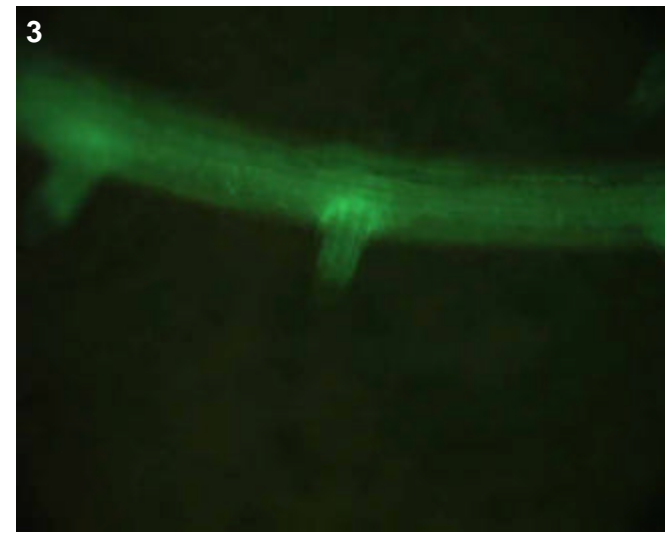
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

There appear to be an unusually large number of seminal roots (see picture 1).

# Genotype: ASQ F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

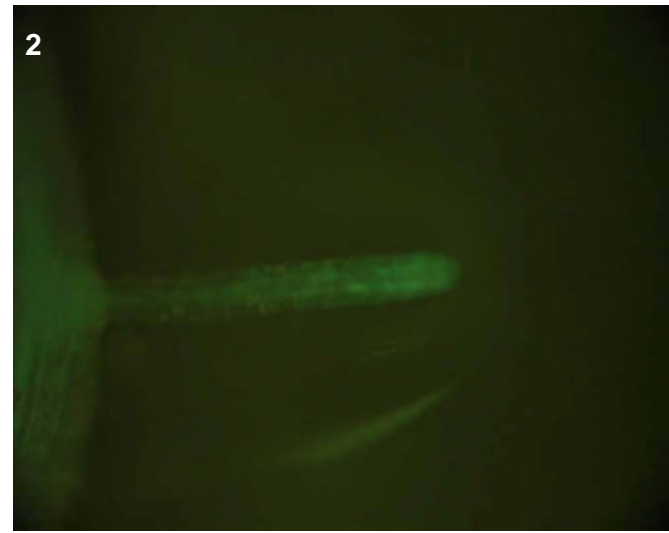
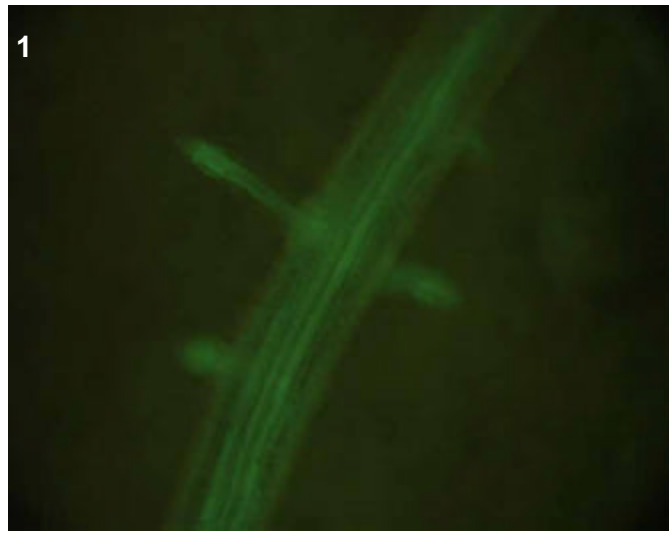
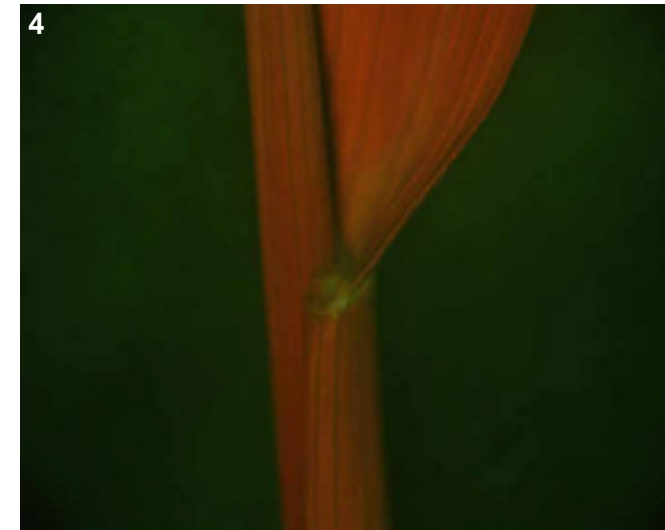
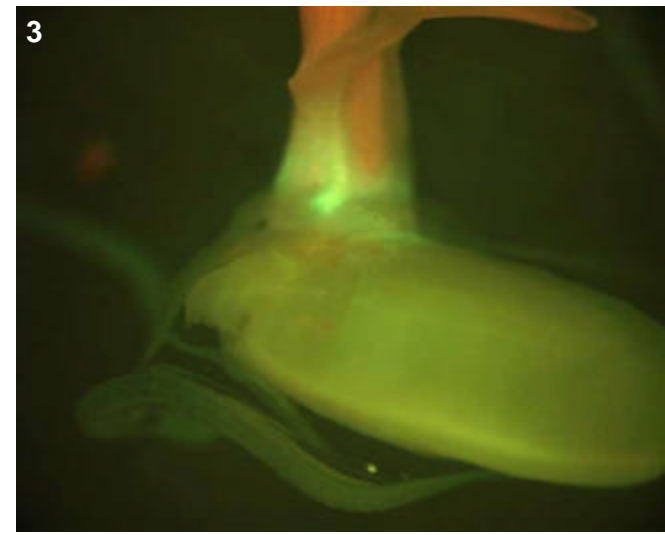
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants **Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**



# Genotype: ASQ H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

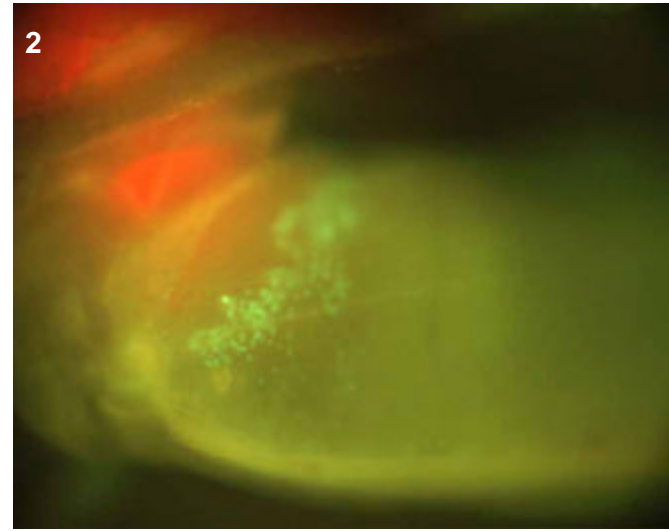
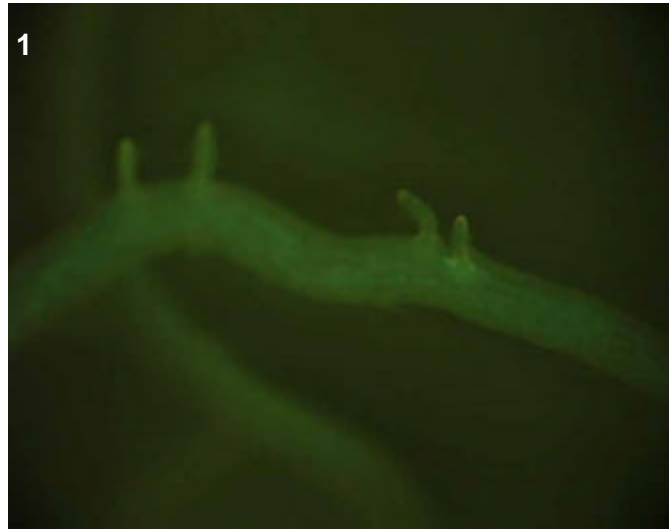
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASR A12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

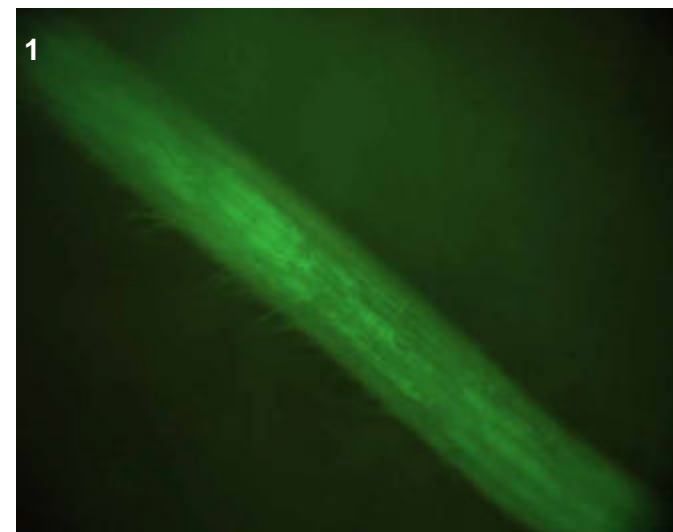
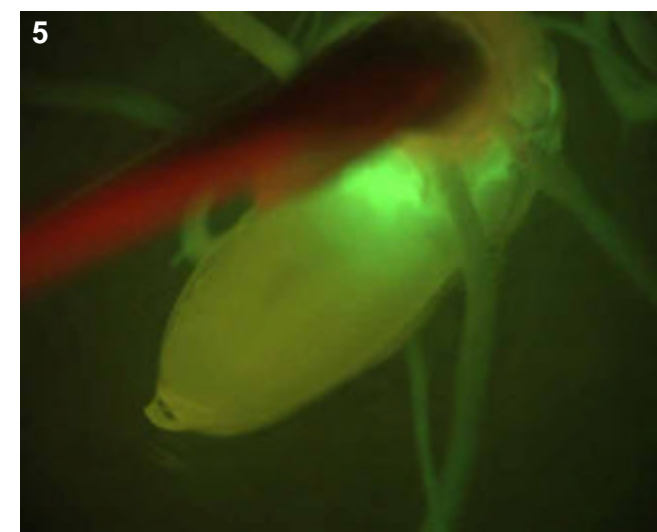
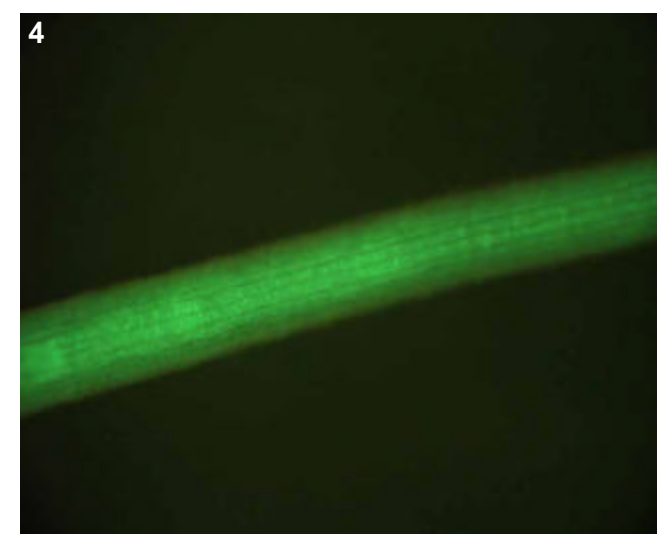
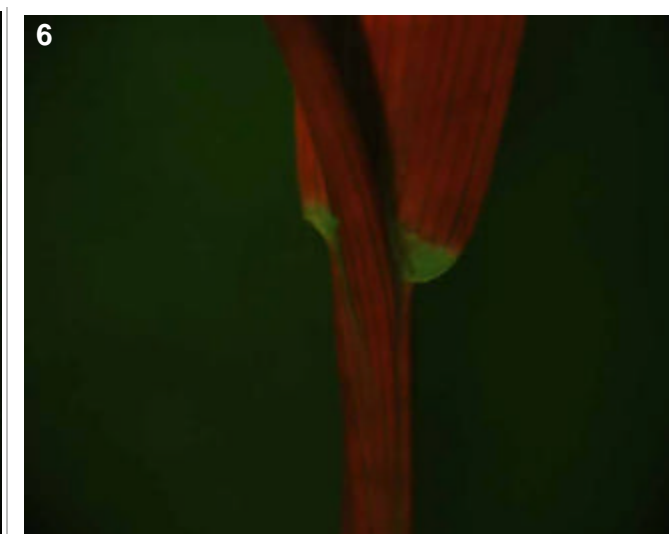
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:** 4



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ASR D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

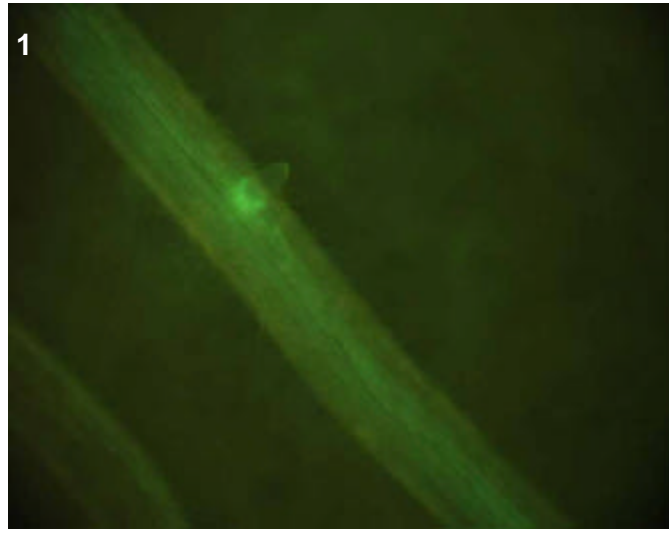
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced: 9



## T0 comments

## T1 seed comments

## T1 seedling comments

Perhaps cortical expression in the roots (picture 1).

# Genotype: ASR H04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

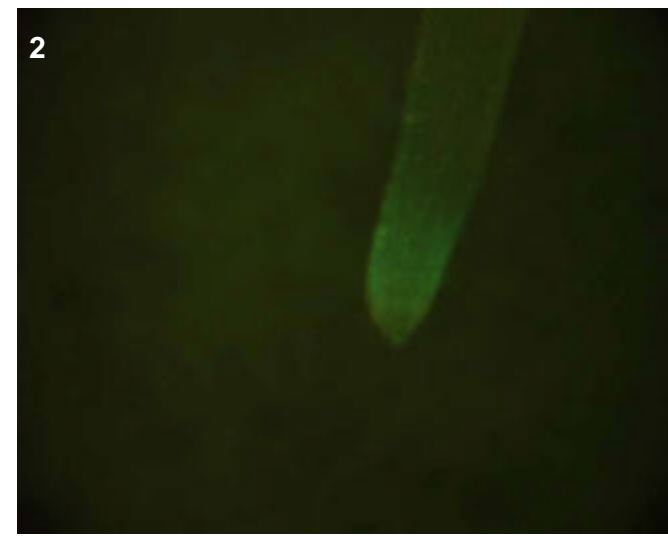
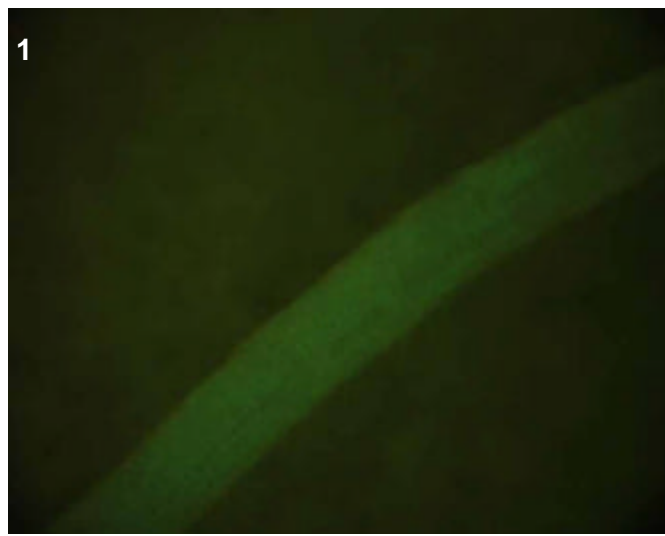
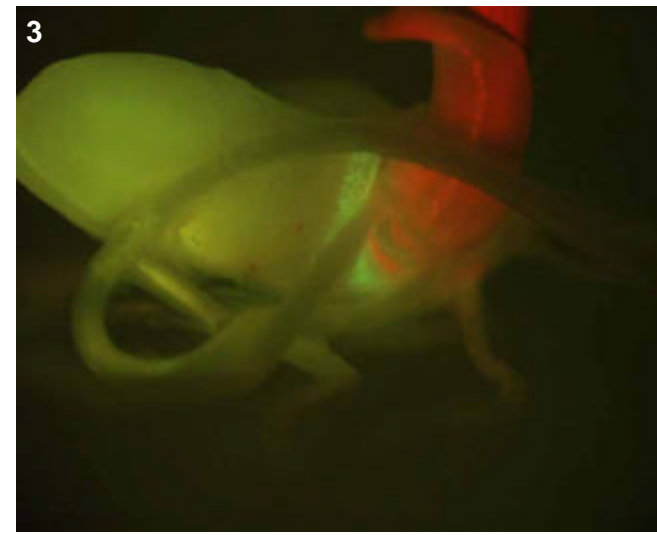
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:** 9



### T0 comments

### T1 seed comments

### T1 seedling comments

A fairly weak root epidermal line.

# Genotype: ASS A05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

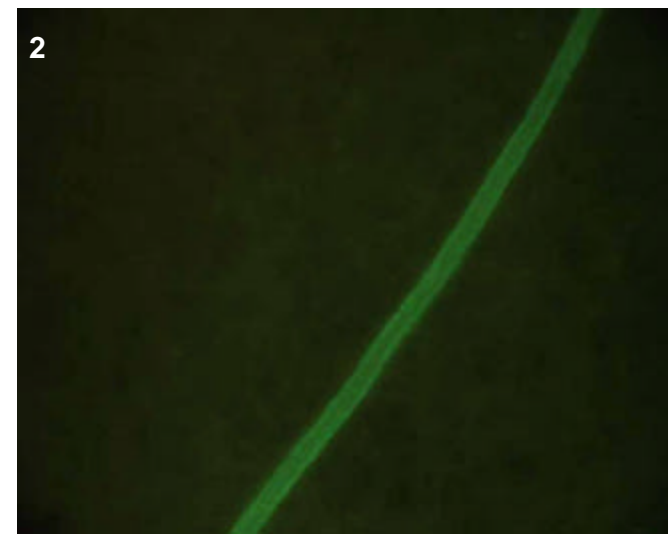
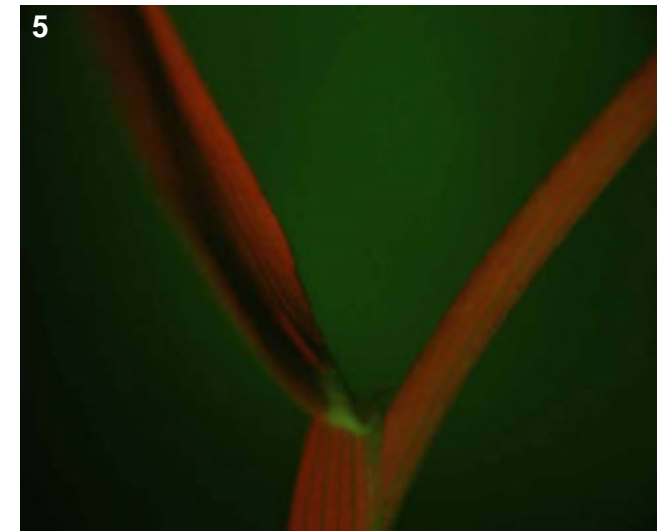
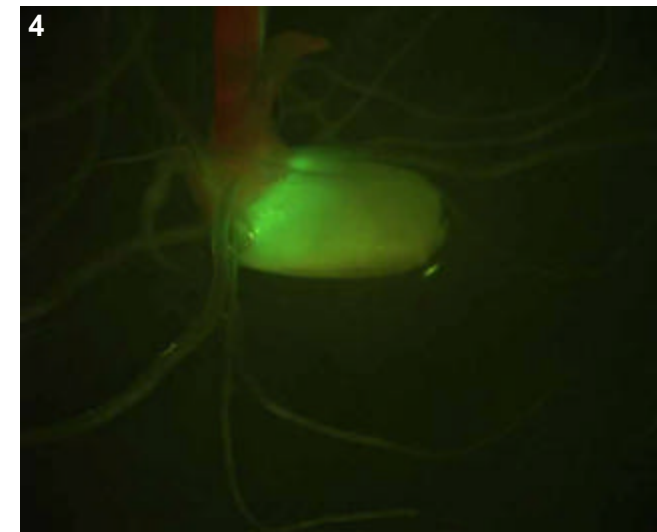
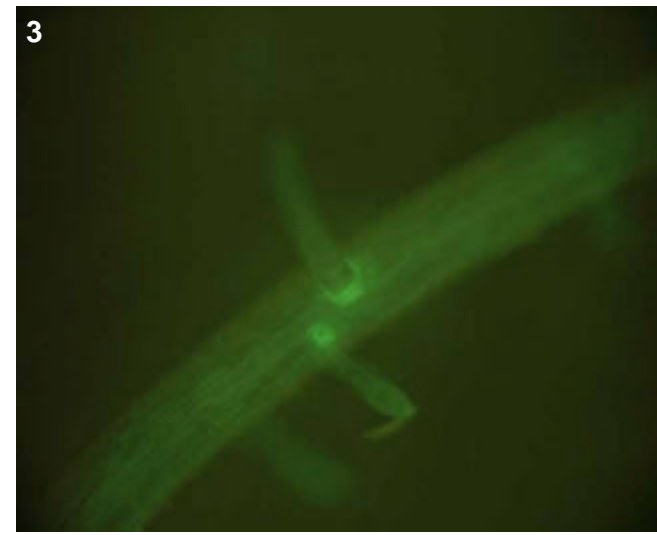
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASS A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

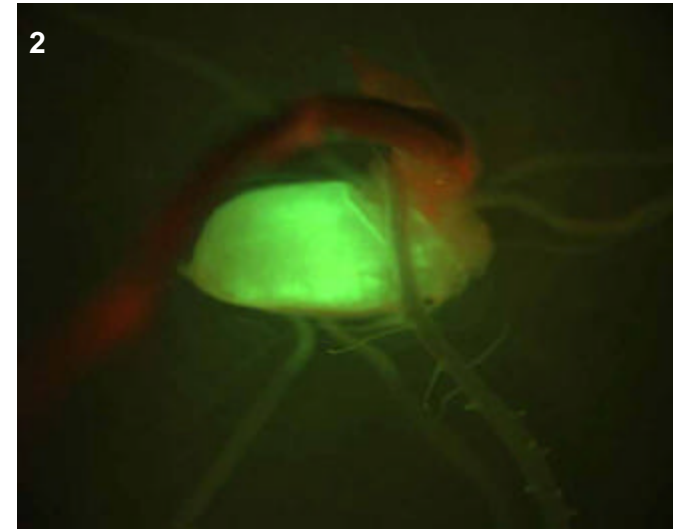
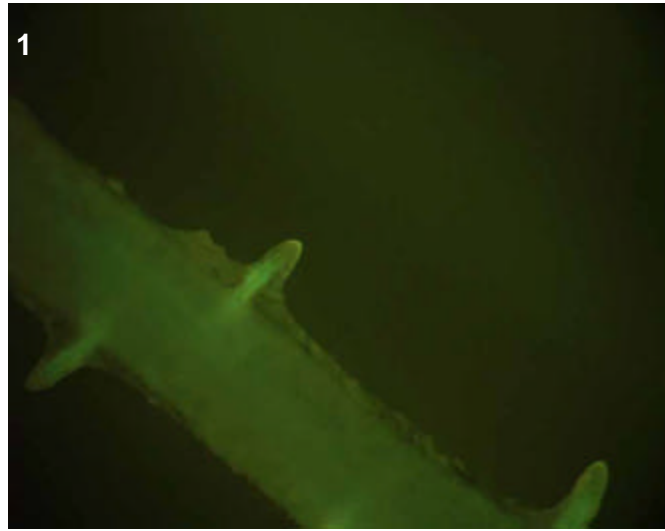
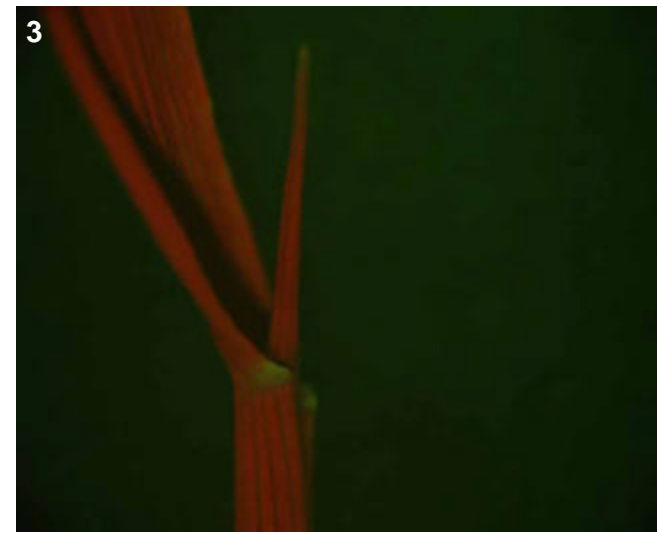
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASS B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

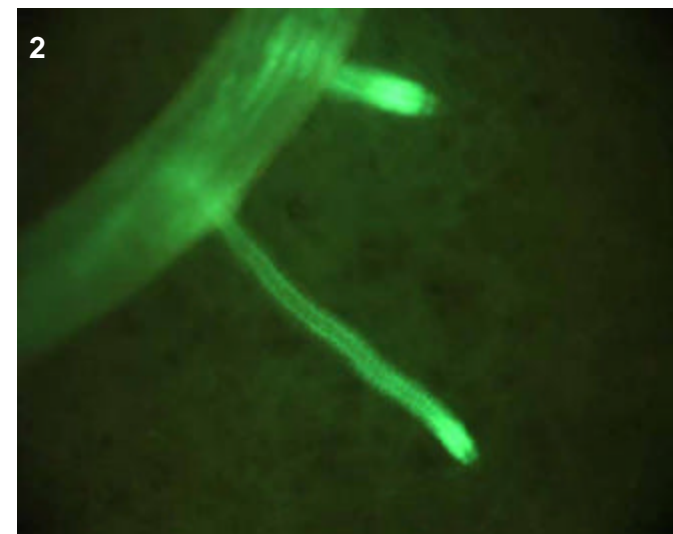
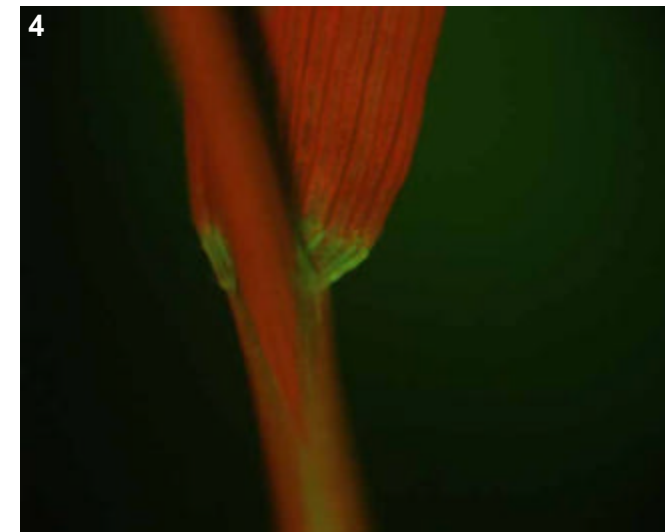
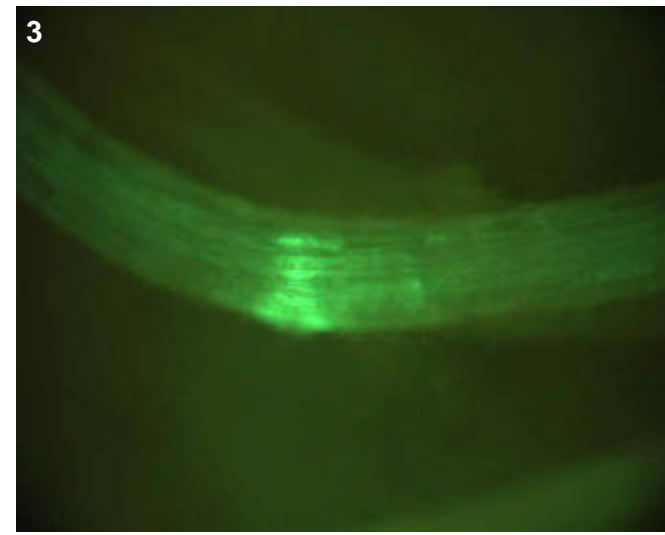
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had medium expression

## T1 seedling comments

# Genotype: ASS G02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

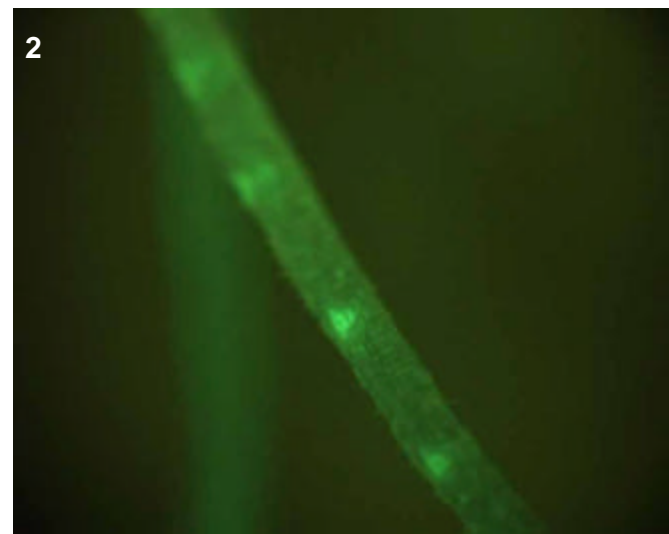
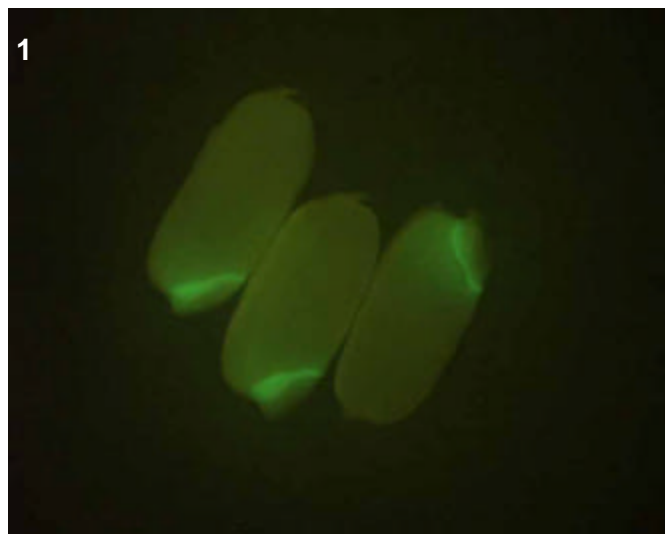
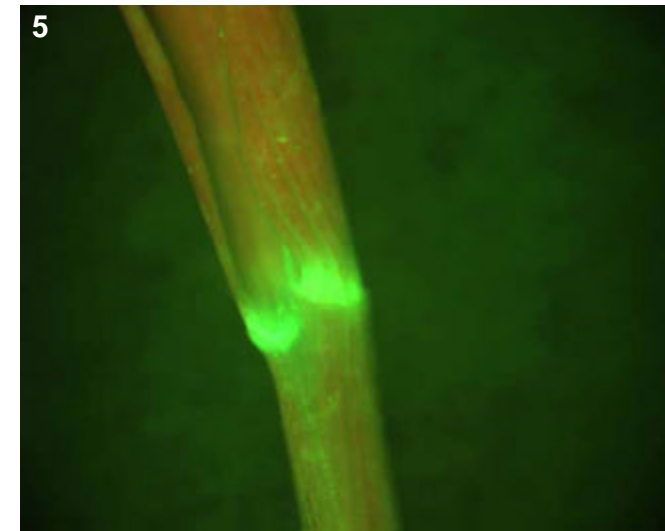
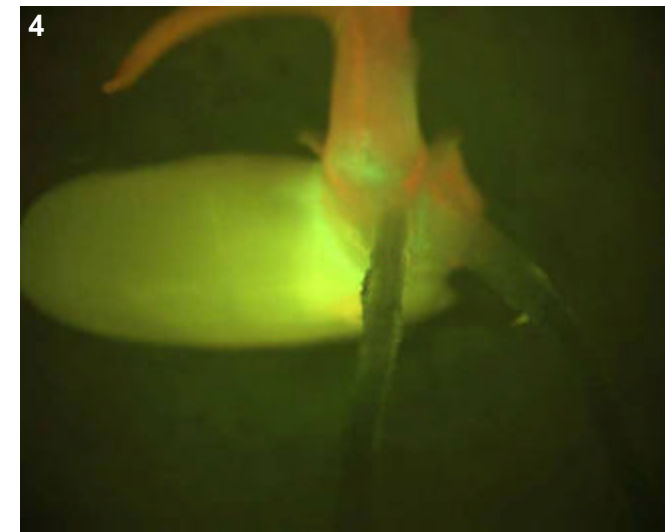
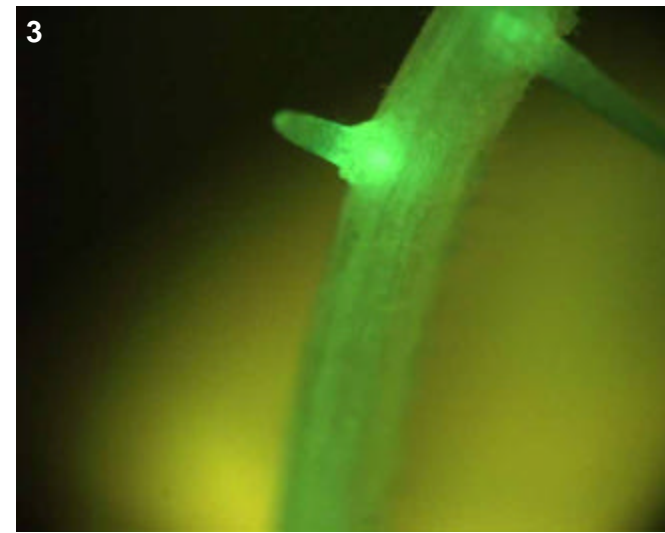
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

5/5 seeds had expression

## T1 seedling comments



# Genotype: ASS H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-5  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

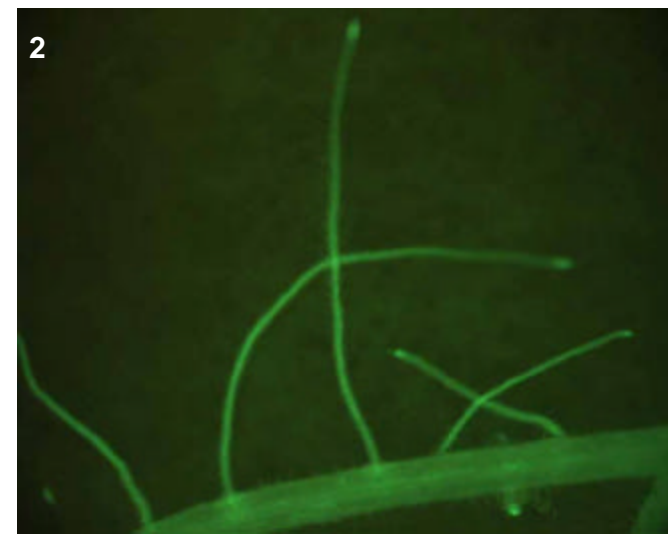
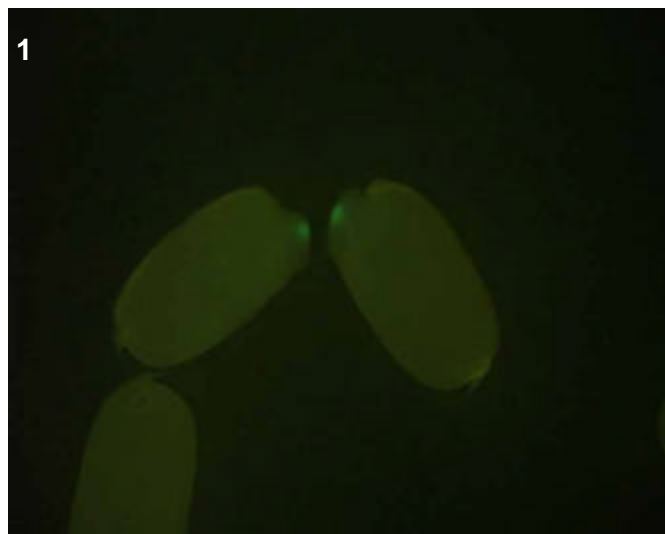
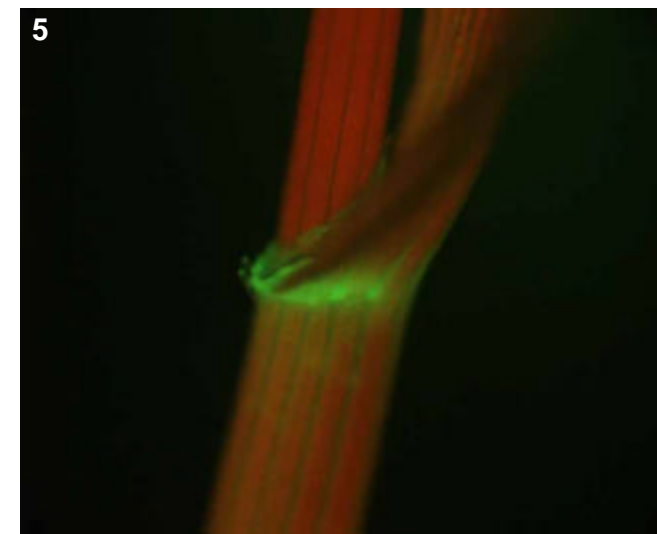
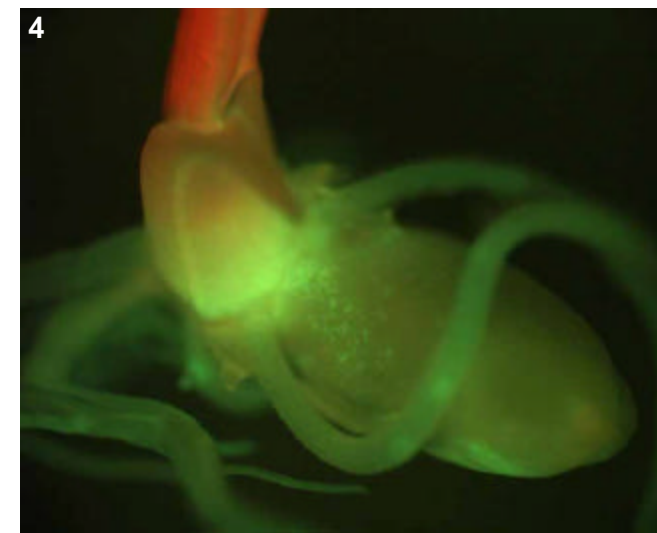
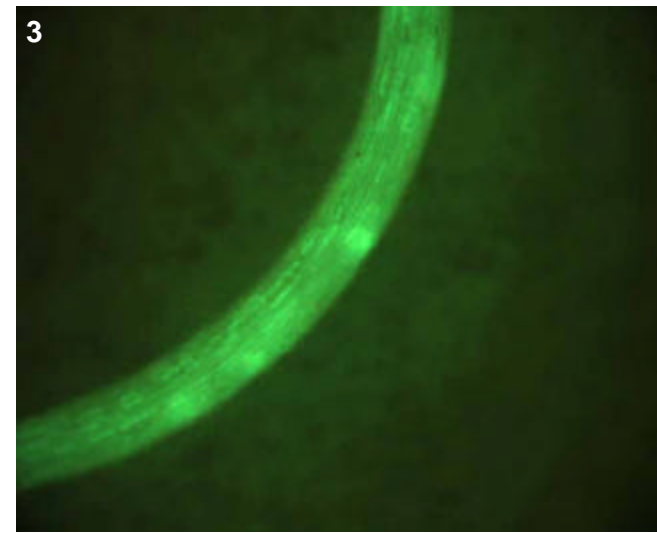
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds displayed a bright spot near the top of the embryo, this has not been observed before!

## T1 seedling comments

# Genotype: AST A04

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant:   
 T1 seed/seedling: 1-5  
 T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Embryo

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis

Constitutive

**T1 Mature**

T0 pattern verified:

T0 pattern verified plus:

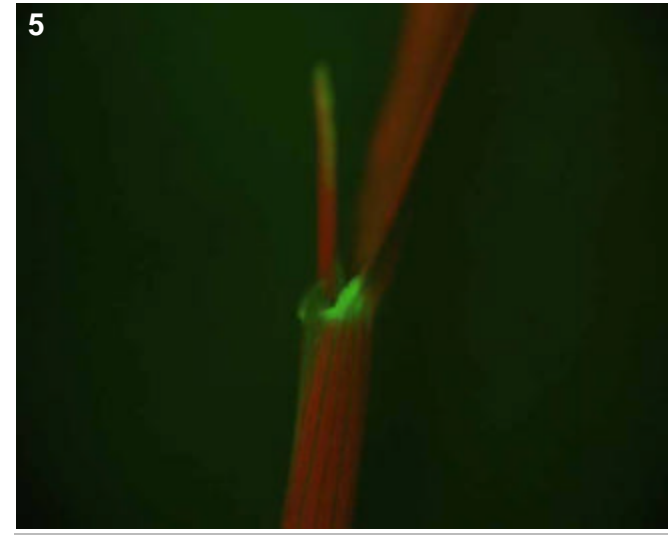
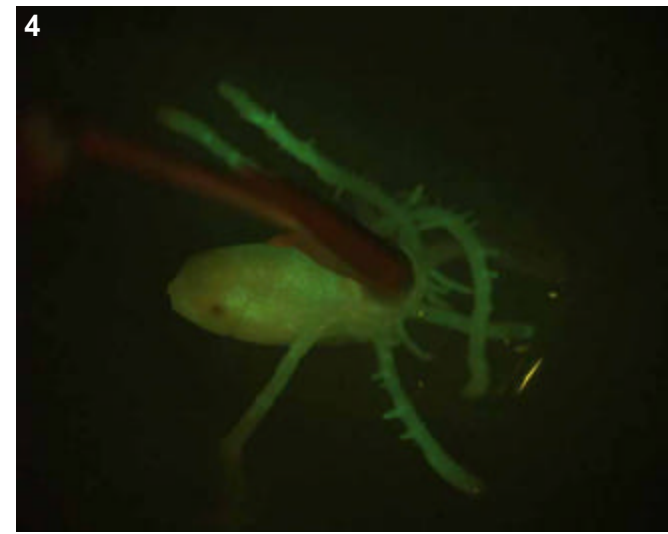
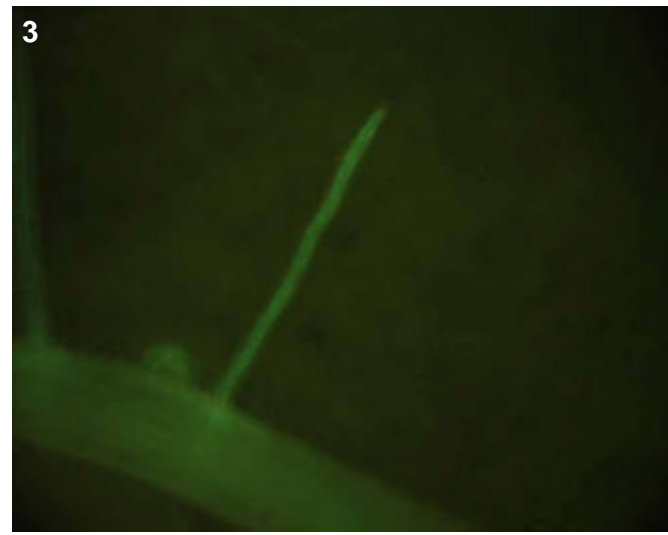
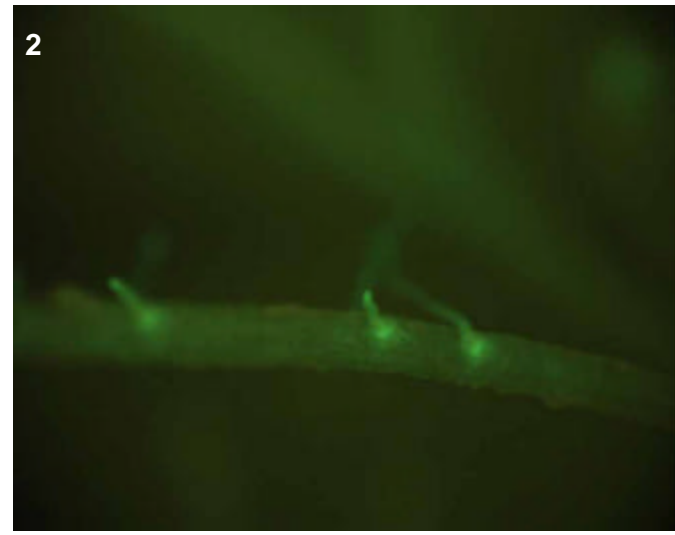
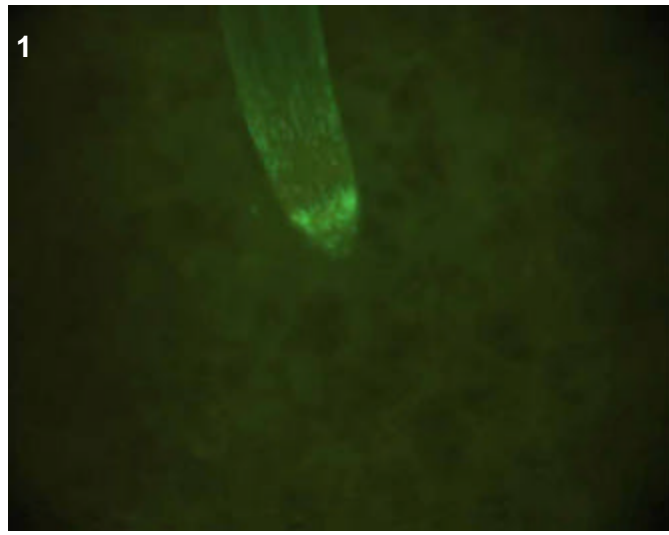
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: AST B01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

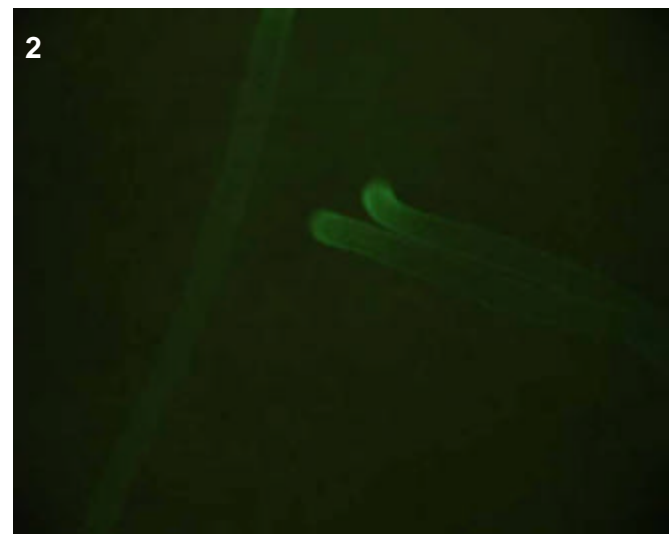
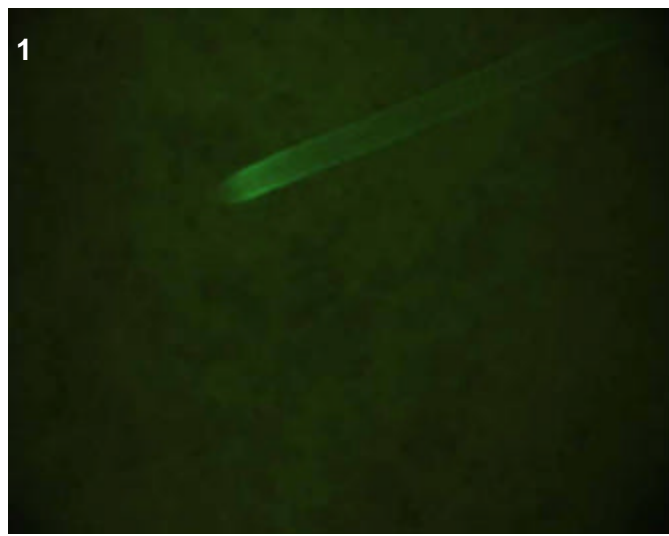
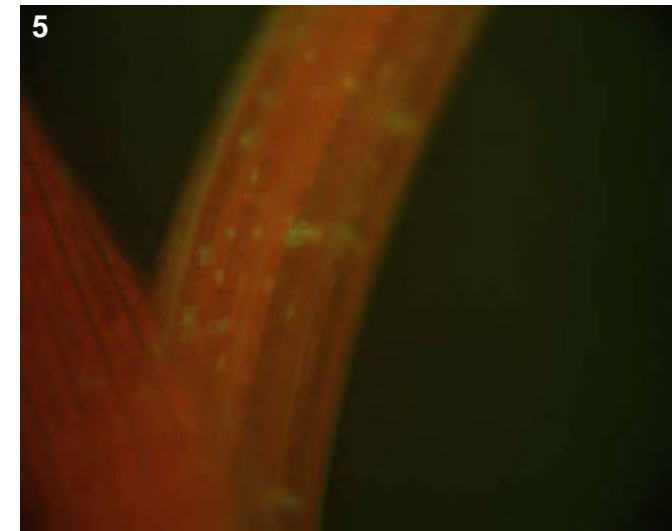
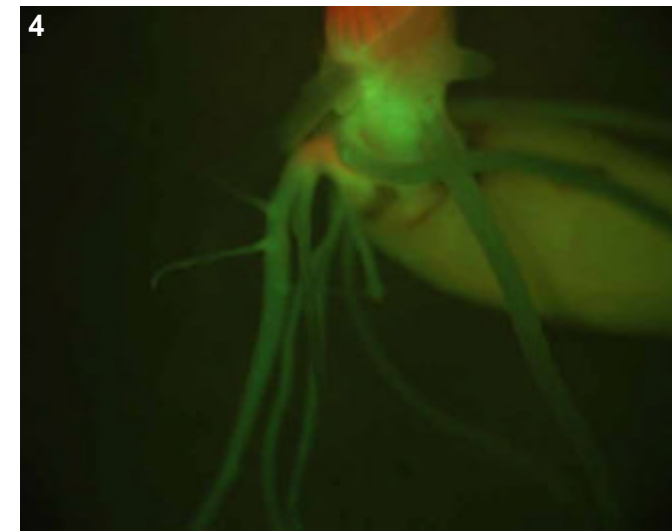
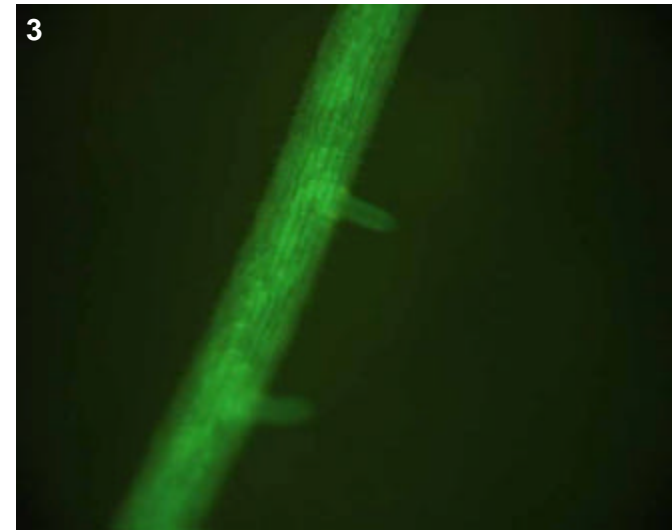
New pattern:

No GFP detected

T1 in greenhouse?  
YES, 2 GFP+ plants

Confocal?

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

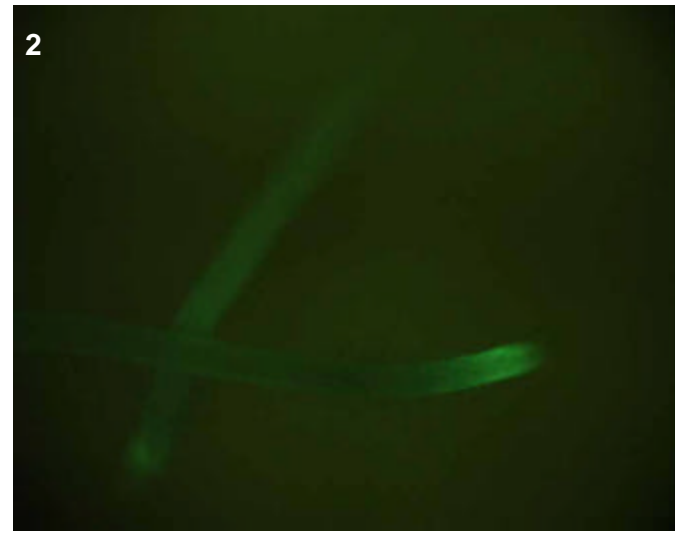
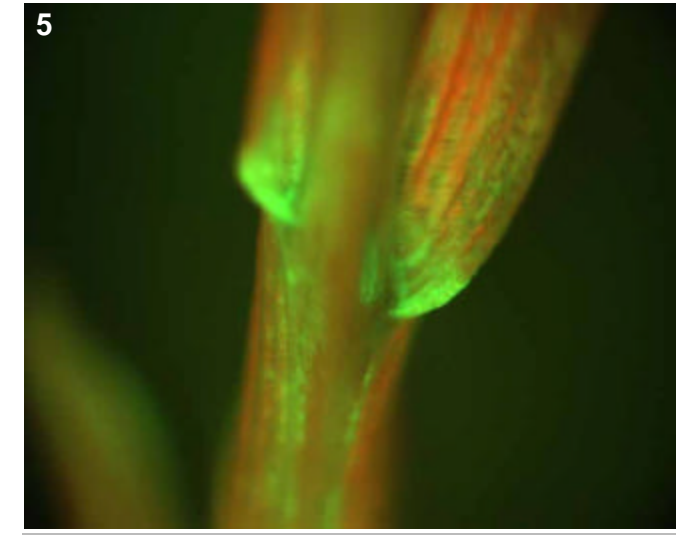
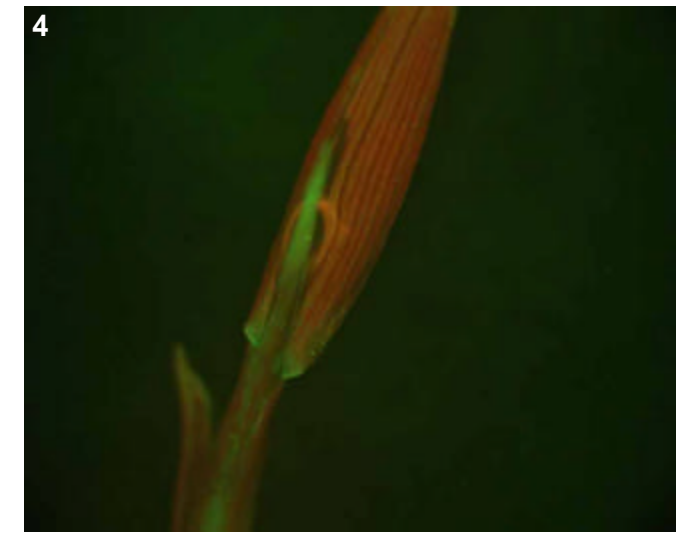
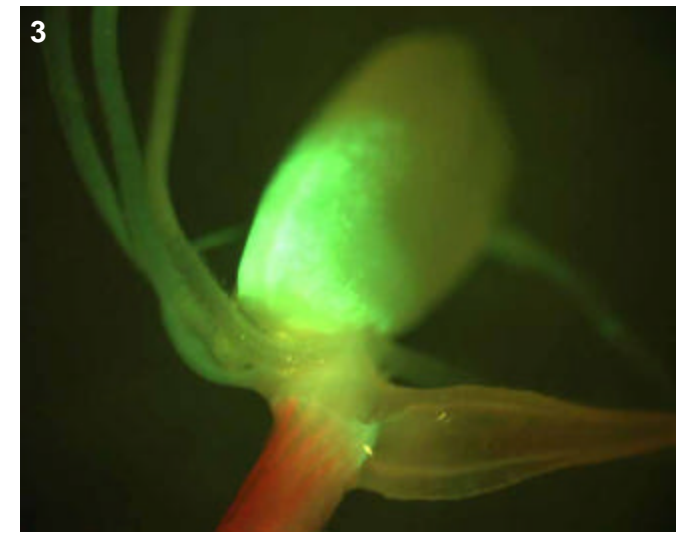
Note the bright horizontal vascular elements in picture 5.

# Genotype: AST B05

Screened	Expression	Pictures
<input type="checkbox"/> T0 mature plant	<input type="checkbox"/> None	T0 mature plant: <input type="text"/>
<input checked="" type="checkbox"/> T1 seed	<input checked="" type="checkbox"/> Bright	T1 seed/seedling: 1-5
<input checked="" type="checkbox"/> T1 seedling	<input type="checkbox"/> Medium	T1 mature plant: <input type="text"/>
<input type="checkbox"/> T1 mature plants	<input type="checkbox"/> Weak	
	<input type="checkbox"/> Unsure	

T0 Flower	T0 Blade	T1 Seed	T1 Seedling
<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> YES	<input checked="" type="checkbox"/> YES
<input type="checkbox"/> POSSIBLE	<input type="checkbox"/> POSSIBLE	<input type="checkbox"/> POSSIBLE	<input type="checkbox"/> POSSIBLE
<input type="checkbox"/> Stamen: anther	<input type="checkbox"/> Vascular	<input type="checkbox"/> Coleorhiza	<input type="checkbox"/> S. vascular
<input type="checkbox"/> Stamen: filament	<input type="checkbox"/> Guard cells	<input checked="" type="checkbox"/> Scutellum	<input checked="" type="checkbox"/> Seminal root
<input type="checkbox"/> Carpel: stigma	<input type="checkbox"/> Trichomes	<input type="checkbox"/> Aleurone/Endo.	<input checked="" type="checkbox"/> Crown roots
<input type="checkbox"/> Carpel: style	<input type="checkbox"/> Mesophyll	<input type="checkbox"/> Vasc. bundle	<input type="checkbox"/> Lateral roots
<input type="checkbox"/> Carpel: ovary			<input type="checkbox"/> Root cap
<input type="checkbox"/> Carpel: base			<input type="checkbox"/> Root apex
<input type="checkbox"/> Lemma/palea			<input type="checkbox"/> R. stele
<input type="checkbox"/> Lodicule			<input type="checkbox"/> R. cortex/end.
<input type="checkbox"/> Rachilla			<input checked="" type="checkbox"/> R. epidermis
<input type="checkbox"/> Sterile lemma			<input type="checkbox"/> Constitutive
<input type="checkbox"/> Pedicel			
<input type="checkbox"/> Guard cells			
<input type="checkbox"/> Trichomes			
<input type="checkbox"/> Vascular			

T1 Mature
<input type="checkbox"/> T0 pattern verified:
<input type="checkbox"/> T0 pattern verified plus:
<input type="checkbox"/> New pattern:
<input type="checkbox"/> No GFP detected
<input type="checkbox"/> T1 in greenhouse? YES, 2 GFP+ plants
<input type="checkbox"/> Confocal?
Number T2 seed produced: <input type="text"/>



**T0 comments**

**T1 seed comments**  
2/4 seeds had weak expression

**T1 seedling comments**  
Could be epidermal expression in both root (pic 2) and shoot (pics 4-5). The plants were small and may have a dwarf mutant phenotype.

# Genotype: AST B07

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant:   
 T1 seed/seedling: 1-8  
 T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle  
 Embryo

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis  
 Constitutive

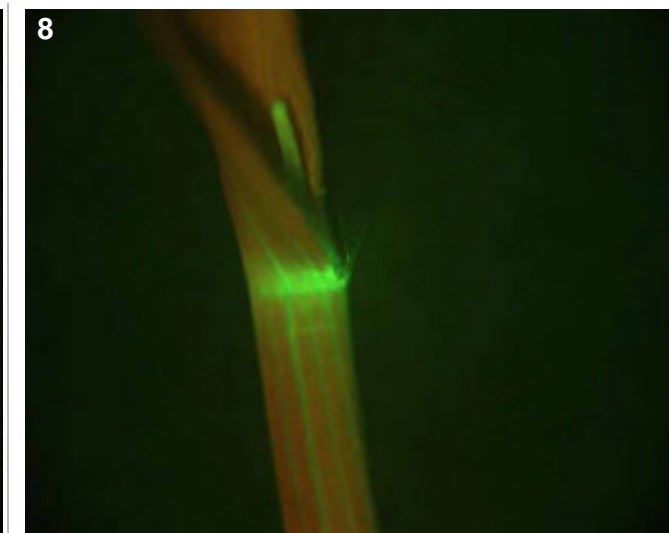
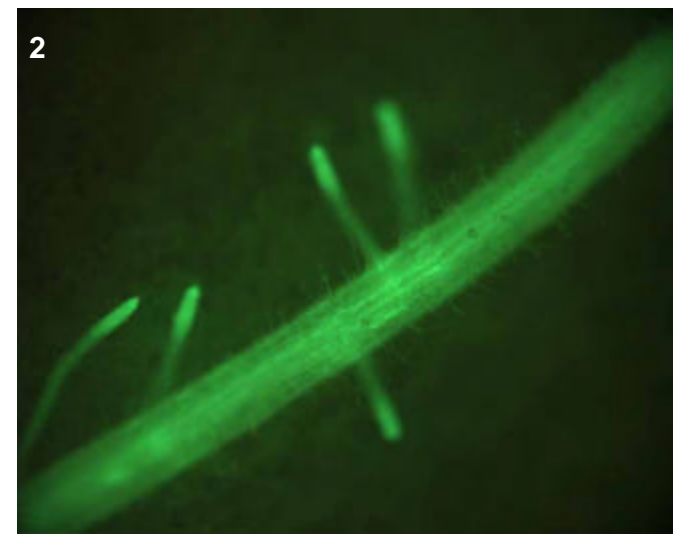
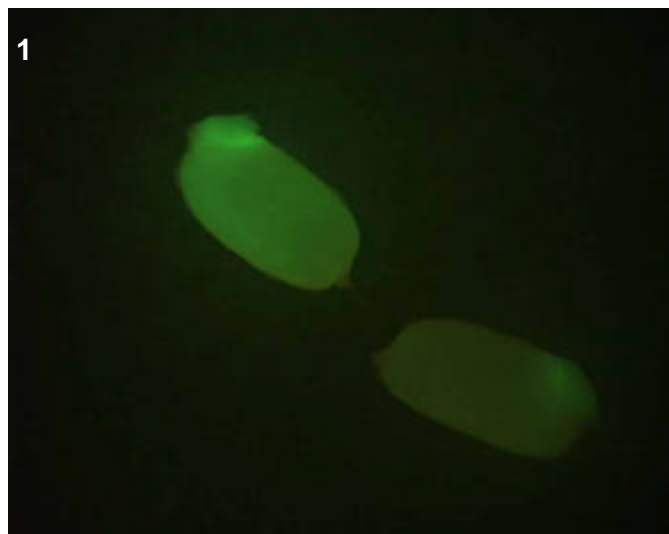
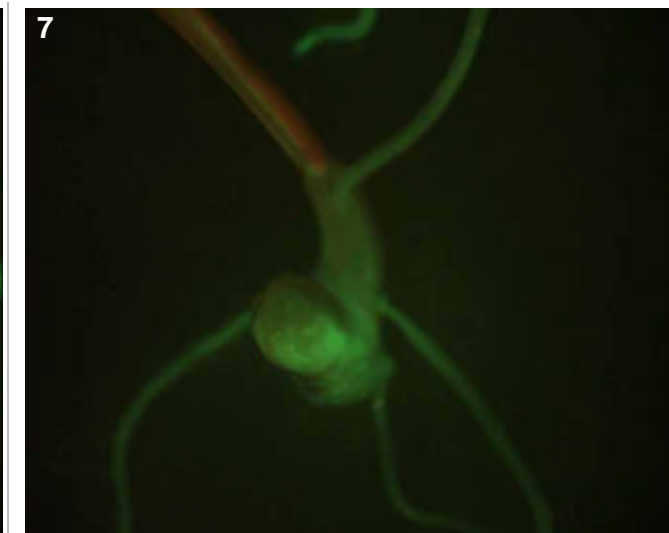
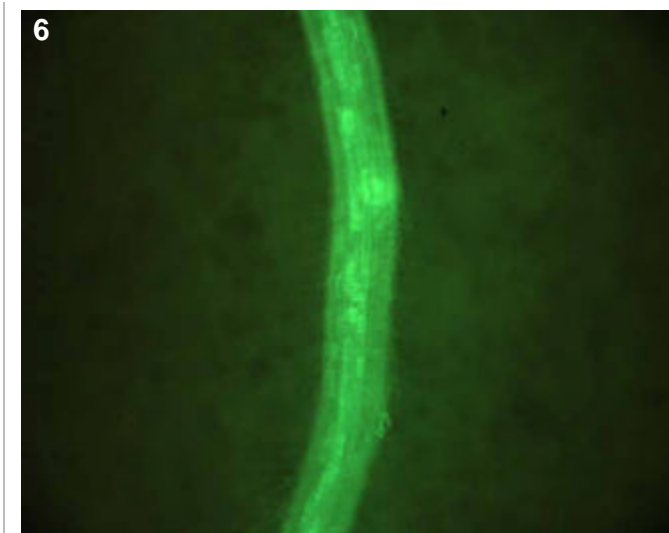
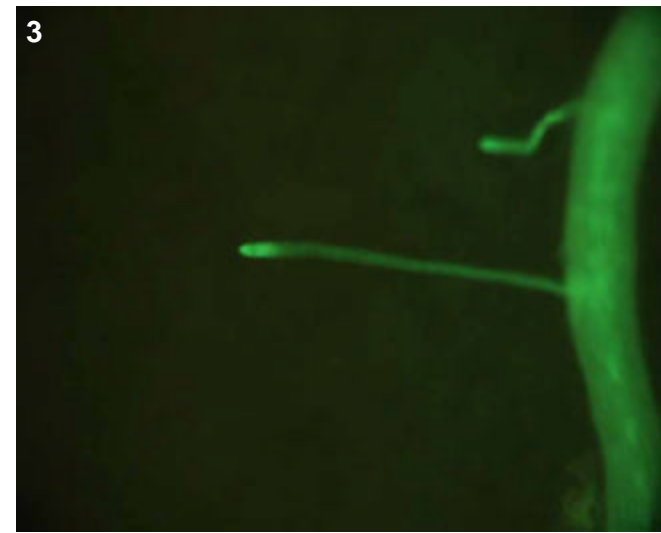
Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

**T1 Mature**

T0 pattern verified:  
 T0 pattern verified plus:  
 New pattern:  
 No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants  Confocal?

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
 3/5 seeds had expression

**T1 seedling comments**

# Genotype: AST C12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

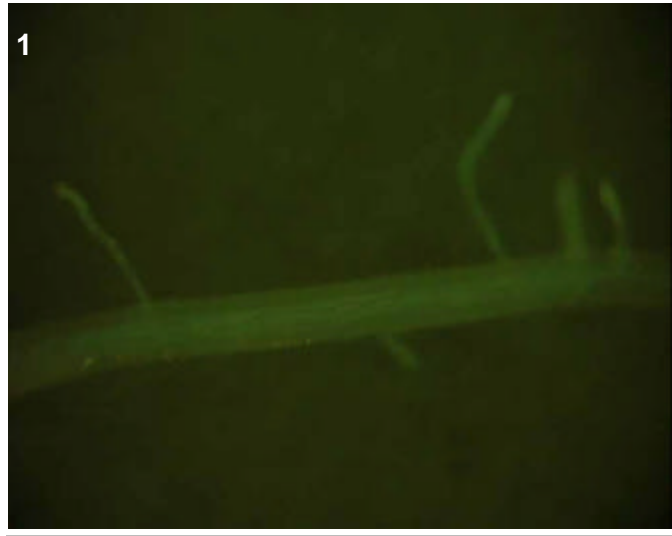
- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

Number T2 seed produced:



## T0 comments

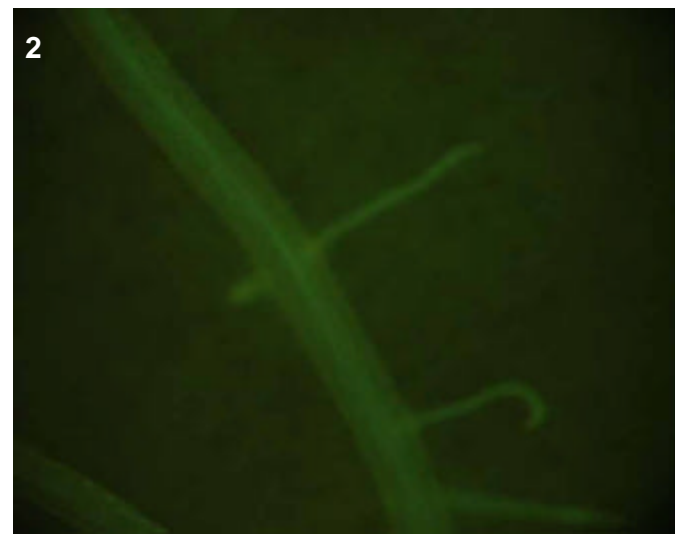
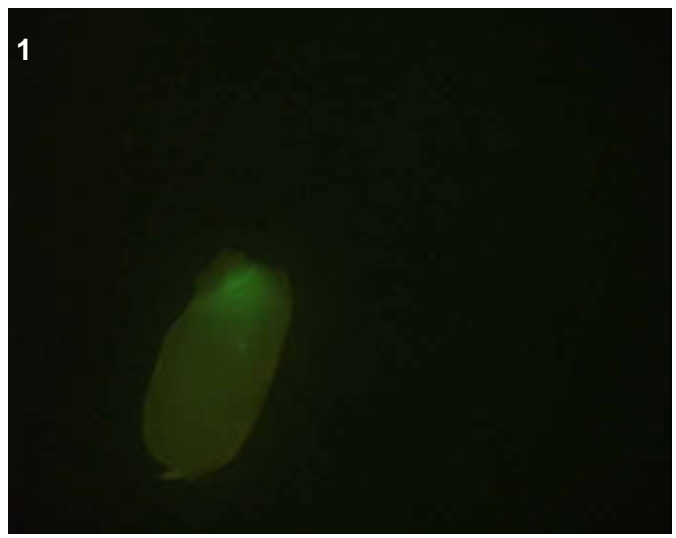
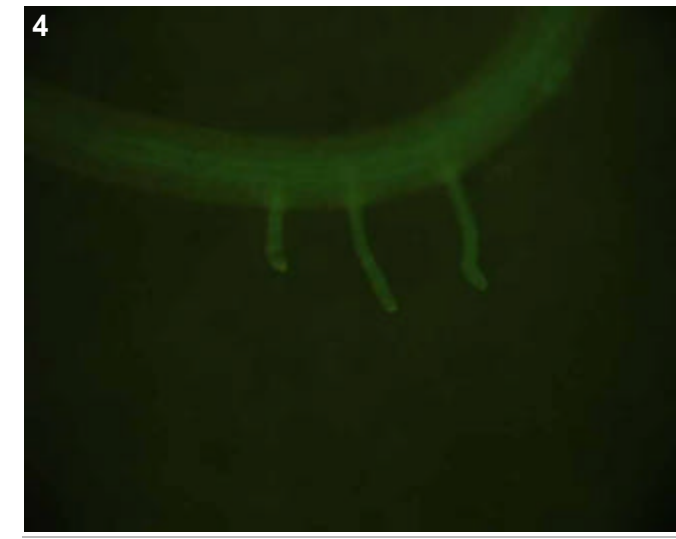
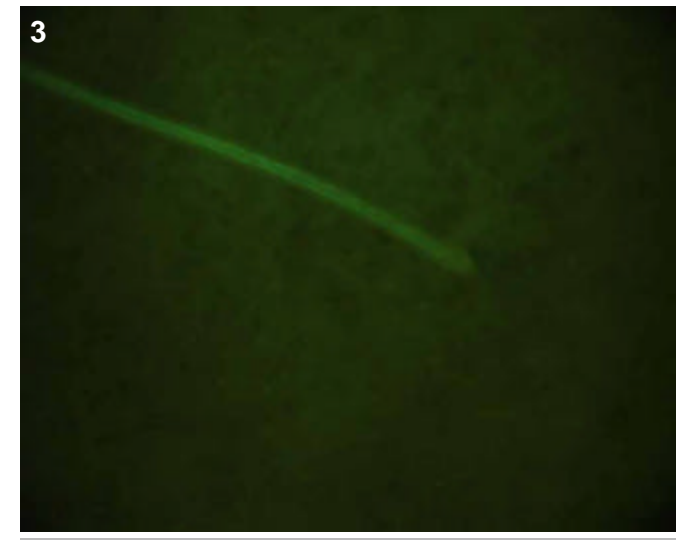
## T1 seed comments

## T1 seedling comments

# Genotype: **AST F01**

<b>Screened</b>	<b>Expression</b>	<b>Pictures</b>
<input type="checkbox"/> T0 mature plant <input checked="" type="checkbox"/> T1 seed <input checked="" type="checkbox"/> T1 seedling <input type="checkbox"/> T1 mature plants	<input type="checkbox"/> None <input type="checkbox"/> Bright <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Weak <input type="checkbox"/> Unsure	T0 mature plant: <input type="text"/> T1 seed/seedling: 1-4 T1 mature plant: <input type="text"/>

<b>T0 Flower</b> <input type="checkbox"/> YES <input type="checkbox"/> POSSIBLE  <input type="checkbox"/> Stamen: anther <input type="checkbox"/> Stamen: filament <input type="checkbox"/> Carpel: stigma <input type="checkbox"/> Carpel: style <input type="checkbox"/> Carpel: ovary <input type="checkbox"/> Carpel: base <input type="checkbox"/> Lemma/palea <input type="checkbox"/> Lodicule <input type="checkbox"/> Rachilla <input type="checkbox"/> Sterile lemma <input type="checkbox"/> Pedicel <input type="checkbox"/> Guard cells <input type="checkbox"/> Trichomes <input type="checkbox"/> Vascular	<b>T0 Blade</b> <input type="checkbox"/> YES <input type="checkbox"/> POSSIBLE  <input type="checkbox"/> Vascular <input type="checkbox"/> Guard cells <input type="checkbox"/> Trichomes <input type="checkbox"/> Mesophyll  <b>T0 Sheath</b> <input type="checkbox"/> YES <input type="checkbox"/> POSSIBLE  <input type="checkbox"/> Collar <input type="checkbox"/> Vascular <input type="checkbox"/> Trichomes <input type="checkbox"/> Guard cells <input type="checkbox"/> Mesophyll	<b>T1 Seed</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> POSSIBLE  <input checked="" type="checkbox"/> Embryo  <input type="checkbox"/> Coleorhiza <input type="checkbox"/> Scutellum <input type="checkbox"/> Aleurone/Endo. <input type="checkbox"/> Vasc. bundle  <b>T1 Seedling</b> <input checked="" type="checkbox"/> YES <input type="checkbox"/> POSSIBLE  <input type="checkbox"/> SHOOT <input checked="" type="checkbox"/> ROOT <input type="checkbox"/> ENDOSPERM  <input type="checkbox"/> Coleoptile <input type="checkbox"/> Sheath tissue <input type="checkbox"/> Blade tissue <input type="checkbox"/> Leaf tip <input type="checkbox"/> Collar <input type="checkbox"/> Trichomes <input type="checkbox"/> Guard cells  <input type="checkbox"/> S. vascular <input checked="" type="checkbox"/> Seminal root <input checked="" type="checkbox"/> Crown roots <input checked="" type="checkbox"/> Lateral roots <input type="checkbox"/> Root cap <input type="checkbox"/> Root apex <input checked="" type="checkbox"/> R. stele <input type="checkbox"/> R. cortex/end. <input type="checkbox"/> R. epidermis  <input type="checkbox"/> Constitutive	<b>T1 Mature</b> <input type="checkbox"/> T0 pattern verified: <input type="checkbox"/> T0 pattern verified plus: <input type="checkbox"/> New pattern:  <input type="checkbox"/> No GFP detected  <b>T1 in greenhouse?</b> YES, 3 GFP+ plants <b>Confocal?</b> <input type="checkbox"/>  <b>Number T2 seed produced:</b> <input type="text"/>
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**T0 comments**

**T1 seed comments**  
3/5 seeds had expression

**T1 seedling comments**

# Genotype: AST G01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

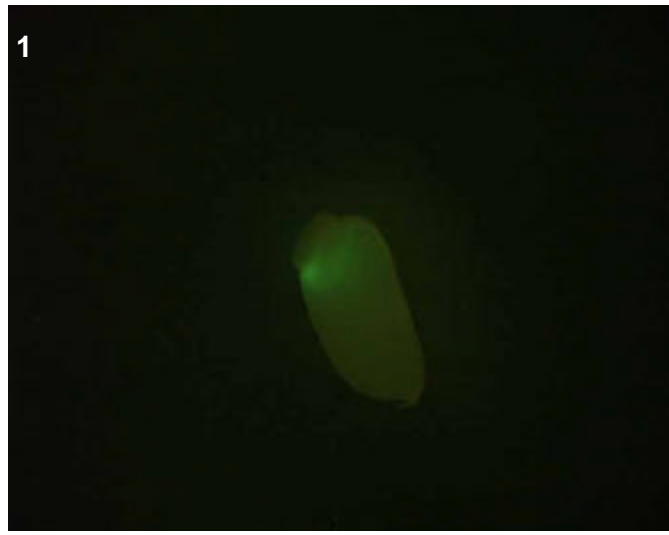
No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

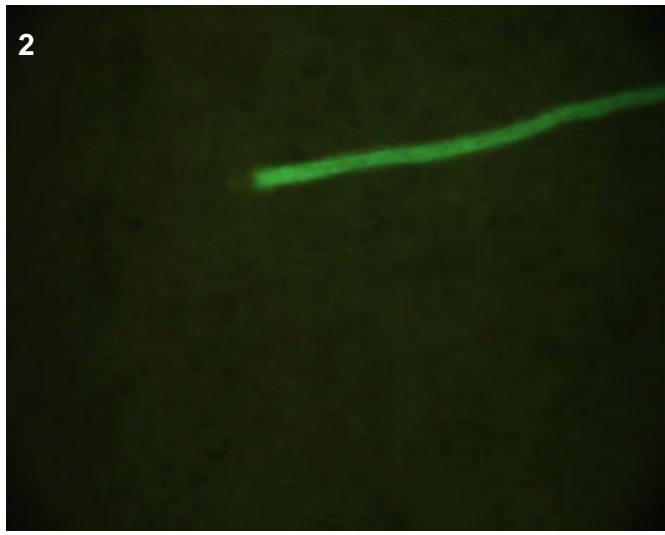
**Confocal?**

Number T2 seed produced:

1



2



**T0 comments**

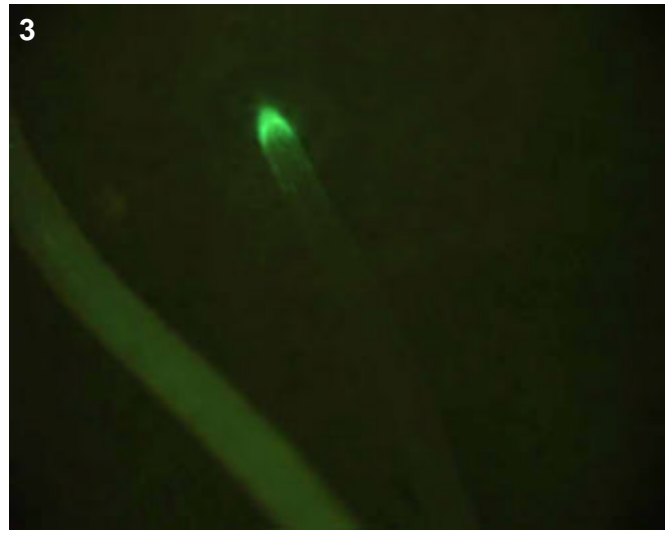
**T1 seed comments**

3/4 seeds had bright expression mostly to low side of scutellum. Seeds unusually thin and small.

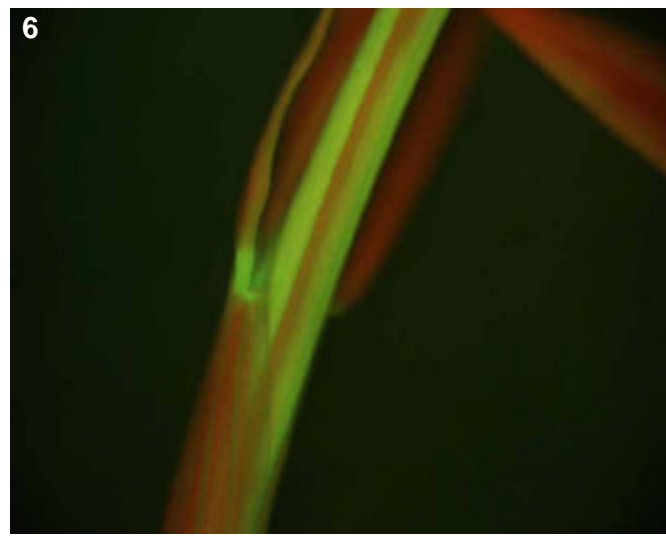
**T1 seedling comments**

The shoot may have epidermal expression (see pictures 5-6), as well as the root.

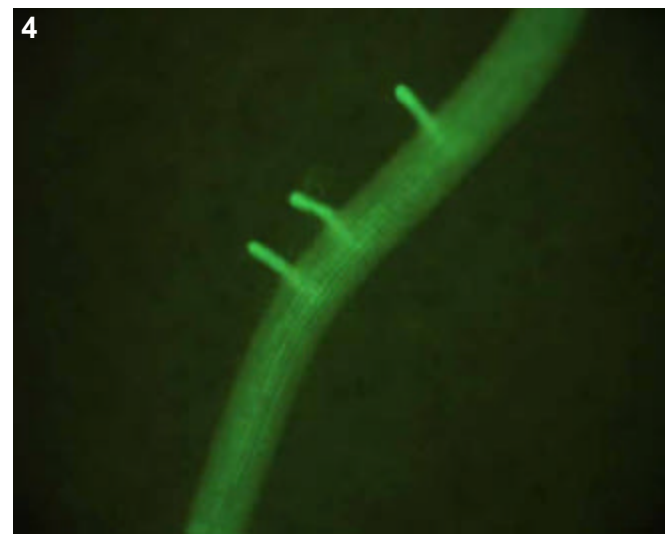
3



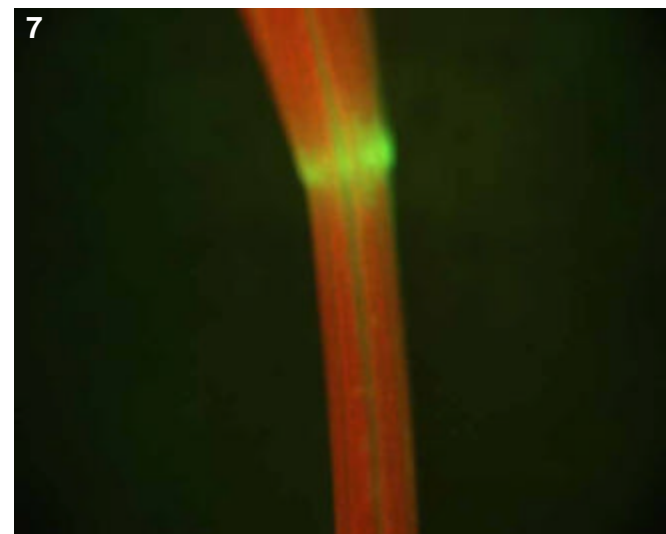
6



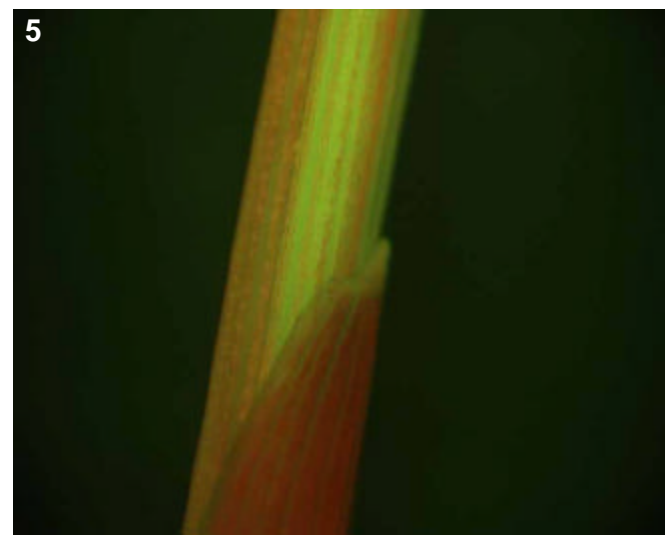
4



7



5





# Genotype: AST G02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

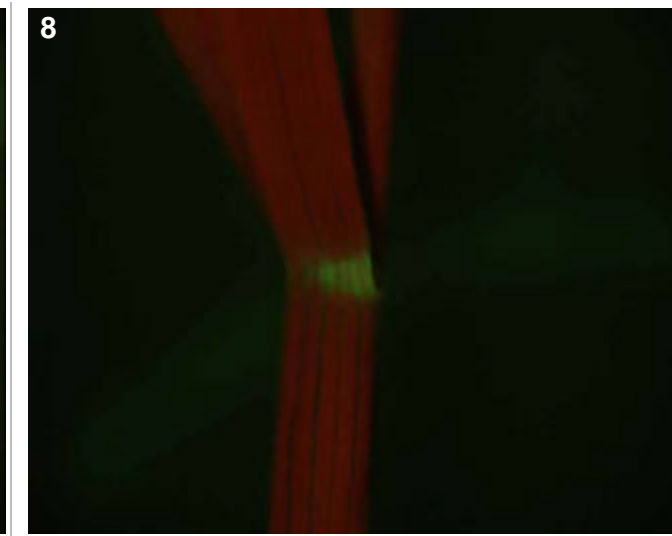
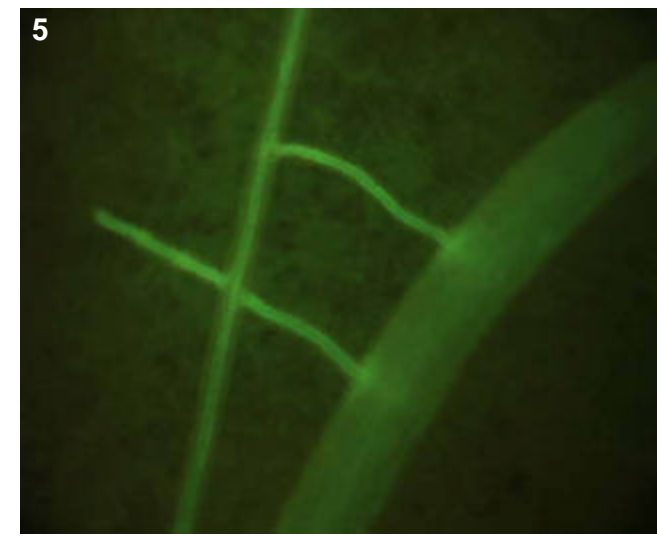
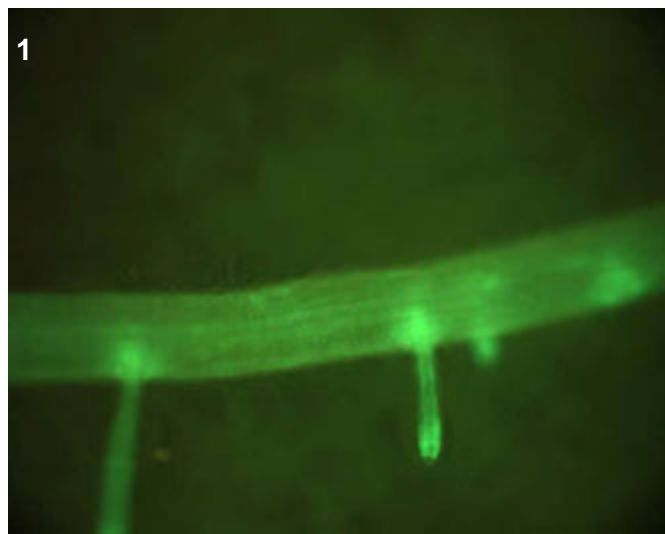
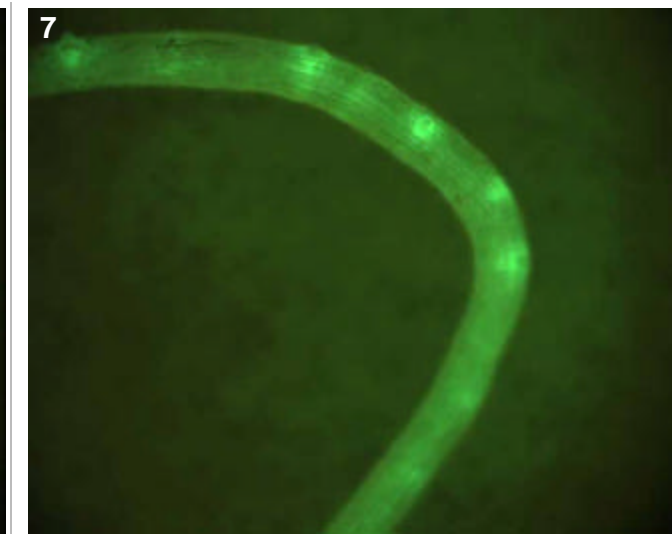
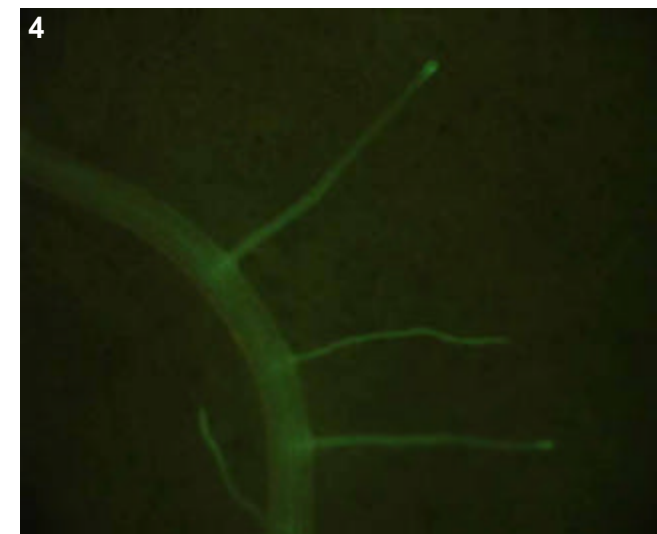
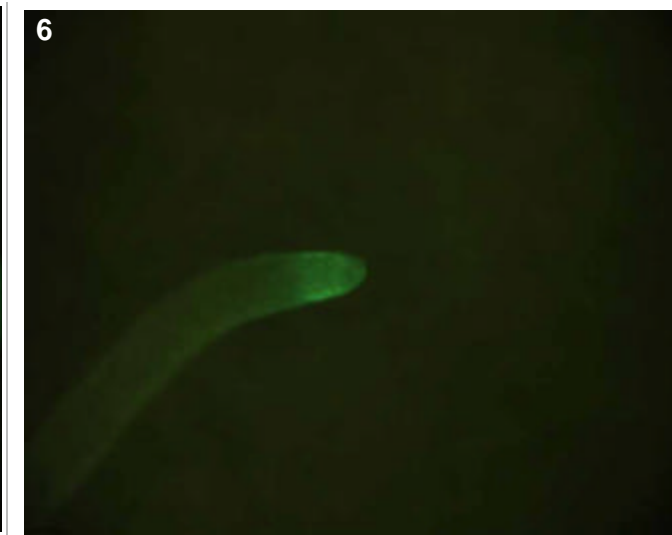
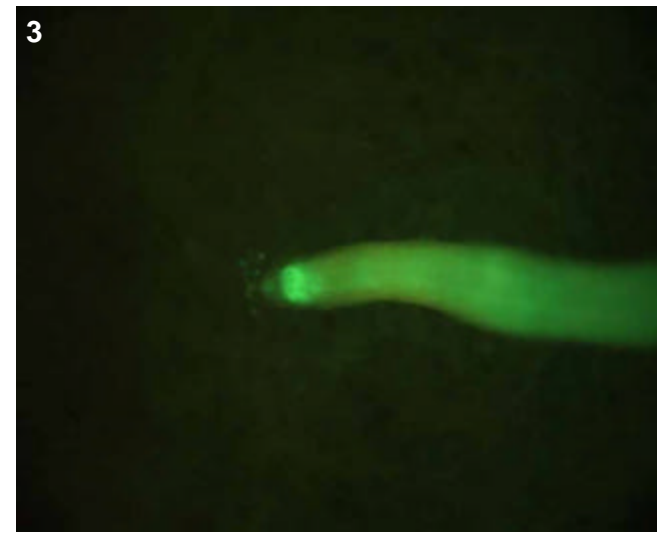
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3 or 4/5 seeds had faint expression in scutellum (no picture taken)

## T1 seedling comments

Looks like a bright root cortical line (pic 1) with epidermal expression around tips of crowns (pic 2). GFP is most bright in the cell division zone (pic 4).

# Genotype: AST H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

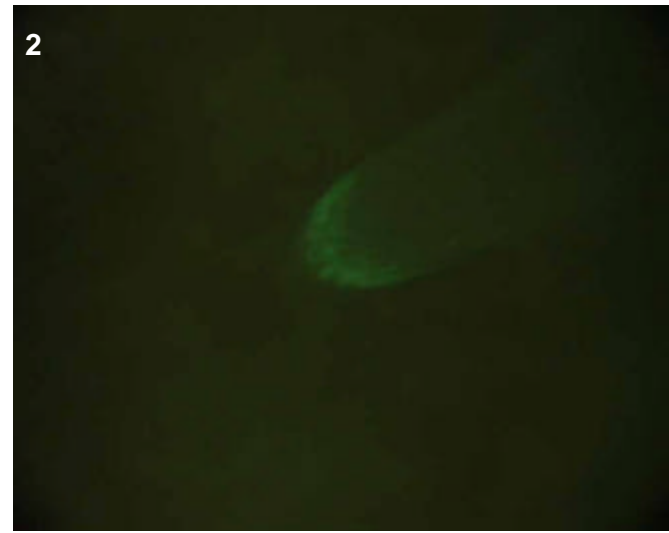
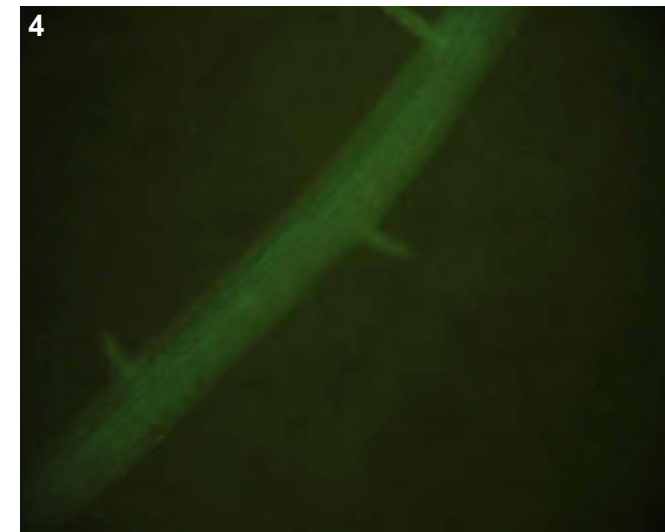
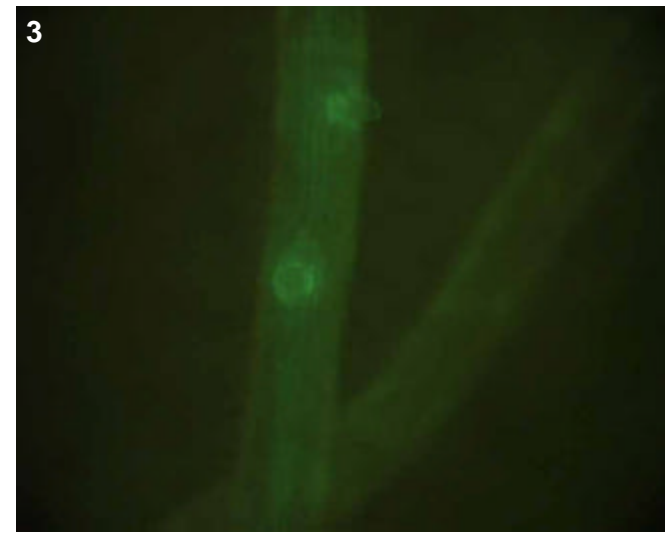
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/5 seeds had expression

## T1 seedling comments

# Genotype: AST H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

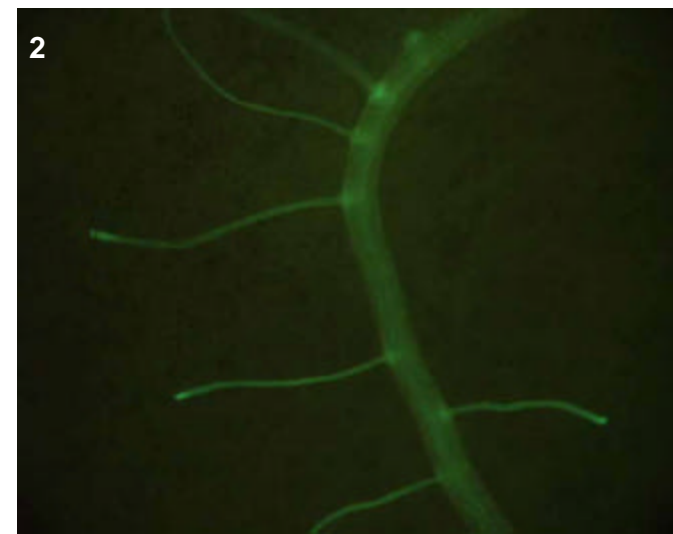
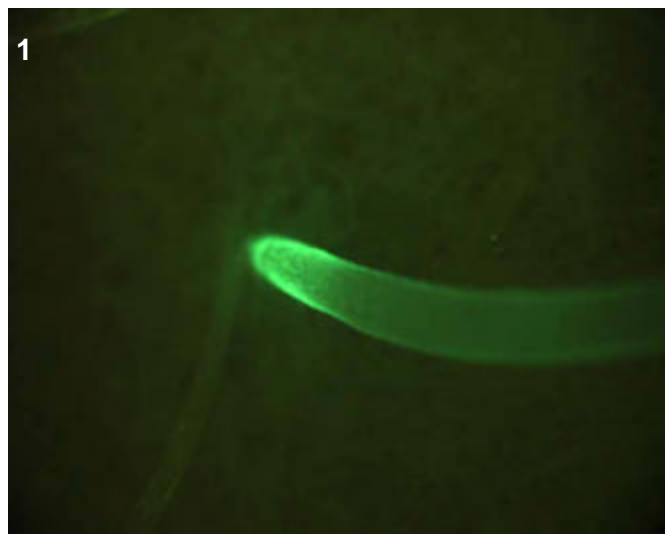
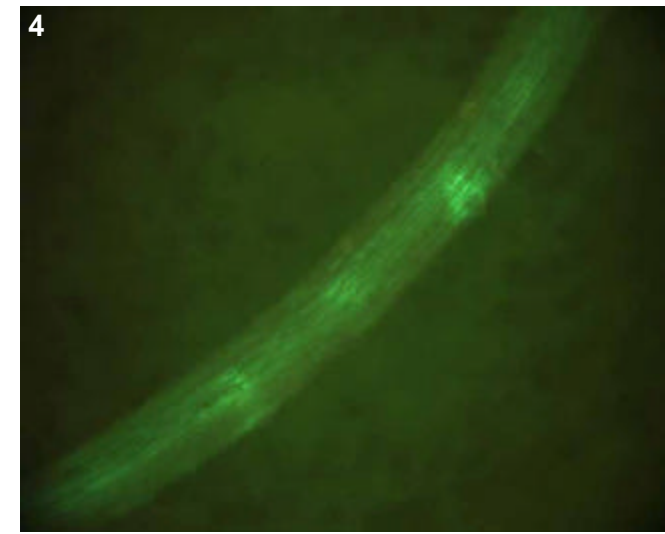
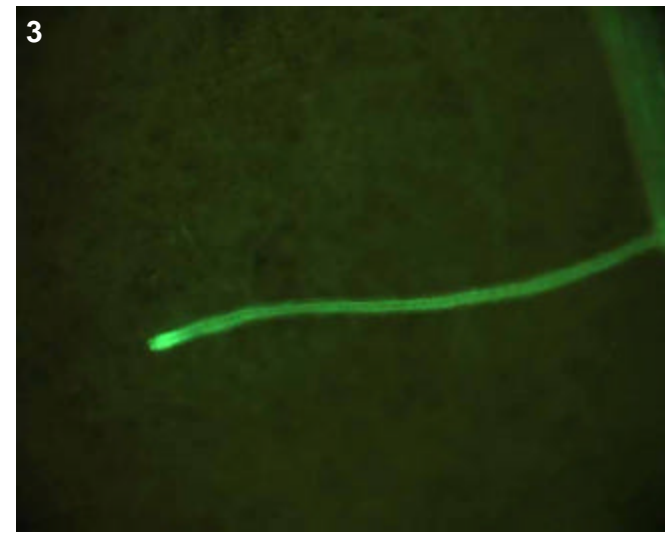
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Surprisingly bright expression for a root-specific line.

# Genotype: ASU A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

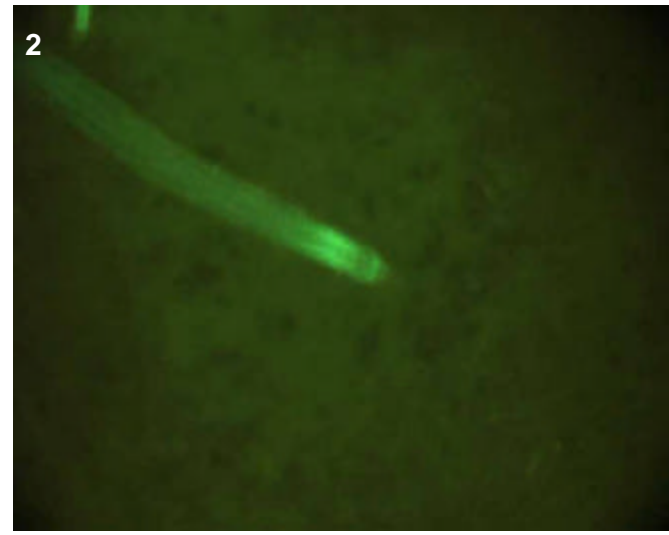
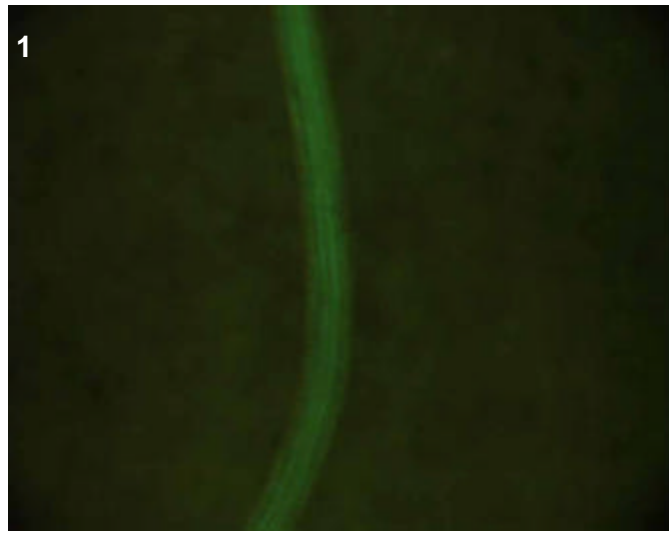
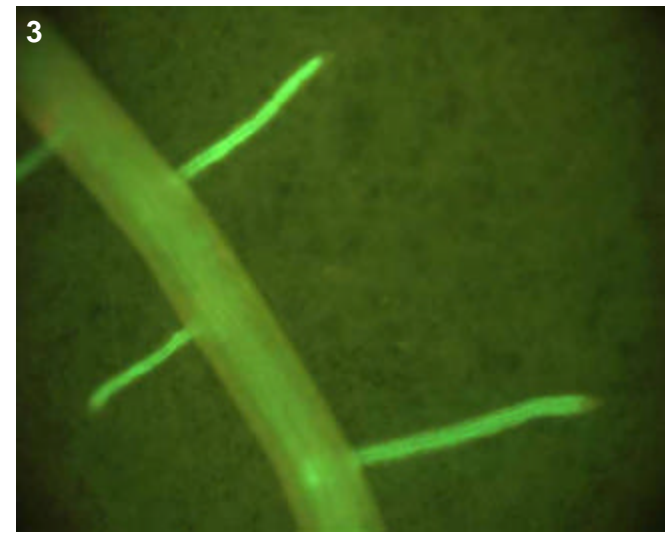
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**  WIP

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
 Interesting expression in tips of crown roots (pic 2).

# Genotype: ASU A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

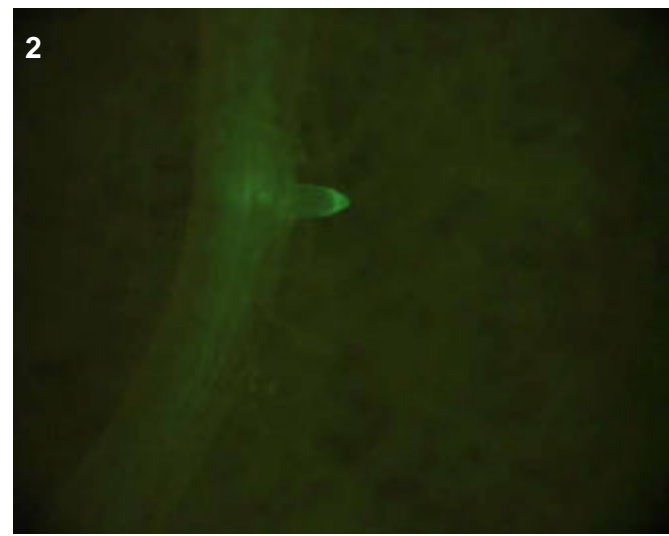
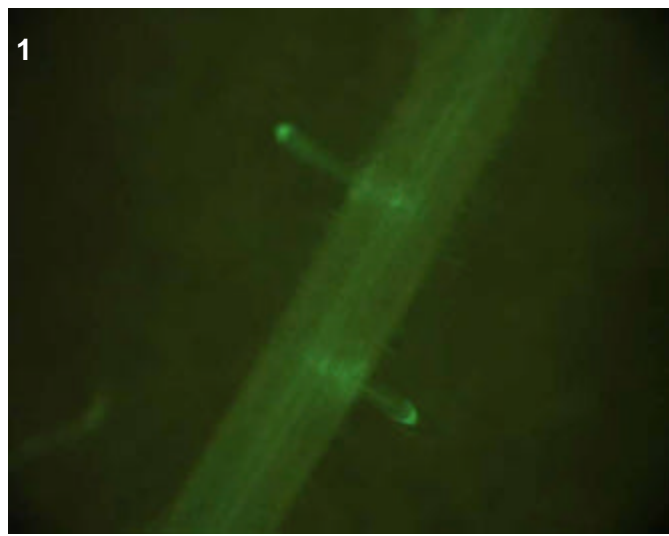
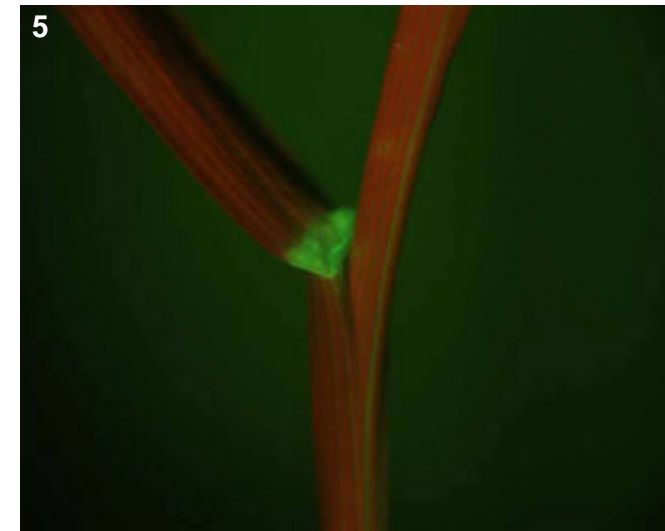
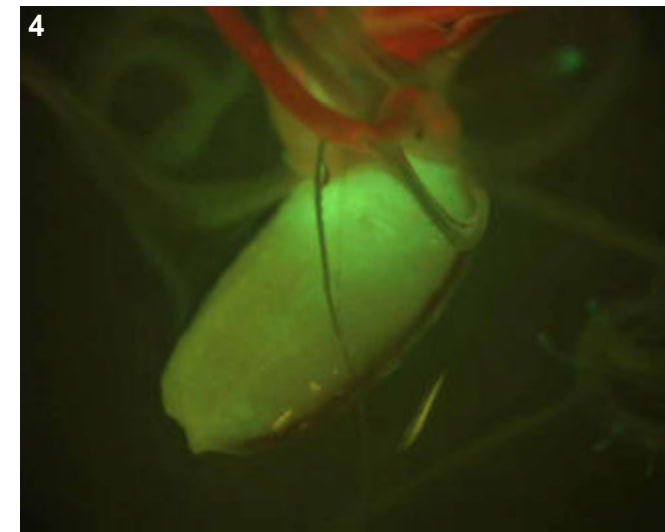
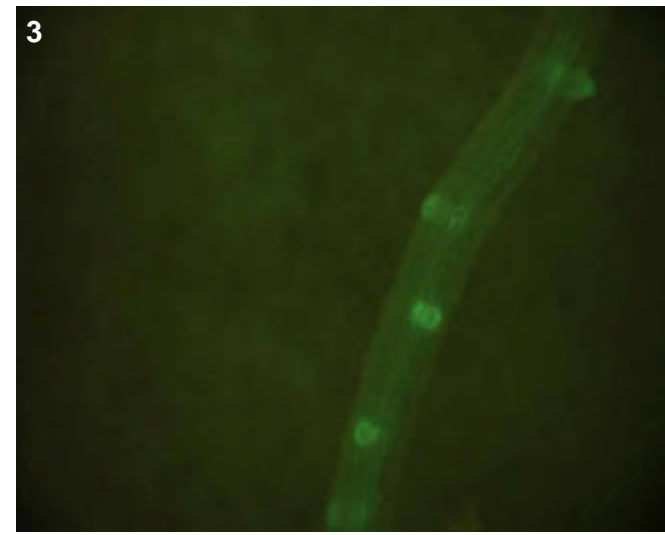
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASU A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

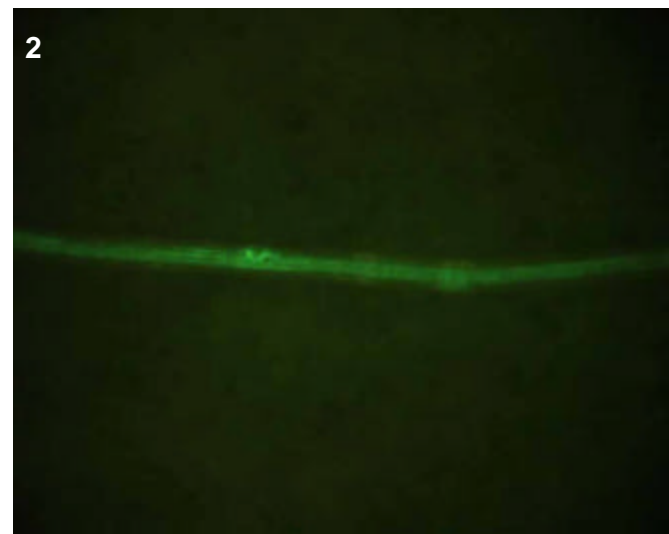
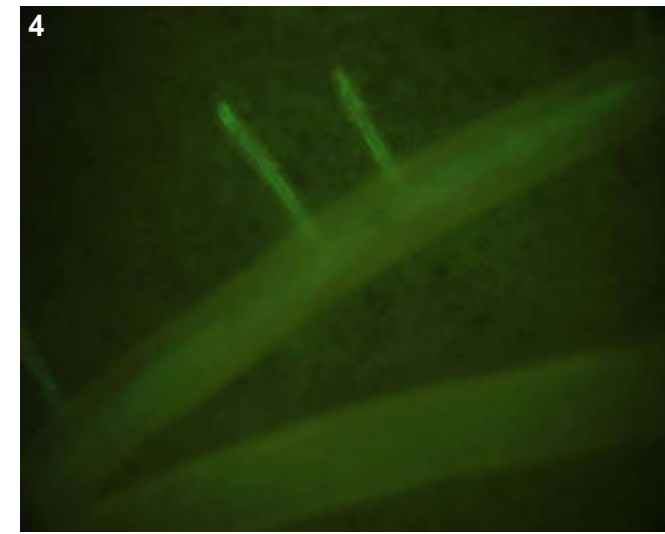
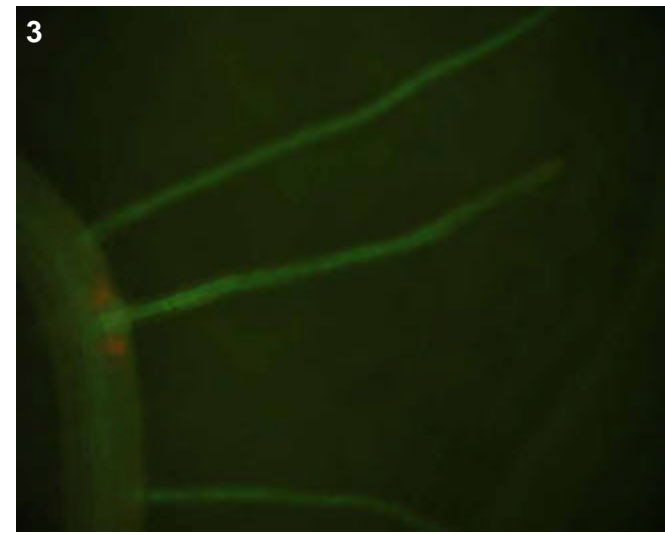
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had faint expression

## T1 seedling comments

Clearly a root-stele specific line (pics 2-4).

# Genotype: ASU B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

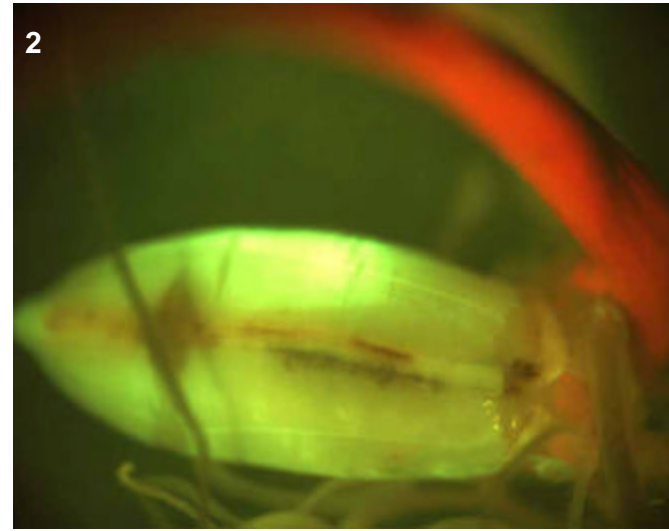
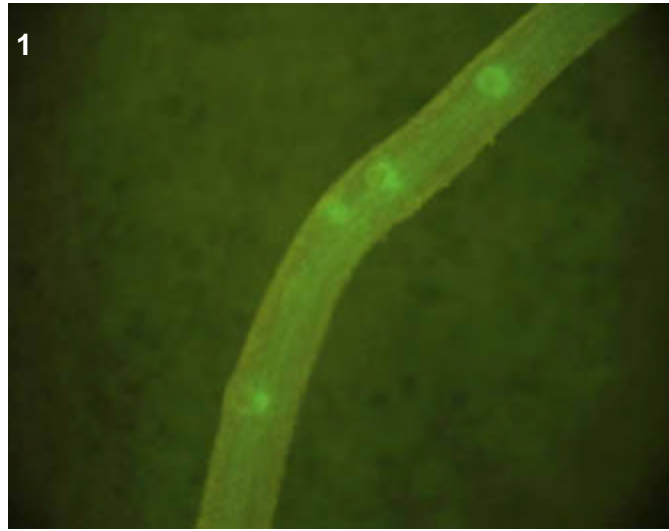
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Most of the root expression was around the emerging lateral roots (pic 1), however there appears to be more faint expression in the seminal root, perhaps in the pericycle.

# Genotype: ASU B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

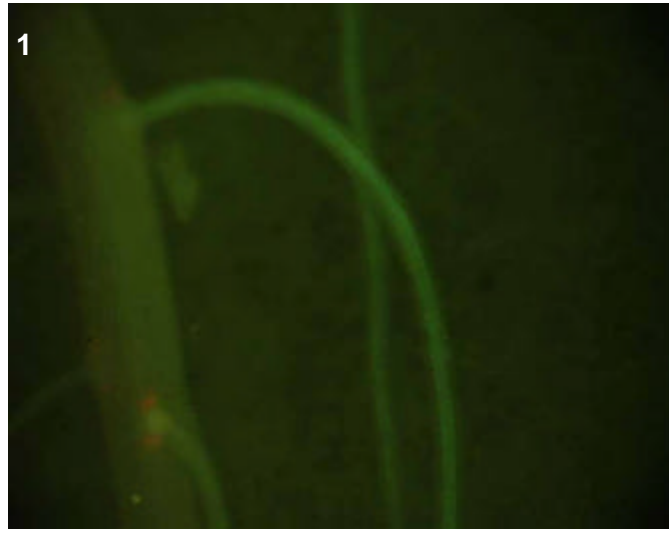
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASU B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

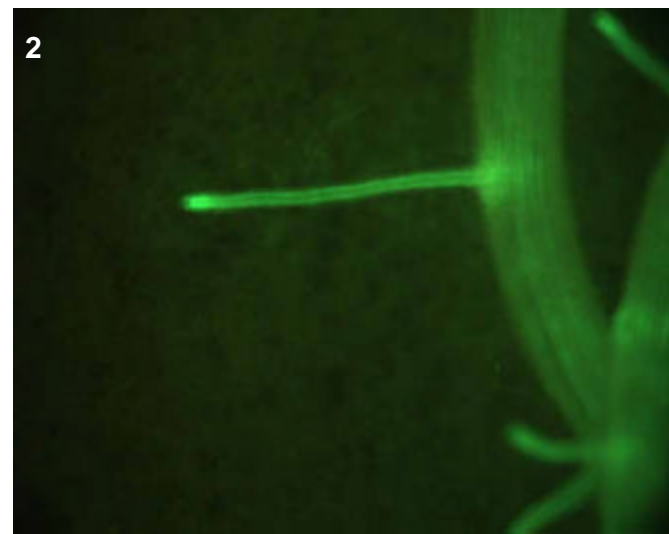
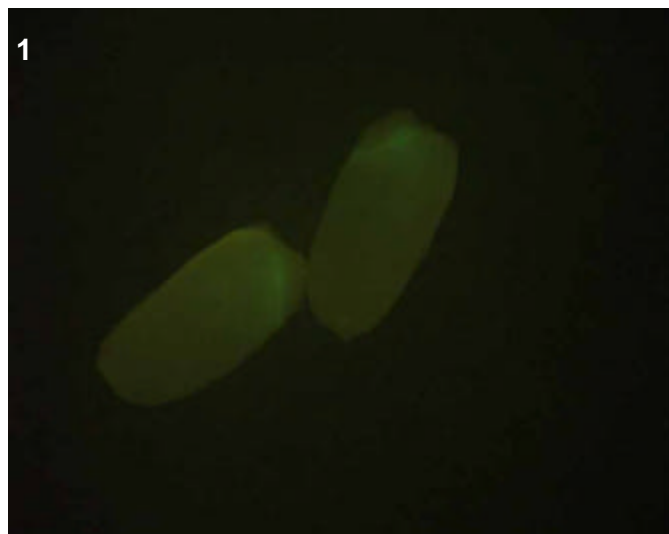
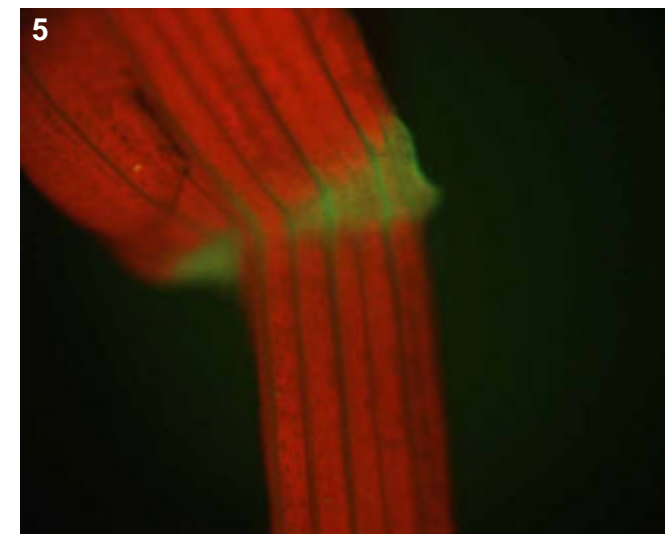
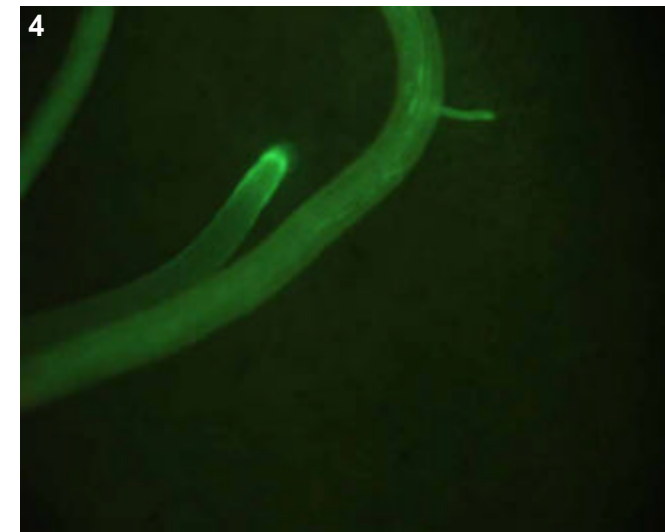
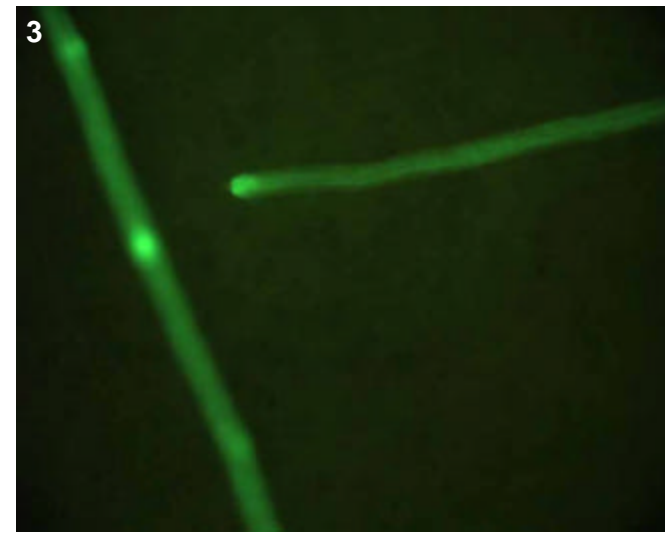
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/3 seeds had medium expression

## T1 seedling comments

# Genotype: ASU B10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

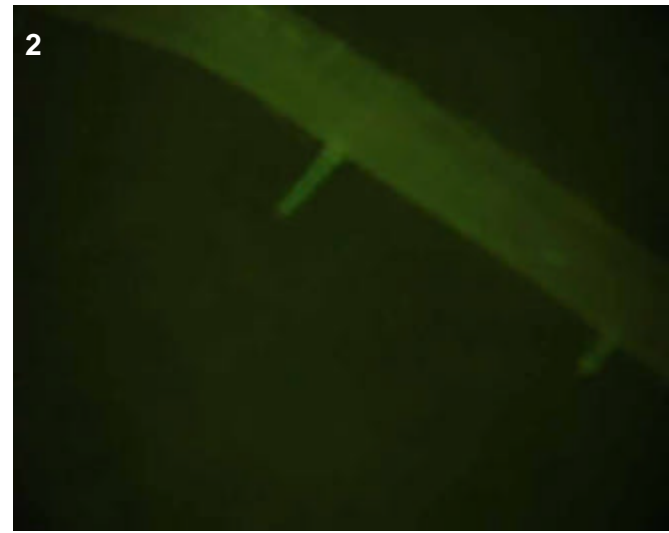
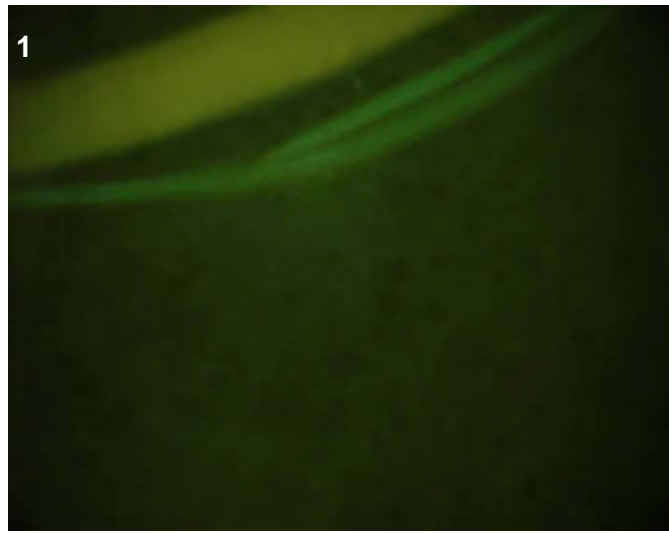
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASU C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

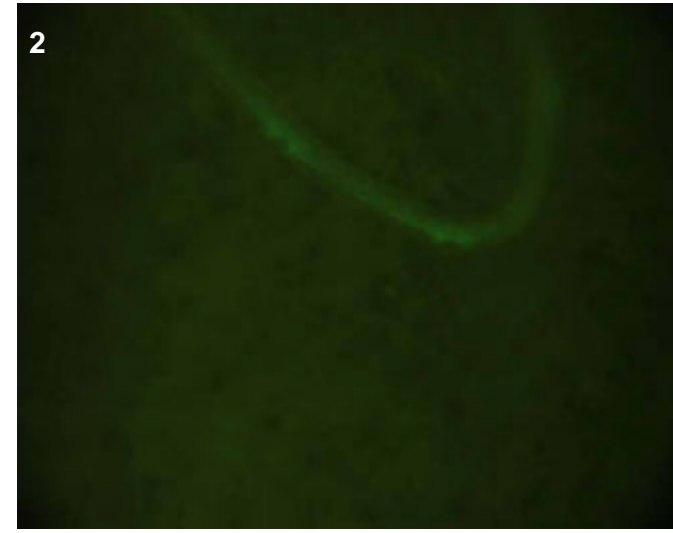
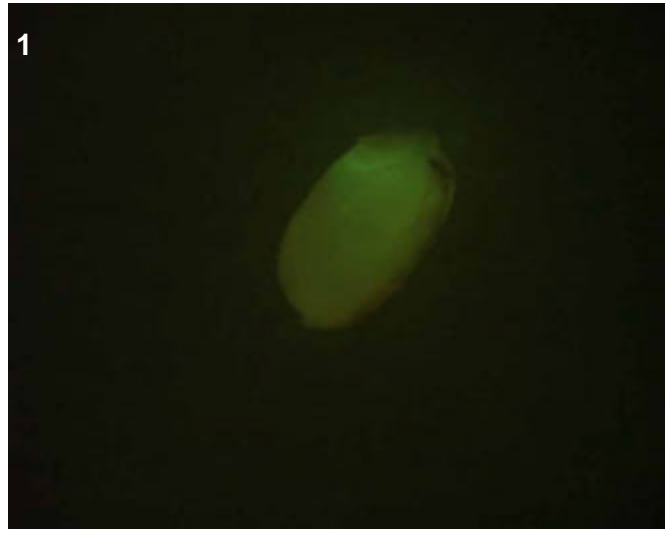
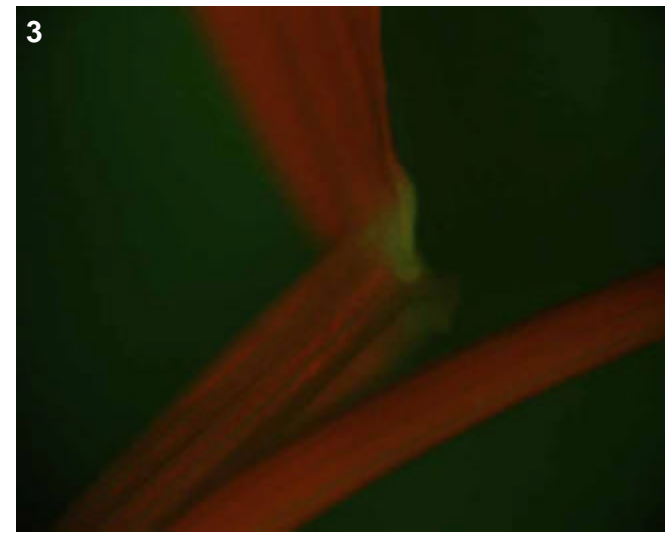
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had expression

## T1 seedling comments

Seedling expression was quite faint (pics 2-3).

# Genotype: ASU C12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

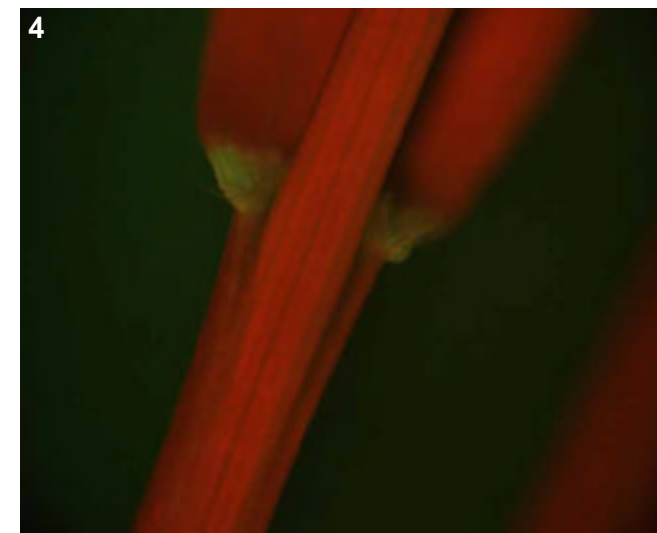
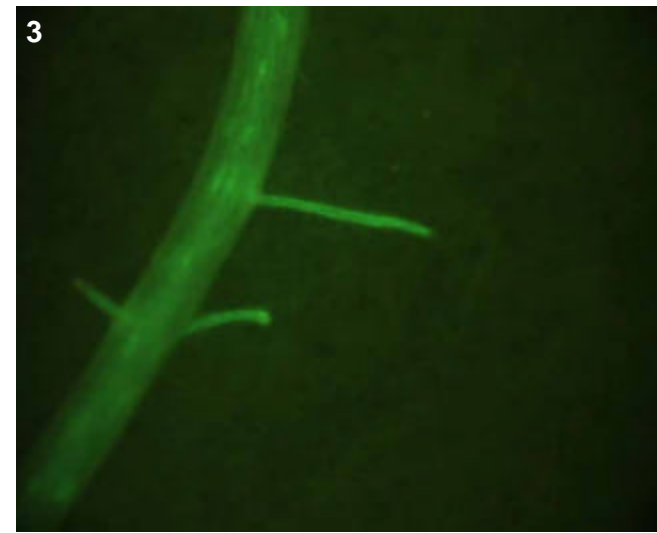
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright root expression (pics 1-3), faint collar (pic 4).

# Genotype: ASU D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

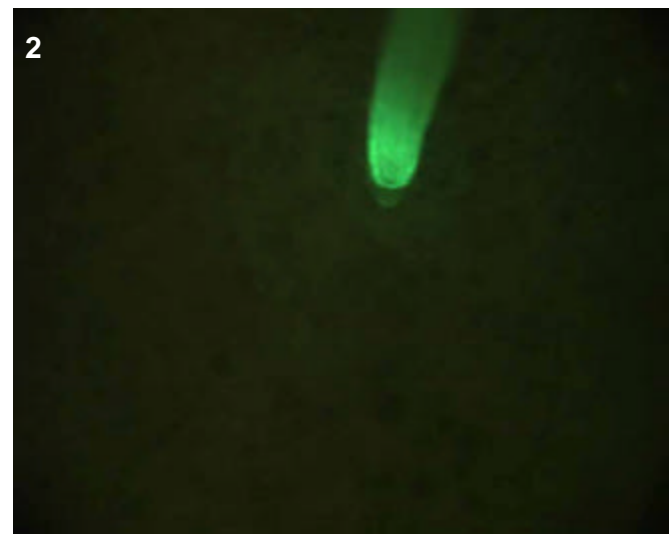
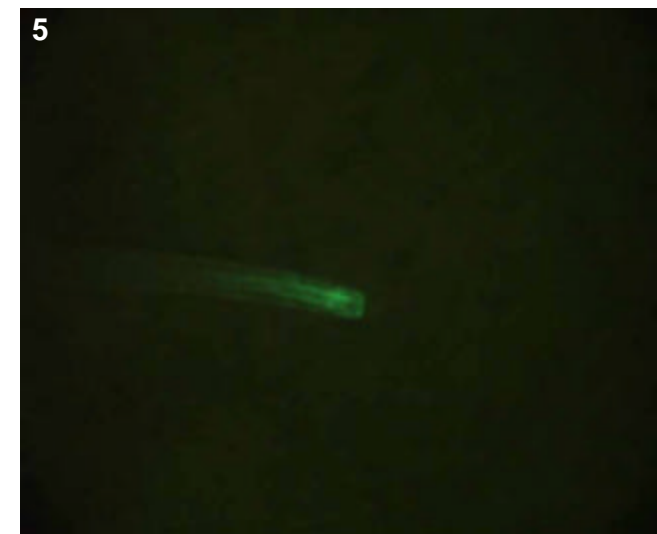
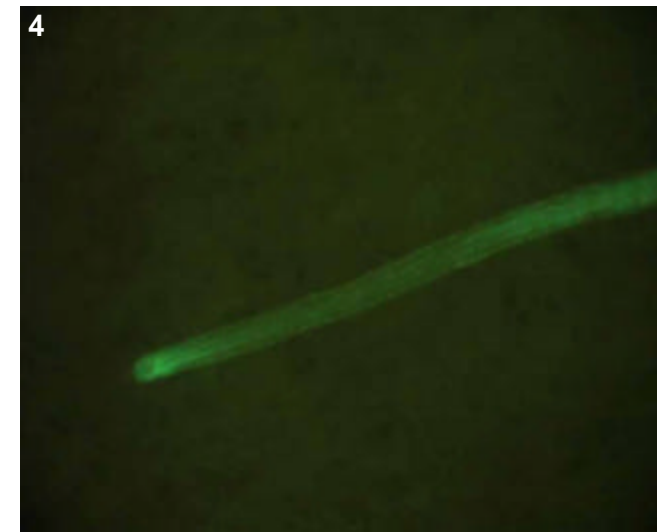
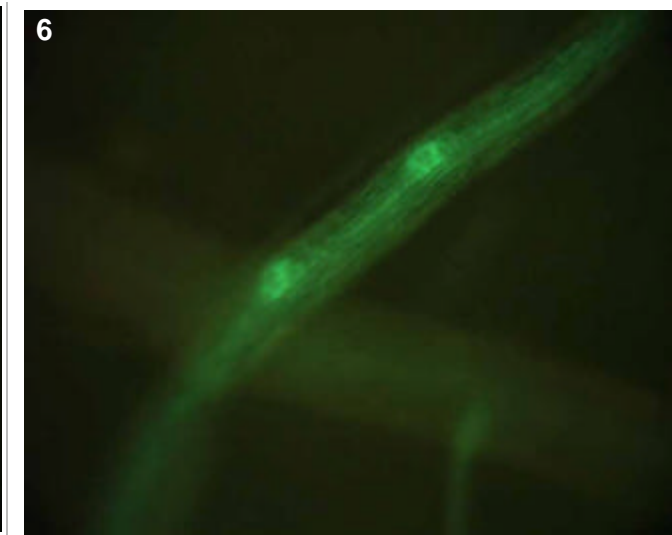
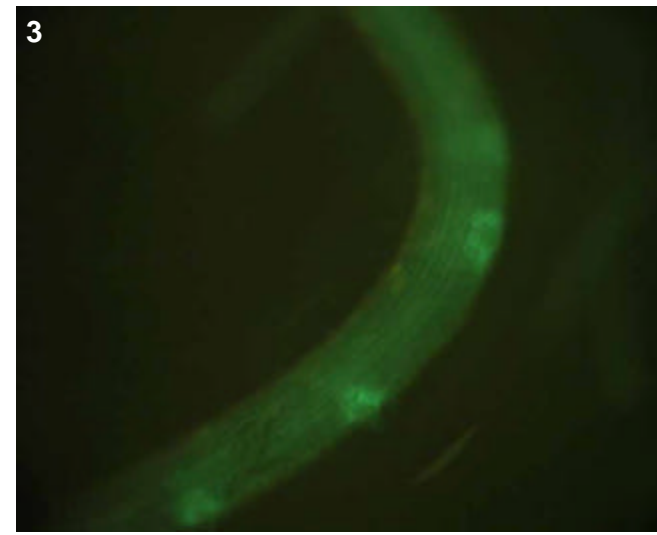
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

Number T2 seed produced:



## T0 comments

## T1 seed comments

3 or 4/5 seeds had faint expression in the scutellum

## T1 seedling comments

Tips of crowns (see pictures 4-5) could be interesting to confocal.

# Genotype: ASU D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

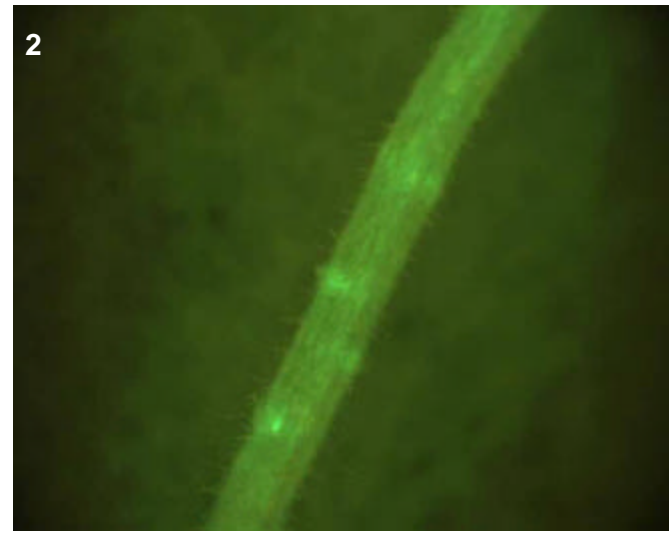
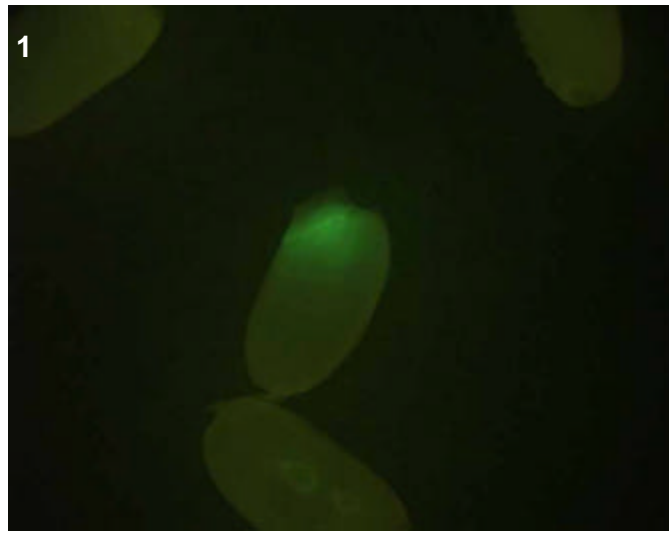
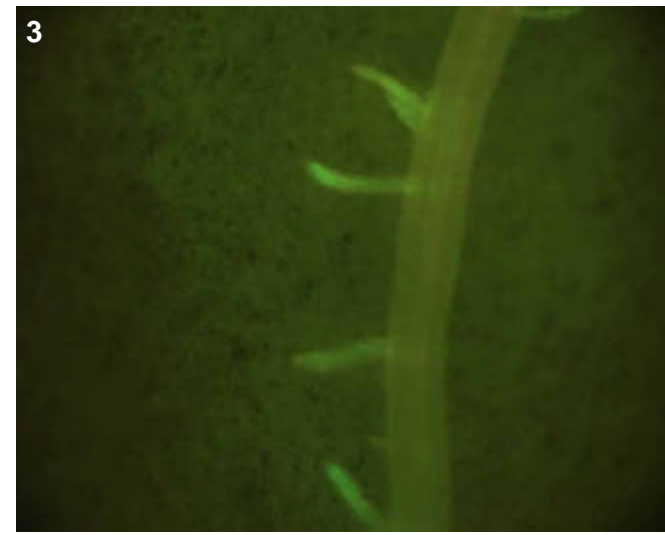
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/5 seeds had bright expression

## T1 seedling comments

# Genotype: ASU D07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

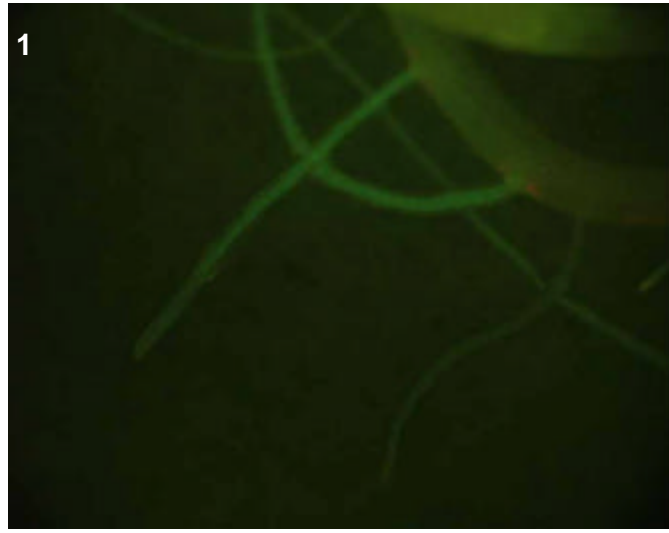
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Perhaps a clone of ASU B07?

# Genotype: ASU D09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

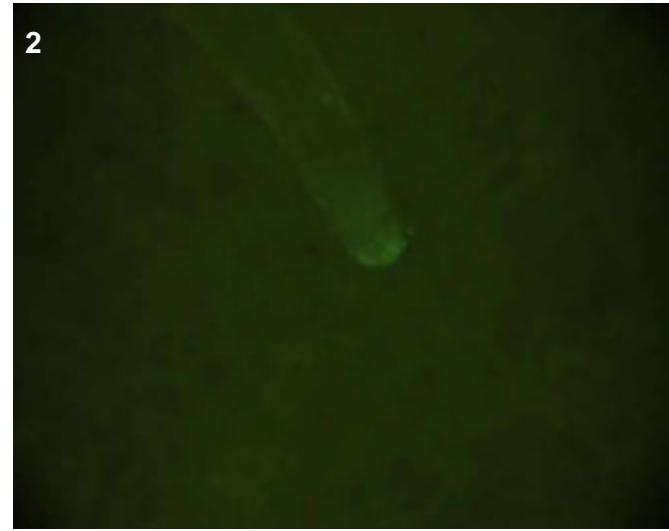
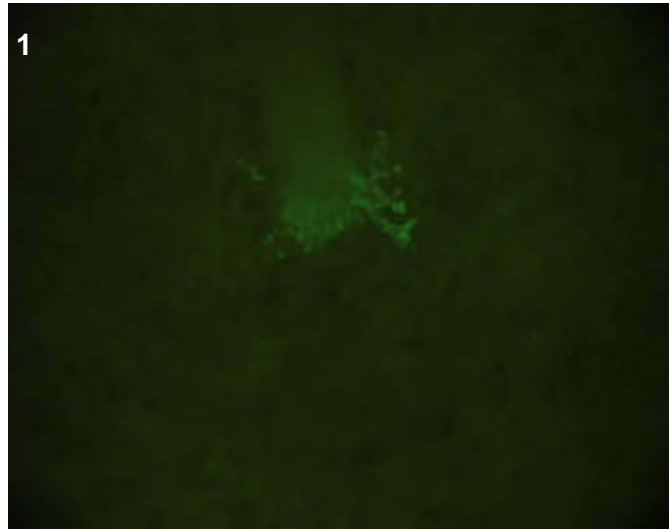
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

An extremely specific root pattern--GFP was bright only in the cells sloughing off of crown root tips!



# Genotype: ASU D11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

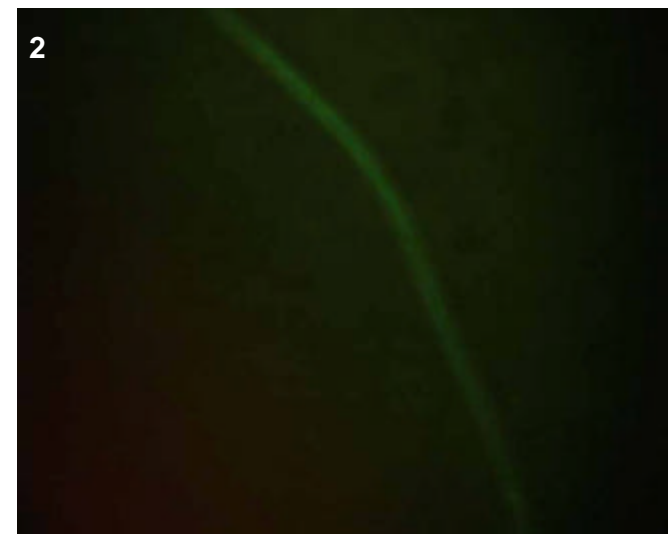
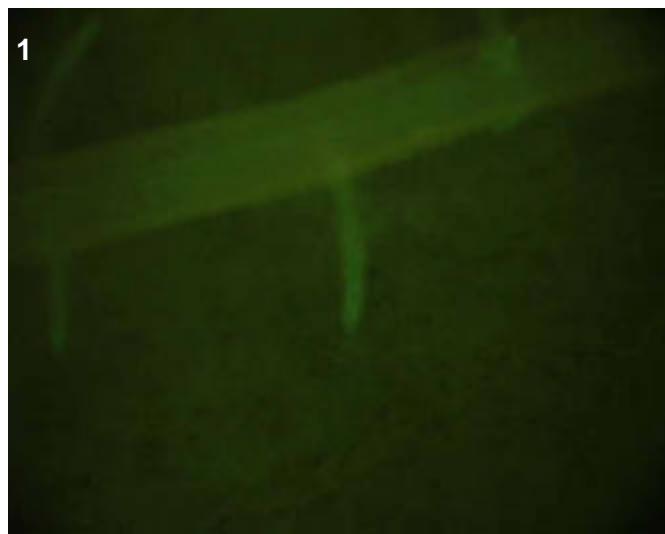
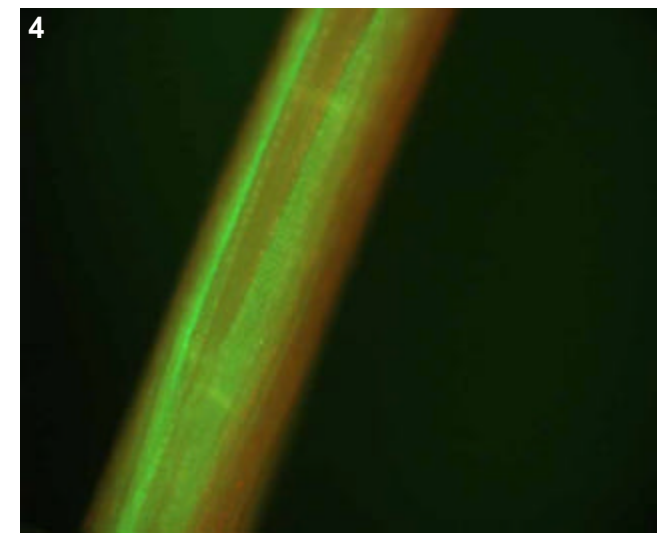
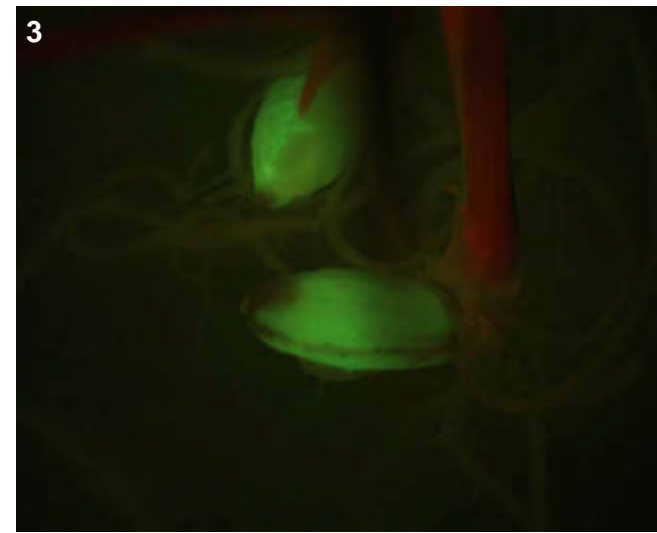
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression was faint (pics 1-2), while endosperm (pic 3) and sheath tissue just above the endosperm (pic 4) was bright.

**Genotype: ASU E06**

**Screened**

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

**Expression**

- None
- Bright
- Medium
- Weak
- Unsure

**Pictures**

- T0 mature plant:
- T1 seed/seedling: 1-6
- T1 mature plant:

**T0 Flower**

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

**T0 Blade**

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

**T1 Seed**

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

**T1 Seedling**

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

**T1 Mature**

T0 pattern verified:

T0 pattern verified plus:

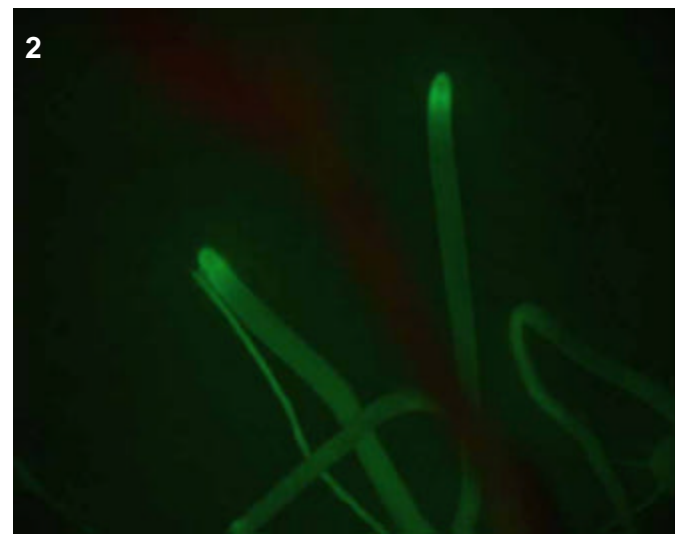
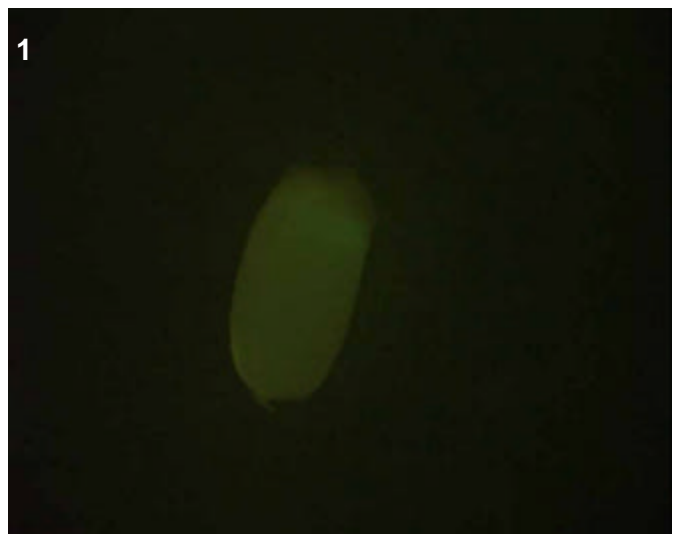
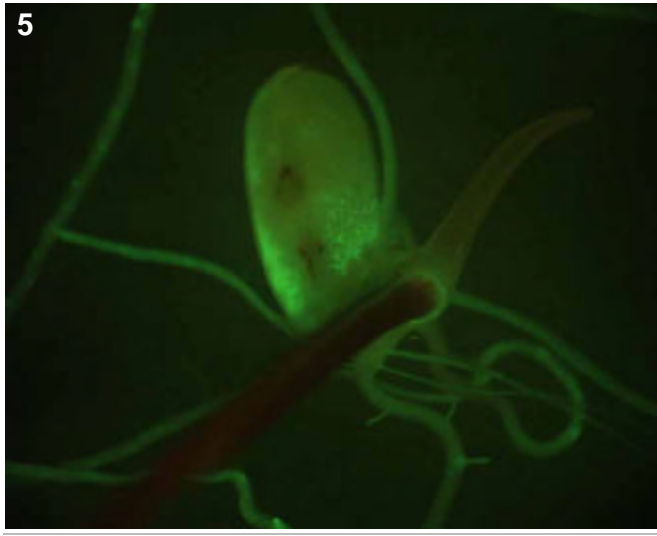
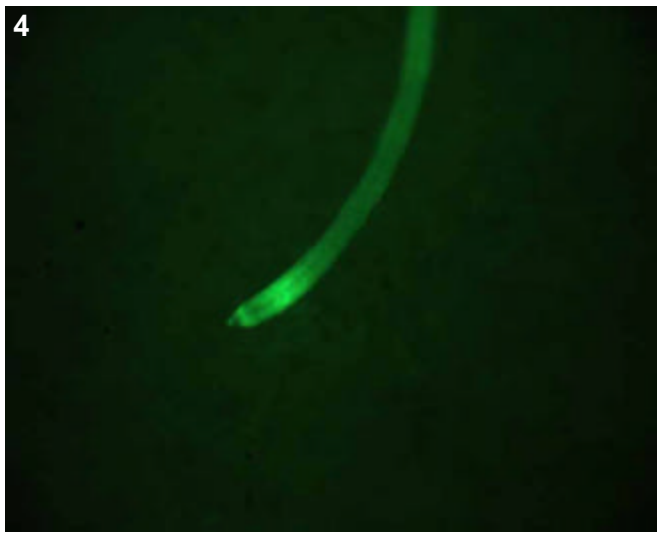
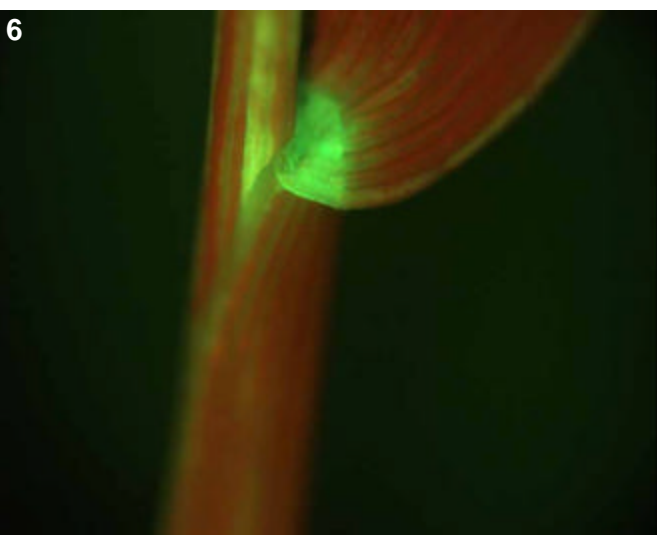
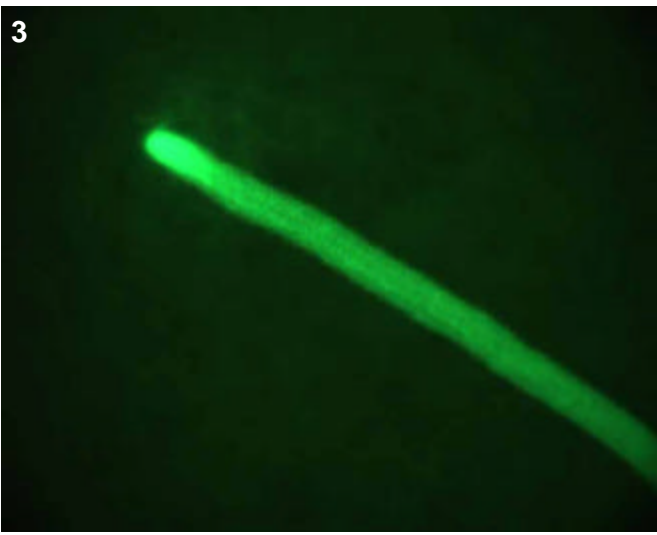
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
2/5 seeds had faint expression

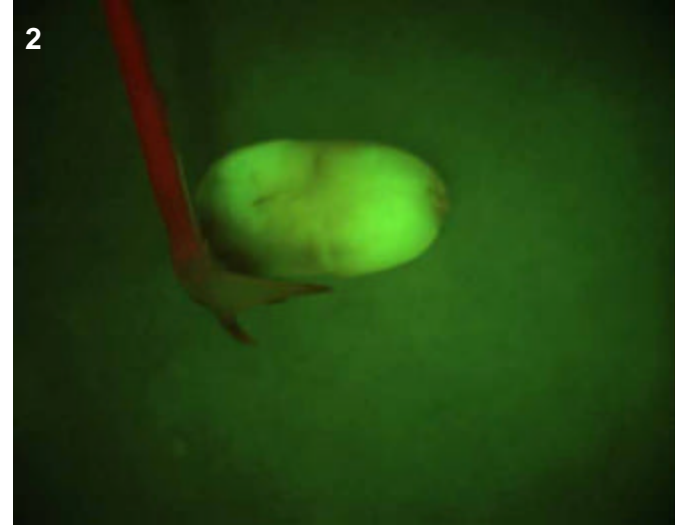
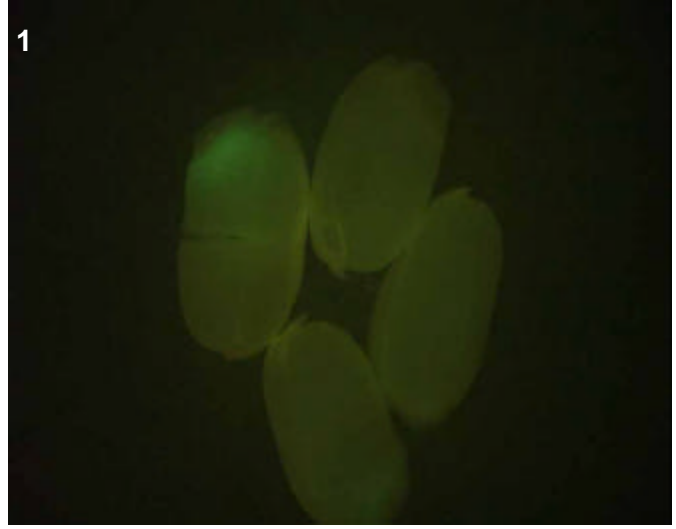
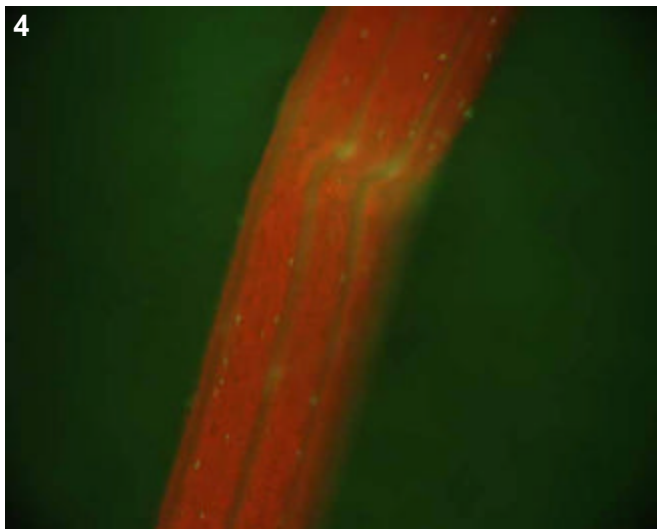
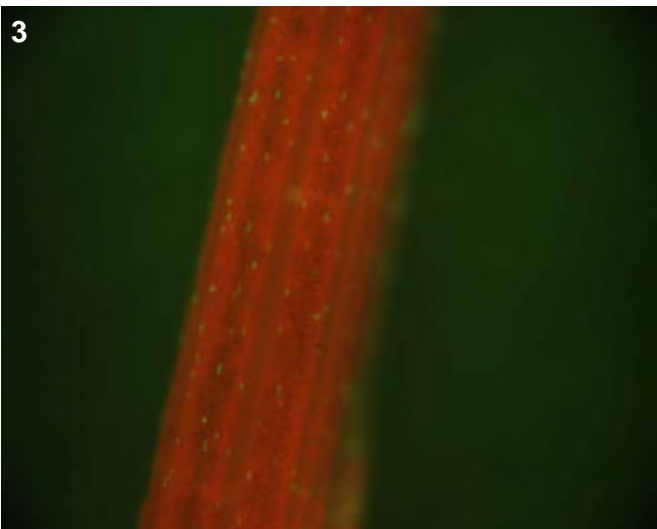
**T1 seedling comments**  
Overall very bright expression.

**Genotype: ASU F05**

Screened	Expression	Pictures
<input type="checkbox"/> T0 mature plant	<input type="checkbox"/> None	T0 mature plant: <input type="text"/>
<input checked="" type="checkbox"/> T1 seed	<input type="checkbox"/> Bright	T1 seed/seedling: 1-4
<input checked="" type="checkbox"/> T1 seedling	<input checked="" type="checkbox"/> Medium	T1 mature plant: <input type="text"/>
<input type="checkbox"/> T1 mature plants	<input type="checkbox"/> Weak	
	<input type="checkbox"/> Unsure	

T0 Flower	T0 Blade	T1 Seed
<input type="checkbox"/> YES	<input type="checkbox"/> YES	<input checked="" type="checkbox"/> YES
<input type="checkbox"/> POSSIBLE	<input type="checkbox"/> POSSIBLE	<input type="checkbox"/> POSSIBLE
<input type="checkbox"/> Stamen: anther	<input type="checkbox"/> Vascular	<input type="checkbox"/> Coleorhiza
<input type="checkbox"/> Stamen: filament	<input type="checkbox"/> Guard cells	<input type="checkbox"/> Scutellum
<input type="checkbox"/> Carpel: stigma	<input type="checkbox"/> Trichomes	<input type="checkbox"/> Aleurone/Endo.
<input type="checkbox"/> Carpel: style	<input type="checkbox"/> Mesophyll	<input type="checkbox"/> Vasc. bundle
<input type="checkbox"/> Carpel: ovary		
<input type="checkbox"/> Carpel: base		
<input type="checkbox"/> Lemma/palea		
<input type="checkbox"/> Lodicule		
<input type="checkbox"/> Rachilla		
<input type="checkbox"/> Sterile lemma		
<input type="checkbox"/> Pedicel		
<input type="checkbox"/> Guard cells		
<input type="checkbox"/> Trichomes		
<input type="checkbox"/> Vascular		

T1 Seedling	T1 Mature
<input checked="" type="checkbox"/> YES	<input type="checkbox"/> T0 pattern verified:
<input type="checkbox"/> POSSIBLE	<input type="checkbox"/> T0 pattern verified plus:
<input type="checkbox"/> SHOOT	<input type="checkbox"/> New pattern:
<input checked="" type="checkbox"/> ROOT	<input type="checkbox"/> No GFP detected
<input checked="" type="checkbox"/> ENDOSPERM	<input type="checkbox"/> T1 in greenhouse?
<input type="checkbox"/> Coleoptile	YES, 1 GFP+ plant
<input type="checkbox"/> Sheath tissue	<input type="checkbox"/> Confocal?
<input type="checkbox"/> Blade tissue	<input type="checkbox"/>
<input type="checkbox"/> Leaf tip	Number T2 seed produced: <input type="text"/>
<input checked="" type="checkbox"/> Collar	
<input checked="" type="checkbox"/> Trichomes	
<input type="checkbox"/> Guard cells	



**T0 comments**

**T1 seed comments**

3/5 seeds had expression

**T1 seedling comments**

There were no roots at all, perhaps a mutant phenotype?

# Genotype: ASU G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

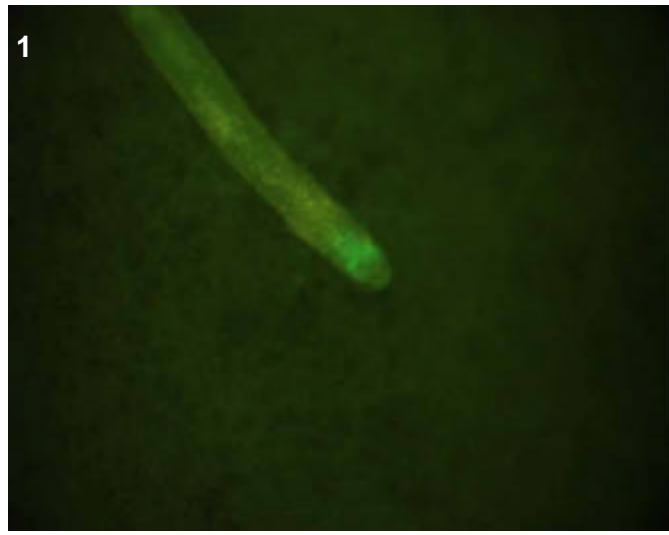
No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Interesting "triangle" of expression in the apex of crown root tips (see picture 1), could be very interesting for confocal.

# Genotype: ASU G07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

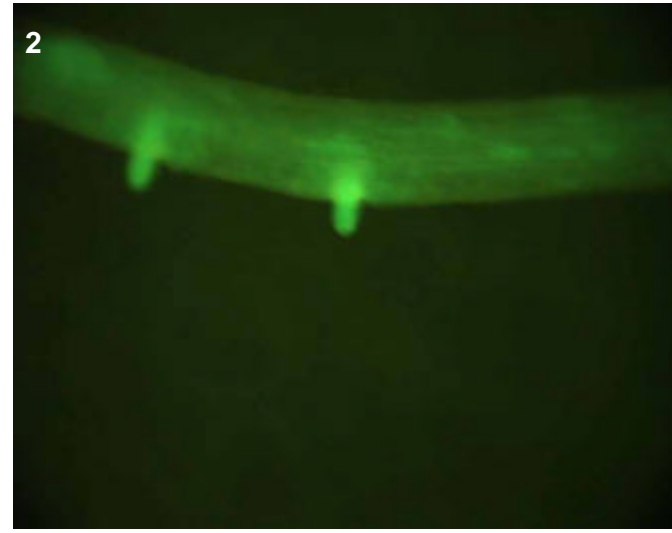
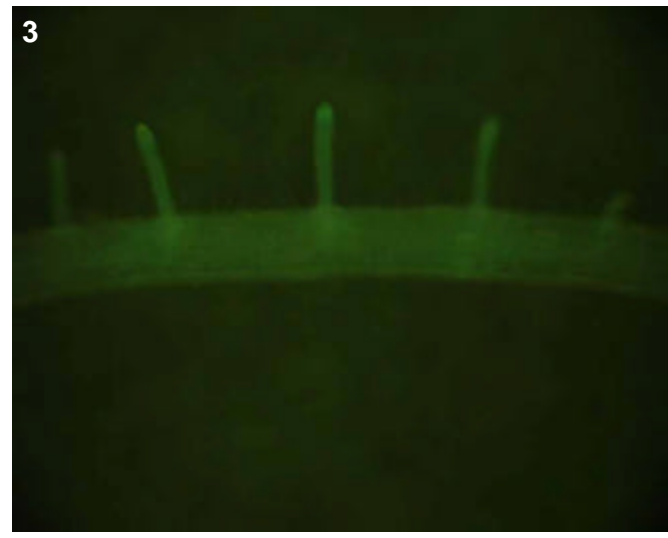
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse? YES, 2 GFP+ plants
- Confocal?
- Number T2 seed produced:



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASU H06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

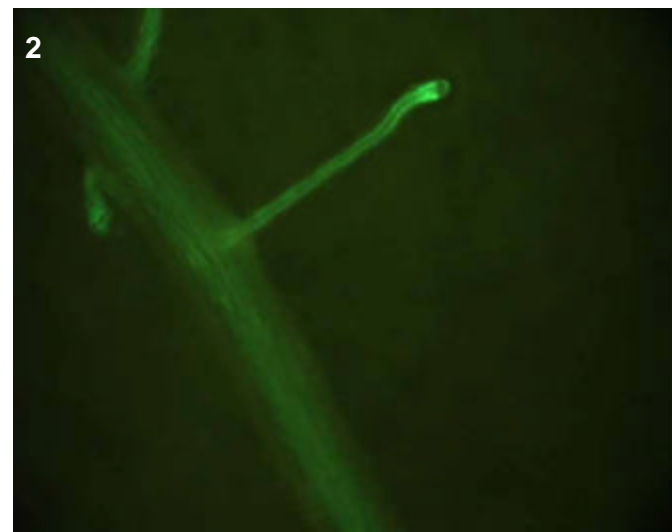
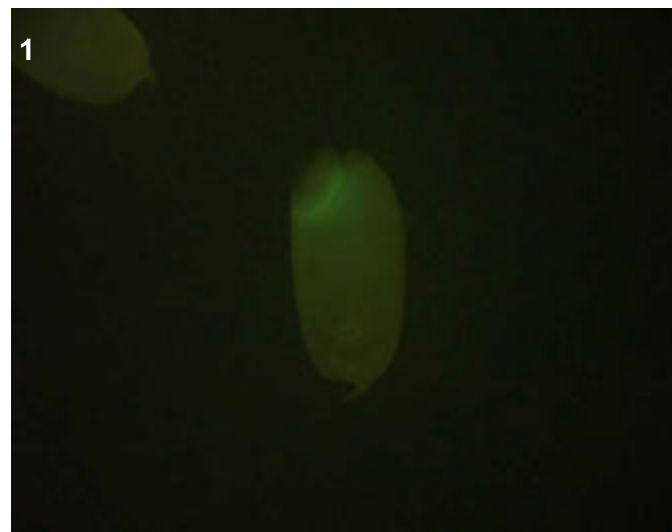
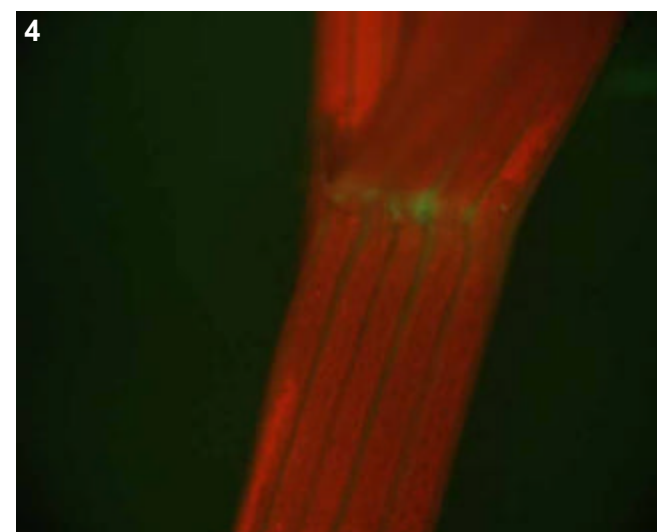
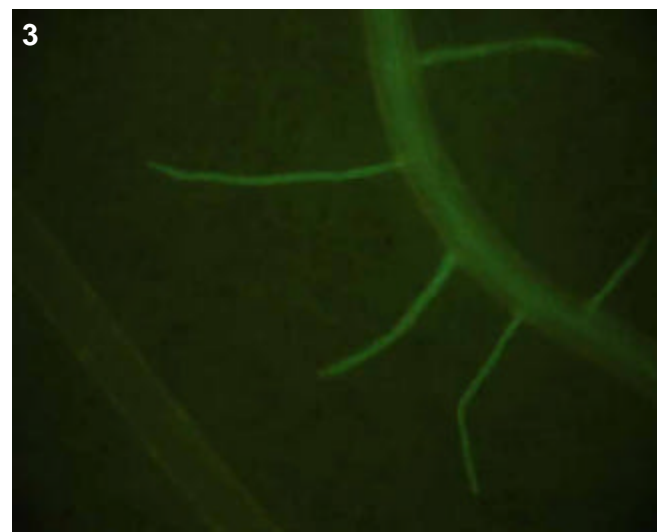
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression

## T1 seedling comments

Bright, distinct vascular pattern in roots (pics 2-3), faint collar (pic 4).

# Genotype: ASU H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

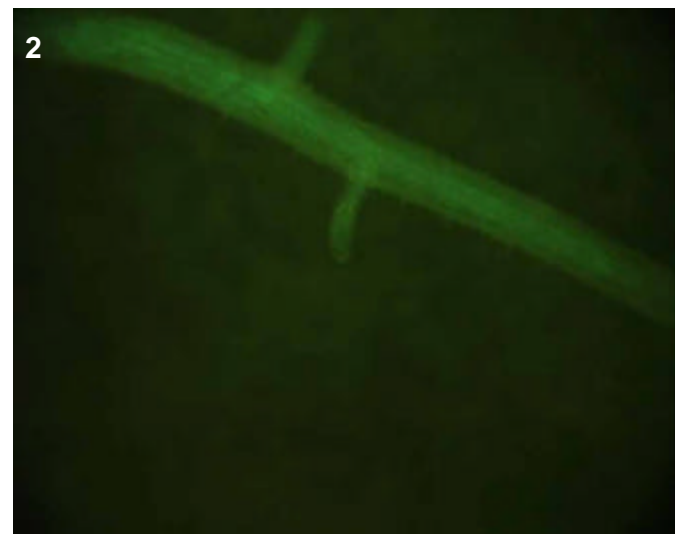
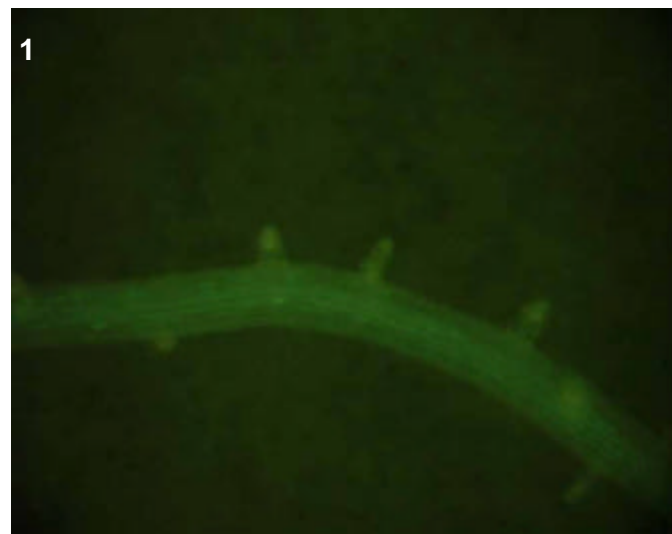
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

**Genotype:** ASU H12

**Screened**

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

**Expression**

- None
- Bright
- Medium
- Weak
- Unsure

**Pictures**

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

**T0 Flower**

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

**T0 Blade**

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

**T0 Sheath**

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

**T1 Seed**

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

**T1 Seedling**

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

**T1 Mature**

T0 pattern verified:

T0 pattern verified plus:

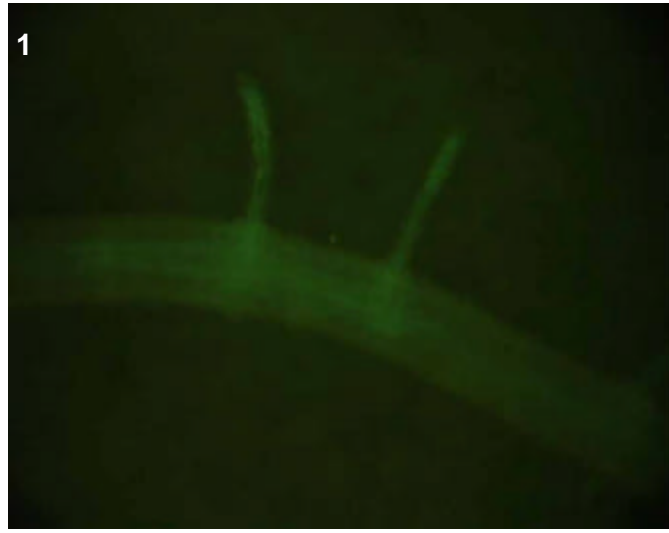
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**



# Genotype: ASV A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

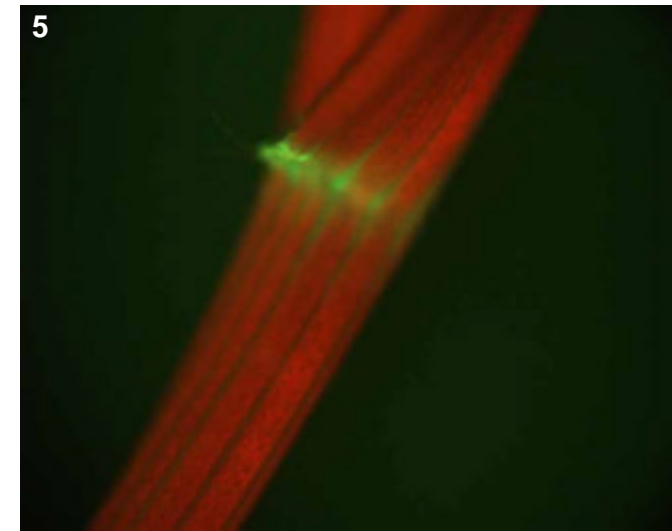
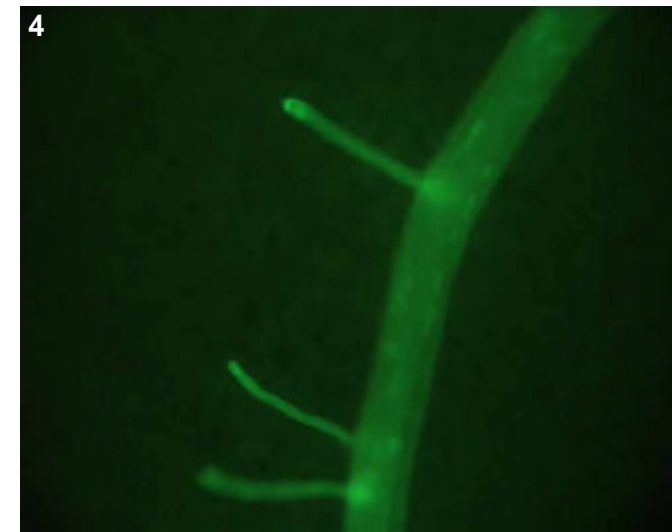
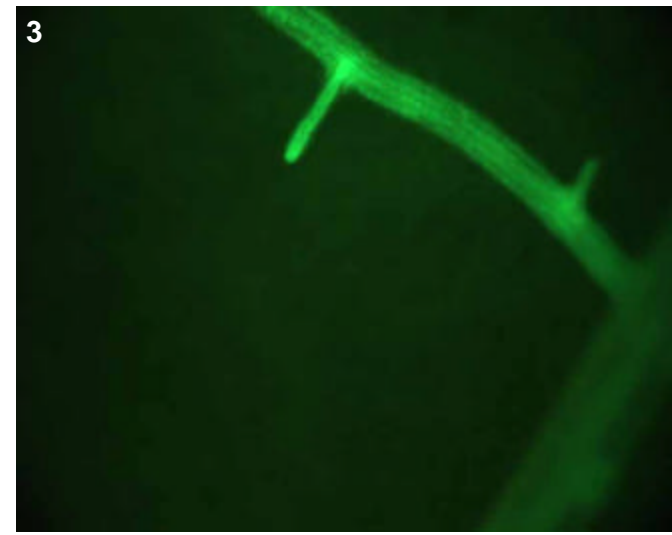
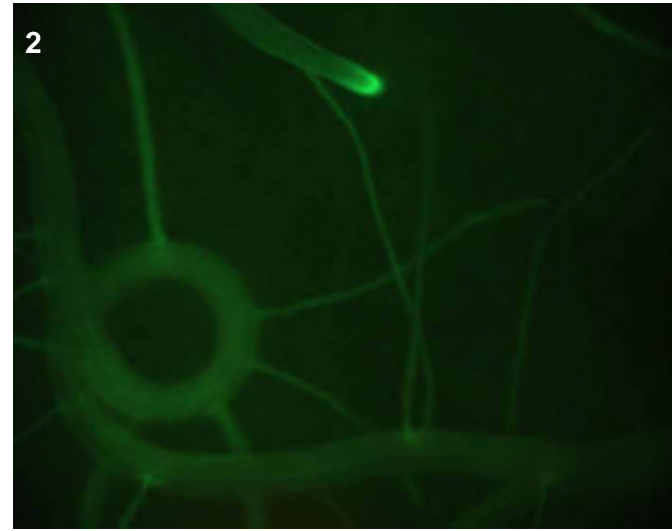
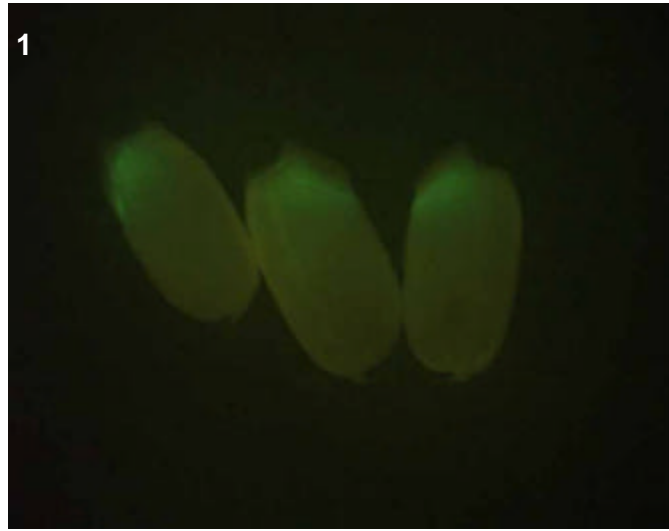
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

5/5 seeds had expression

## T1 seedling comments

# Genotype: ASV A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

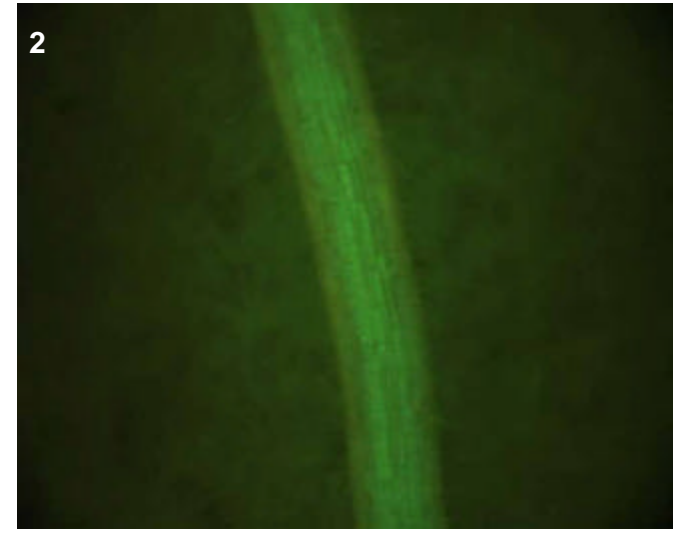
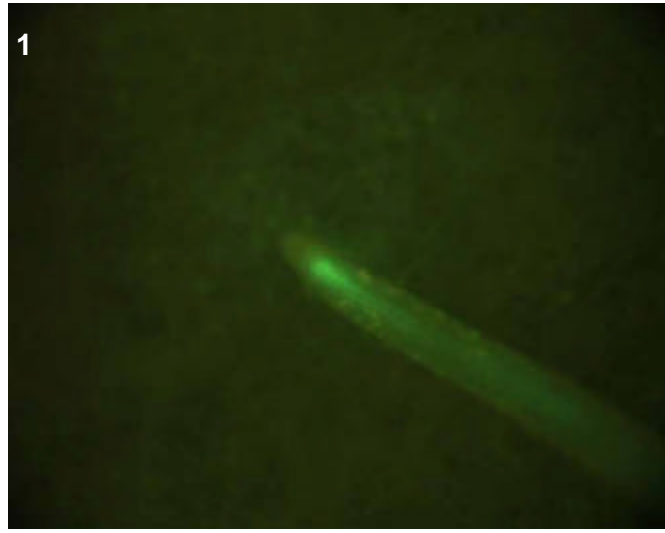
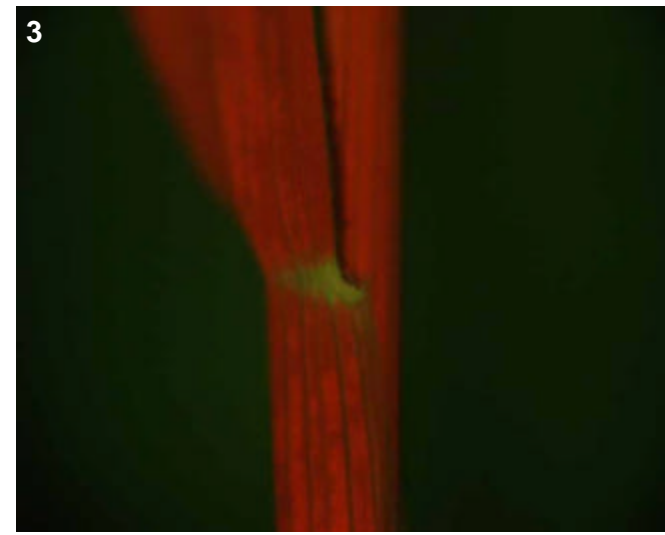
**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

The vascular expression observed near tips of crowns (pic 1) looks interesting and should be analyzed more closely by confocal.

# Genotype: ASV A11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

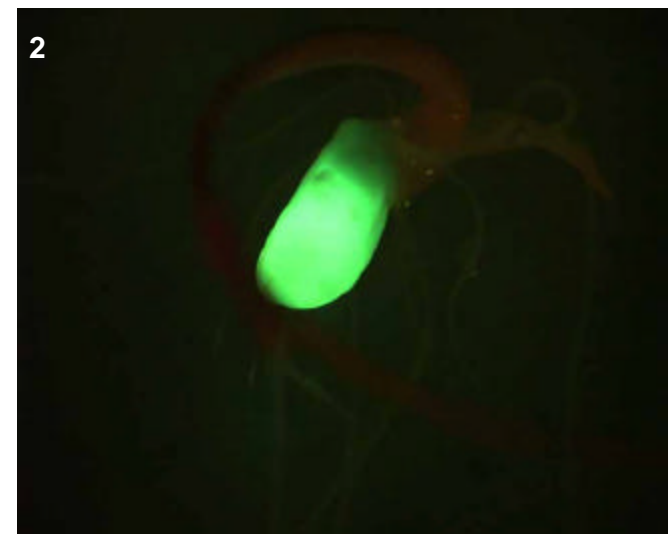
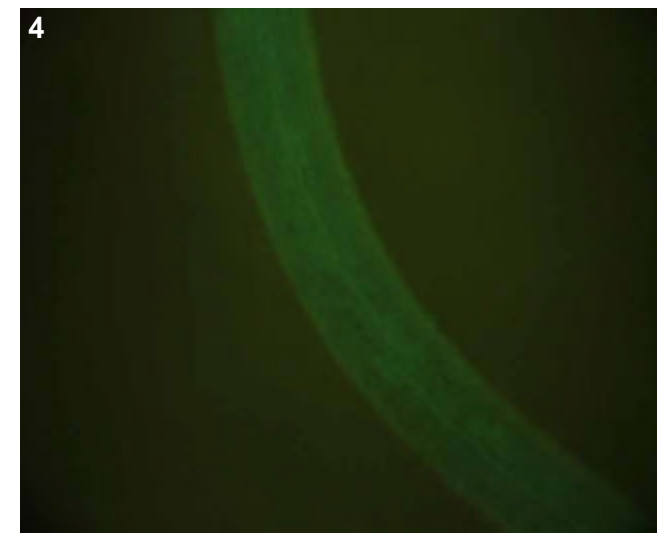
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/4 seeds had expression. 1 was super bright (pic 1, left seed), and 2 others were medium.

## T1 seedling comments

The bright endosperm remains after 1 week (pic 2).

# Genotype: ASV B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

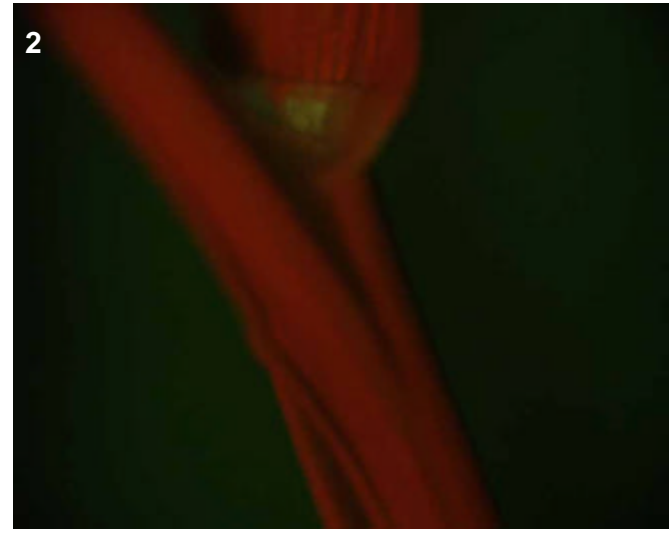
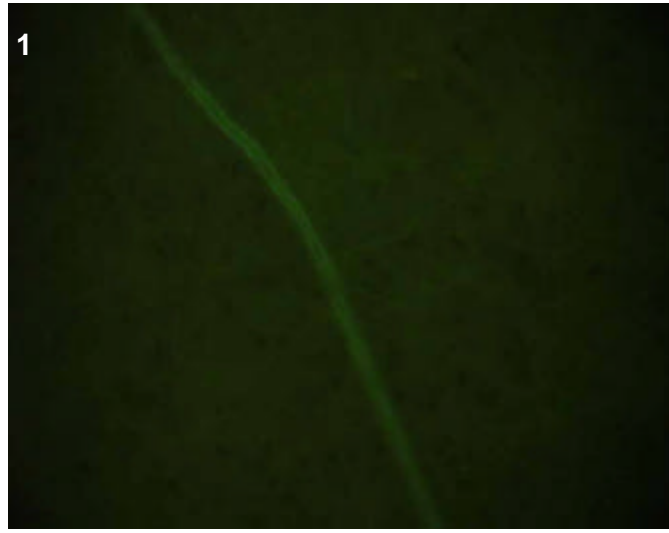
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASV B06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

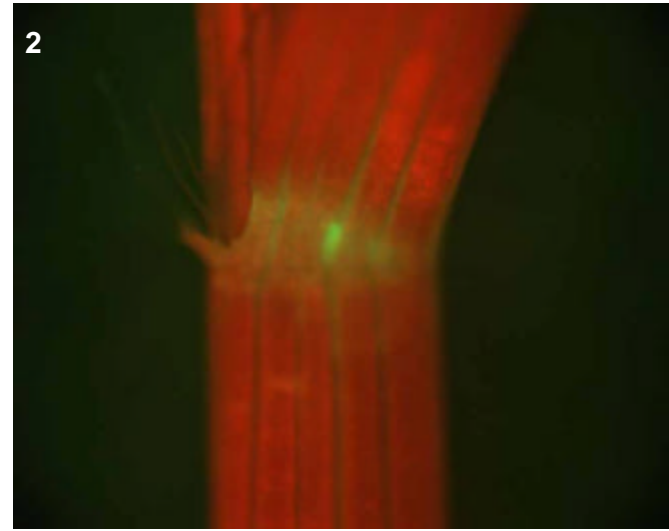
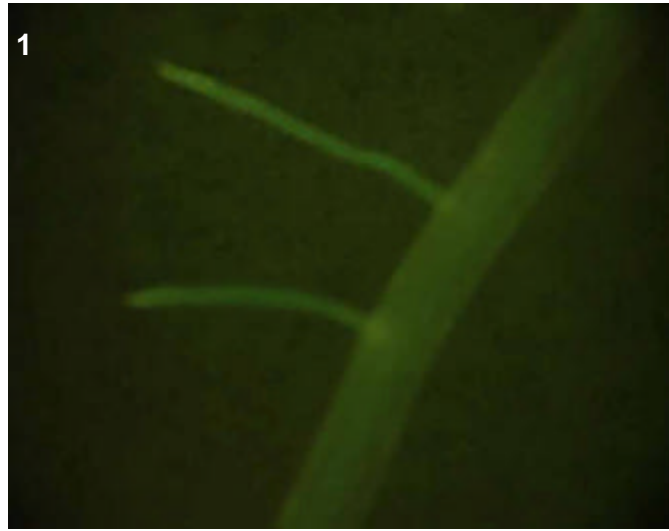
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASV B08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-5  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

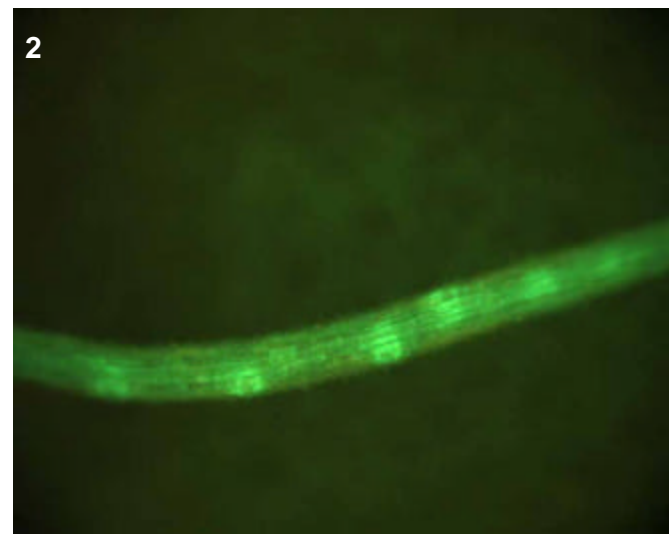
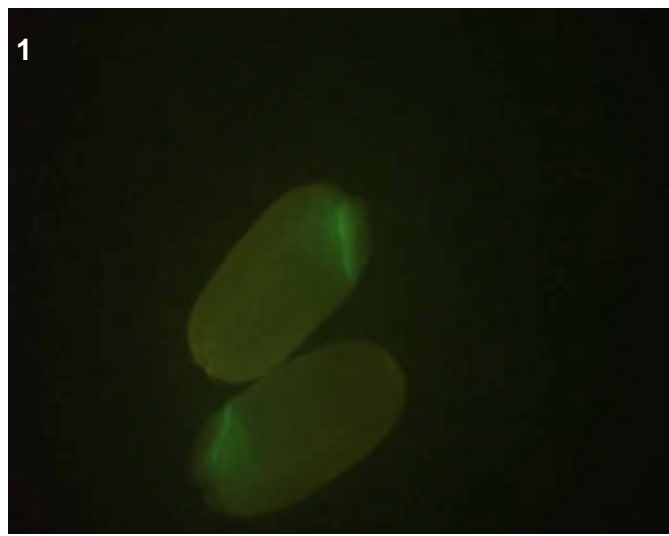
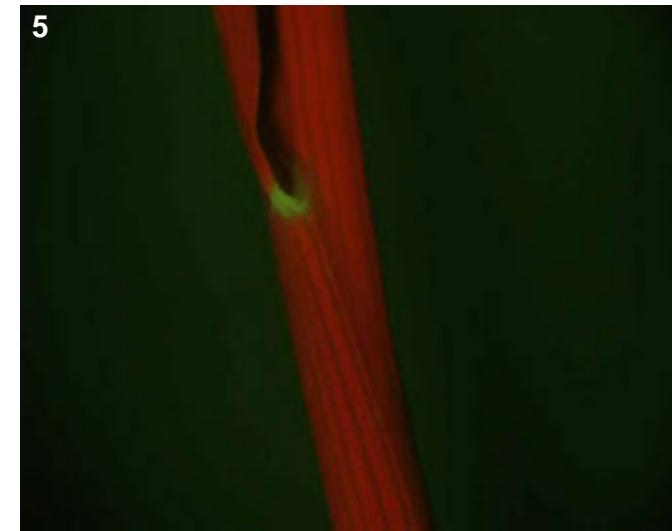
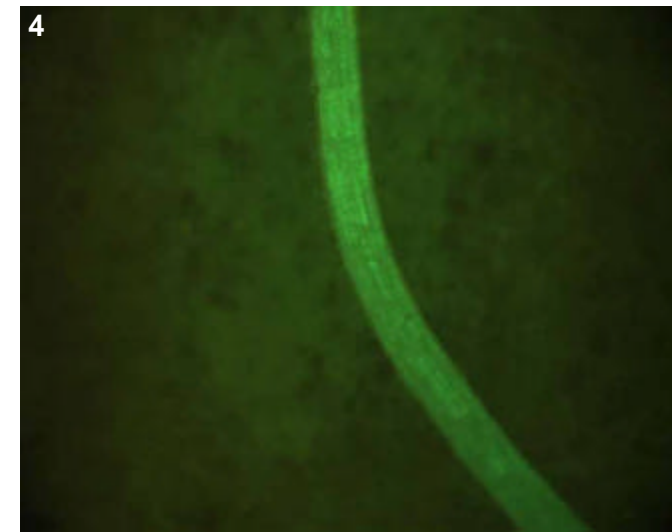
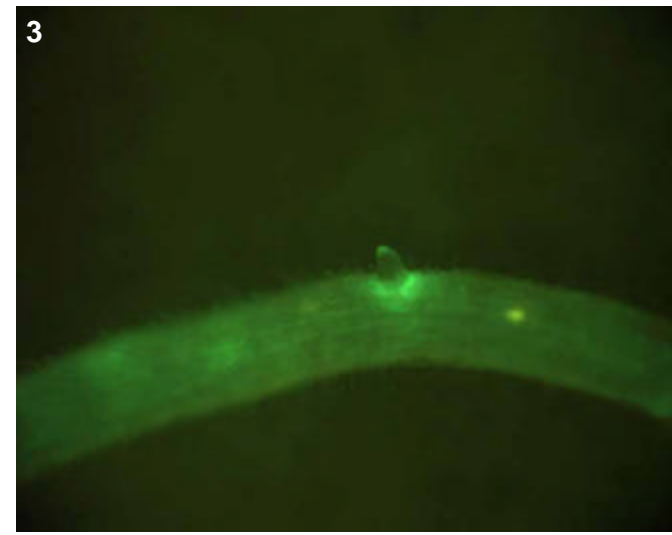
New pattern:

No GFP detected

T1 in greenhouse?  
YES, 1 GFP+ plant

Confocal?

Number T2 seed produced:



## T0 comments

## T1 seed comments

4/5 seeds had expression

## T1 seedling comments

# Genotype: ASV B11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

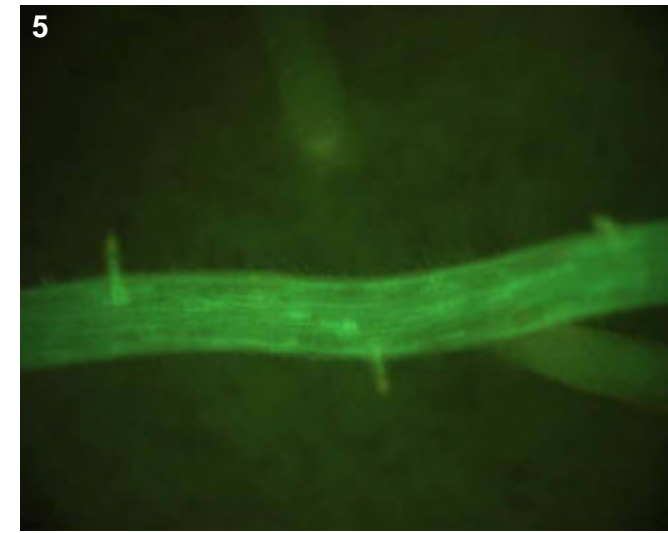
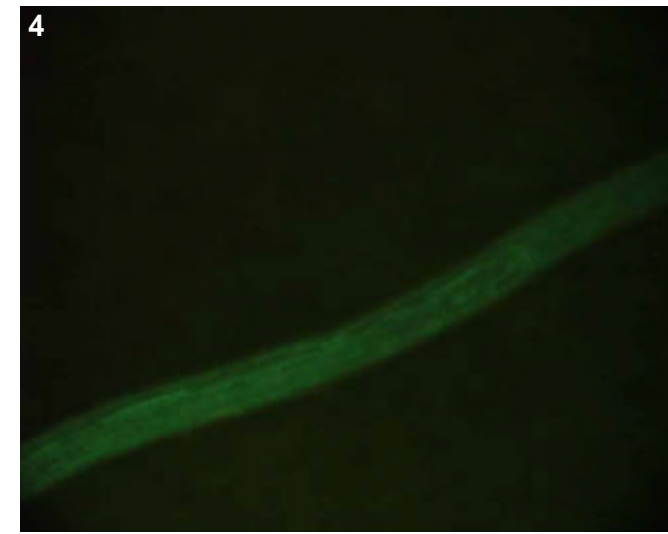
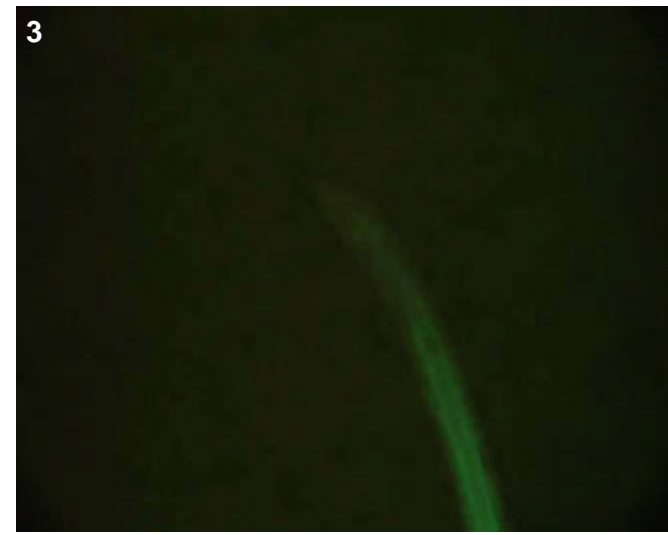
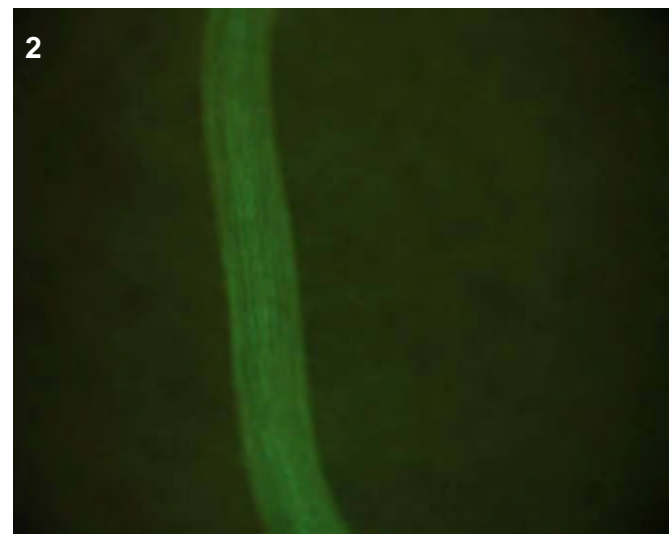
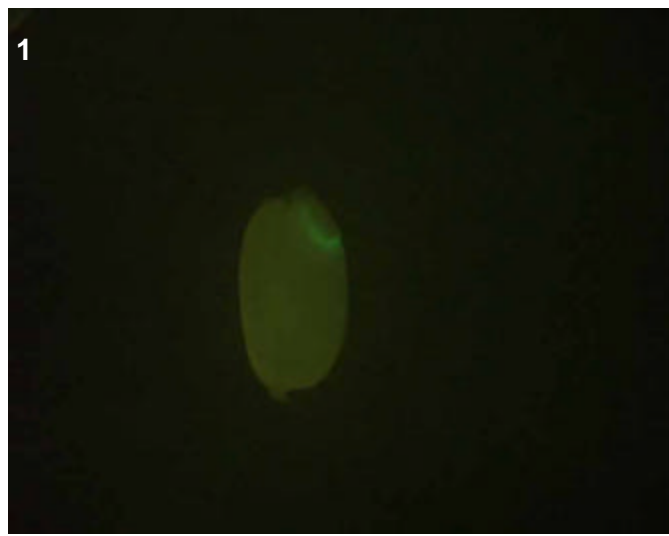
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
YES, 3 GFP+ plants

Confocal?

Number T2 seed produced:



**T0 comments**

**T1 seed comments**  
2/5 seeds had expression

**T1 seedling comments**

# Genotype: ASV C01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

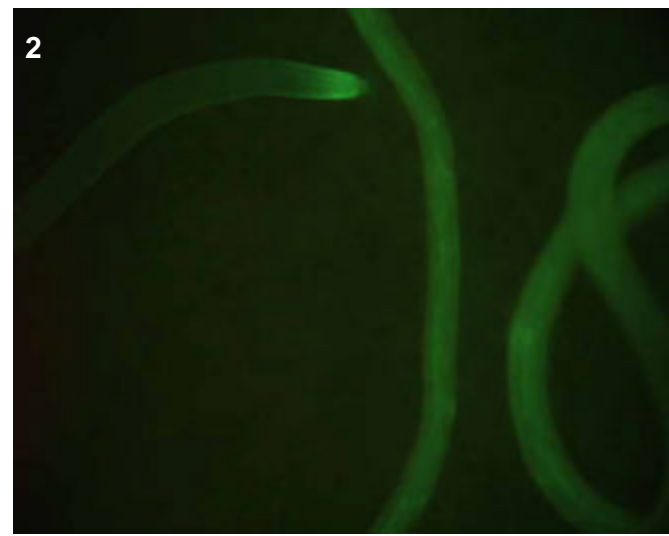
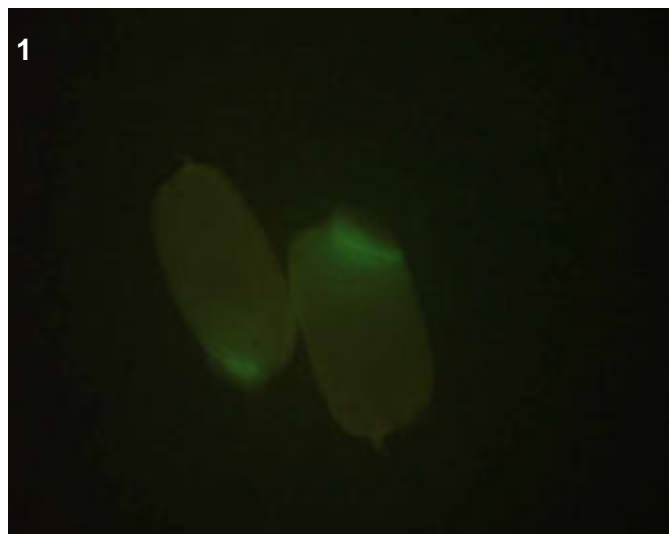
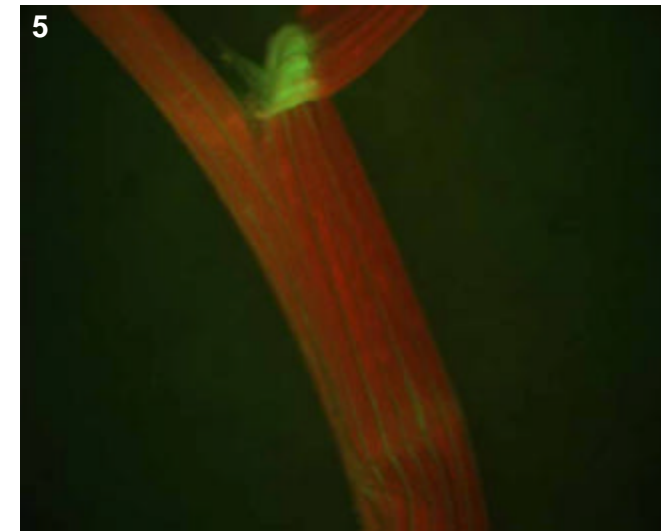
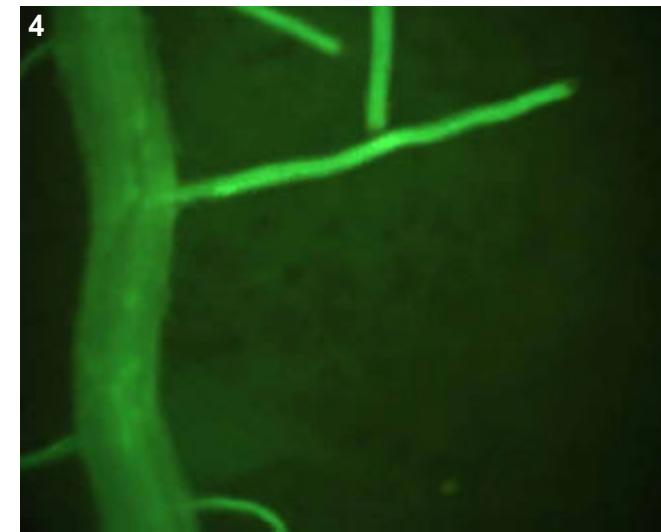
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

5/5 seeds had expression

## T1 seedling comments



# Genotype: ASV C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

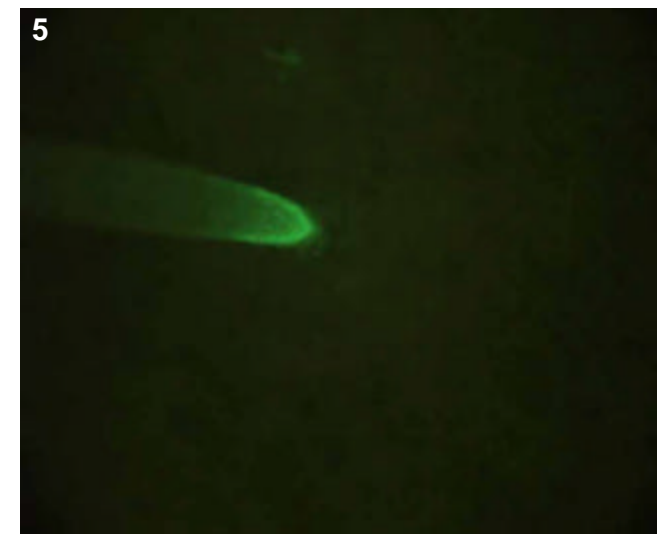
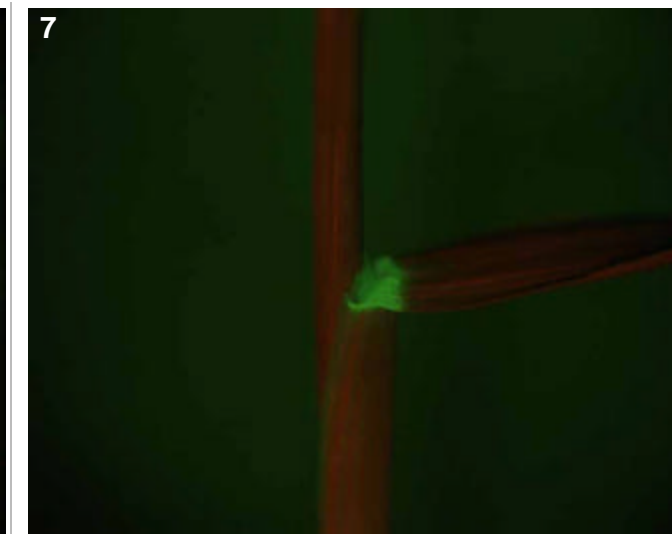
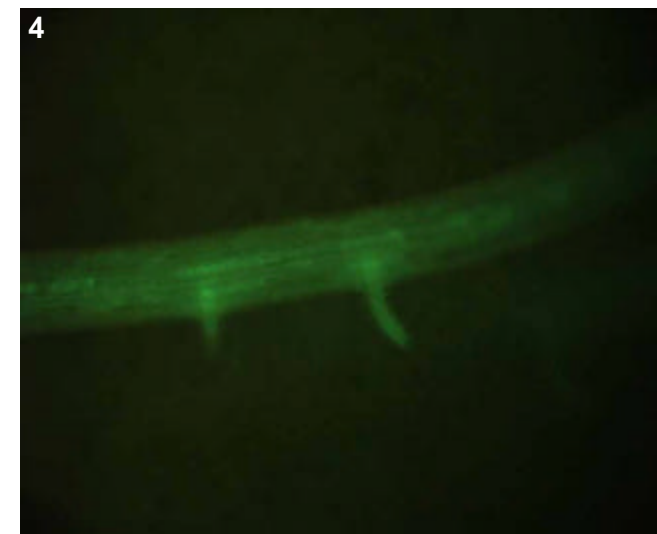
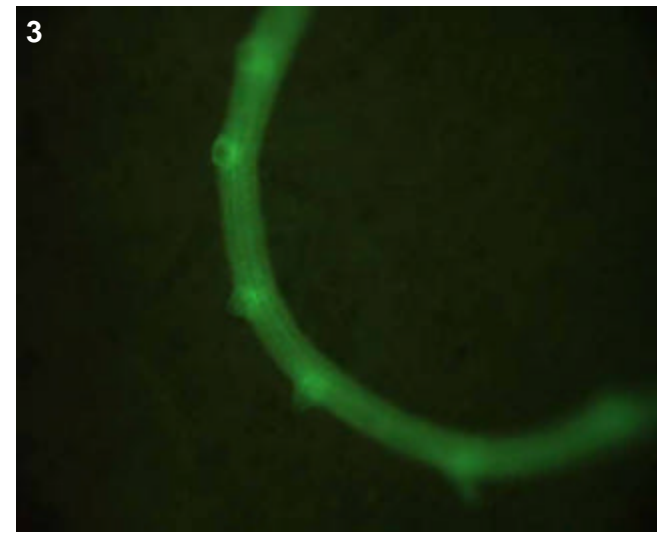
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASV C11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

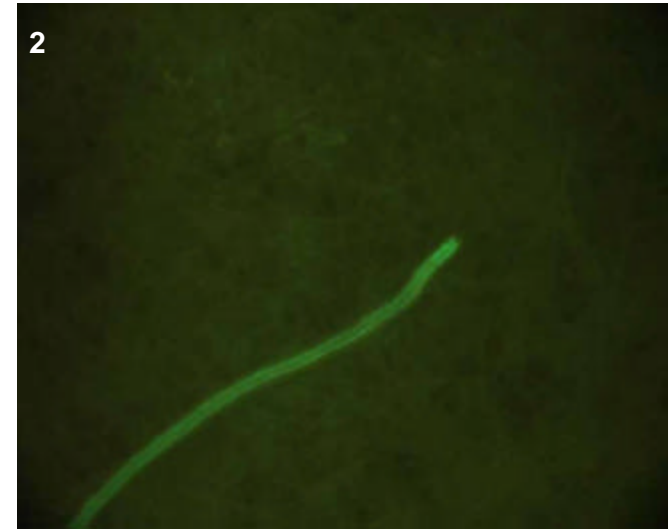
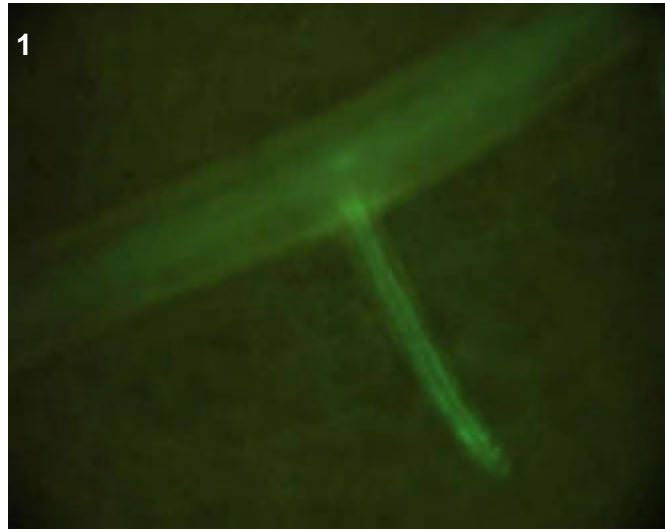
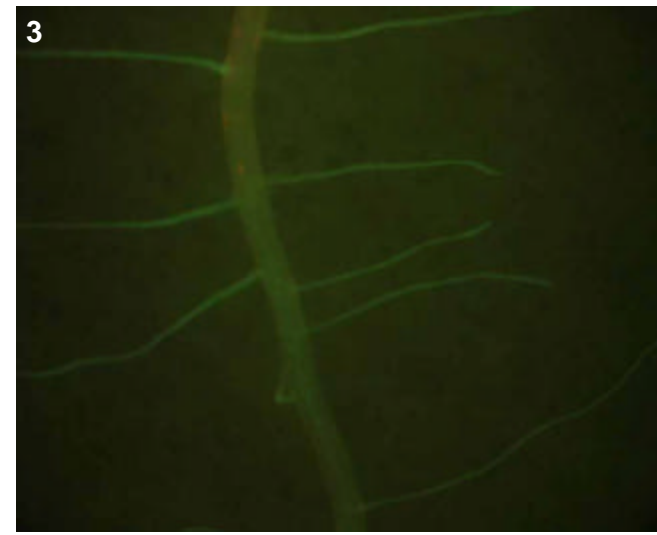
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASV D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

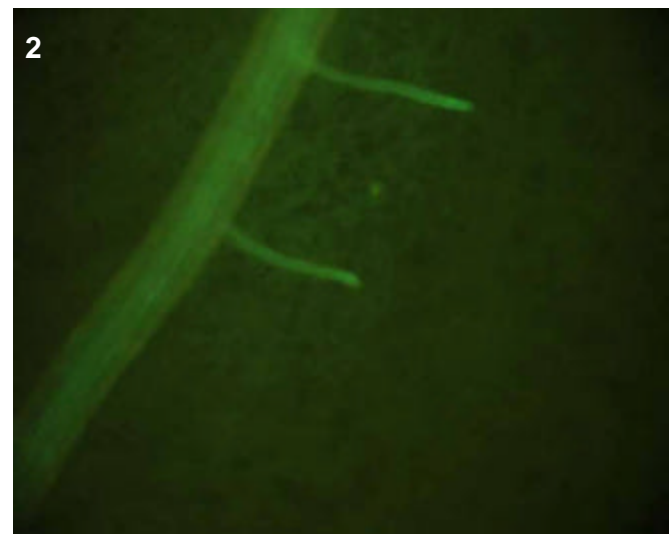
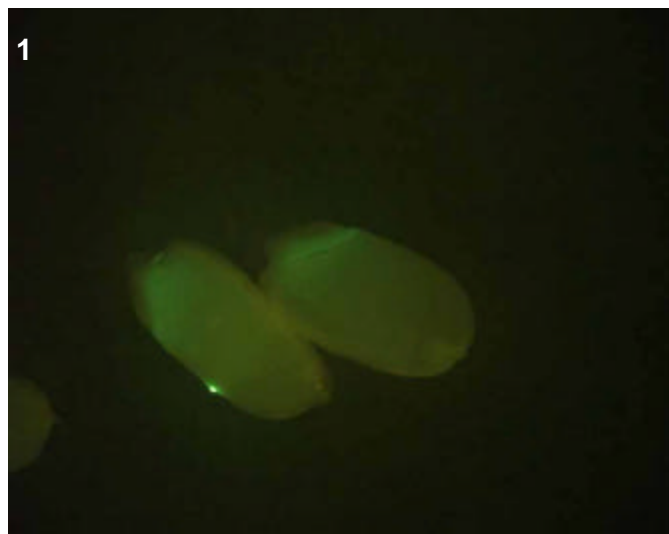
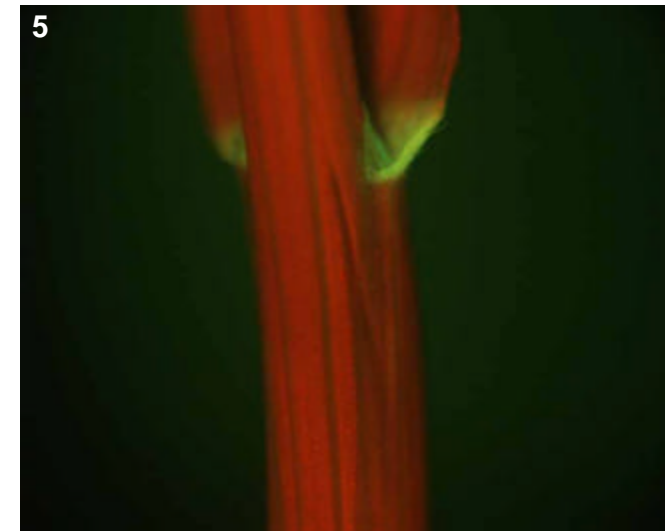
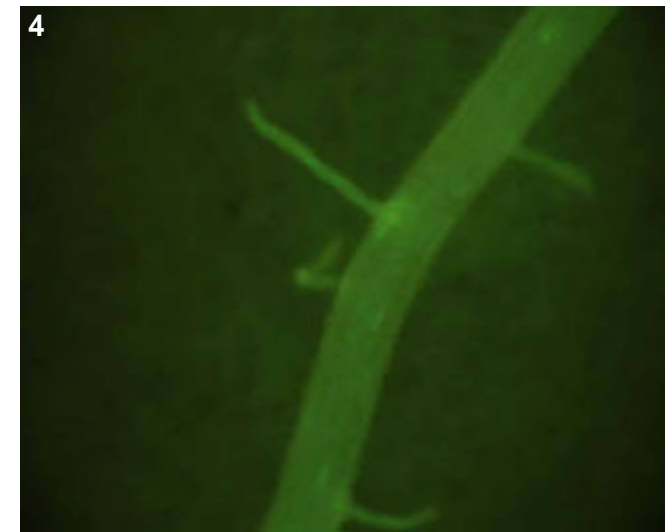
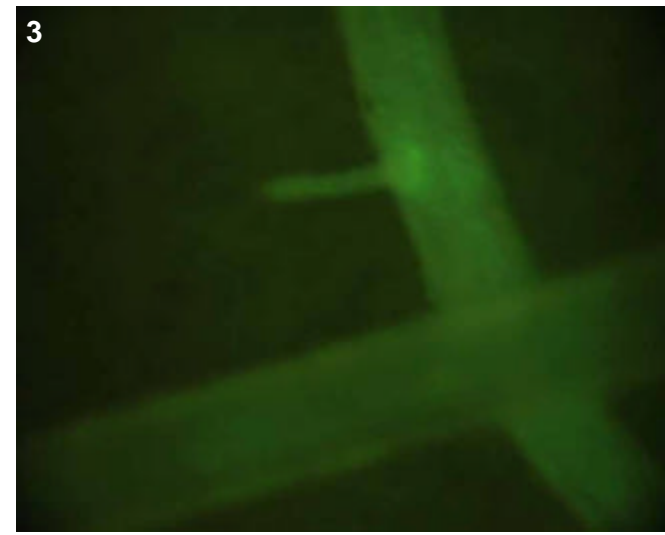
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression

## T1 seedling comments

# Genotype: ASV D02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

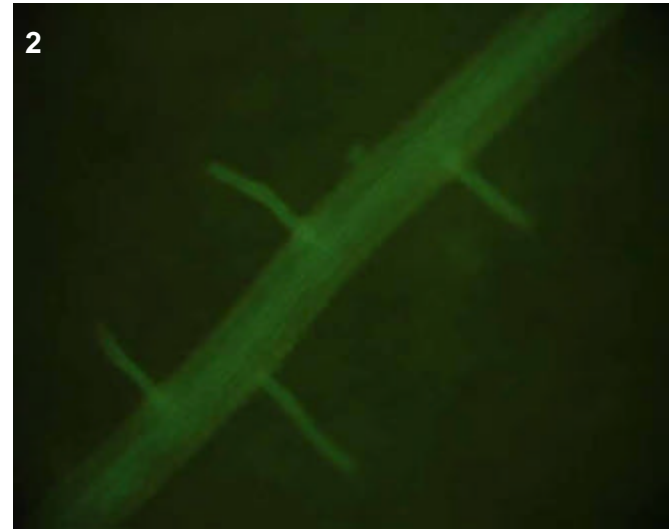
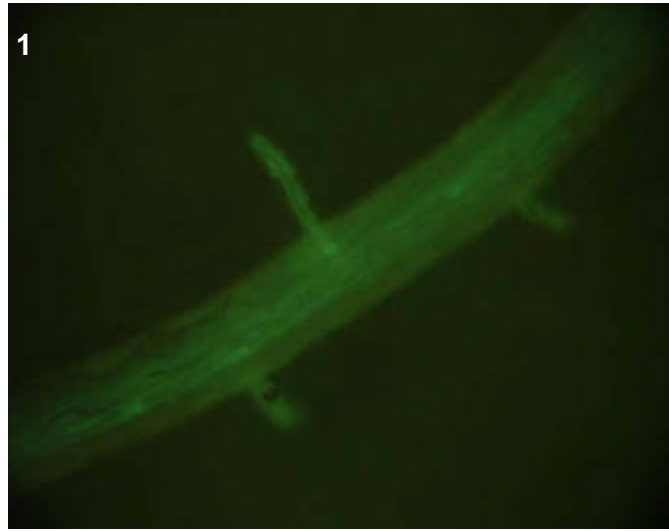
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASV E04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

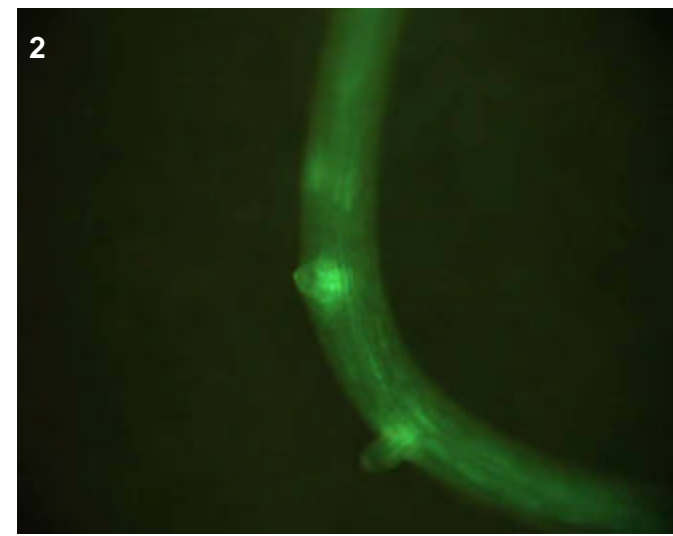
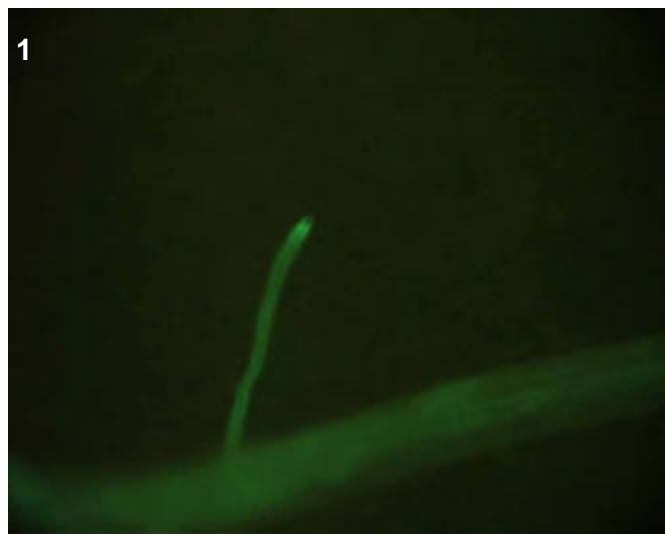
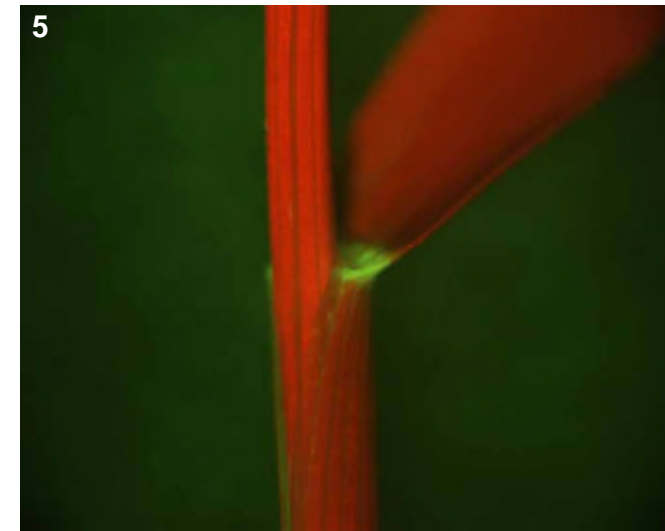
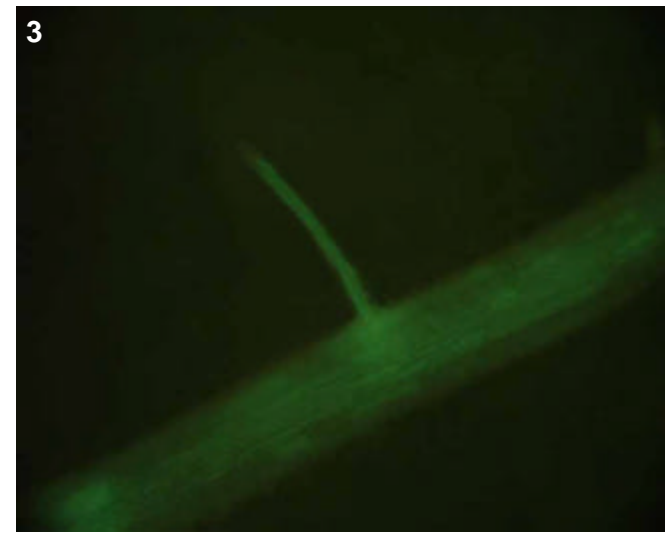
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASV E05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

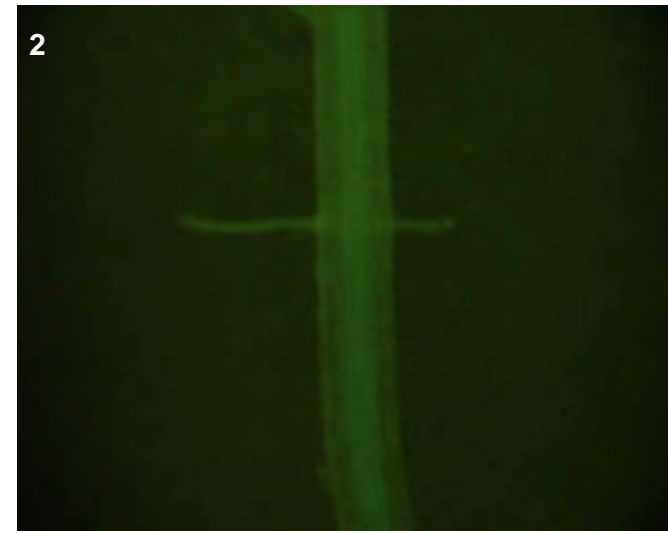
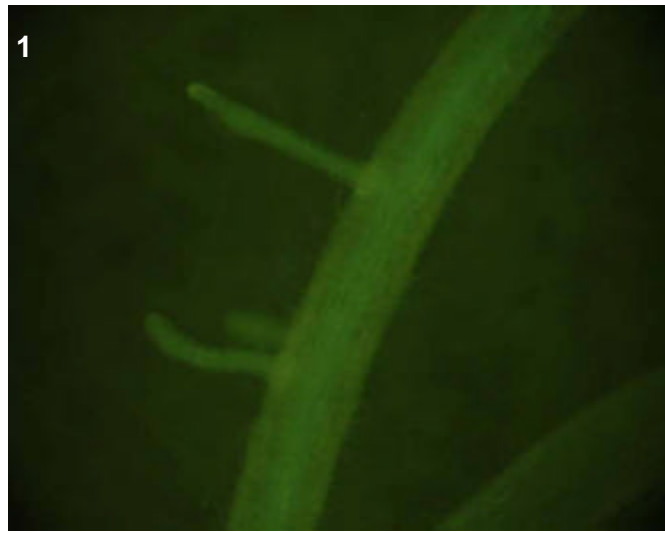
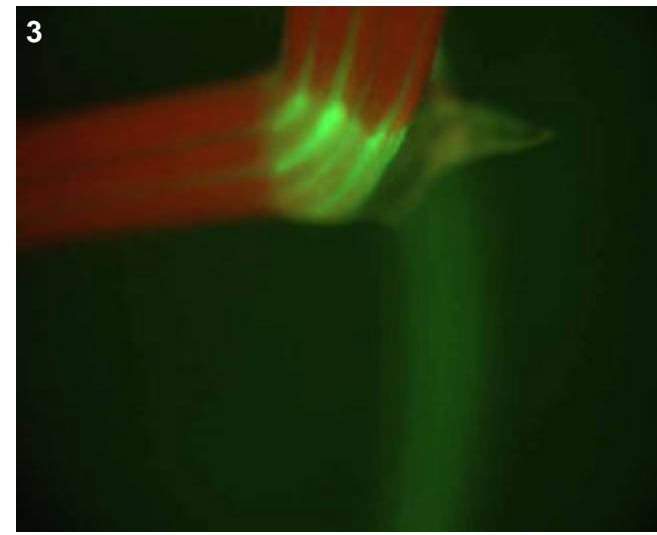
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

Faint root vascular (pics 1-2), bright collar (pic 3).

# Genotype: ASV F01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

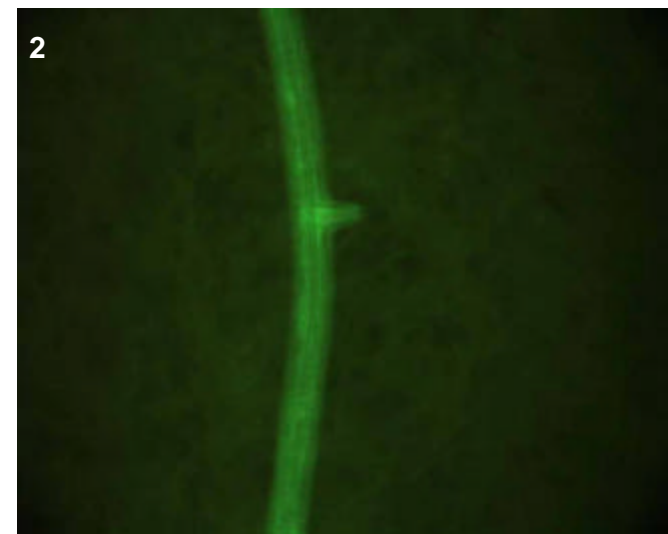
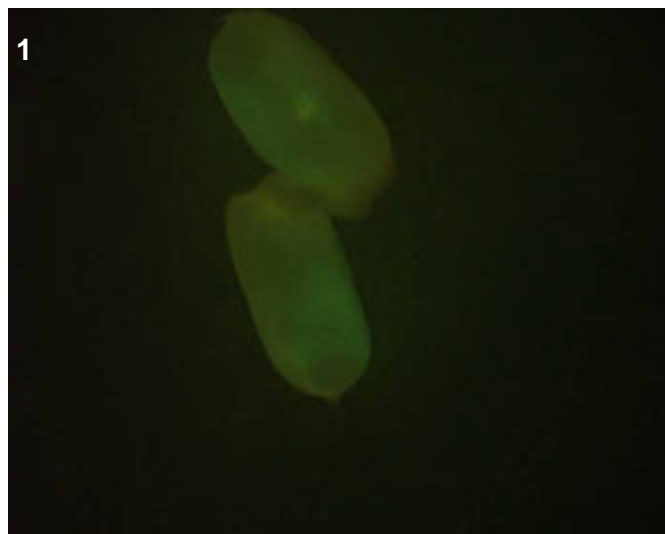
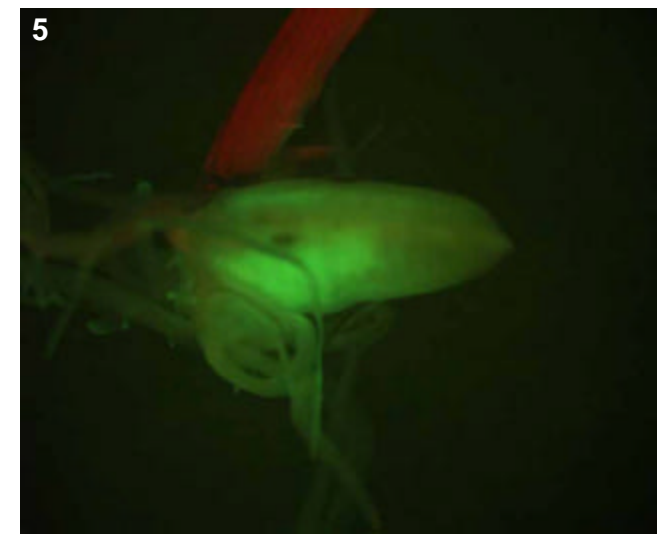
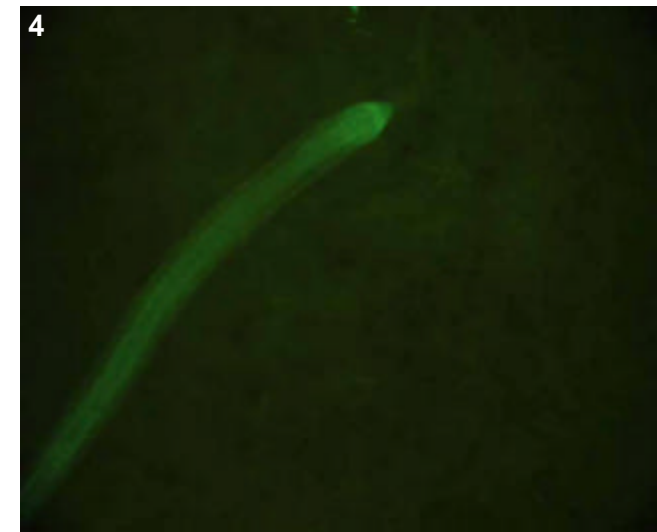
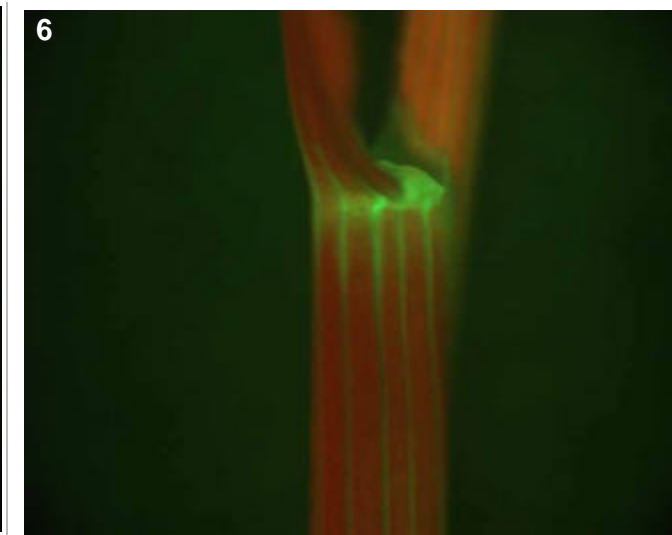
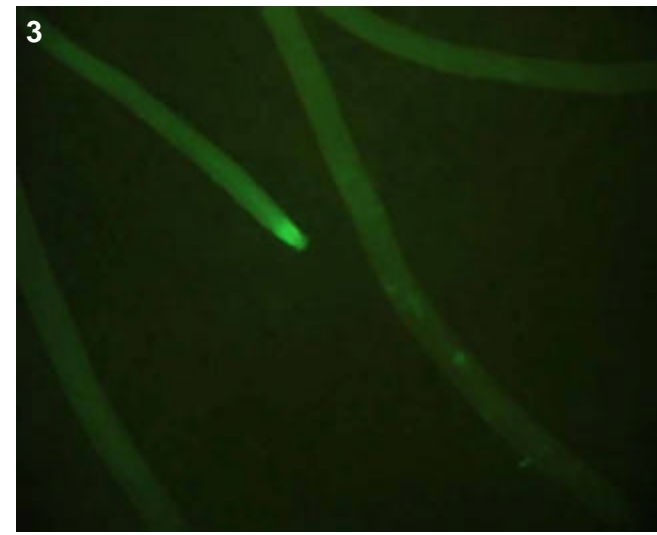
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had expression. Interesting because the lower 1/3 of seed is bright (pic 1), endosperm?

## T1 seedling comments

# Genotype: ASV F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

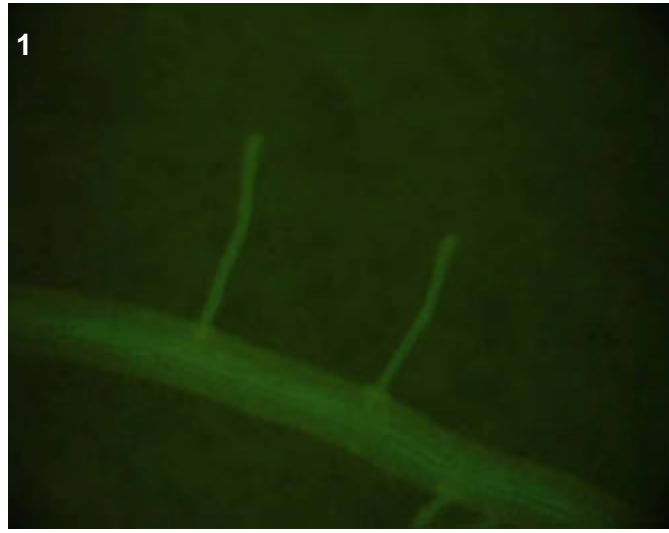
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASV F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

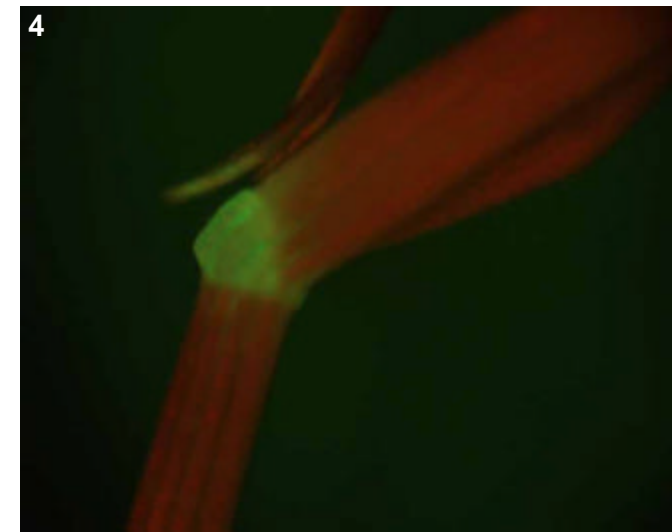
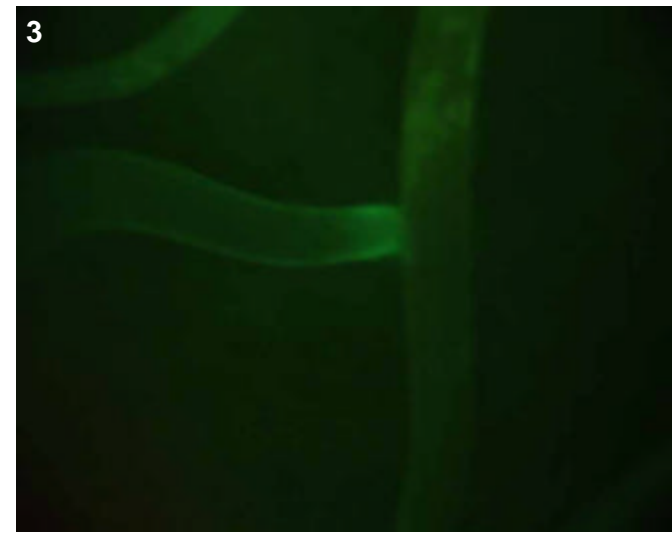
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?**  
YES, 3 GFP+ plants
- Confocal?**
- Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
2/5 seeds had medium expression

**T1 seedling comments**

**Genotype: ASV G05**

**Screened**

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

**Expression**

- None
- Bright
- Medium
- Weak
- Unsure

**Pictures**

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

**T0 Flower**

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

**T0 Blade**

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

**T0 Sheath**

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

**T1 Seed**

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

**T1 Seedling**

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

**T1 Mature**

T0 pattern verified:

T0 pattern verified plus:

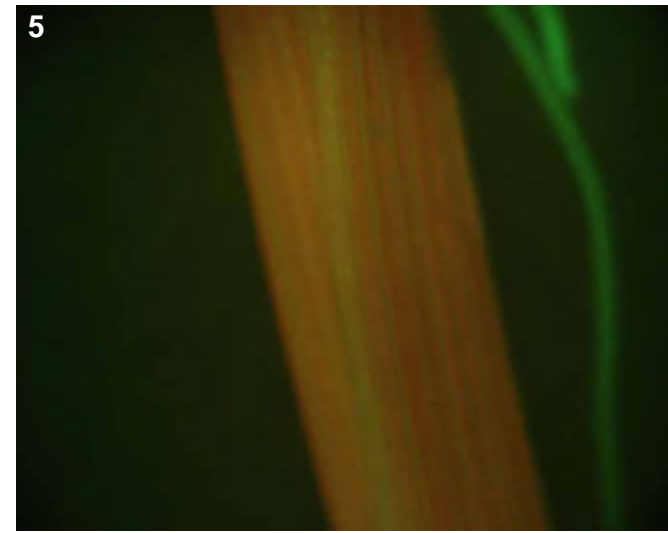
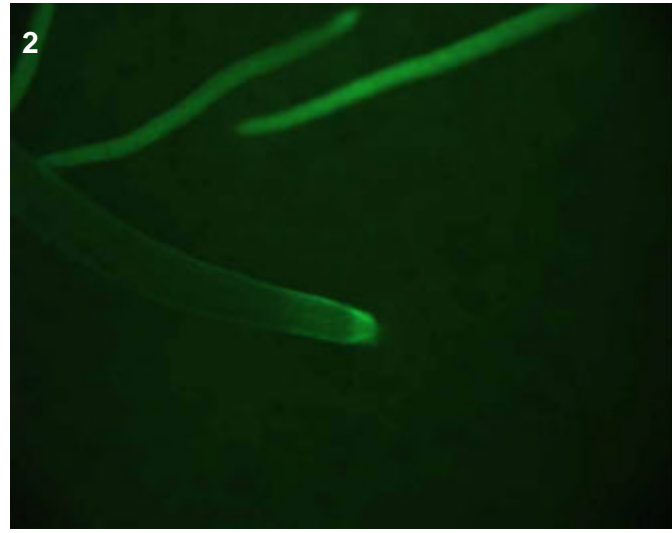
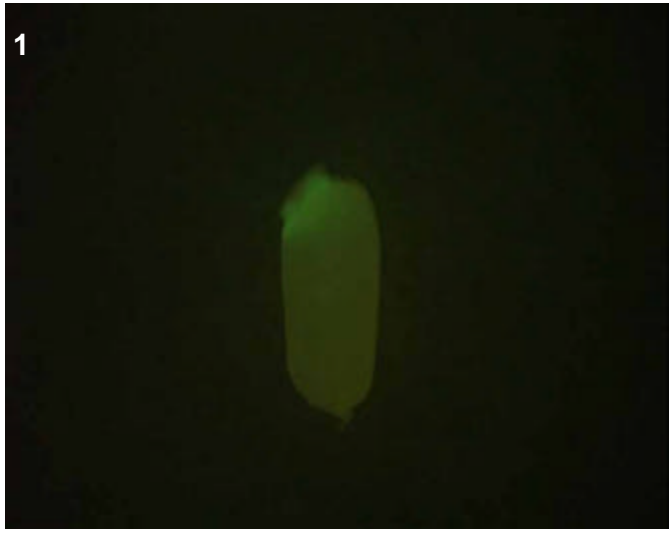
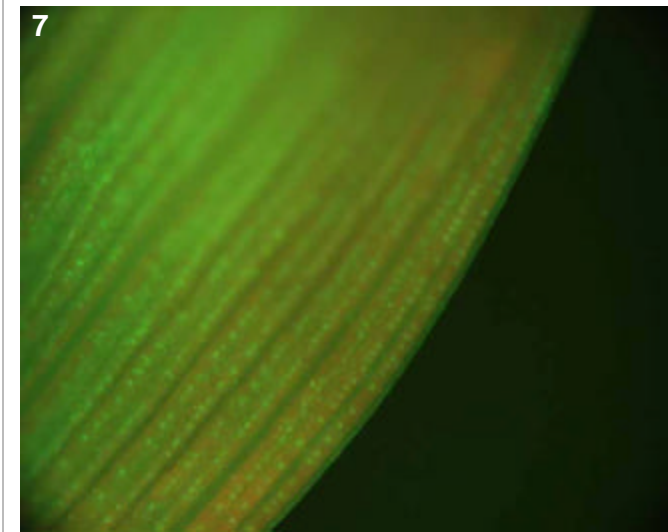
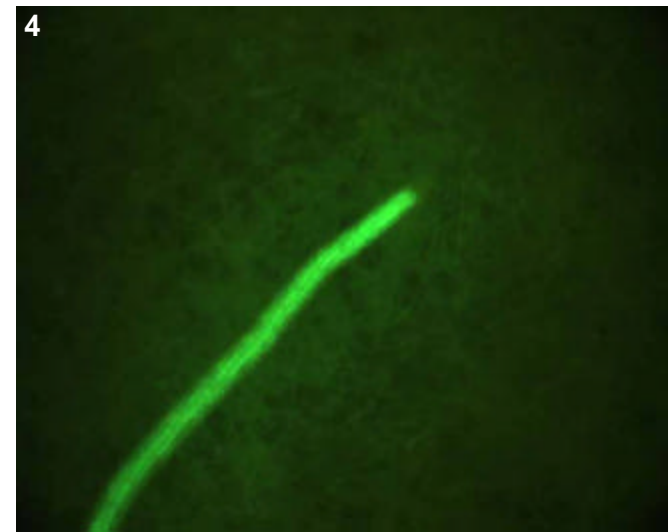
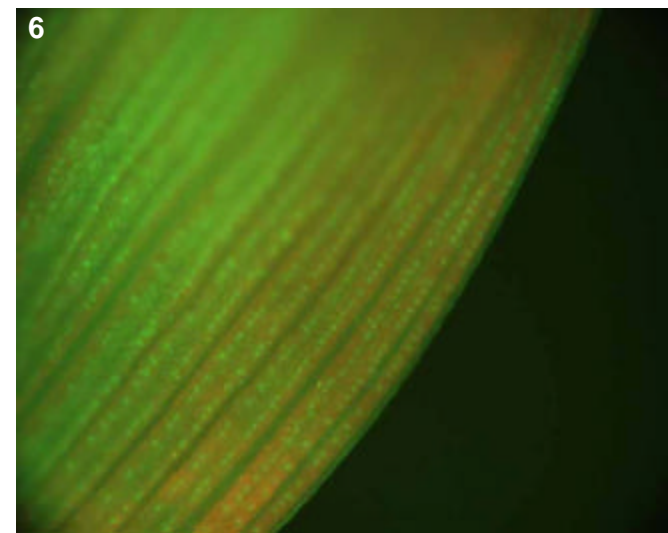
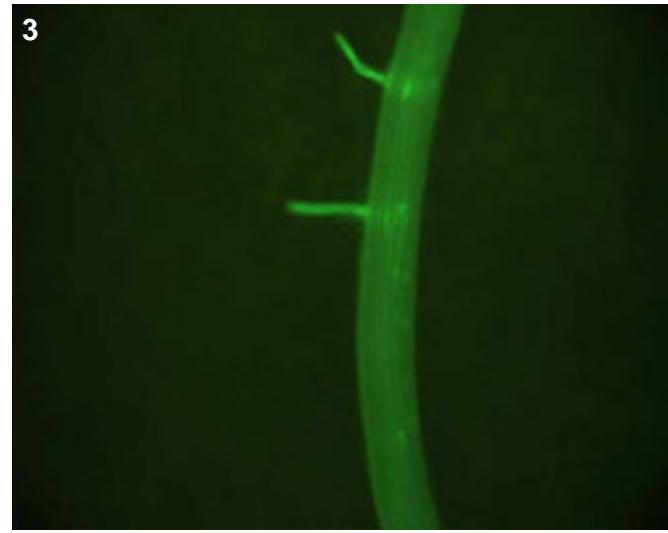
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



**T0 comments**

**T1 seed comments**  
 3/5 seeds had medium expression

**T1 seedling comments**  
 Perhaps an epidermal pattern in both root (pics 2-4) and shoot (pics 5-7).

# Genotype: ASV H01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

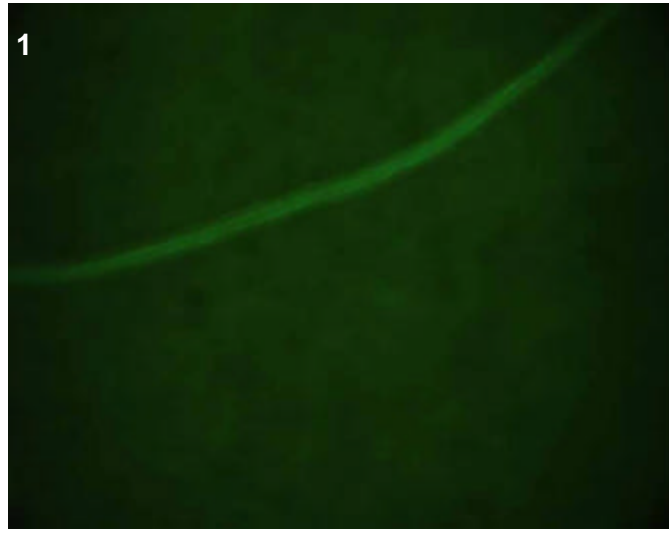
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression observed only in the stele of young crown roots (pic 1).

# Genotype: ASV H05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

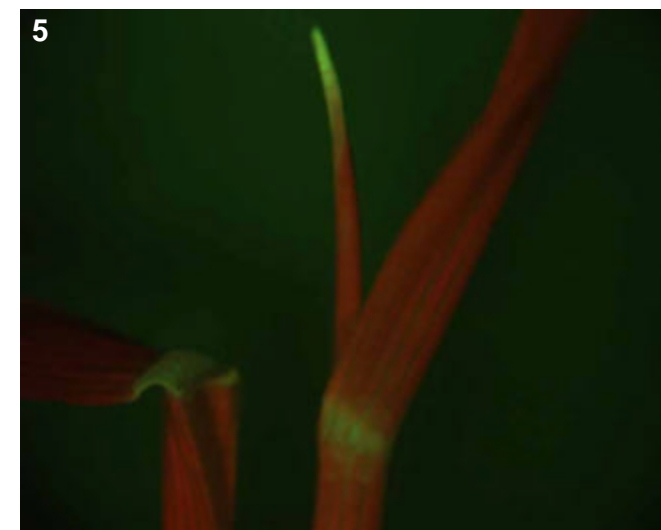
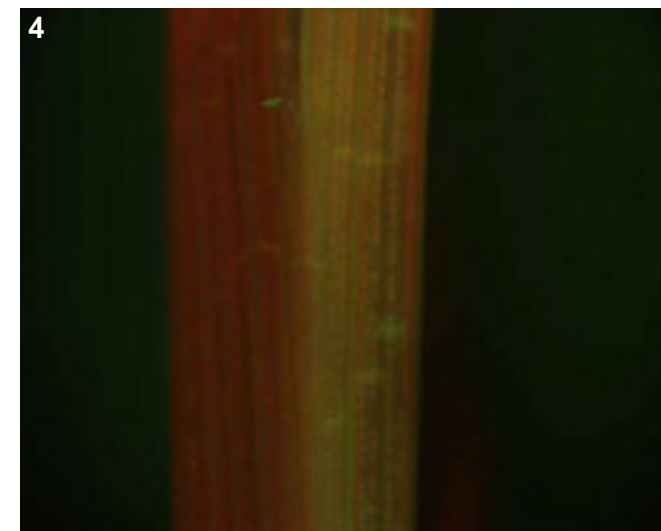
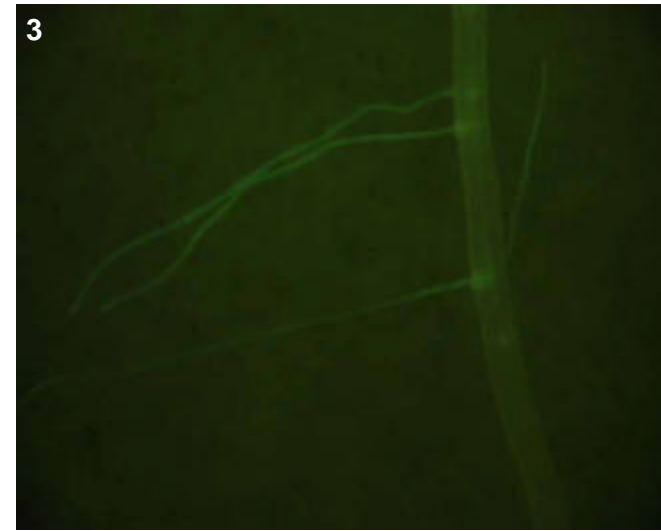
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

1/5 seeds had expression

### T1 seedling comments

# Genotype: ASW A01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

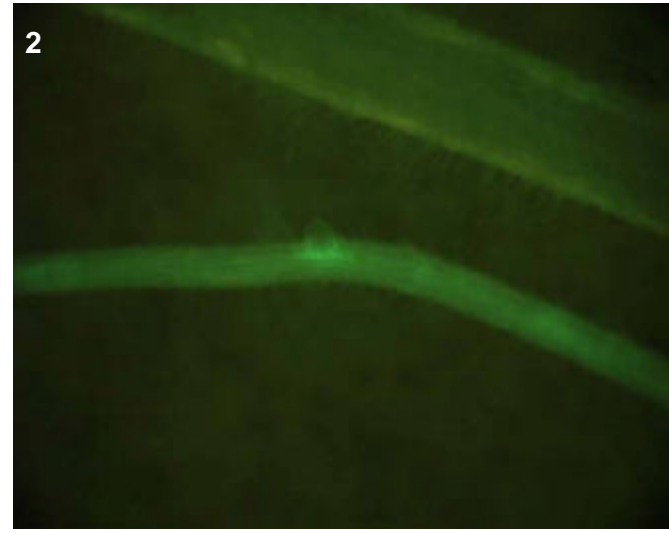
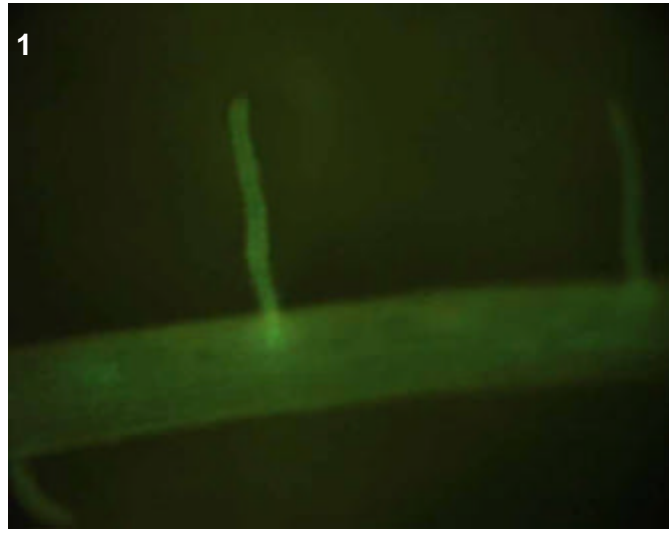
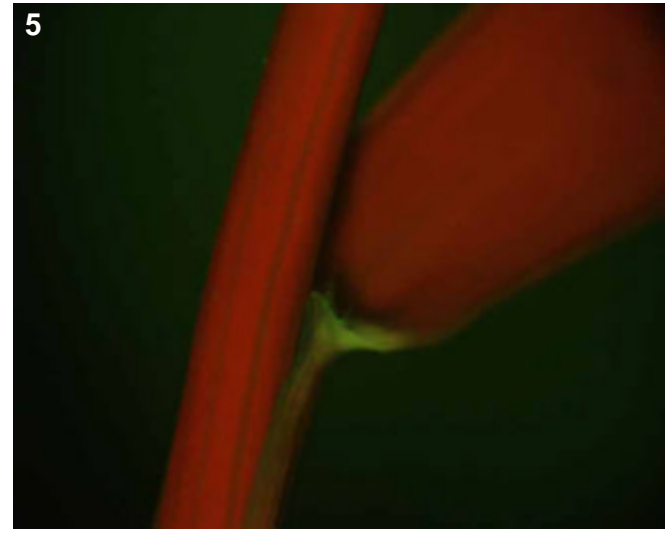
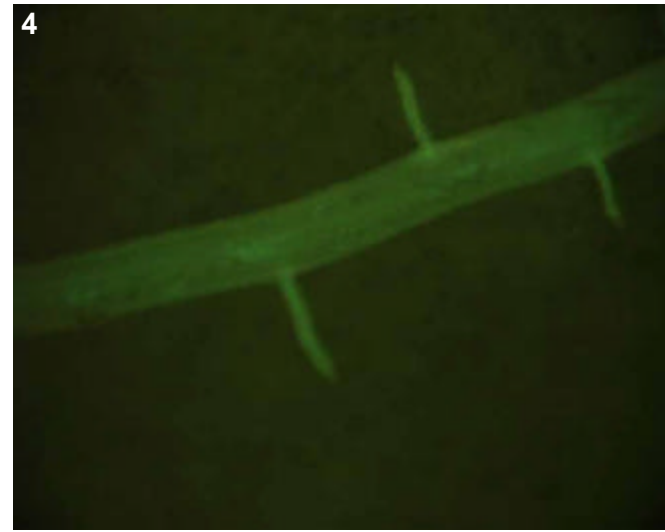
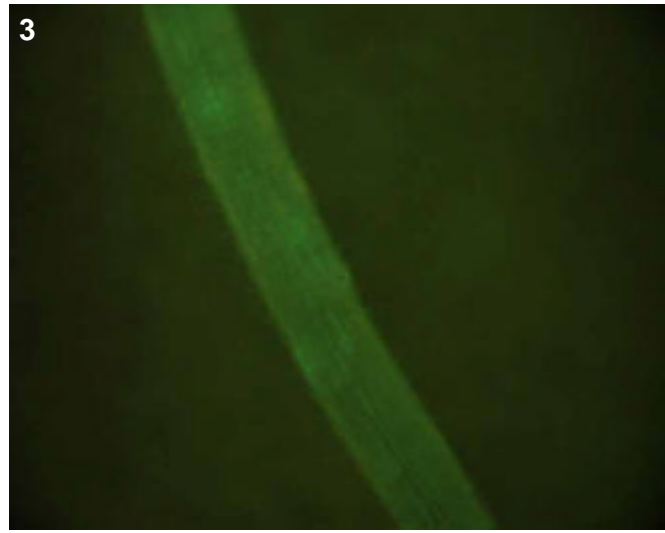
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASW A02

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant:   
 T1 seed/seedling: 1-8  
 T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Embryo

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis

Constitutive

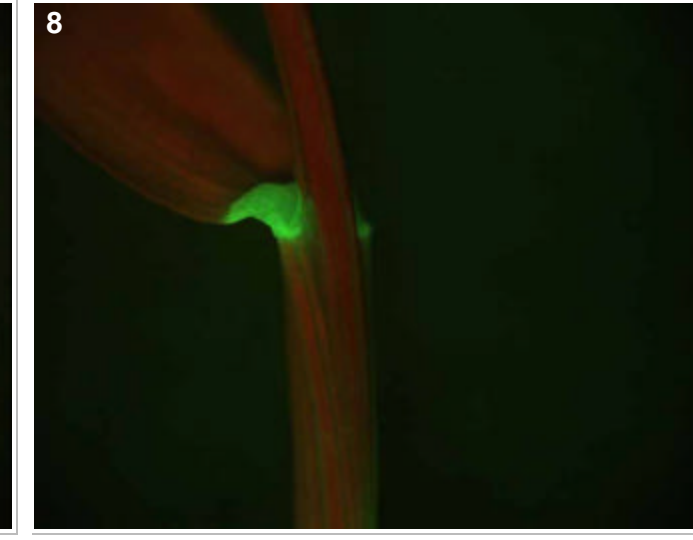
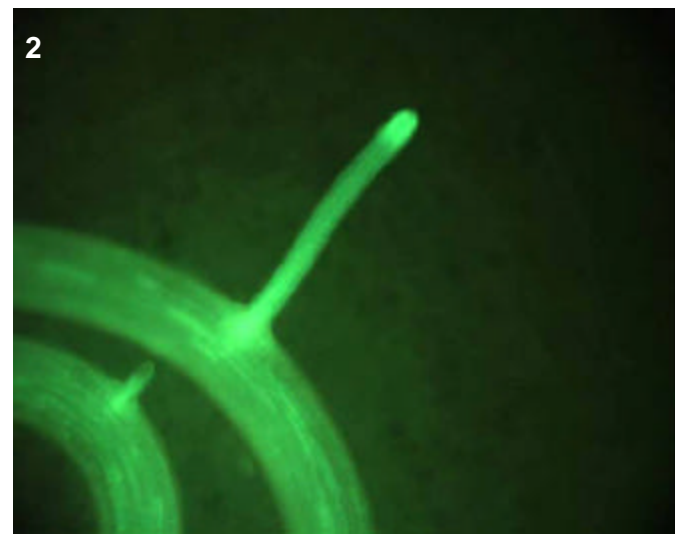
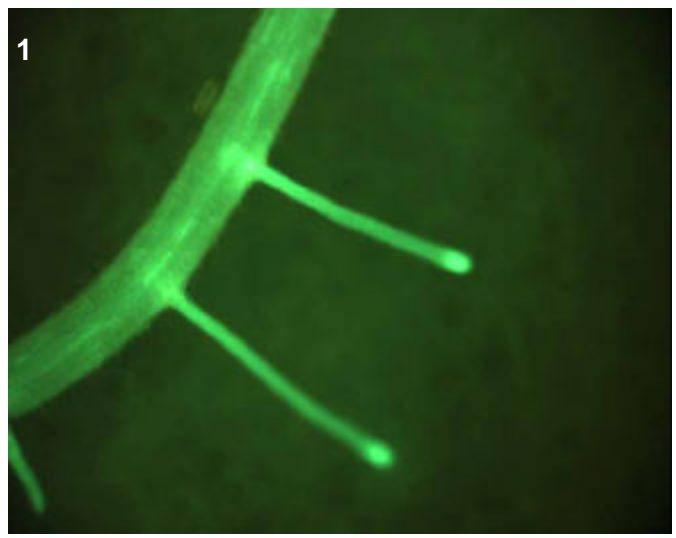
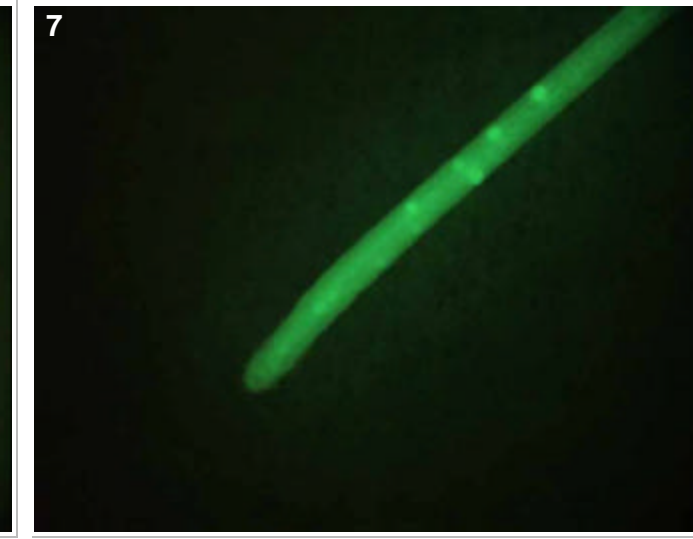
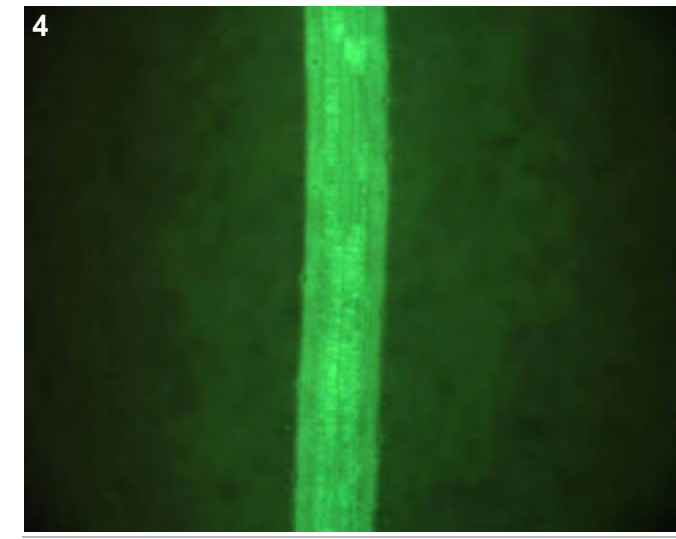
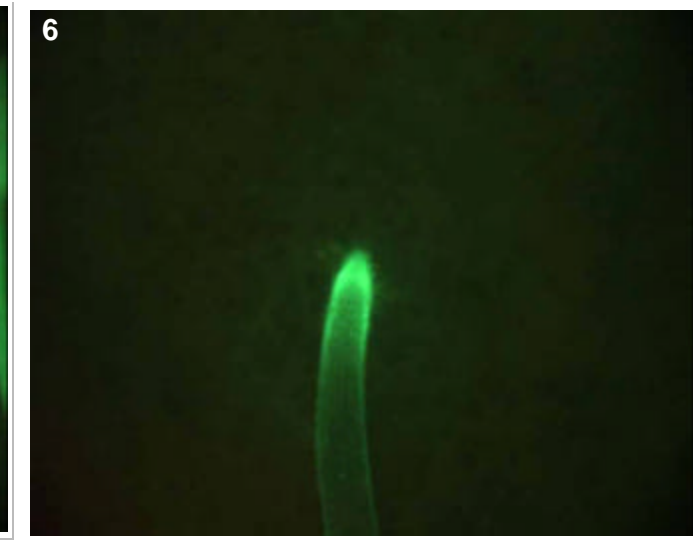
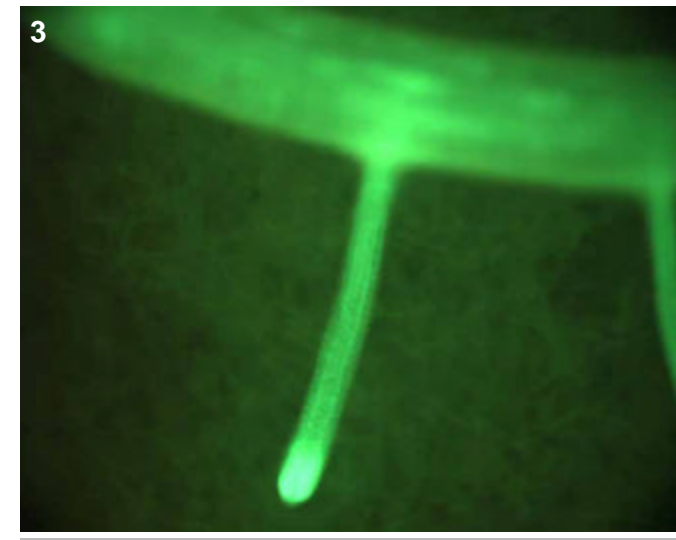
**T1 Mature**

T0 pattern verified:  
 T0 pattern verified plus:  
 New pattern:  
 No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
 2/5 seeds had medium scutellum expression (no picture taken).

**T1 seedling comments**  
 Note the extremely bright root expression (pics 1-7), I suspect a predominately epidermal pattern with some additional cortical expression in the laterals.

# Genotype: ASW A07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-5  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

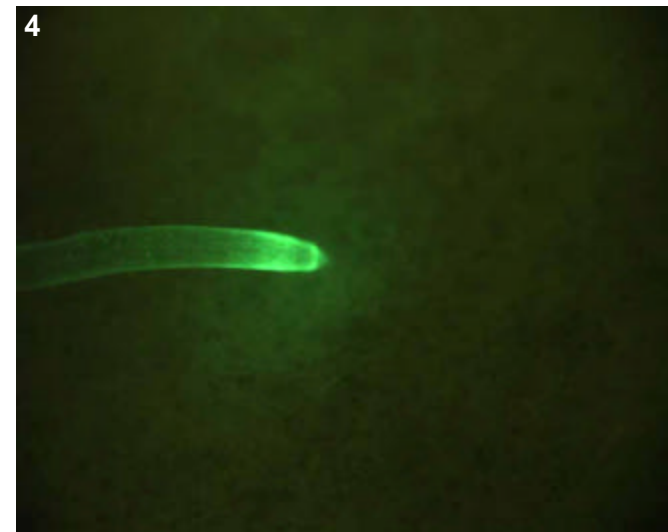
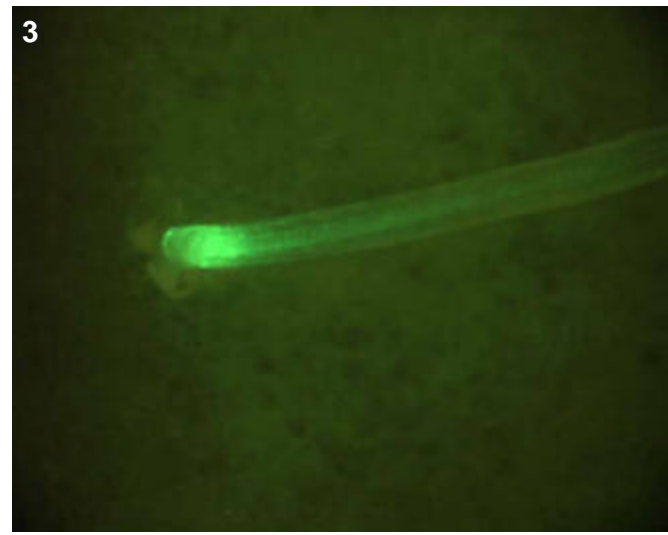
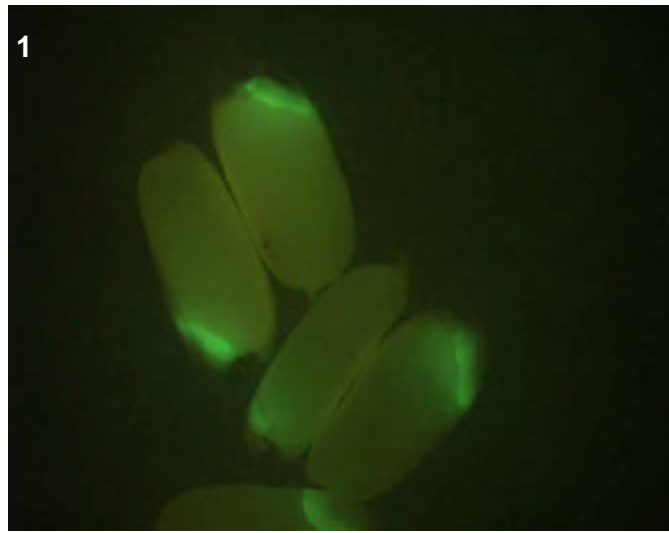
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
YES, 3 GFP+ plants

Confocal?

Number T2 seed produced:



T0 comments

T1 seed comments  
5/5 seeds had expression.

T1 seedling comments

# Genotype: ASW B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

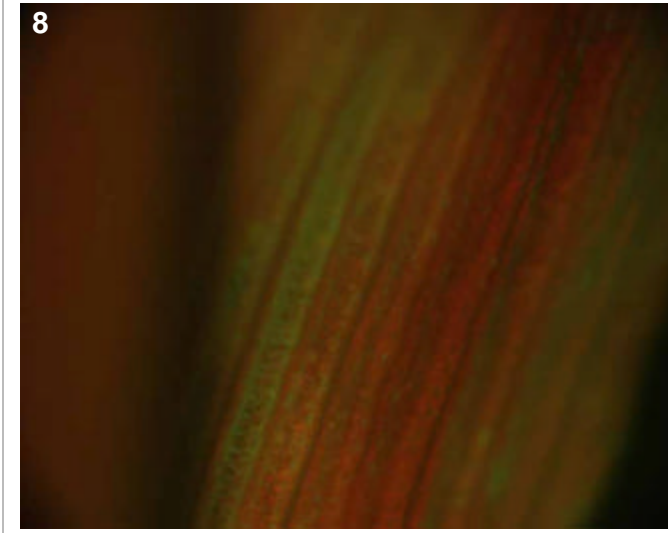
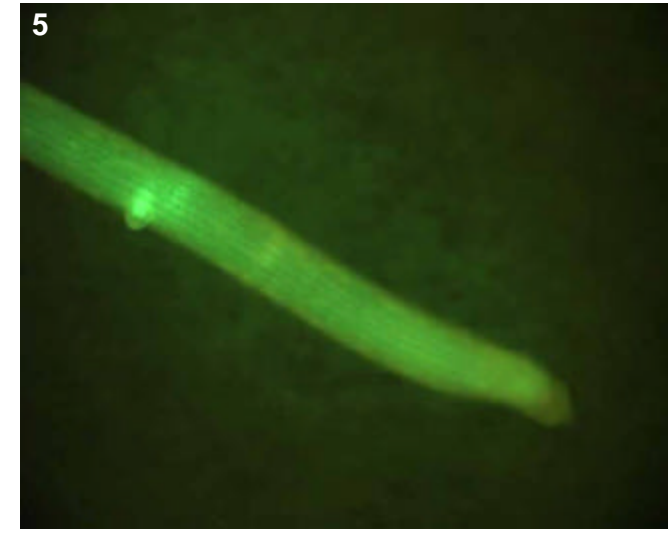
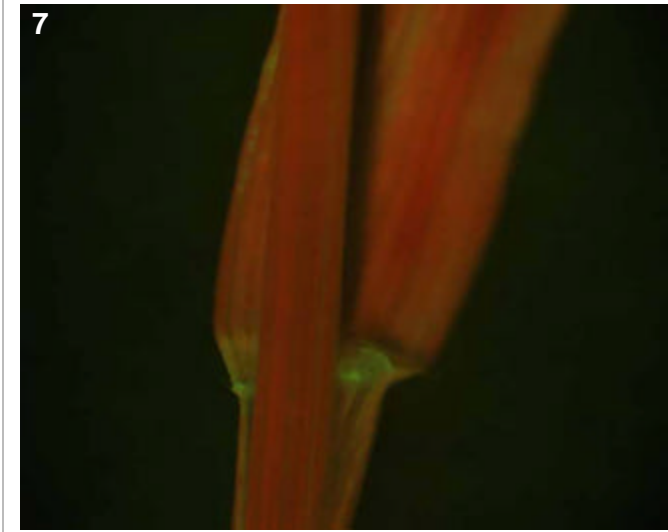
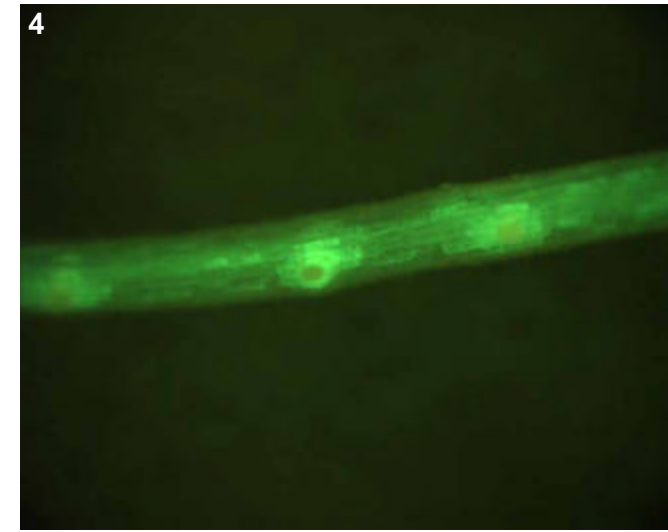
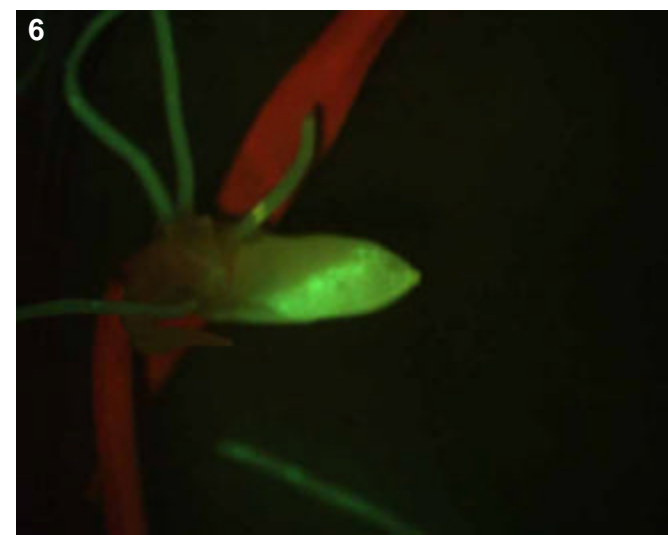
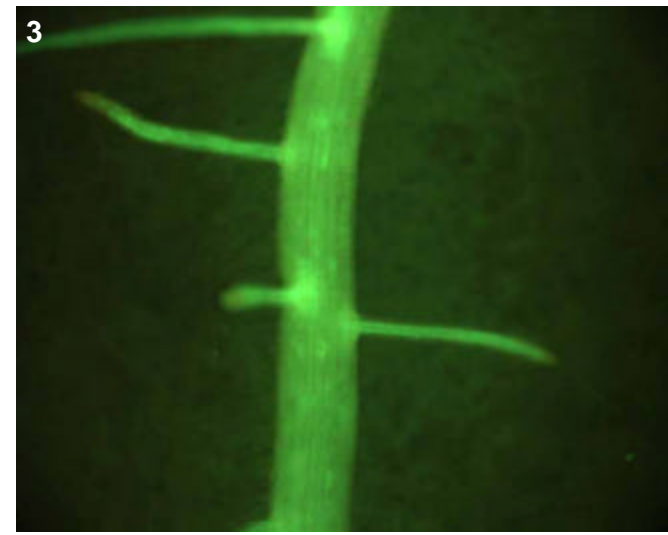
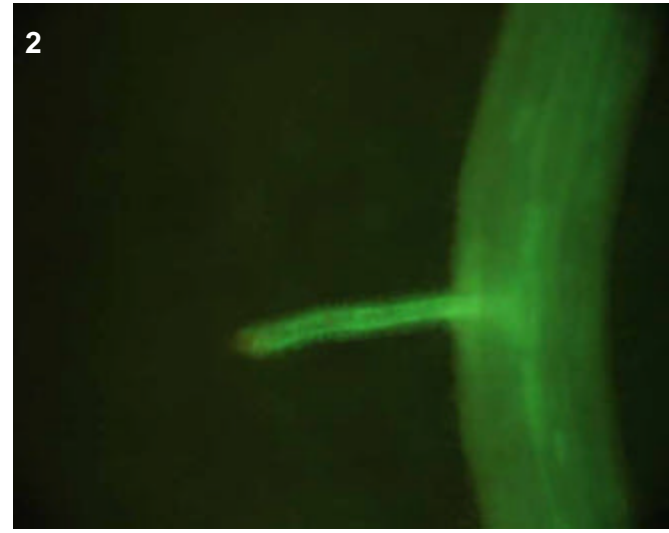
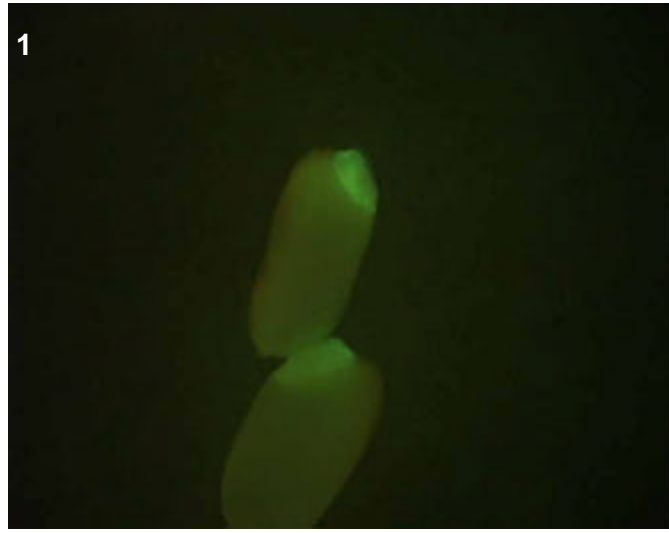
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?  
YES, 3 GFP+ plants
- Confocal?
- Number T2 seed produced:



**T0 comments**

**T1 seed comments**  
4/5 seeds had expression.

**T1 seedling comments**



# Genotype: ASW C02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

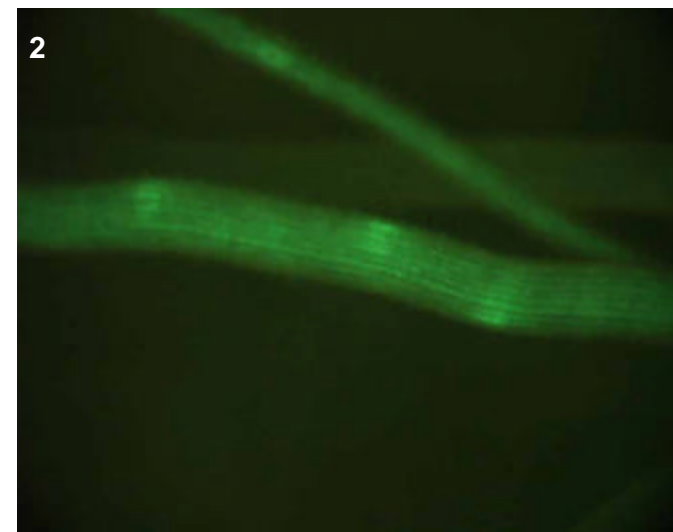
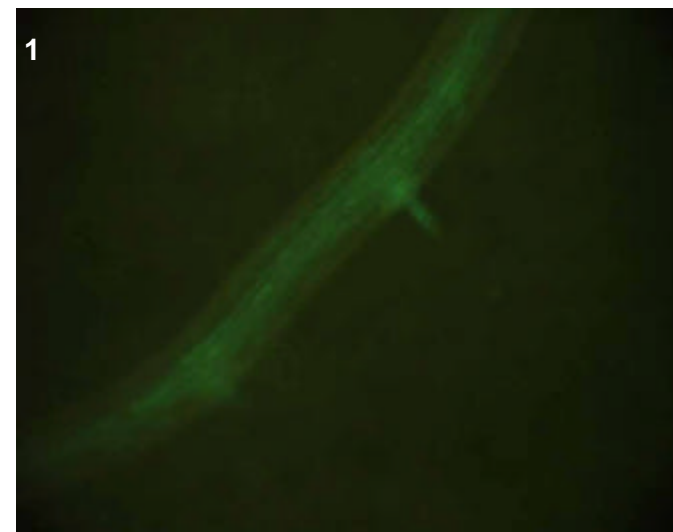
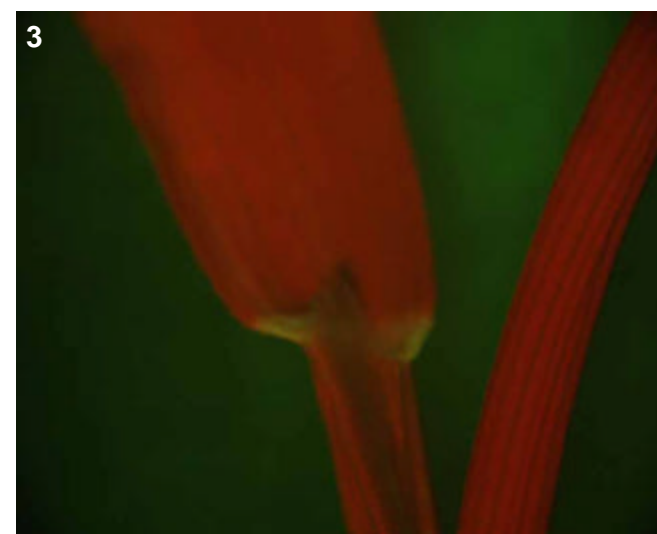
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

Root expression (pics 1-2) was much brighter than shoot (pic 3).

# Genotype: ASW C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

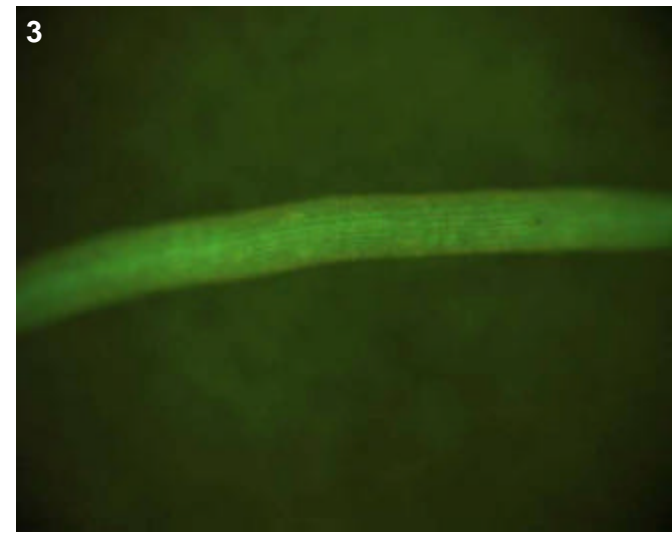
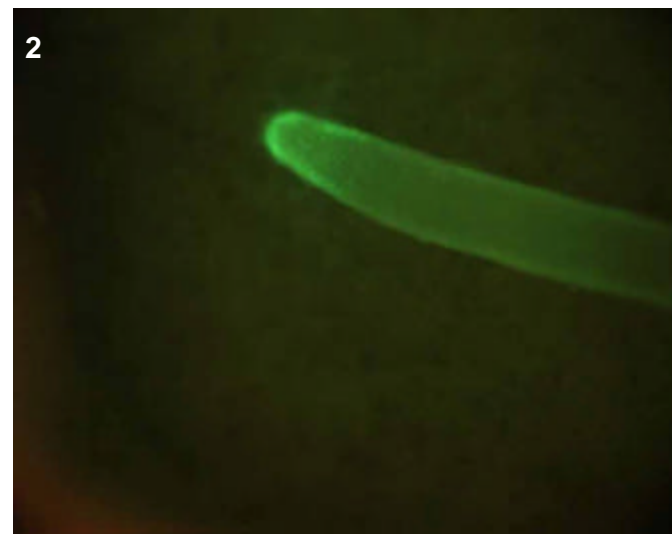
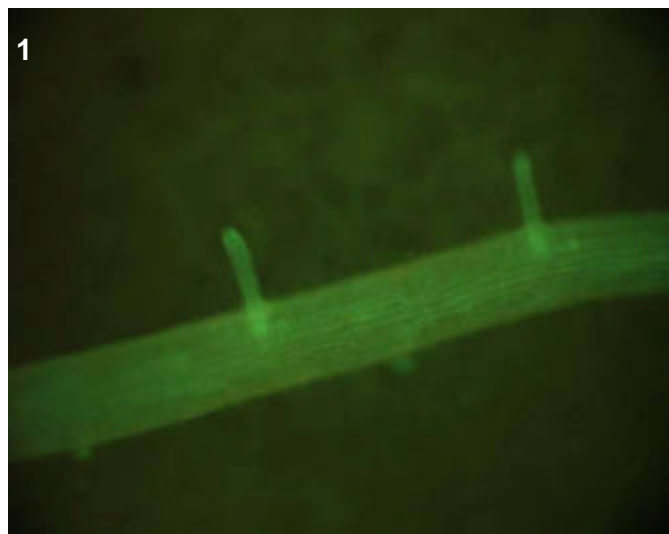
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse? YES, 3 GFP+ plants

Confocal? WIP

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

A nice root epidermal-specific line (pics 1-4).

# Genotype: ASW D01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-6  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

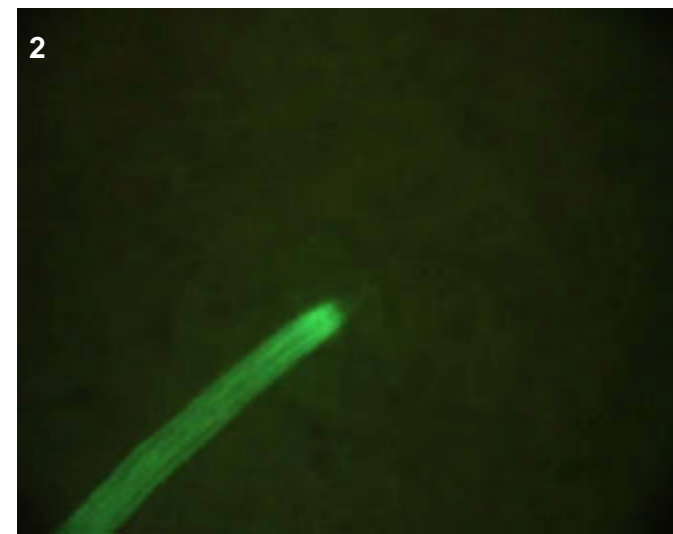
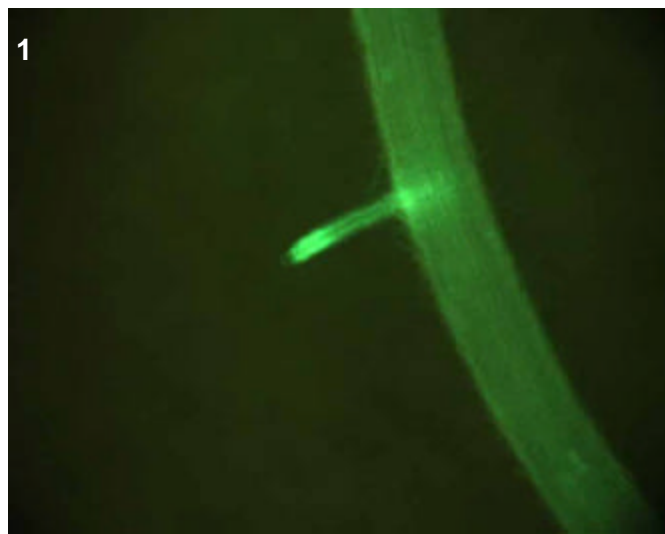
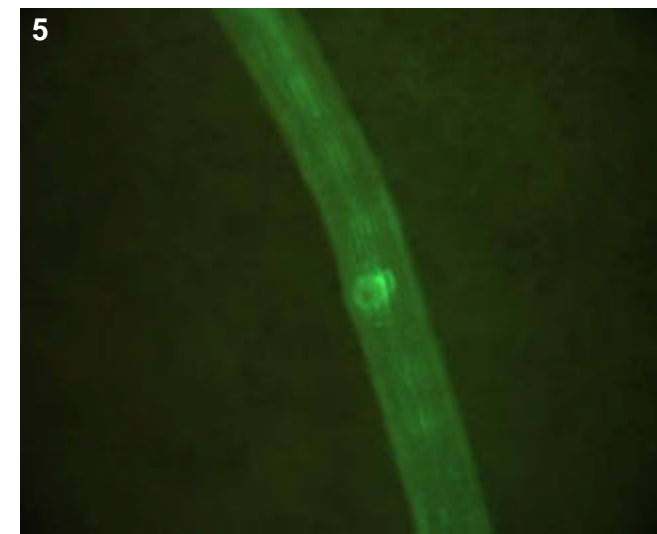
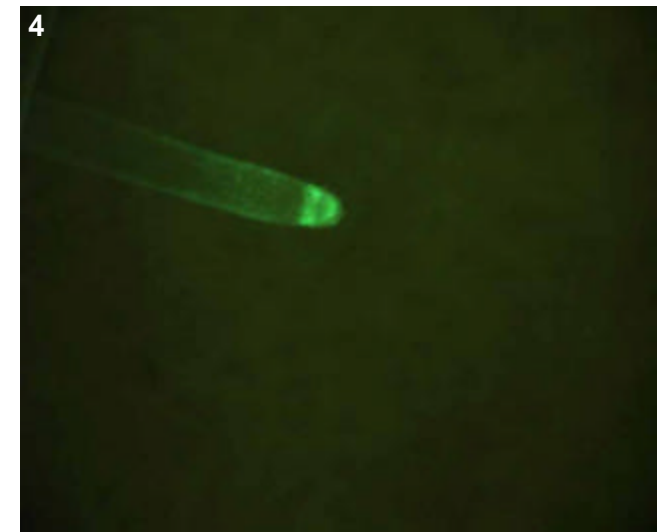
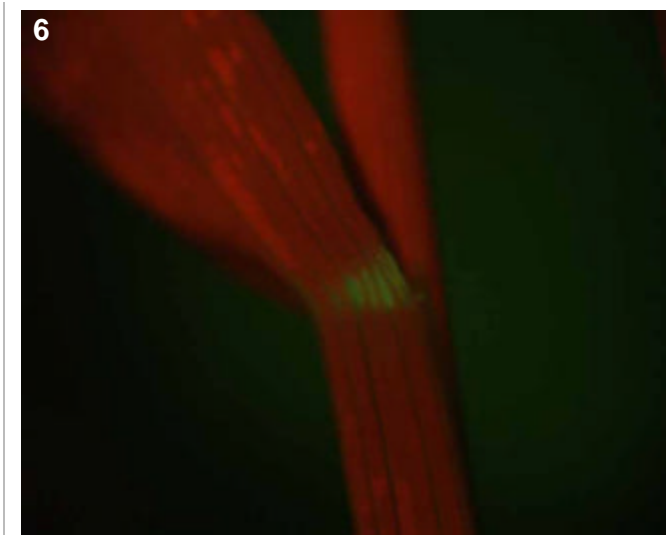
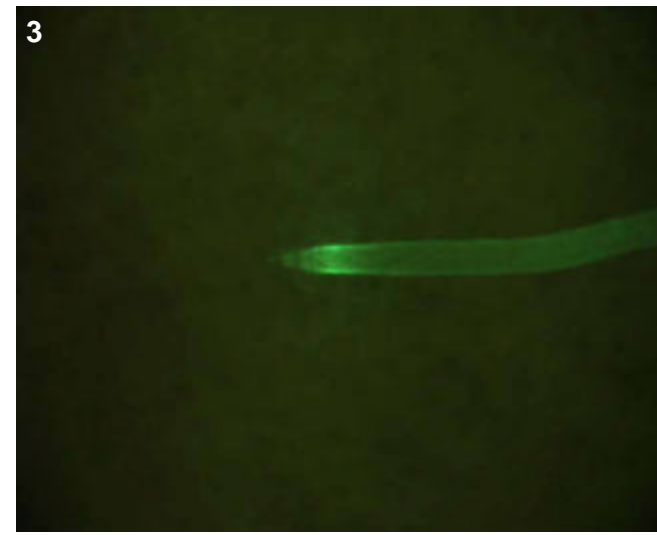
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Confocal imaging of lats (pic 1) and crowns (pic 2) would likely show a nice cortical line.

# Genotype: ASW E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

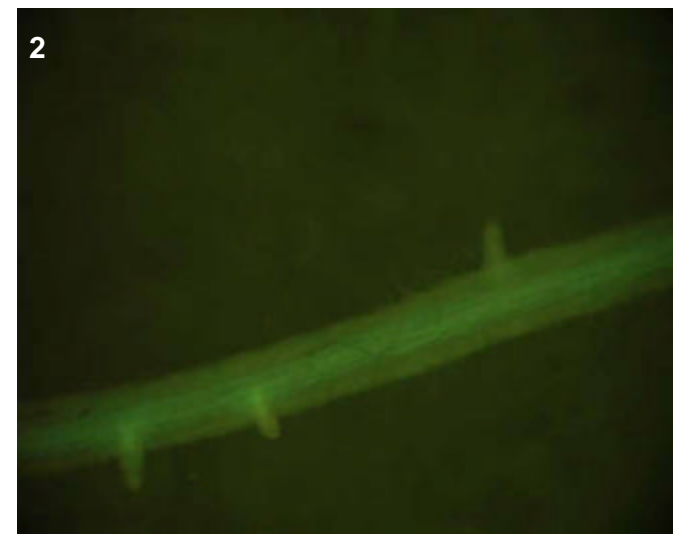
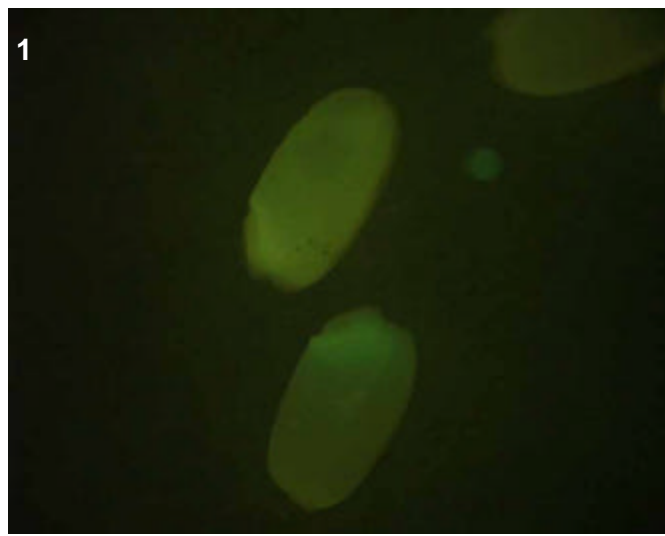
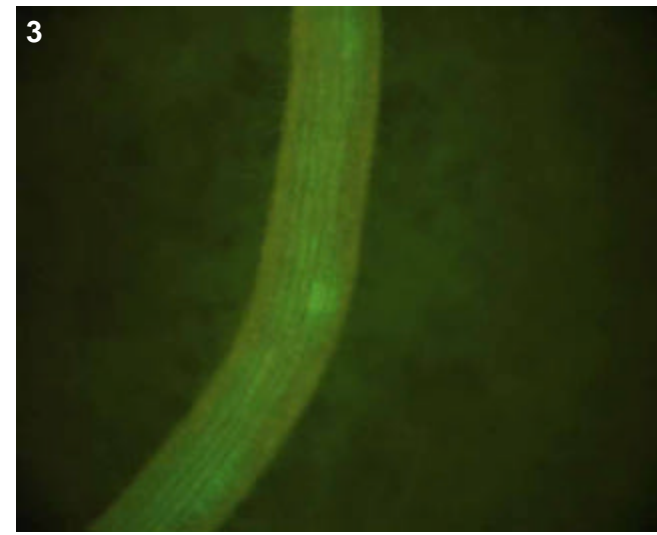
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

# Genotype: ASW F03

### Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

### Expression

- None
- Bright
- Medium
- Weak
- Unsure

### Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

### T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

### T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

### T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

### T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

### T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

### T1 Mature

T0 pattern verified:

T0 pattern verified plus:

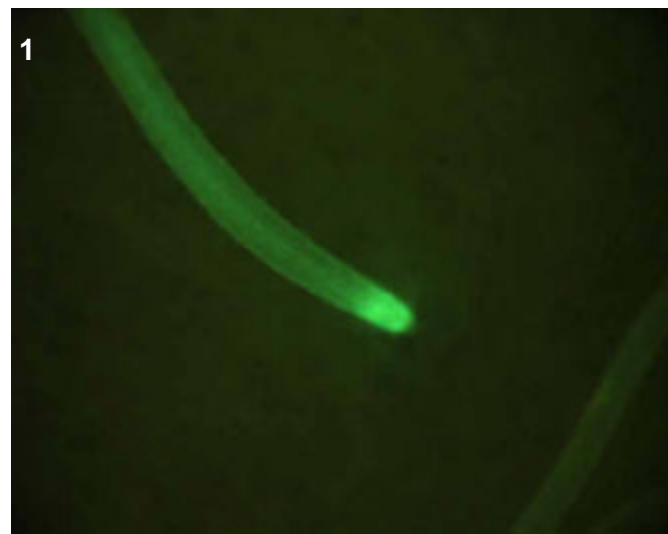
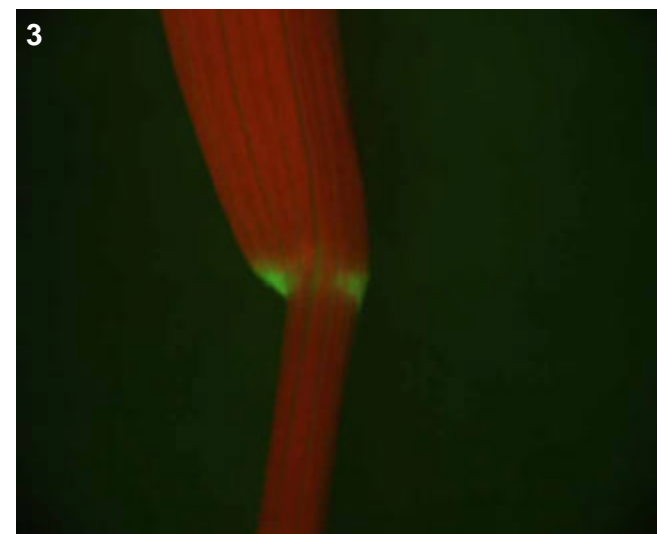
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



### T0 comments

### T1 seed comments

3/5 seeds had medium expression in the scutellum (no picture taken).

### T1 seedling comments

# Genotype: ASW F05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

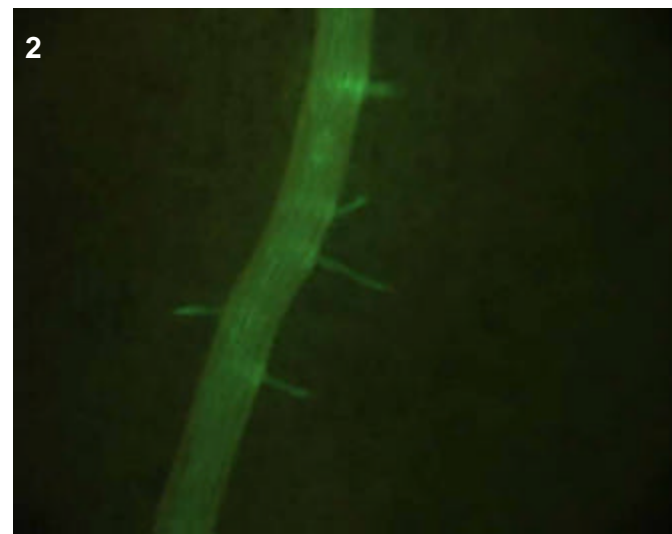
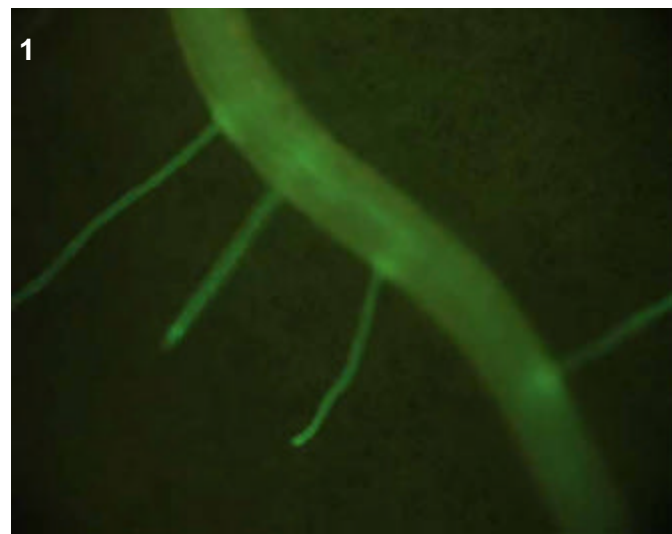
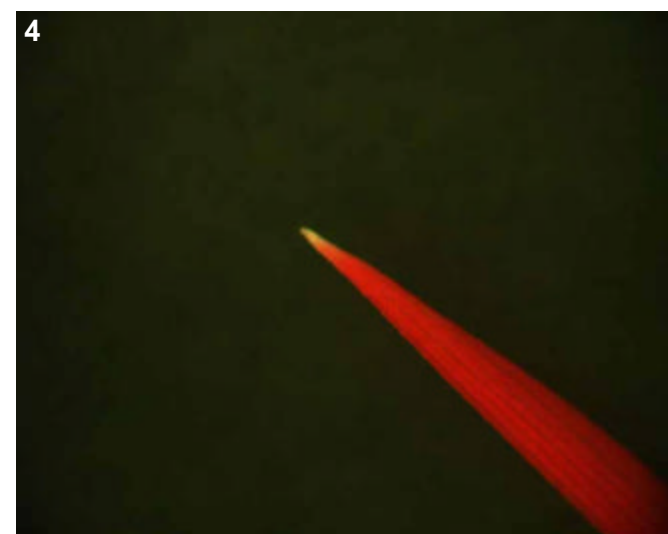
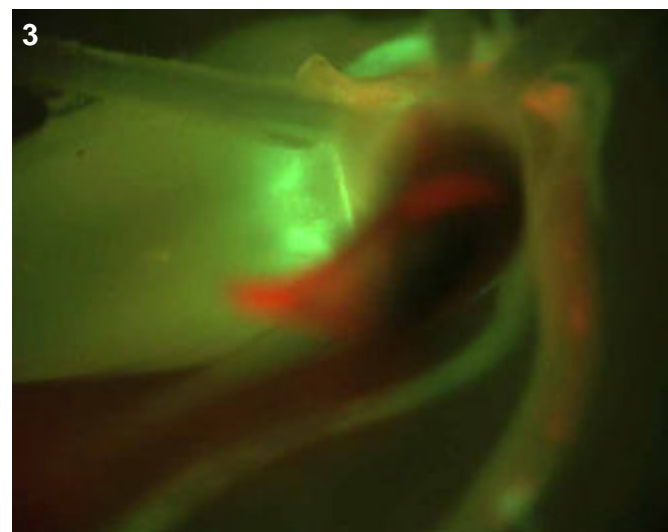
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

Confocal?

Number T2 seed produced:



T0 comments

T1 seed comments

T1 seedling comments

# Genotype: ASW F08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-8  
T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

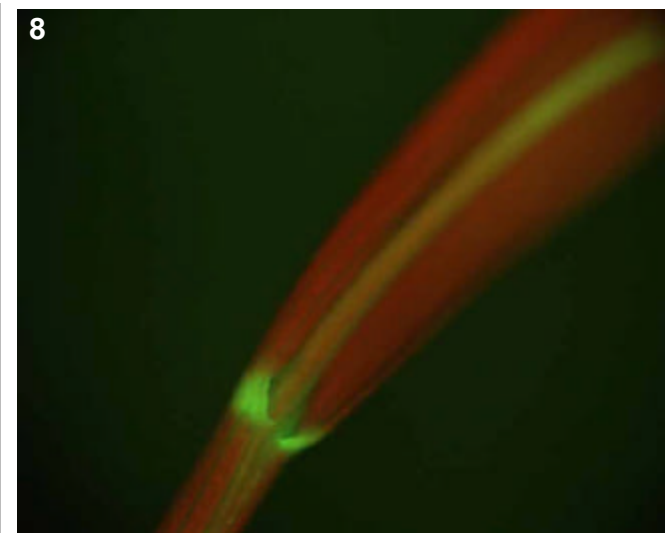
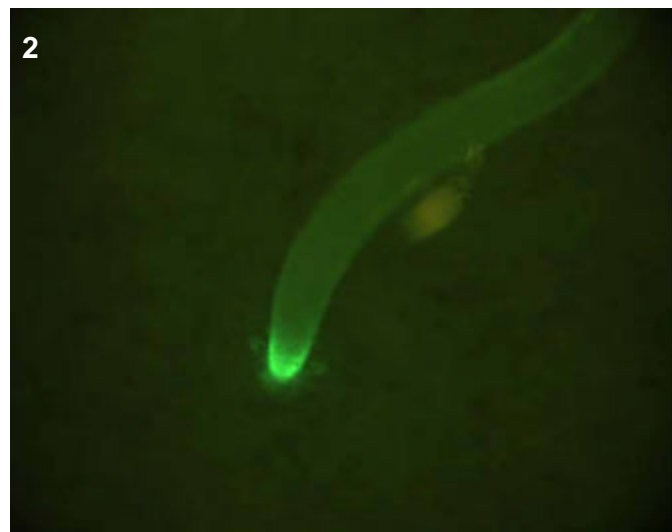
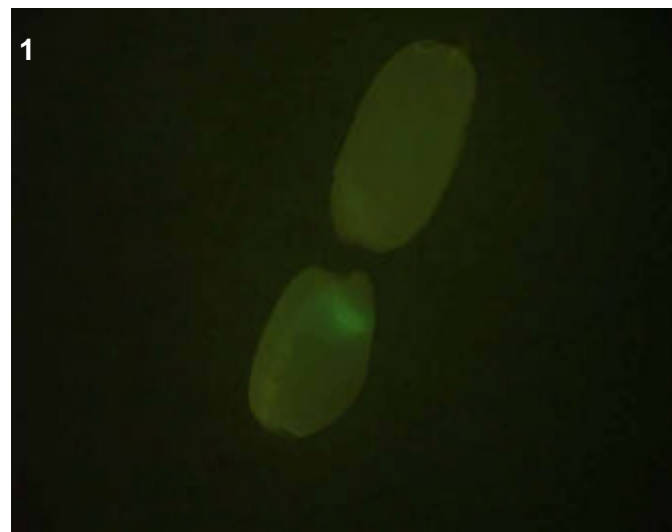
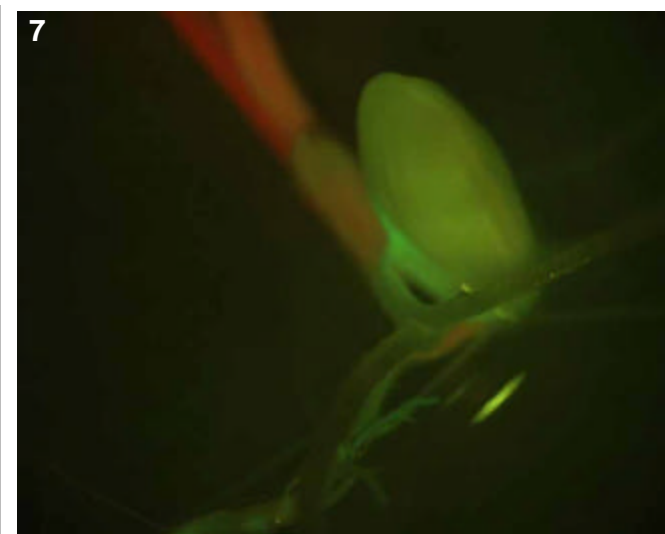
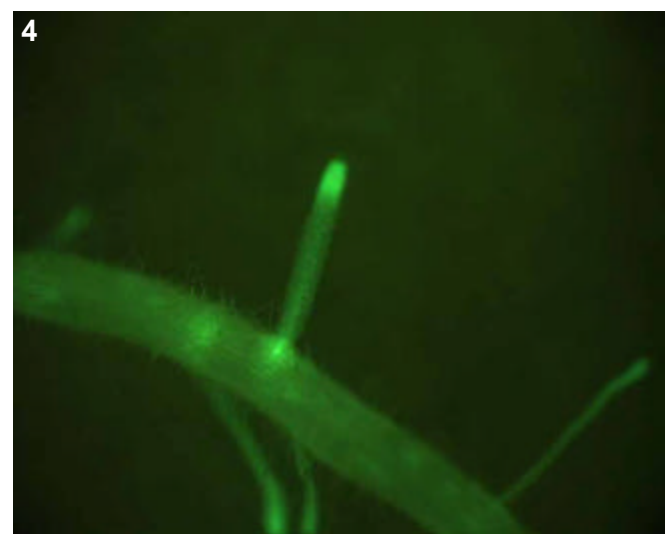
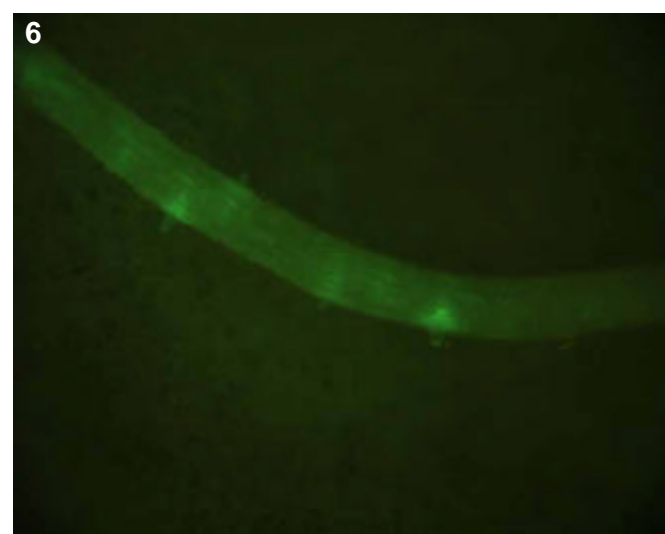
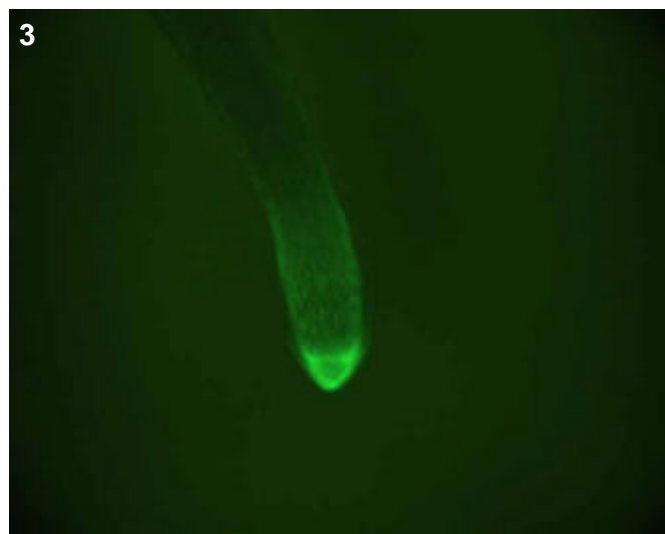
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

# Genotype: ASW G05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

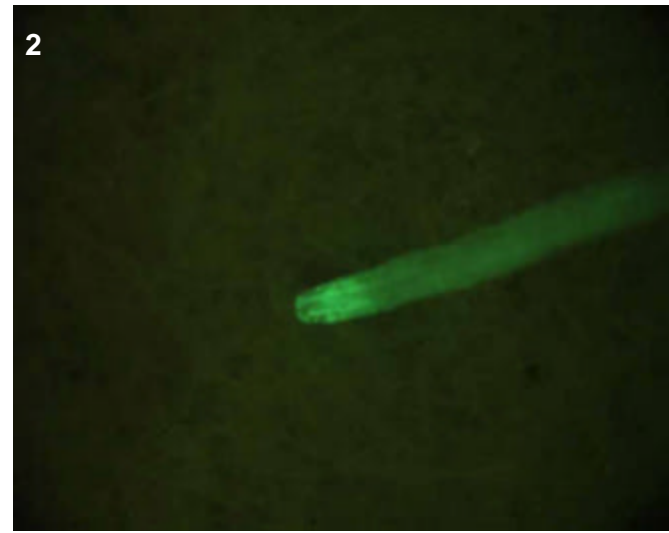
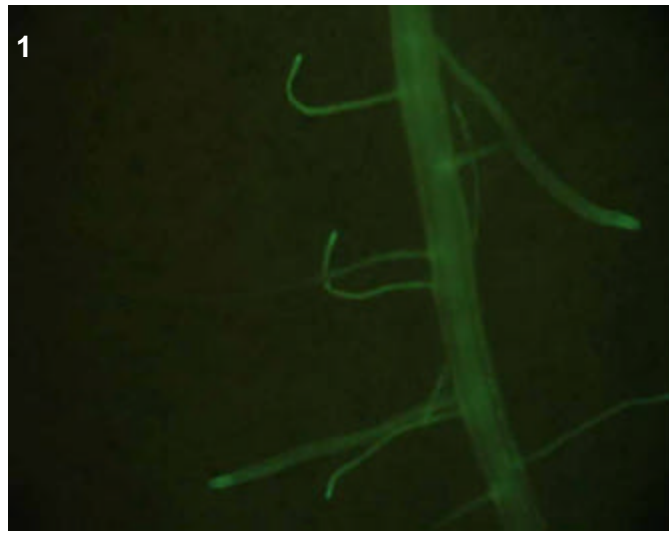
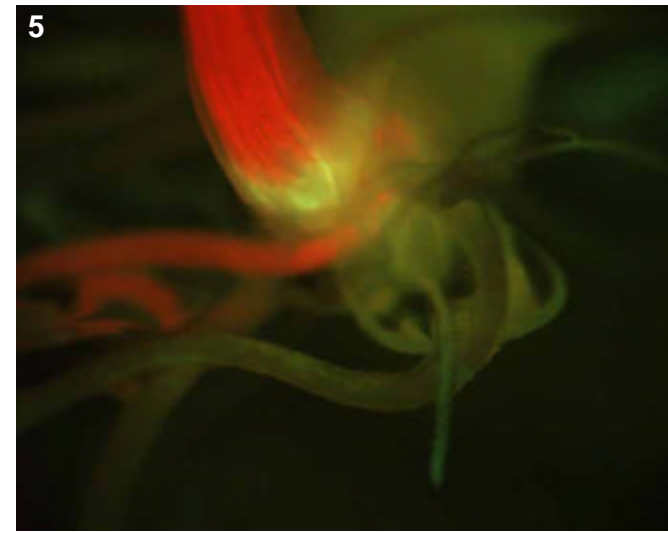
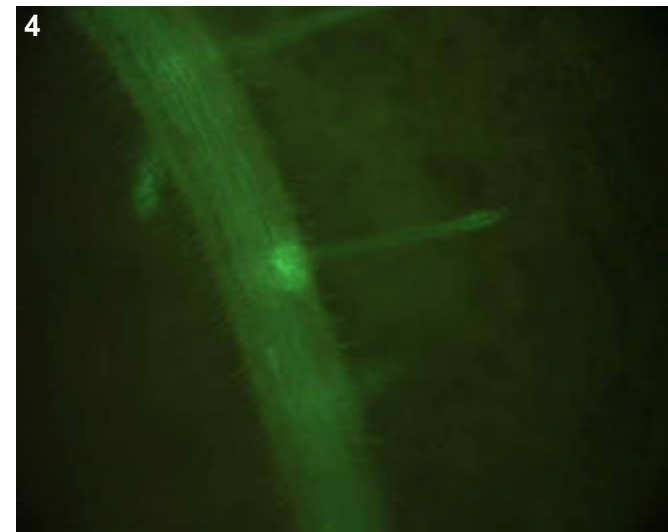
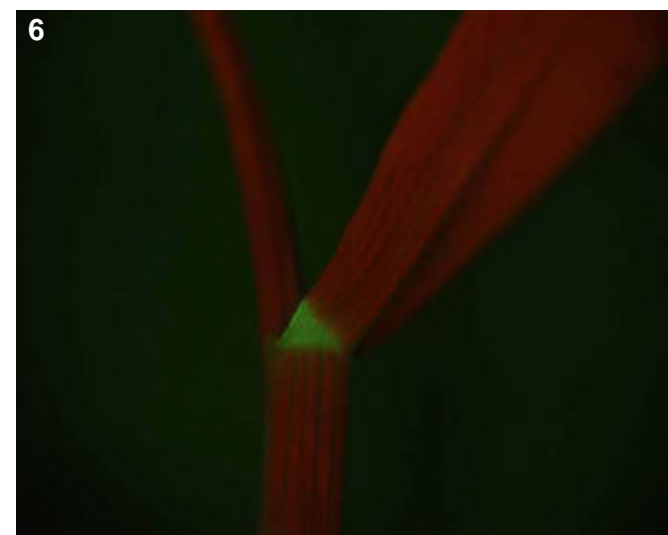
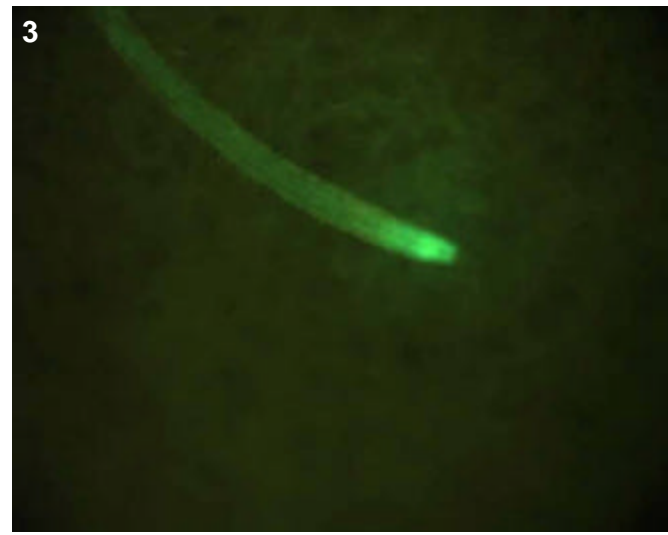
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASX A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

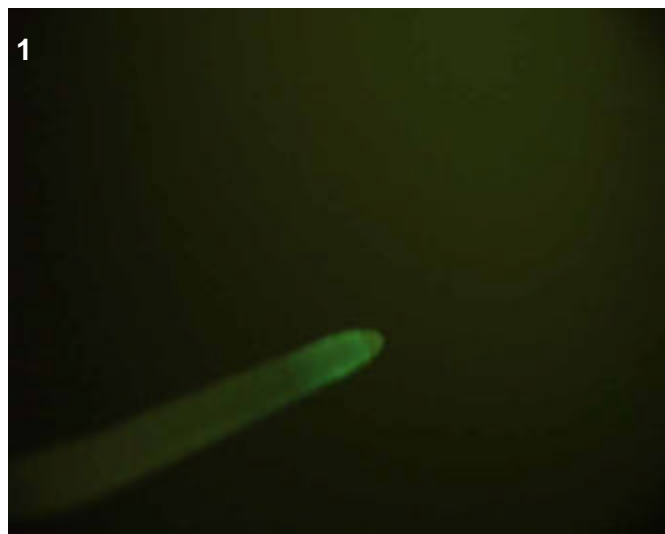
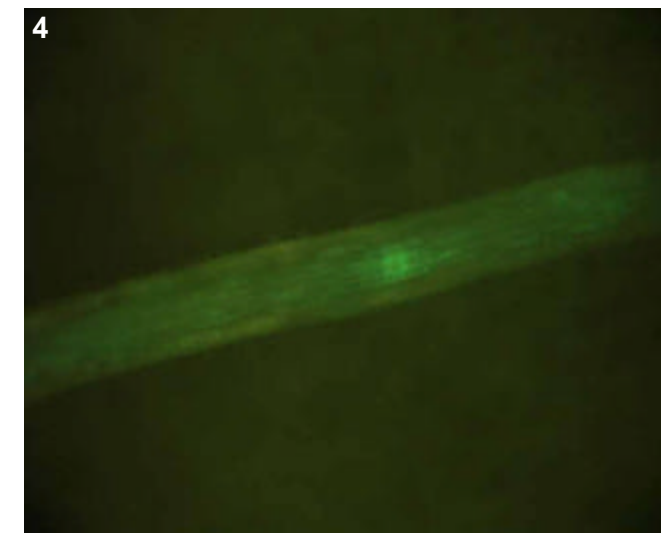
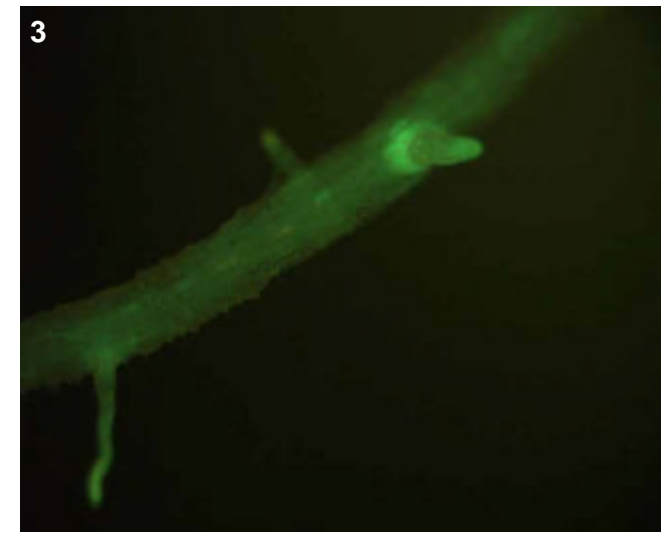
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

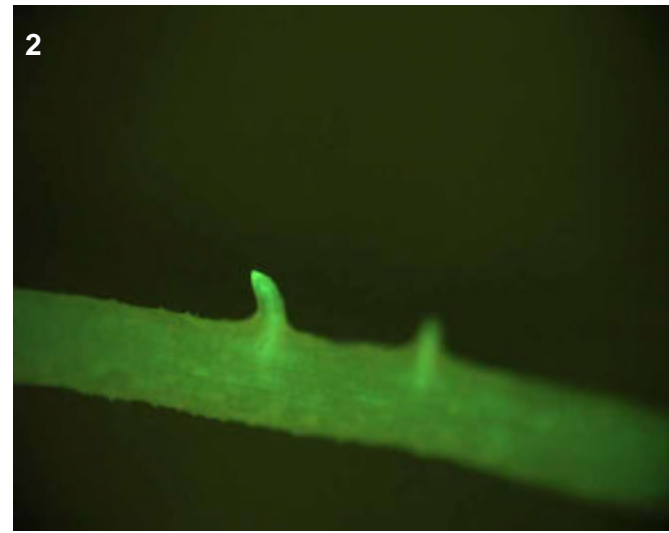
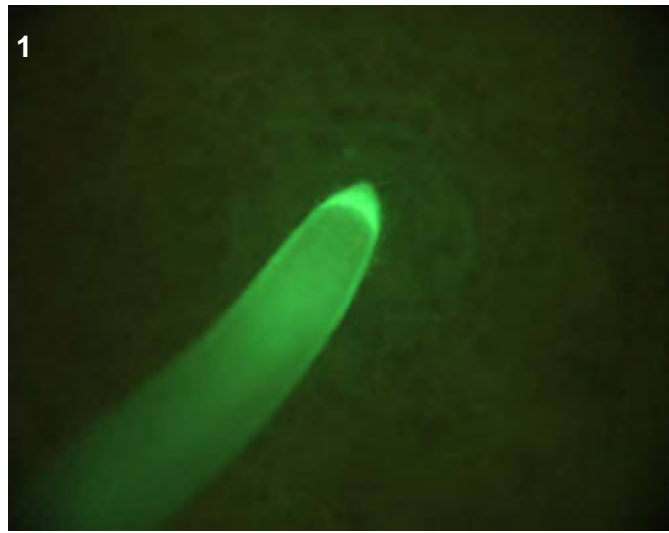
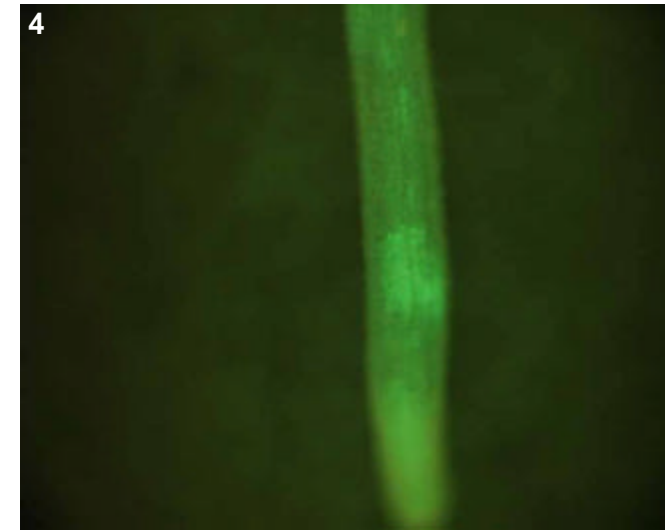
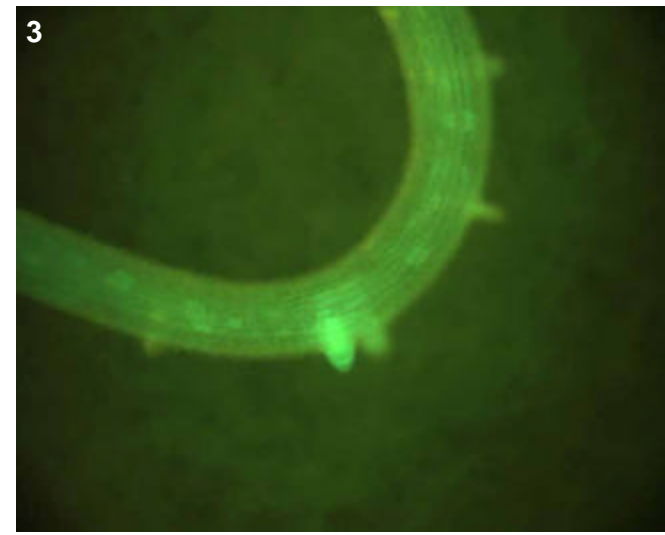
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

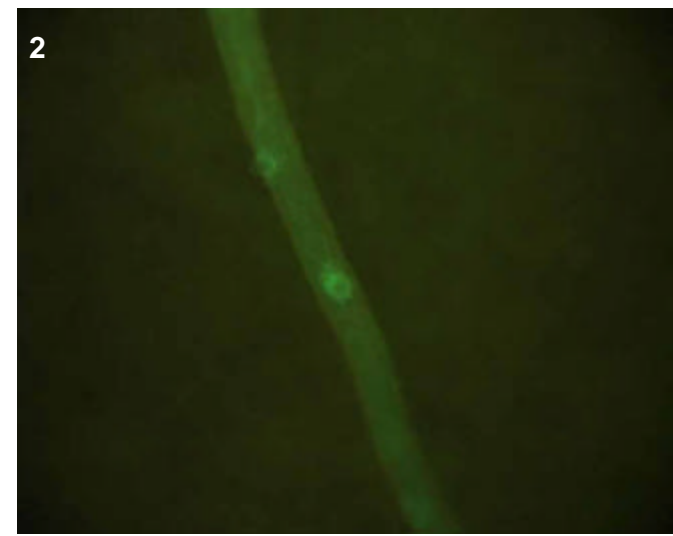
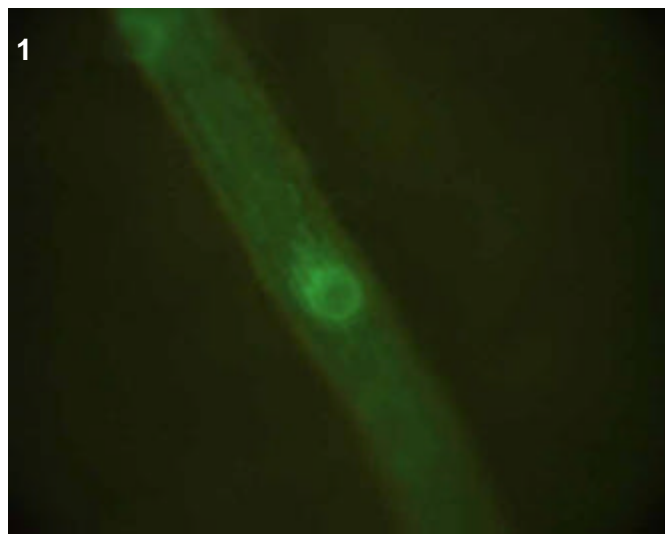
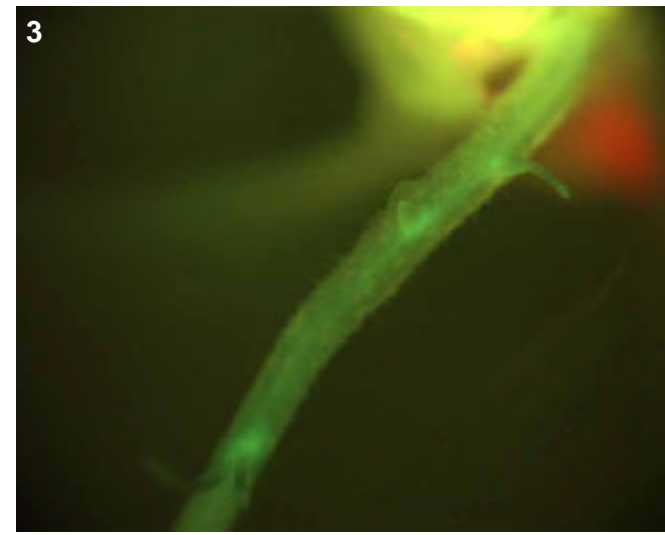
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX B07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

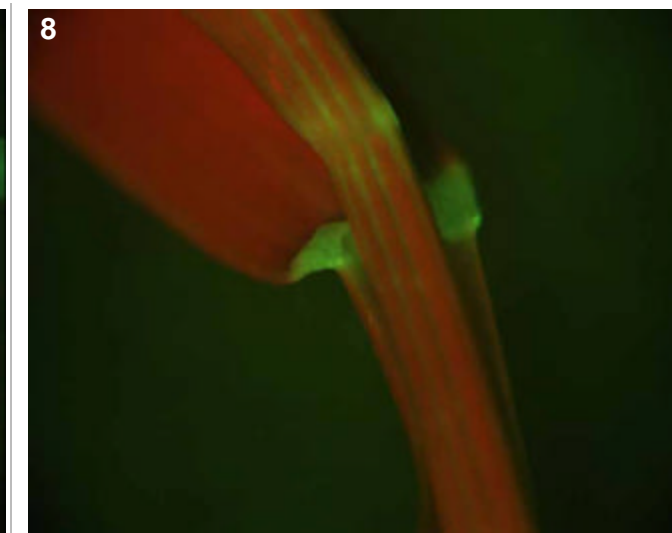
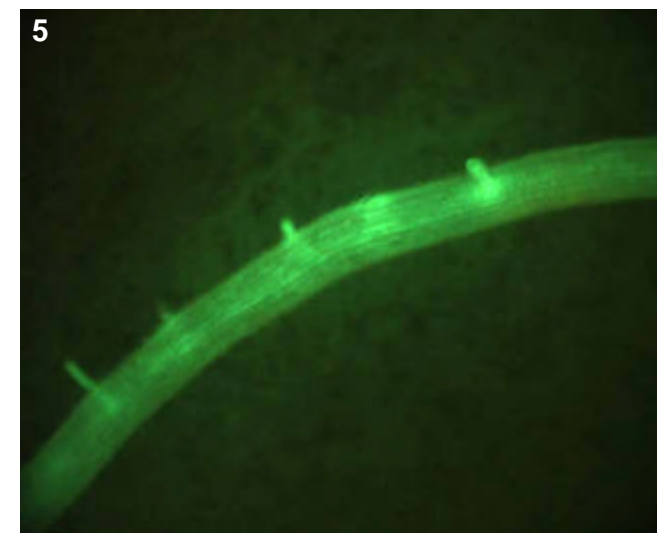
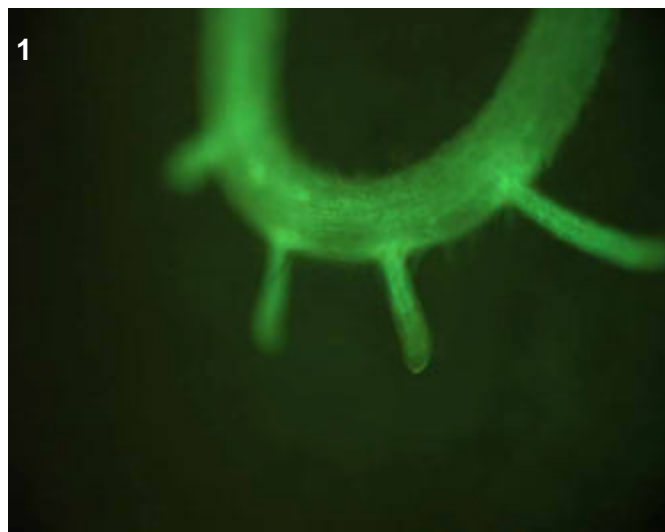
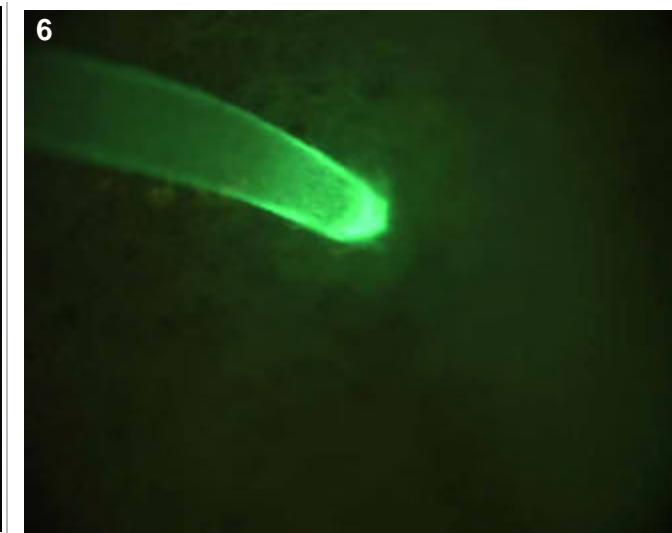
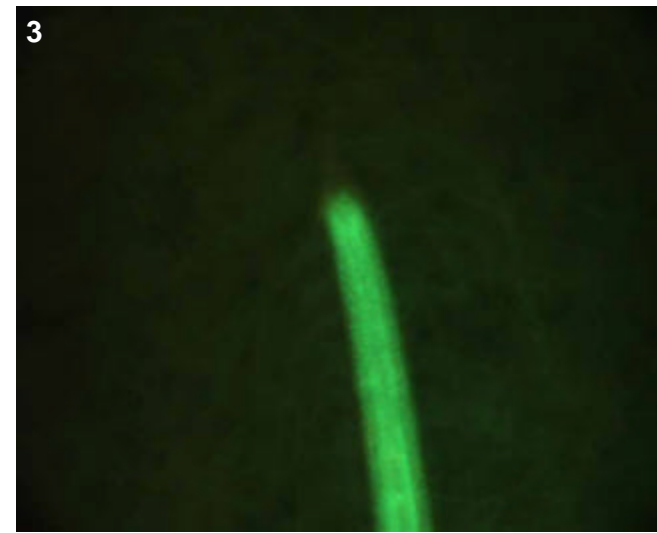
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX B11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

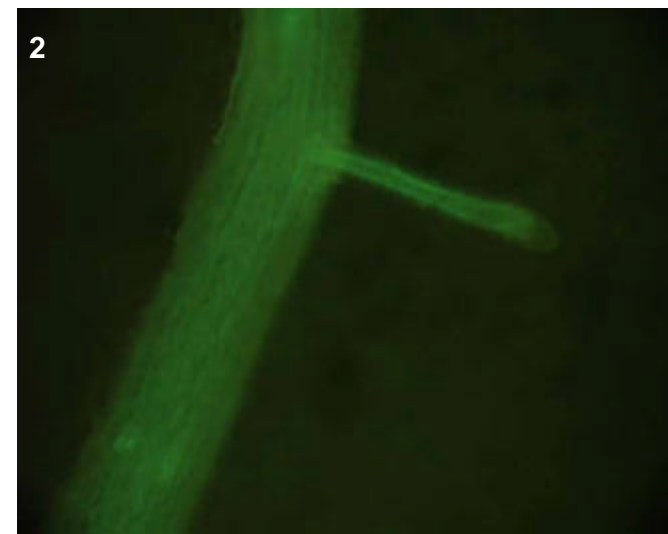
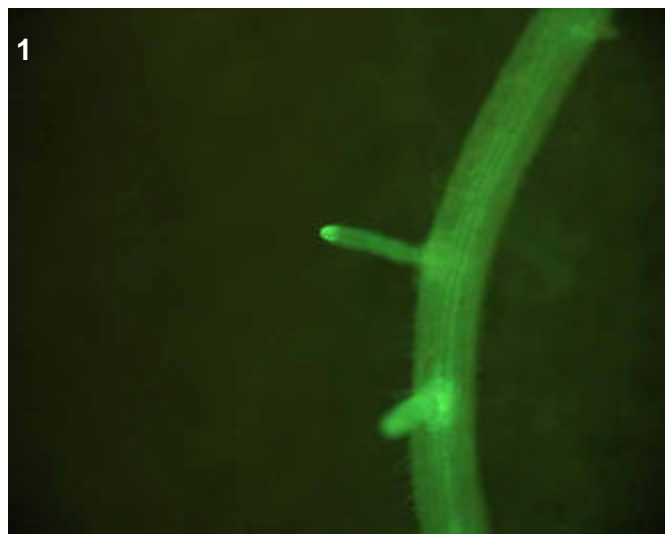
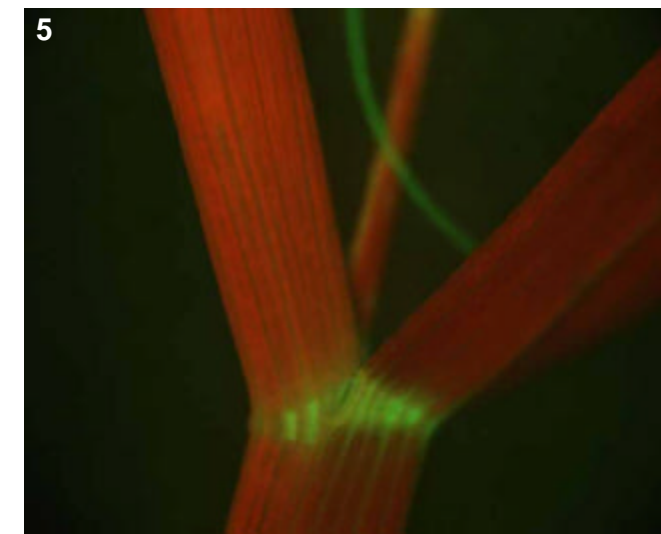
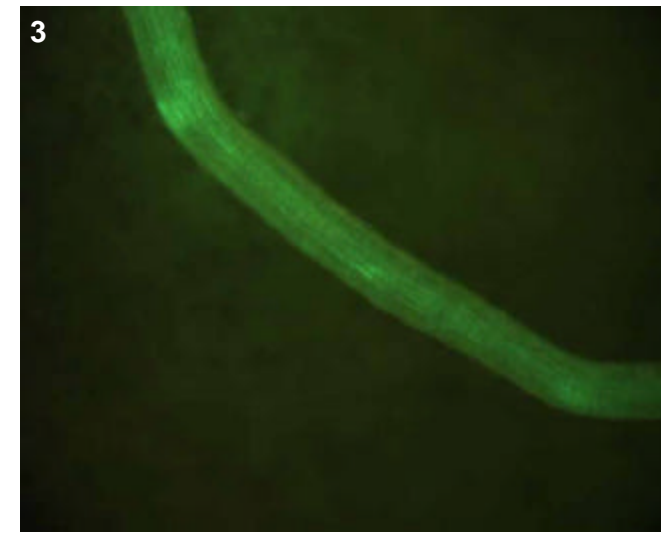
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX C01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

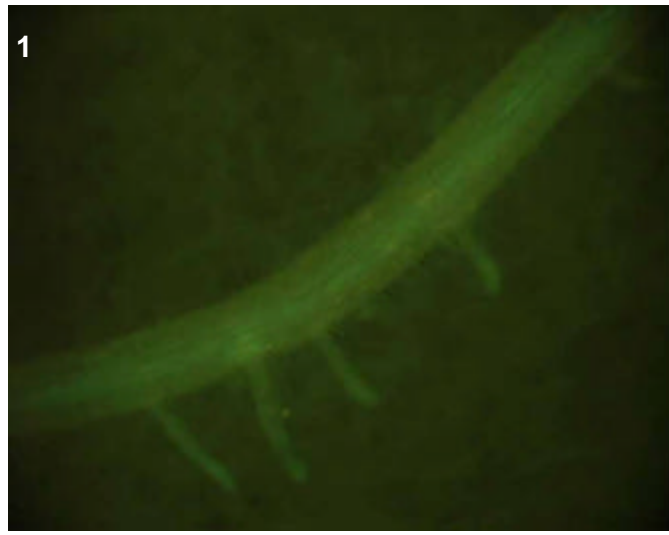
No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

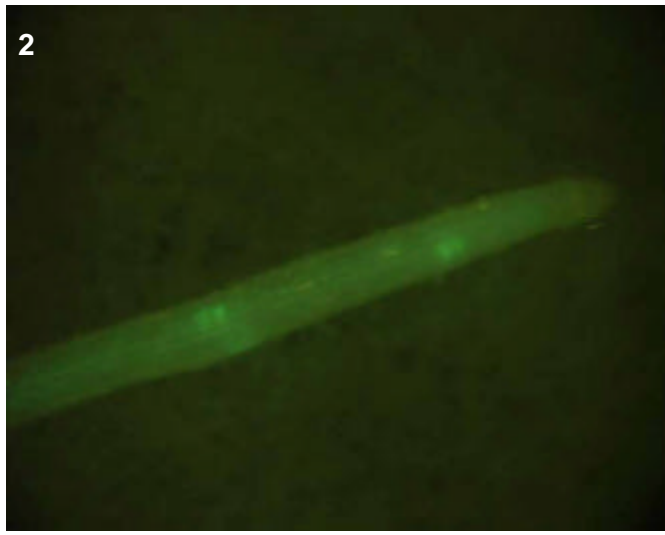
**Confocal?** WIP

**Number T2 seed produced:**

1



2



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASX E06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

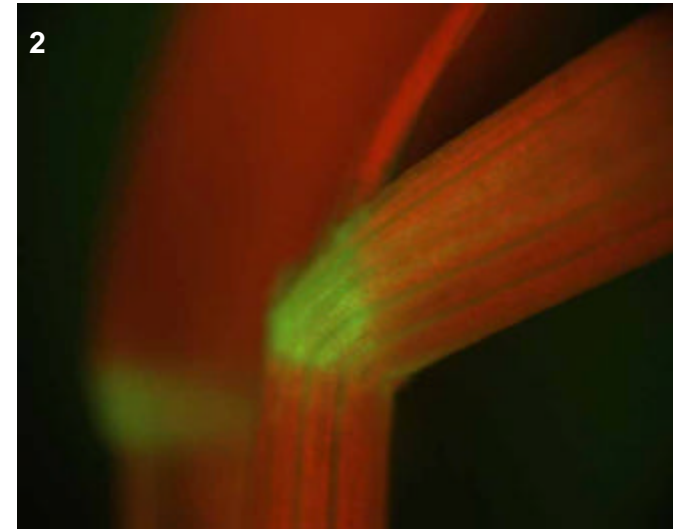
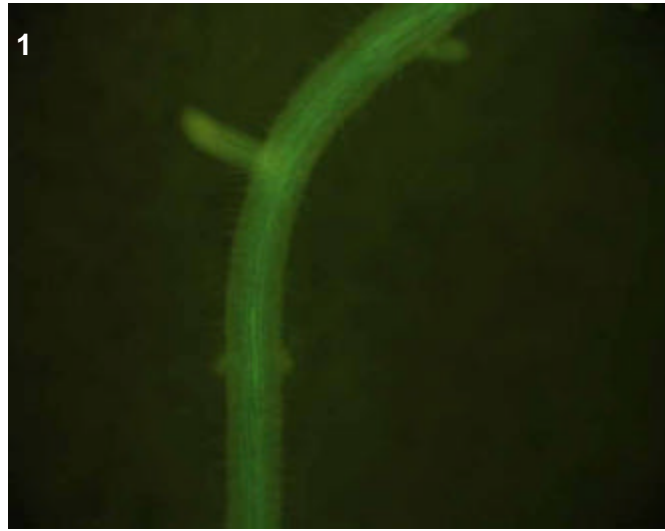
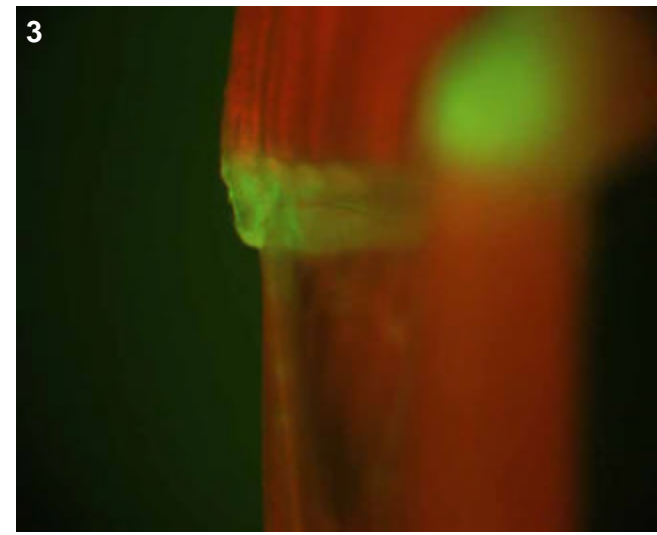
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ASX E12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

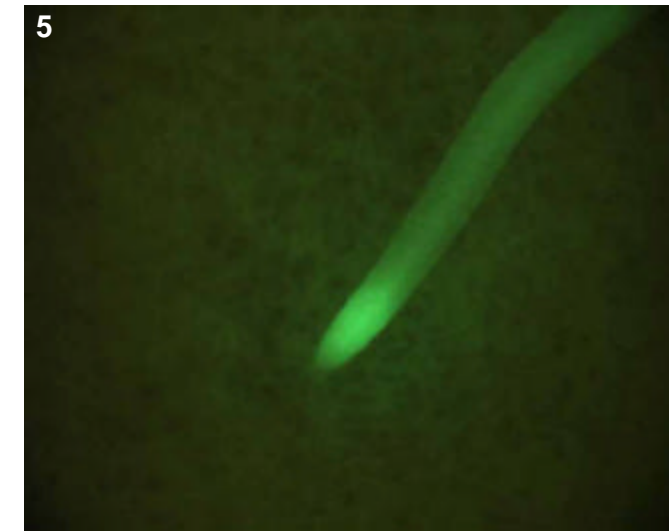
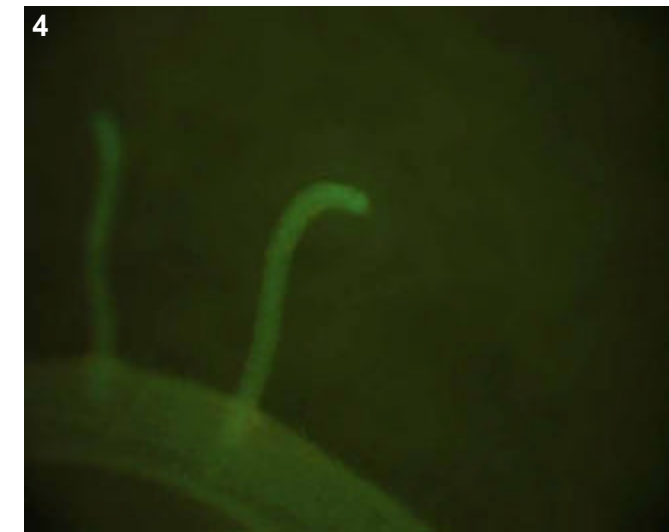
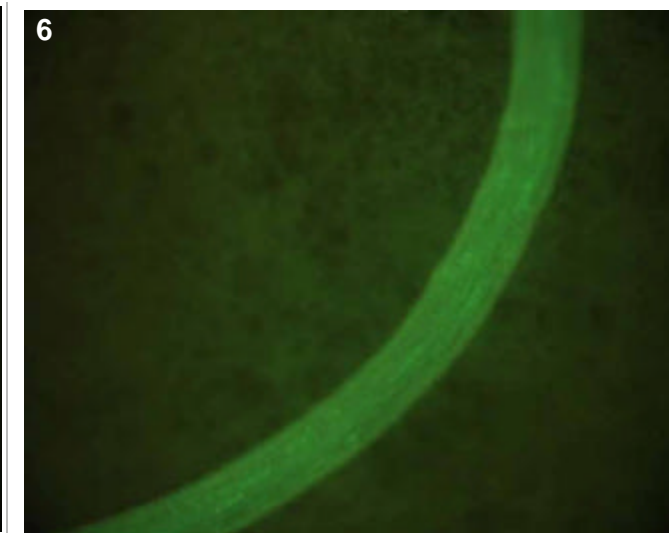
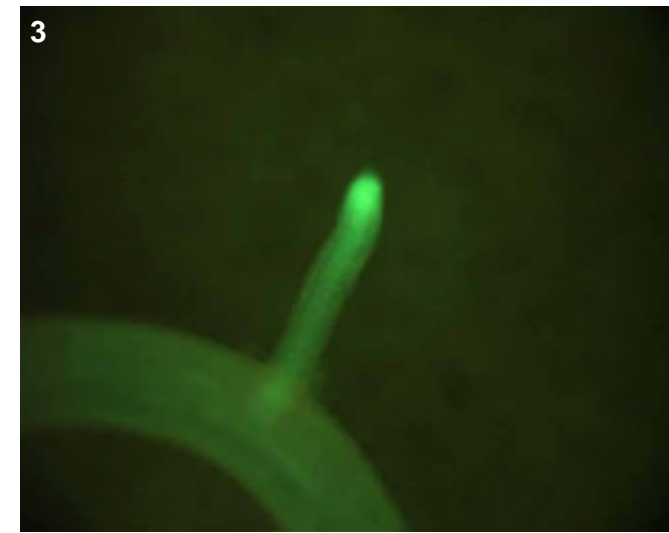
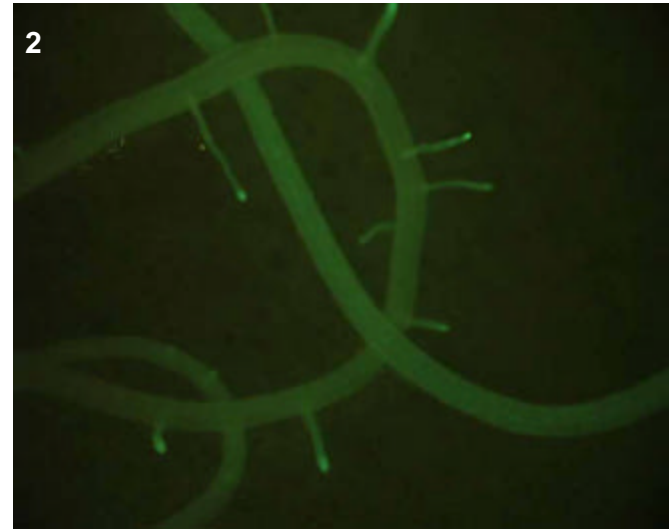
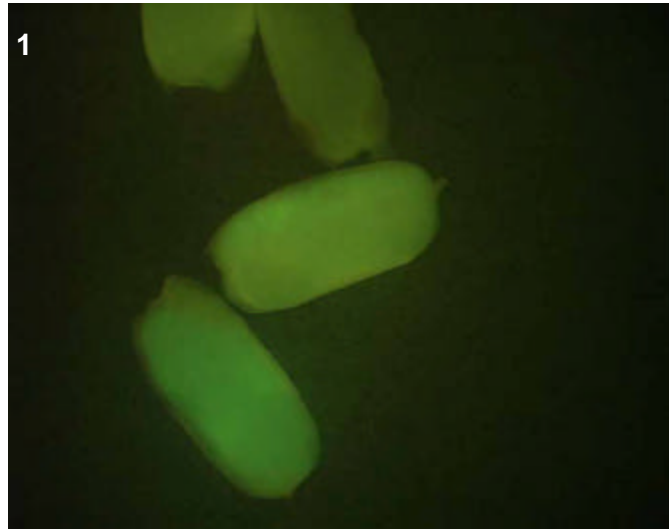
**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/4 seeds had faint-medium expression.

## T1 seedling comments

Confocal analysis must be done to clarify what tissues are GFP positive in the root (pics 2-7)--could be epidermal or more inside, or both.



# Genotype: ASX F04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

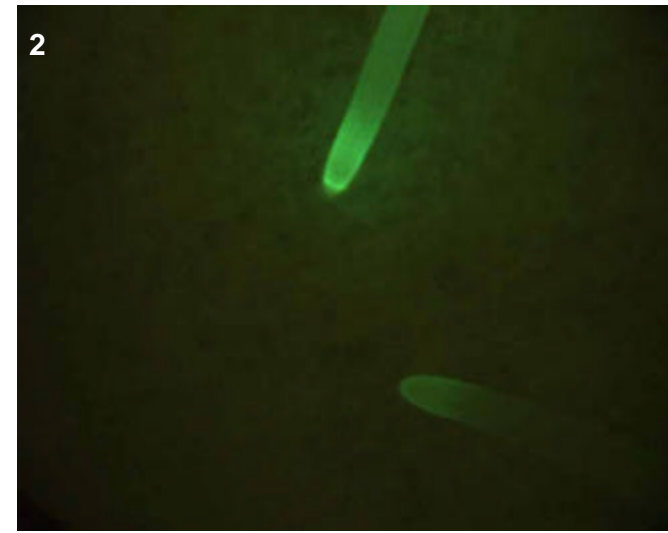
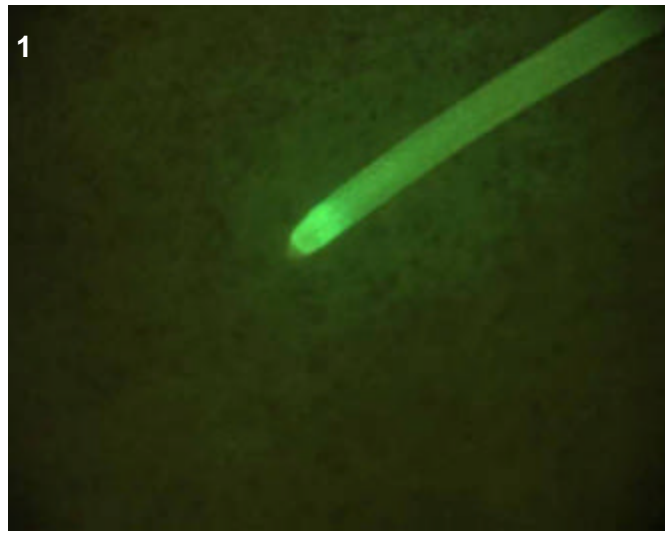
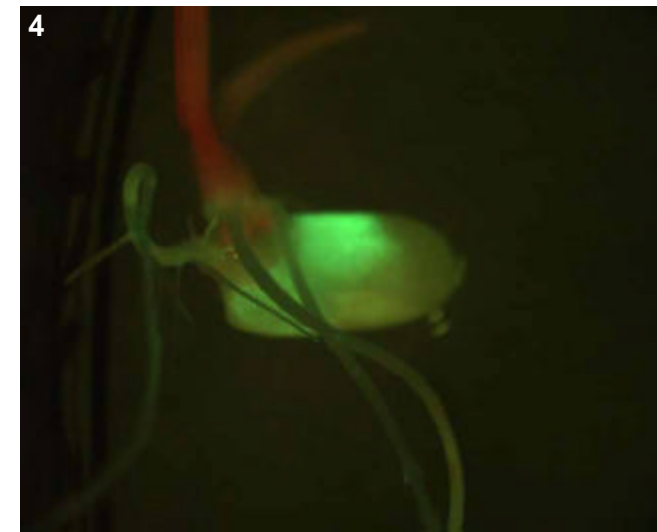
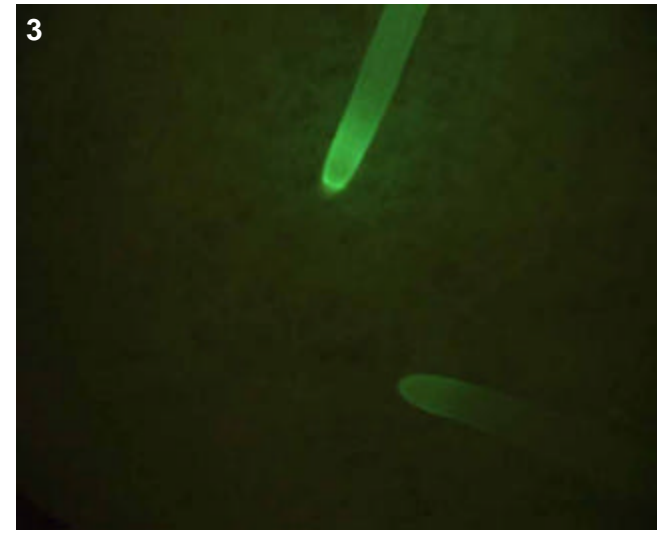
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX G10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

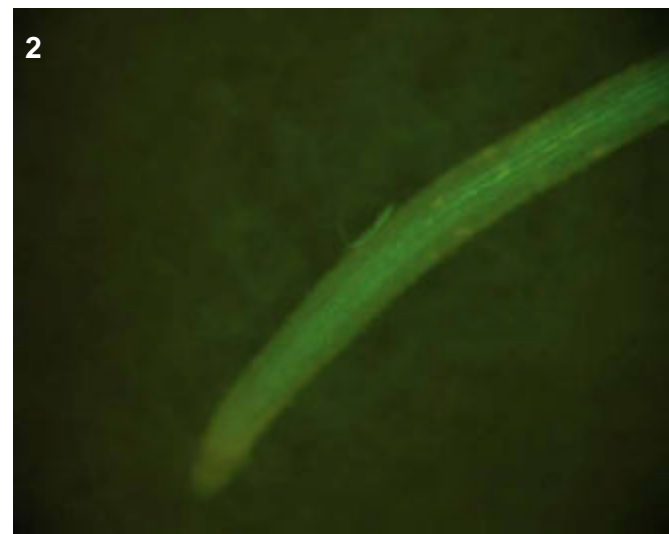
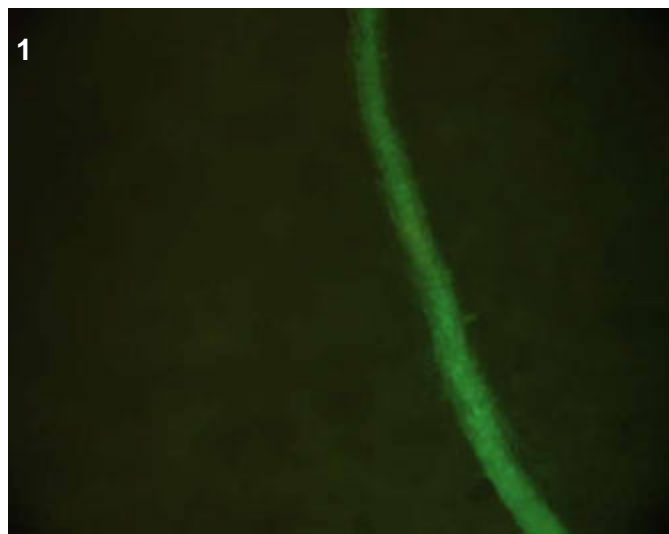
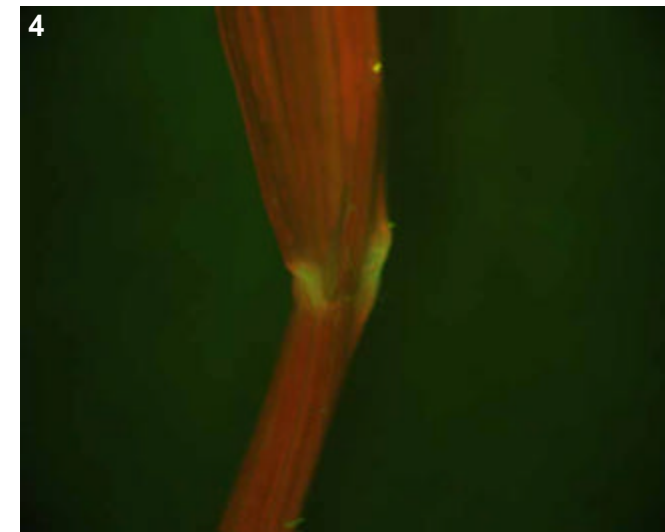
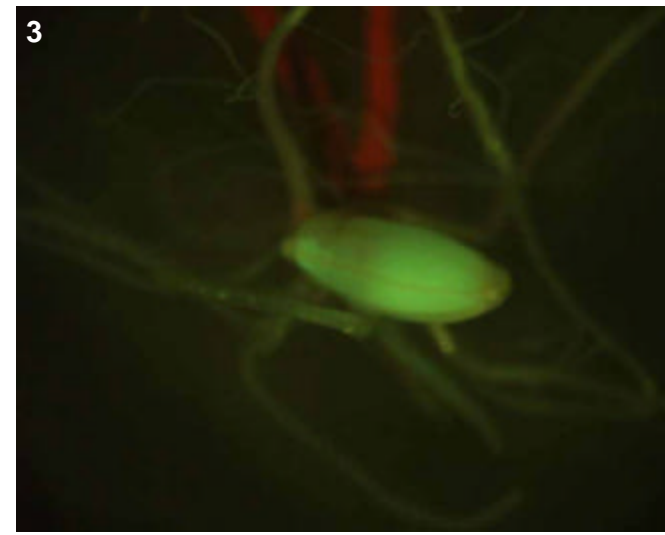
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX H08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

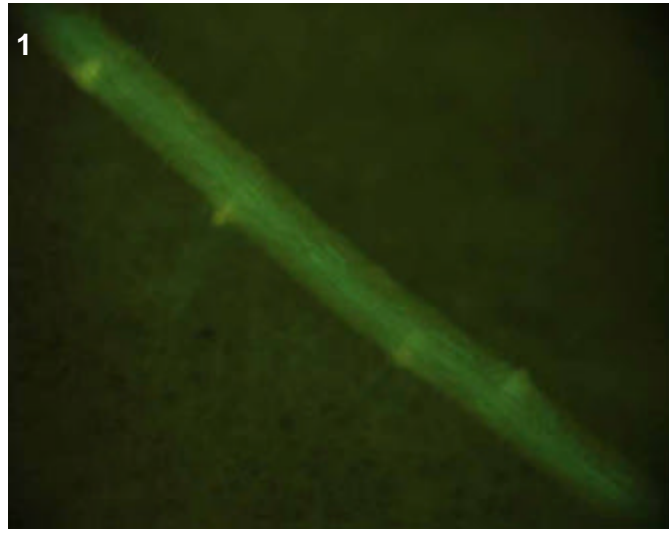
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASX H09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

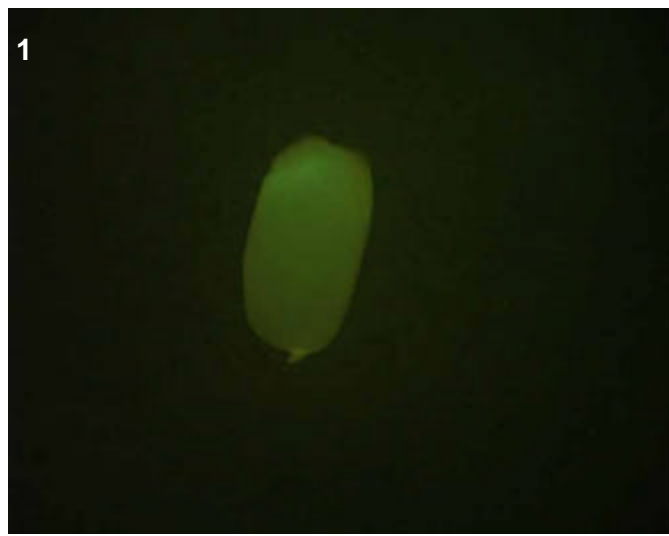
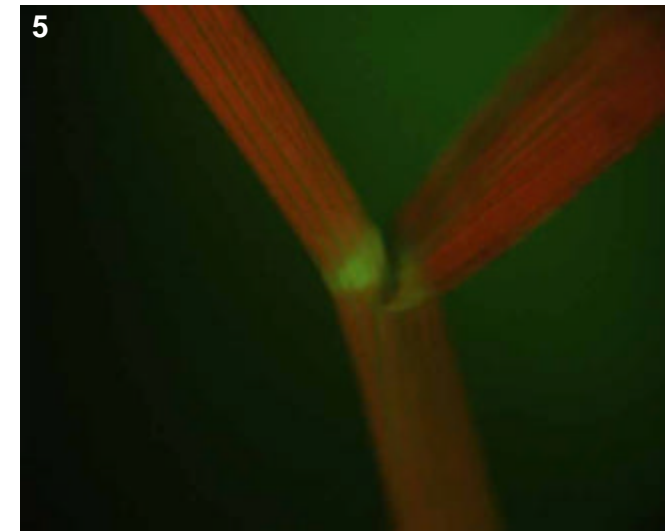
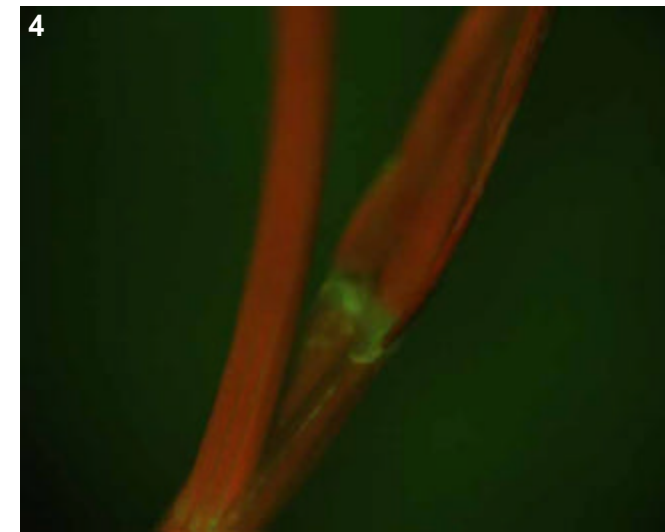
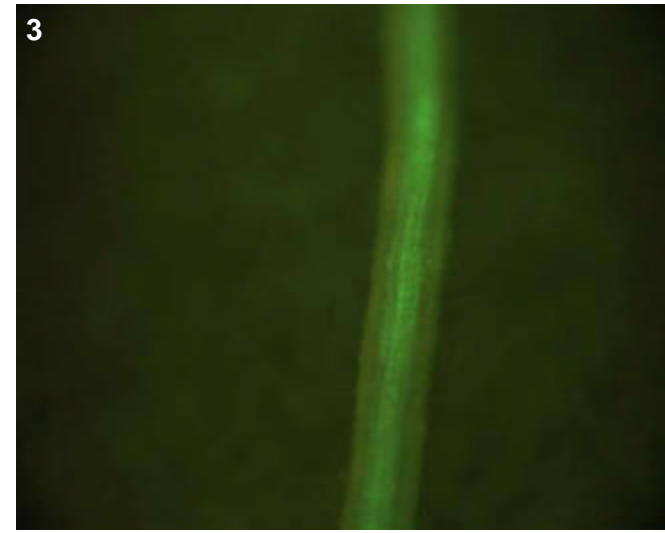
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had weak expression.

## T1 seedling comments

# Genotype: ASY A03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

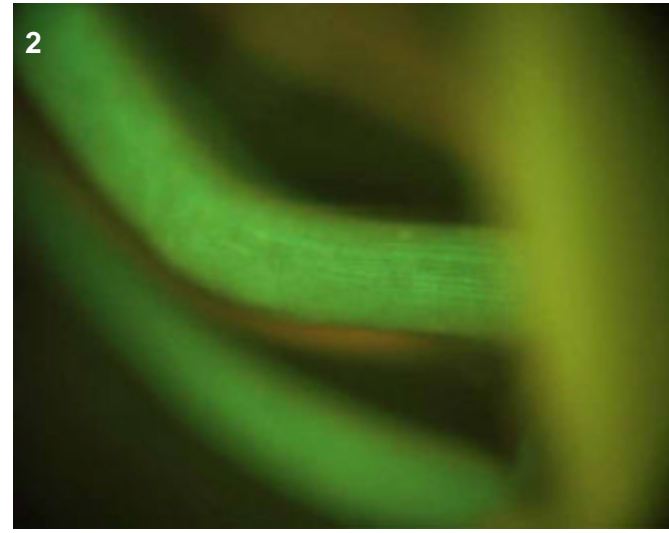
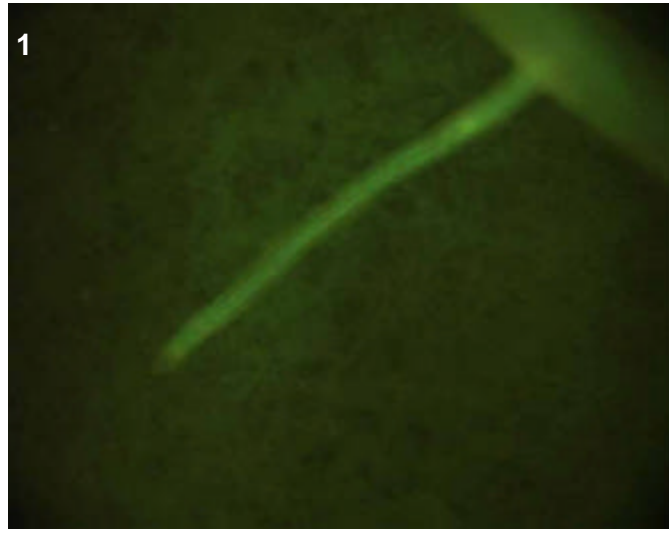
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks epidermal in crowns (pic 2) and more inside for the laterals (pic 1).

# Genotype: ASY A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

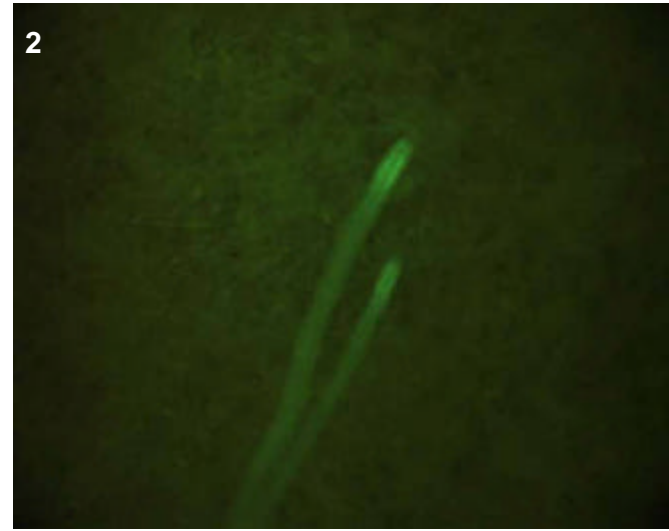
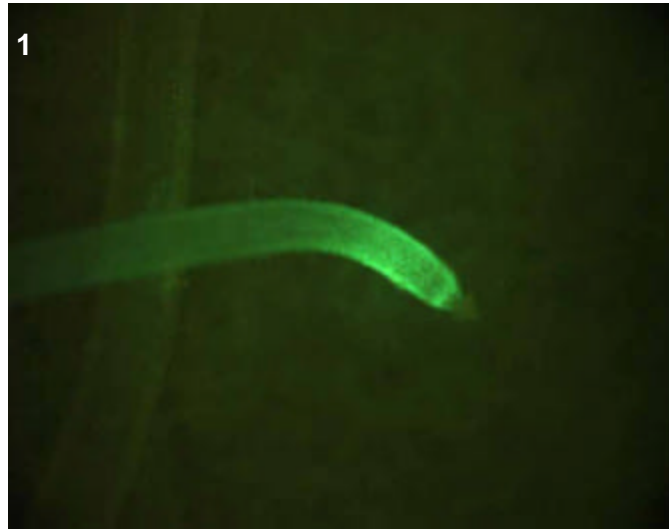
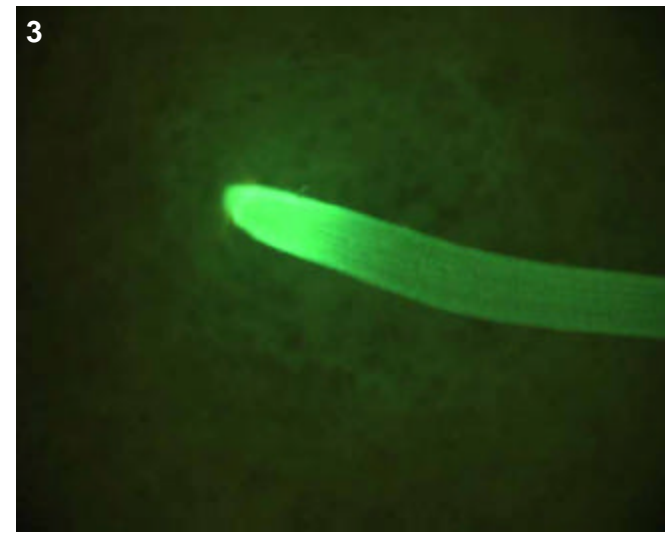
**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Crown root expression (see pics 1 and 2) could be interesting for confocal.

# Genotype: ASY A11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

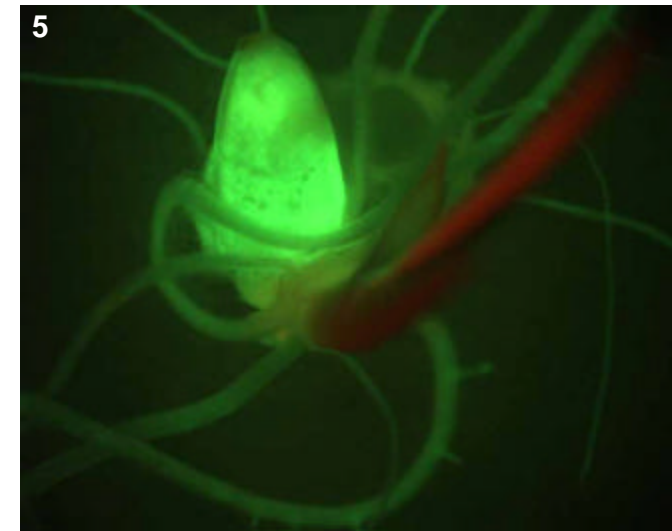
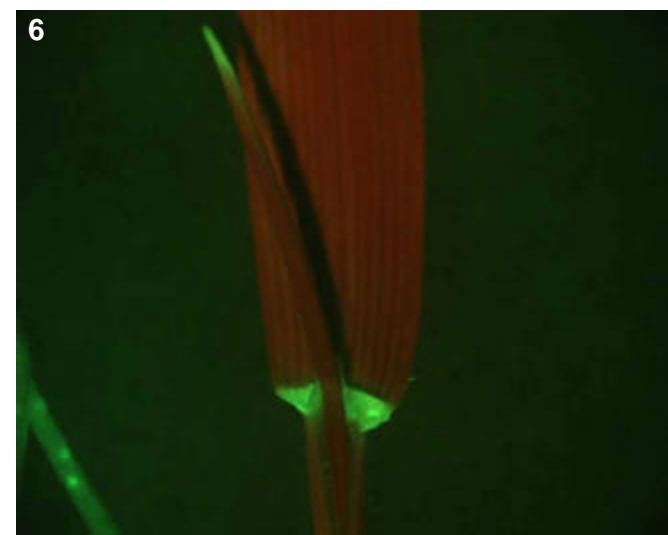
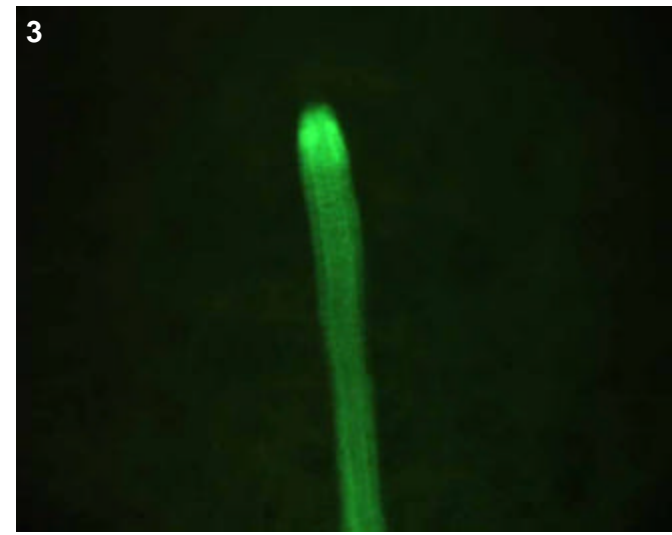
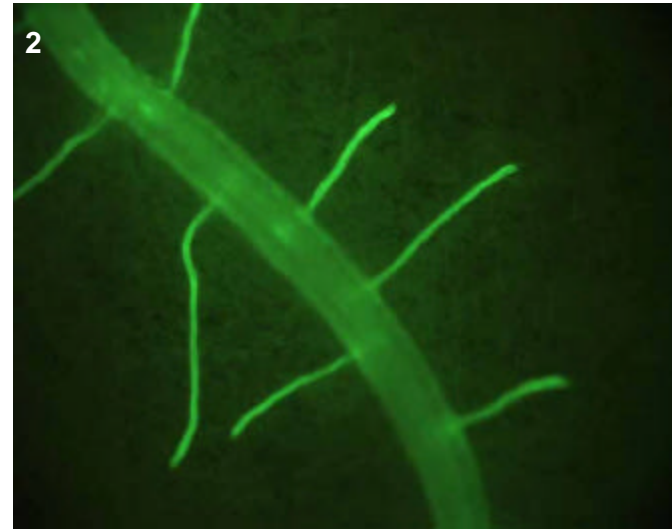
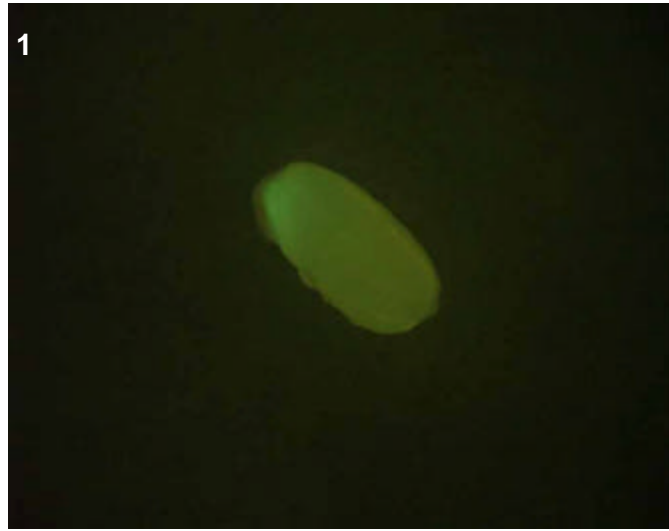
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had medium expression.

## T1 seedling comments

Very bright expression.

# Genotype: ASY B05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

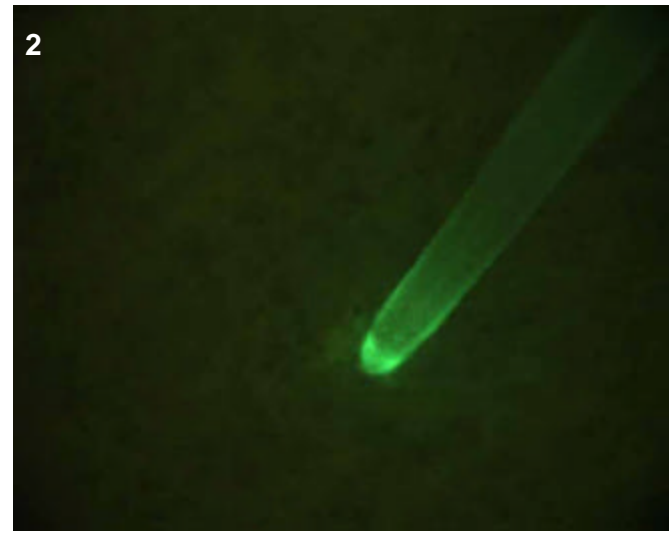
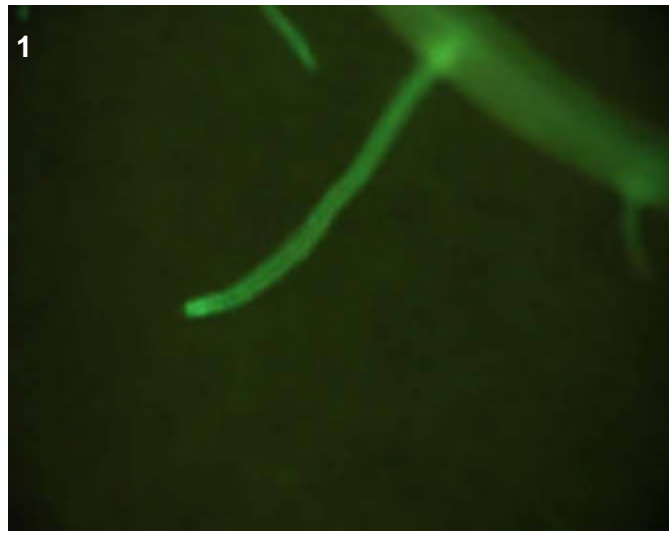
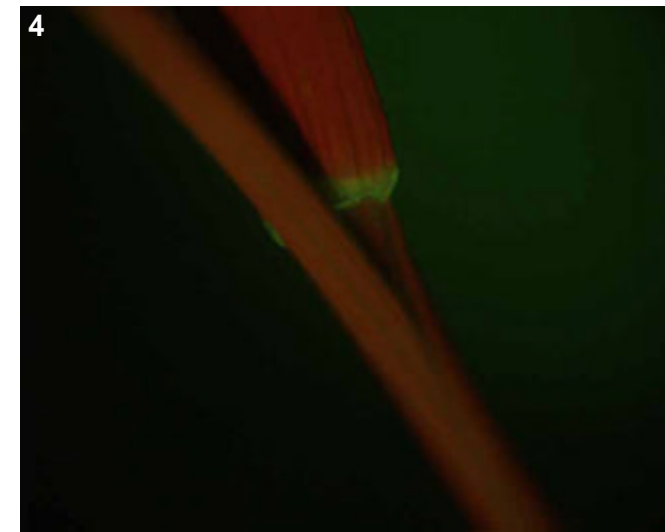
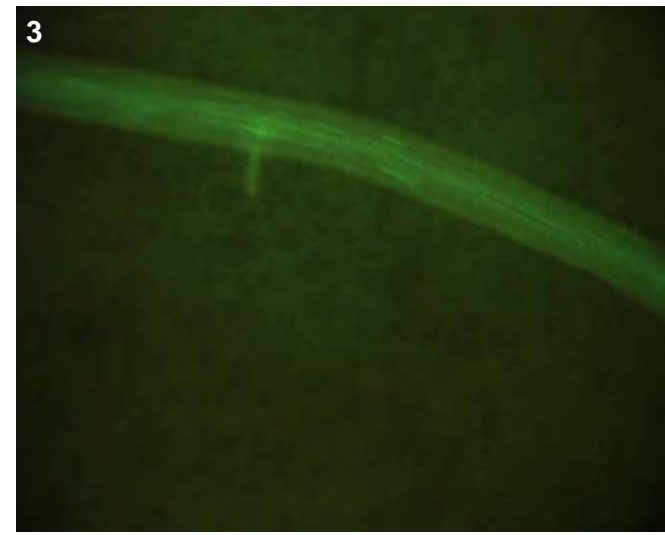
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ASY C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## Pictures

T0 mature plant:   
T1 seed/seedling: 1-5  
T1 mature plant:

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

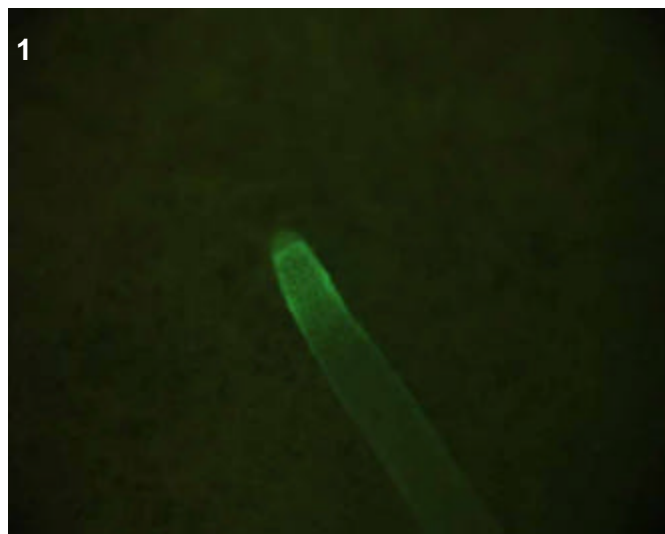
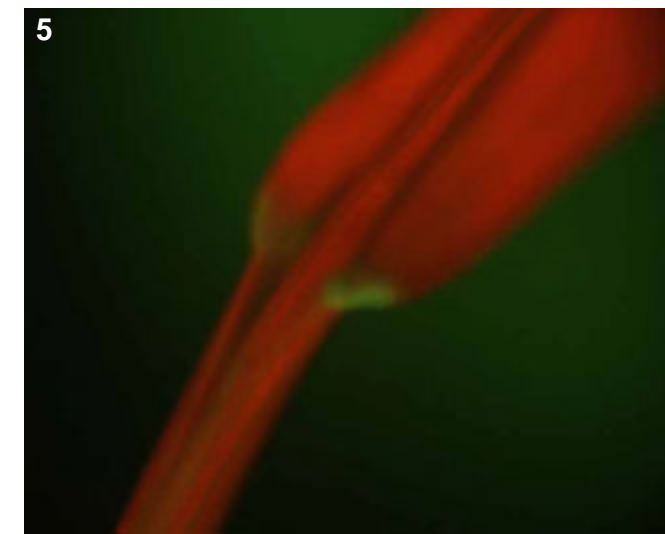
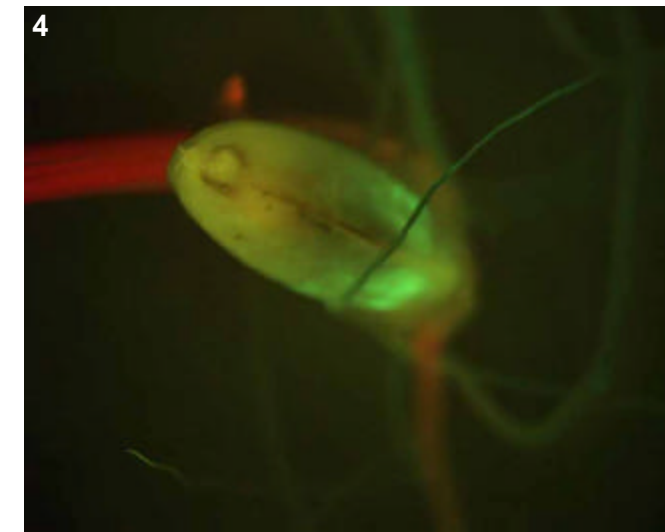
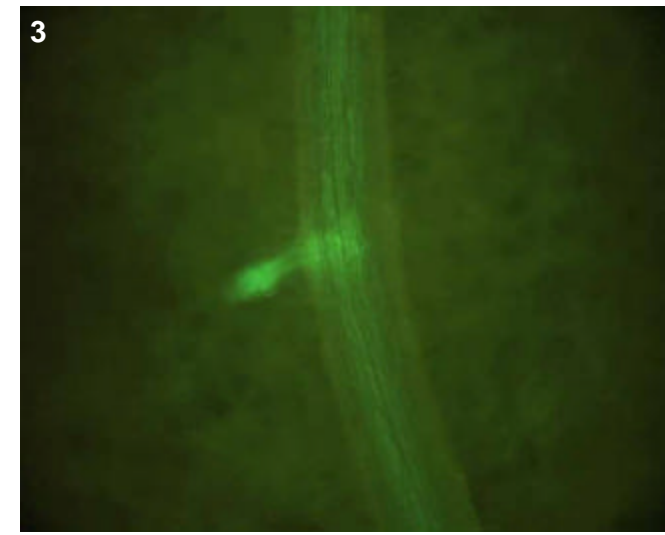
New pattern:

No GFP detected

T1 in greenhouse?  
YES, 3 GFP+ plants

Confocal?

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASY C09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

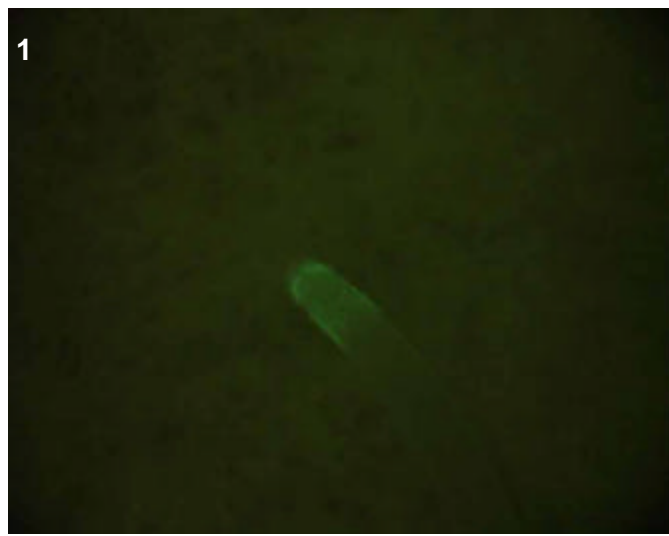
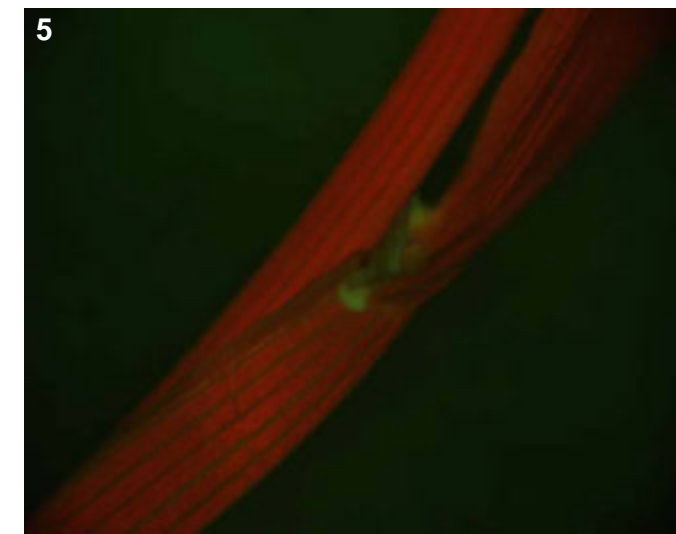
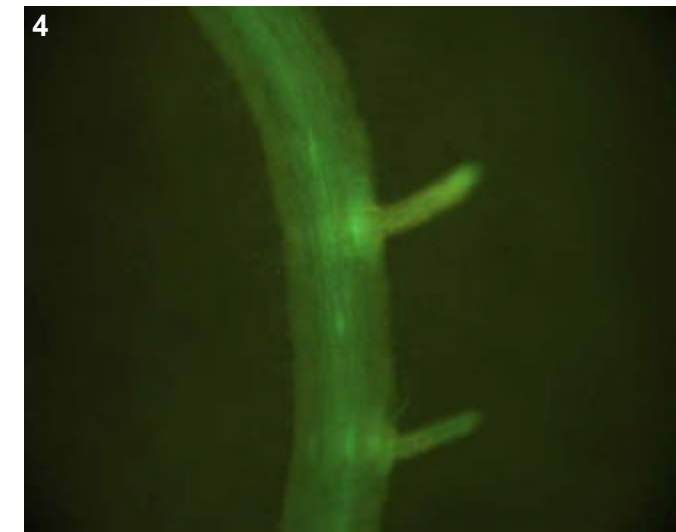
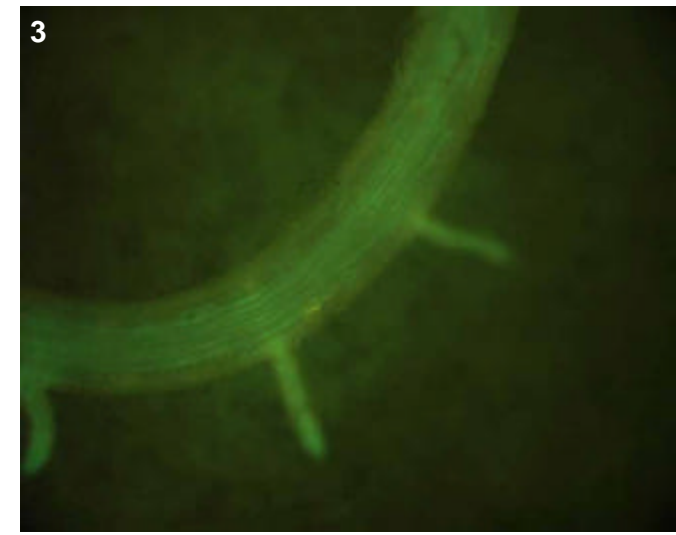
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
 YES, 3 GFP+ plants    Confocal?

Number T2 seed produced:



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
 Root expression (pics 1-4) was brighter than the shoot expression (pic 5). Note the bright burst of expression in elongation zone of crown root tips (pic 2).

# Genotype: ASY C11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

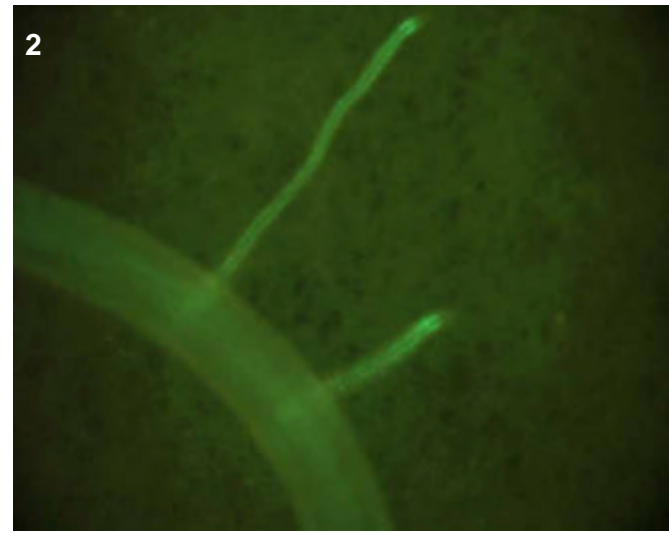
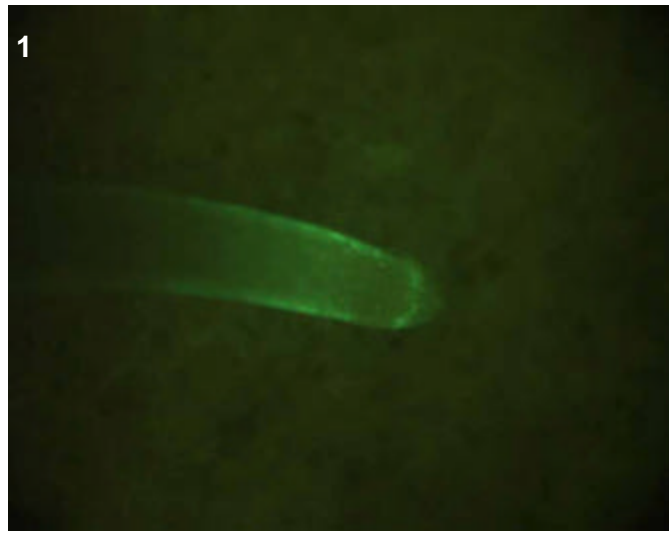
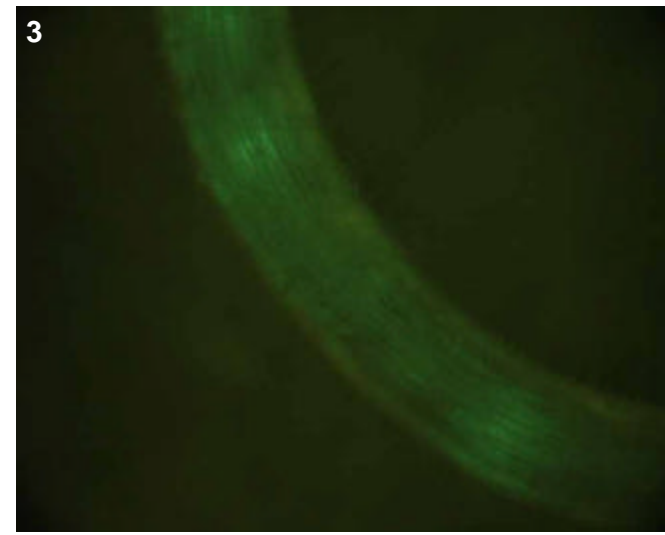
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

There appeared to be no seminal root on the two seedlings.

# Genotype: ASY D10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling: 1-9
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

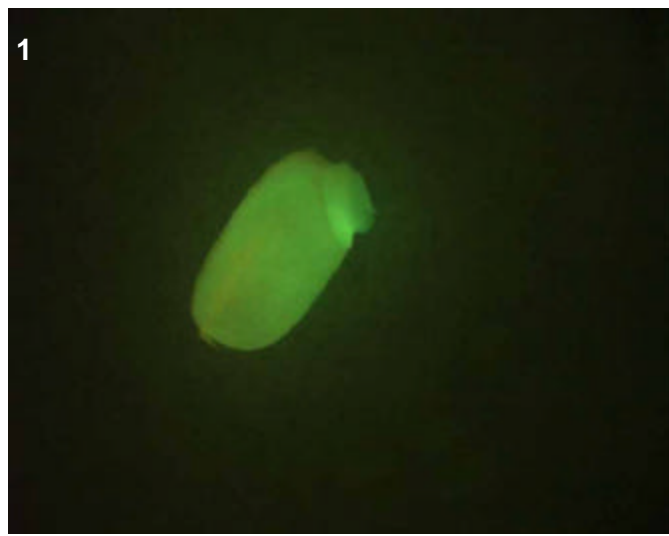
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

T1 in greenhouse?  
YES, 2 GFP+ plants

Confocal?

Number T2 seed produced:



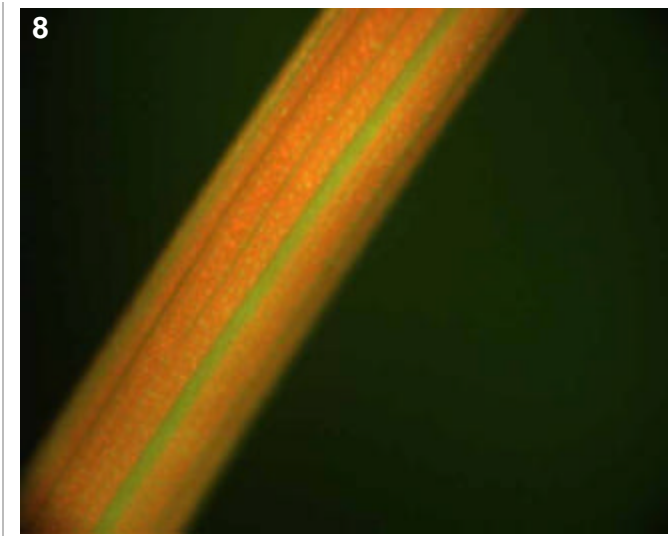
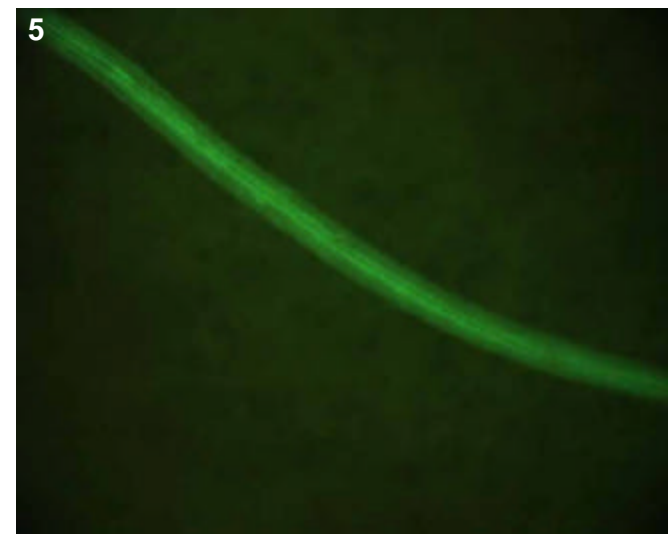
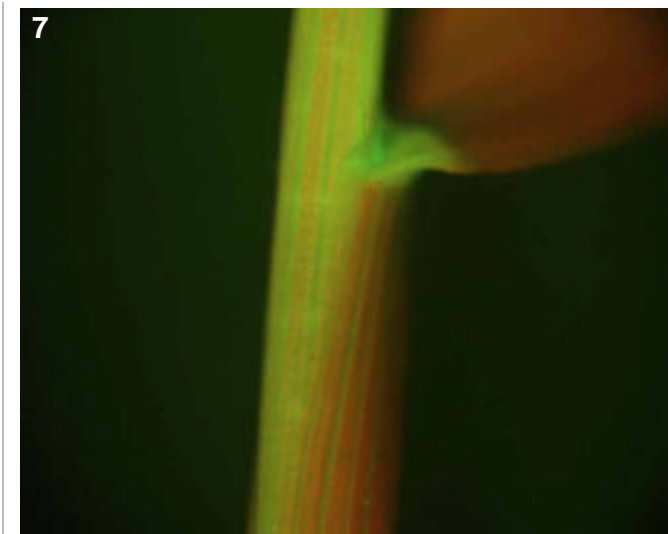
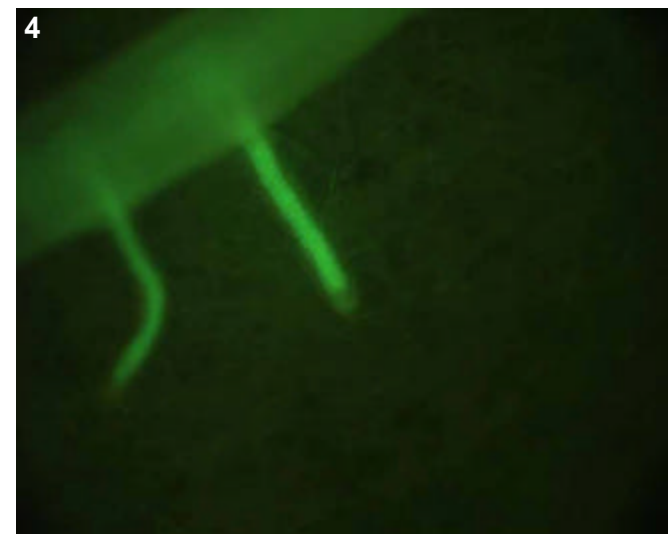
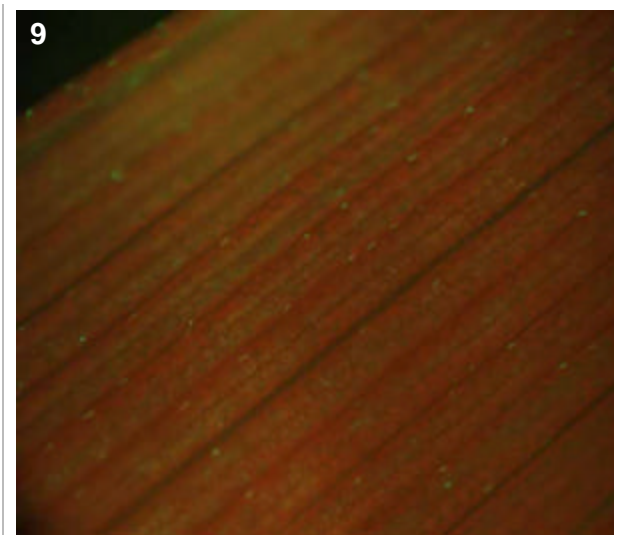
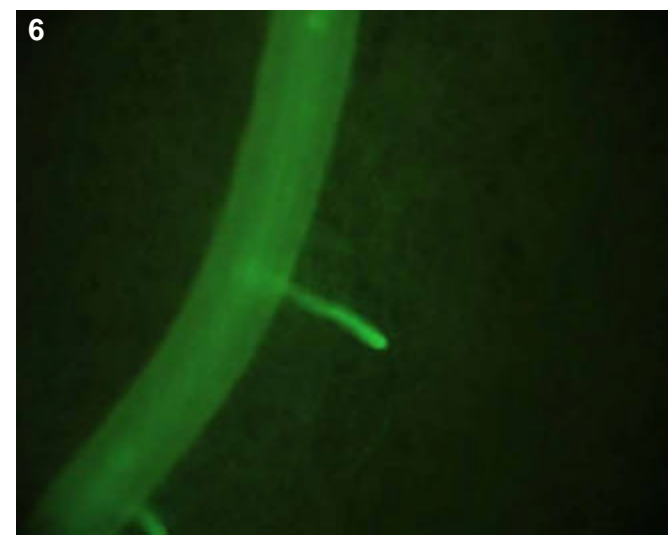
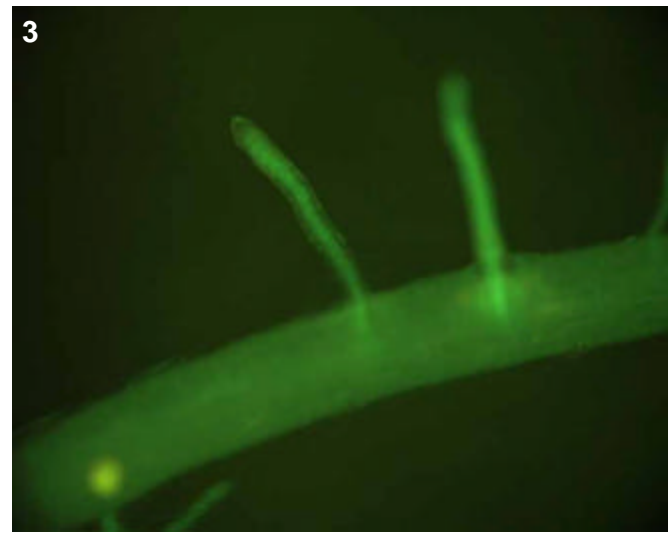
## T0 comments

## T1 seed comments

4/5 seeds had medium expression.

## T1 seedling comments

The lateral roots appear to have bright expression in the stele, most evident in pictures 3 and 4.



# Genotype: ASY E03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

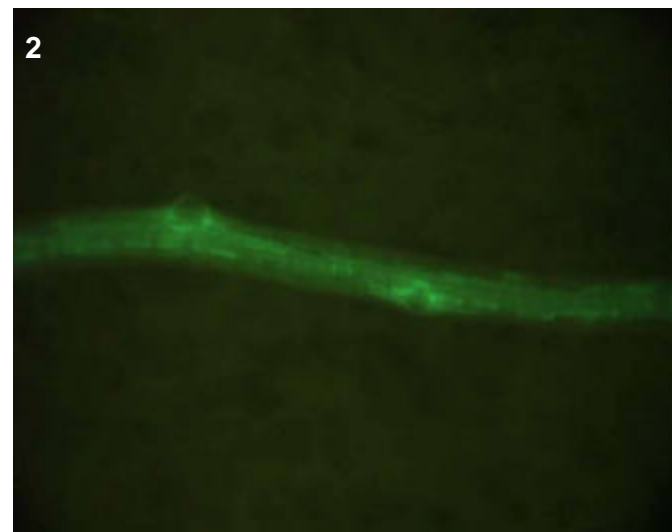
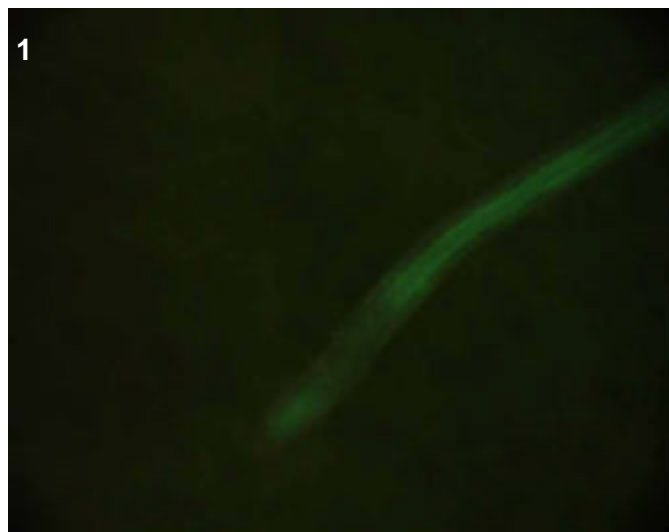
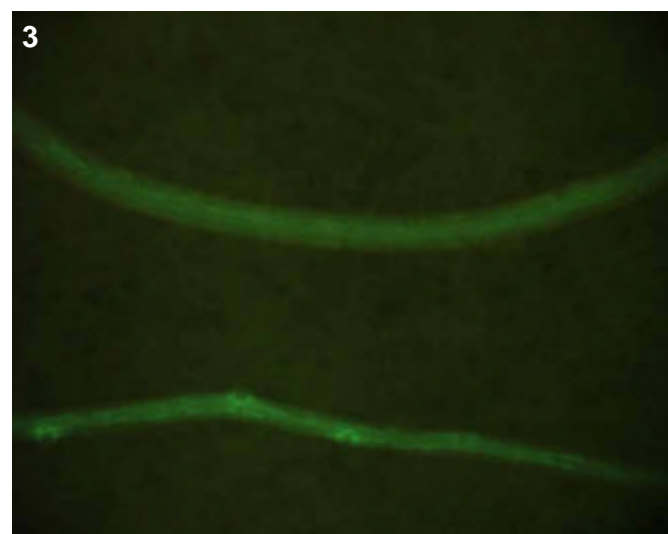
**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

WIP

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression in tips of crown roots is very interesting (pic 1), with a burst of expression in initials near apex followed by expression in what could be the elongation zone.

**Genotype: ASY E04**

**Screened**

T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

**Expression**

None  
 Bright  
 Medium  
 Weak  
 Unsure

**Pictures**

T0 mature plant:   
 T1 seed/seedling: 1-5  
 T1 mature plant:

**T0 Flower**

YES  
 POSSIBLE

Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

**T0 Blade**

YES  
 POSSIBLE

Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

**T0 Sheath**

YES  
 POSSIBLE

Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

**T1 Seed**

YES  
 POSSIBLE

Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle  
 Embryo

**T1 Seedling**

YES  
 POSSIBLE

SHOOT  
 ROOT  
 ENDOSPERM

Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells

S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis  
 Constitutive

**T1 Mature**

T0 pattern verified:

T0 pattern verified plus:

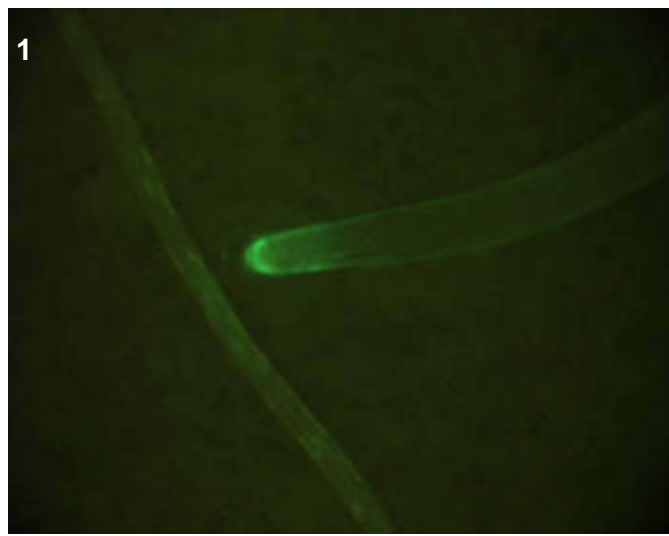
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

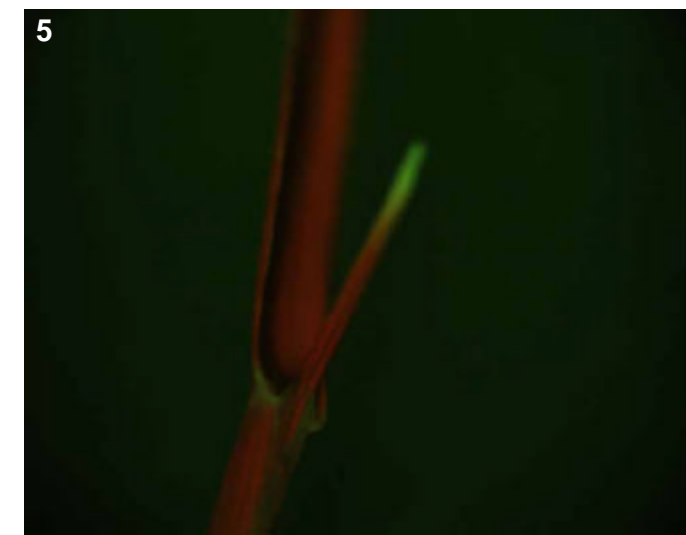
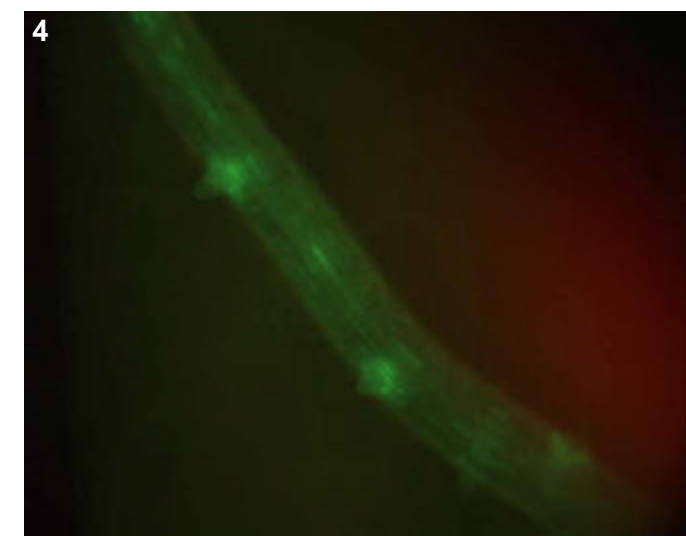
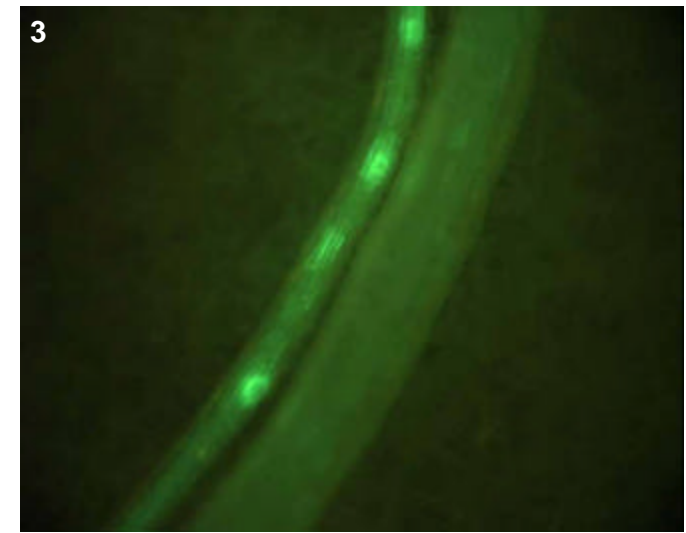
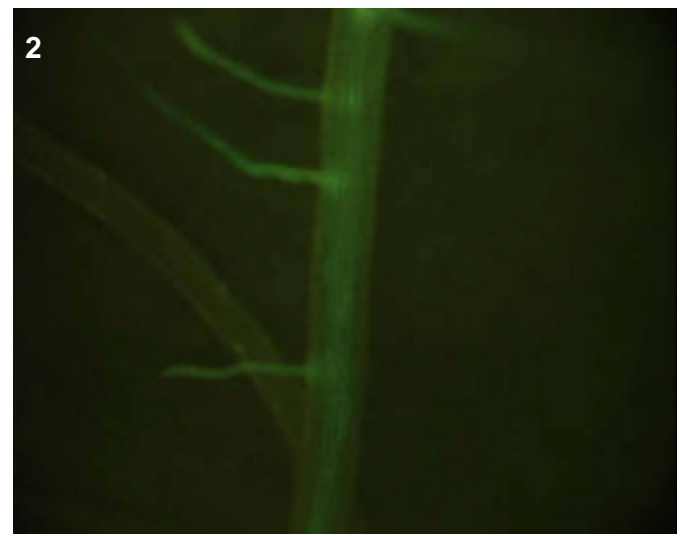
**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**



**Genotype: ASY F06**

**Screened**

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

**Expression**

- None
- Bright
- Medium
- Weak
- Unsure

**Pictures**

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

**T0 Flower**

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

**T0 Blade**

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

**T0 Sheath**

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

**T1 Seed**

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

**T1 Seedling**

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

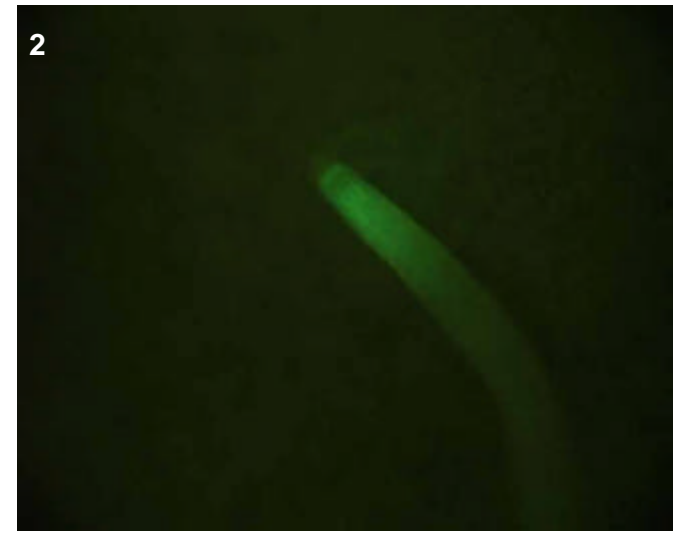
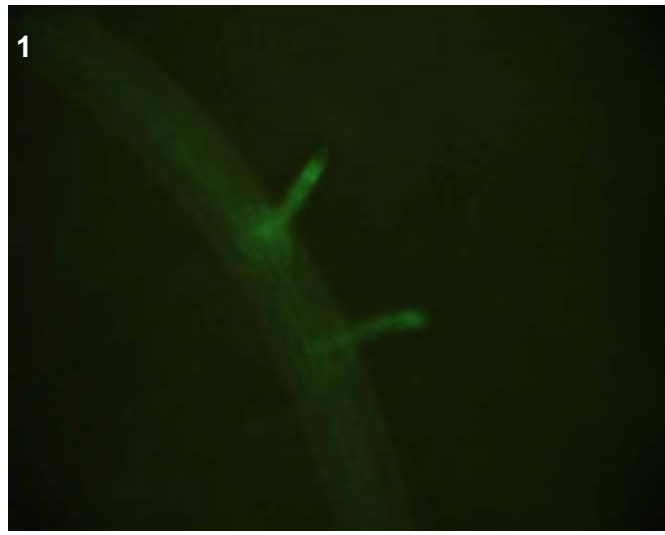
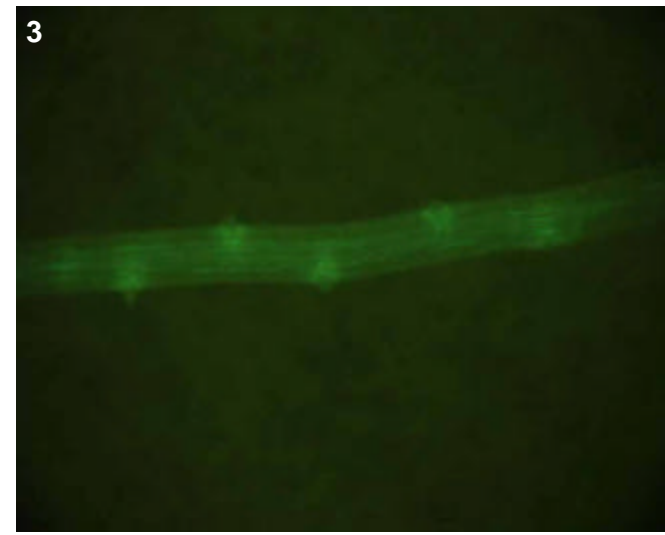
**T1 Mature**

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?** YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASY F10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling: 1-6
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

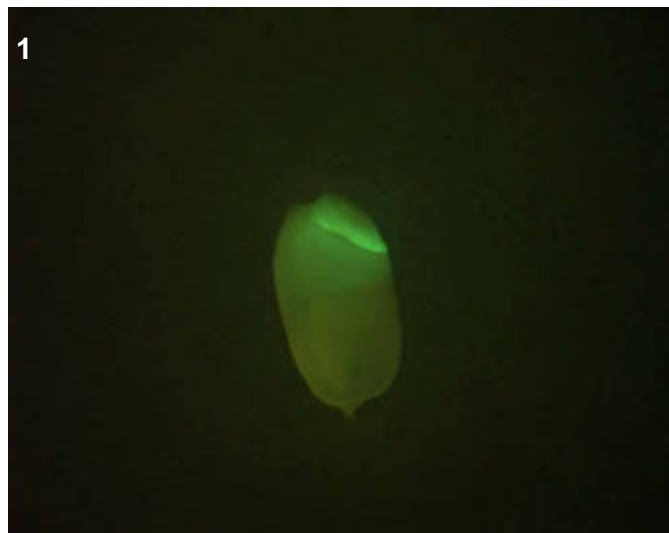
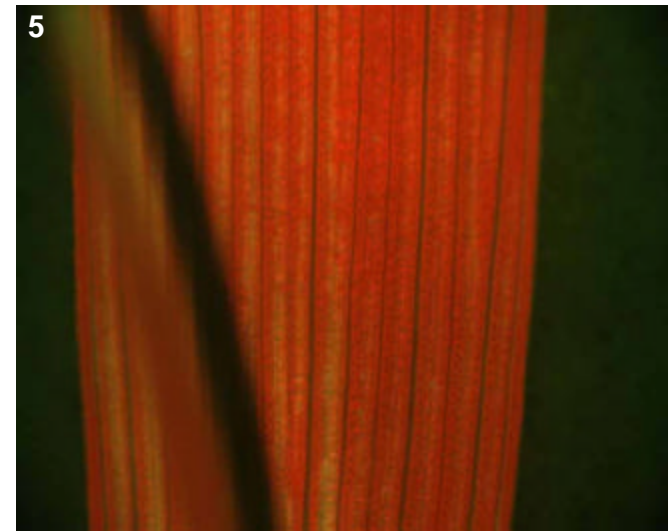
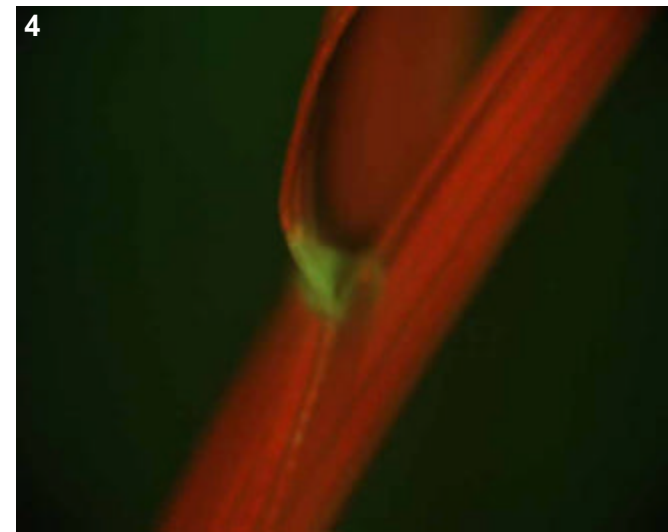
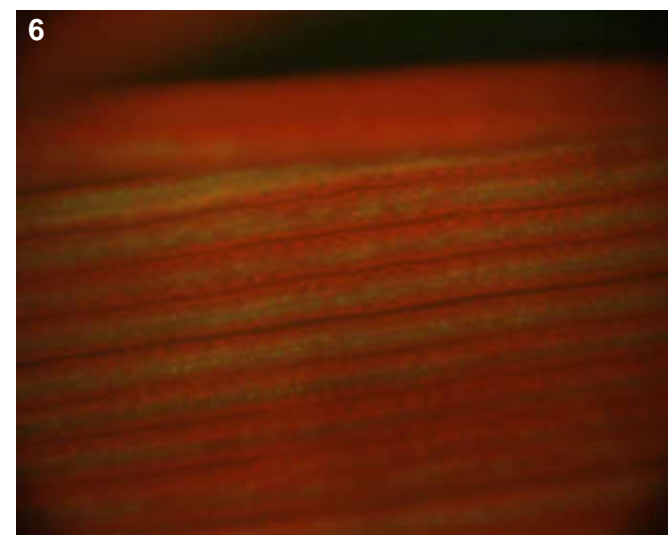
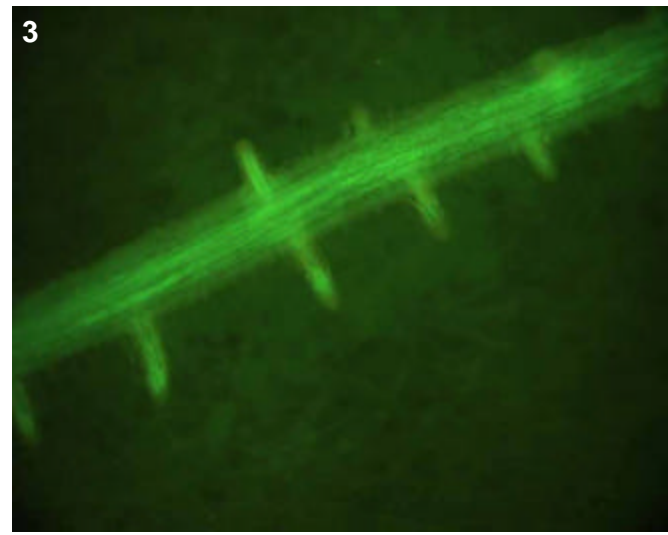
No GFP detected

T1 in greenhouse?

YES, 3 GFP+ plants

Confocal?

Number T2 seed produced:



### T0 comments

### T1 seed comments

4/5 seeds had expression.

### T1 seedling comments



# Genotype: ASY G01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

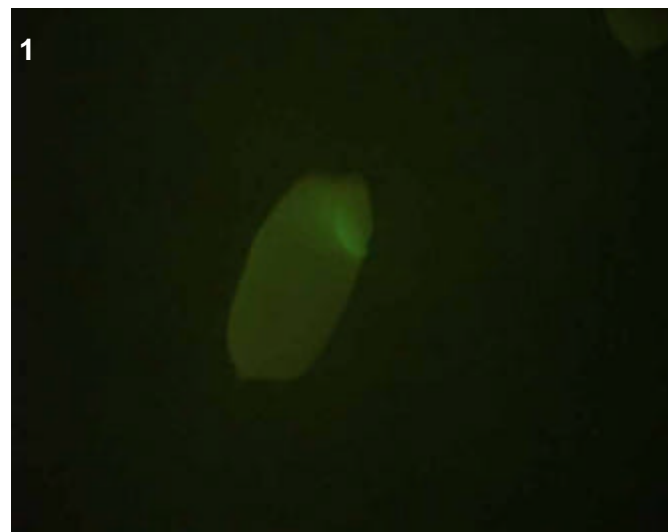
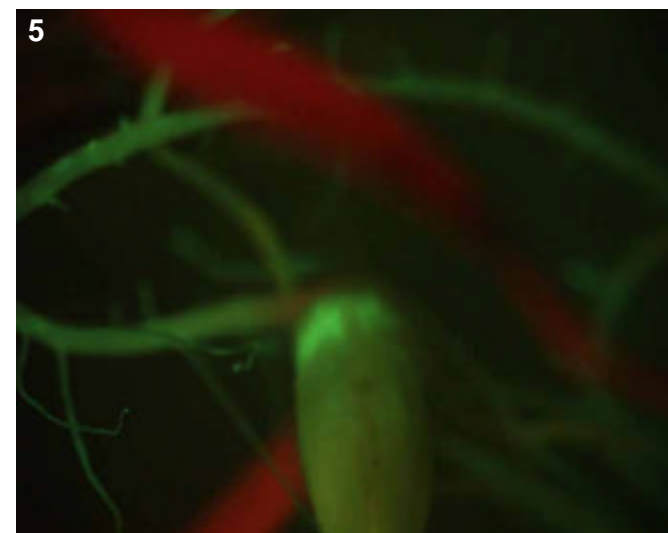
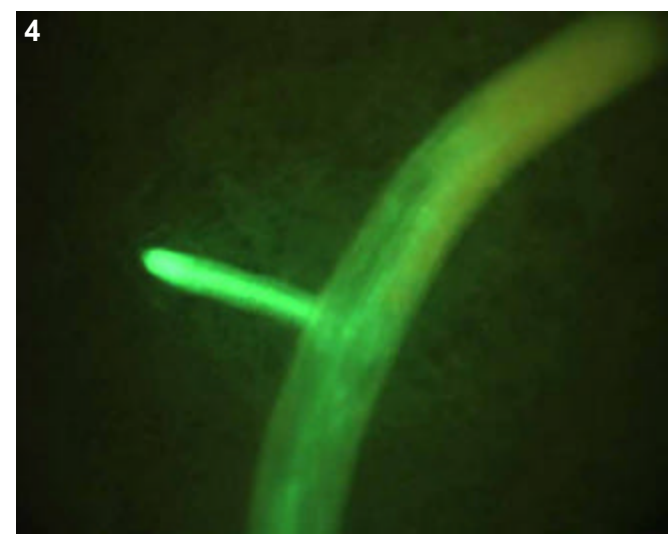
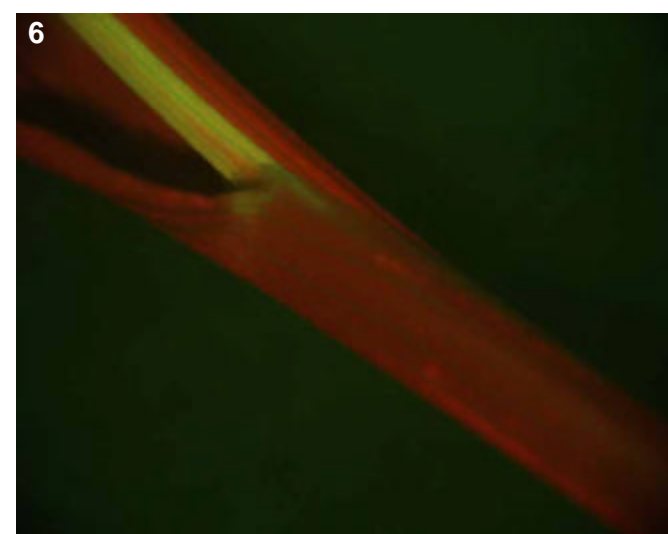
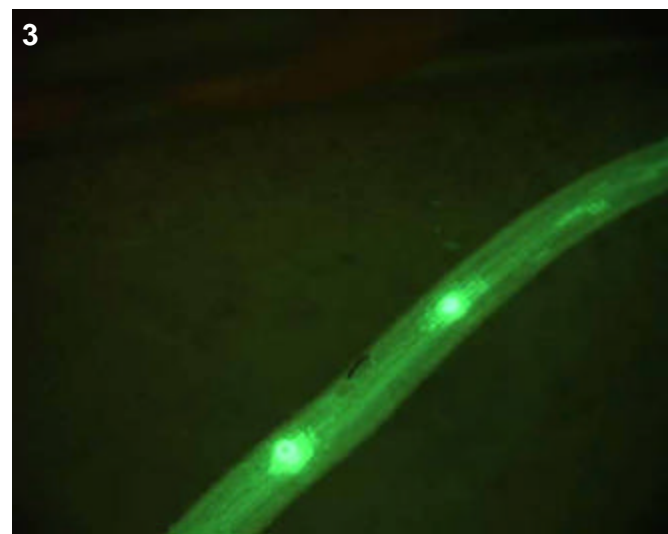
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

4/5 seeds had faint expression.

## T1 seedling comments

# Genotype: ASY G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

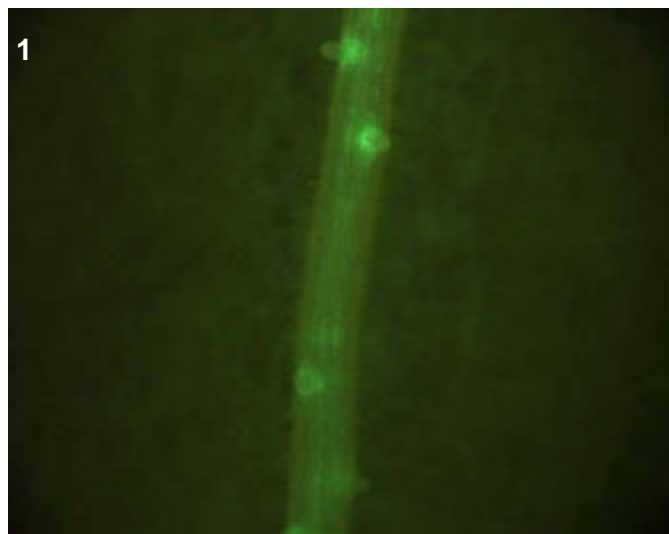
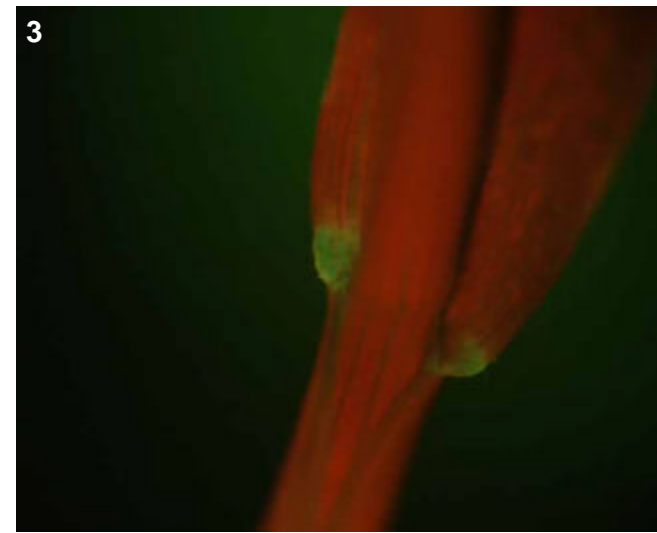
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASY G11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

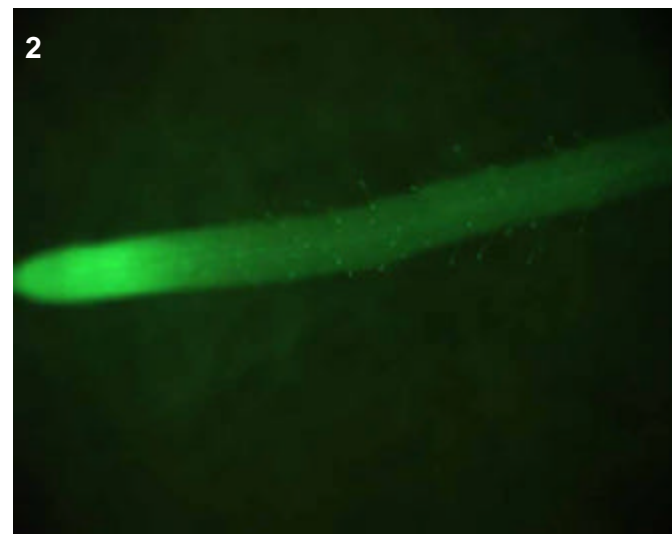
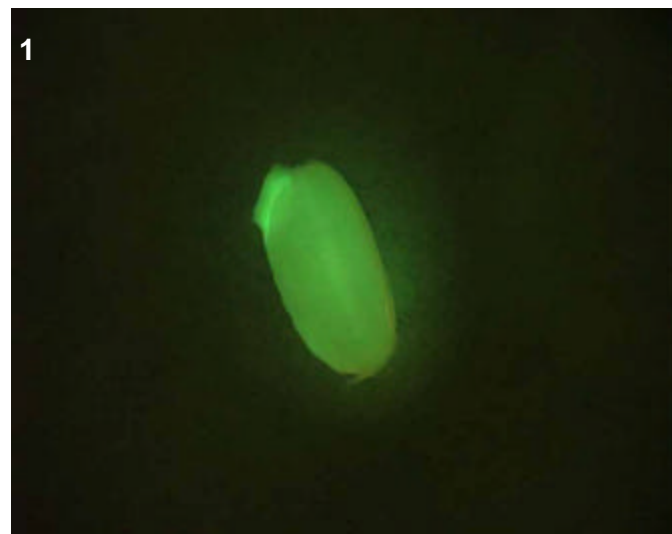
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



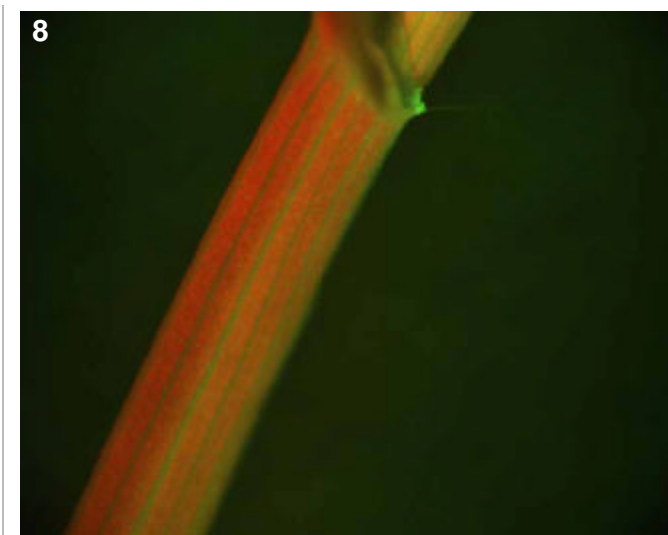
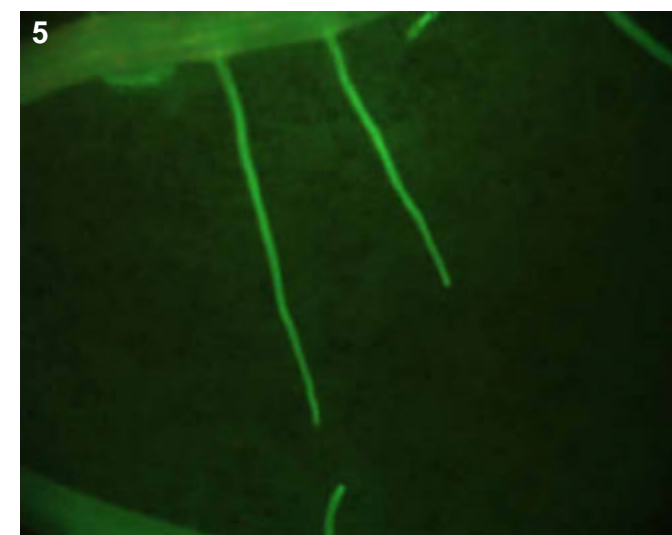
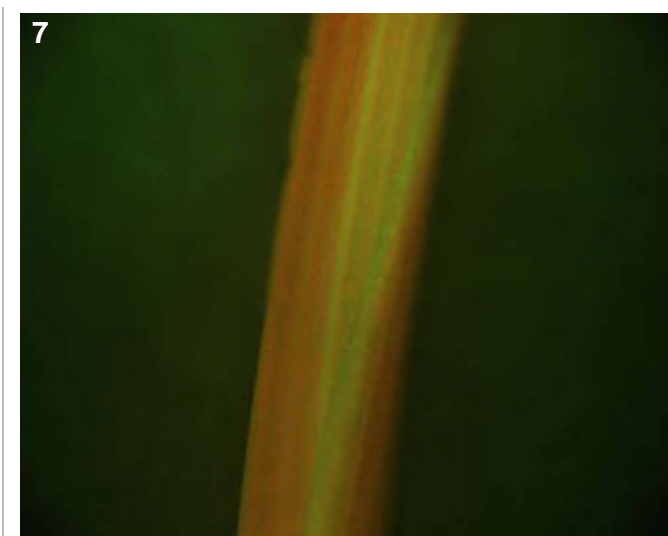
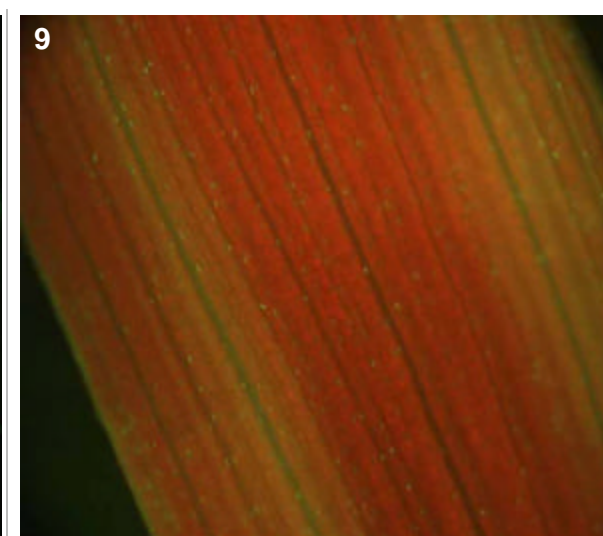
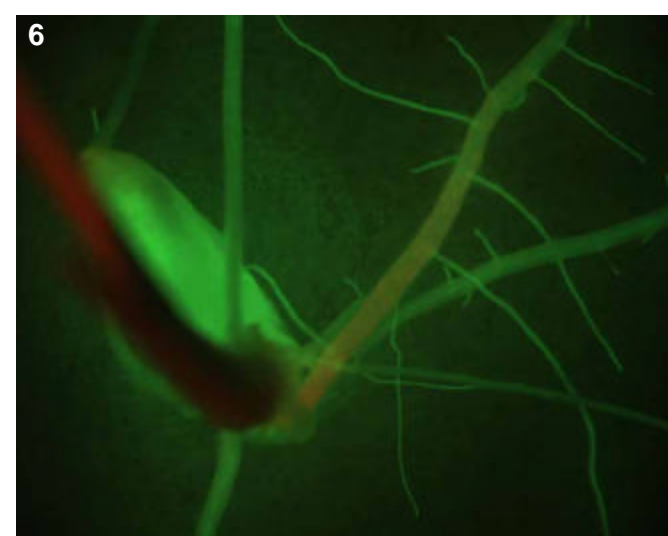
## T0 comments

## T1 seed comments

4/5 seeds had expression.

## T1 seedling comments

Very bright expression, note the bright root hairs on crown roots (see pics 2 and 3).



# Genotype: ASY H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

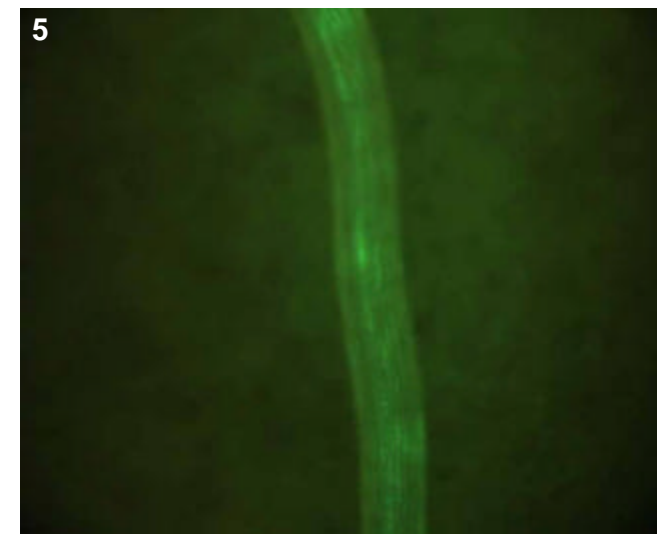
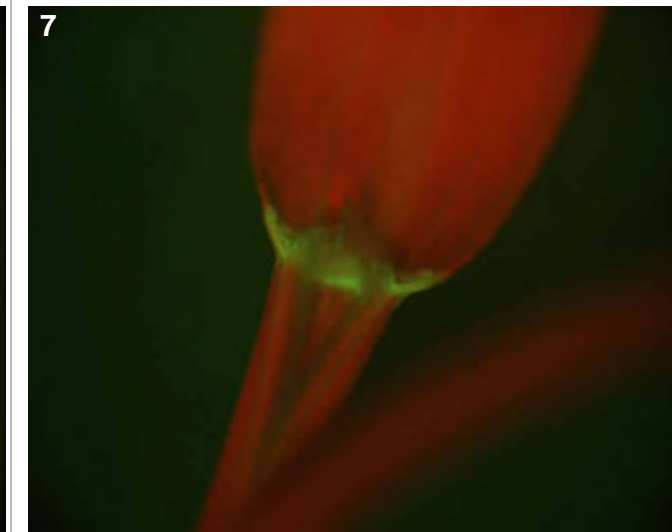
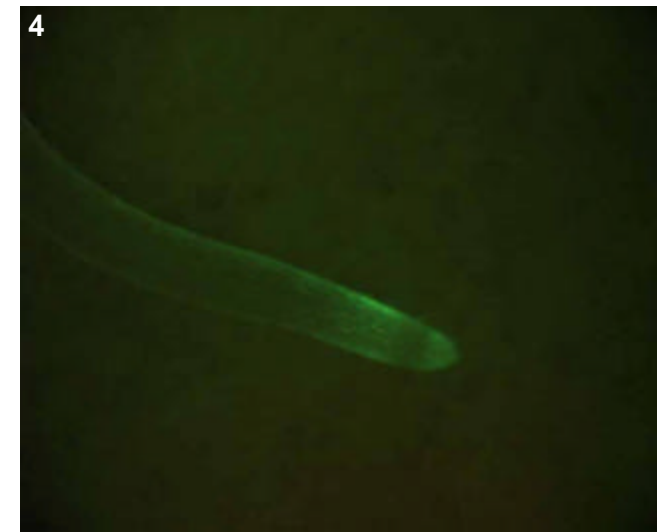
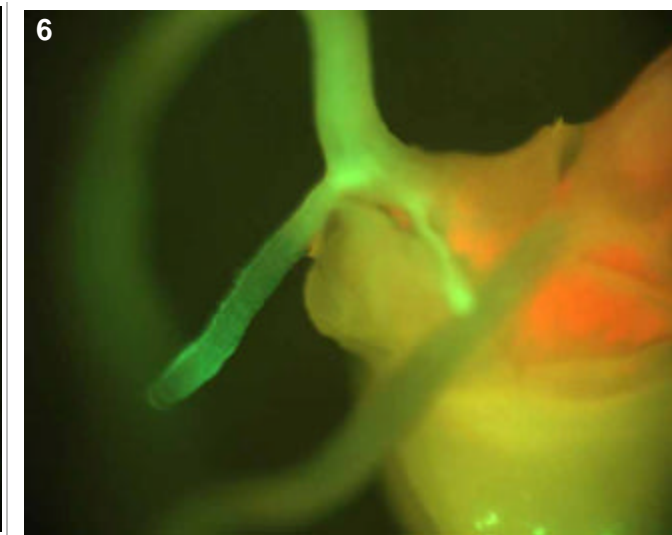
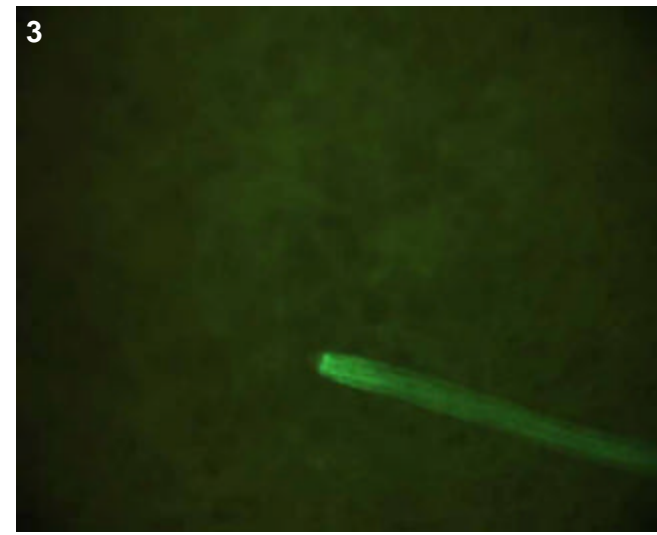
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2-3/5 seeds had faint expression.

## T1 seedling comments

# Genotype: ASZ A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-10

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

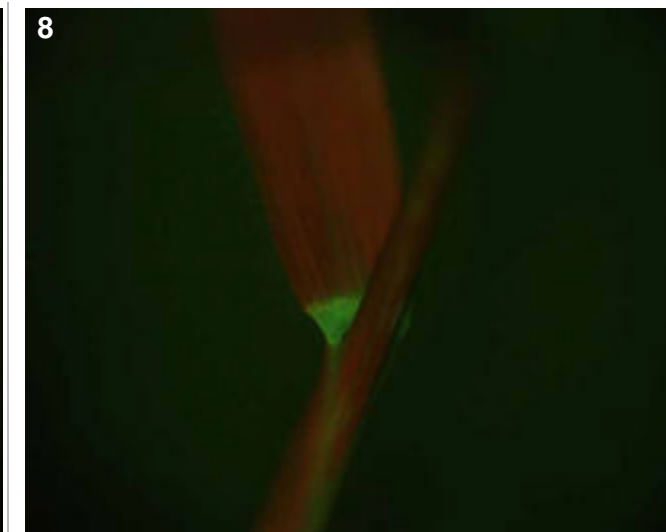
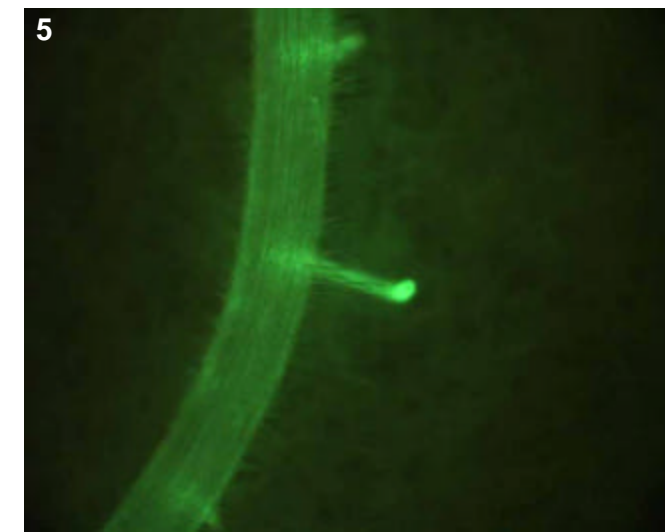
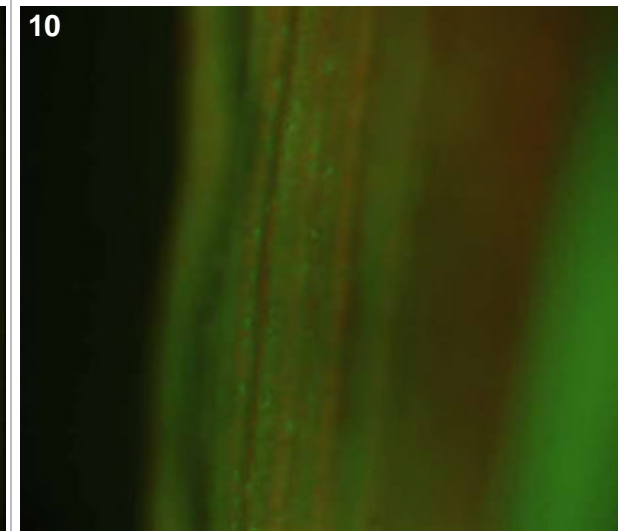
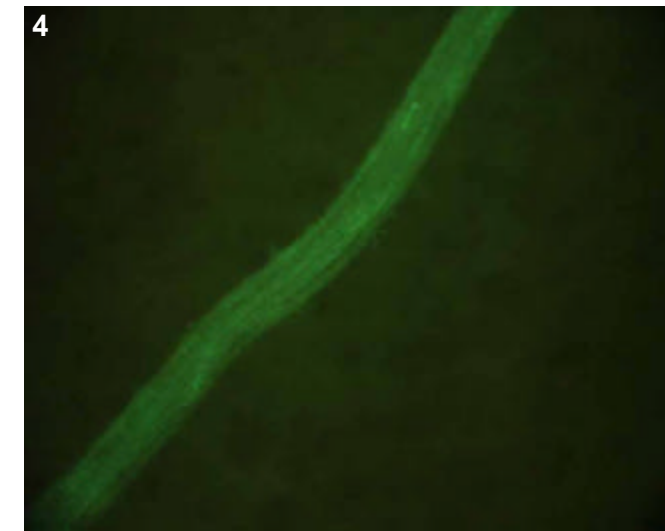
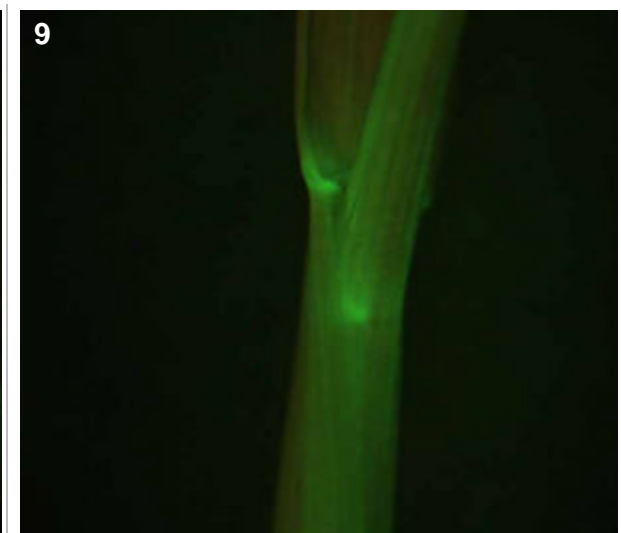
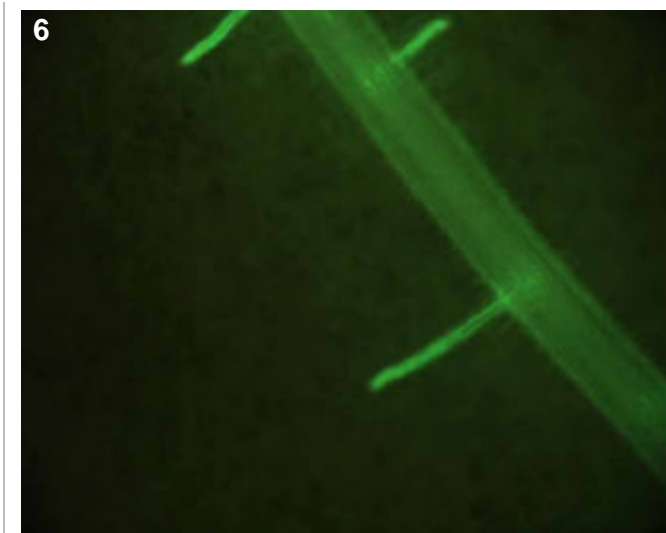
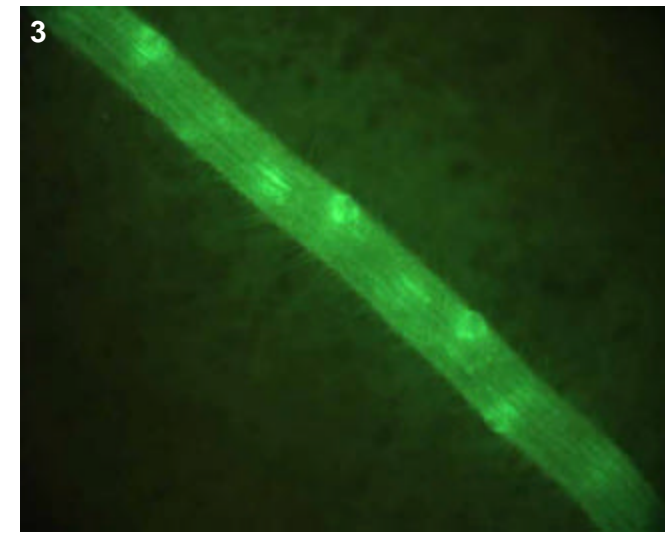
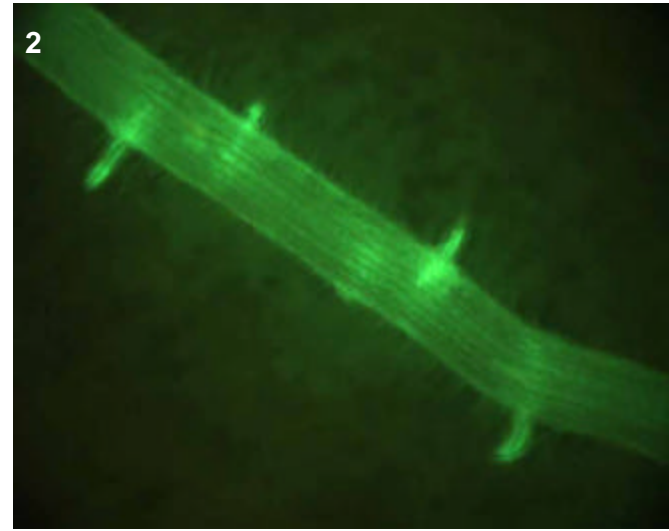
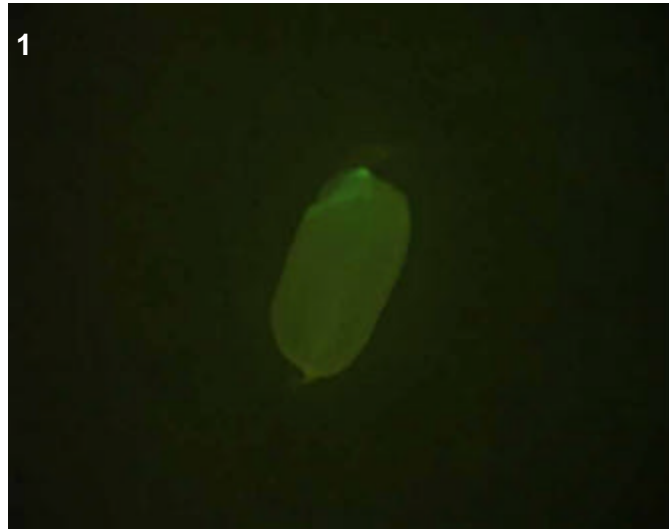
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
3/5 seeds had medium expression.

**T1 seedling comments**

# Genotype: ASZ A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

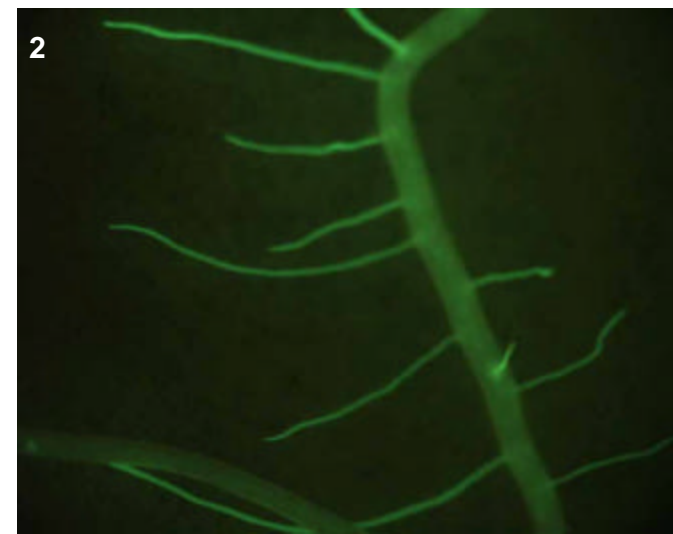
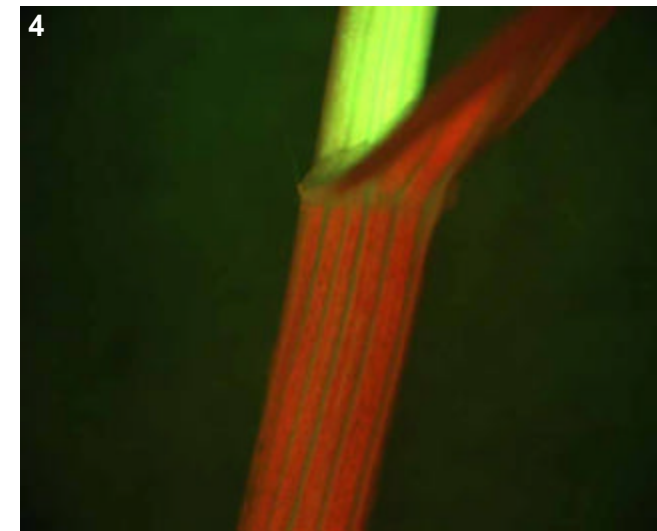
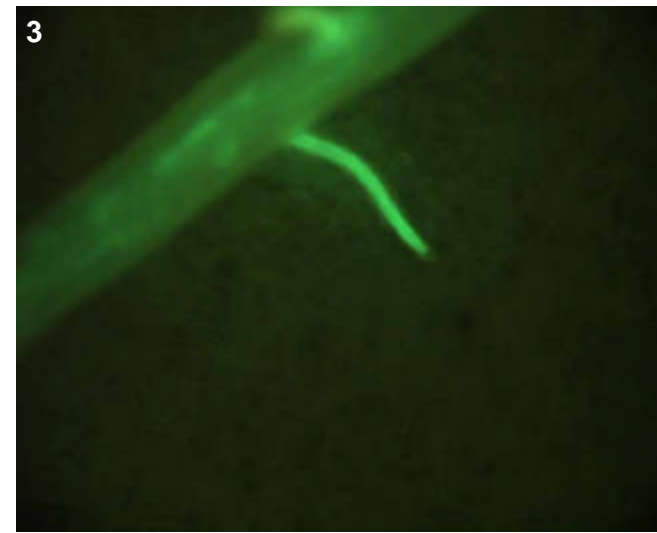
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

All 3 GFP positive seedlings showed the pattern in pics 1-3. Only 1 of the 3 seedlings showed the shoot expression in pic 4. All were moved to the greenhouse.

# Genotype: ASZ A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

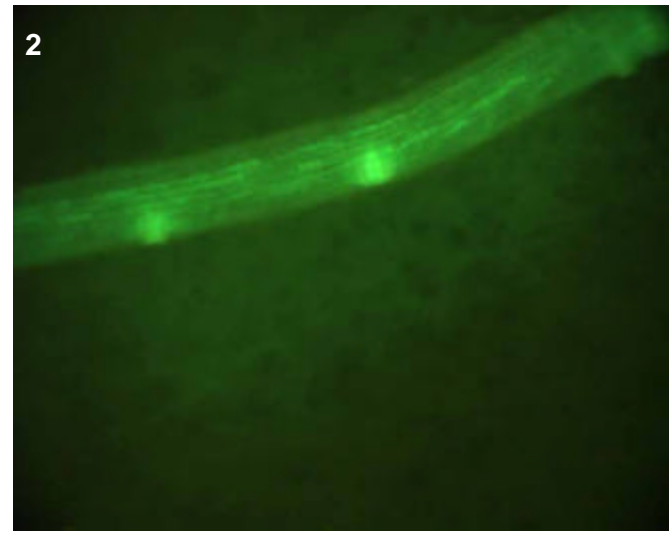
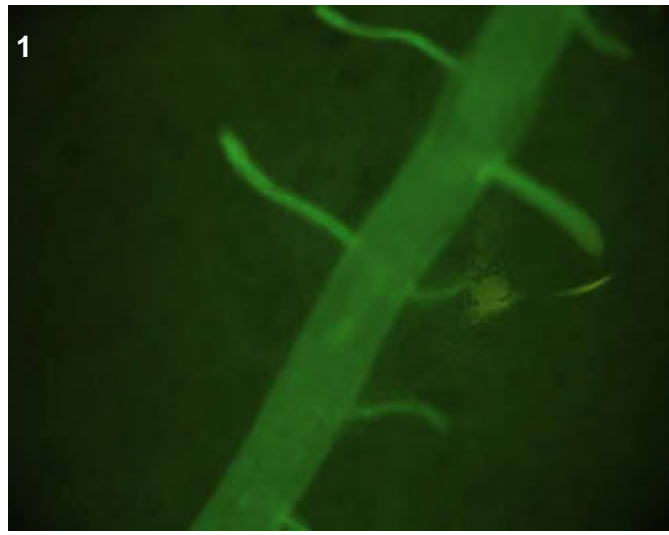
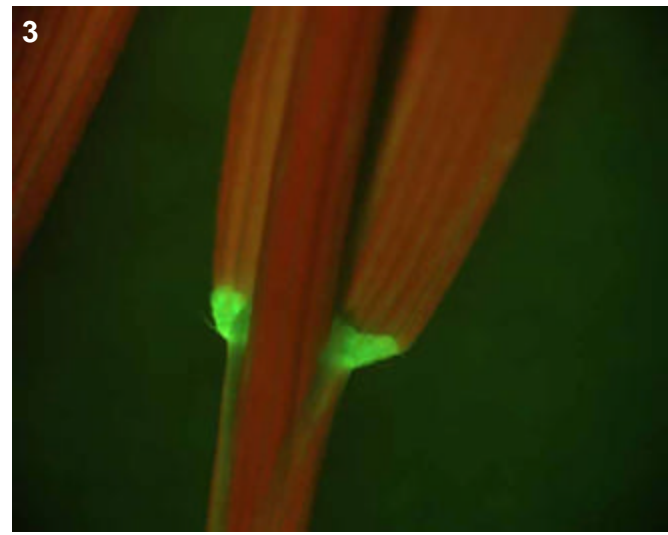
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Note the "stripes" of leaf blade GFP in picture 3.

# Genotype: ASZ A12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

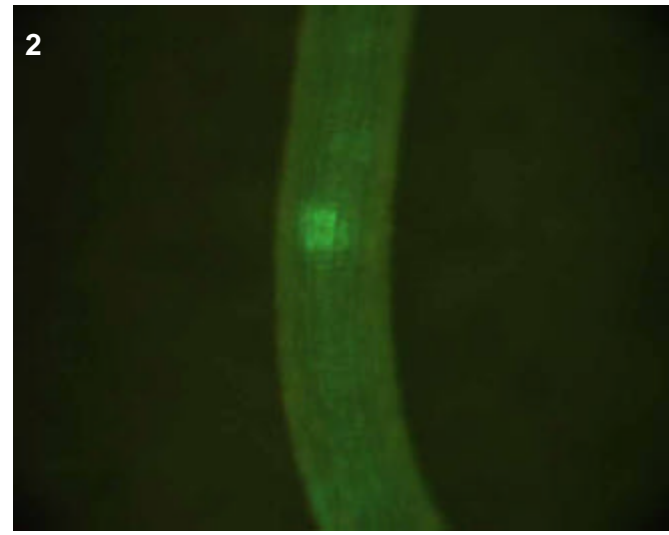
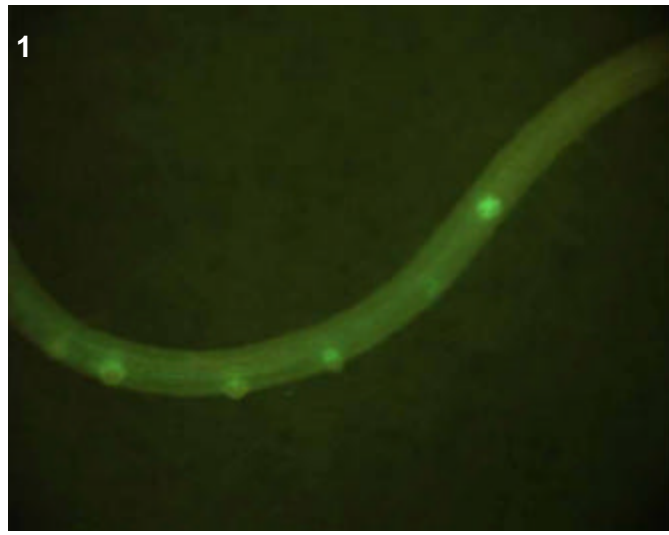
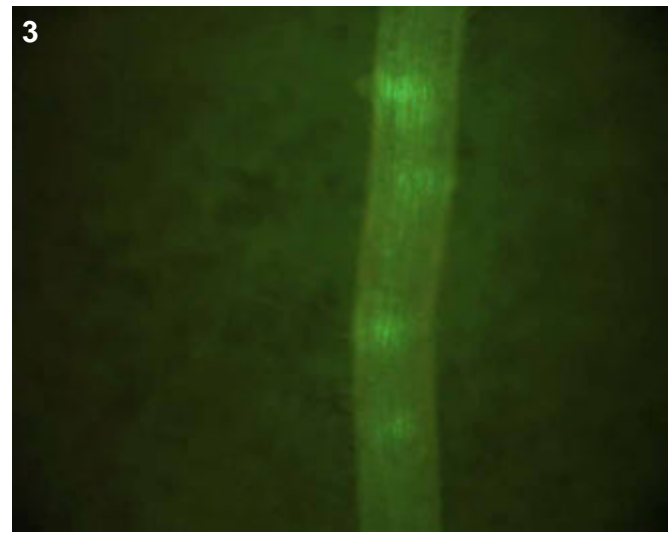
- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants **Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**



# Genotype: ASZ B10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

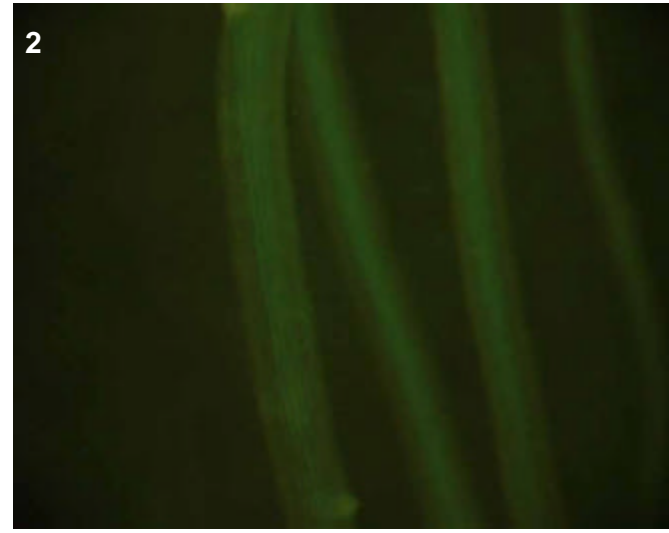
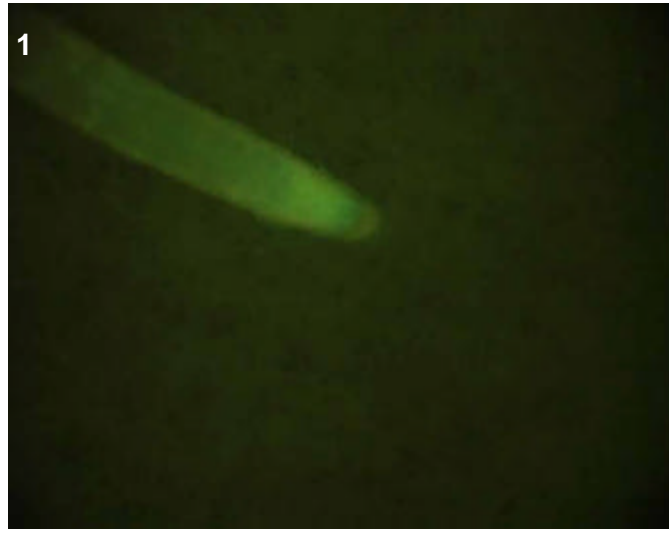
## T1 in greenhouse?

YES, 1 GFP+ plant

## Confocal?

WIP

## Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright expression in initials near crown root tips (picture 1).

# Genotype: ASZ C01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

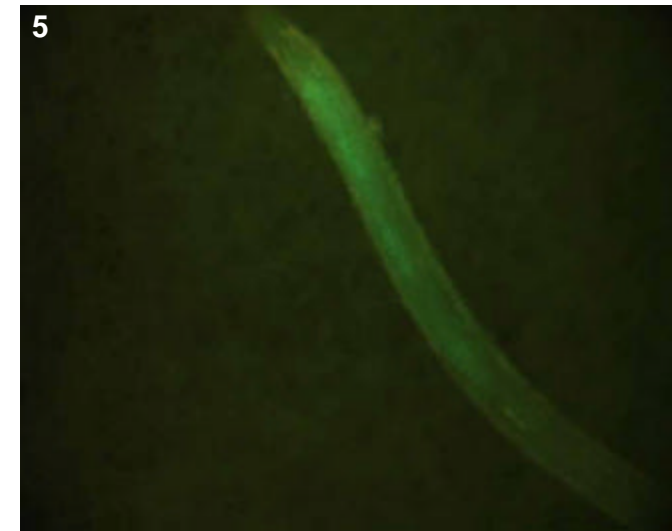
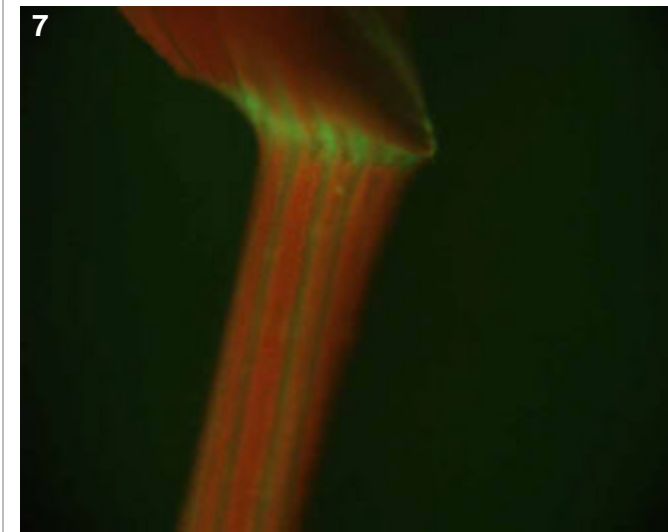
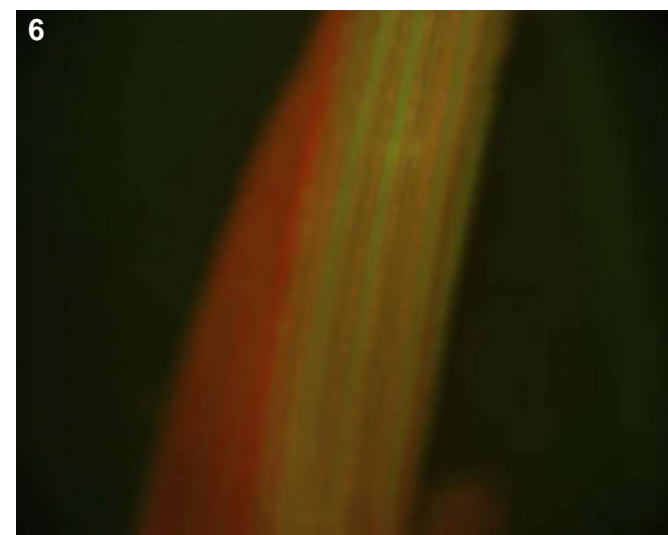
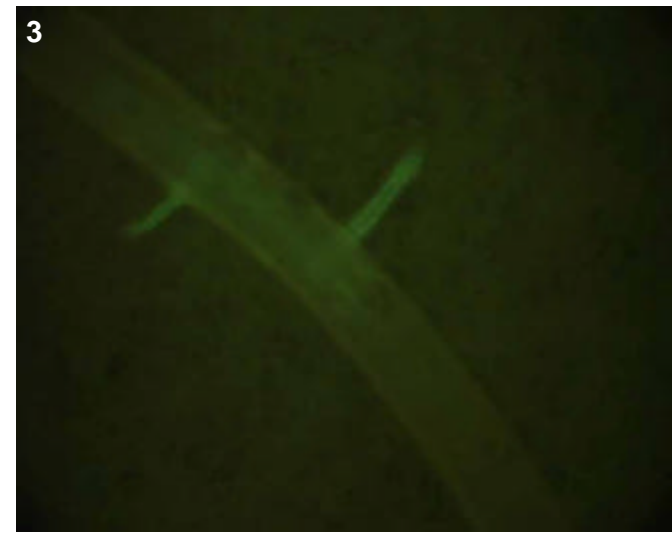
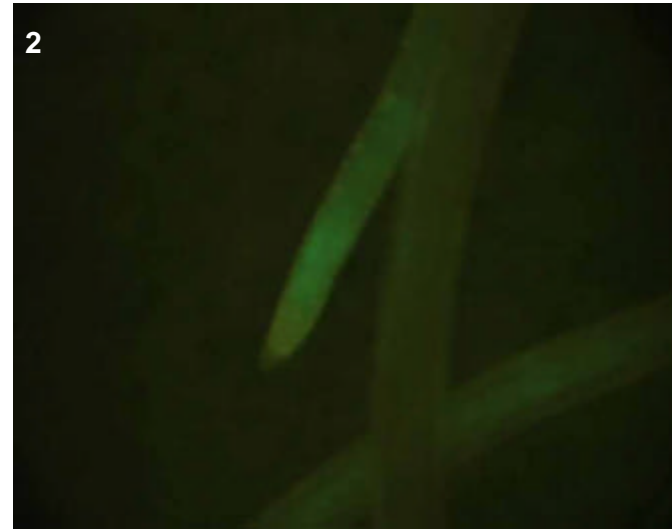
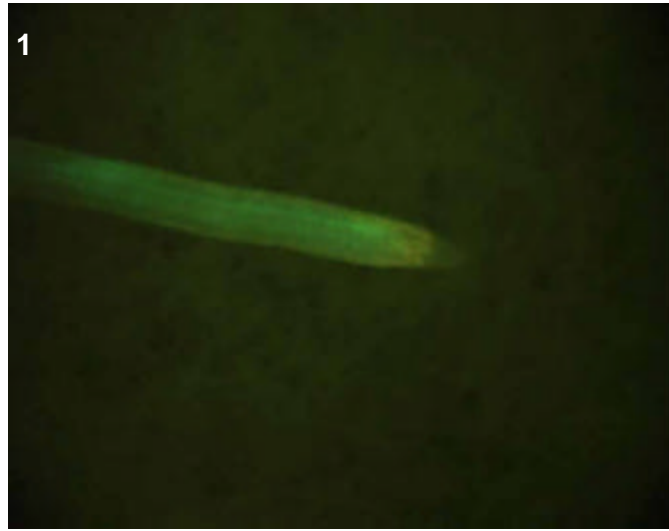
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
Interesting root expression--most bright where lateral roots are forming, with lateral root primordia appearing right near the tips of crowns (especially pic 2). Perhaps a mutant phenotype?

# Genotype: ASZ C06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

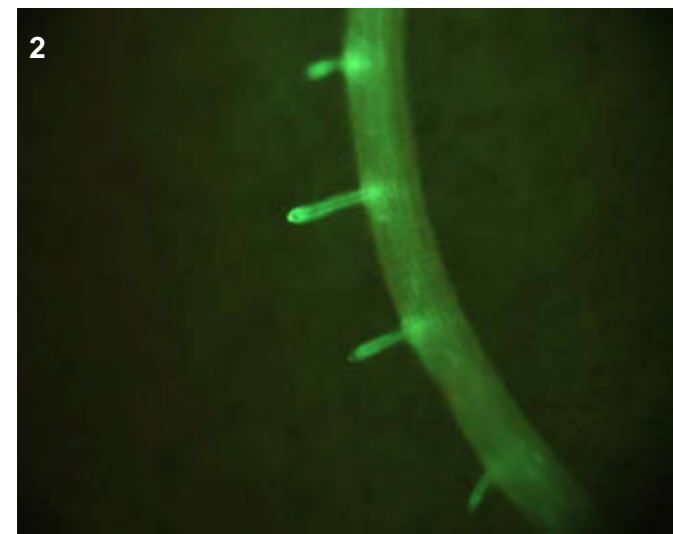
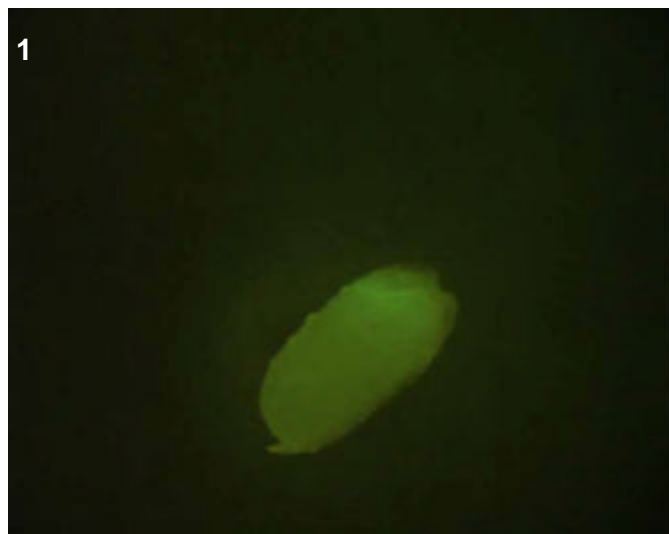
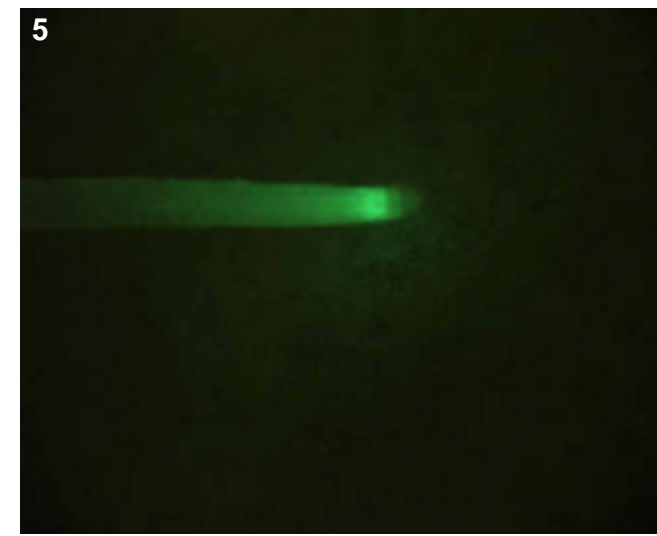
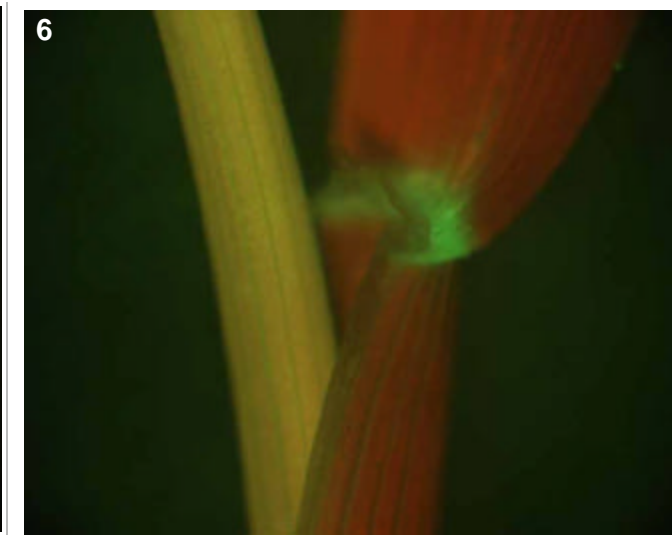
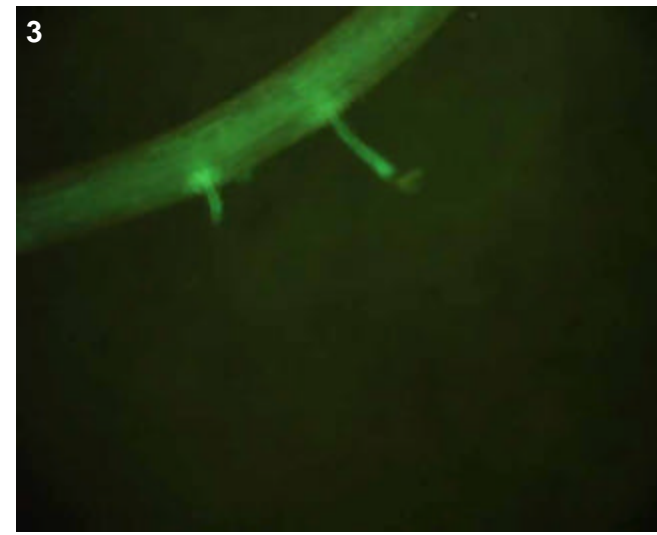
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had faint expression.

## T1 seedling comments

Root expression is bright and looks specific to the stele (pics 2-4). Note the bright initials at tips of crowns (pic 5). Shoot expression was in the collar and perhaps epidermis of young blade (pic 6).

# Genotype: ASZ E07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

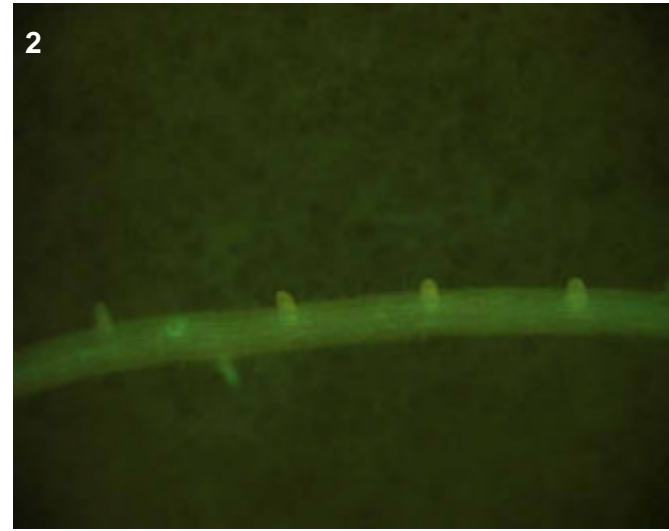
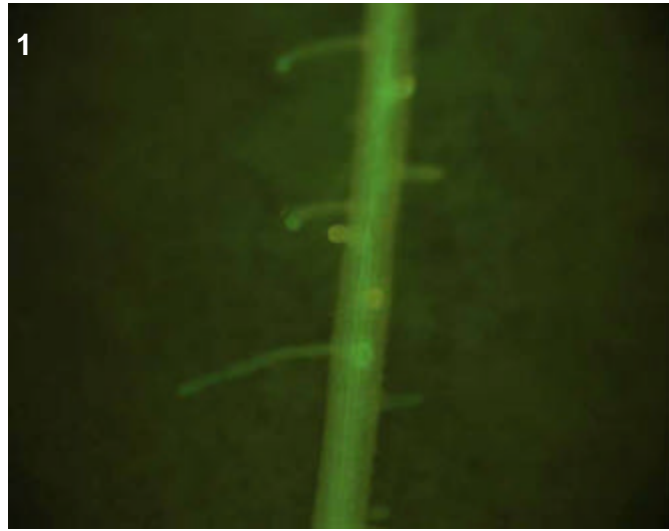
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ASZ F08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

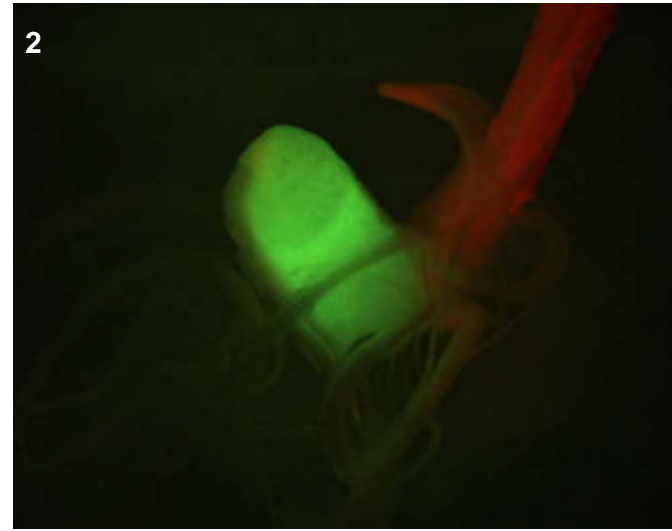
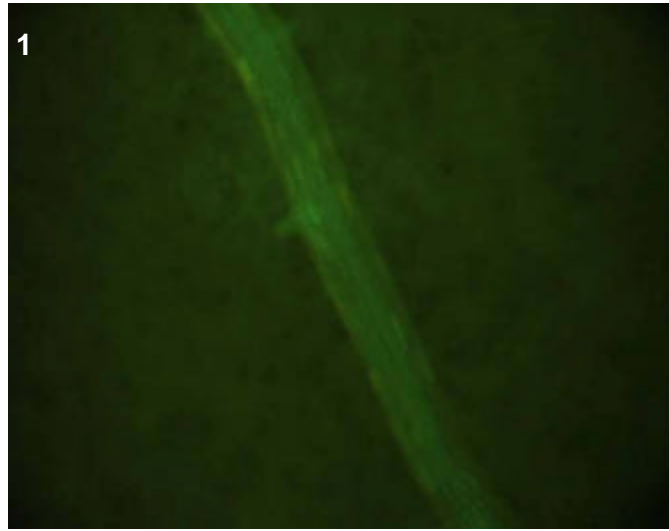
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Very faint root stele (pic 1), bright endosperm (pic 2).

# Genotype: ASZ F11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

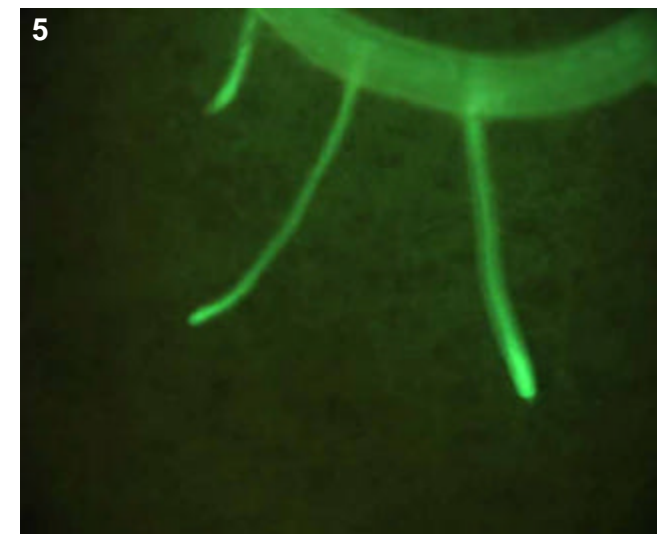
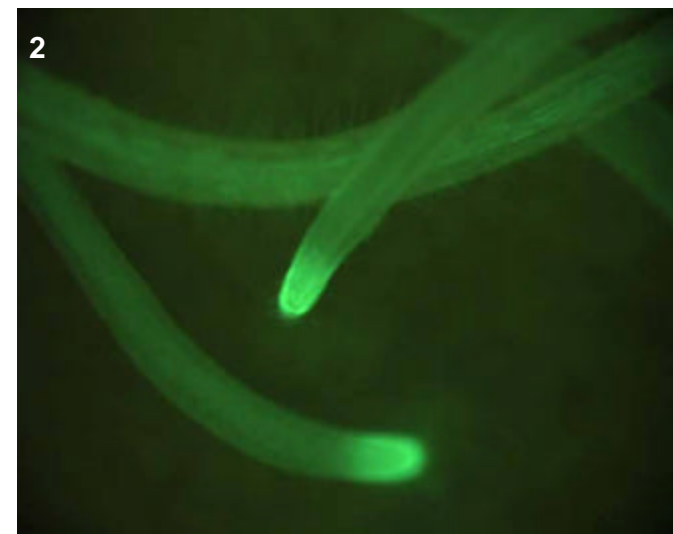
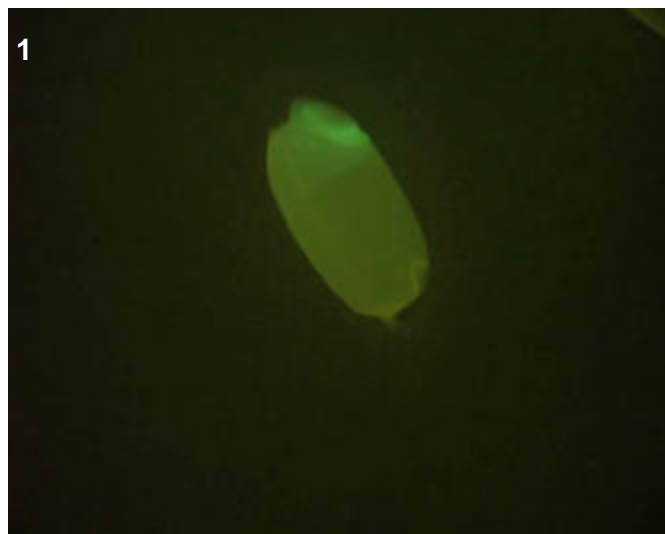
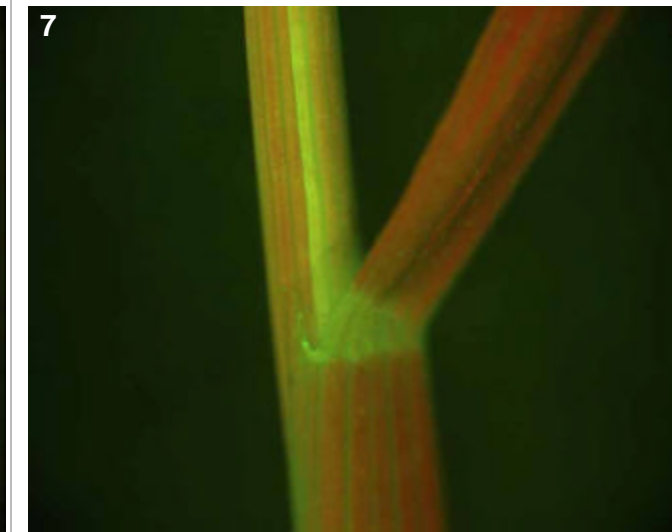
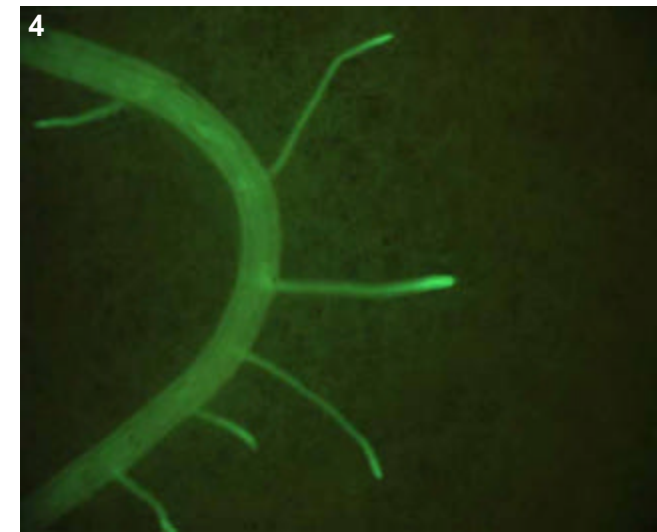
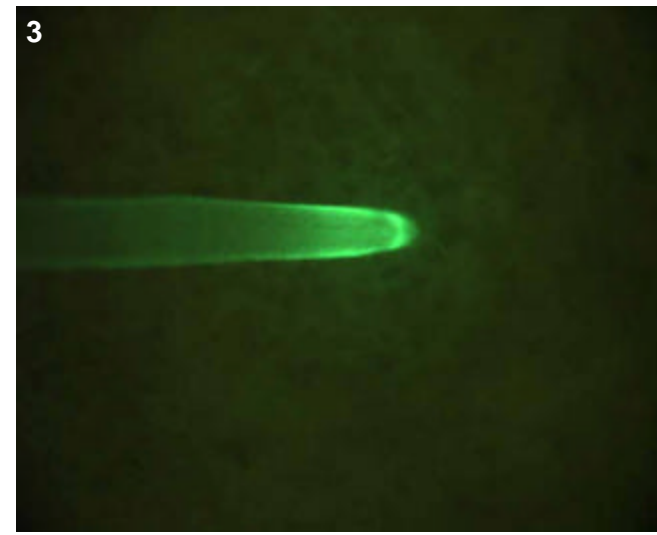
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

Perhaps an overall epidermal pattern in both roots (pics 2-5) and shoot (pics 6-7).

# Genotype: ASZ G09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

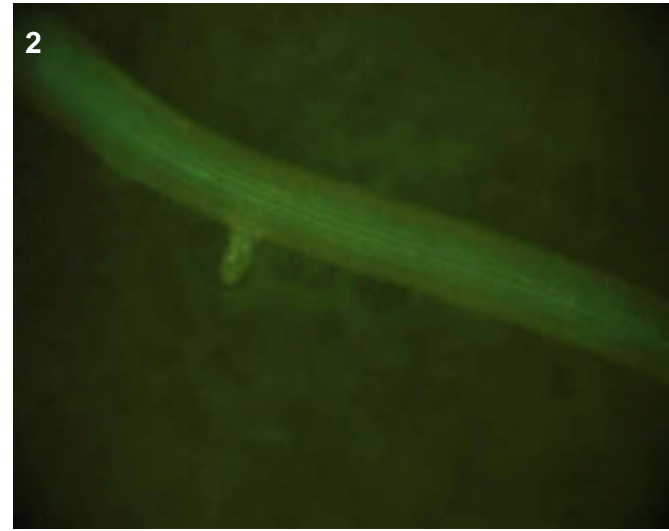
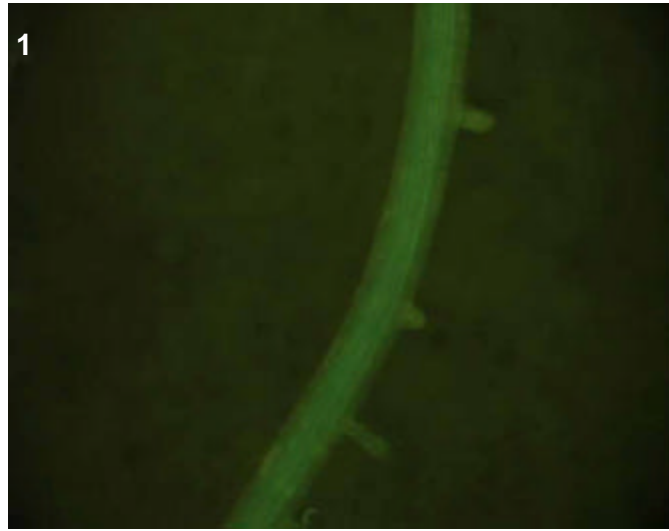
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Quite faint epidermal expression in roots (pics 1-2), the seminal root appeared unusually long on this GFP positive plant as well as a sibling GFP negative. Both were moved to the greenhouse.

# Genotype: ASZ G12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling:

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?  
YES, 1 GFP+ plant
- Confocal?
- Number T2 seed produced:

## T0 comments

## T1 seed comments

1/5 seeds had faint expression.

## T1 seedling comments



# Genotype: ASZ H09

### Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

### Expression

- None
- Bright
- Medium
- Weak
- Unsure

### Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

### T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

### T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

### T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

### T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

### T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

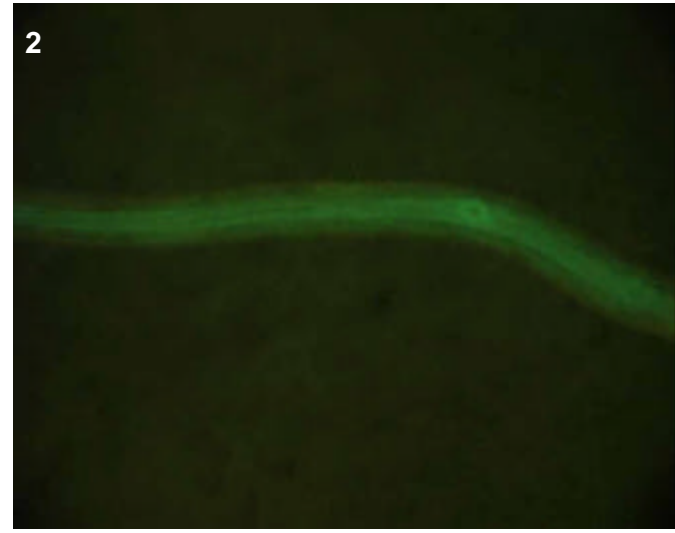
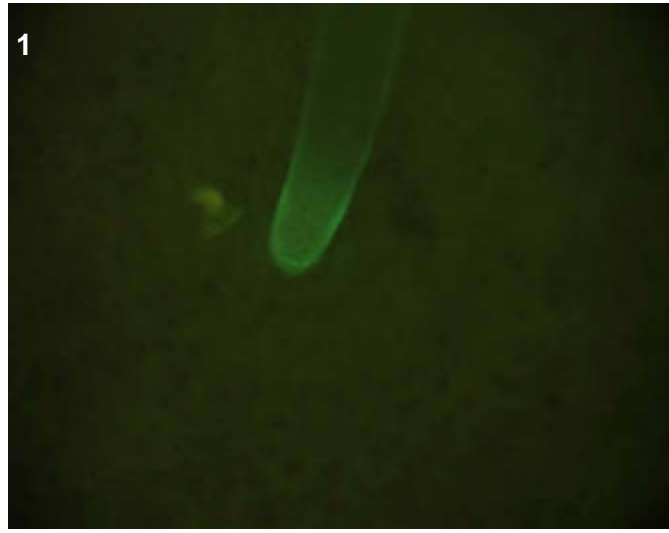
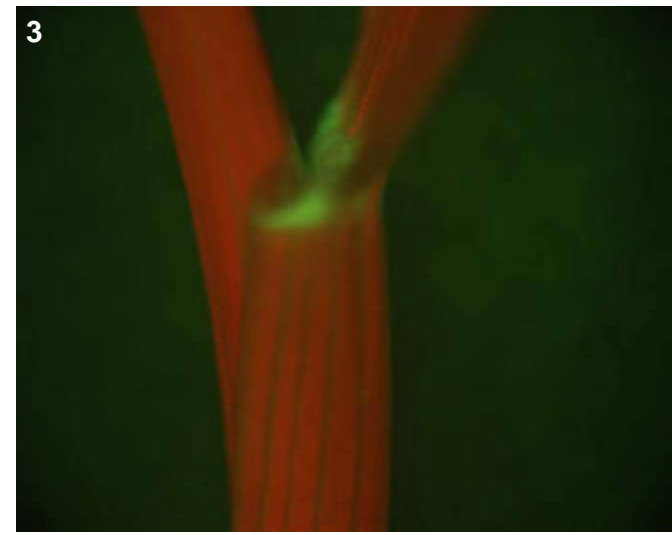
### T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ASZ H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

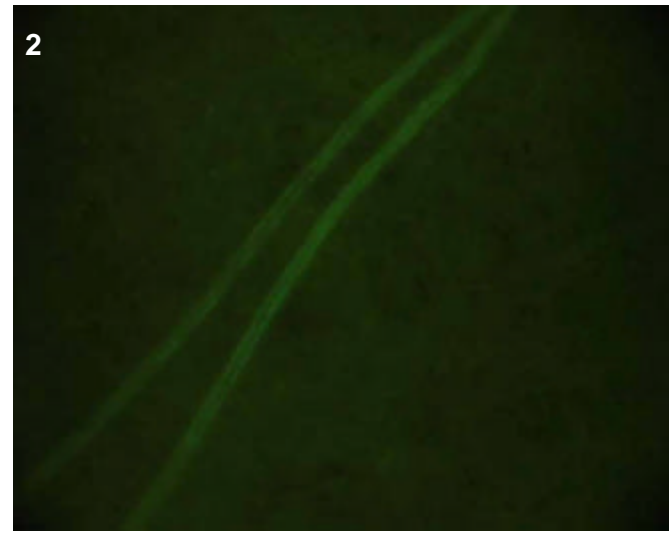
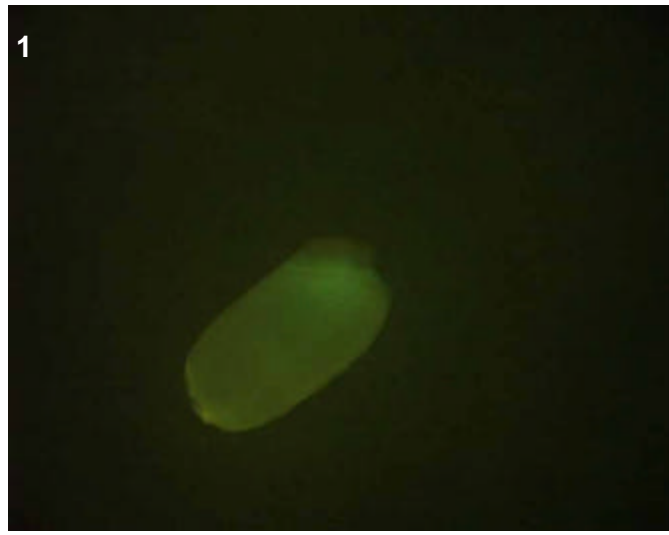
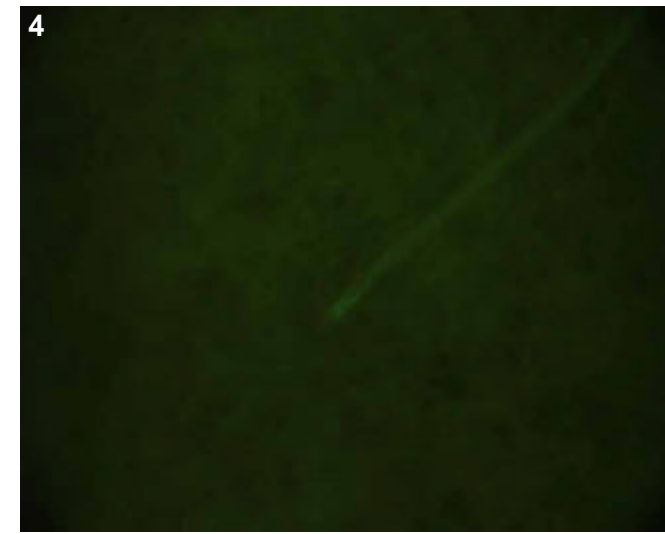
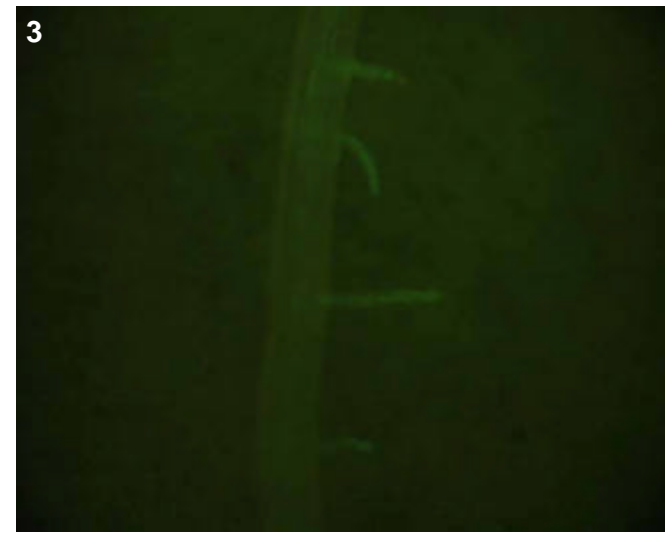
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?
- YES, 2 GFP+ plants
- Confocal?
- Number T2 seed produced:



**T0 comments**

**T1 seed comments**  
1 or 2 seeds out of 5 had expression.

**T1 seedling comments**  
Quite faint root expression (pics 2-4), brightest in lats, especially near the root apex (see pic 4).

# Genotype: ATA A04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

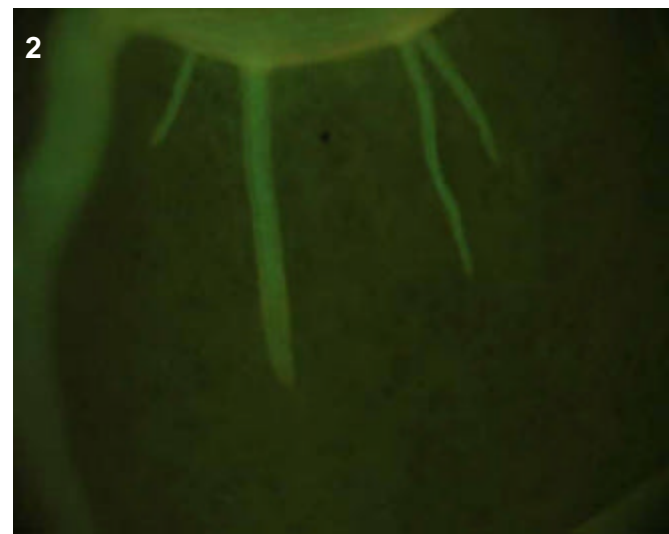
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ATA A08

## Screened

- T0 mature plant  
 T1 seed  
 T1 seedling  
 T1 mature plants

## Expression

- None  
 Bright  
 Medium  
 Weak  
 Unsure

## Pictures

T0 mature plant:   
 T1 seed/seedling: 1-8  
 T1 mature plant:

## T0 Flower

- YES  
 POSSIBLE  
 Stamen: anther  
 Stamen: filament  
 Carpel: stigma  
 Carpel: style  
 Carpel: ovary  
 Carpel: base  
 Lemma/palea  
 Lodicule  
 Rachilla  
 Sterile lemma  
 Pedicel  
 Guard cells  
 Trichomes  
 Vascular

## T0 Blade

- YES  
 POSSIBLE  
 Vascular  
 Guard cells  
 Trichomes  
 Mesophyll

## T0 Sheath

- YES  
 POSSIBLE  
 Collar  
 Vascular  
 Trichomes  
 Guard cells  
 Mesophyll

## T1 Seed

- YES  
 POSSIBLE  
 Embryo  
 Coleorhiza  
 Scutellum  
 Aleurone/Endo.  
 Vasc. bundle

## T1 Seedling

- YES  
 POSSIBLE  
 SHOOT  
 ROOT  
 ENDOSPERM  
 Coleoptile  
 Sheath tissue  
 Blade tissue  
 Leaf tip  
 Collar  
 Trichomes  
 Guard cells  
 S. vascular  
 Seminal root  
 Crown roots  
 Lateral roots  
 Root cap  
 Root apex  
 R. stele  
 R. cortex/end.  
 R. epidermis  
 Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

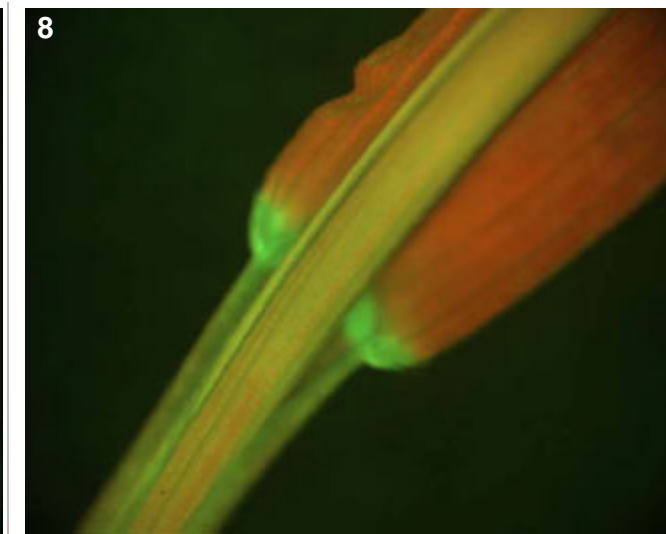
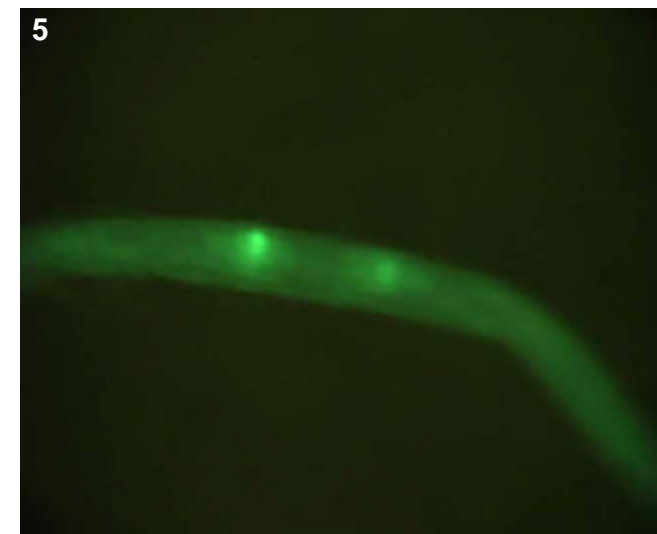
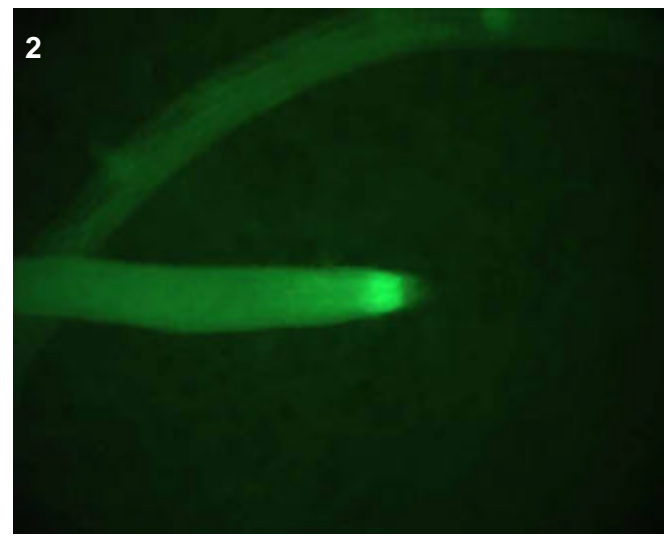
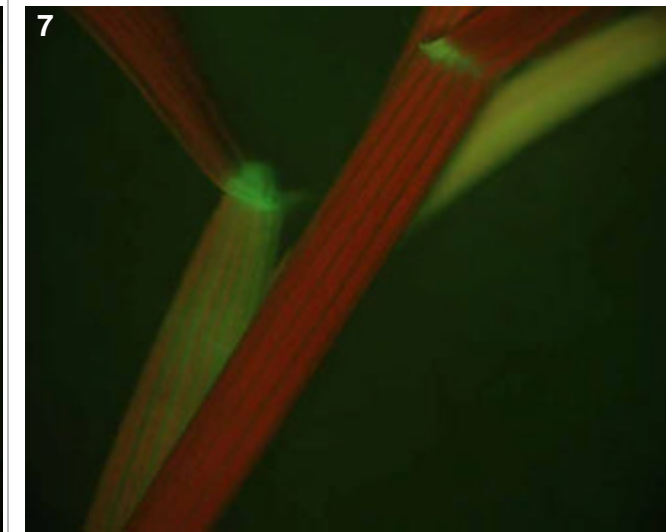
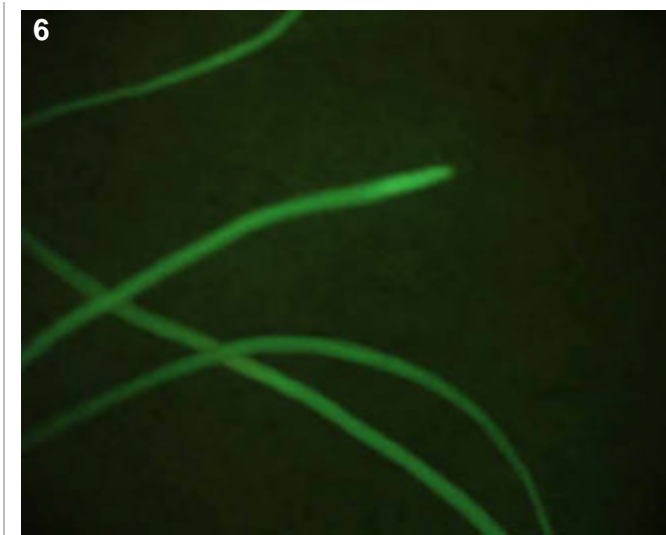
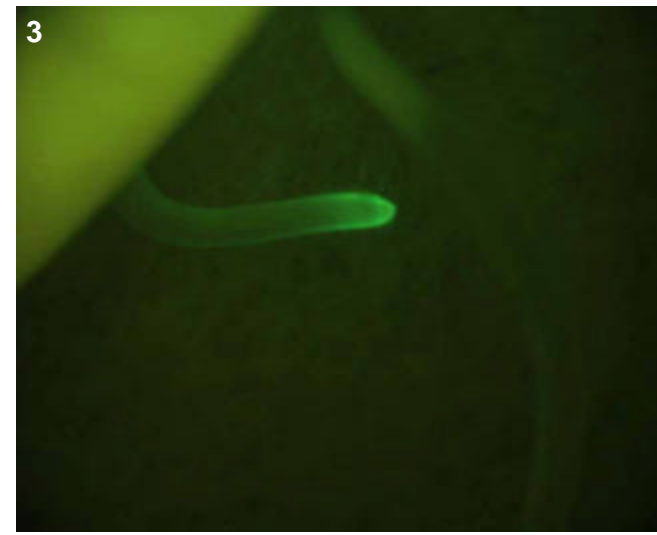
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had medium expression.

## T1 seedling comments

Note the bright initials in tips of crown roots (pic 2). Of 4 GFP positive seedlings, 2 appeared to have epidermal expression in the blade (such as pic 8) and 2 did not.

# Genotype: ATA A10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

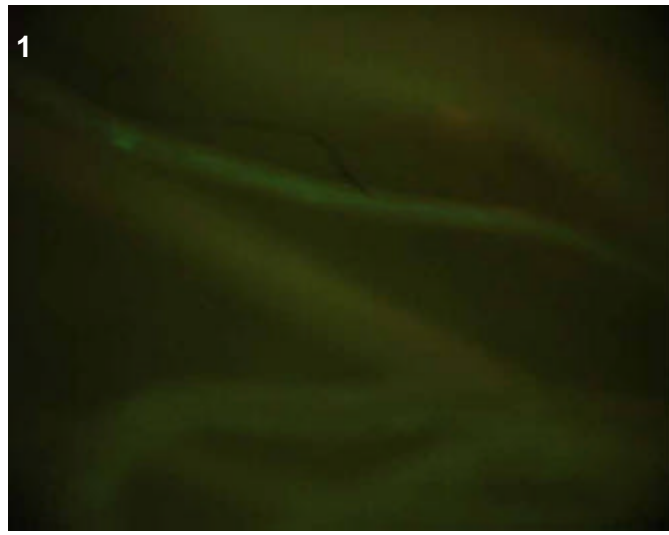
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression noted in only the small, thin crowns near the base of the plant.

# Genotype: **ATA B03**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

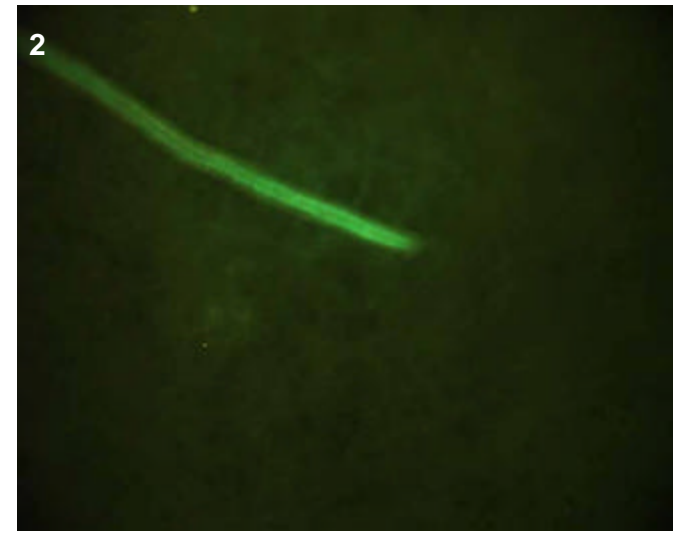
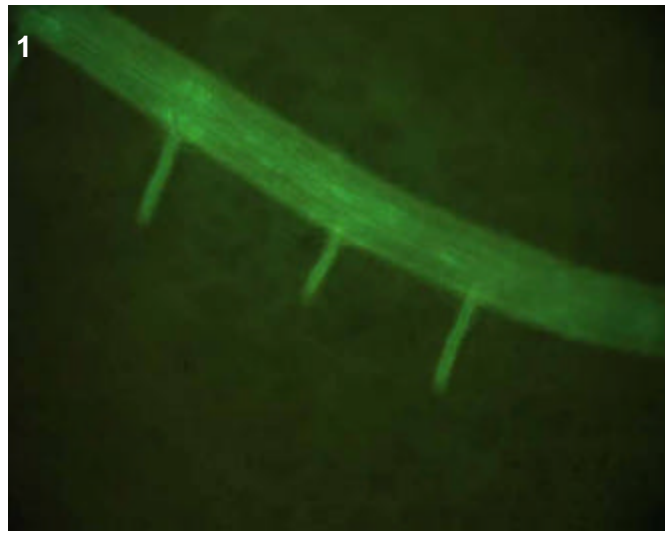
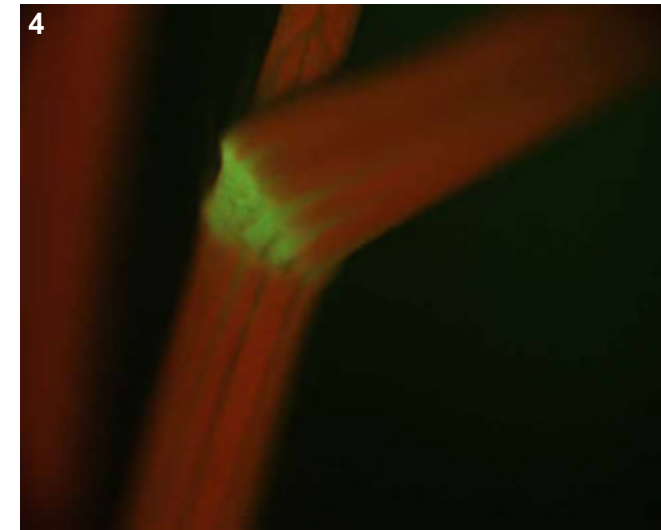
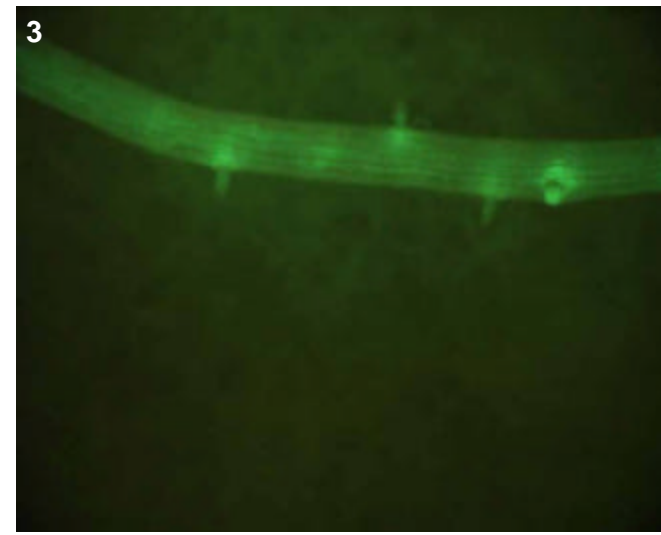
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: **ATA B04**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

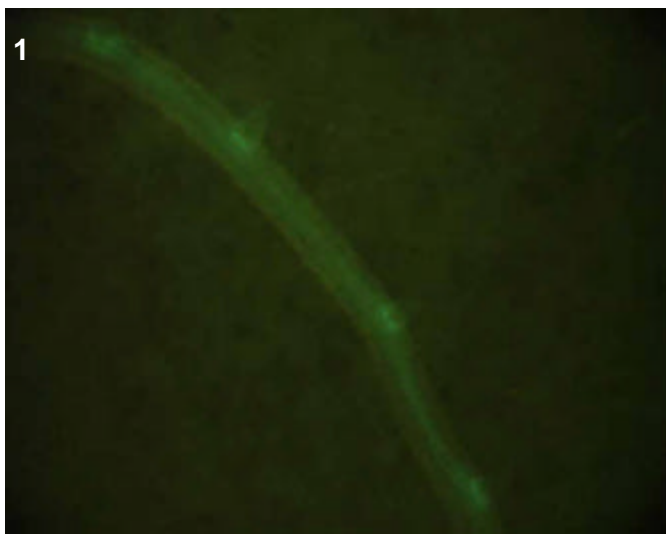
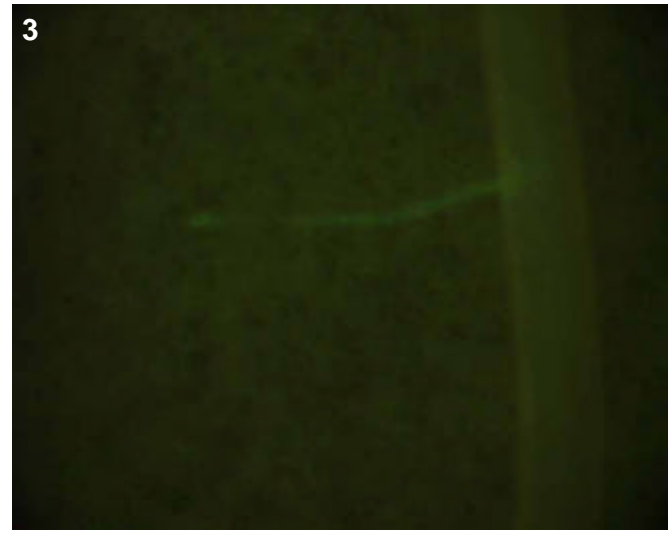
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: **ATA B06**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

**T1 in greenhouse?**

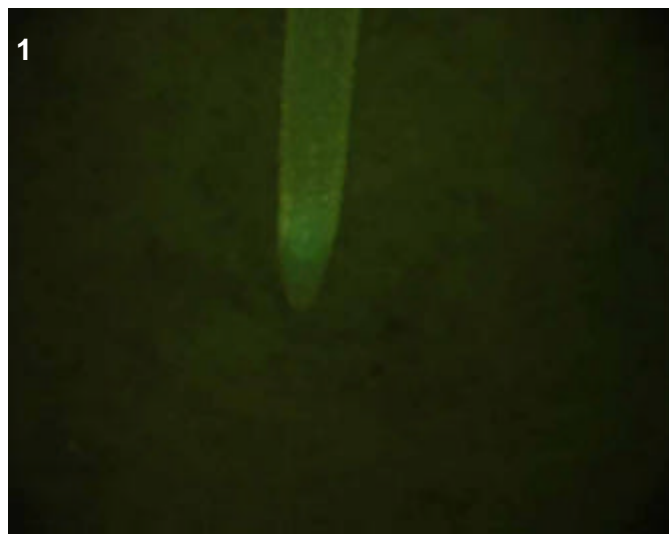
YES, 3 GFP+ plants

**Confocal?**

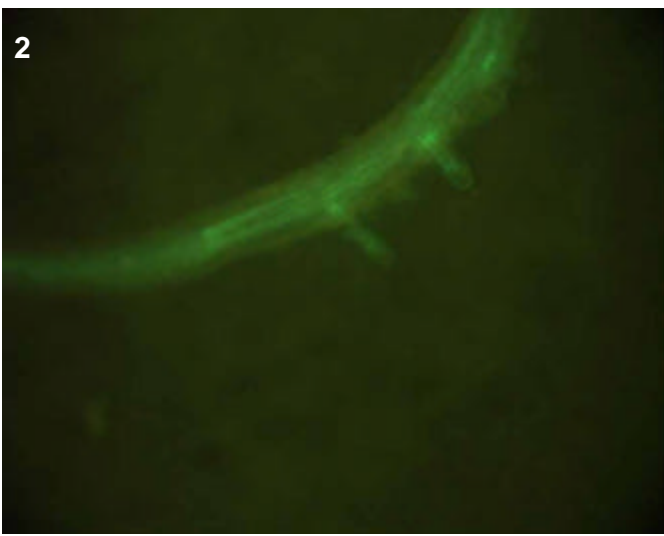
WIP

**Number T2 seed produced:**

1



2



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

There appears to be some interesting expression in the initials of crown root tips (pic 1).



# Genotype: ATA B10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

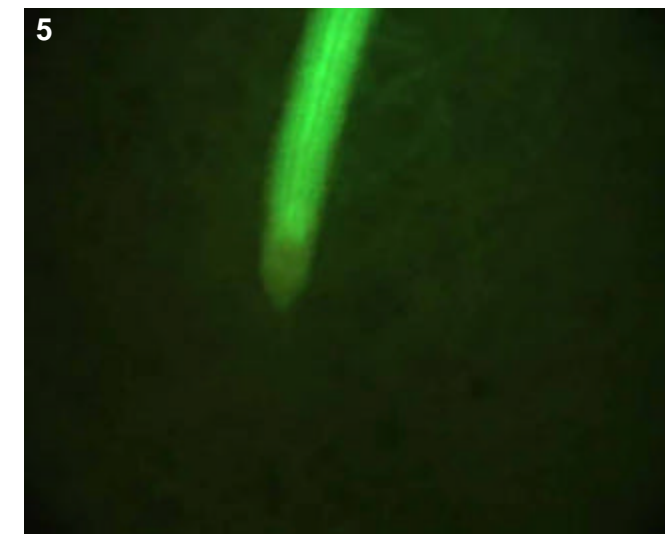
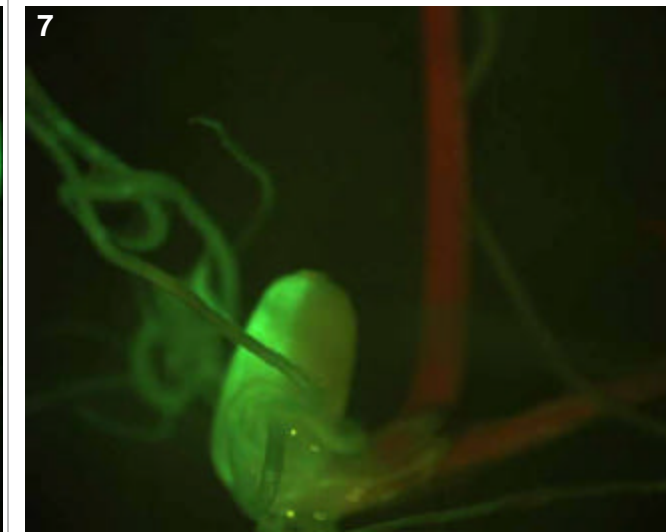
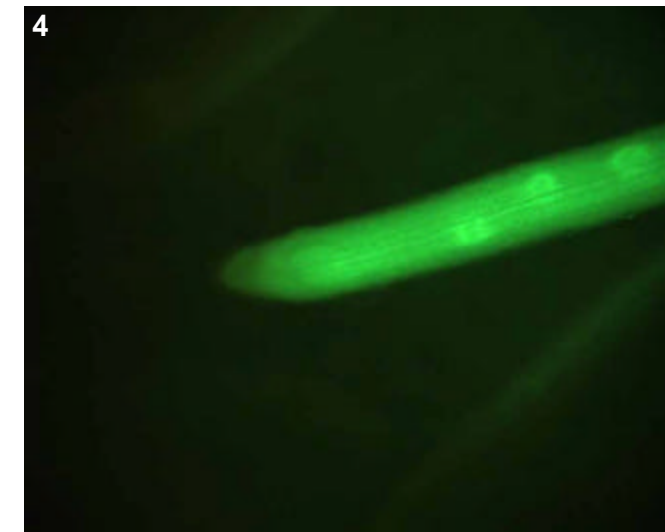
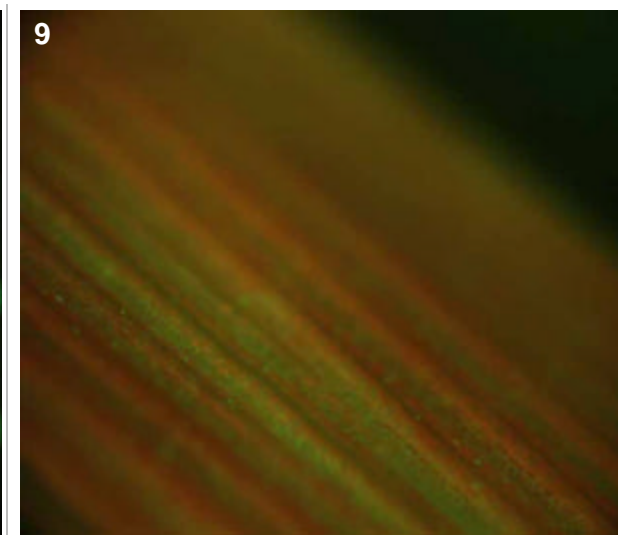
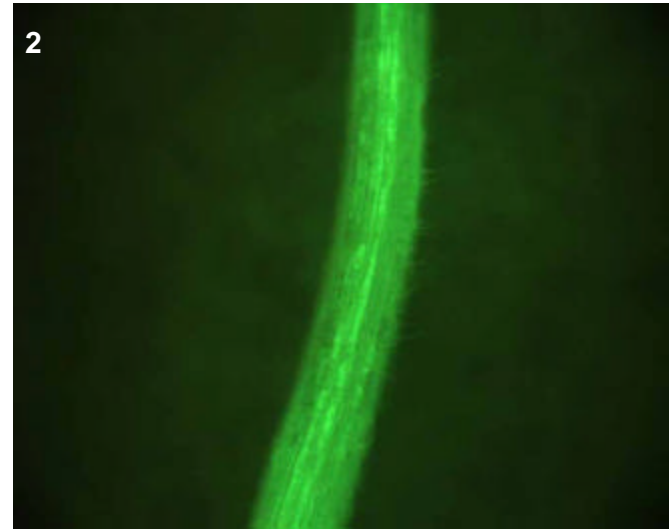
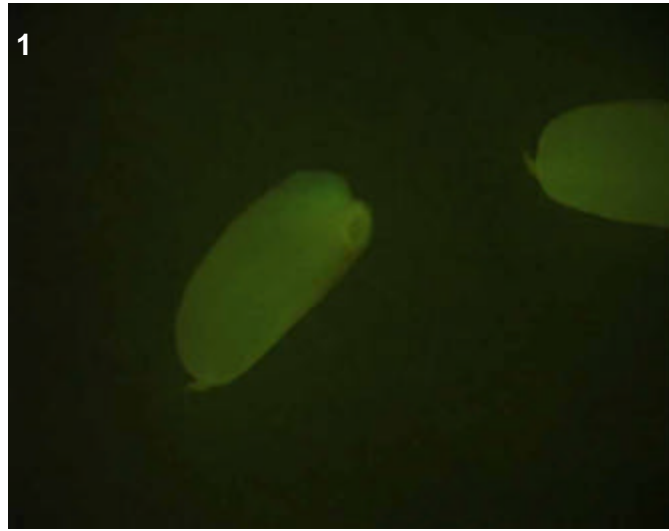
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
2/5 seeds had faint expression.

**T1 seedling comments**  
Perhaps epidermal expression both in root and shoot.

# Genotype: ATA C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

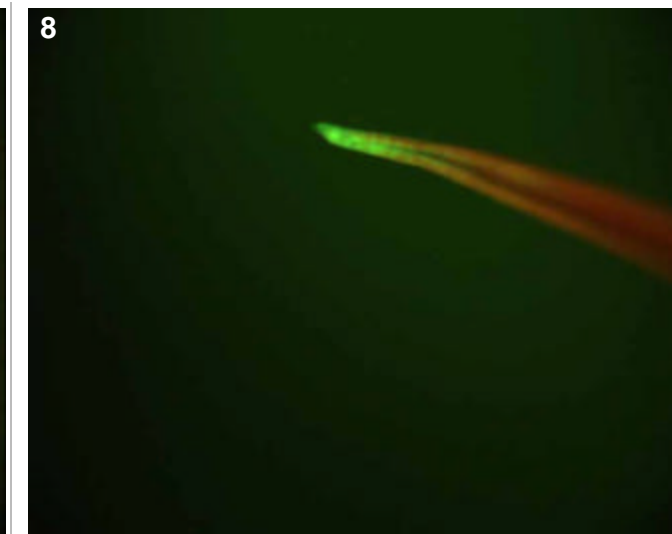
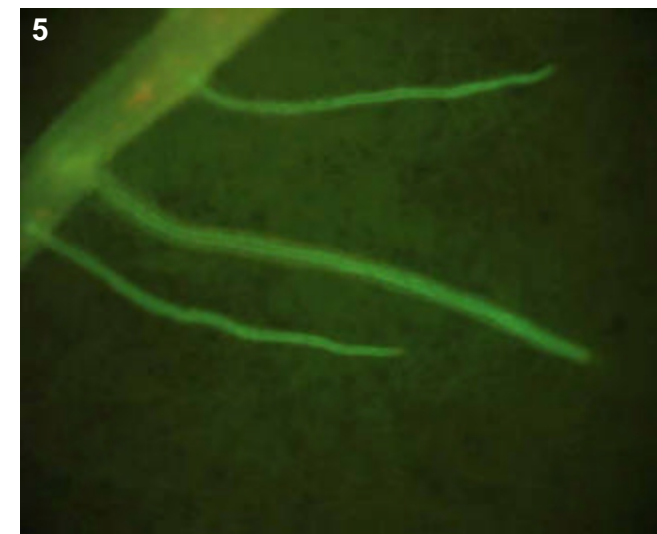
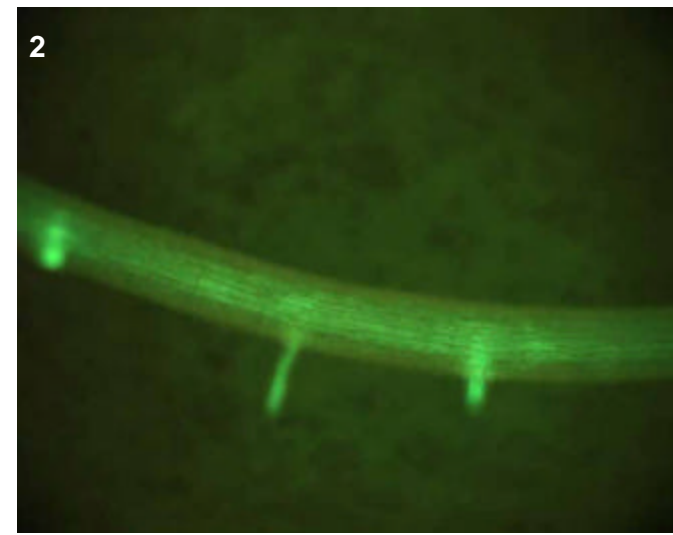
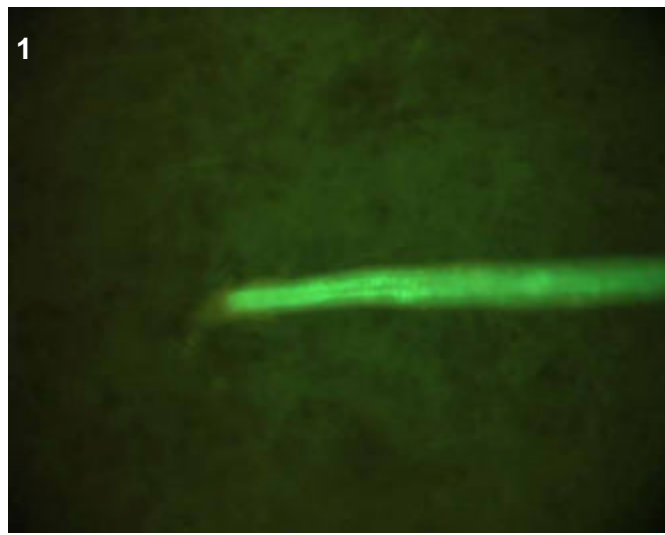
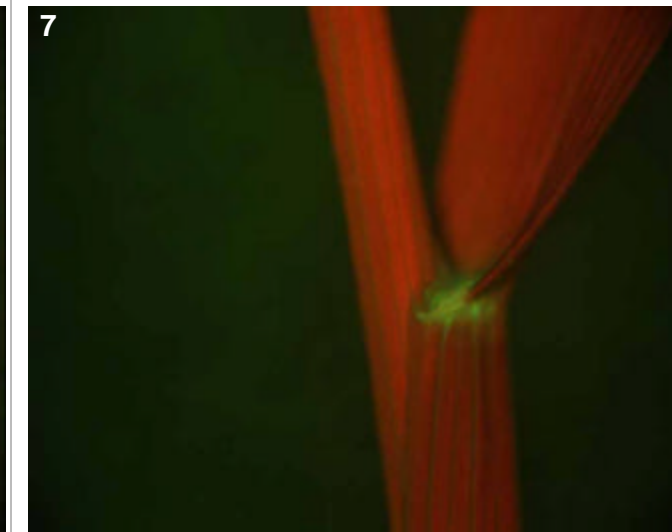
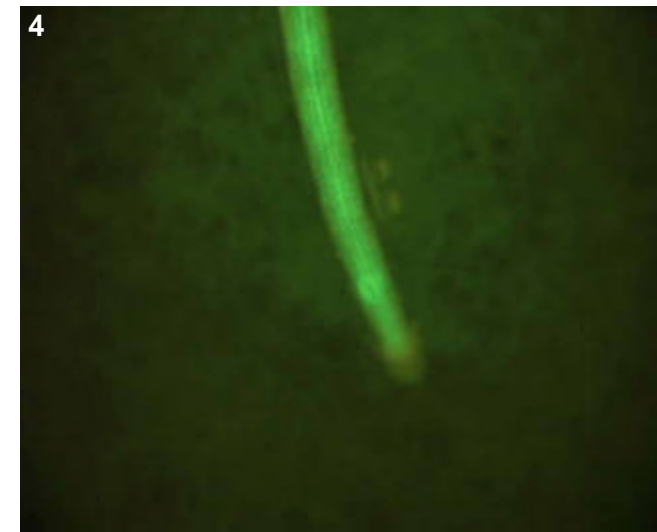
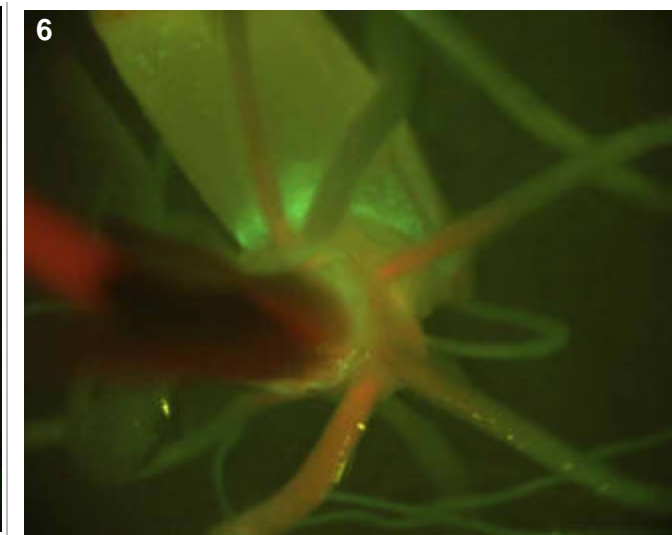
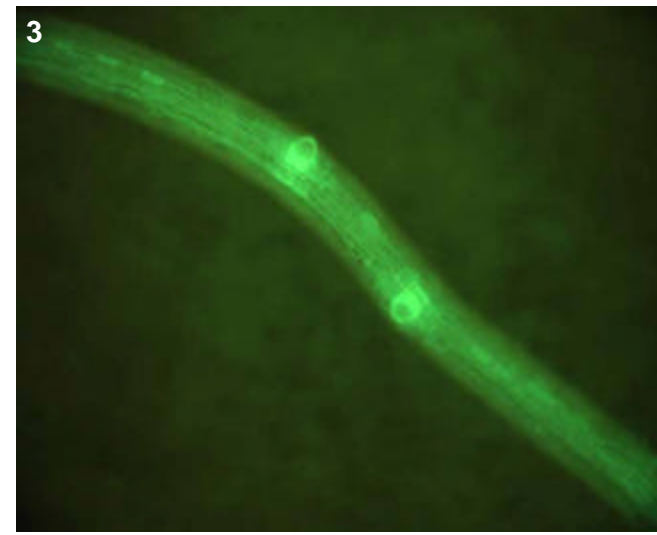
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

2/5 seeds had faint expression (no picture taken).

## T1 seedling comments

# Genotype: ATA C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

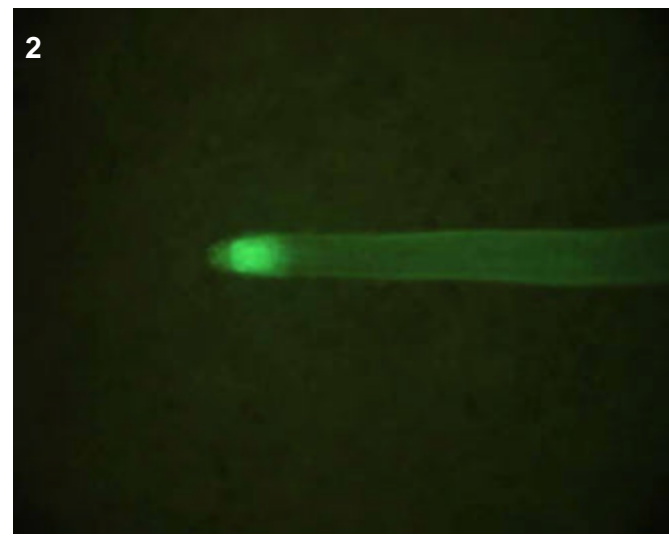
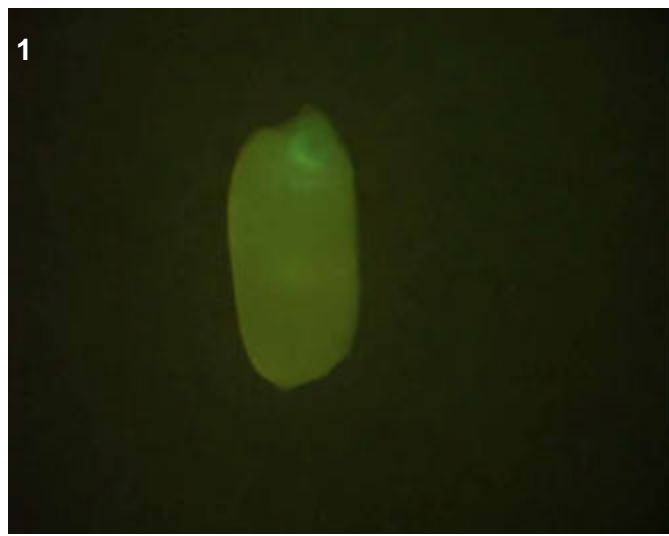
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

Number T2 seed produced:



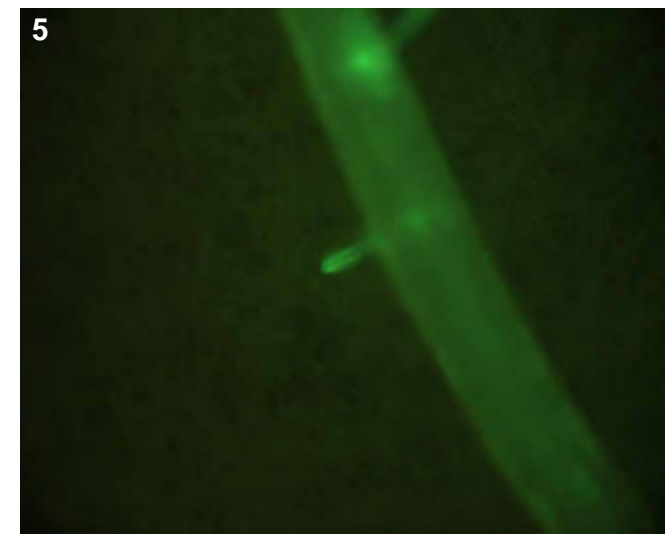
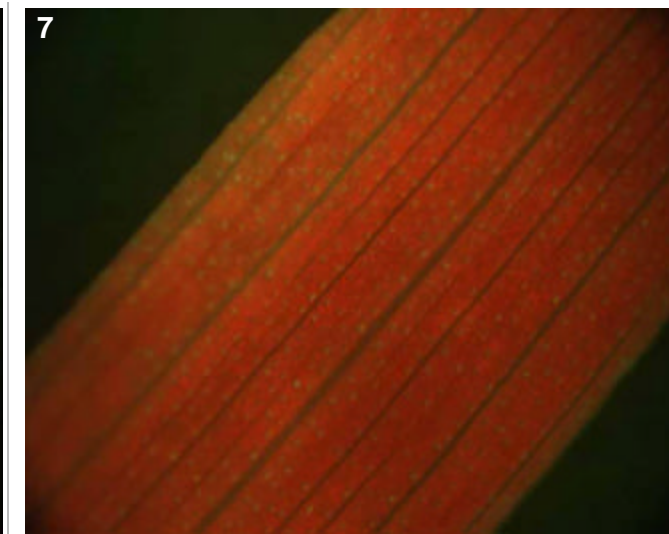
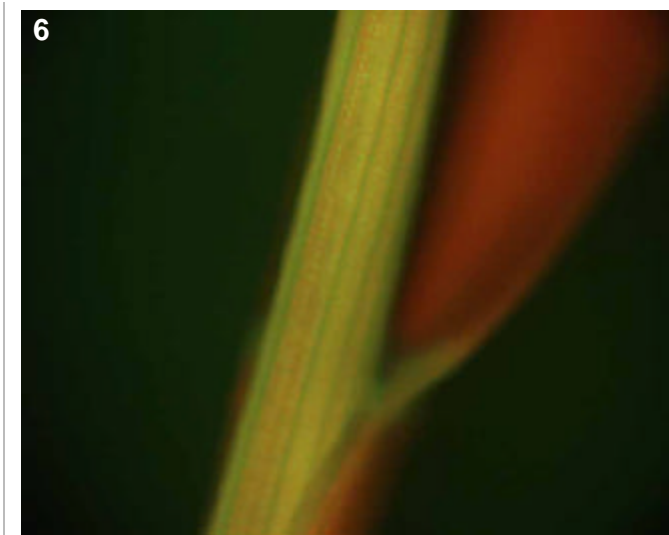
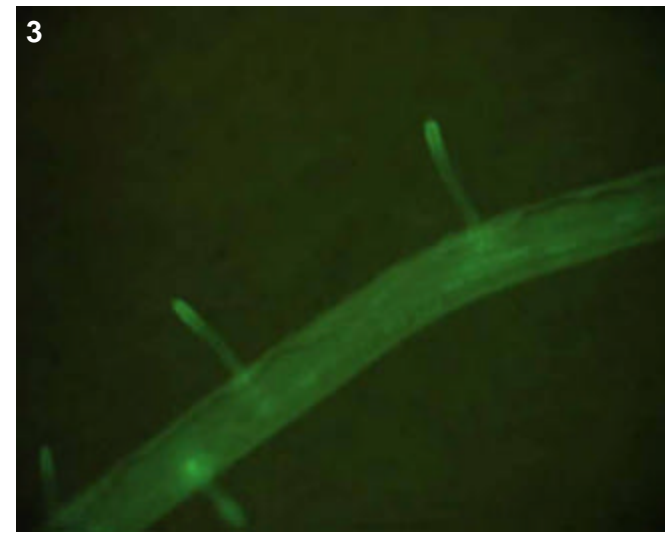
### T0 comments

### T1 seed comments

2/5 seeds had medium expression.

### T1 seedling comments

Definitely brighter GFP expression in cell elongation/maturation zones of roots. The bright initials at tips of crown roots (pic 2) would be interesting to confocal. In shoot, the expression was limited to just the guard cells (pics 6-7).



# Genotype: **ATA E03**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

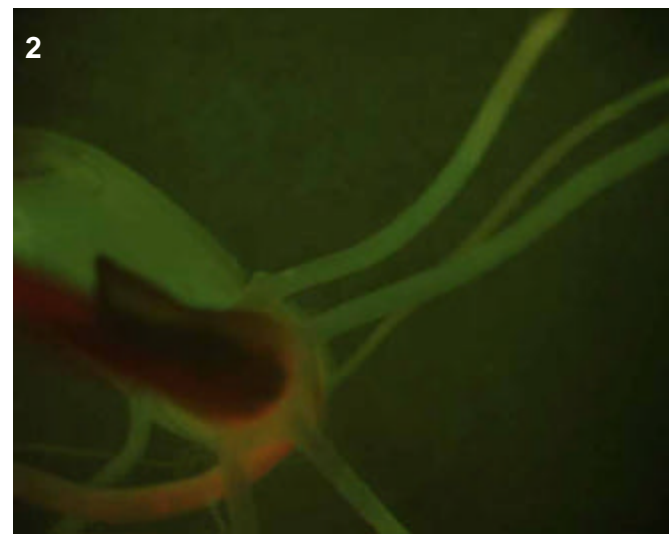
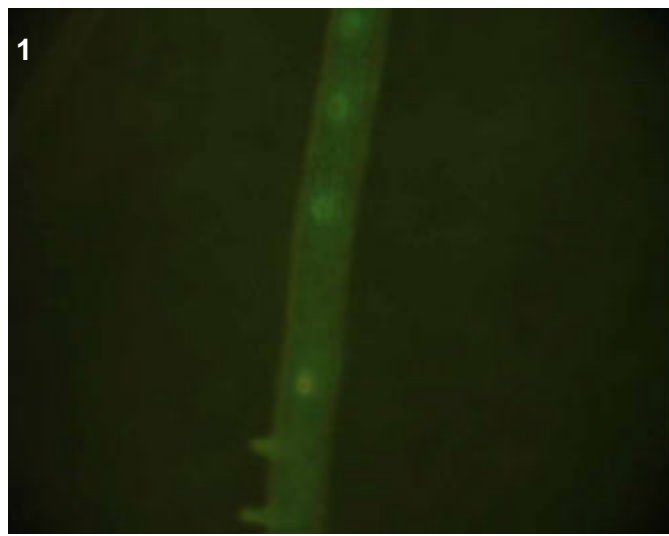
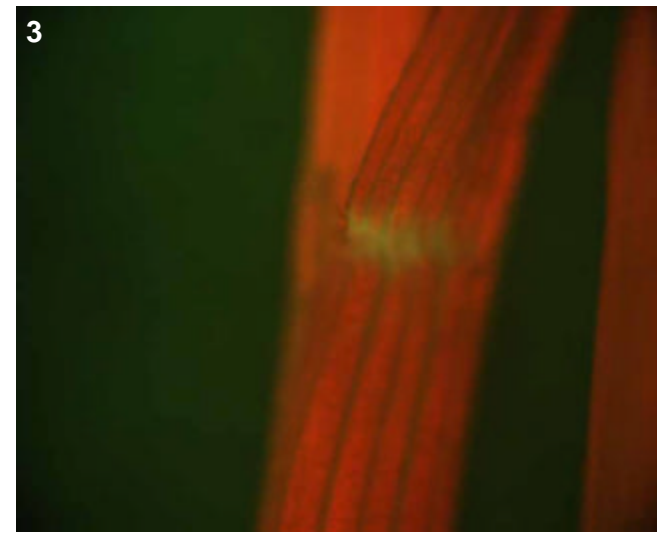
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ATA F02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

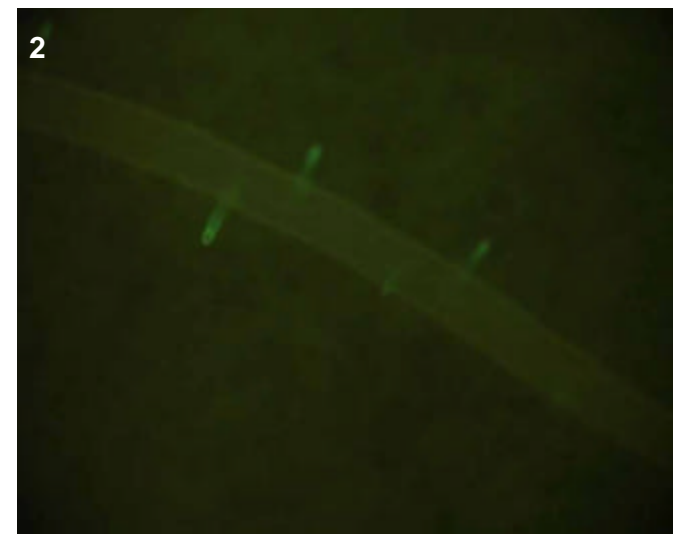
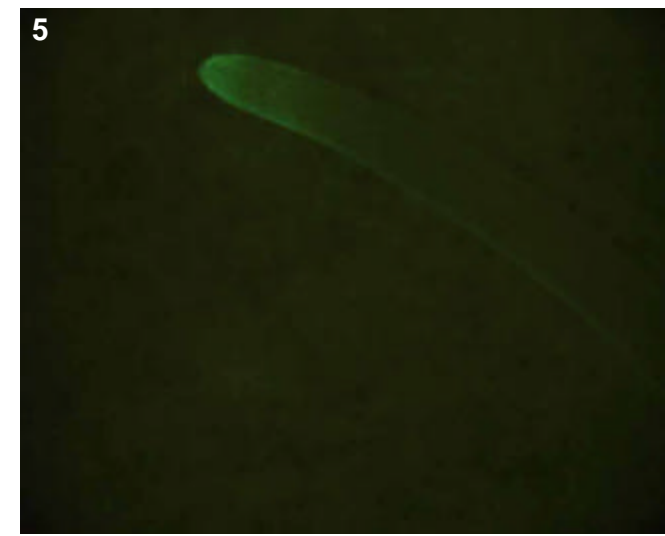
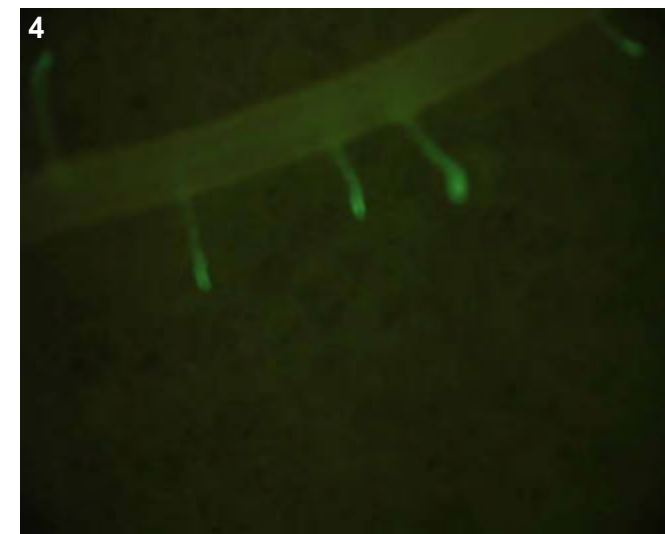
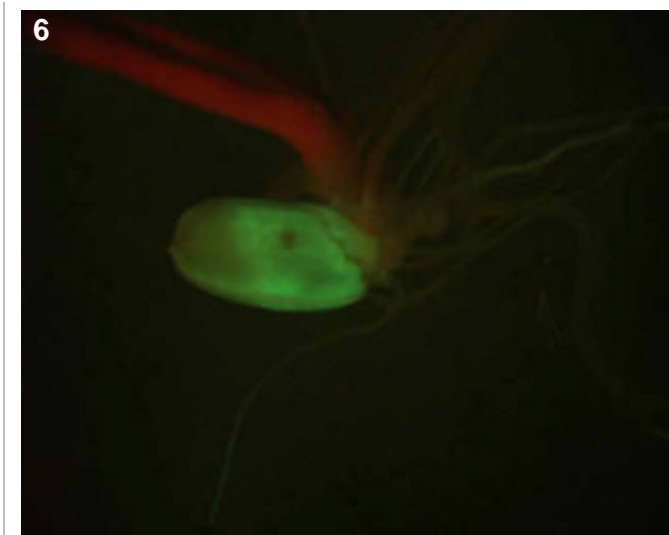
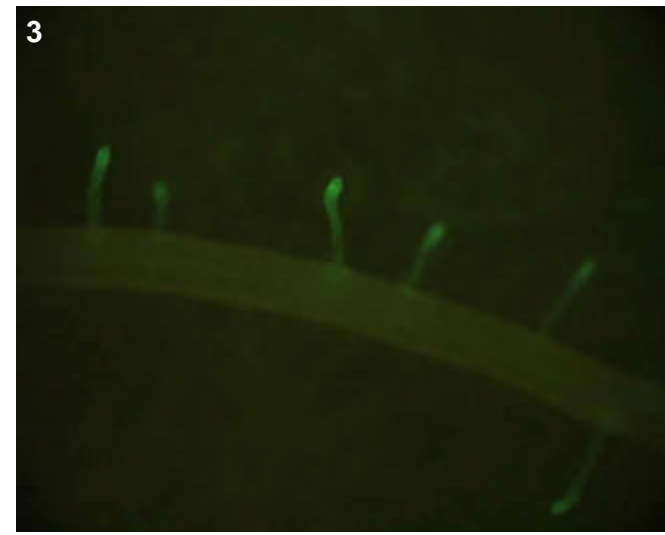
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Very specific root expression, bright only in tips of crowns/seminals (pic 5) and laterals (pics 1-4). In laterals also there is brighter expression near the tips, as best seen in pictures 3 and 4.

# Genotype: ATA F09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

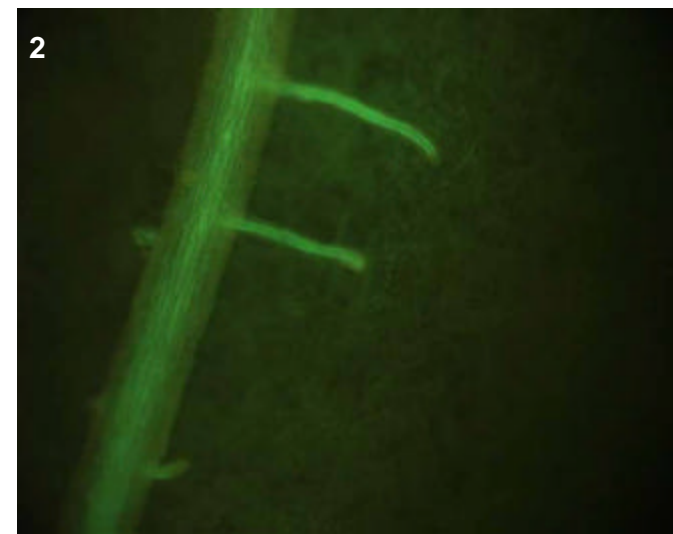
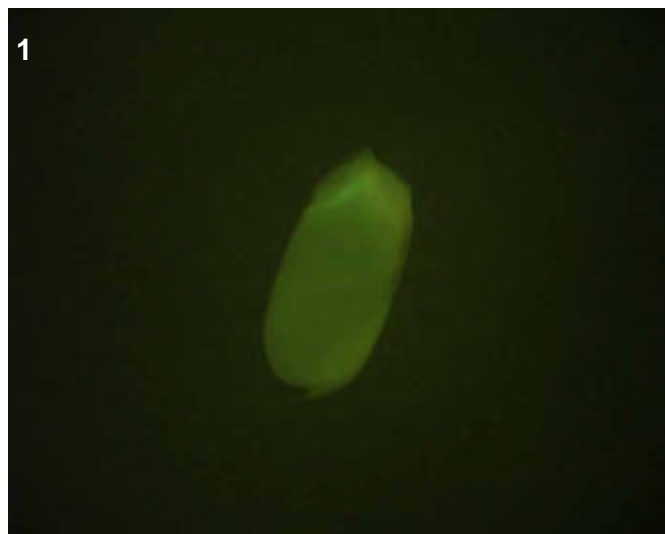
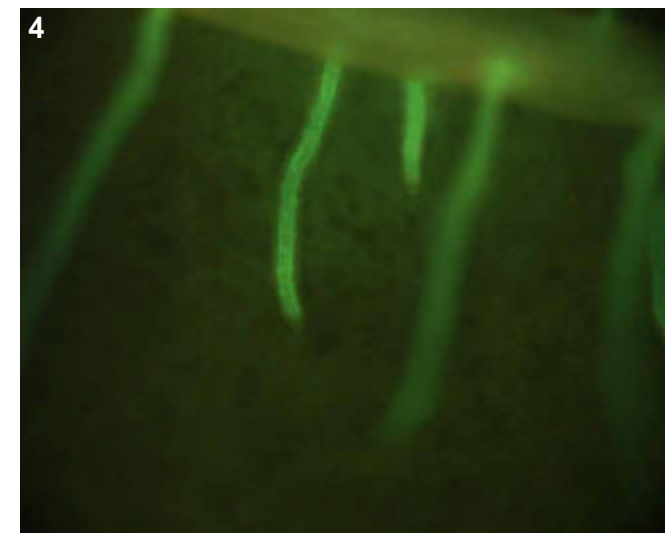
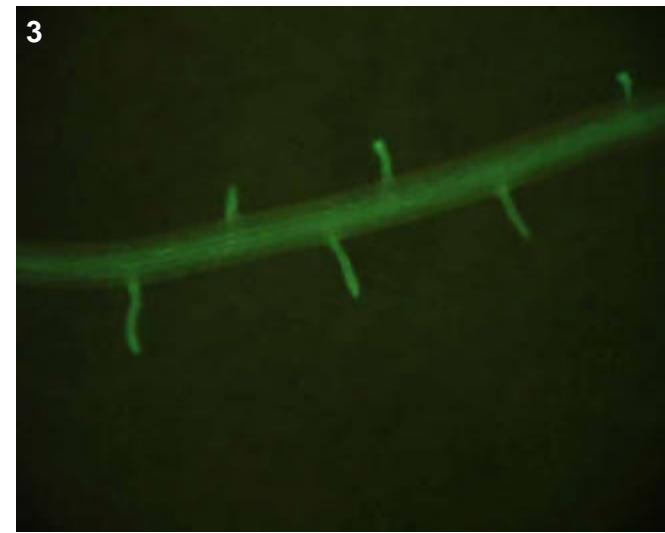
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had medium expression.

## T1 seedling comments

Bright root stelar expression that dies out near the tips of crowns.

# Genotype: **ATA F10**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

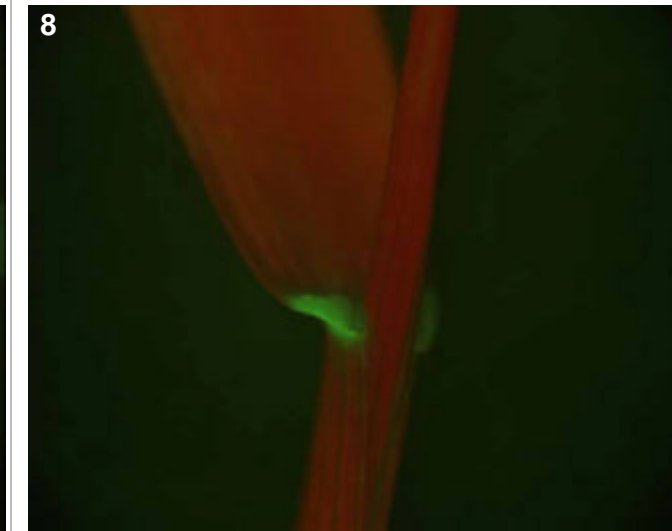
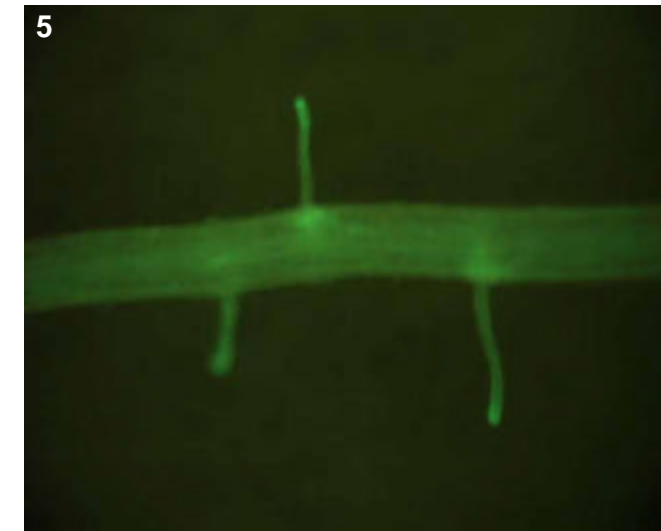
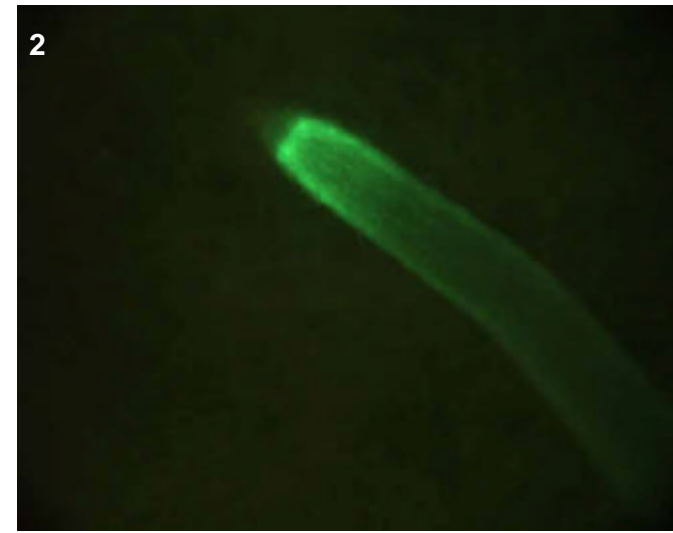
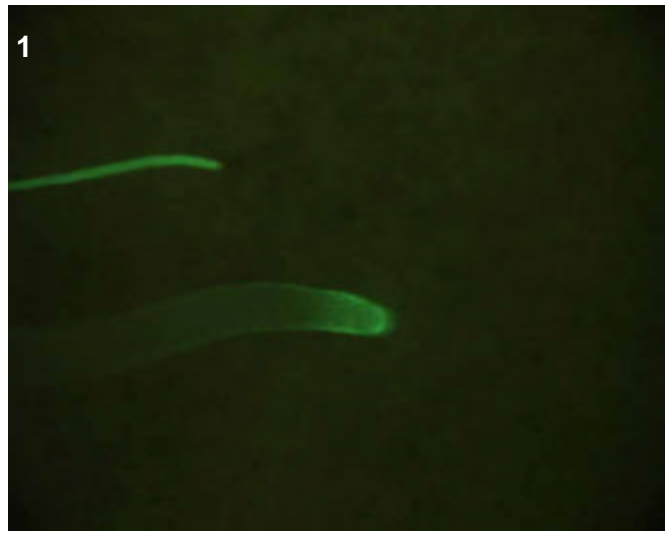
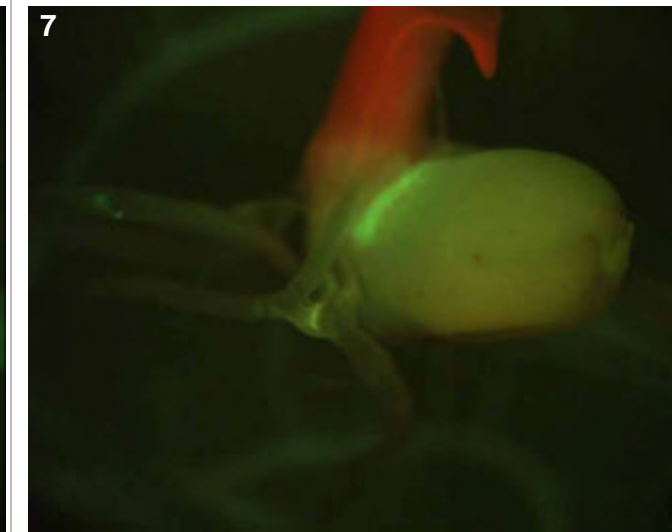
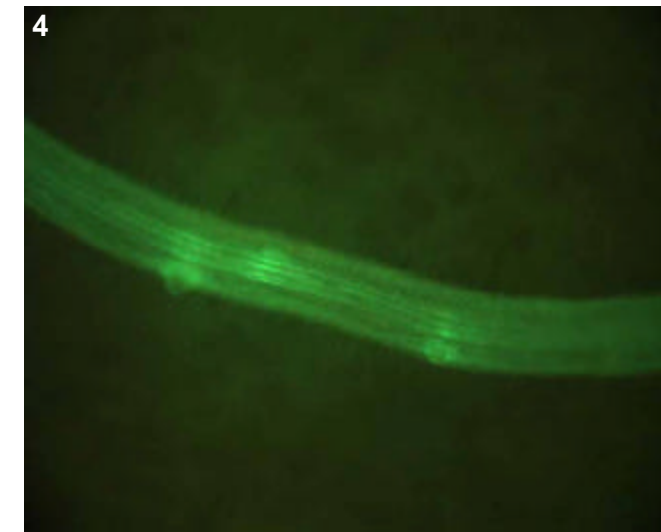
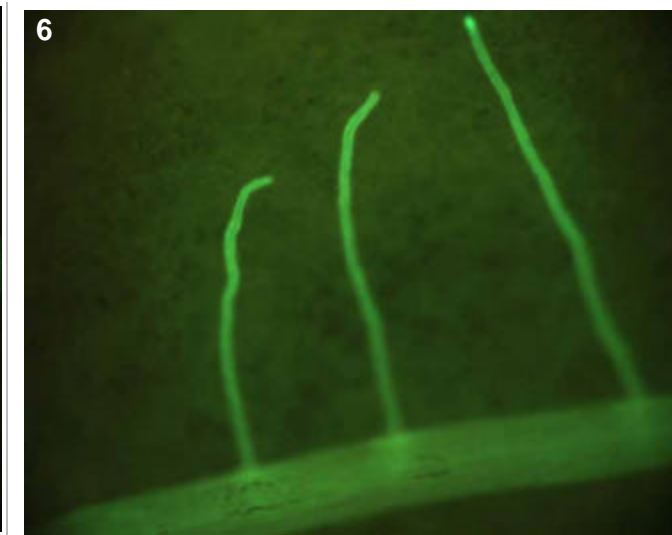
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

# Genotype: ATA G04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

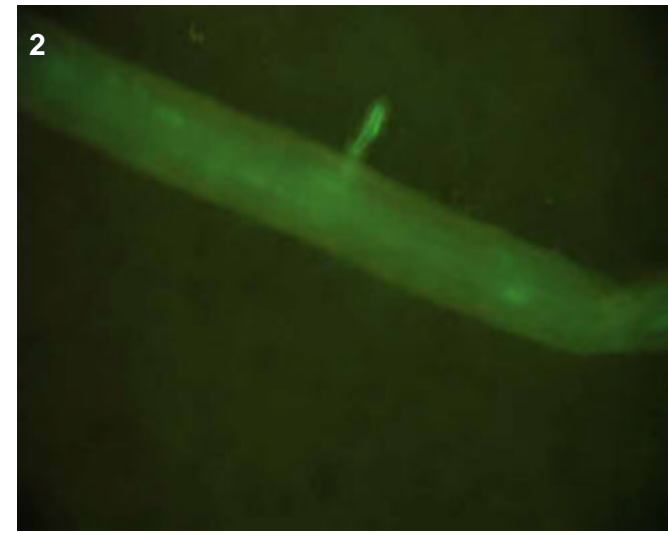
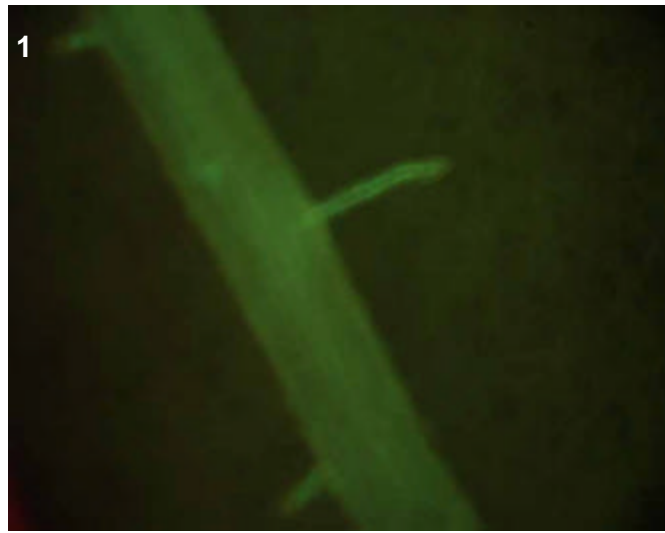
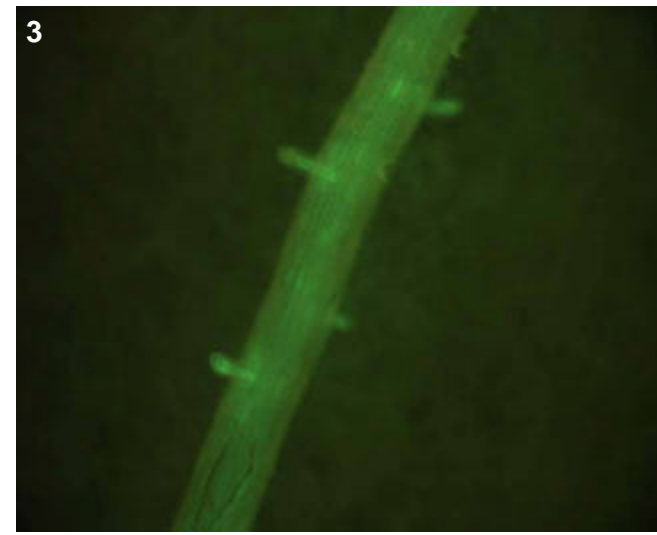
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ATA G08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

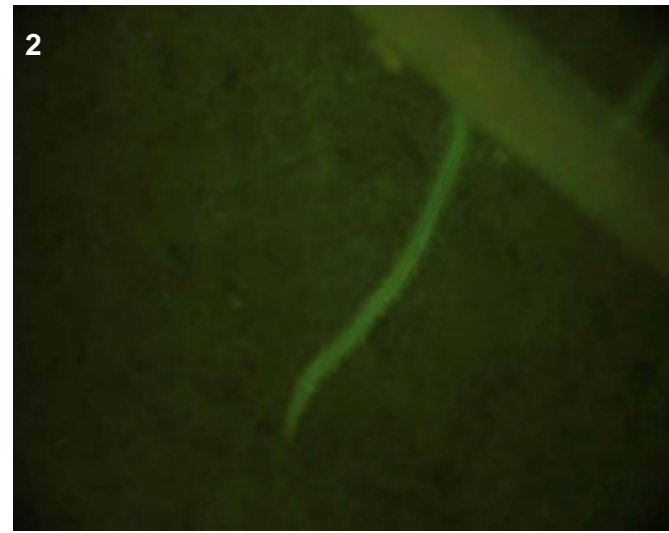
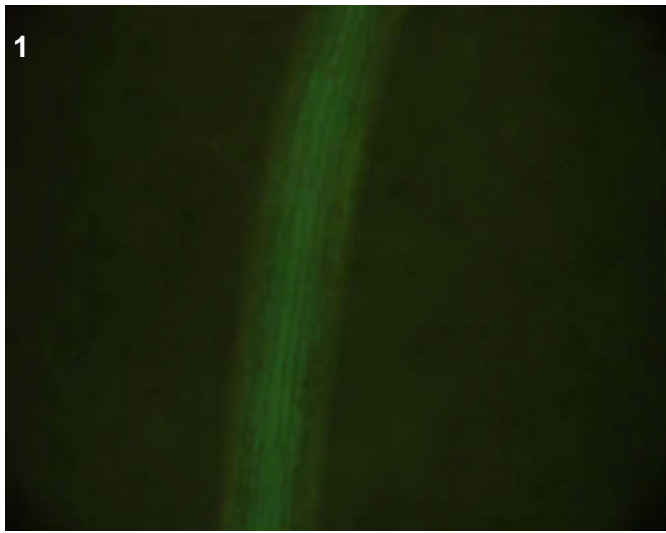
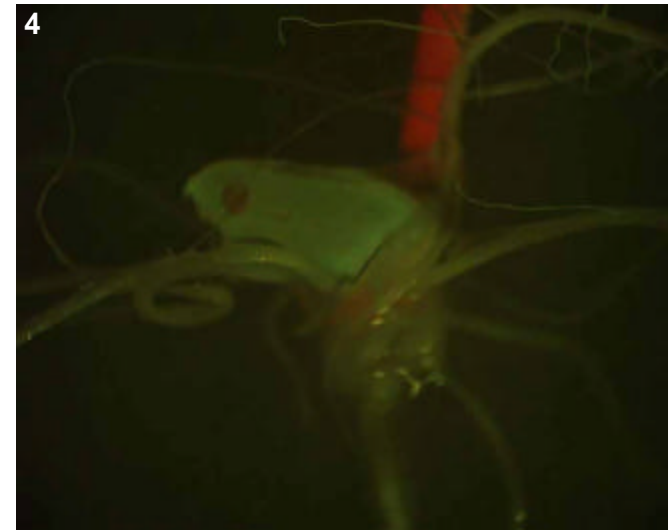
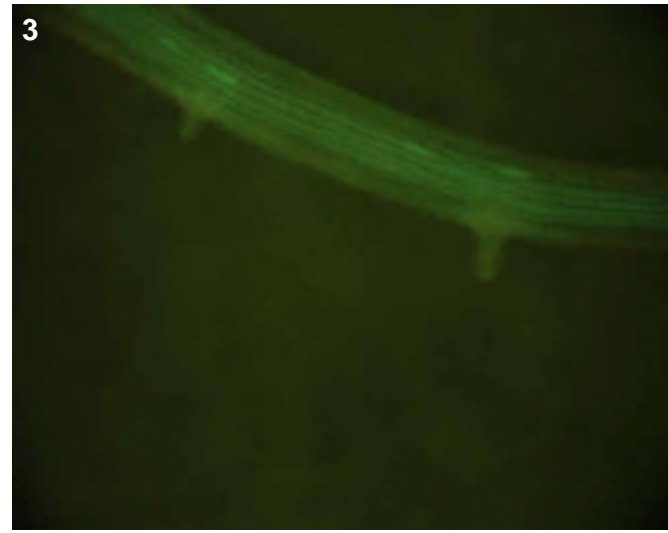
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: **ATA G10**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

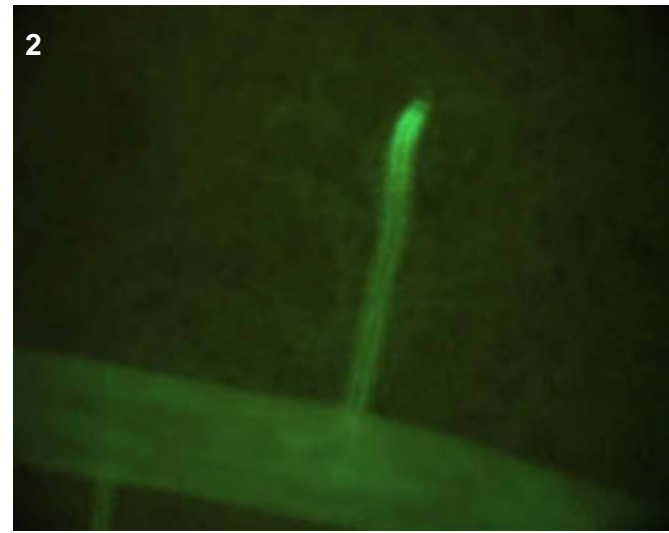
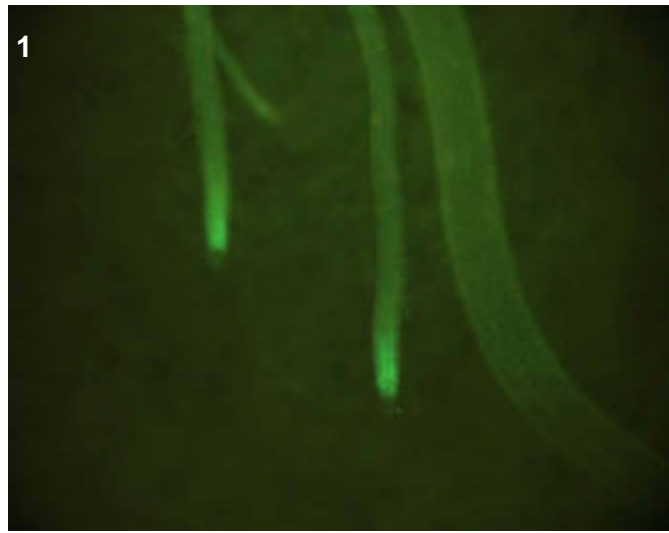
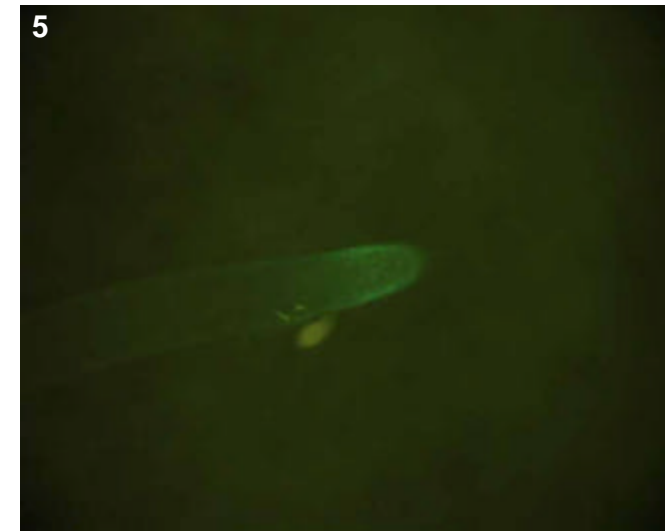
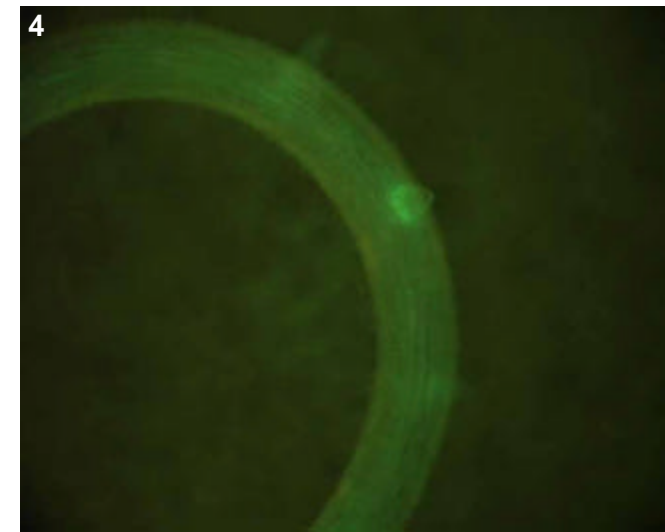
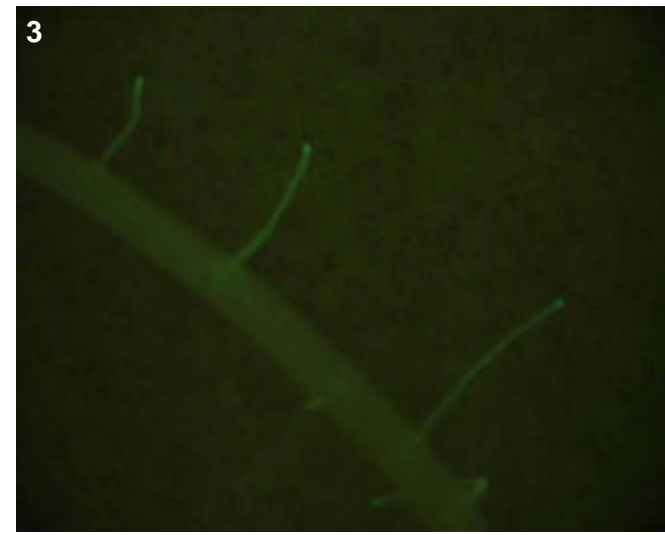
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ATA H01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

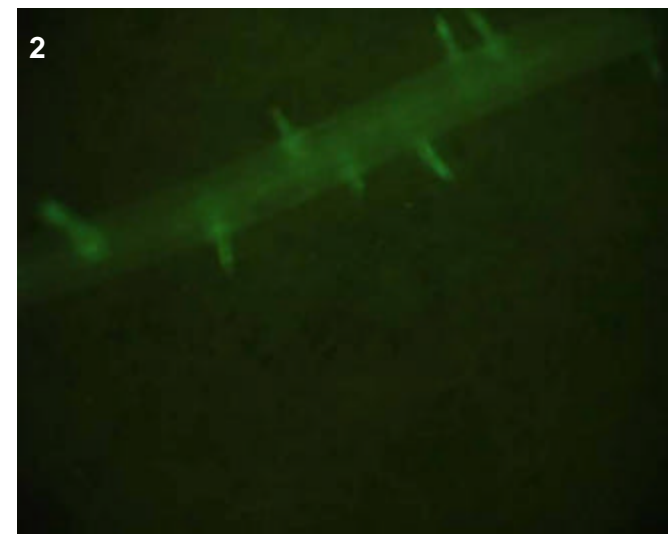
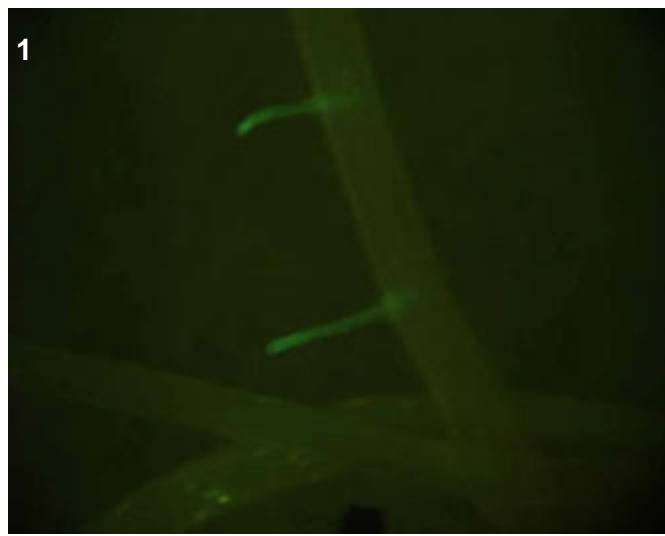
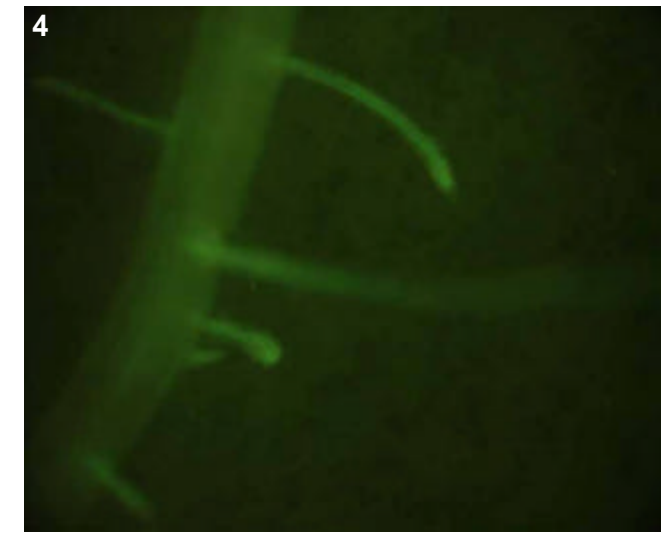
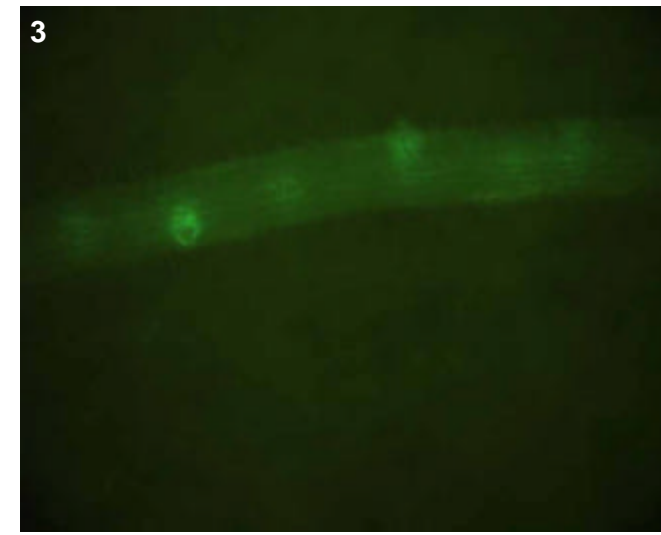
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Expression specific to the lateral roots, either in the stele or just outside.

# Genotype: ATA H07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

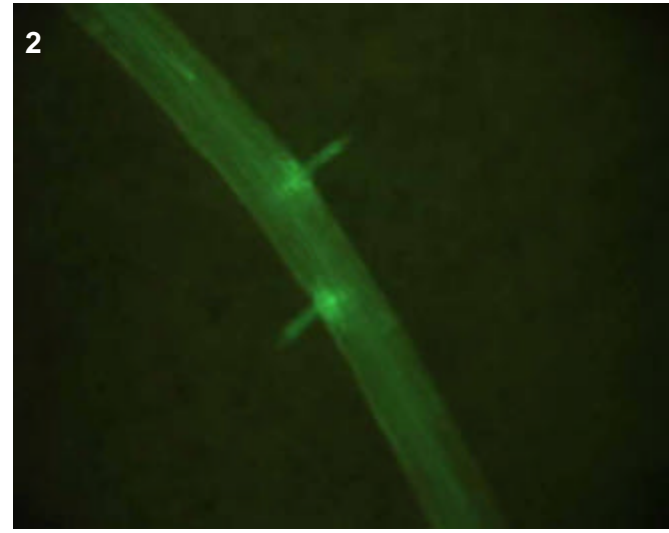
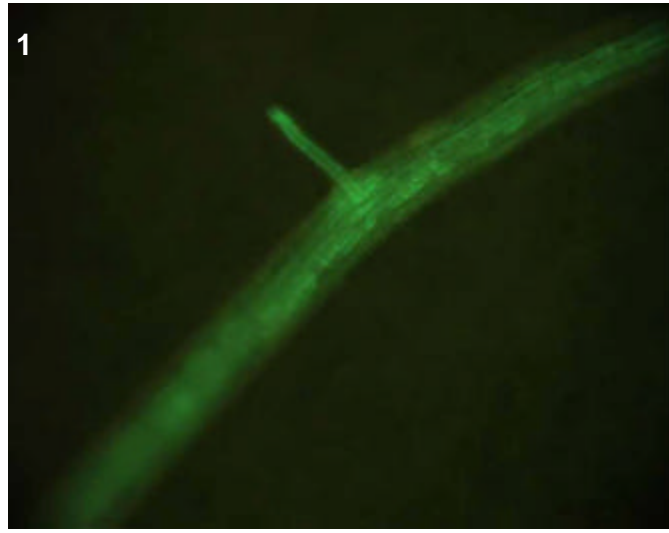
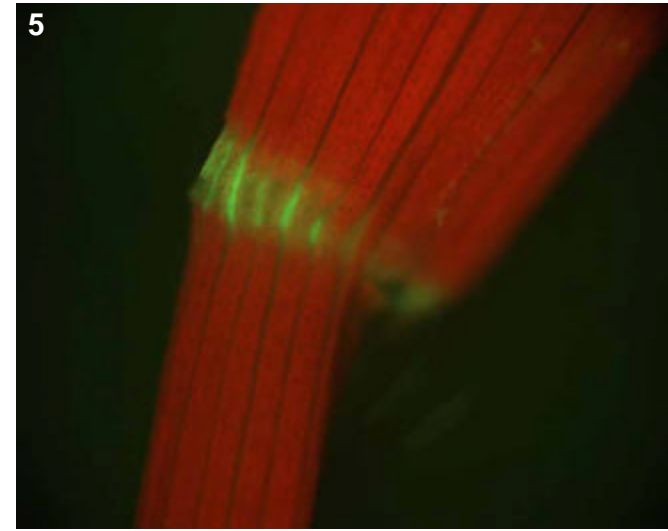
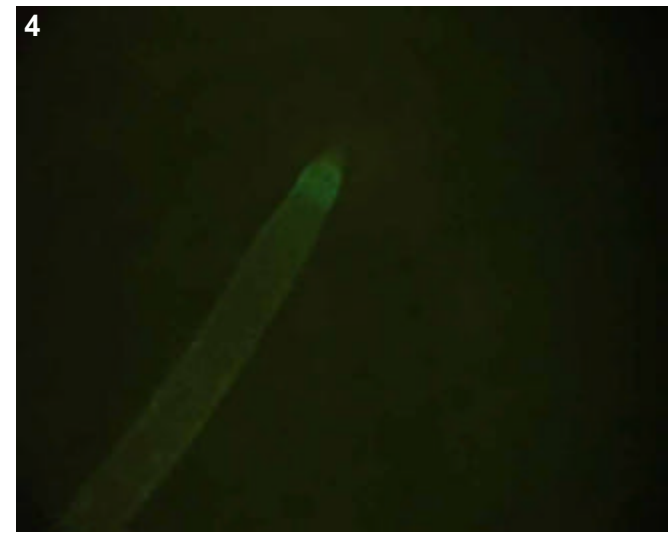
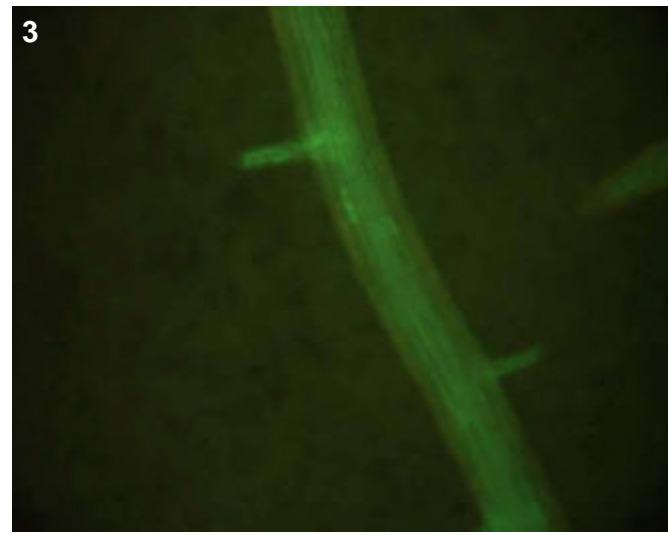
New pattern:

No GFP detected

**T1 in greenhouse?**  
 YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ATB A12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

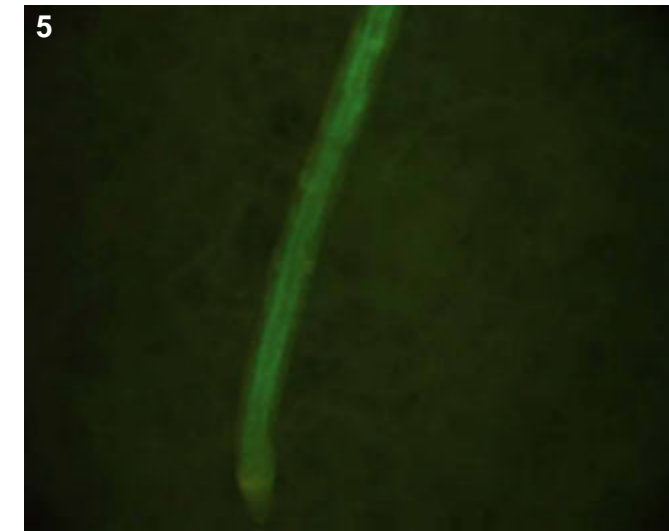
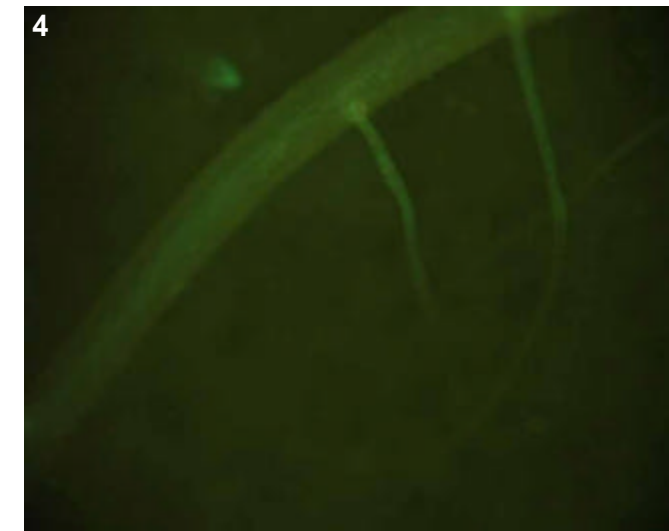
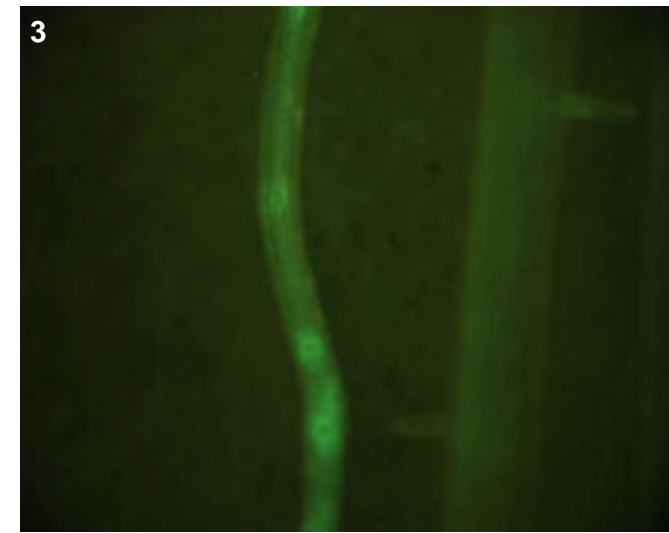
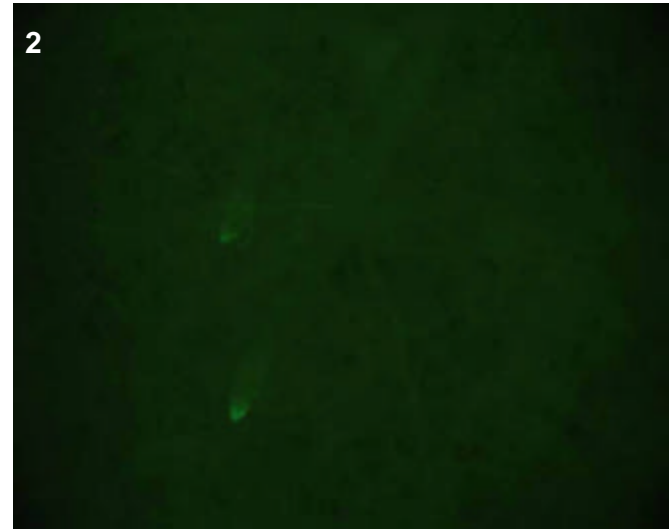
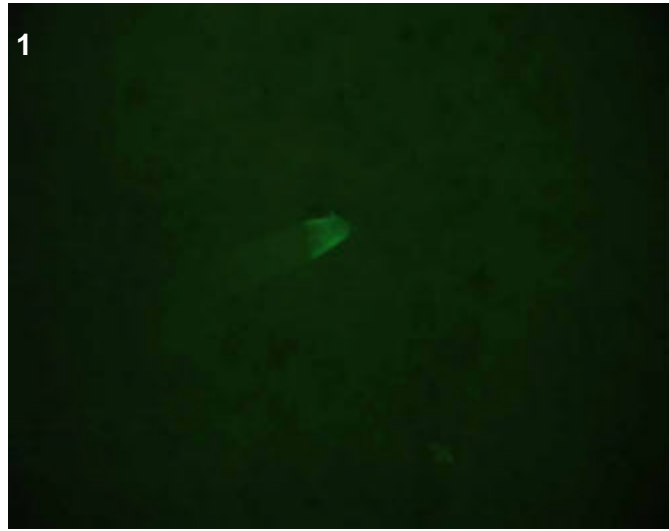
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

Nice root-specific line, with nearly all roots showing bright epidermal expression at the tips (see pics 1 and 2). There was also expression more interior, perhaps cortical, in certain roots (see pics 3-5).

# Genotype: ATB B01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

- T0 mature plant:
- T1 seed/seedling:
- T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?**  
YES, 2 GFP+ plants
- Confocal?**
- Number T2 seed produced:**

## T0 comments

## T1 seed comments

## T1 seedling comments

Just faint expression in the vascular of seminal and crowns, not the lats (no pictures taken).

# Genotype: ATB C03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-11

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

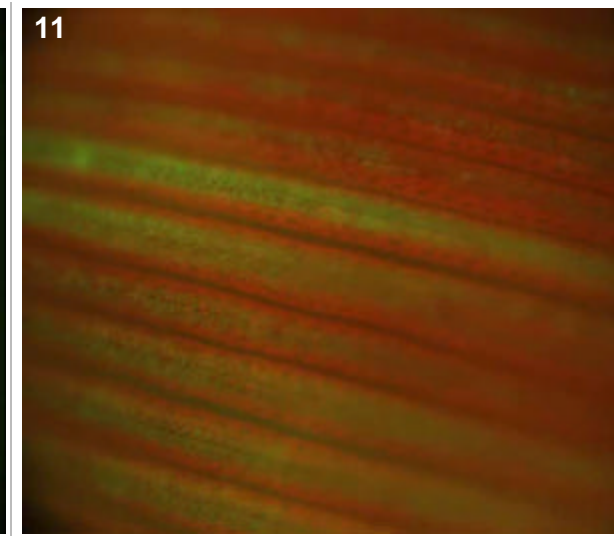
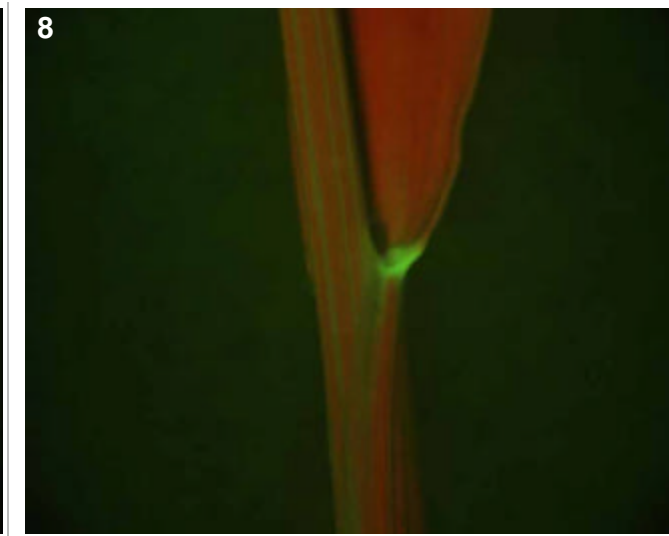
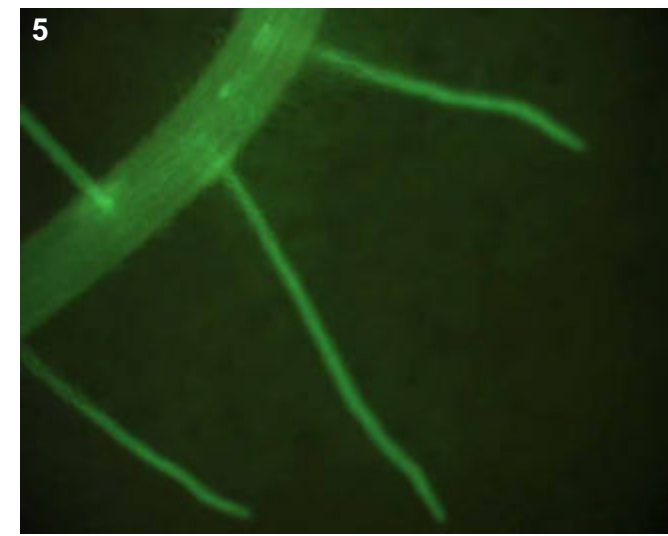
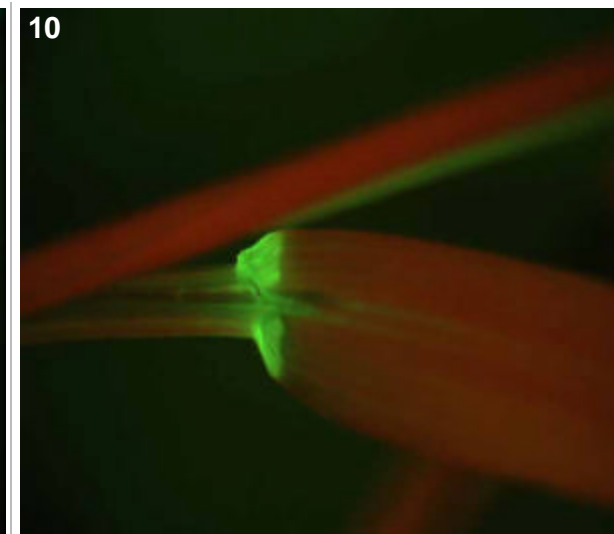
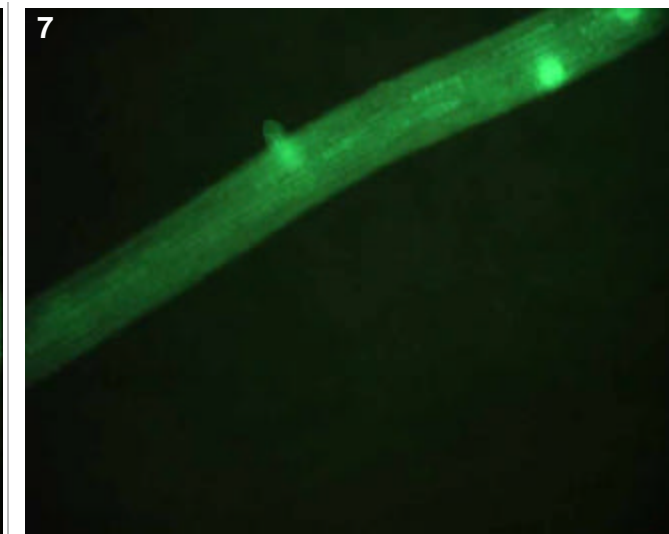
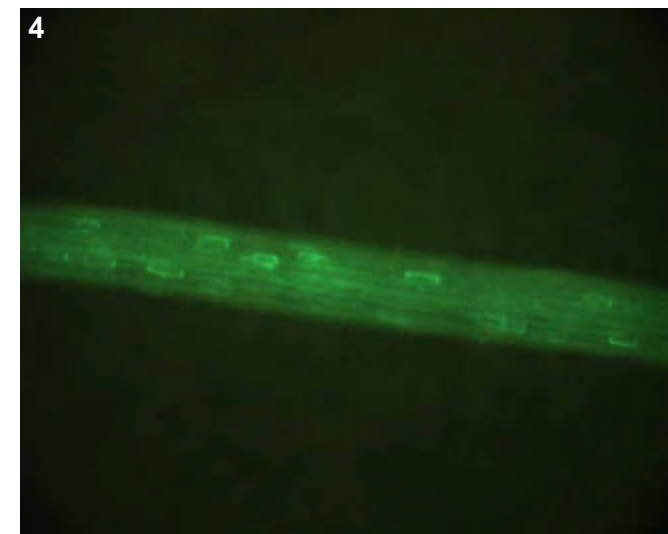
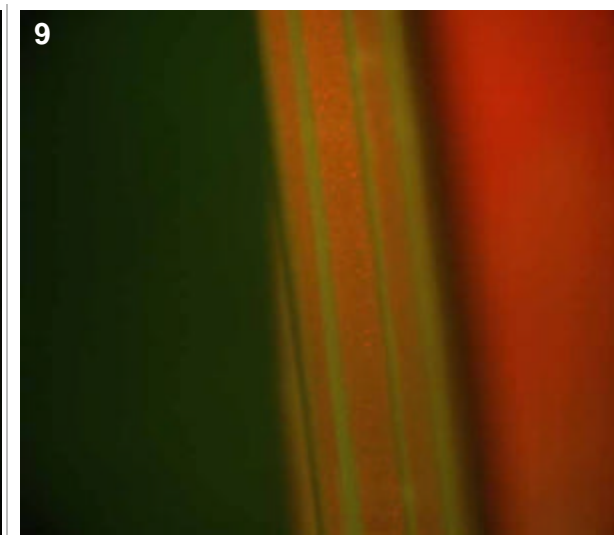
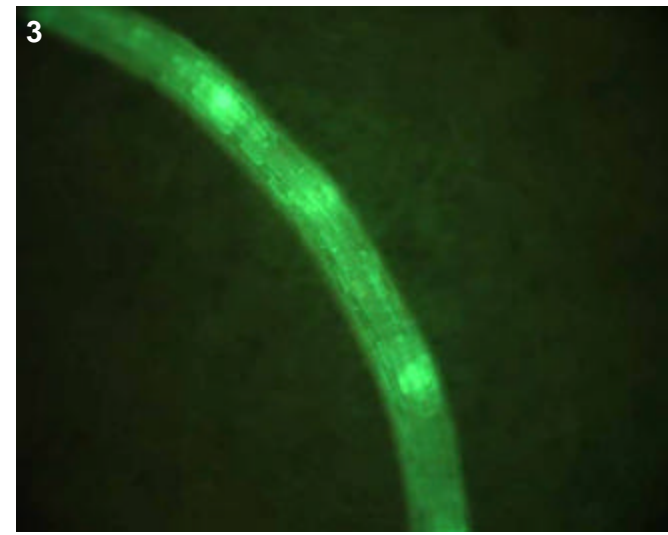
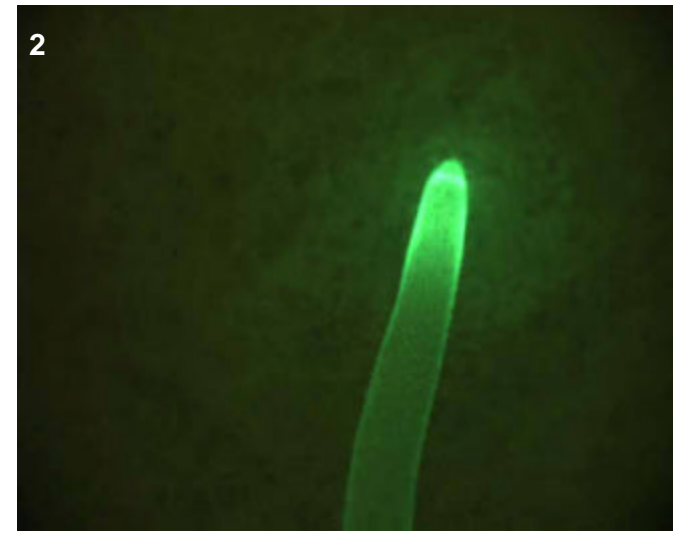
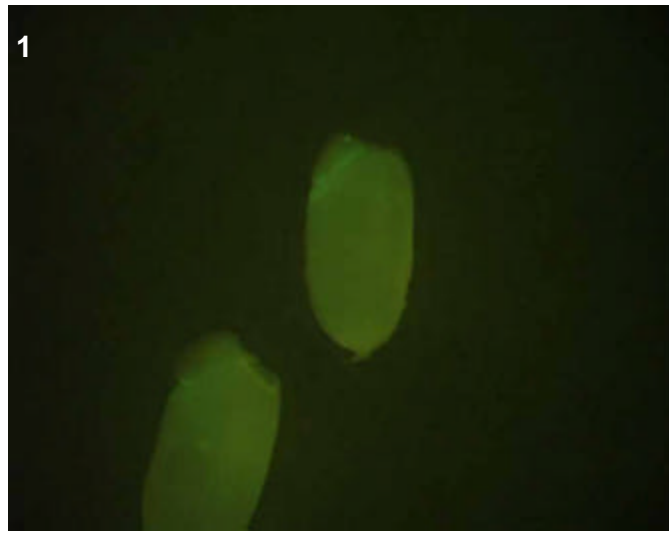
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/4 seeds had medium expression.

## T1 seedling comments

# Genotype: ATB C11

### Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

### Expression

- None
- Bright
- Medium
- Weak
- Unsure

### Pictures

- T0 mature plant:
- T1 seed/seedling: 1-10
- T1 mature plant:

### T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

### T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

### T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

### T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

### T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

### T1 Mature

T0 pattern verified:

T0 pattern verified plus:

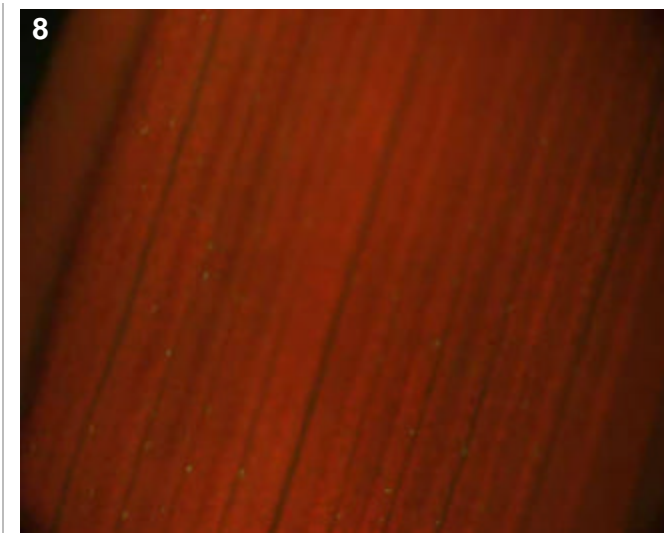
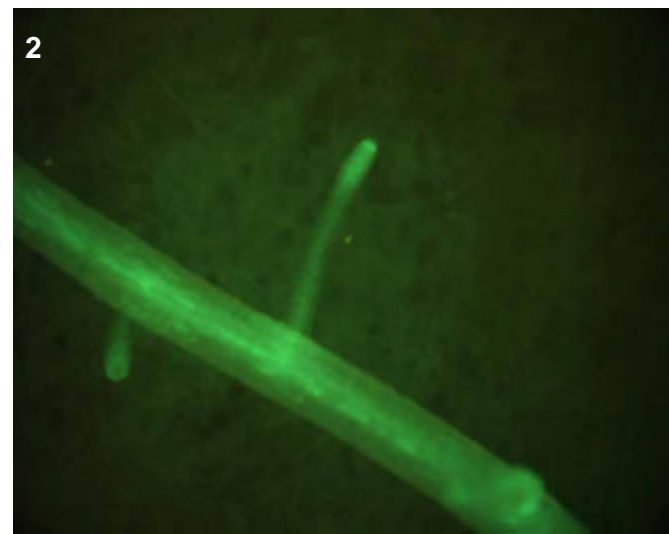
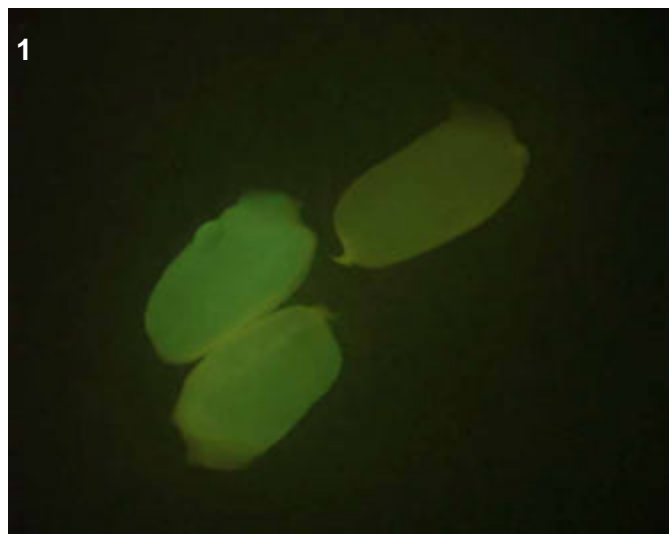
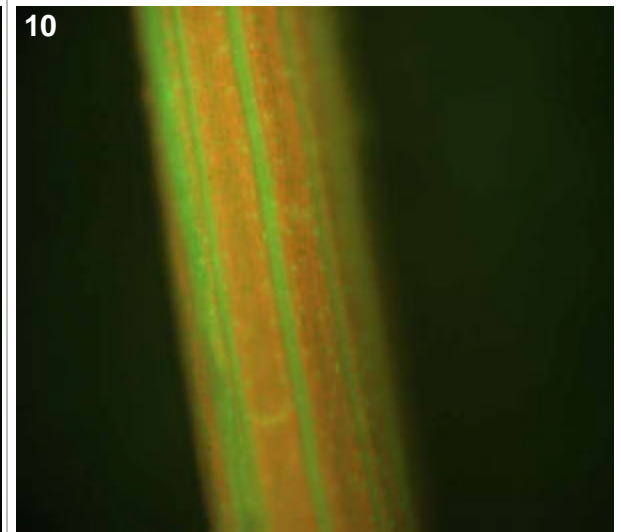
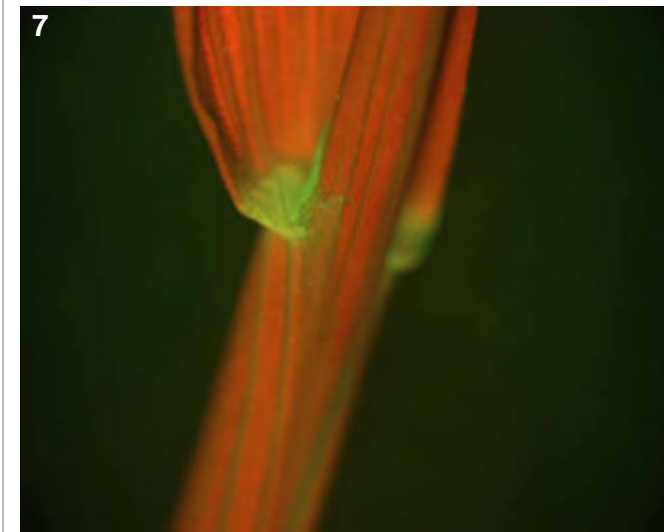
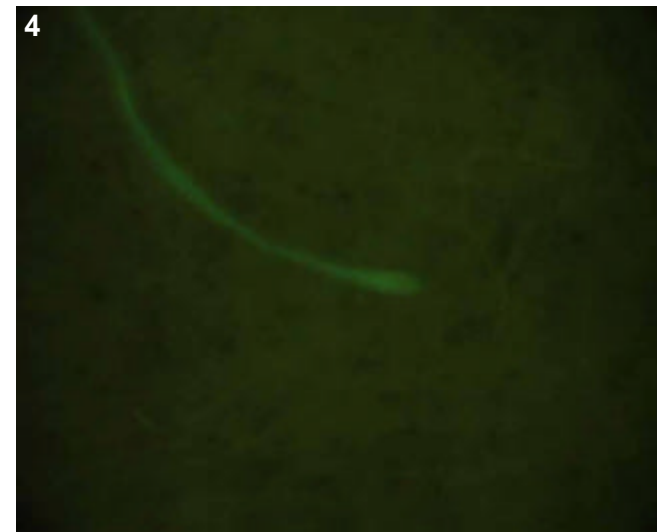
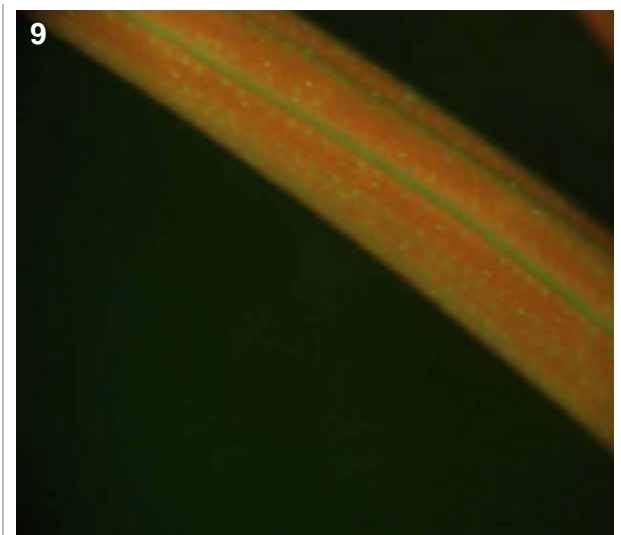
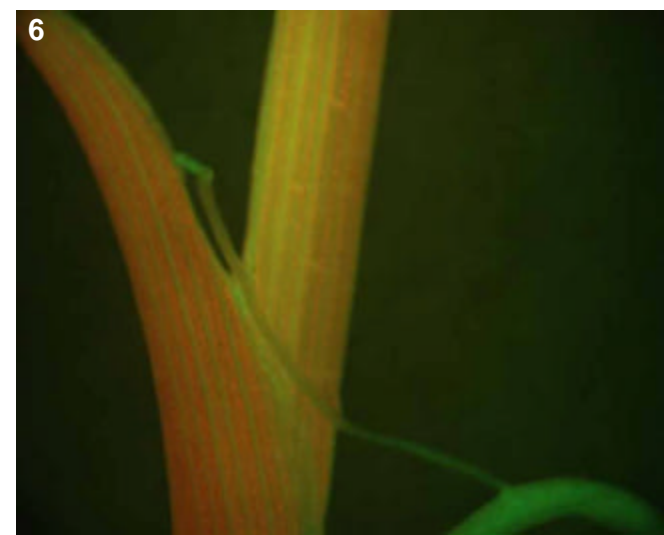
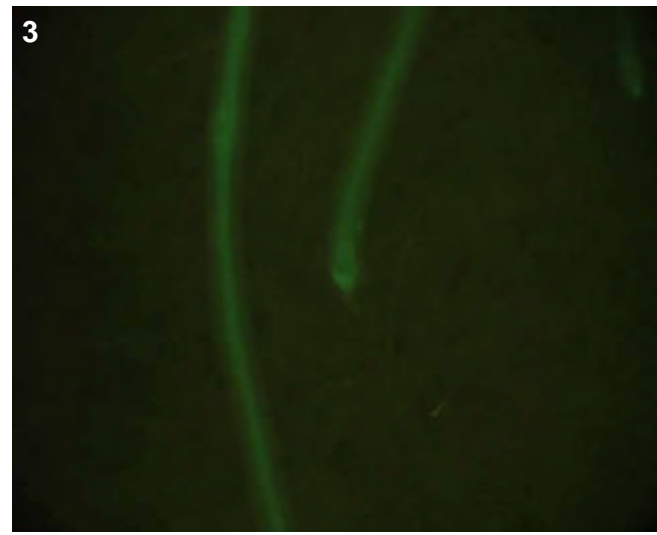
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

3/5 seeds had medium expression.

### T1 seedling comments

Bright stele expression in roots (pics 2-4), shoot expression was even brighter (pics 6-10).



# Genotype: ATB D03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

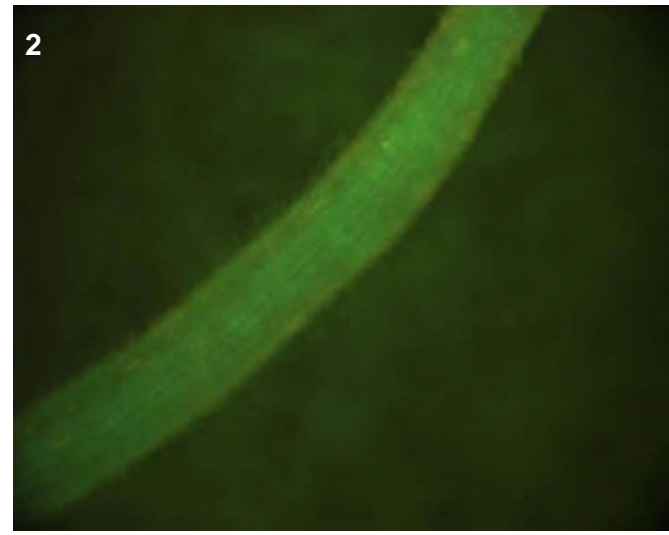
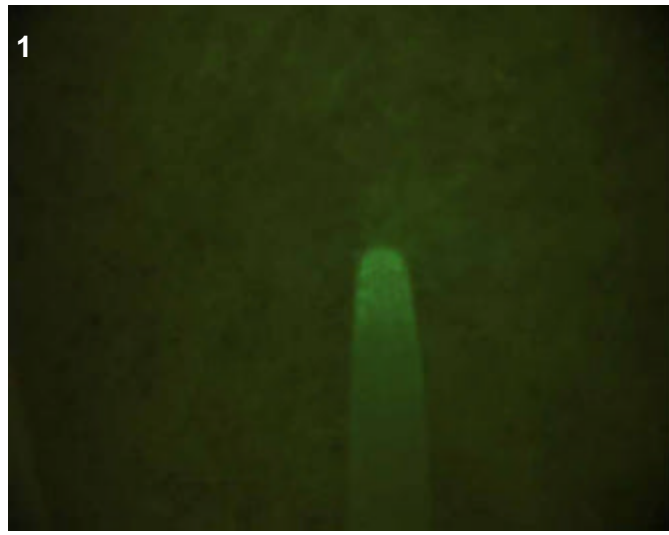
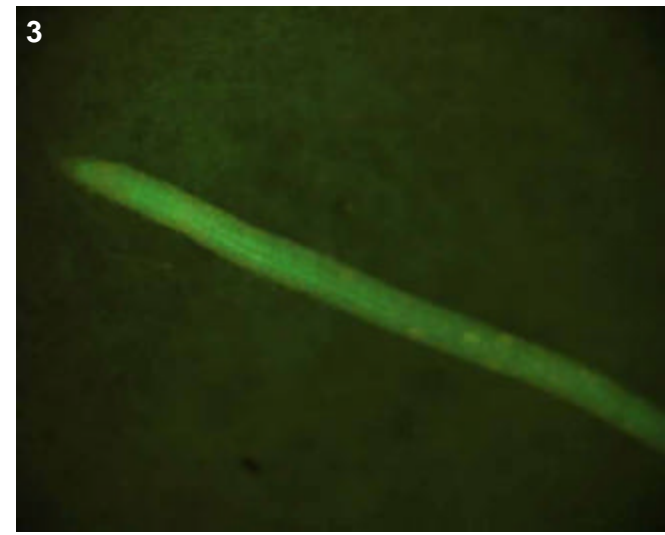
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ATB D12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

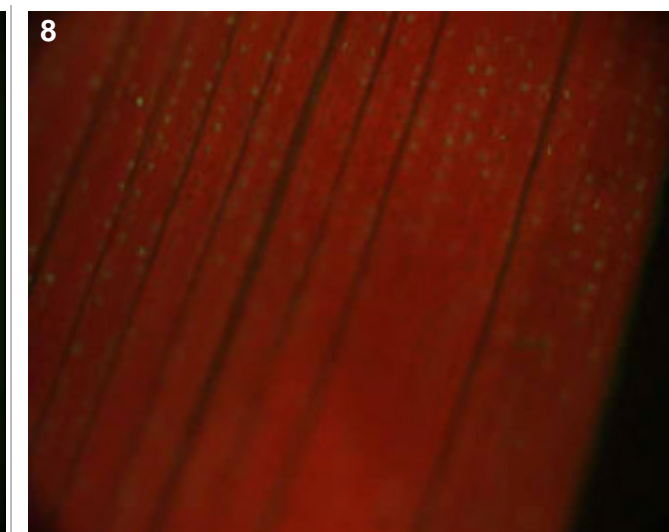
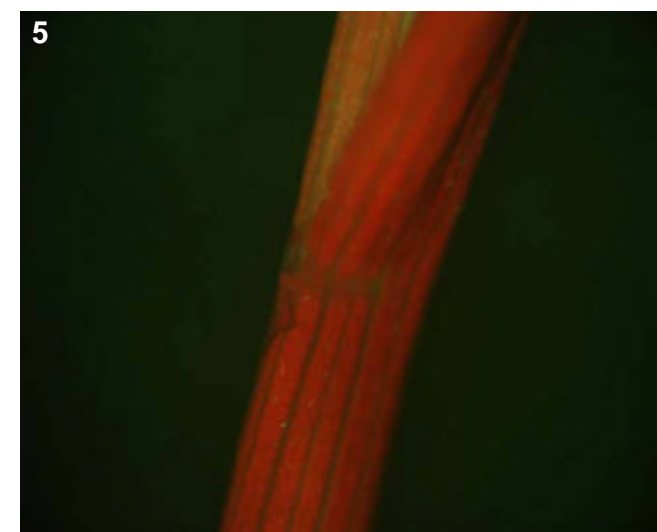
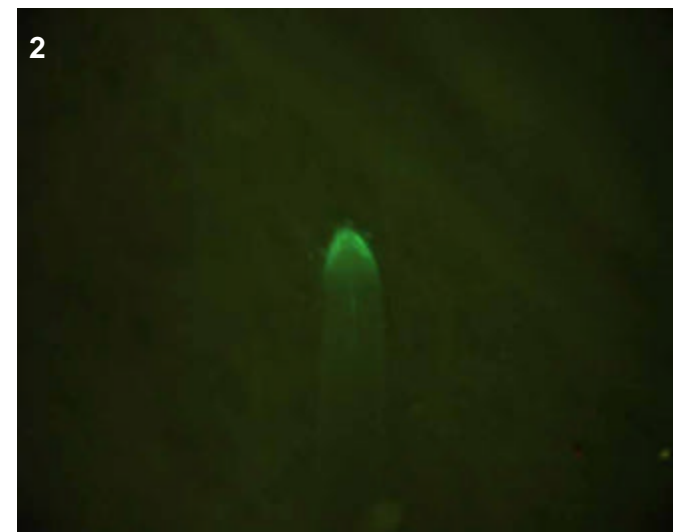
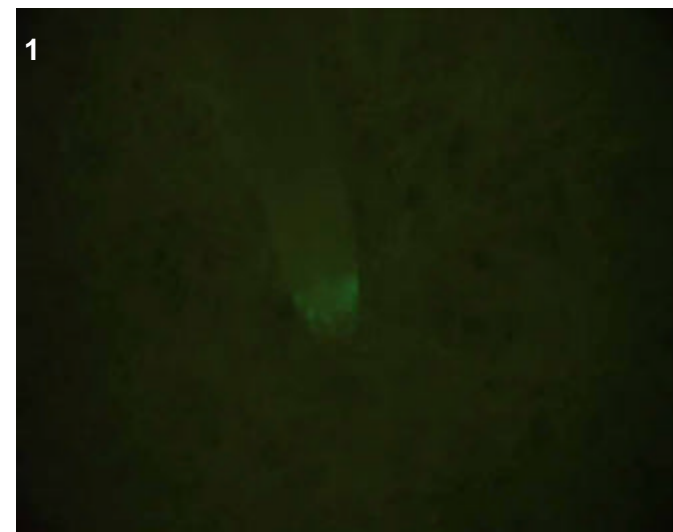
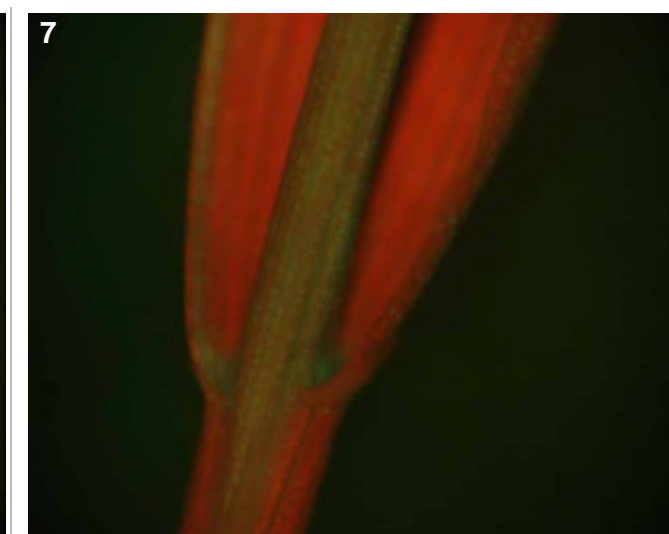
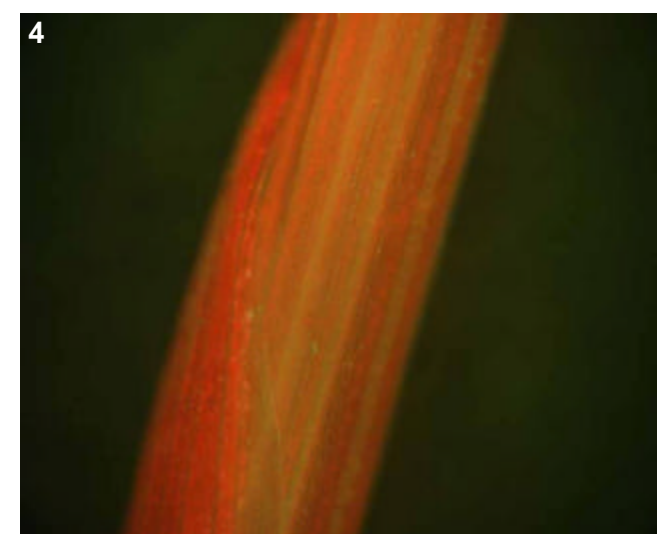
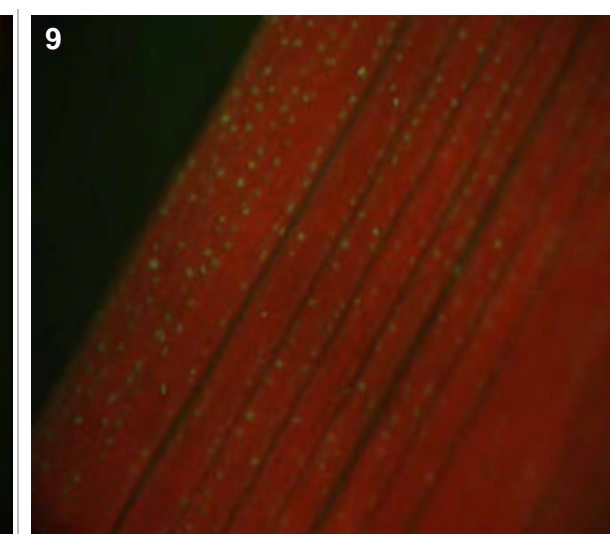
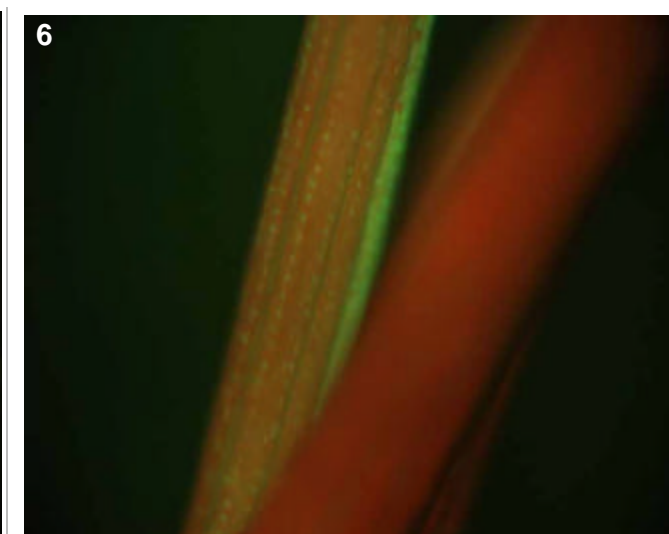
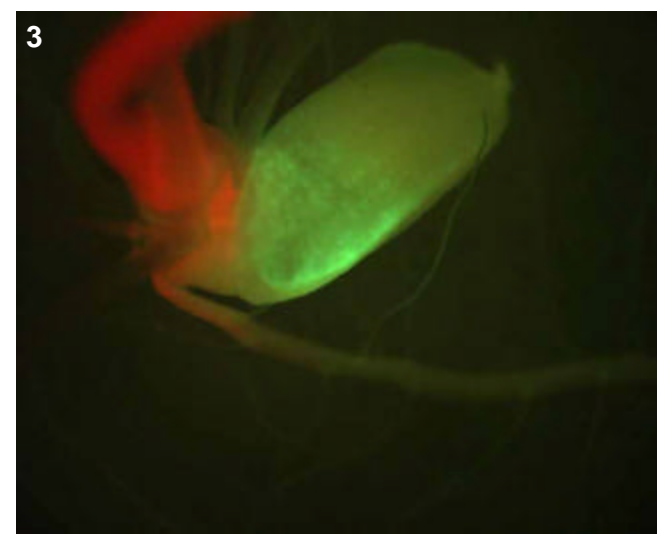
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

## T1 seedling comments

Two rather unusual, and specific, patterns--one in the root consisting of bright epidermal at crown tips (pics 1-2), and one in the shoot consisting of bright guard cells (pics 4-9).

# Genotype: ATB E03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

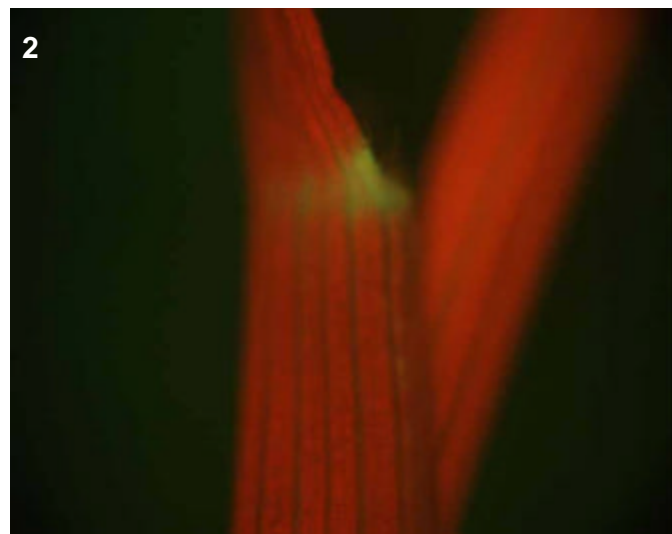
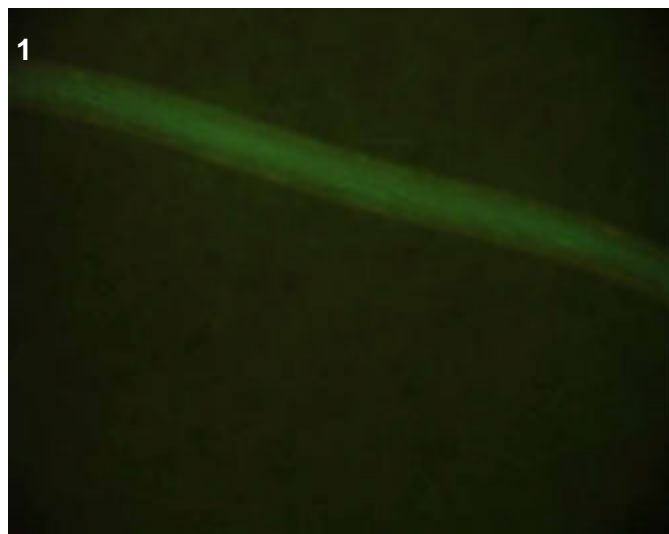
No GFP detected

**T1 in greenhouse?**

YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ATB E05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

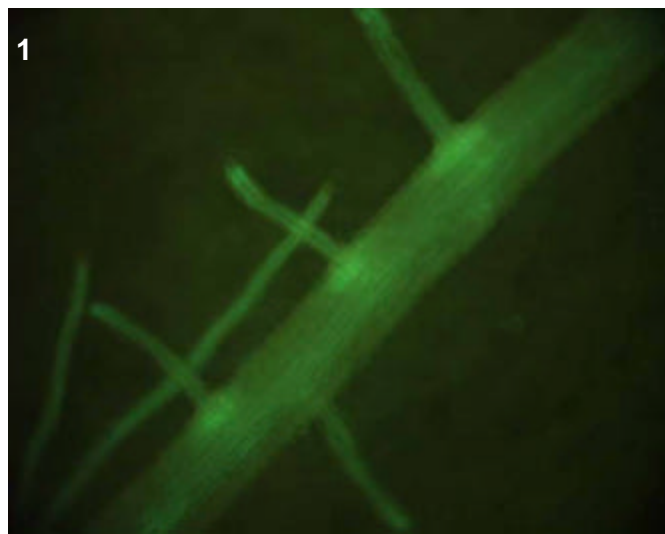
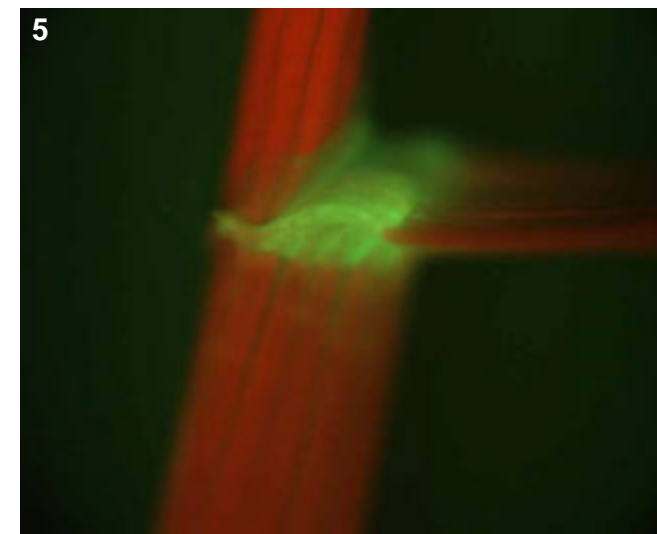
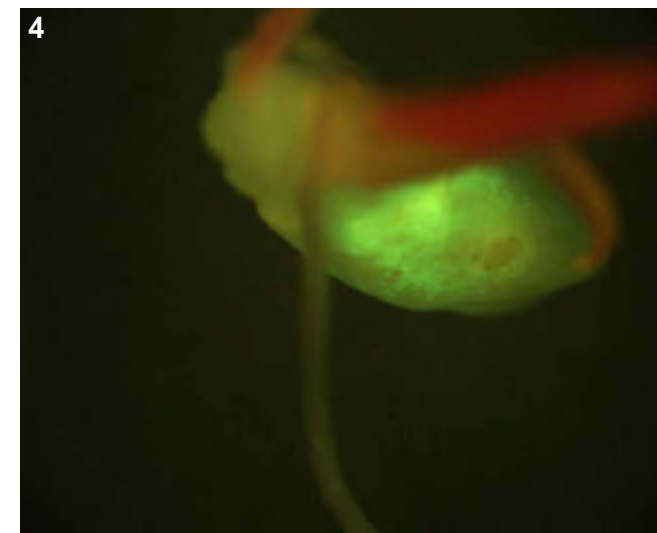
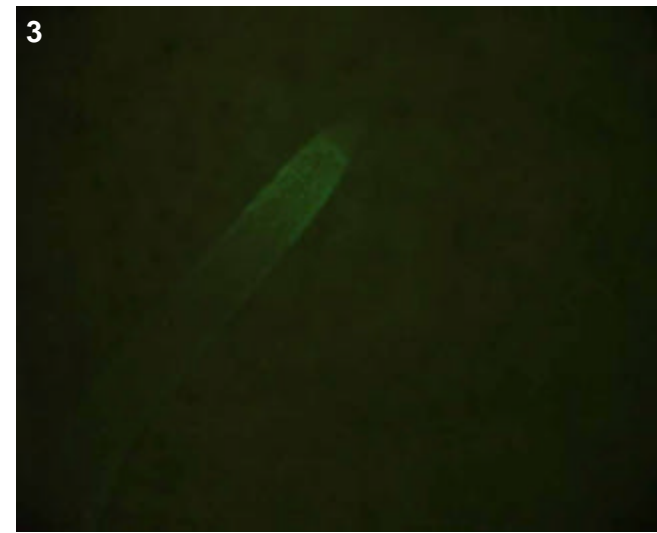
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: ATB E09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

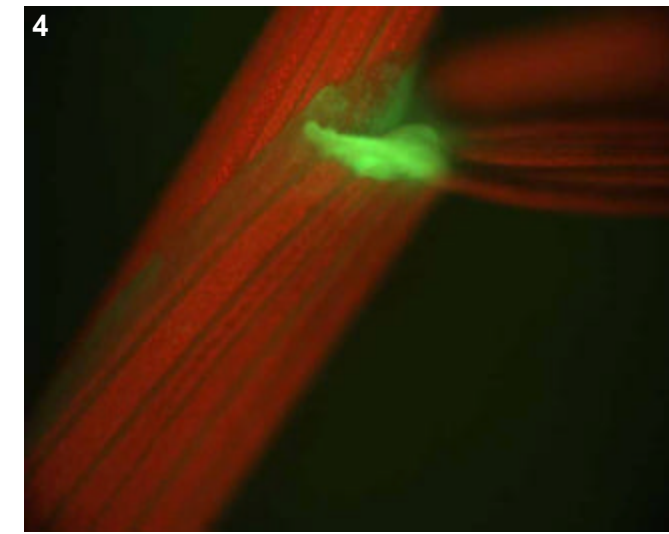
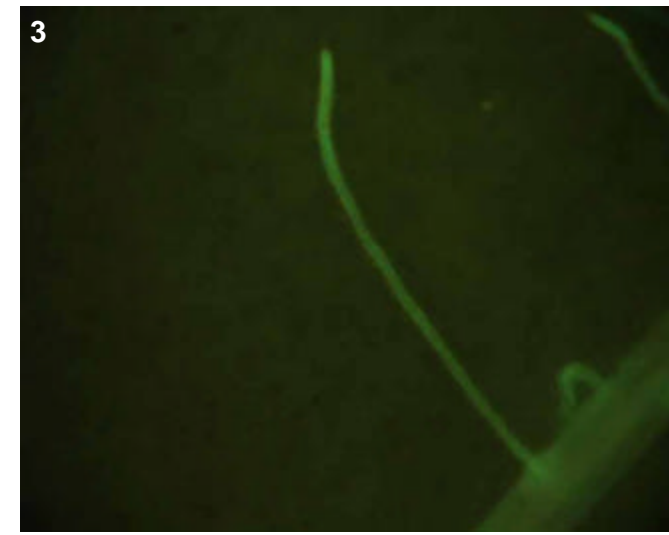
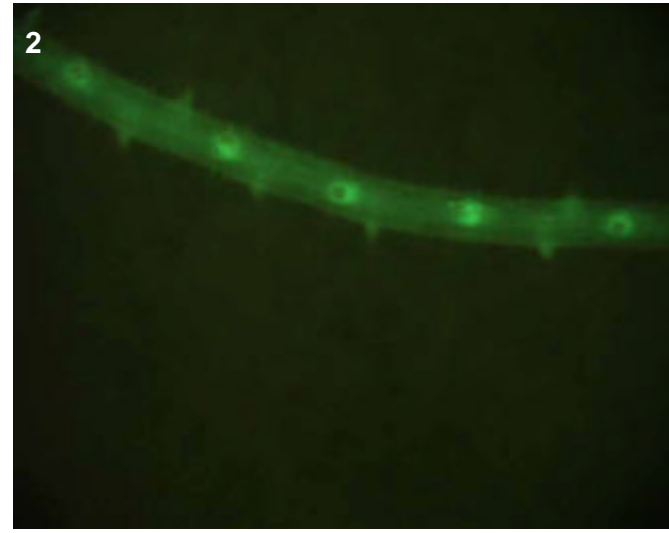
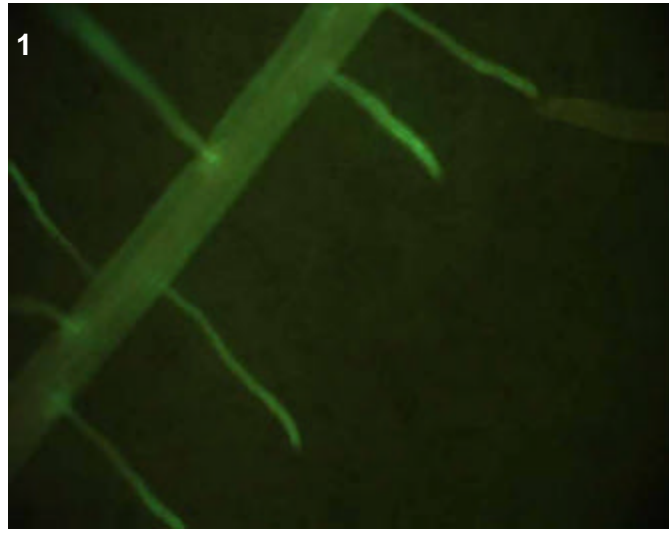
- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected
- T1 in greenhouse?**  
YES, 3 GFP+ plants
- Confocal?**
- Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ATB E10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

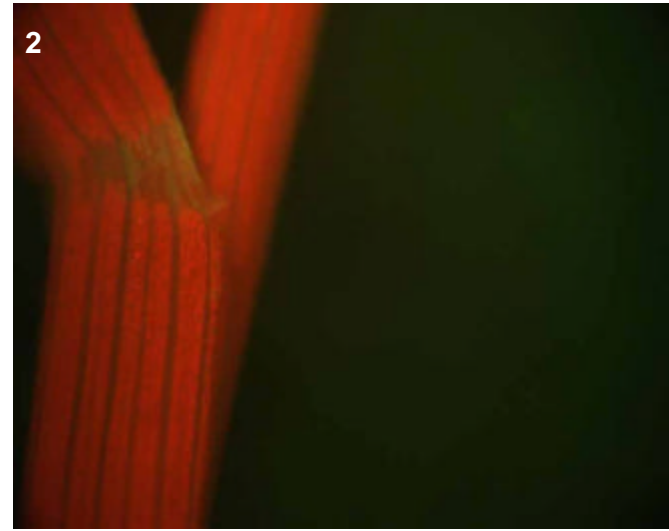
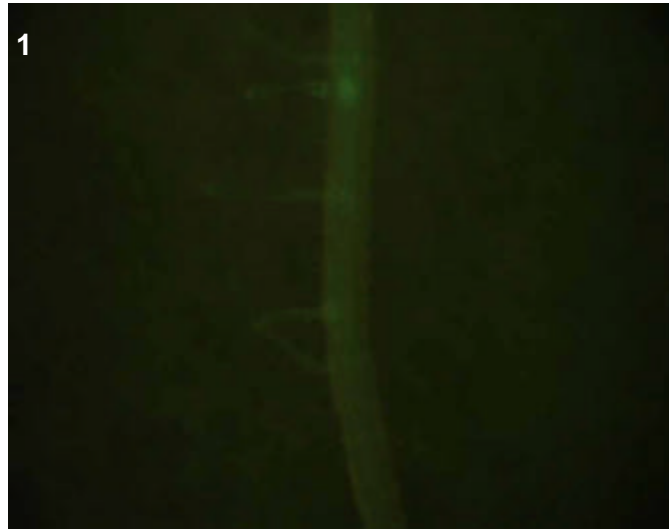
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression brightest at tips of lateral roots and their emergence zone (pic 1).

# Genotype: ATB E11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-10

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

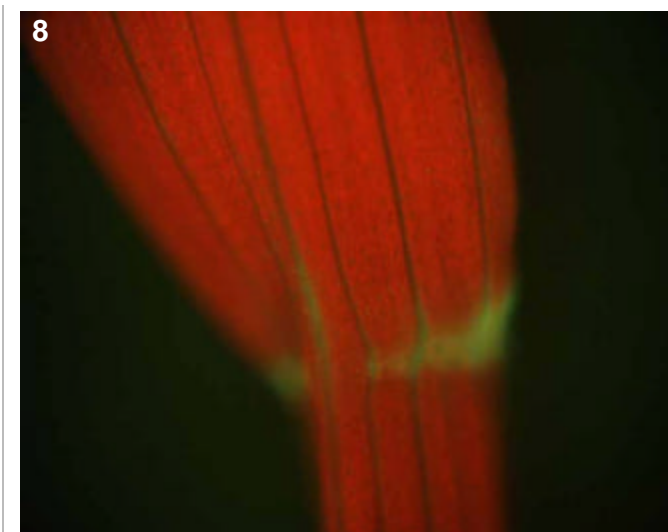
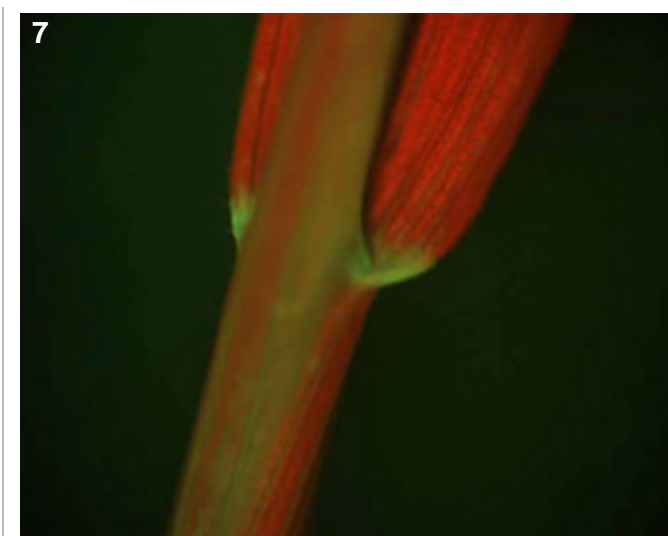
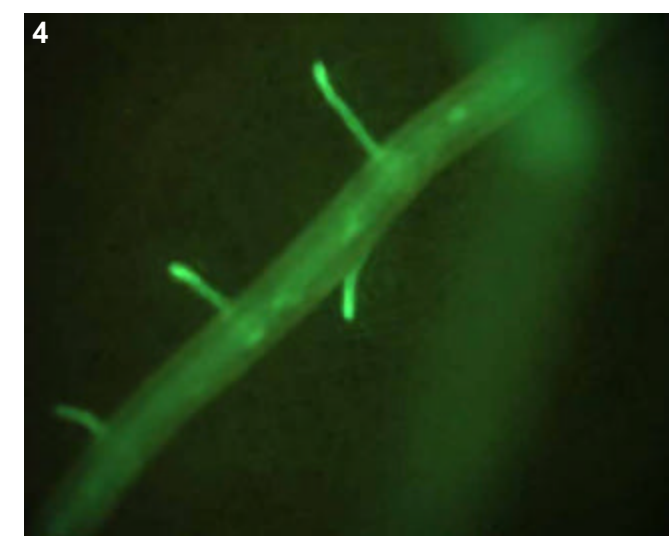
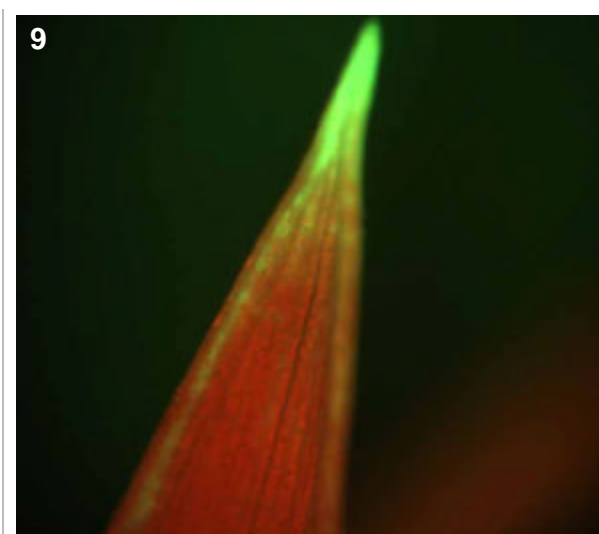
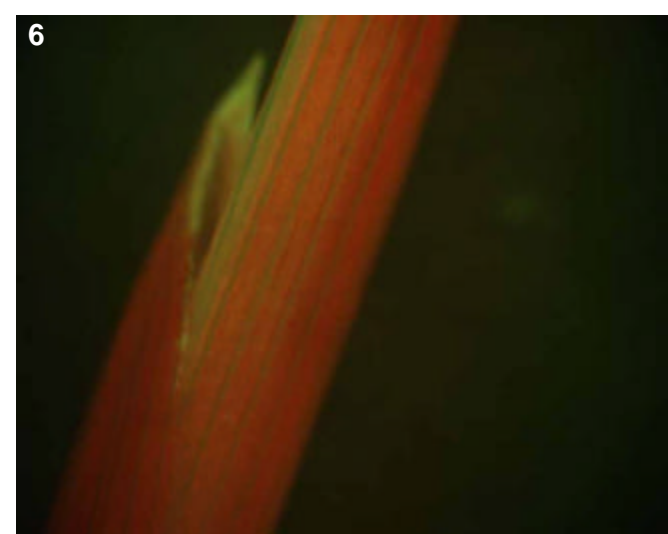
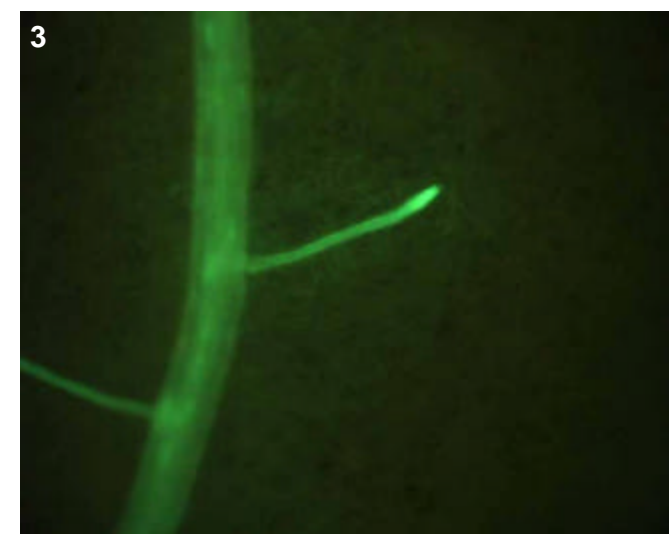
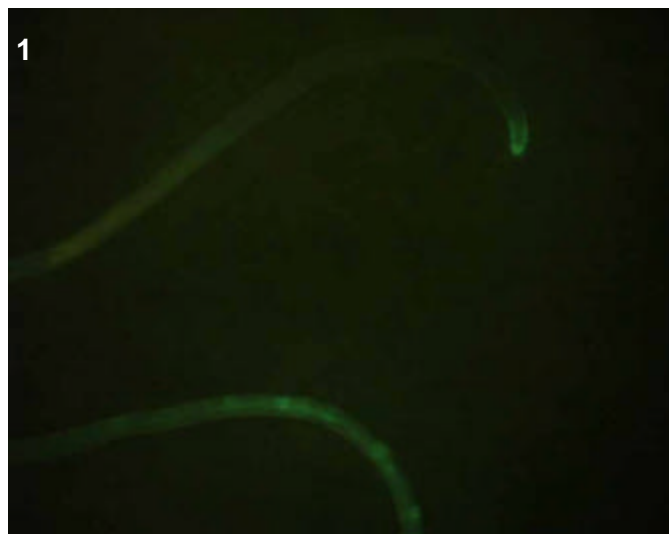
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



### T0 comments

### T1 seed comments

### T1 seedling comments

Extremely bright expression.

# Genotype: ATB F11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

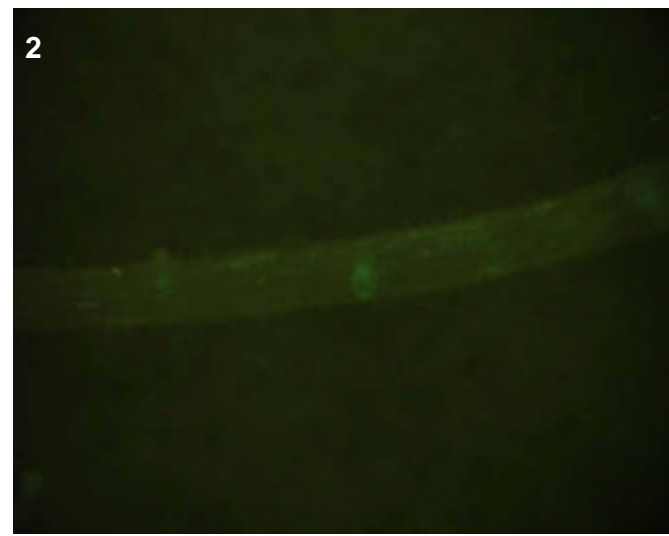
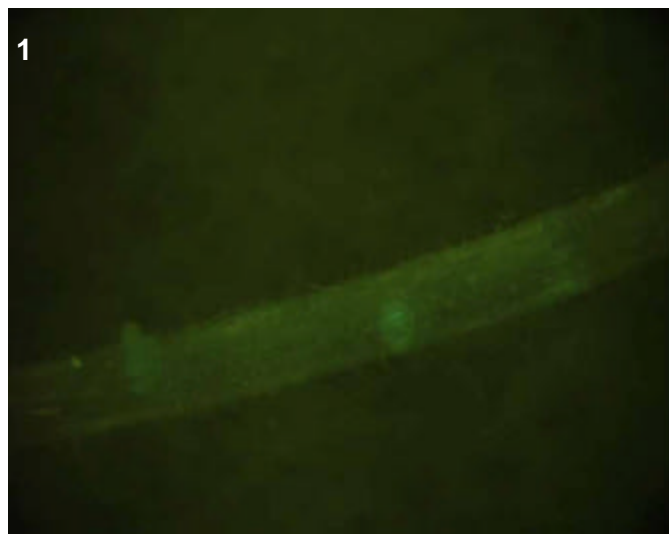
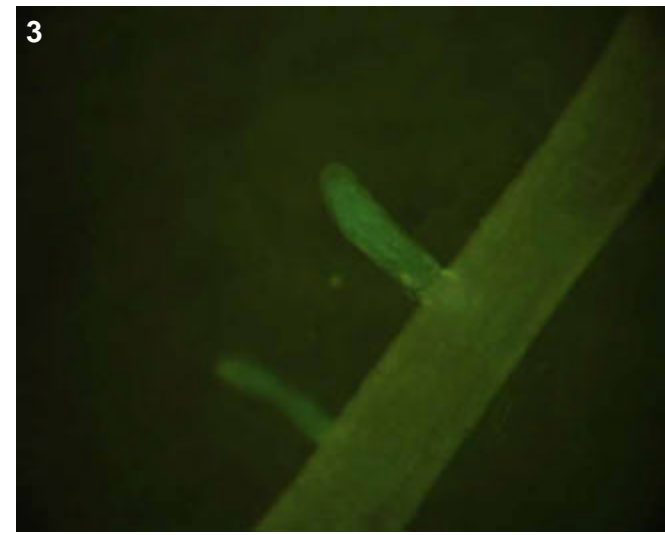
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
 YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**



# Genotype: ATB H05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

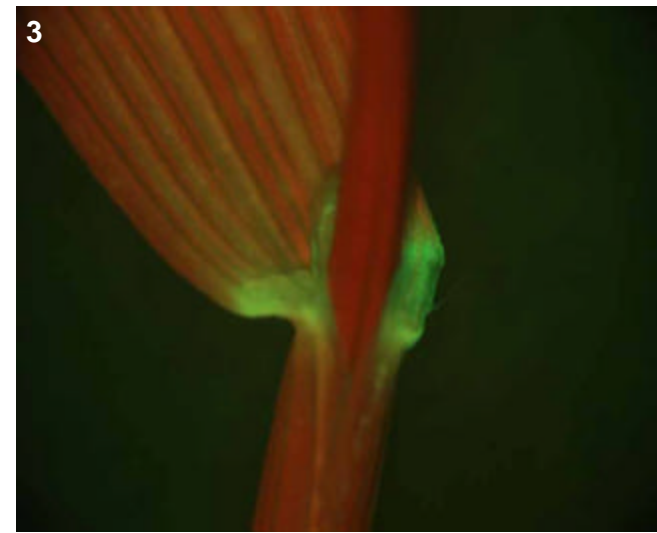
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Of the two GFP positive plantlets, one was bright and one was medium, perhaps dosage effect of the transgene?

# Genotype: ATB H09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

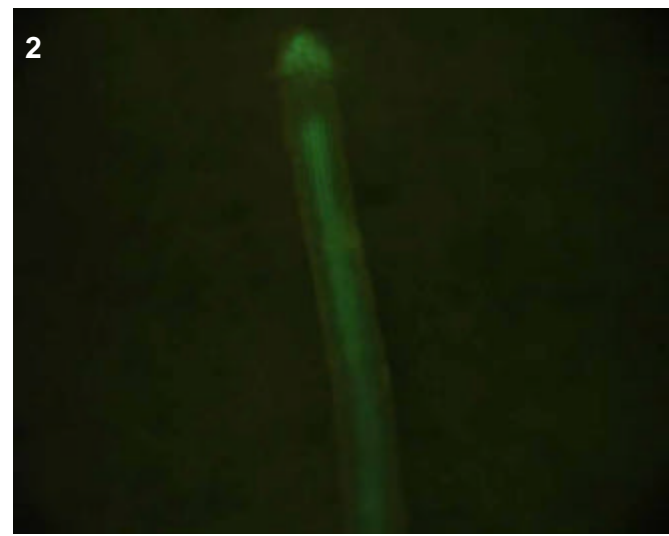
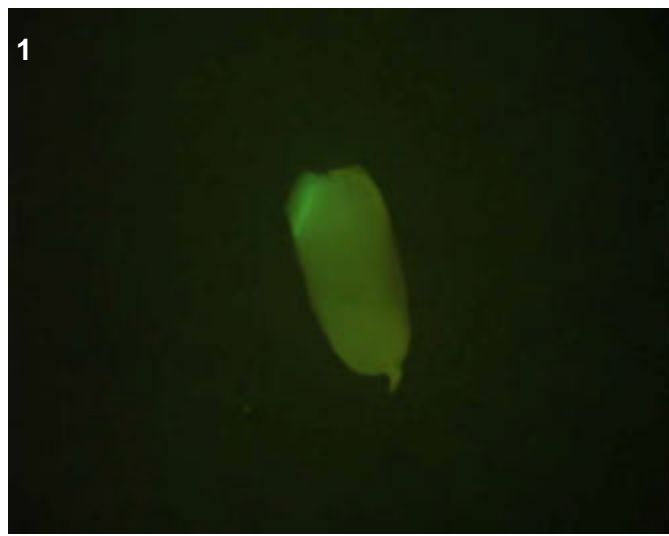
**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

WIP

Number T2 seed produced:



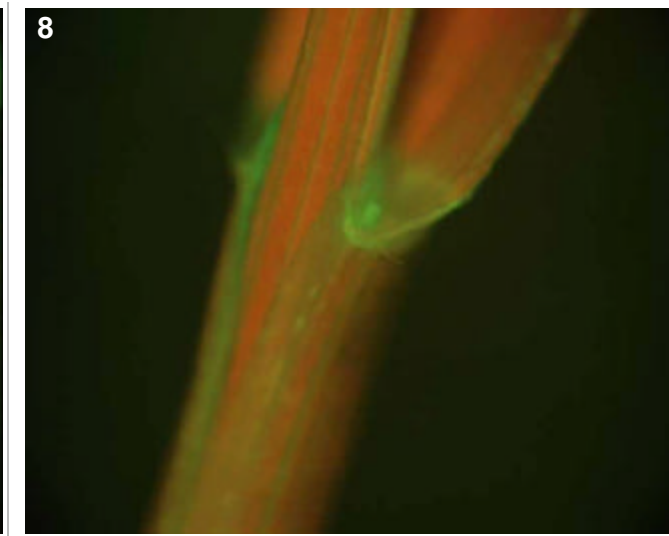
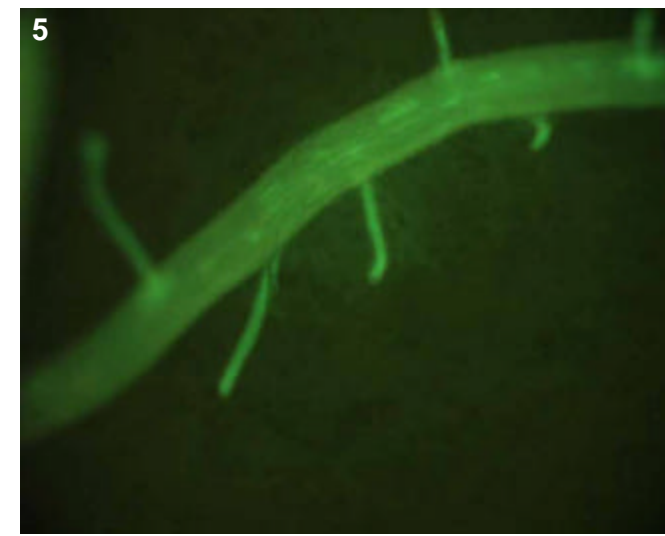
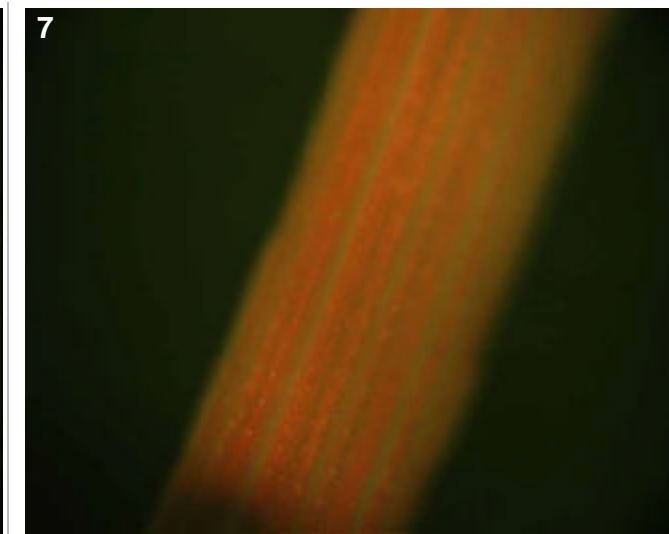
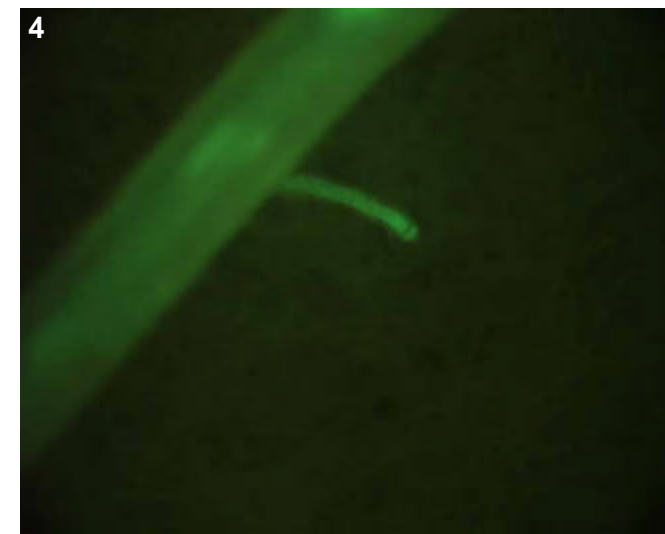
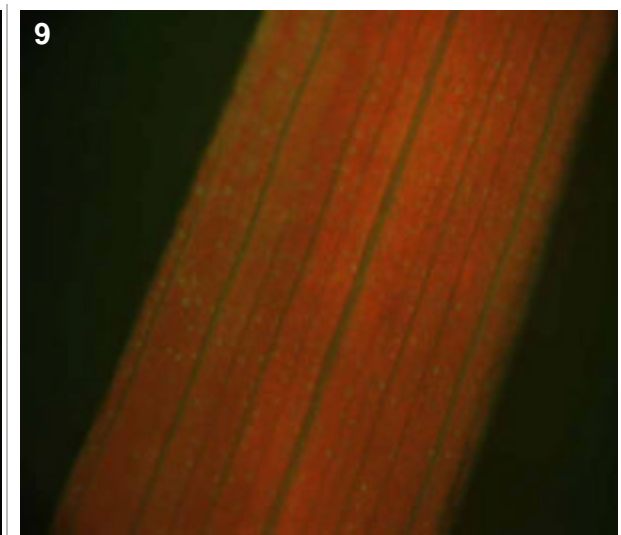
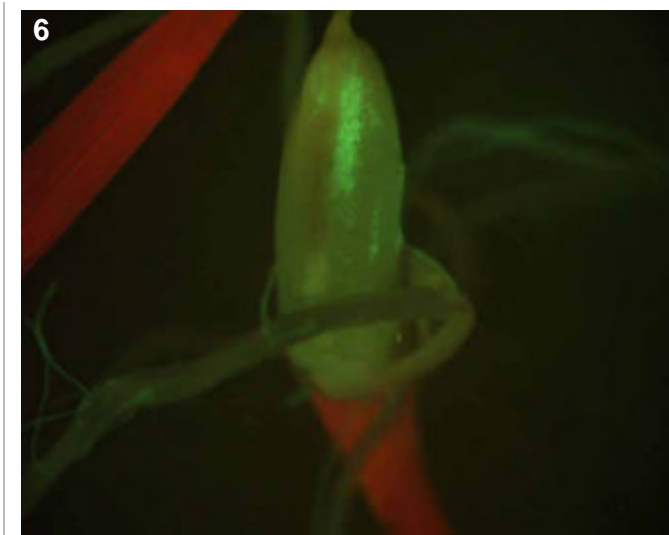
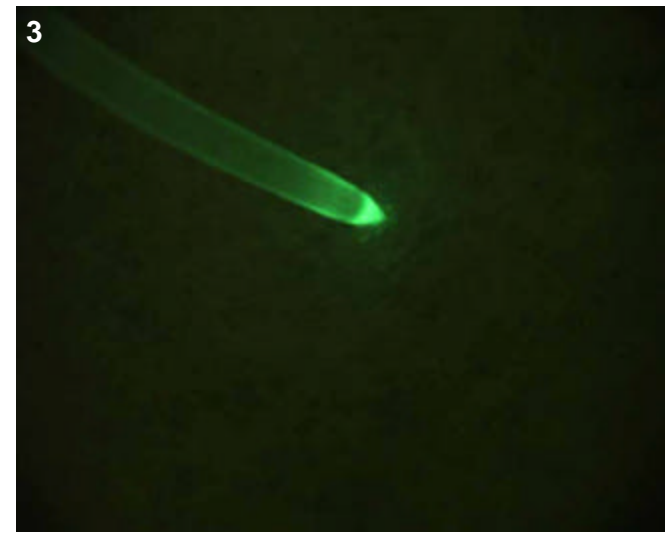
## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

Root expression was brighter than the shoot. The root expression seemed to vary by the root, ranging from at times stelar (pic 1), to cortex/endodermis (pic 5), to epidermis (pic 3). In any case, the expression in pic 2 would be interesting to confocal.



# Genotype: ATC A02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

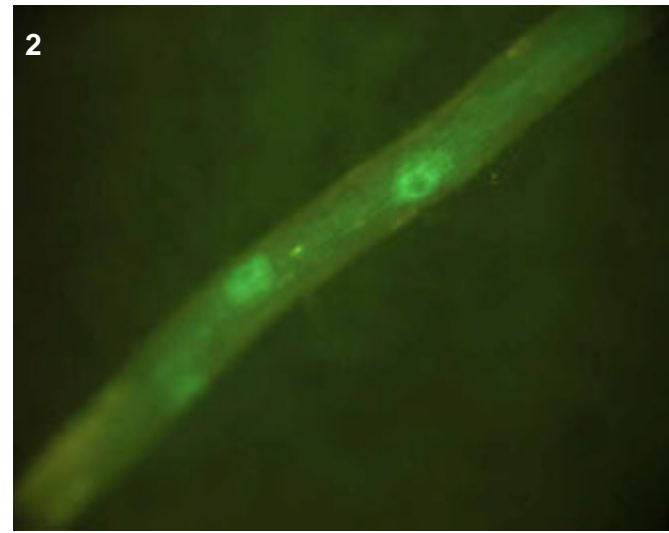
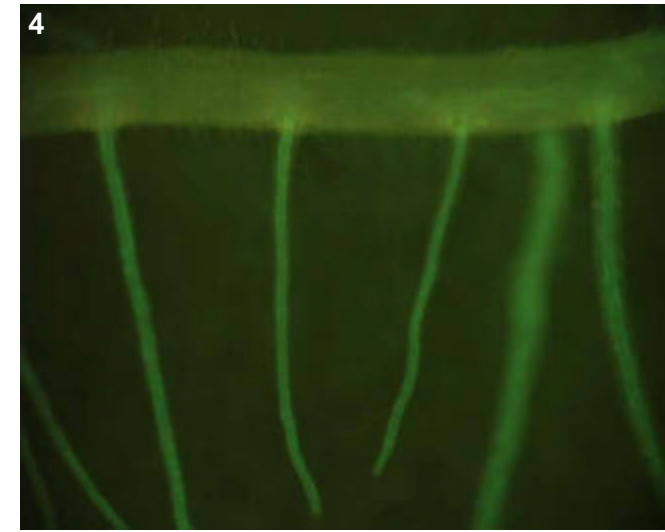
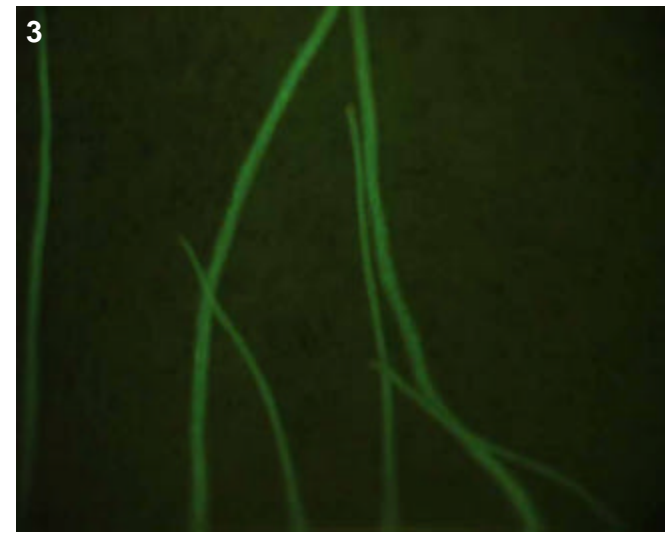
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

The lateral roots appeared to be very long.

# Genotype: ATC A06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

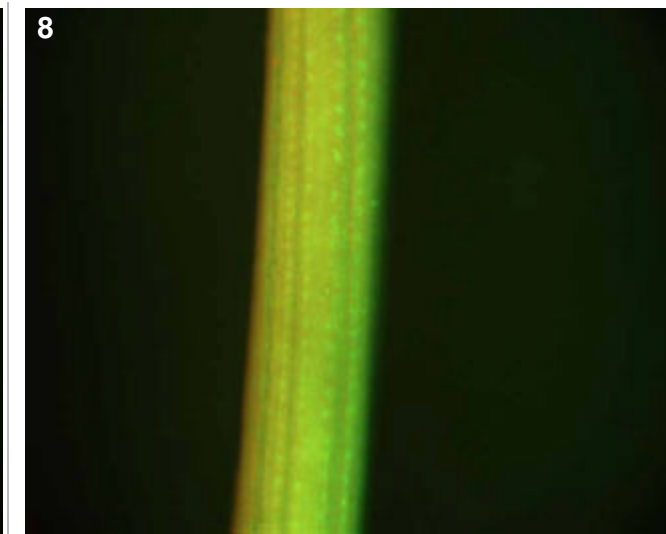
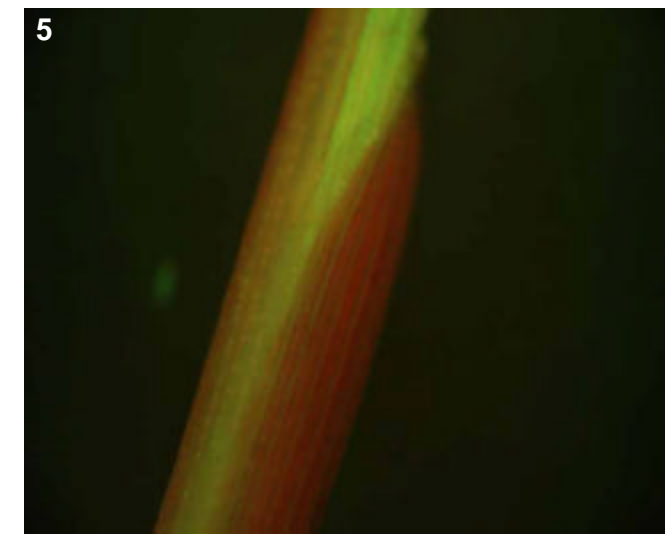
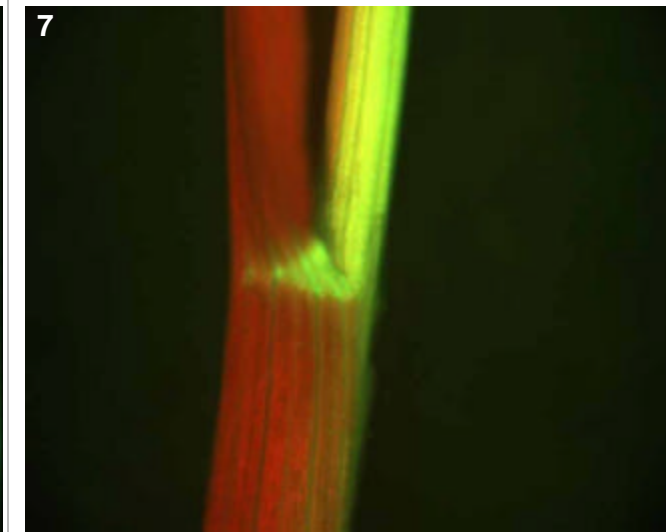
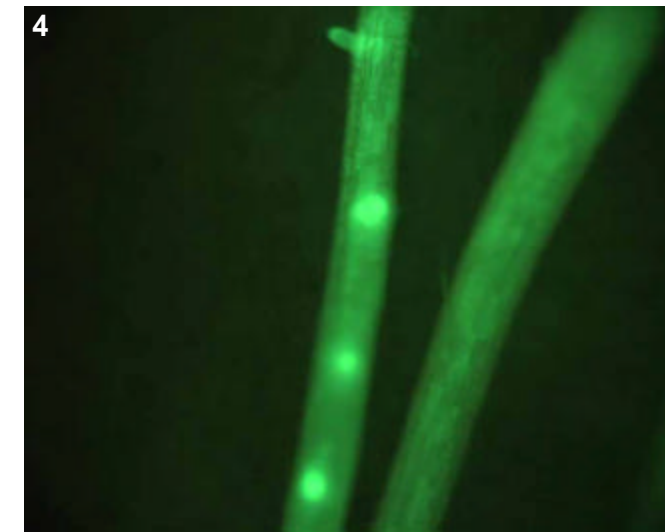
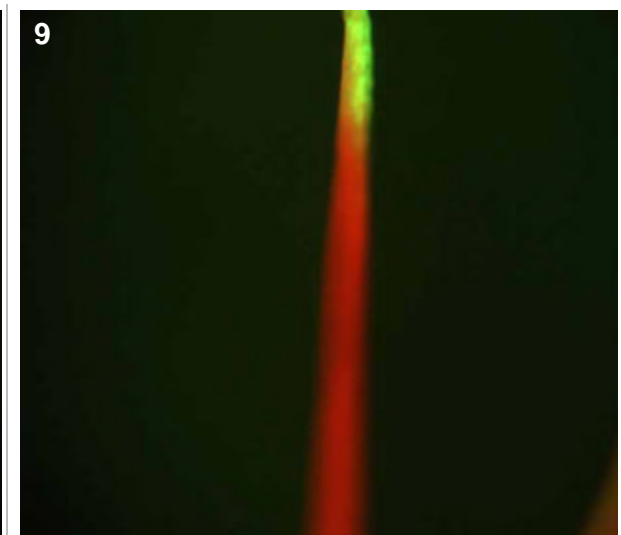
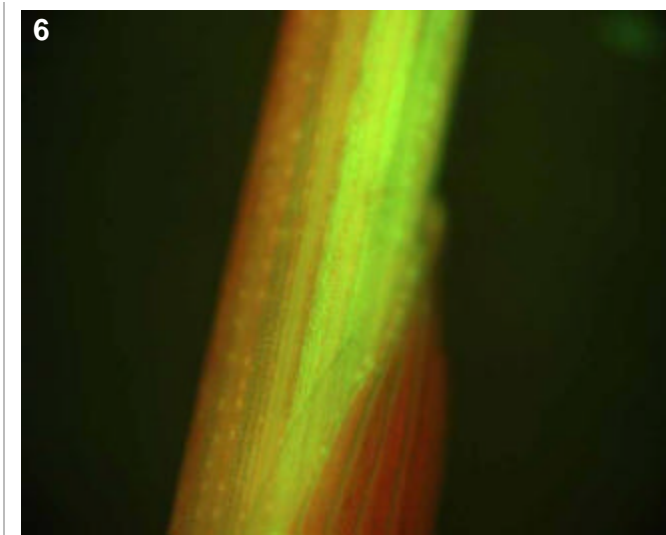
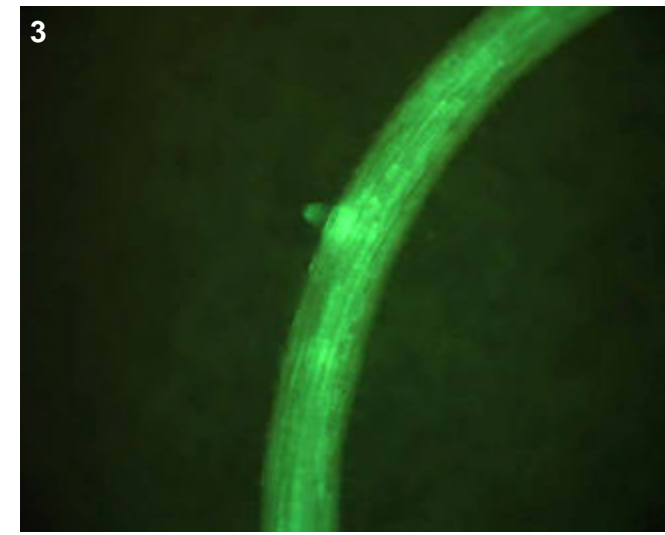
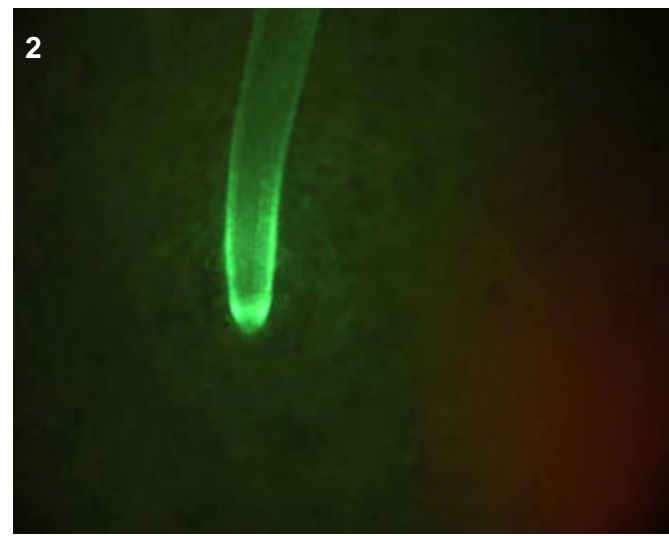
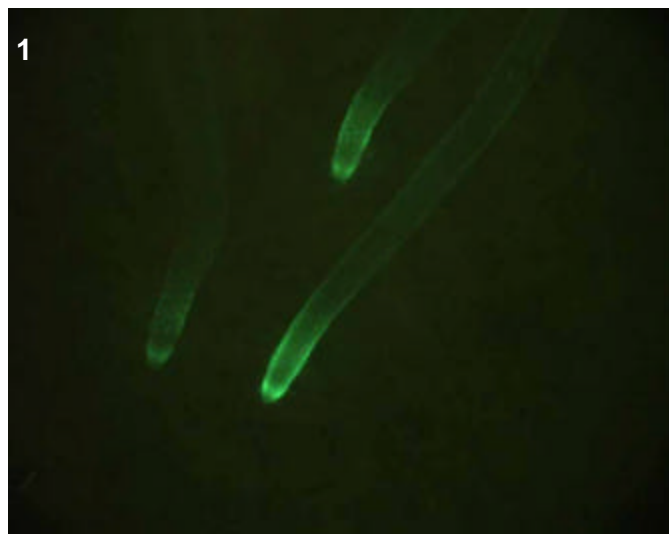
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**  
Appears to be bright epidermal in root (pics 1-4) and shoot (pics 5-9).

# Genotype: ATC A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-9

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

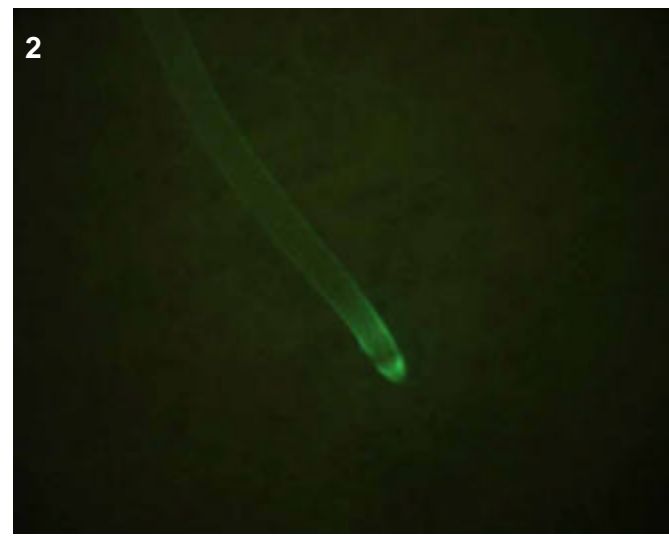
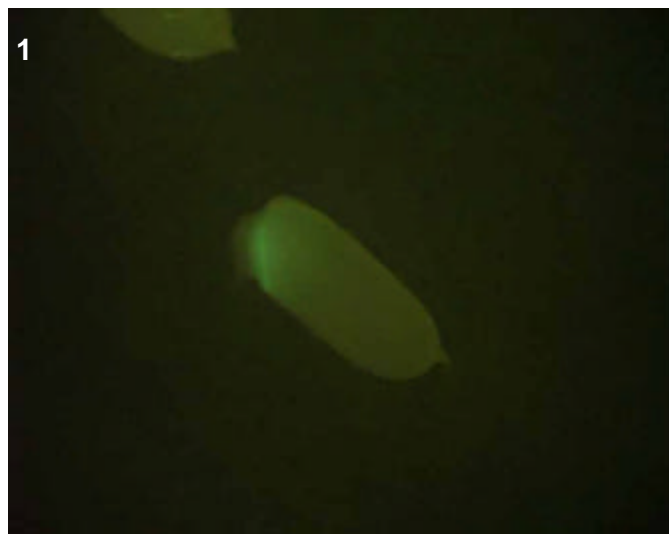
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:

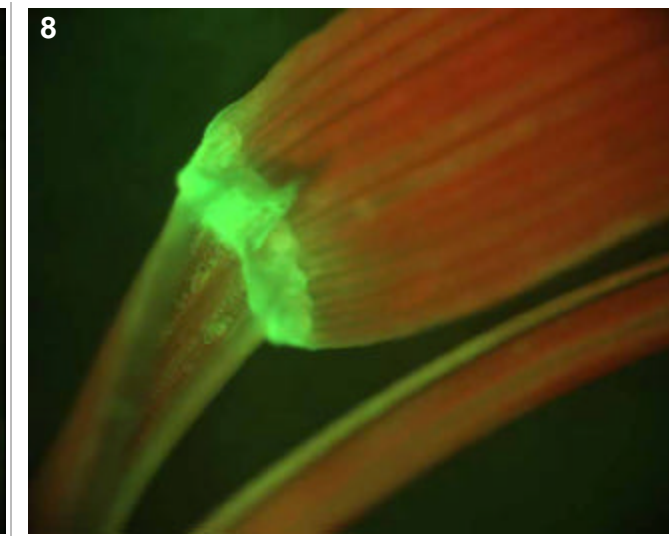
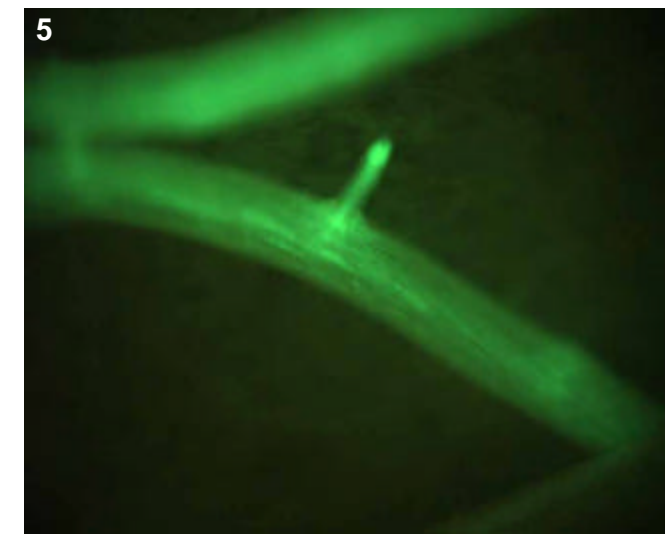
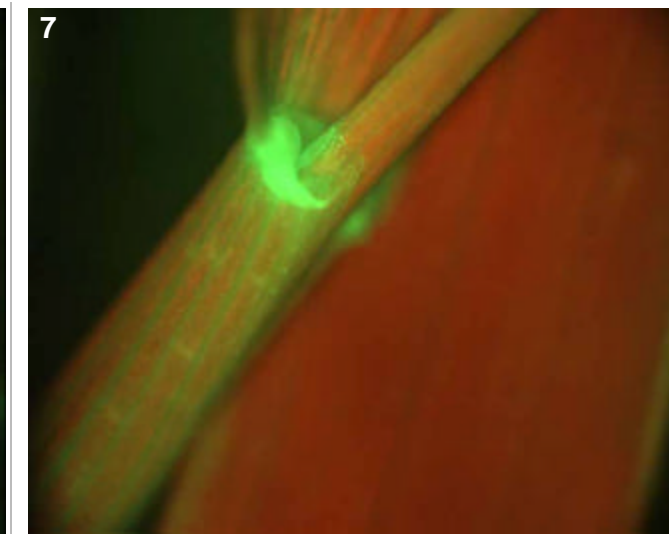
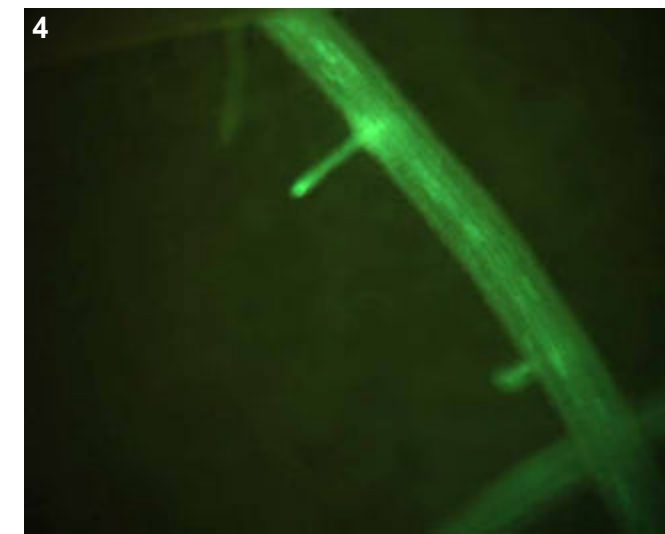
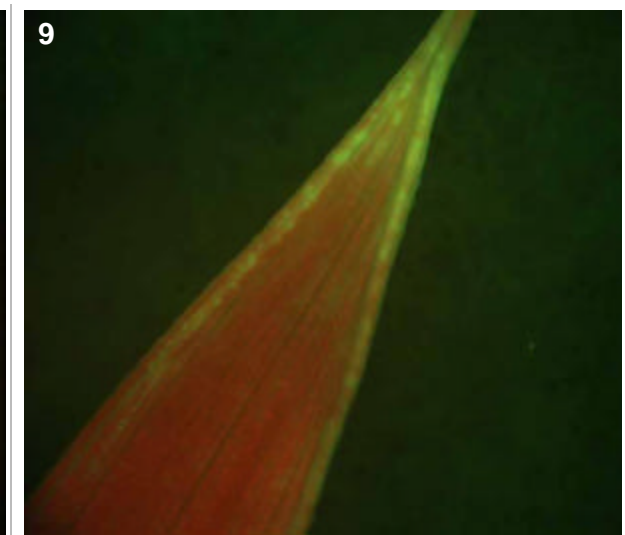
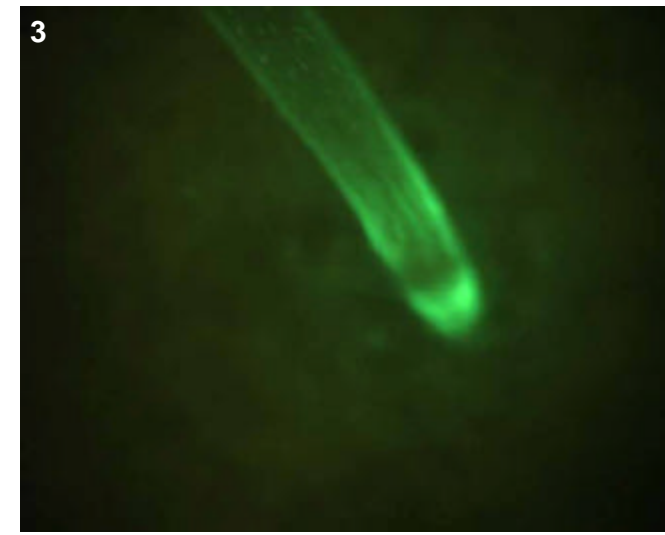


### T0 comments

### T1 seed comments

4/5 seeds had medium expression.

### T1 seedling comments



# Genotype: ATC B02

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

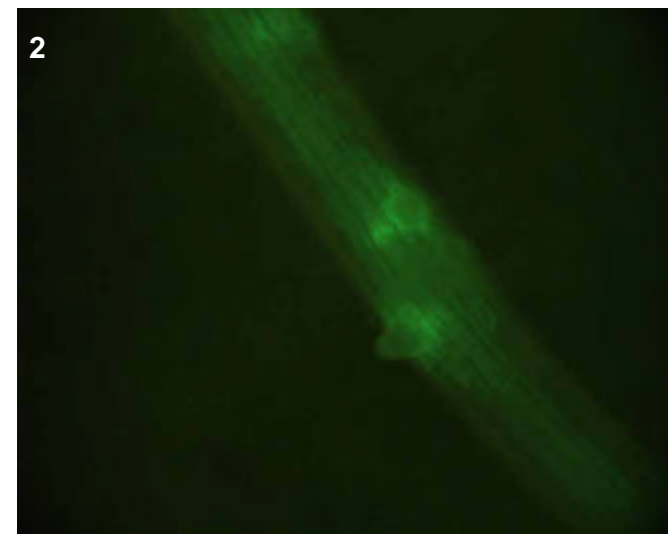
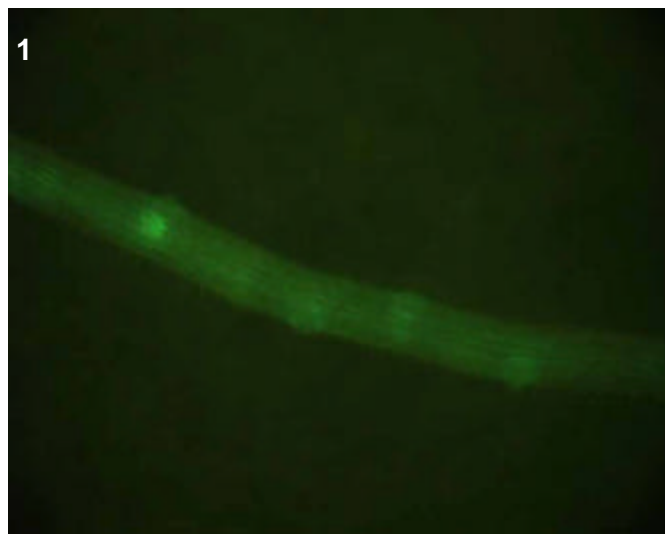
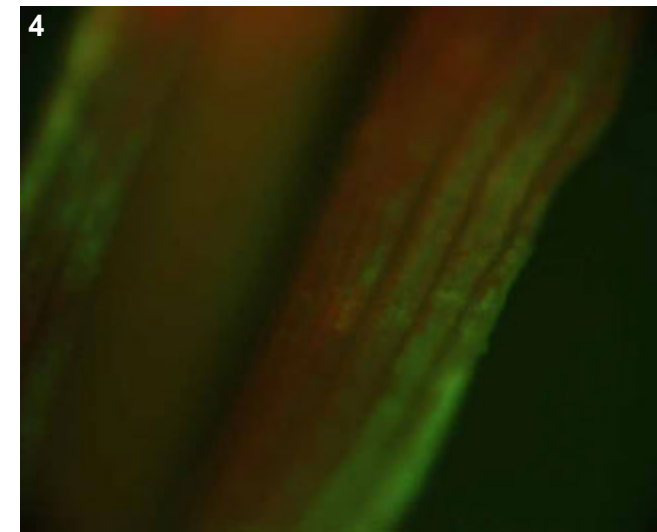
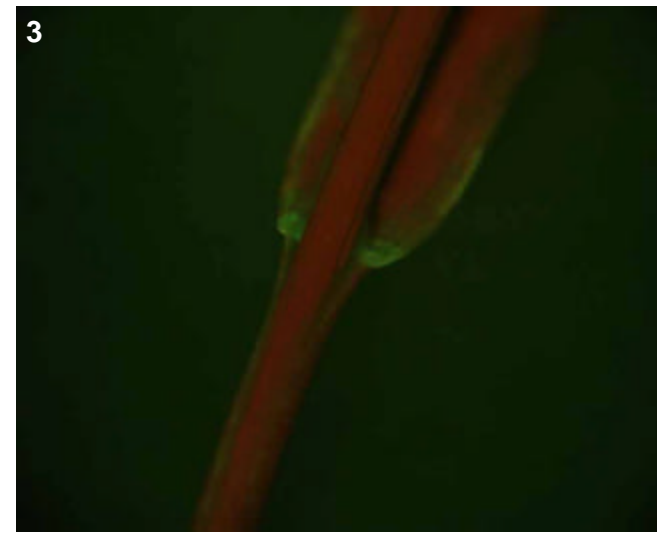
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Perhaps an overall epidermal pattern.

# Genotype: ATC B04

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

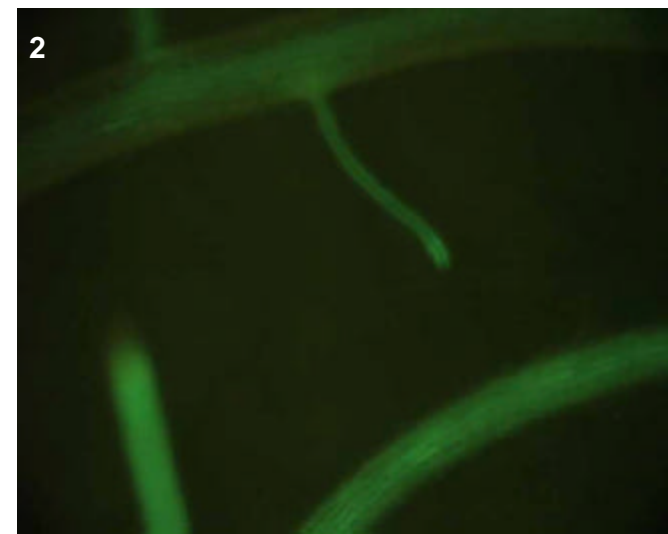
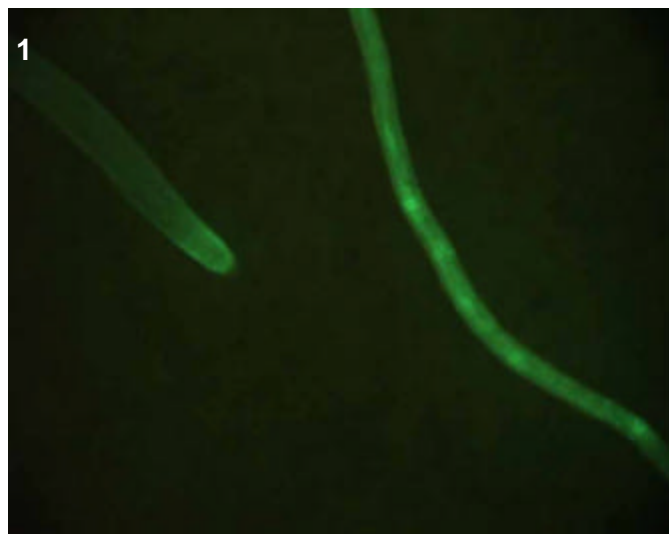
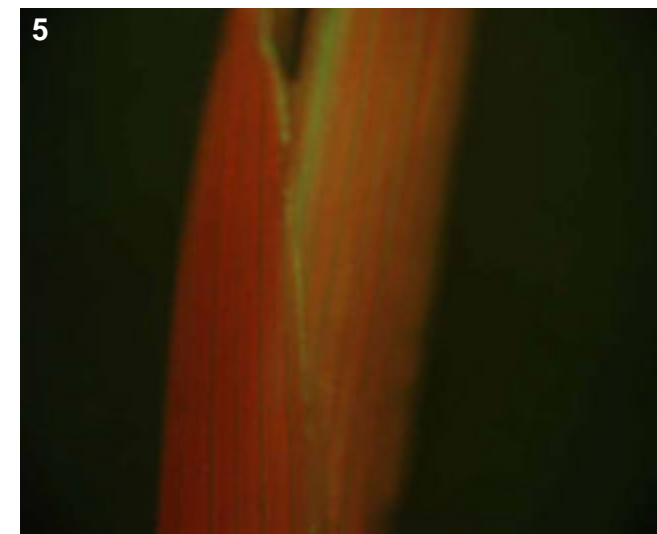
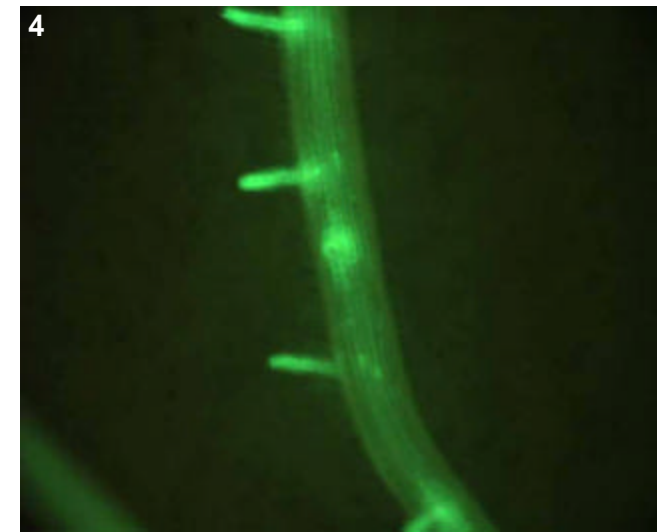
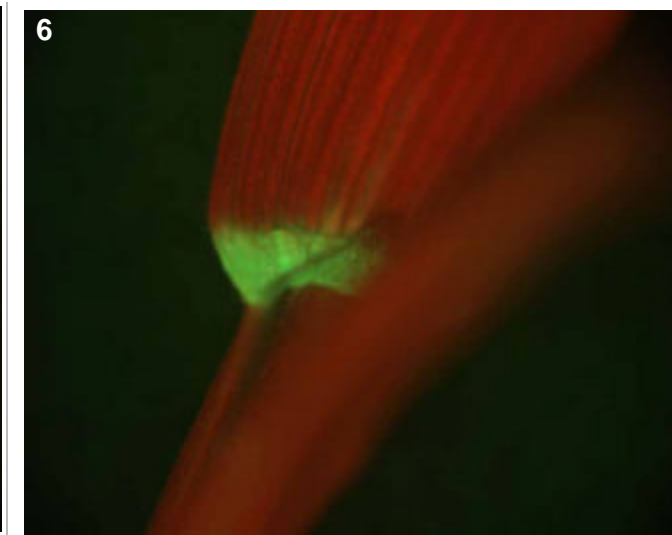
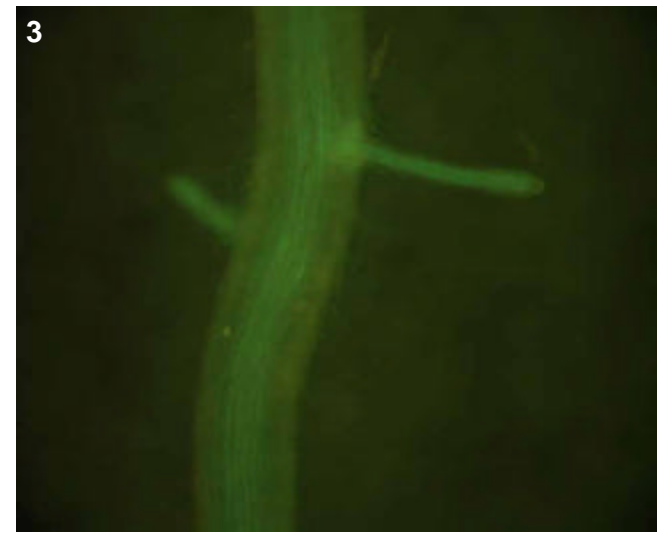
No GFP detected

**T1 in greenhouse?**

YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

1 of the 3 GFP+ seedlings was very bright, the other two were medium, perhaps due to dosage effects of the transgene?

# Genotype: ATC B05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

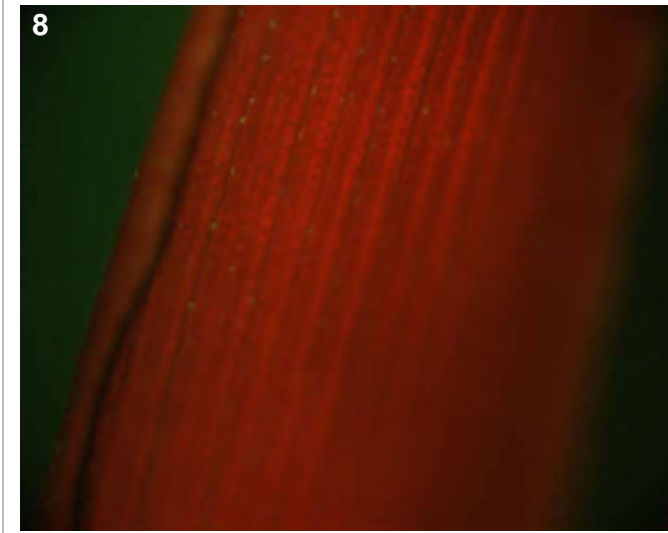
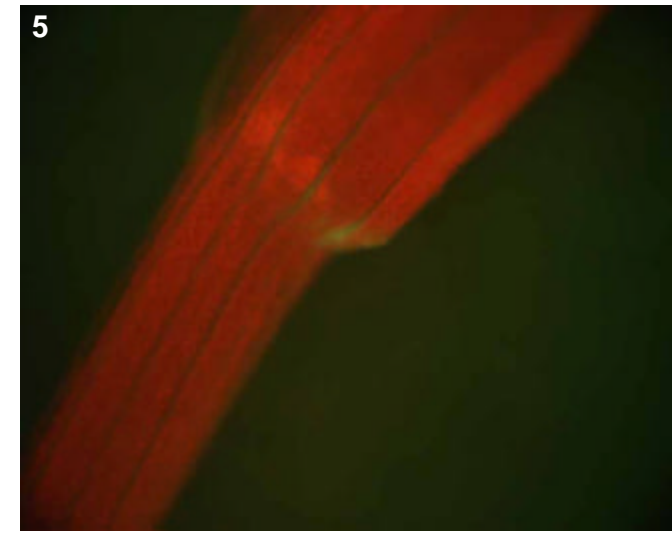
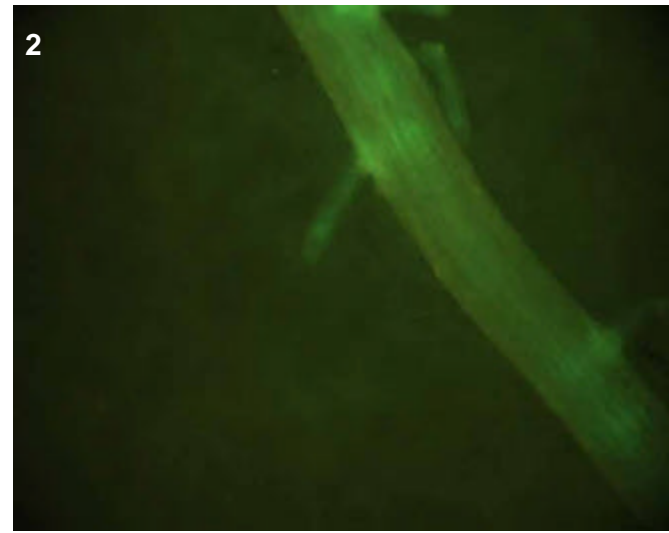
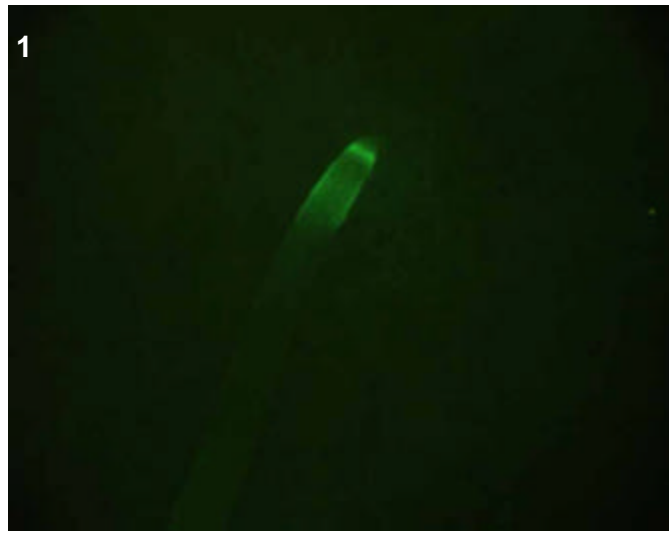
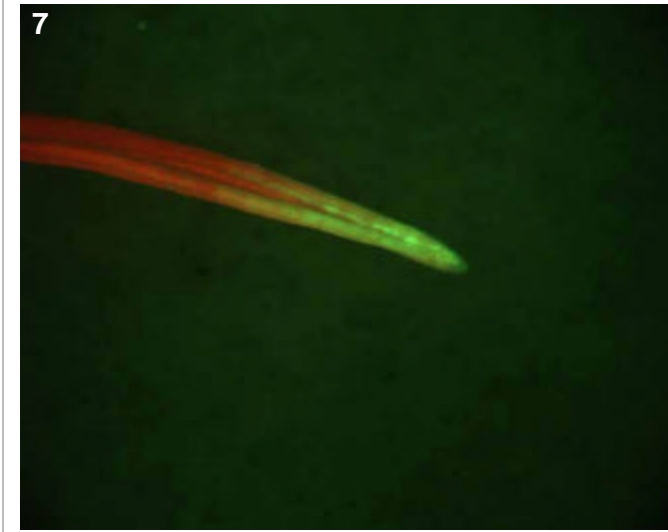
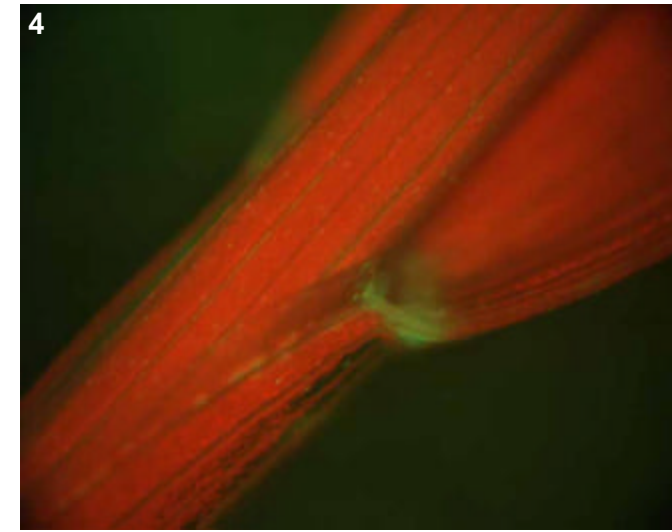
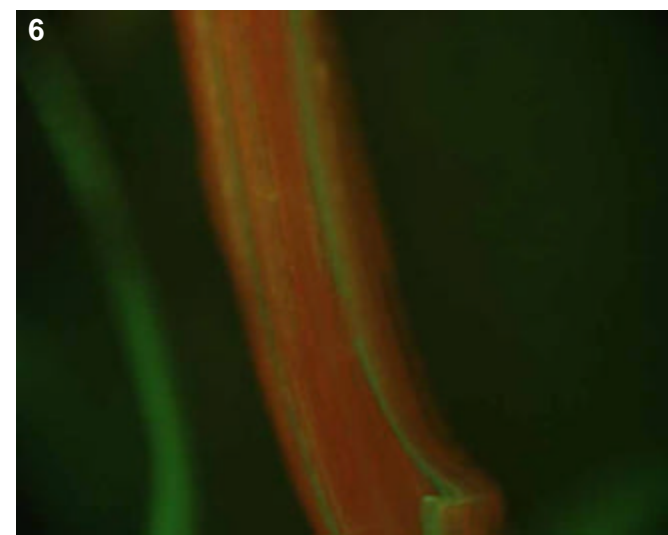
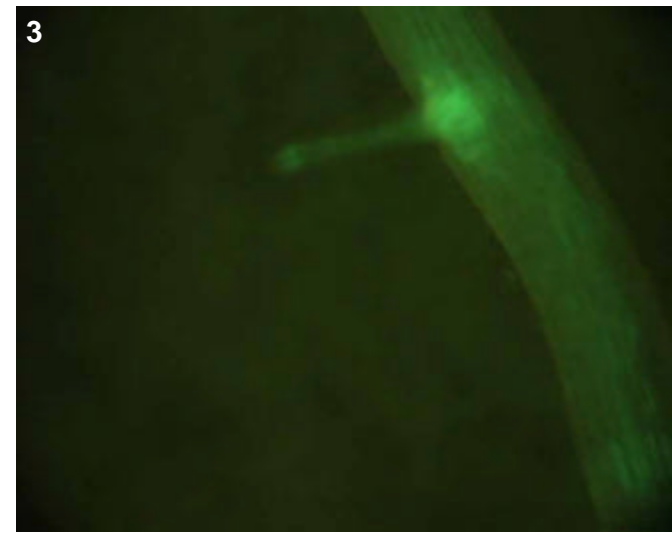
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Notice the extra bright GFP in the apex of crown roots (pic 1) and laterals (pics 2-3).



# Genotype: ATC B06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

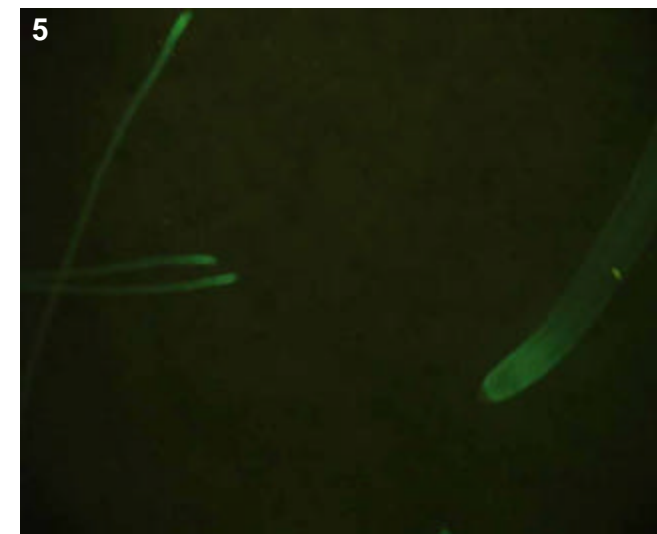
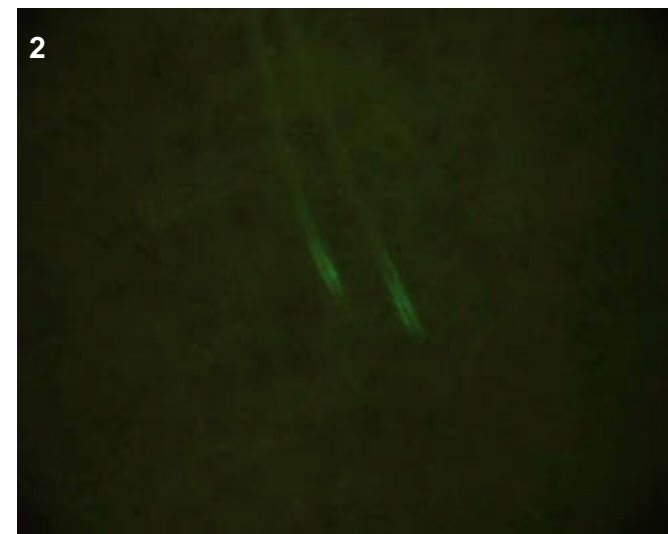
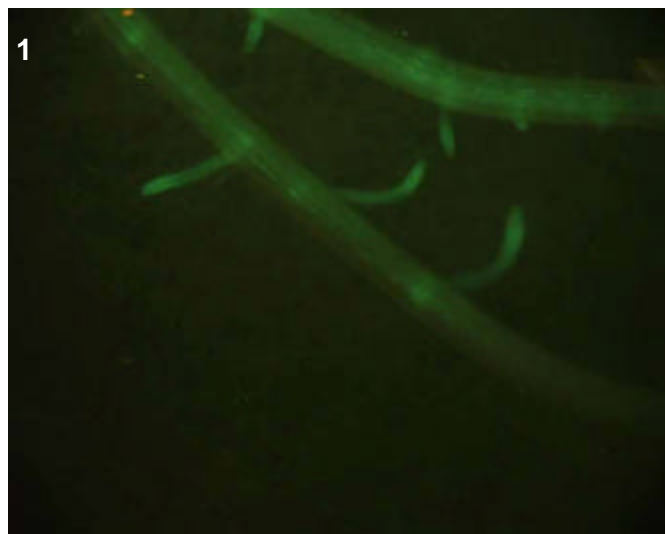
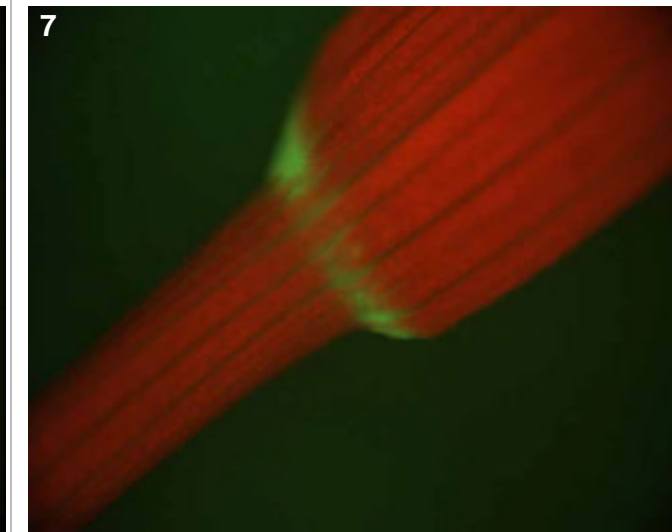
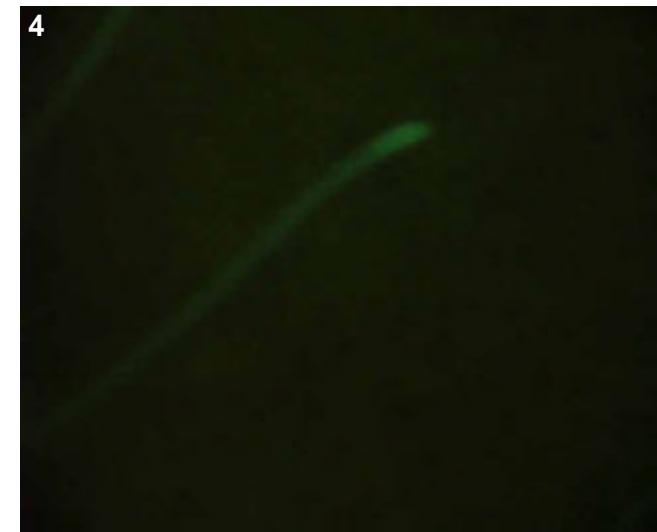
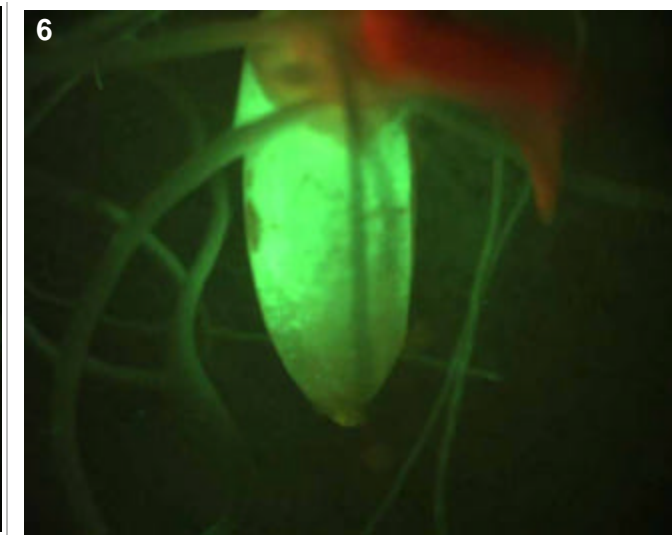
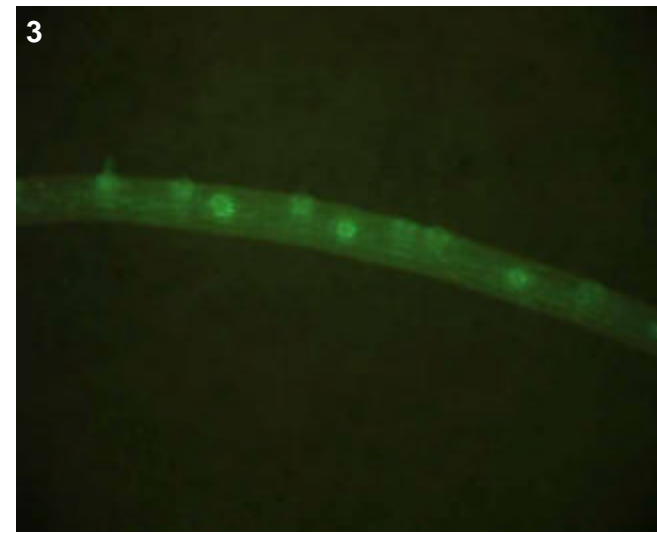
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

In mature laterals and crowns, GFP expression was limited to the elongation zone near the root tip (especially visible in pics 2 and 5).

# Genotype: ATC C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-8

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

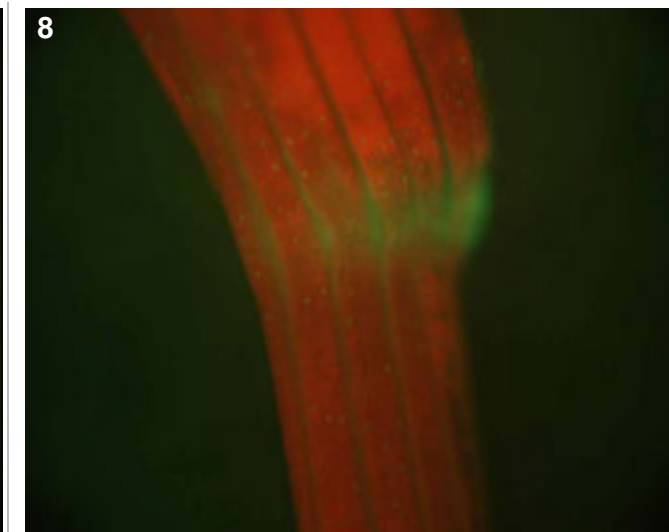
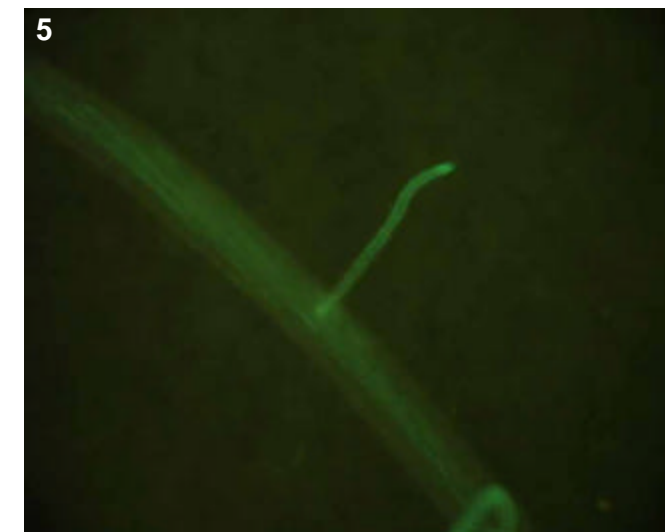
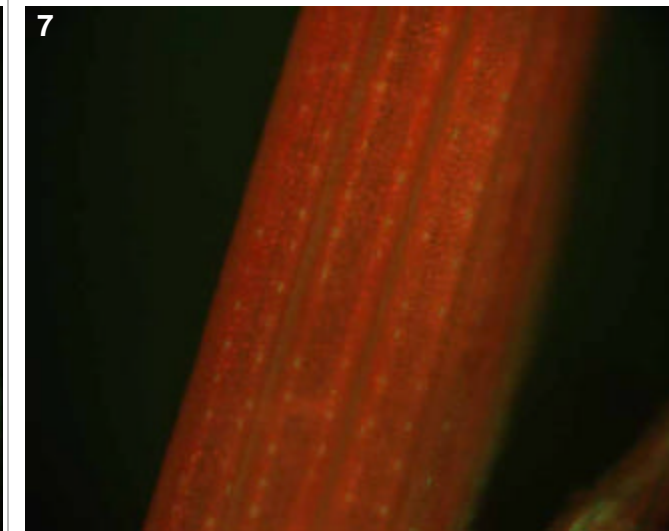
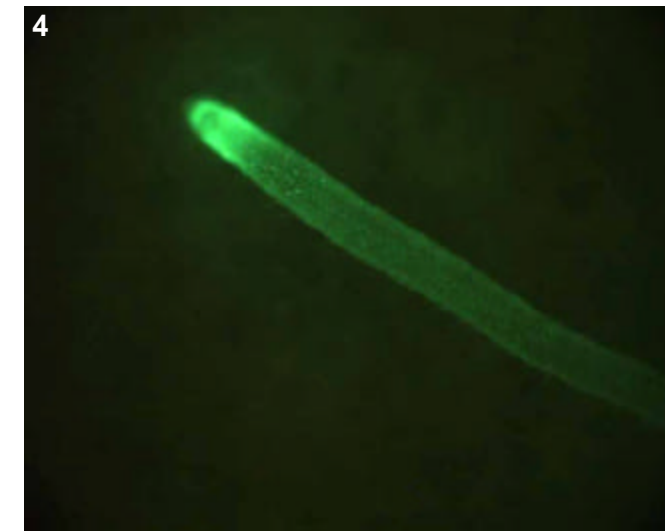
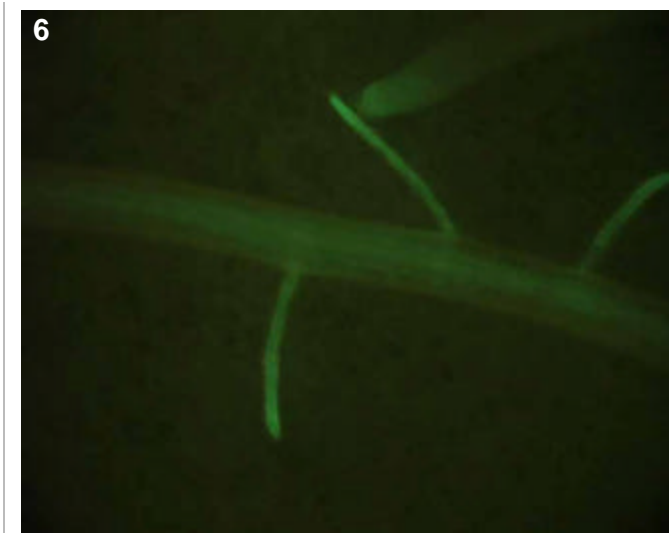
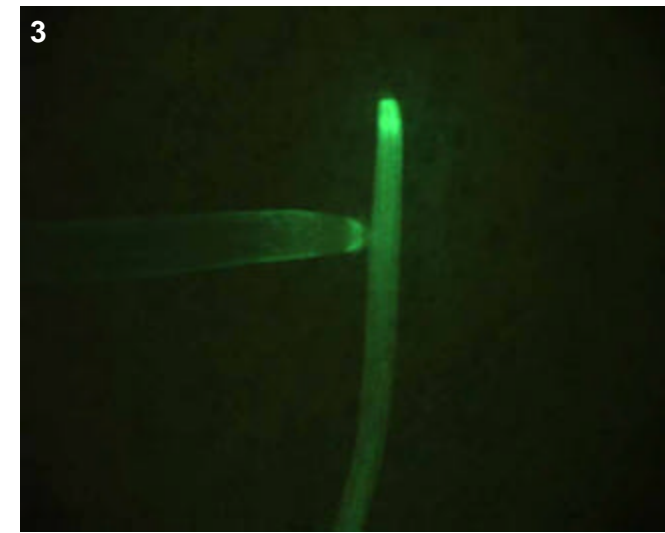
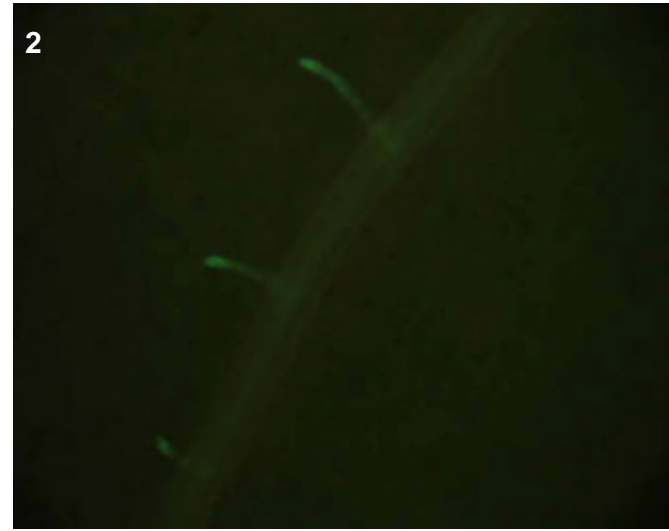
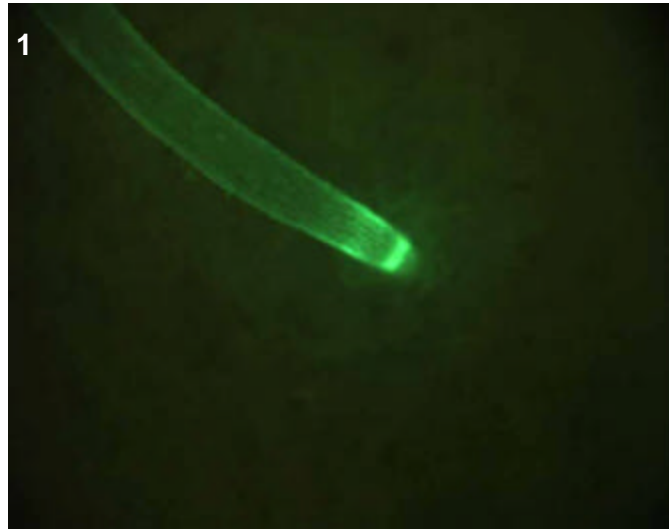
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

Number T2 seed produced:



### T0 comments

### T1 seed comments

### T1 seedling comments

Root expression was bright and ranged from epidermal at crown root tips (see pic 1) to apparently stelar expression in laterals and more mature seminal root (see pics 5 and 6). Shoot expression was more faint.

# Genotype: ATC C10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

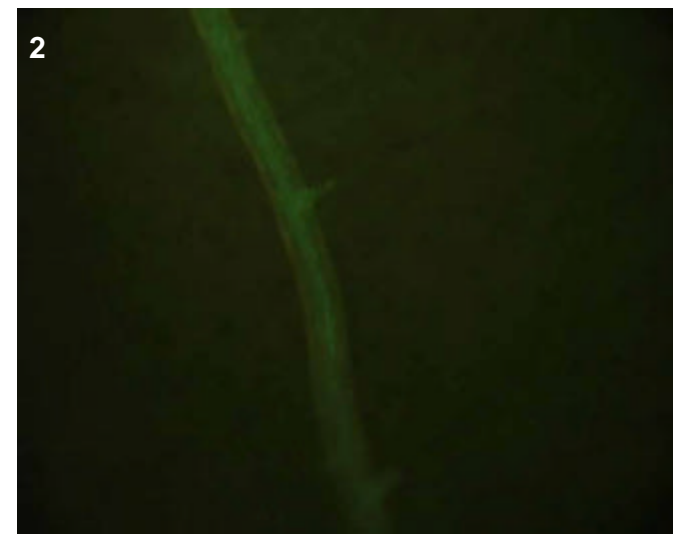
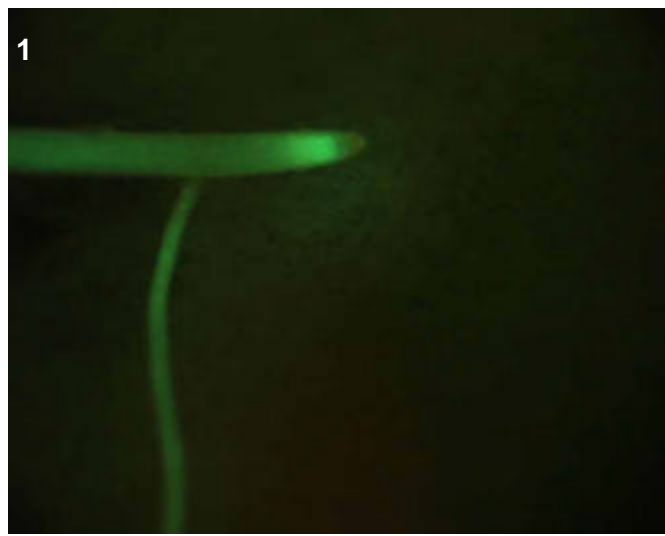
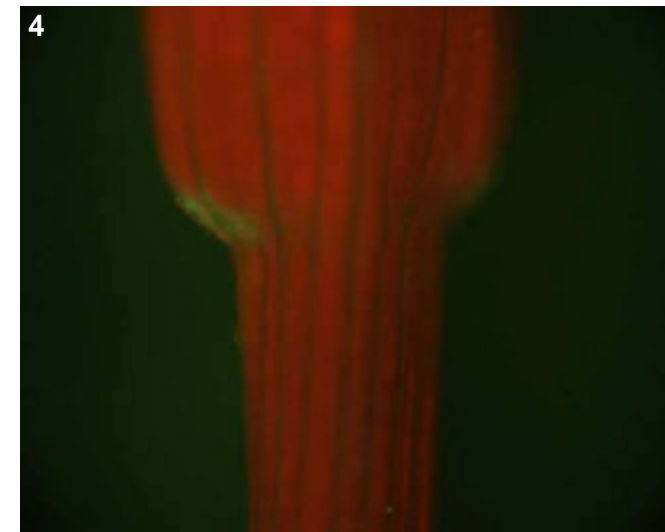
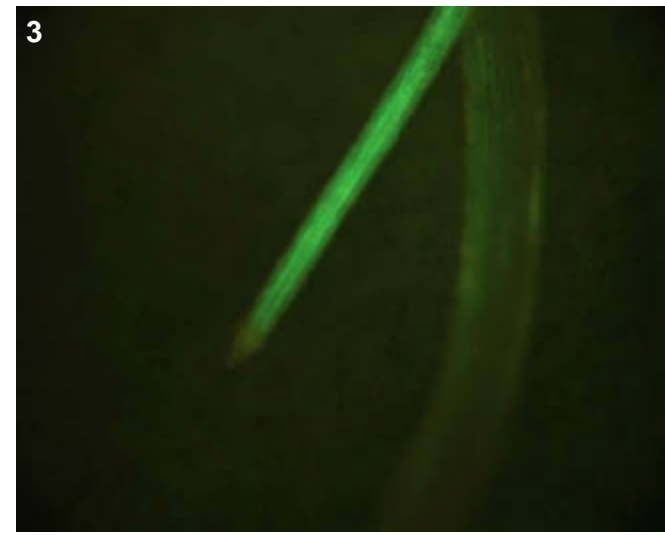
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Root expression much brighter than shoot.

# Genotype: ATC D12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

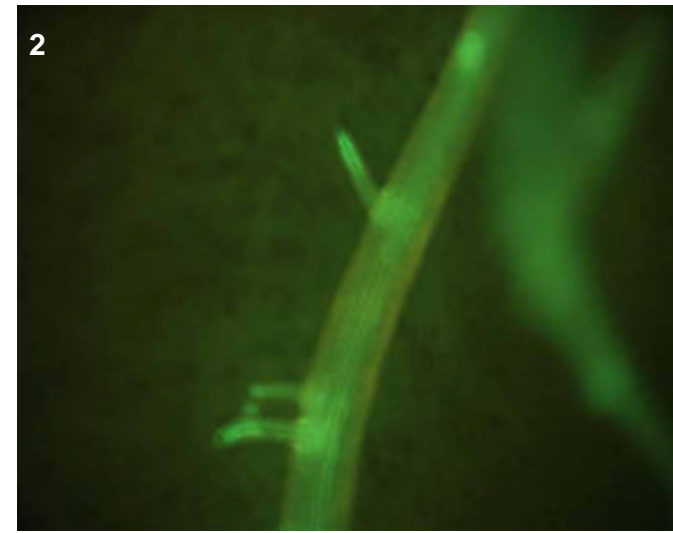
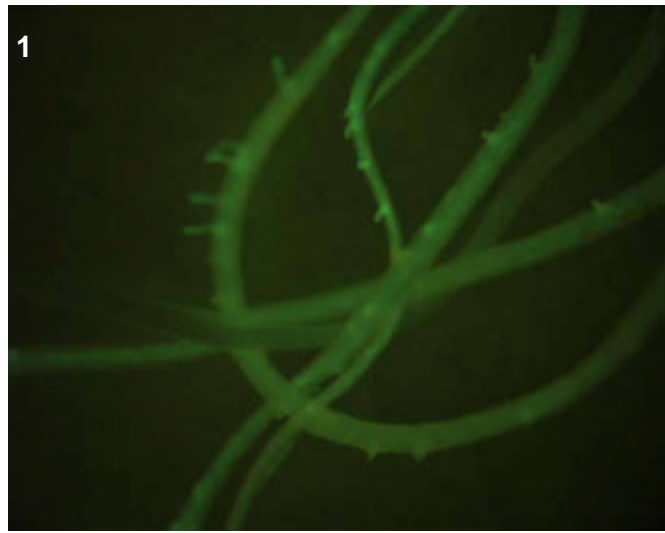
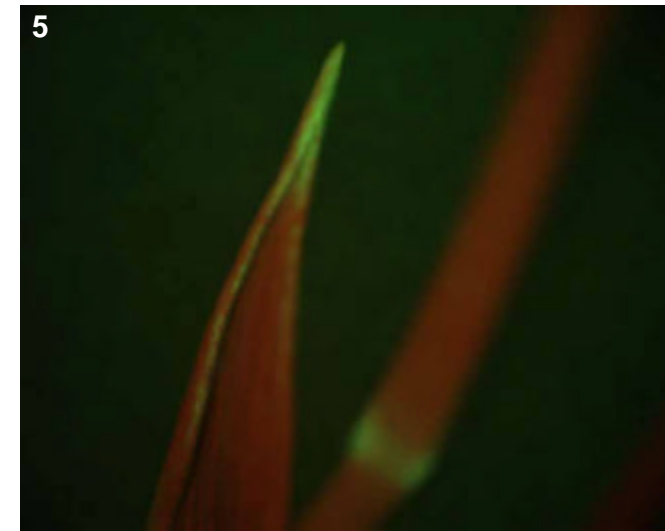
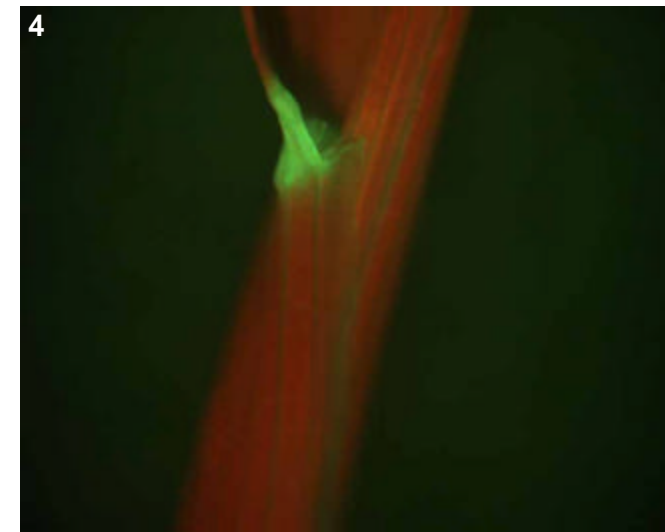
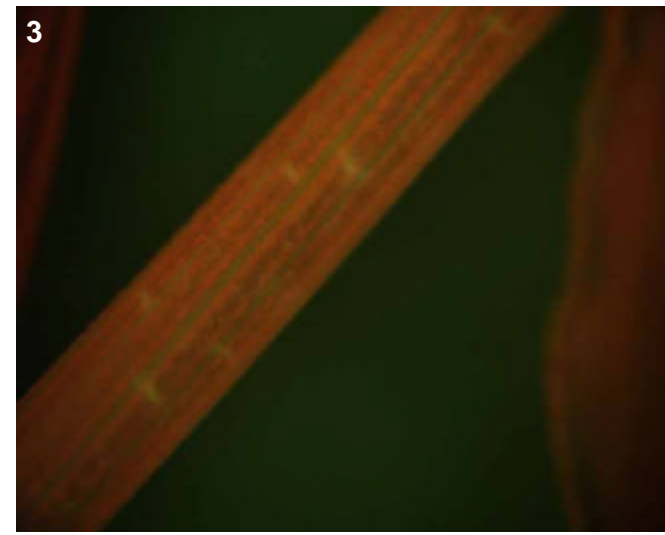
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Both root and shoot vascular expression, the root a bit brighter.

# Genotype: ATC E01

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

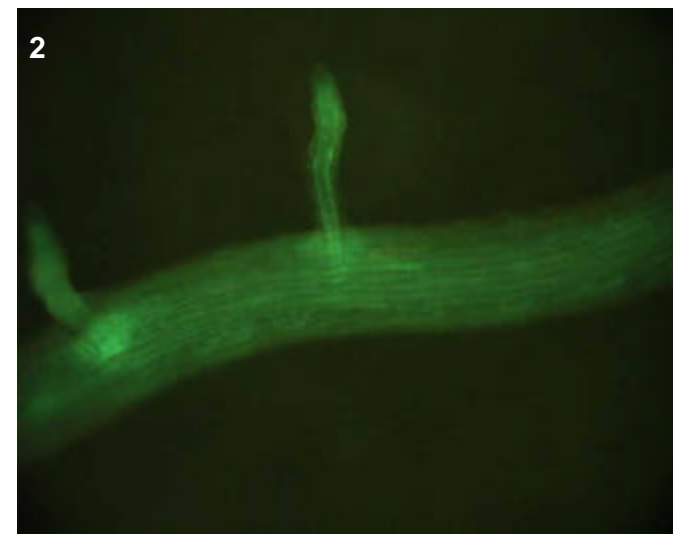
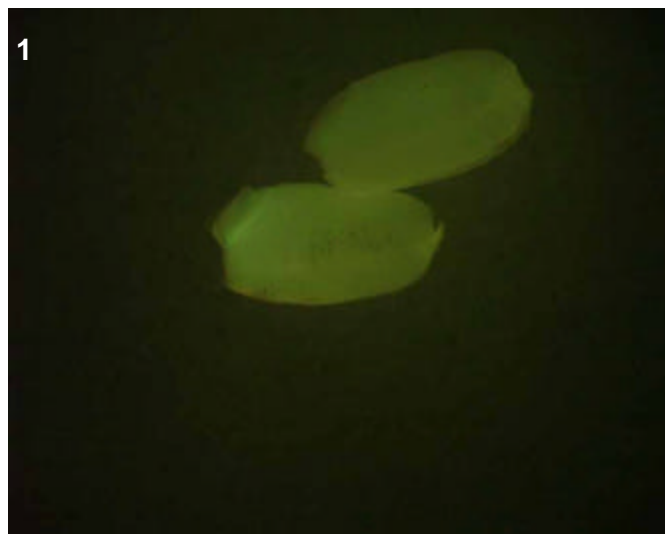
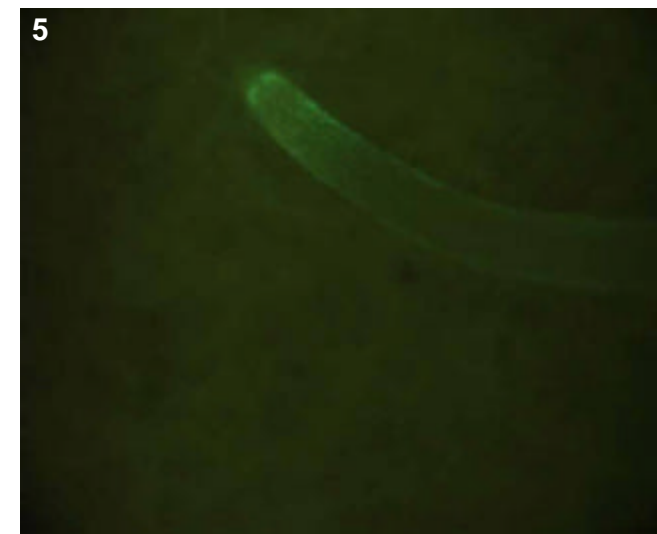
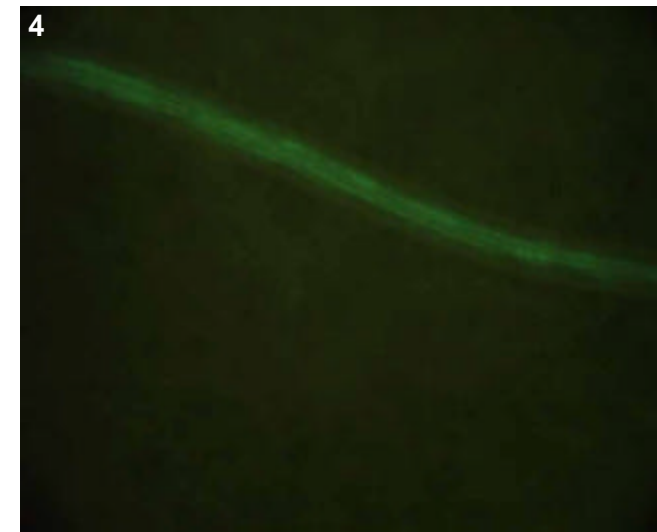
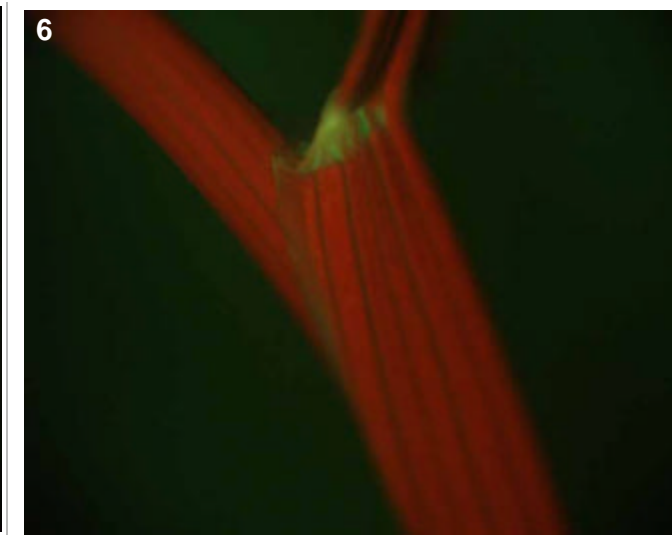
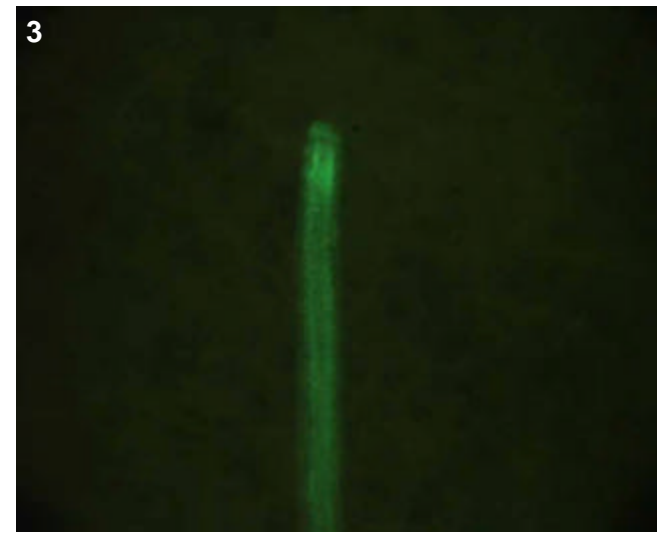
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/4 seeds had expression.

## T1 seedling comments

# Genotype: ATC E06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

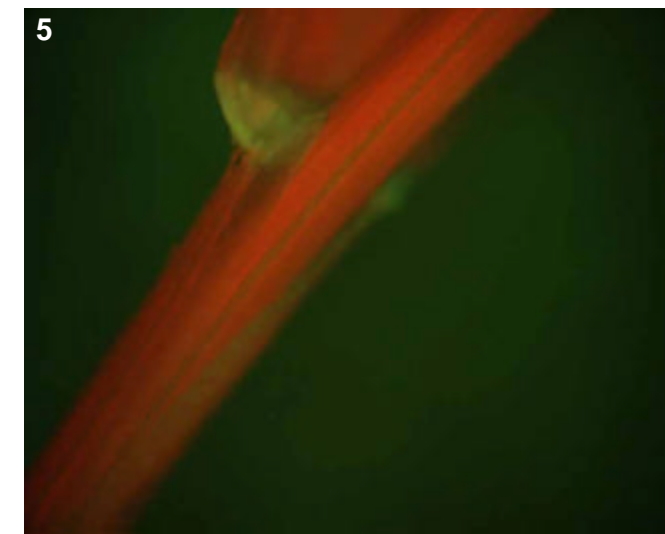
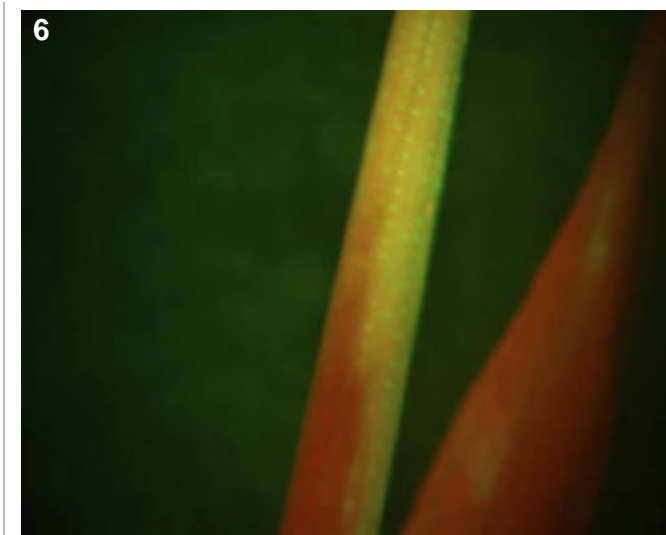
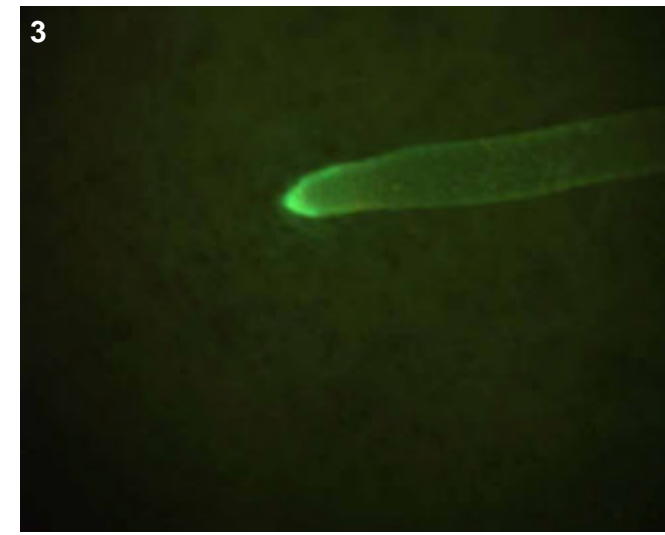
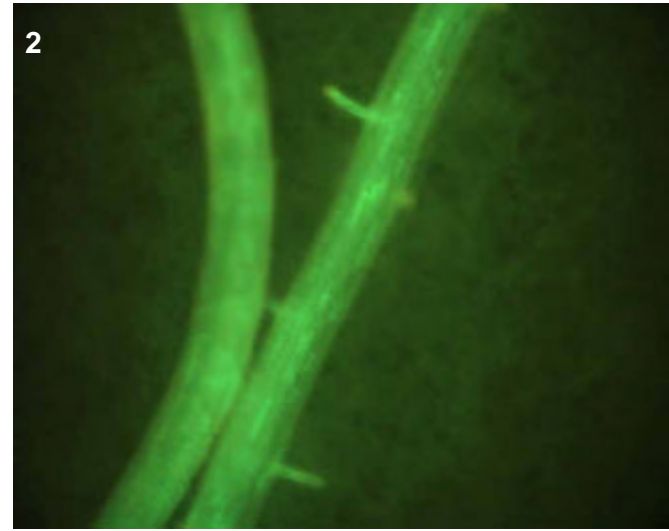
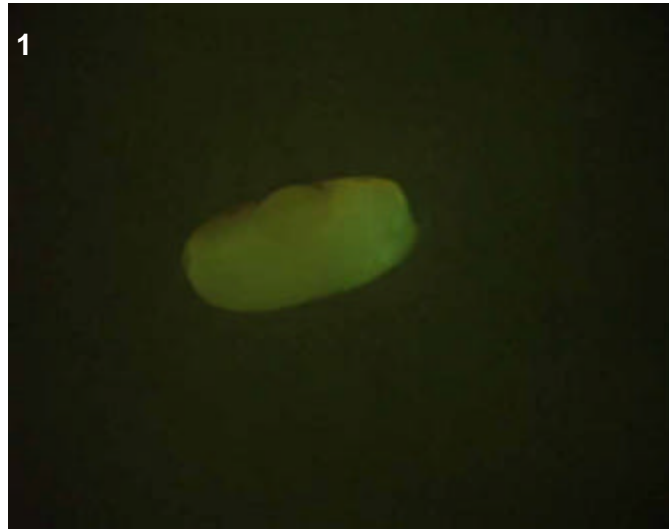
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**  
3/5 seeds had faint expression.

**T1 seedling comments**  
Bright roots, medium endosperm and shoot.

# Genotype: ATC F07

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

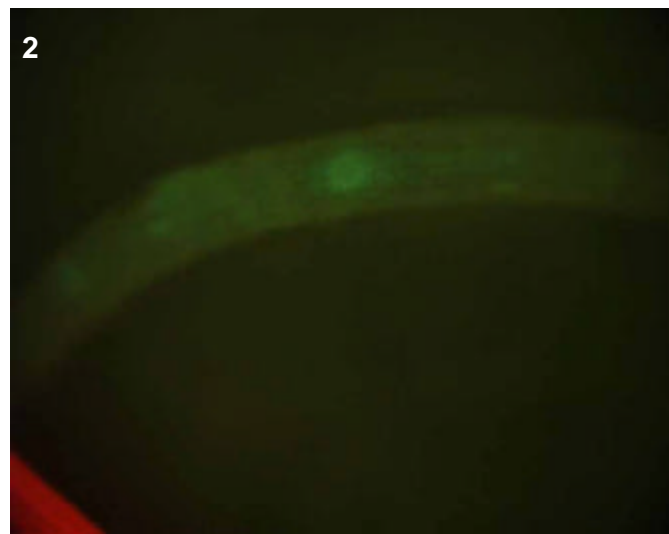
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



**T0 comments**

**T1 seed comments**

**T1 seedling comments**

# Genotype: ATC F12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

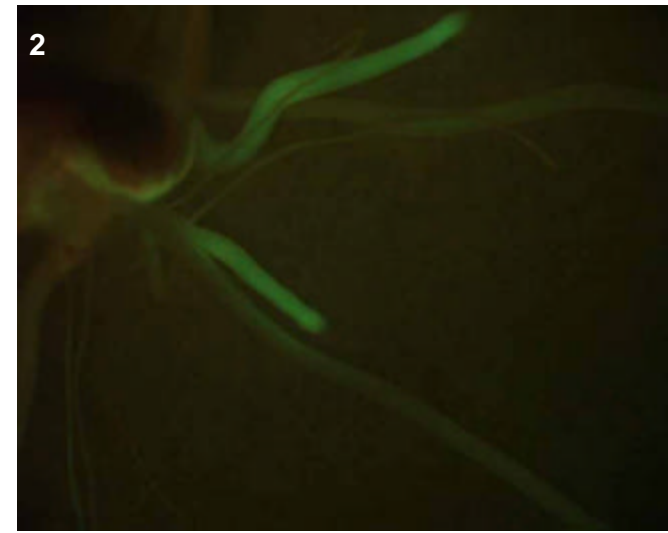
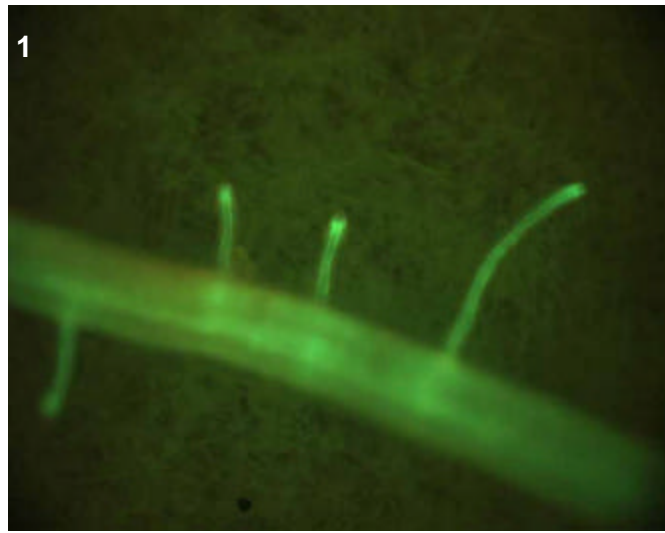
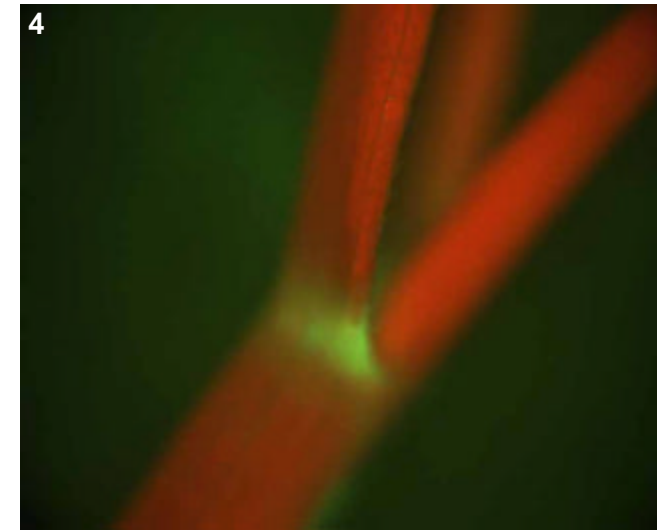
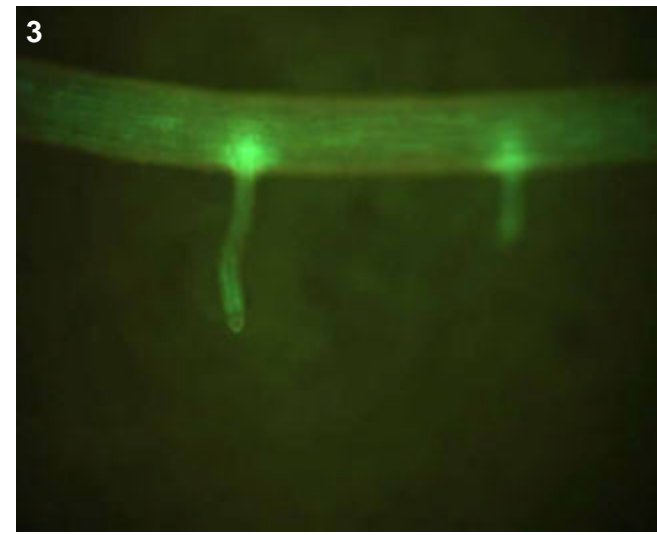
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments



# Genotype: ATC G10

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

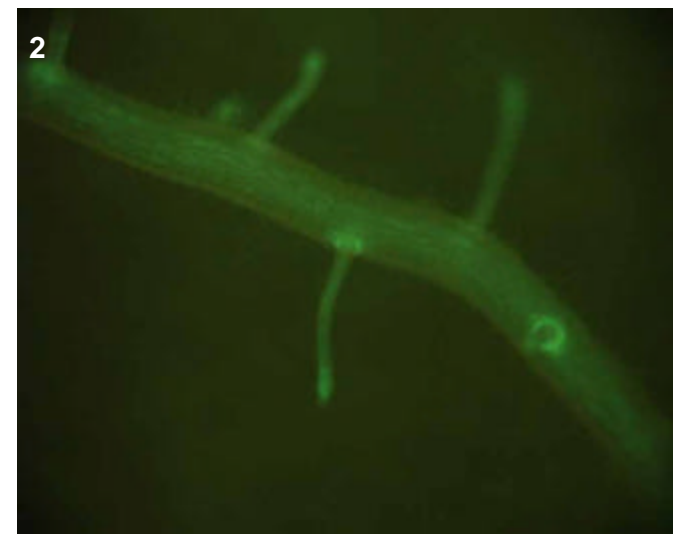
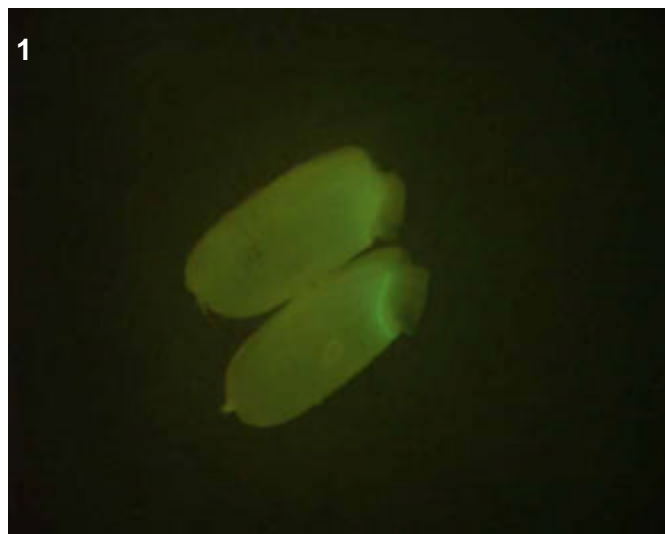
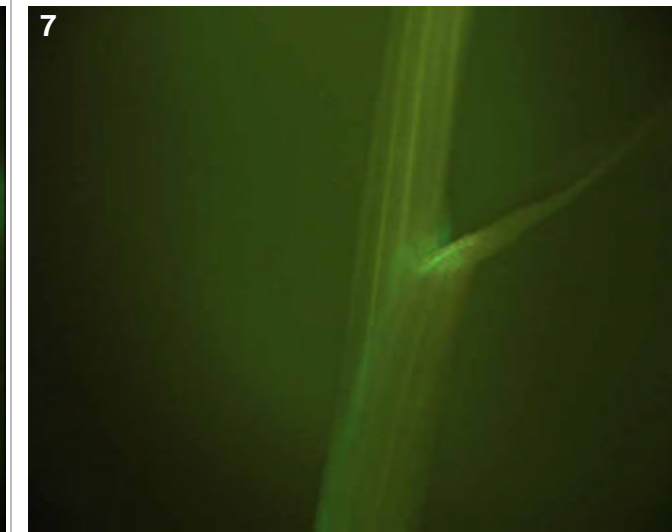
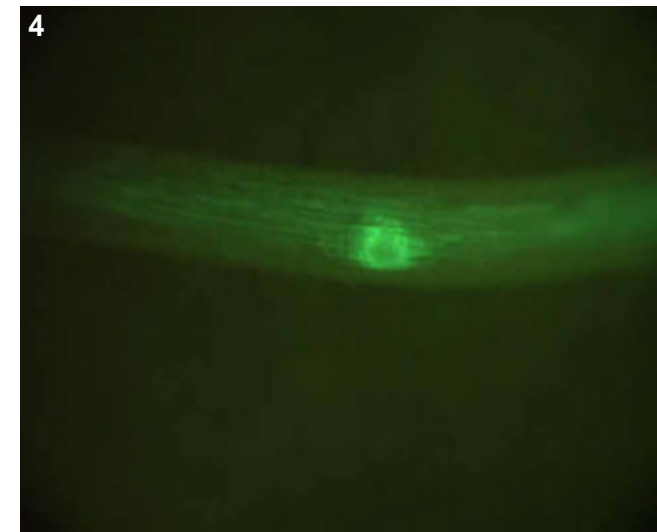
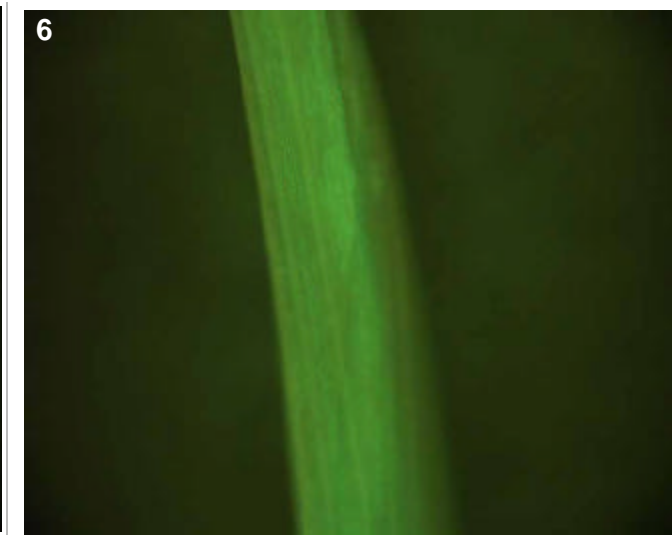
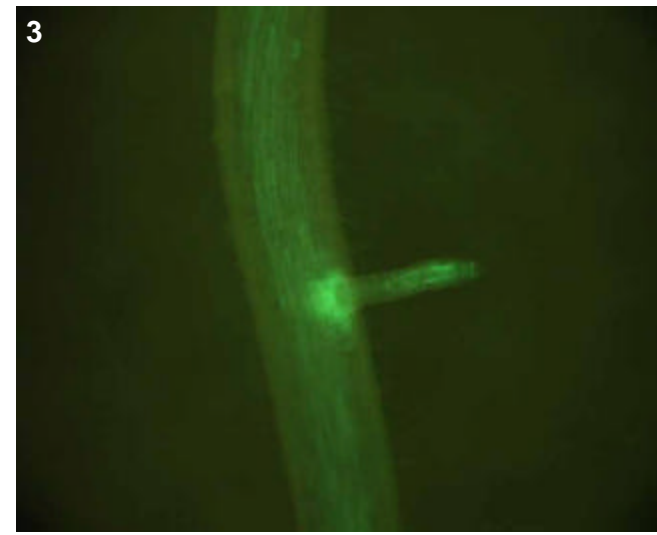
No GFP detected

**T1 in greenhouse?**

YES, 1 plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

3/5 seeds had expression.

## T1 seedling comments

This could be a valuable chlorophyll mutant line, 4 of the 5 seedlings were albinos, and all 4 were also GFP positive. I moved the one GFP- negative seedling to the greenhouse just in case it somehow contained the transgene.

# Genotype: ATC H03

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

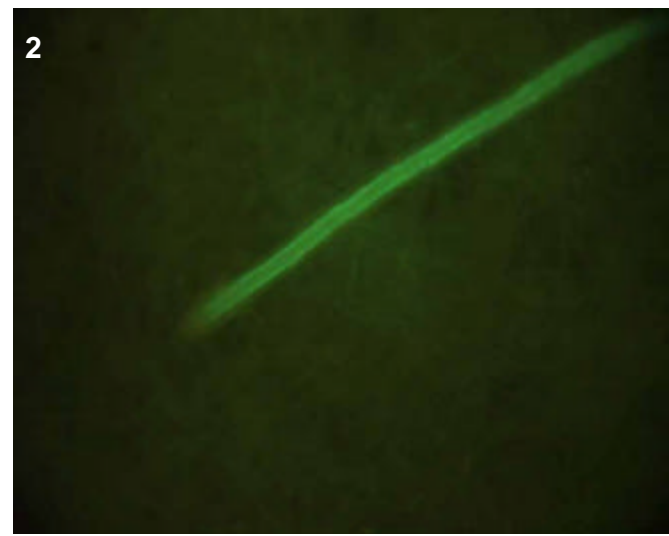
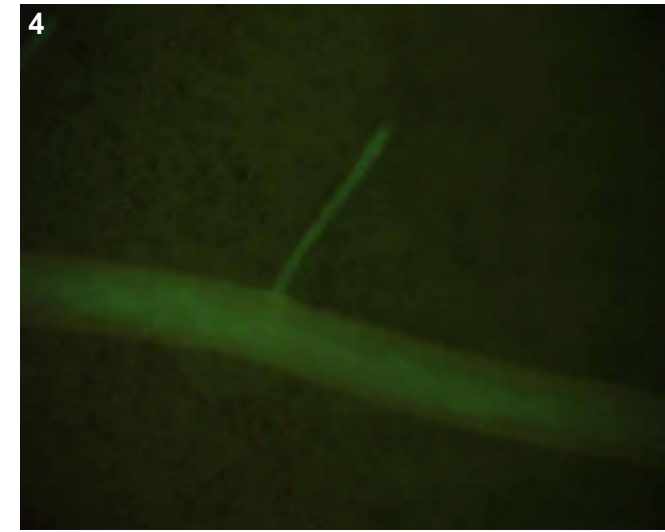
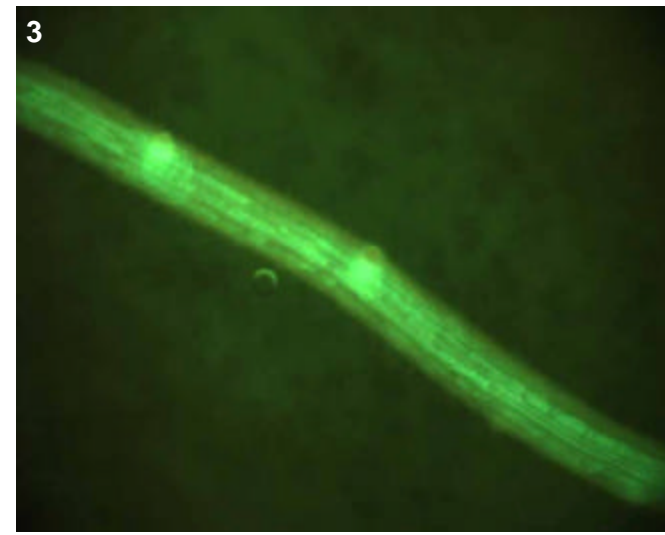
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

2/5 seeds had expression.

## T1 seedling comments

# Genotype: ATC H11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

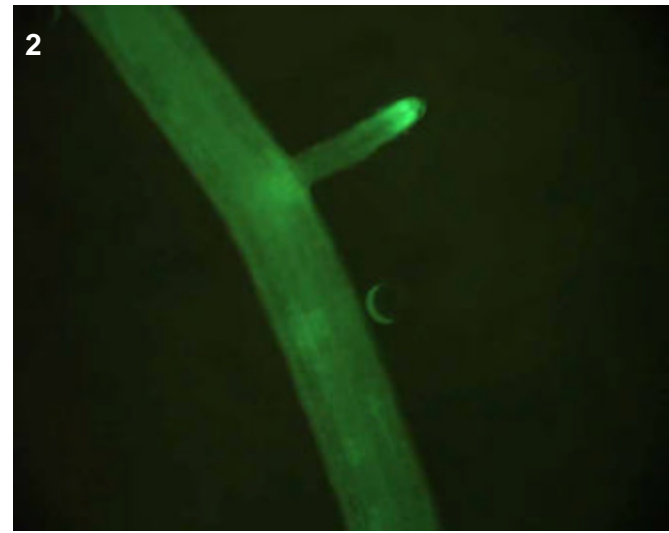
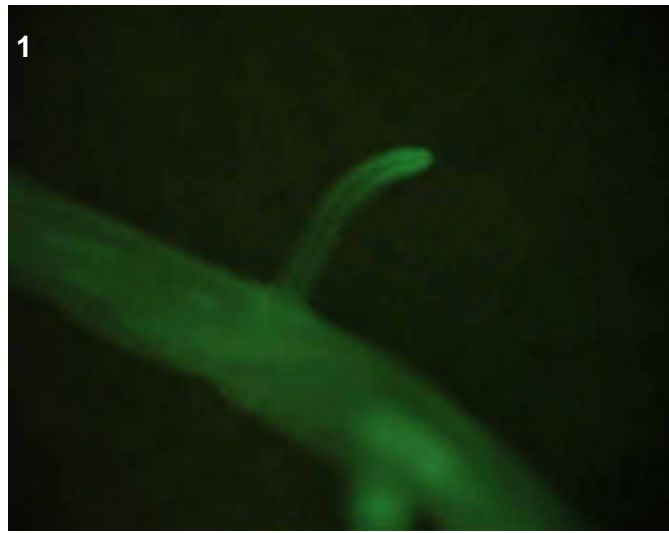
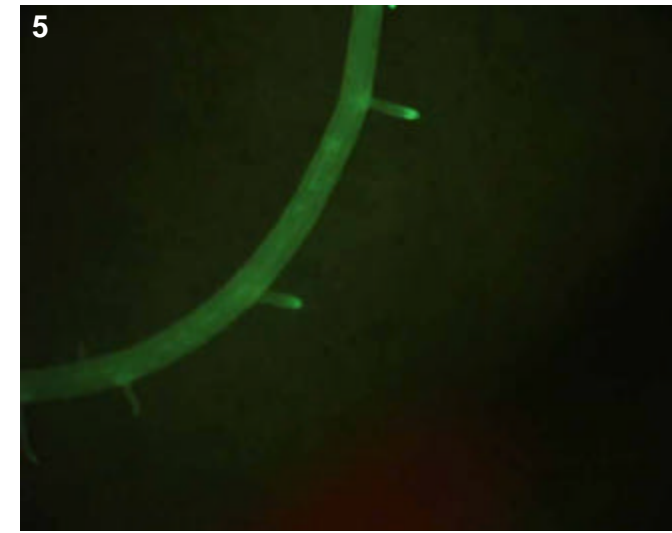
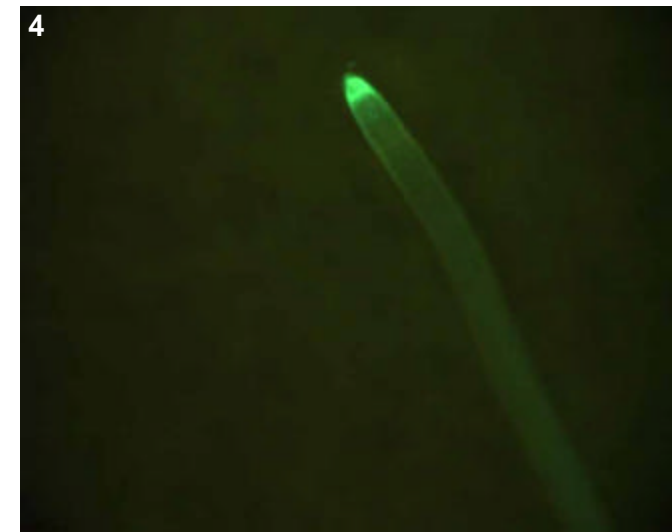
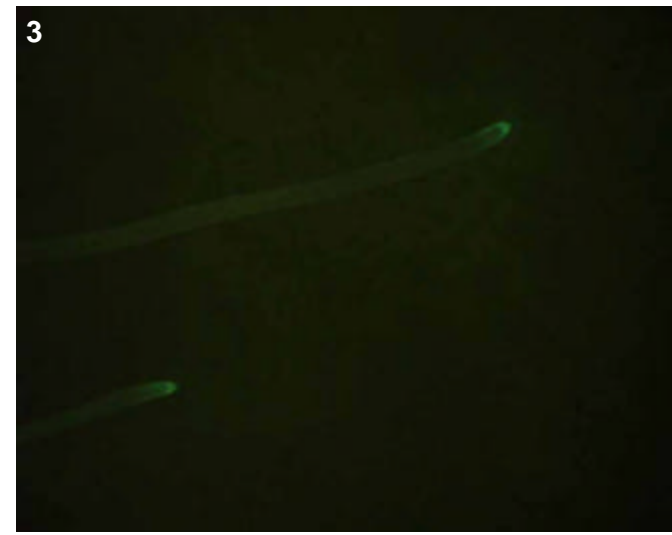
**T1 in greenhouse?**

YES, 1 GFP+ plant

**Confocal?**

WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Incredibly clear and bright cortical expression, especially in the lats as seen in pictures 1 and 2. Should be great for confocal imaging! There was some epidermal in the tips of crowns.

# Genotype: ATC H12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

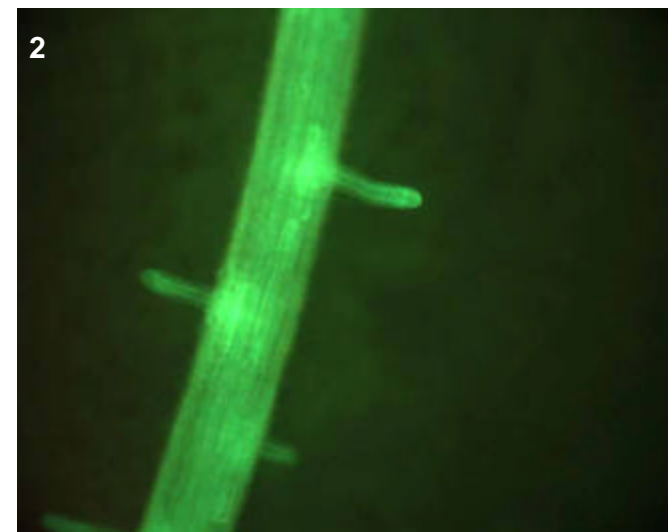
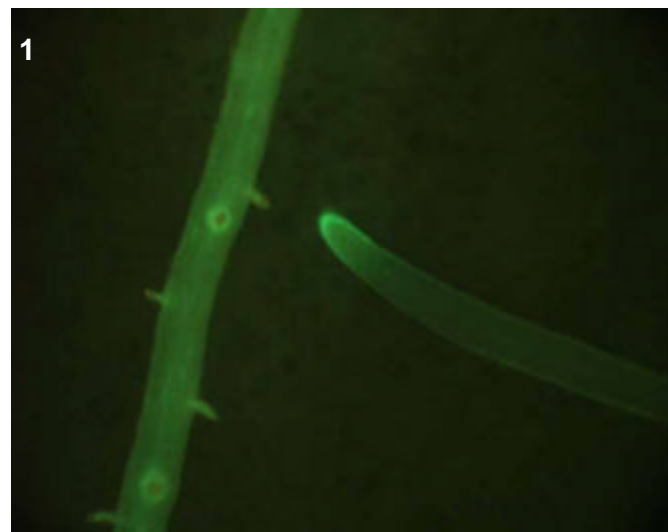
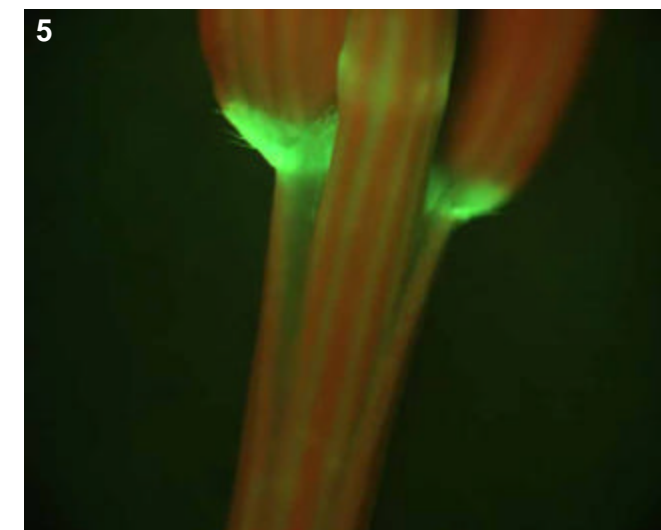
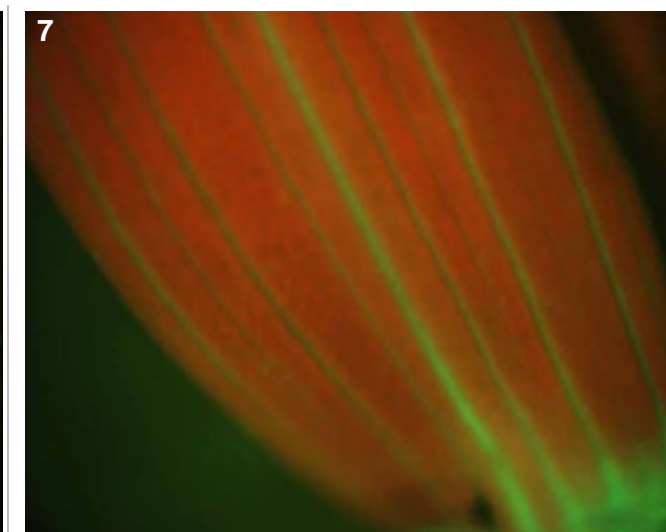
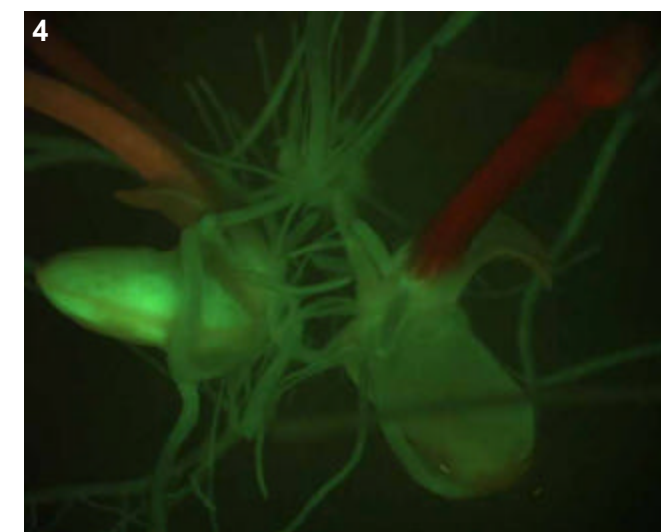
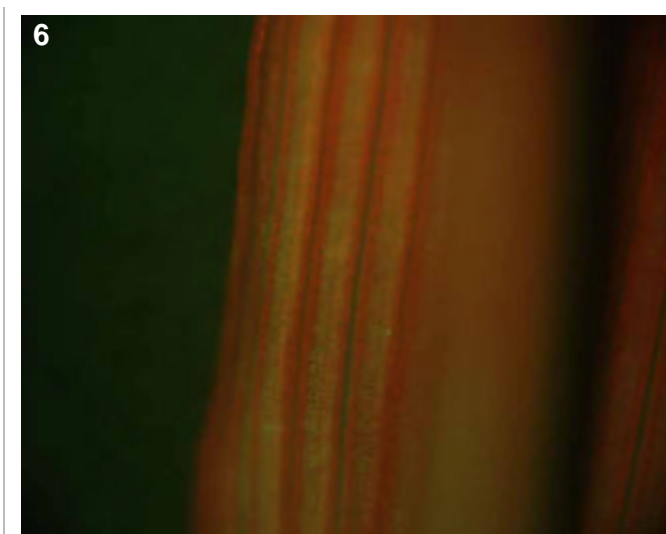
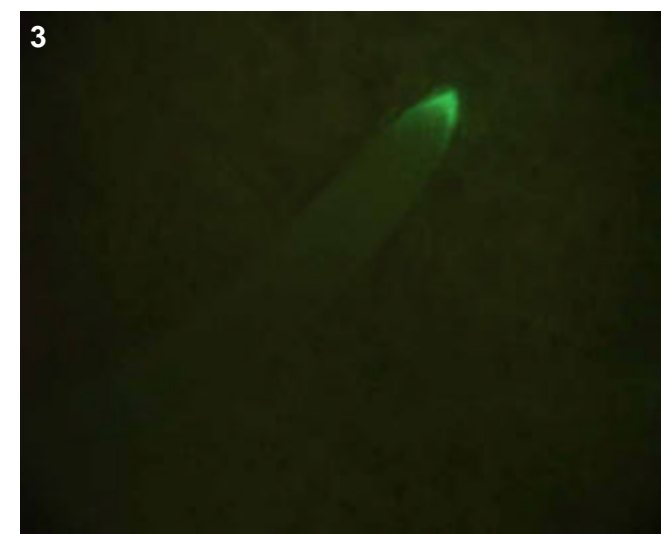
New pattern:

No GFP detected

T1 in greenhouse?  
YES, 3 GFP+ plants

Confocal?

Number T2 seed produced:



## T0 comments

## T1 seed comments

1/4 seeds had medium expression (no picture taken).

## T1 seedling comments

Note the interesting patterns on the leaf blade (see pics 6 and 7).

# Genotype: ATD A08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

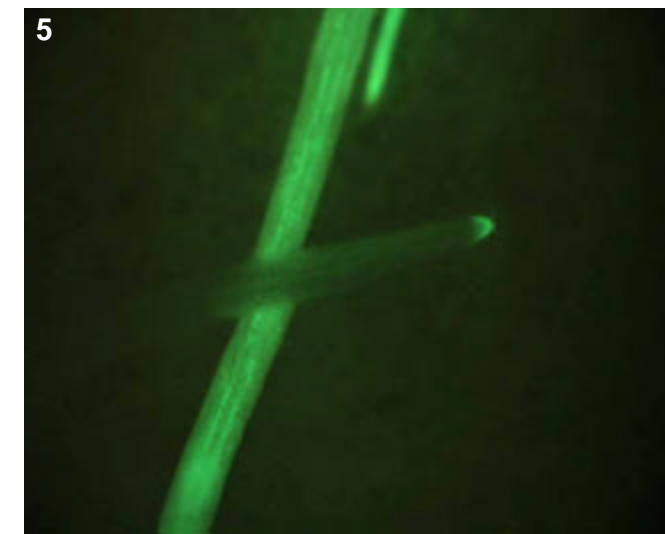
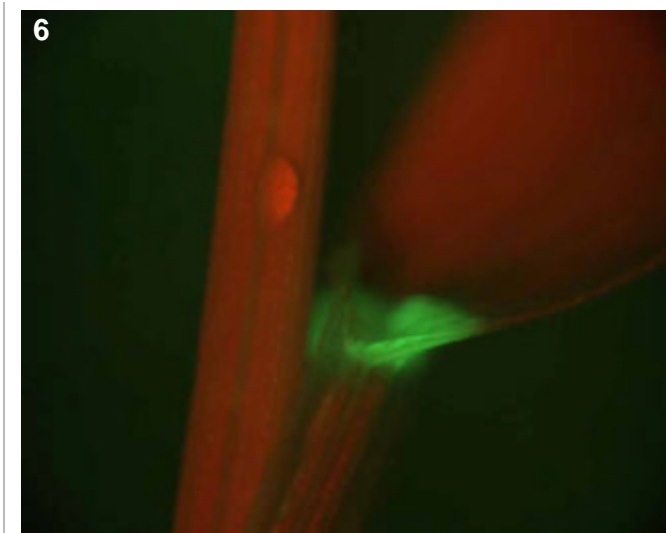
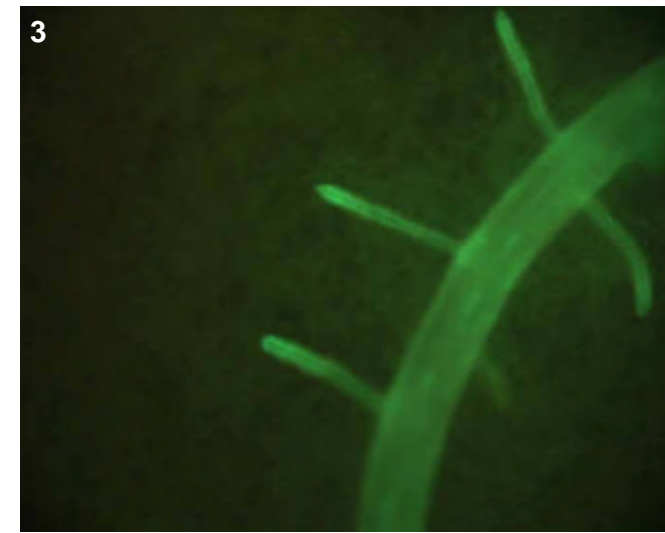
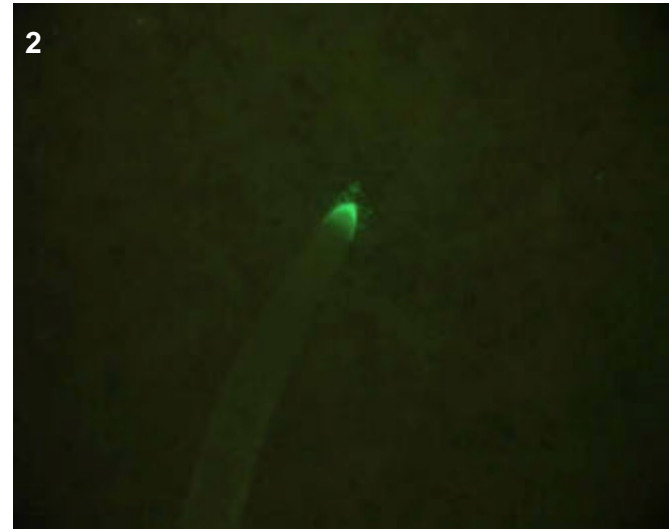
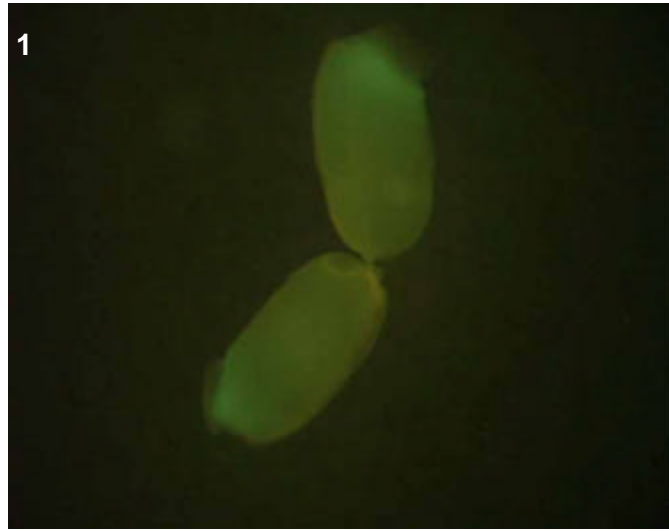
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

4/5 seeds had medium expression.

## T1 seedling comments

# Genotype: ATD A09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

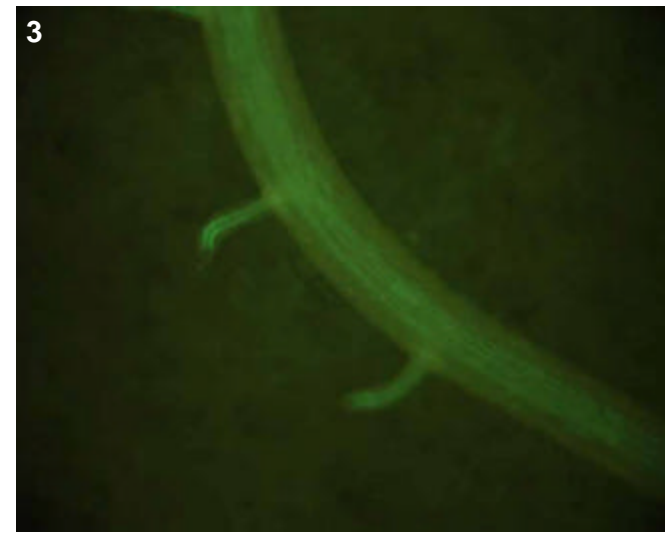
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

1/5 seeds had expression.

## T1 seedling comments

Medium root expression, faint shoot.

# Genotype: ATD A12

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

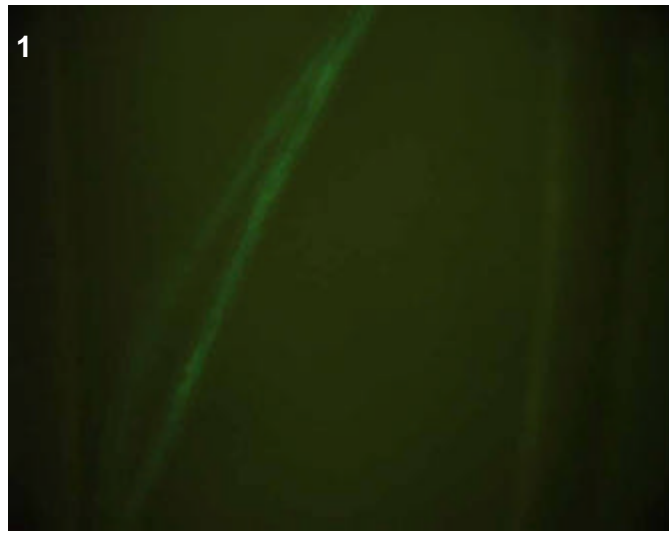
No GFP detected

**T1 in greenhouse?**  
YES, 1 GFP+ plant

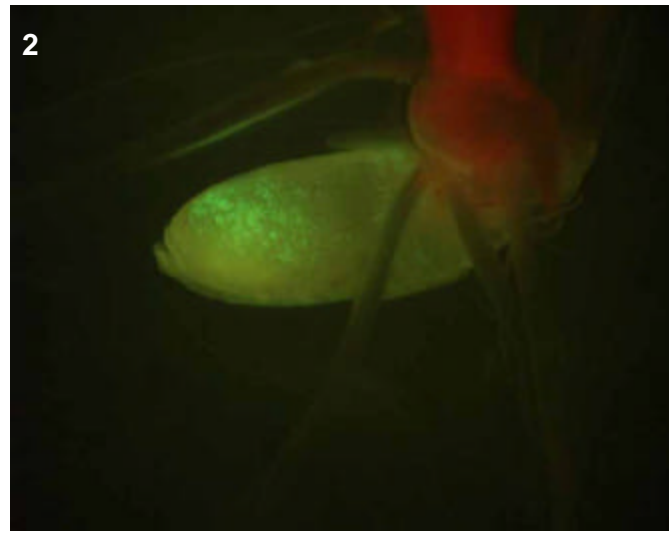
**Confocal?**

**Number T2 seed produced:**

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

Faint root stele, mostly in the young crowns (pic 1).

# Genotype: ATD B09

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-2

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

New pattern:

No GFP detected

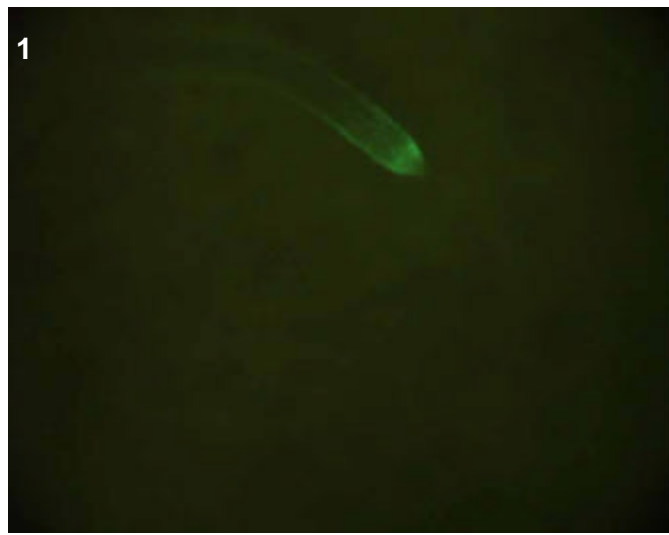
**T1 in greenhouse?**

YES, 1 GFP+ plant

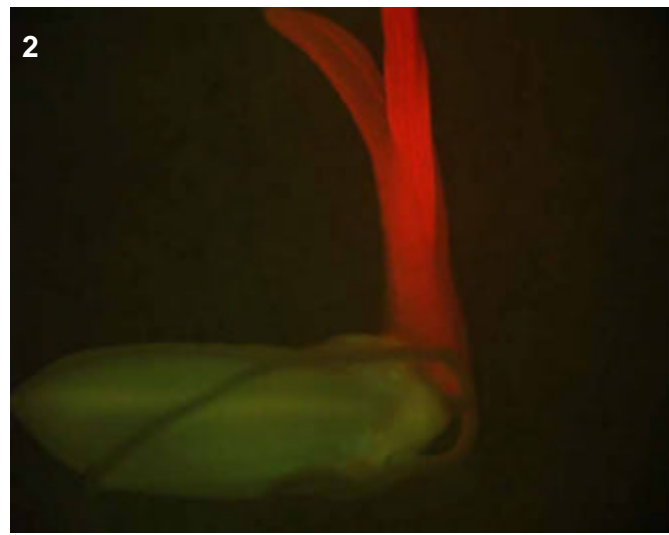
**Confocal?**

Number T2 seed produced:

1



2



## T0 comments

## T1 seed comments

## T1 seedling comments

There was just one small plant (pic 2) with two crown roots showing epidermal expression at the tips (pic 1).



# Genotype: ATD C05

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

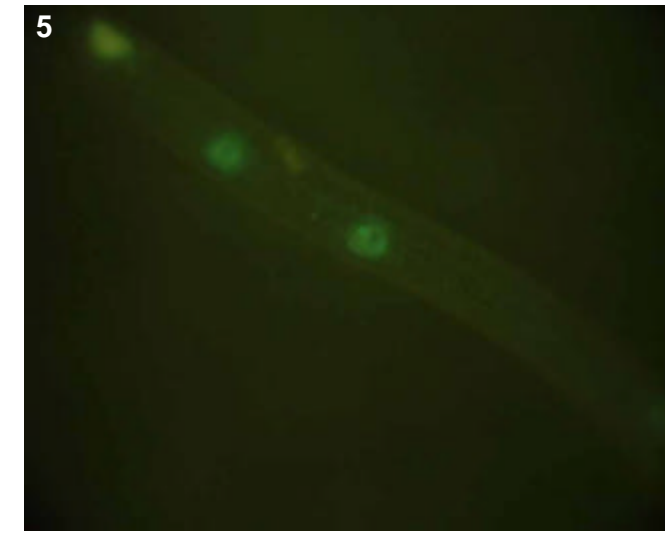
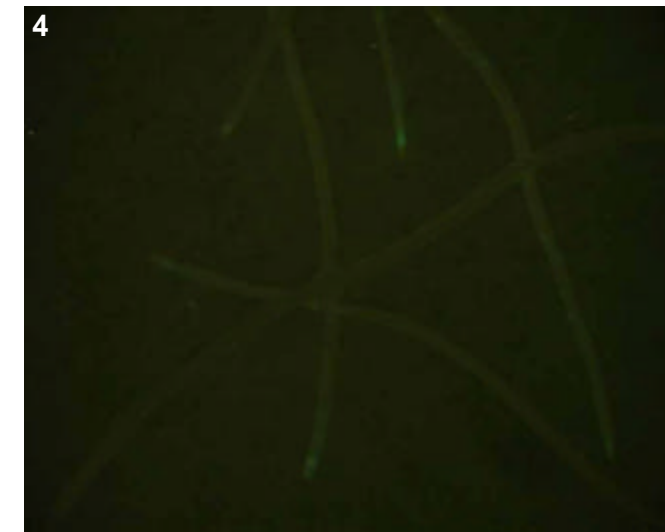
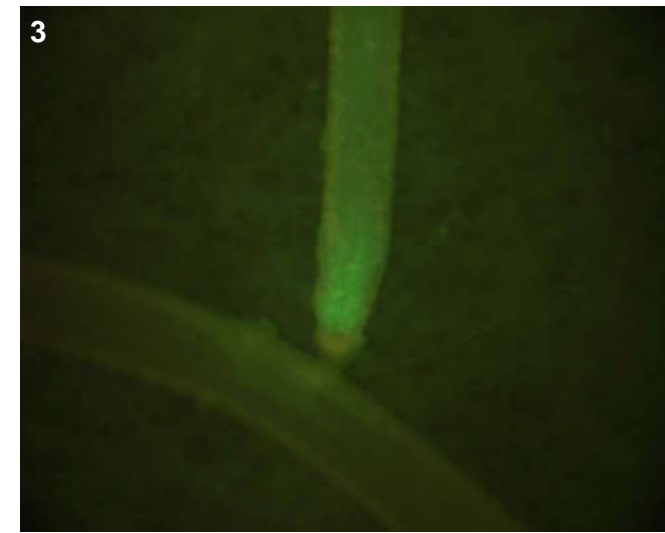
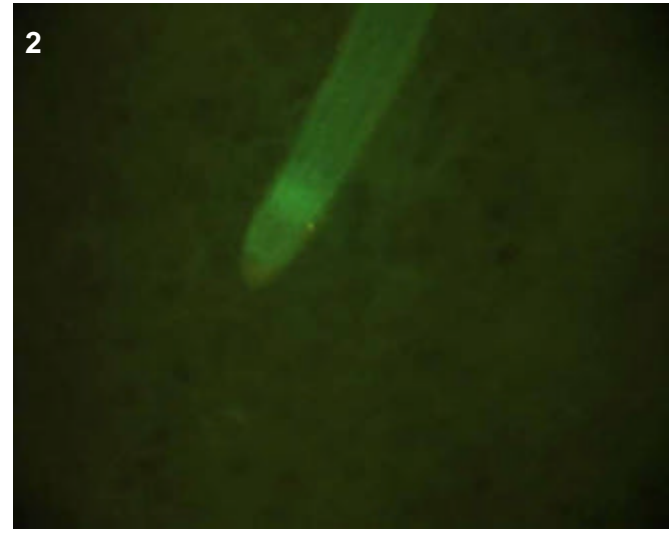
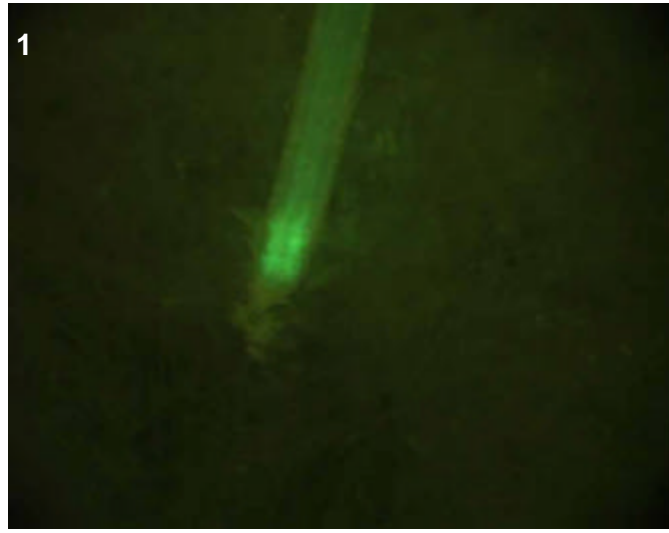
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?** WIP

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

A very interesting root mutant line--a very diminished seminal root and nearly no lateral roots. Mostly just long crown roots (pic 4) with bright initials in the cell division zone (pics 1-3). This would be great for confocal imaging. The shoot, though GFP negative, also appeared small.

# Genotype: ATD C08

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-7

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

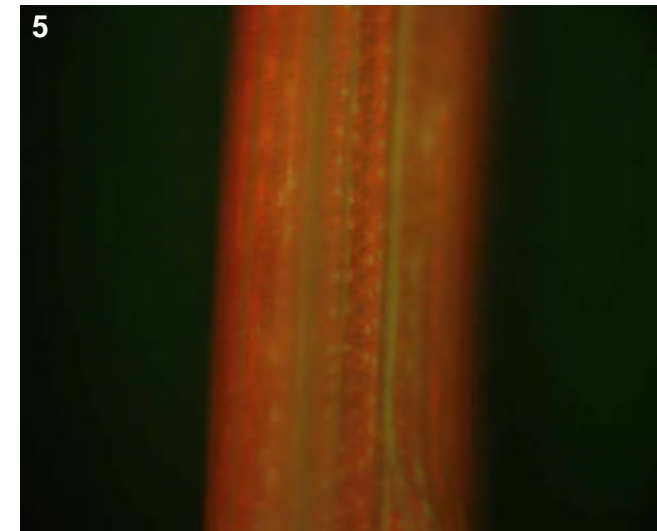
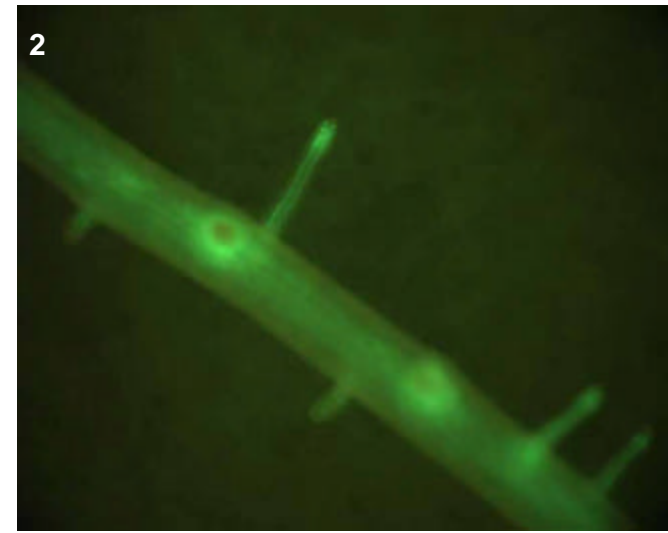
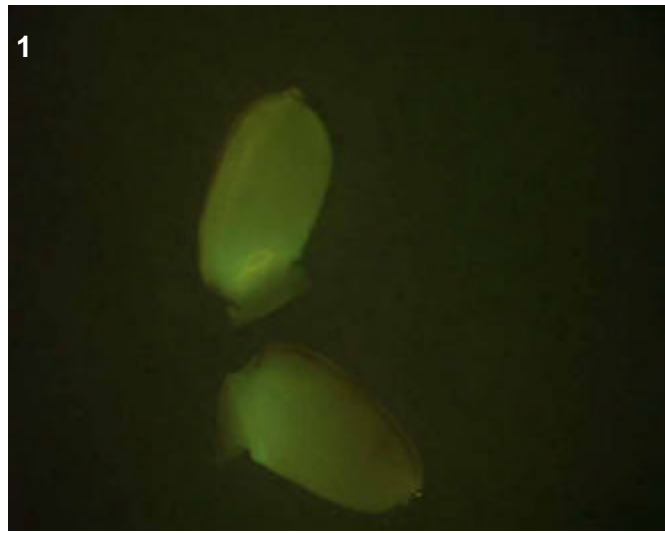
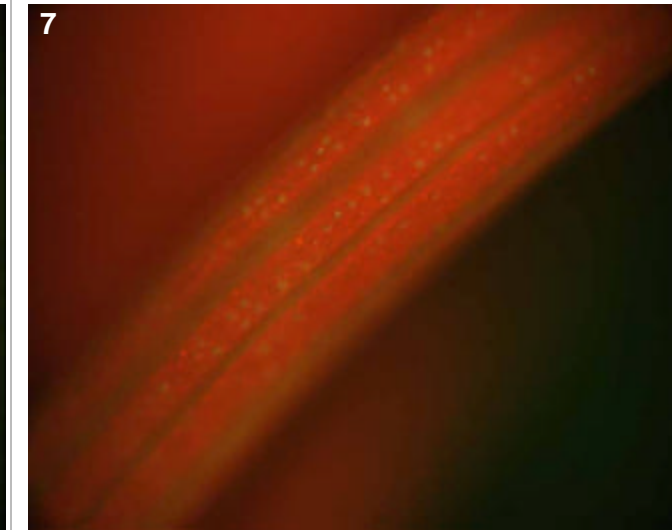
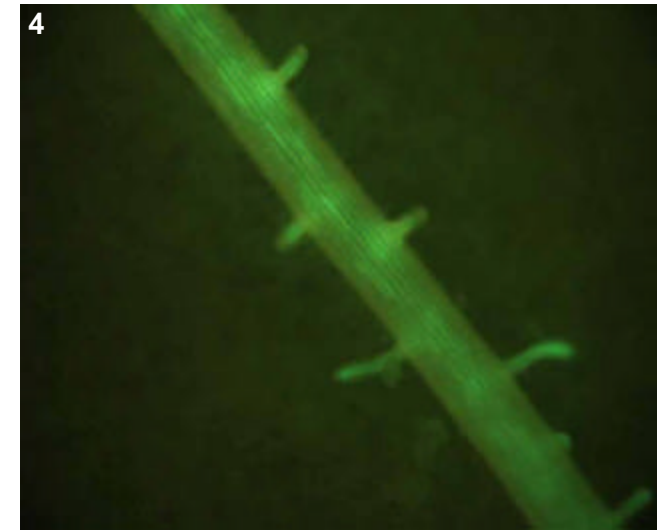
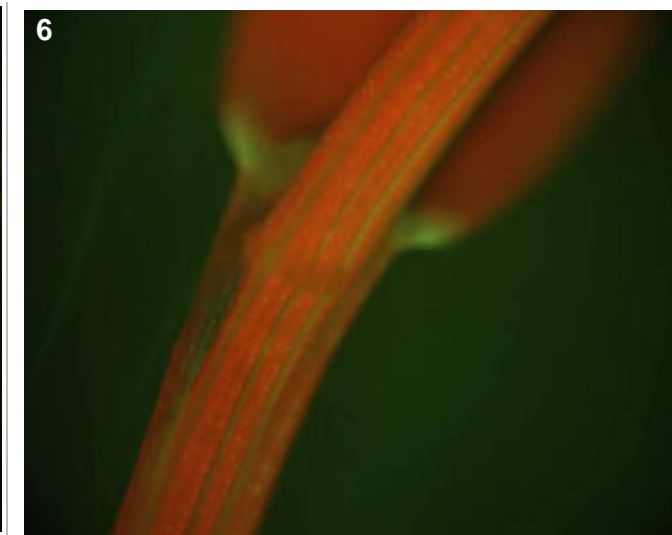
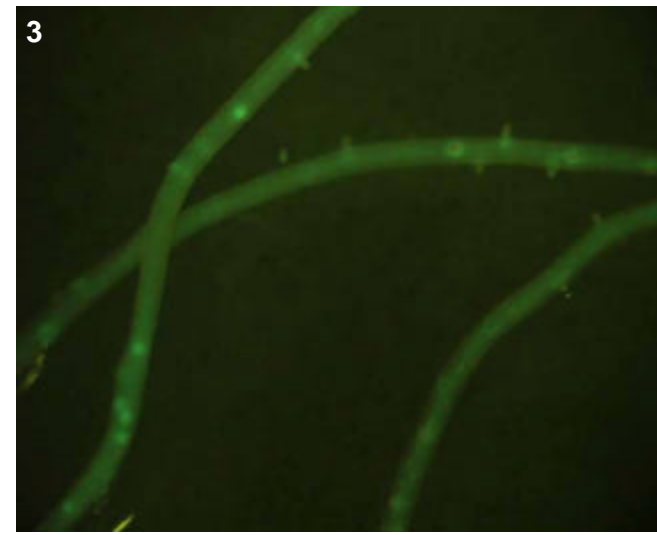
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

Number T2 seed produced:



## T0 comments

## T1 seed comments

2/5 seeds had faint expression.

## T1 seedling comments

The plants appear to be root mutants, having no crown roots, only seminals.

# Genotype: ATD C11

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-3

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

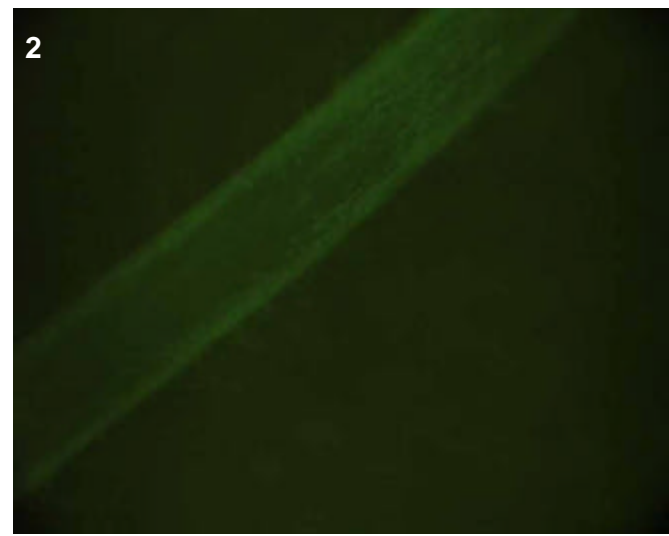
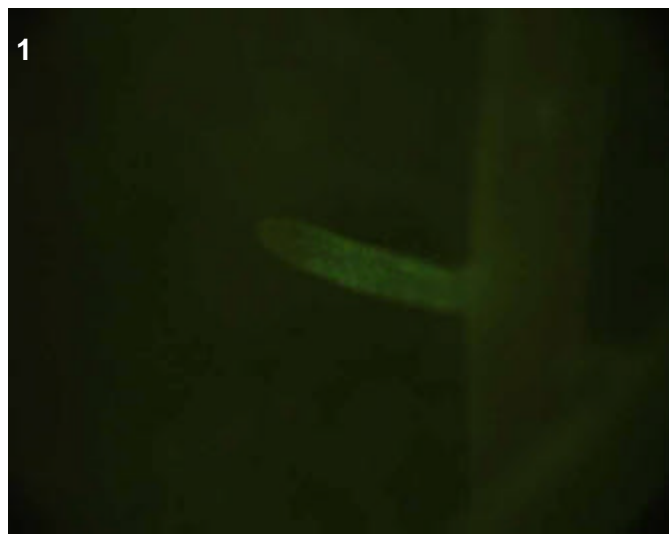
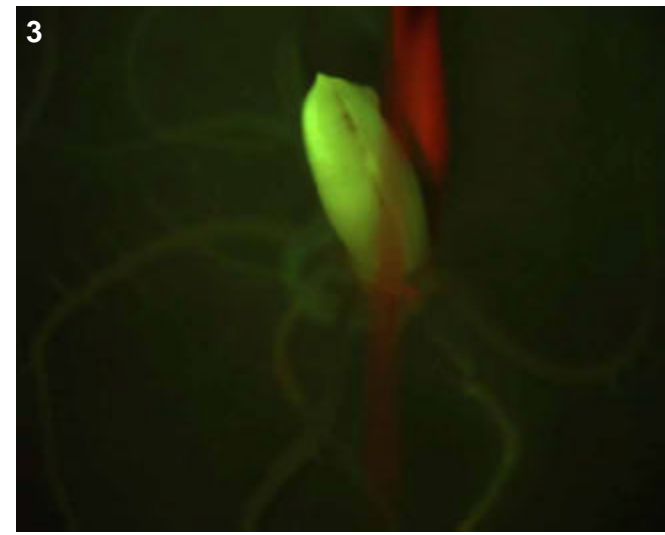
## T1 Mature

- T0 pattern verified:
- T0 pattern verified plus:
- New pattern:
- No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Looks like faint root epidermal.

# Genotype: ATD D06

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-6

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

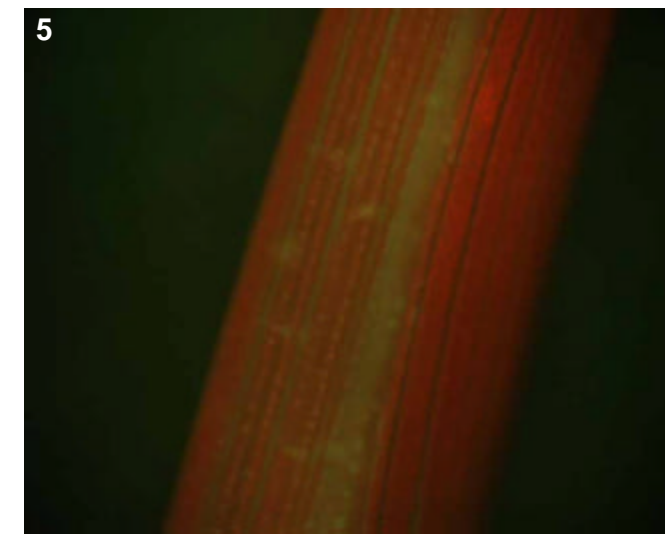
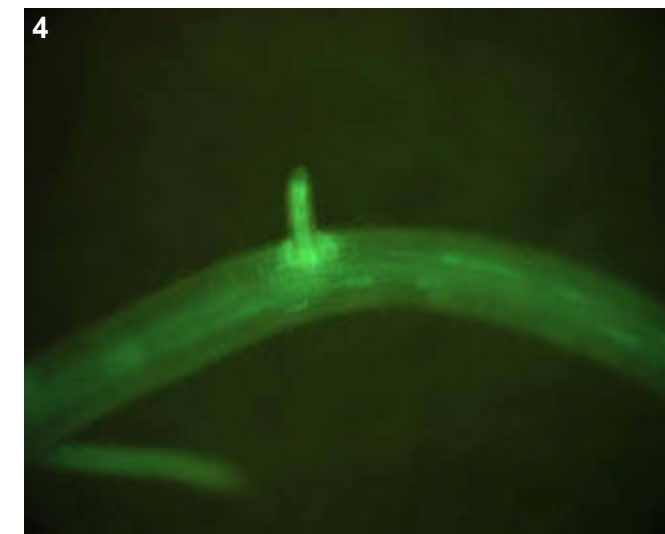
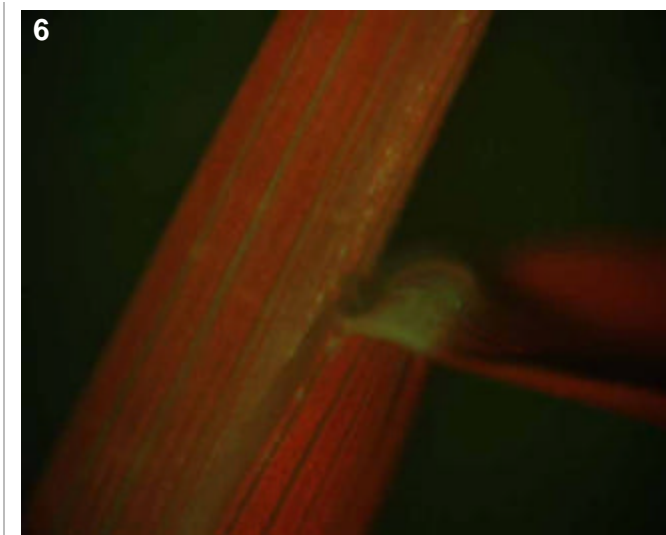
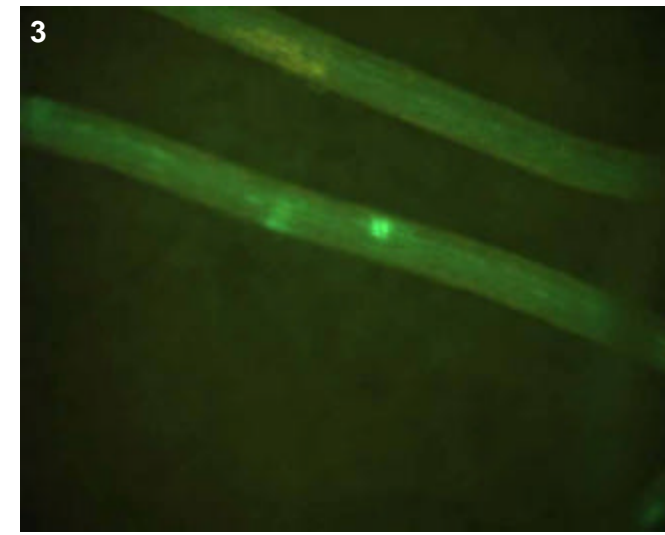
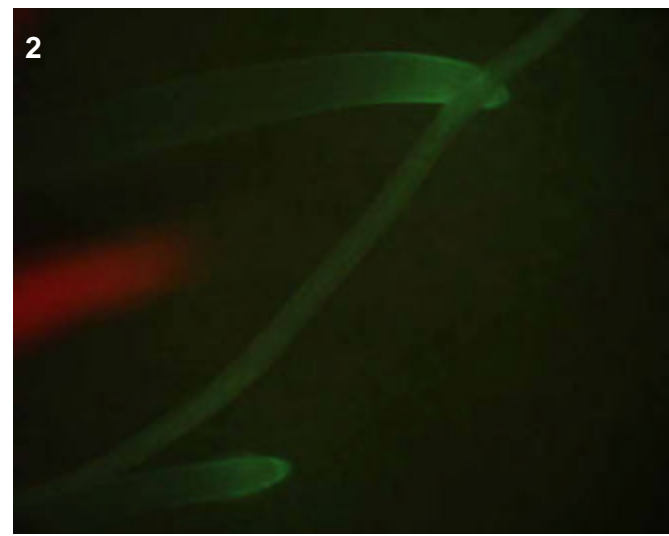
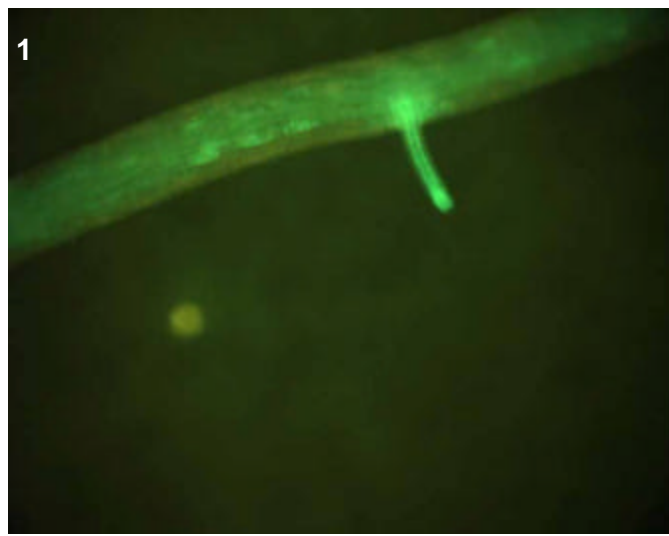
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 3 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

Bright epidermis/cortex in roots, with very bright laterals (pics 1-4). In shoot there were bright horizontal vascular elements (pics 5-6).

# Genotype: **ATD E05**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-5

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

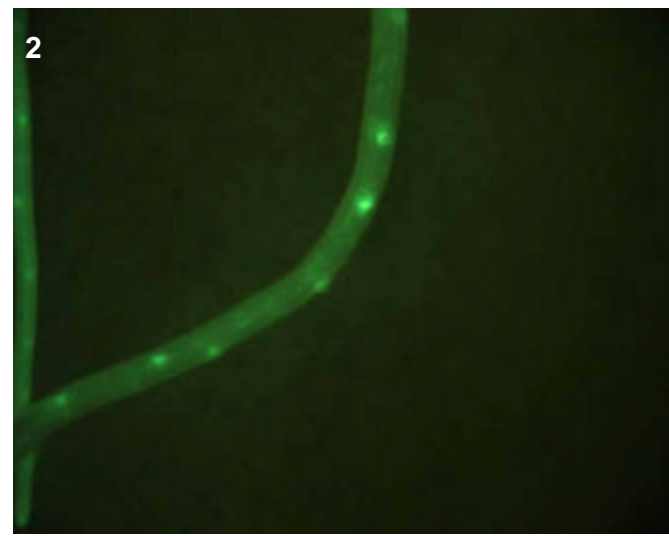
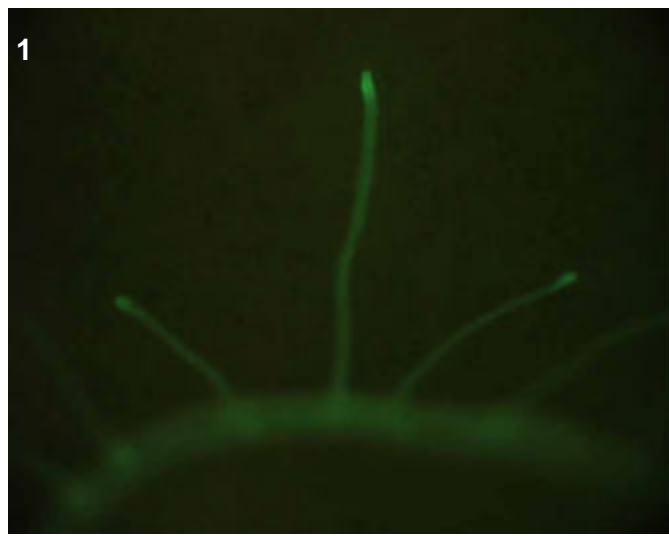
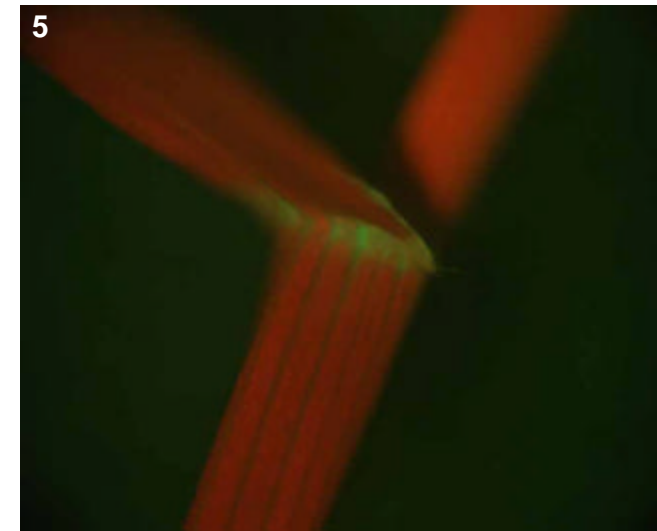
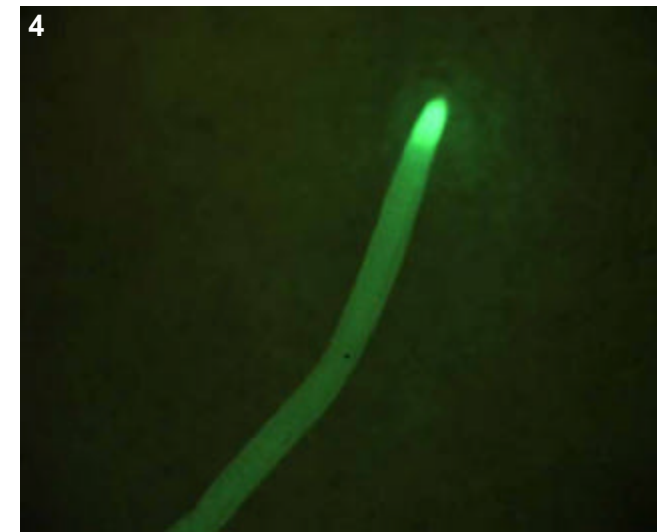
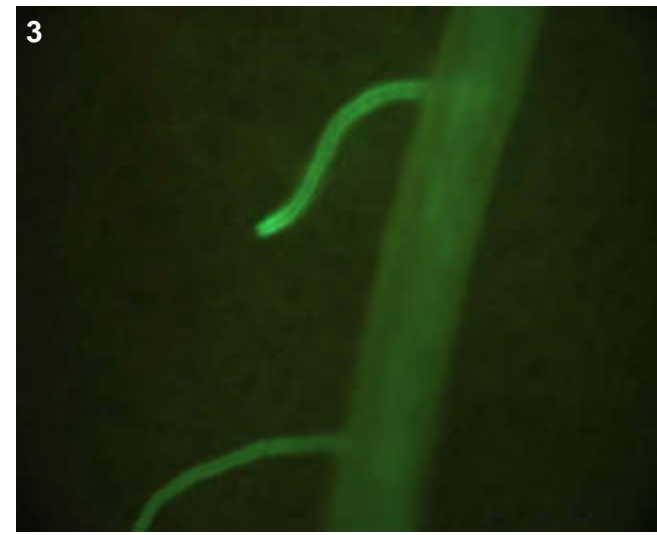
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments

# Genotype: **ATD G02**

## Screened

- T0 mature plant
- T1 seed
- T1 seedling
- T1 mature plants

## Expression

- None
- Bright
- Medium
- Weak
- Unsure

## Pictures

T0 mature plant:

T1 seed/seedling: 1-4

T1 mature plant:

## T0 Flower

- YES
- POSSIBLE
- Stamen: anther
- Stamen: filament
- Carpel: stigma
- Carpel: style
- Carpel: ovary
- Carpel: base
- Lemma/palea
- Lodicule
- Rachilla
- Sterile lemma
- Pedicel
- Guard cells
- Trichomes
- Vascular

## T0 Blade

- YES
- POSSIBLE
- Vascular
- Guard cells
- Trichomes
- Mesophyll

## T0 Sheath

- YES
- POSSIBLE
- Collar
- Vascular
- Trichomes
- Guard cells
- Mesophyll

## T1 Seed

- YES
- POSSIBLE
- Embryo
- Coleorhiza
- Scutellum
- Aleurone/Endo.
- Vasc. bundle

## T1 Seedling

- YES
- POSSIBLE
- SHOOT
- ROOT
- ENDOSPERM
- Coleoptile
- Sheath tissue
- Blade tissue
- Leaf tip
- Collar
- Trichomes
- Guard cells
- S. vascular
- Seminal root
- Crown roots
- Lateral roots
- Root cap
- Root apex
- R. stele
- R. cortex/end.
- R. epidermis
- Constitutive

## T1 Mature

T0 pattern verified:

T0 pattern verified plus:

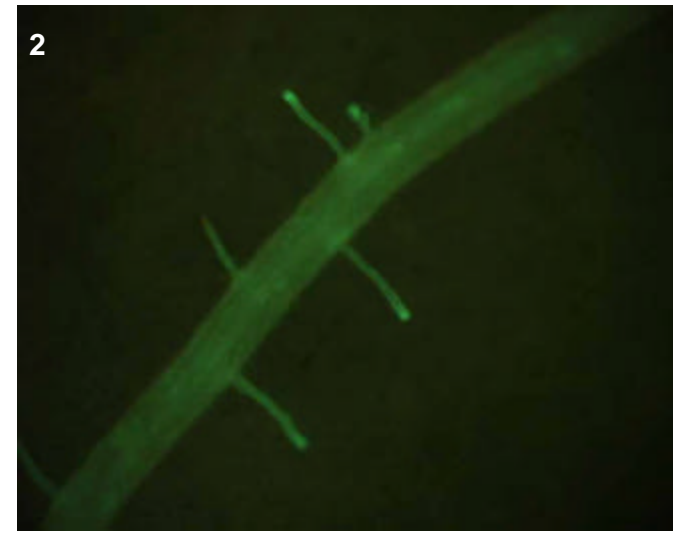
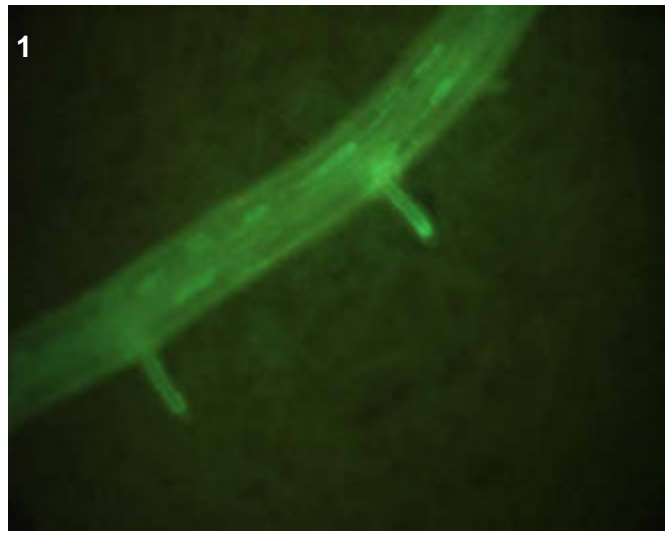
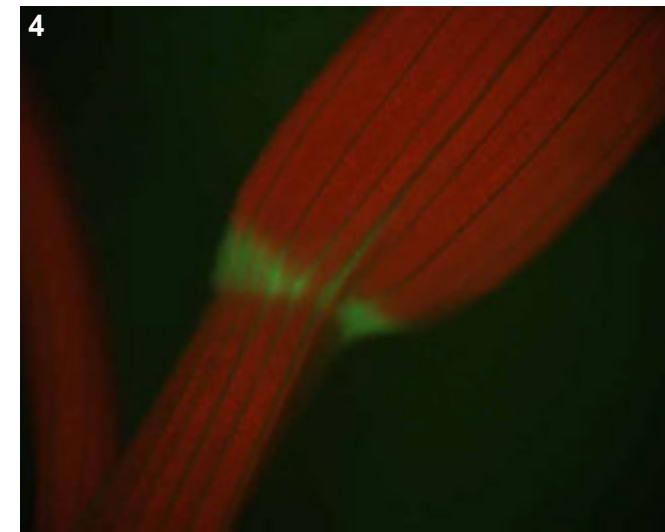
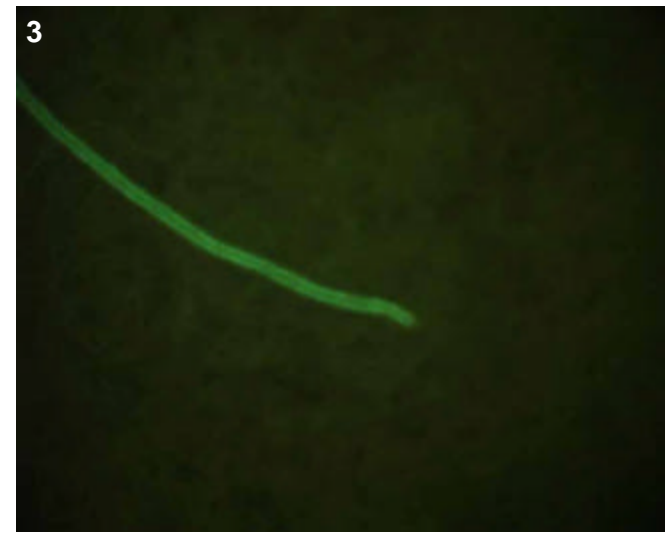
New pattern:

No GFP detected

**T1 in greenhouse?**  
YES, 2 GFP+ plants

**Confocal?**

**Number T2 seed produced:**



## T0 comments

## T1 seed comments

## T1 seedling comments