

Ramblin'TM

Petunia x hybrida / trailing

GERMINATION – Stage 0

Media pH: 5.8

GERMINATION – Stage 1

Expect radicle emergence in 3 – 4 days.

Visual Note: At the end of Stage 1, the radicle will have emerged and roots are beginning to form.

Moisture: Moisture level 5 (saturated): Water is easily observed in media. Seeds may be covered with a light layer of coarse vermiculite to maintain moisture levels. Drench pelleted seed thoroughly to encourage breakdown of the pellet. Media should not remain saturated for more than 48 hours.

Media Temperature: 72 – 76°F (22-24 C)

Fertilizer: If desired, feed at 25 – 35 ppm with a fertilizer containing both calcium and potassium nitrates.

Media EC: 0.8 – 1.0

Lighting: 20 – 1000 foot candles (200 – 10,000 lux) will improve germination dramatically compared to Petunia seed germinated in the dark.

GERMINATION – Stage 2

The development of a good root system is key to a quality Petunia plug. Emphasis should be directed at the development of the roots through careful monitoring of temperature, water and fertilizer management.

Visual Note: At the end of Stage 2, germination is completed. The roots are developing, a stem is present and the cotyledons have expanded.

Moisture: Moisture level 4 (wet): Media is wet to the touch, but not saturated. Reduced moisture levels encourage roots to penetrate into the media.

Media Temperature: 65 – 68°F (18 – 20°C)

Fertilizer: Alternate between a calcium and ammonium based fertilizers at 50 – 75 ppm nitrogen. In regions with high light intensity, ammonium will promote leaf and shoot development.

Media EC: 1.2 – 1.5

Lighting: Provide 3000 – 5000 foot candles (30,000 – 50,000 lux). If desired, supplemental lighting at 400 foot candles (4000 lux) for a 16-hour day will initiate an even earlier flower bud development.

GERMINATION – Stage 3

Producing a high quality Petunia plug is dependent upon careful water management during Stage 3.

Visual Note: At the end of Stage 3, the roots should be penetrating the plug cell and the first true leaves have developed.

Moisture: Alternate moisture level 4/1. Moisture level 4 (wet): Media is wet to the touch, but not saturated. Moisture level 1 (dry) Media has changed color to a very light brown. Petunia roots require high levels of oxygen once roots have reached 1/2 inch in length.

Humidity: 40 – 50% at night.

Media Temperature: 65 – 68°F (18 – 20°C).

Fertilizer: Alternate between a calcium and ammonium based fertilizers at 100 – 150 ppm nitrogen. For more shoot growth, add an additional ammonium treatment to the schedule. To prevent stretching, reduce ammonium and apply only calcium-based fertilizers. Yellow mature leaves may indicate insufficient ammonium and phosphorus levels.

Media EC: 1.5 – 1.75

Lighting: Provide 3000 – 5000 foot candles (30,000 – 50,000 lux). Continue and increase supplemental lighting to 450 – 600 foot candles (4500 – 6000 lux) to induce early flowering.

Growth Regulators: Applications of B-Nine (daminozide) at 2500 ppm after the first true leaves have appeared are recommended to keep the plants compact in the plug. Petunias are also responsive to DIF, Bonzi (paclobutrazol) and Sumagic (uniconazol).

GERMINATION – Stage 4

Begin toning the Petunia seedlings by manipulating water, temperature and nutrients.

Visual Note: At the end of Stage 4, the roots should hold the plug mass together easily. The shoots should have 2 – 3 sets of true leaves.

Moisture: Alternate moisture level 4/1. Moisture level 4 (wet): Media is wet to the touch, but not saturated. Moisture level 1 (dry) Media has changed color to a very light brown. Media saturated for more than 72 hours in combination with temperatures below 60°F (16°C) may promote tip abortion.

Media Temperature: 60 – 62°F (16 – 17°C). Temperatures below 59°F (15°C), combined with low light levels, will delay flower initiation.

Fertilizer: Alternate between a calcium and ammonium based fertilizers at 100 – 200 ppm nitrogen. Supplemental calcium and magnesium, (13-2-13-6CA-3Mg) may be needed to promote additional root growth. Strap leaves may indicate a calcium deficiency.

Media EC: 1.5 – 2.0

Lighting: Provide 3000 – 5000 foot candles (30,000 – 50,000 lux). Supplementary light can be provided for a 14 – 24-hour day.

GROWING ON

Transplant as soon as root system is established. Root bound plugs do not transplant well. 'Ramblin' Petunia use less growth regulators and are not as daylength sensitive as other trailing type Petunias, making 'Ramblin' very economical to grow.

Media pH: 5.8 – 6.2

Moisture: Alternate moisture level 4/1. Moisture level 4 (wet): Media is wet to the touch, but not saturated. Moisture level 1 (dry) Media has changed color to a very light brown. Good air circulation and water management is essential for the production of healthy Petunias.

Temperature: After transplant, Petunias require temperatures > 59°F (15°C) nights for the first 4 – 6 weeks to initiate flower bud development. Note: After bud set, the night temperatures can be lowered to 55°F (13°C) to encourage basal branching and compactness. However, lower temperatures may also substantially decrease the number of flowers initiated.

Fertilizer: Use a complete fertilizer at a rate of 150 – 200 ppm nitrogen.

Media EC: 1.5 – 2.0

Lighting: Provide 3000 – 5000 foot candles (30,000 – 50,000 lux). Petunias need long days to flower. To initiate bud under short days, extend day length to 14 hours. Under long day, low light conditions, supplemental lighting of 450 – 700 foot candles may be necessary.

Growth Regulators: B-Nine (daminozide) as needed at 3500 ppm. 'Ramblin' Petunias are also responsive to Bonzi (paclobutrazol) and Sumagic (uniconazol). DIF will also control growth of 'Ramblin' Petunias.

Common Pests: Aphids

Common Diseases: Botrytis, Rhizoctonia

SCHEDULING

A 3.5 – 4-inch (8 – 10 cm.) crop of 'Ramblin' Petunias are easy to finish and won't take over the bench!

Plug crop time: 4 – 5 weeks

4 inch crop time from transplant: 6 – 7 weeks

10 inch hanging baskets from transplant: 6 – 7 weeks

GARDEN PERFORMANCE

'Ramblin' trailing Petunias are profitable and grower friendly. They were bred to have a rambling plant habit – growing only 8 – 10 inches tall, but spreading to 2.5 feet. These low growing, trailing Petunias are very showy in large garden beds, hanging baskets and mixed containers.

GARDEN SPECIFICATIONS

Light: Full sun

Garden Height: 10 – 14 inches (25 – 35 cm)

Garden Width: 24 – 30 inches (60 – 75 cm)

USDA Hardiness Zone: 8

AHS Heat Zone: 12 – 1