



Plush™, Ramblin'™

PETUNIA X HYBRIDA / TRAILING

Minimum Germination Rate: 85%

Seed Product Form: Pelleted, raw

FLOWERING

Time frame when plants are receptive to flower initiation: Days 18 – 24; 3 – 6 leaves present.

Flowering Type: Facultative long-day plant – long days enhance flowering.

Specific Flowering Mechanism: Flowering is affected by daylength, irradiance and temperature.

PLUG CULTURE

Germination: Optimum conditions for seedling development that begins the day the crop is sown until cotyledon expansion. Expect radicle emergence in 3 – 5 days.

Cover: Seeds may be covered with a thin layer of coarse vermiculite to maintain moisture levels.

Media: • pH: 5.5 – 5.8
• EC: 0.75 – 1

Light: Light is necessary for germination. Provide a light source of 10 – 100 foot candles (100 – 1,000 lux) if utilizing a chamber.

Moisture: Saturated (5) for days 1 – 3 or until radicle emergence. On days 4 – 6 reduce moisture to wet (4). Reduce further beginning day 7 to medium (2).

Humidity: 100% until radicle emergence then reduce to 40%.

Dehumidify: Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Temperature: 72° – 76°F (22° – 24°C) until radicle emergence. Gradually reduce to 65° – 68°F (18° – 20°C) as cotyledons expand.

Plug Bulking/Flower Initiation: Optimum conditions during the vegetative period, beginning at cotyledon expansion, needed for the root to reach the edge of the plug cell AND to make the plant receptive to flower initiation.

Media: • pH: 5.5 – 5.8 Yellow upper leaves may indicate iron deficiencies when pH is > 6.6
• EC: 1 – 1.5

Light: Petunias need long days to flower. To initiate bud under short days, extend day length to 13.5 – 14 hours. Under long day, low light conditions, supplemental lighting of 350 – 500 foot candles (3,500 – 5,000 lux) may be necessary.

Temperature: After transplant, Petunias require temperatures > 55°F (13°C) nights for the first 6 weeks to initiate flower bud development. After bud set, the night temperatures can be lowered to 50°F (10°C) to encourage basal branching and compactness. However, lower temperatures may also substantially decrease the number of flowers initiated. Downward cupping of leaves may indicate too cool temperatures in combination with overwatering.

Average Daily Temperature (ADT): 67°F (19°C)

Moisture: Alternate between moisture levels wet (4) and dry (1) Allow media to approach level (1) before re-saturating to level (4).

Humidity: 40 – 50%

Dehumidify: Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Fertilizers: Upon initial germination begin feeding early on with 50 ppm nitrogen. Pay attention to the addition of boron since low boron can cause tip abortion. Feed established seedlings at 100 – 150 ppm nitrogen. Under high light conditions, apply an ammonium-based feed (17-5-17). Under low light conditions, apply a calcium-based feed (14-4-14). Under high light and long or extended days, an ammonium-based feed (20-10-20) is preferred. For more shoot growth, add an additional ammonium treatment to the schedule. To prevent stretching under low light and cool temperatures, reduce ammonium and apply only calcium-based fertilizer.

Growth Regulators: Petunias are responsive to B-Nine (daminozide) at 2,500 – 5,000 ppm. Apply B-Nine before the buds are visible. Late applications will distort flower color and size. Also responds to DIF treatments, Bonzi (paclobutrazol), Sumagic (uniconazole) or B-Nine/Cycocel (chlormequat chloride) tank mix.

GROWING ON

Transplant Ready: 4 – 5 weeks from sow in a '288' tray. Transplant as soon as root system is established. Root bound plugs do not transplant well. Plush and Ramblin' Petunia require less growth regulators and are not as daylength sensitive as other trailing types of Petunias, making them very economical to grow. Grow Plush and Ramblin' similar to other spreading Petunias.

Finish Bulking/Flower Initiation: Optimum conditions during the vegetative period, beginning at transplant, needed for the root to reach the edge of the container AND to make the plant receptive to flower initiation.

Media: • pH: 5.5 – 5.8
• EC: 1.5 – 2

Light: 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 350 – 500 foot candles (3,500 – 5,000 lux) may be necessary. Plush is very early flowering under short day and low light conditions.

Temperature: After transplant, Petunias require temperatures > 55°F (13°C) nights for the first 6 weeks to initiate flower bud development. After bud set, the night temperatures can be lowered to 50°F (10°C) to encourage basal branching and compactness. However, lower temperatures may also substantially decrease the number of flowers initiated. Downward cupping of leaves may indicate too cool temperatures in combination with overwatering.

Average Daily Temperature (ADT): 67°F (19°C)

Moisture: Alternate between wet (4) and dry (1) Allow media to approach level (1) before re-saturating to level (4).

Humidity: 40 – 50%

Dehumidify: Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

Fertilizers: Feed at 100 – 200 ppm nitrogen. Under high light conditions, apply an ammonium-based feed (17-5-17). To prevent stretching under low light conditions, apply a calcium-based feed (14-4-14). Under high light and long or extended days, an ammonium-based feed (20-10-20) is preferred.

Growth Regulators: B-Nine (daminozide) as needed at 3,500 ppm. Apply B-Nine before the buds are visible. Late applications will distort flower color and size. Also responds to DIF treatments, Bonzi (paclobutrazol), Sumagic (uniconazole) or B-Nine/Cycocel (chlormequat chloride) tank mix.

Common Diseases: Botrytis, Rhizoctonia

Common Pests: Aphids

PRODUCT USE	GARDEN SPECIFICATIONS
Pots, containers, trellises, hanging baskets, mass plantings, retaining walls	Light: Full sun USDA Hardiness Zone: 8 AHS Heat Zone: 12 – 1

	Garden Height	Garden Width
Plush	10 – 14" (25 – 35 cm)	24 – 28" (60 – 70 cm)
Ramblin'	10 – 14" (25 – 35 cm)	30 – 36" (75 – 90 cm)

PETUNIA SCHEDULING IN WEEKS

	Plush	Ramblin'
Total crop time	9 – 11	10 – 12
'288' plug crop time	4 – 5	4 – 5
Transplant to finish crop time		
4" crop	4 – 5	5 – 6
10" hanging basket	6 – 8	7 – 8

Note: These suggestions are only guidelines and may have to be altered to meet individual grower's needs. Check all chemical labels to verify registration for use in your region.