

Fuseables[®] Petunia

Petunia x hybrida

Approximate seed count (multi-pelleted seed): 850 to 935 S./oz. (31 to 33 S./g)

Plug Production

Media

Use a well-drained, disease-free media with a pH of 5.5 to 6.0 and an EC of 0.75 mS/cm (1:2 extraction).

Sowing

Can be produced in a 288, 105/128, 72 liner size plug tray, but recommend 105/128 cells or larger. Do not cover the seed. Water adequately after sowing to completely dissolve the pellet.

Stage 1 – Germination takes approximately 4 days.

Germination temperature: 72 to 76°F (22 to 24°C).

Light: Lighting is beneficial.

Media moisture: Keep soil very wet (level 5) during Stage 1 for optimal germination.

Relative humidity: Maintain 100% relative humidity (RH) until radicles emerge.

Stage 2

Temperature: 68 to 75°F (20 to 24°C).

Light: Up to 2,500 f.c. (26,900 Lux).

Media moisture: Start to slightly reduce soil moisture (level 4) to allow the roots to penetrate into the media.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) from nitrate-form fertilizers with low phosphorous.

Stage 3

Temperature: 65 to 70°F (18 to 21°C).

Light: Can be up to 2,500 f.c. (26,900 Lux).

Media moisture: Allow media to dry further until the surface becomes light brown (level 2) before watering. Keep the moisture to wet-dry cycle (moisture level 4 to 2).

Fertilizer: Increase the fertilizer rate to 2 (100 to 175 ppm N/ 0.7 to 1.2 mS/cm EC). If growth is slow, apply a balanced ammonium and nitrate-form fertilizer with every other fertilization.

Maintain a media pH of 5.8 to 6.2 and EC between 1.0 and 1.5 mS/cm (1:2 extraction).

Growth Regulators: If possible, try to grow Petunia Fuseables plugs without any PGRs. The competition amongst the multiple seedlings in

each plug cell will provide natural growth control and also cooler temperatures during stage 4 will provide natural toning of the plugs.

In North American conditions: If PGRs are needed, apply B-Nine/Alar (daminozide) 1 to 2 applications at 5,000 ppm (6.0 g/l, 85% formulation or 7.8 g/l, 64% formulation) as a spray. The first application should be made when plugs have 2 to 3 true leaves. A second application can be made 7 days later. This treatment can improve basal branching of mature plants.

In Northern European conditions: 1 to 3 applications of B-Nine/Alar (daminozide) at 1,250 ppm (1.5 g/l, 85% formulation or 2.0 g/l, 64% formulation) spray has been tested and shown effective if needed.

Stage 4

Temperature: 60 to 65°F (16 to 18°C).

Light: Up to 5,000 f.c. (53,800 Lux) if temperature can be controlled.

Media moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Growing On to Finish

Container Size

6 to 8-in. (15 to 20-cm) pots: 1 plug per pot,
10 to 12-in. (25 to 30-cm) color bowls or baskets: 3 plugs per color bowl or basket.

Media

Use a well-drained, disease-free soilless medium with a pH of 5.5 to 6.2 and a medium initial nutrient charge.

Temperature

Nights: 57 to 65°F (14 to 18°C).

Days: 61 to 75°F (16 to 24°C).

Petunia Fuseables can be grown at temperatures as low as 50°F (10°C). Crop timing (time to flower) is related to average temperature when grown under proper daylength. Plants will take longer to flower when grown under cooler conditions.

Light

Keep light levels as high as possible while maintaining moderate temperatures.

Fertilizer

Apply nitrate-form with low phosphorus fertilizer at rate 3 (175 to 225 ppm N (1.2 to 1.5 mS/cm EC) every other irrigation. Apply a balanced ammonium and nitrate-form fertilizer with low phosphorus as needed to encourage growth and to balance media pH. Maintain media pH 5.8 to 6.2.

For constant fertilizer program, apply fertilizer at rate 2 (100 to 175 ppm N or 0.7-1.2 mS/cm EC) while maintaining the above recommended EC and pH ranges.

Growth Regulators

Use B-Nine/Alar (daminozide) at 5,000 ppm (5.9 g/l, 85% formulation or 7.8 g/l, 64% formulation) at 7 days after transplant followed by a Bonzi (paclobutrazol) 2-4 ppm (0.5-1.0 ml/l, 0.4% formulation) drench a week later or just use the same PGR regime as that for standard grandiflora petunias or spreading petunia.

Note: Pleasantly Blue responds better to a B-Nine spray than it does to a Bonzi spray or drench, so for this particular Fuseables, the use of B-Nine is preferred.

To determine the best rate for your conditions, we recommend that you run an in-house trial.

Photoperiod

Petunia Fuseables are slightly sensitive to daylength. All varieties can flower successfully at 10 hours daylength with crop time delay of about 3-6 days compared to that under long day conditions.

Crop Scheduling

Sow to transplant (288-cell plug tray): 4 weeks

Sow to transplant (105/128-cell plug tray): 5 weeks

Sow to transplant (72-cell tray): 5 to 6 weeks

Transplant to flower:

6-7 weeks from 288 cells

5-6 weeks from 105/128 cells

4-5 weeks from 72 cells

Total Crop Time:

Container Size	Plants per Pot or Basket	Spring (weeks)	Summer (weeks)
6 to 8-in. (15 to 20-cm) pot	1	9 to 11	7 to 9
10-in. (25-cm) color bowl or basket	1-3	10 to 12	8 to 10
12-in. (30-cm) color bowl or basket	4	10 to 12	8 to 10

Common Problems

No major problems will occur if good cultural and IPM practices are used.

Note: Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific chemical being used in accordance with all regulations.