

## Petunia Lo Rider

(*Petunia x hybrida*)

### Germination

Approximate seed count (pelleted): 33,000 S./oz.  
(1,200 S./g)

#### Media

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

#### Sowing

Covering seed is not recommended. Water adequately after sowing to completely dissolve the pellet.

**Stage 1** – Germination takes approximately 4 days.

**Soil temperature:** 72 to 76°F (22 to 24°C)

**Light:** Lighting is optional.

**Moisture:** Keep soil saturated moisture (level 5) during Stage 1 for optimal germination.

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

### Plug Production

#### Media

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

#### Sowing

Covering seed is not recommended. Water adequately after sowing to completely dissolve the pellet.

**Stage 1** – Germination takes approximately 4 days.

**Soil temperature:** 72 to 76°F (22 to 24°C)

**Light:** Lighting is optional.

**Moisture:** Keep soil saturated moisture (level 5) during Stage 1 for optimal germination.

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

#### Stage 2

**Soil temperature:** 68 to 75°F (20 to 24°C)

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

**Moisture:** Start to slightly reduce soil moisture (level 4) to allow 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

**Soil temperature:** 65 to 70°F (18 to 21°C)

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

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

**Fertilizer:** Increase fertilizer to rate 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 medium pH 5.8 to 6.2 and EC between 1.0 and 1.5 mS/cm (1:2 extraction).

**Growth Regulators:** Control plug growth first by environment, nutrition and irrigation management, then with chemical plant growth regulators if needed. Minimize ammonium-form nitrogen fertilizer to avoid seedling elongation. Temperature differential (DIF) can also be used to minimize height. Test all chemical plant regulators first.

Lo Rider plugs can be treated with the same growth regulators as other standard petunia.

**In North American conditions:** Apply B-Nine/Alar (daminozide) 1 to 2 applications at 2500-5,000 ppm (3.0-6.0 g/l, 85% formulation or 3.9-7.8 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 have been tested and shown effective if needed.

## Stage 4

**Soil temperature:** 60 to 65°F (16 to 18°C)

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

**Moisture:** Same as Stage 3.

**Fertilizer:** Same as Stage 3.

## Growing On to Finish

### Container Size

**804 pack:** 1 plant per cell

**10-in. (25-cm) baskets:** 3 to 4 plants per 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)

Lo Rider petunias can tolerate temperatures as low as 35°F (2°C); however, keep in mind that crop timing (time to flower) is related to daily average temperature when grown under proper daylength. Lo Rider plants will take longer to flower when grown in 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 balance medium pH. Maintain medium pH 5.8 to 6.2.

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

### Growth Regulators

Lo Rider petunia is genetically compact and needs less to no PGR after transplanting. Based upon

numerous trials, use B-Nine/Alar (daminozide) at 2,500 ppm (2.9 g/l, 85% formulation or 3.9 g/l, 64% formulation) 1 to 3 applications starting at 7 days after transplant, or just use the half PGR rate as that for standard petunias, such as Dreams. Under some growing regimes, production with no plant growth regulators may be possible.

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

### Photoperiod

Similar to Dreams petunia, all Lo Rider varieties can flower successfully at 10-hour daylengths with slightly delayed flower time compared with long day conditions.

### Crop Scheduling

**Sow to transplant (288-cell plug):** 5 to 6 weeks

**Transplant to flower:** 5 to 7 weeks

**Container Size:** 804 pack

**Number of Plants:** 1 plant per cell

**Spring:** 9 to 11 weeks

**Summer:** 8 to 10 weeks

**Container Size:** 10-in. (25-cm) basket

**Number of Plants:** 3 to 4 plants per basket

**Spring:** 10 to 13 weeks

**Summer:** 8 to 11 weeks

### Common Problems

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

### Garden Information

- Lo Rider series petunia is excellent for mono and mixed containers, baskets.
- Plant in full sun.
- Reaches 7 to 10 in. 17 to 25 cm) tall and spreads 8 to 12 in. (20 to 30 cm)
- Garden spacing: 6 to 8 in. (15 to 20 cm)

**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.

