

## Spreading Petunia Easy Wave®

(*Petunia x hybrida*)

### Germination

**Note:** Because their spreading habit begins after transplanting, Easy Wave plugs can be produced like other petunia plugs.

#### 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 Easy Wave 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. Burgundy Star, Pink and Plum Vein benefit from light during germination.

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

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

### Plug Production

#### 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 root 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.

**In North American conditions:** 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

**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

**1801 flats & Wave-Pink 306-Packs:** 1 plant per cell

**4-in. (10-cm) pots:** 1 plant per pot

**6-in. (15-cm) pots:** 1 to 3 plants per pot

**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)

Easy Wave 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. Easy Wave plants will take longer to flower when grown in cooler conditions.

#### **Light**

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

#### **Fertilizer**

Easy Wave petunias require more fertilizer than is usually recommended for petunias. For best results, apply nitrate-form with low phosphorus fertilizer at rate 4 (225 to 300 ppm N (1.5 to 2.0 mS/cm EC) every other irrigation. Apply a balanced ammonium and nitrate-form fertilizer with low phosphorus as need to encourage growth and balance medium pH. Maintain medium pH 5.8 to 6.2.

For constant fertilizer program, can apply fertilizer at rate 3 (175 to 225 ppm N or 1.2 to 1.5 mS/cm EC) while maintaining the above recommended EC and pH ranges.

#### **Growth Regulators**

**In North American conditions:** 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. Follow these with a Bonzi drench at 3 to 5 ppm (0.8 to 1.3 ml/l, 0.4% formulation) depending on environmental conditions. If additional PGR is needed, a Bonzi (paclobutrazol) spray at 30 ppm (7.5 ml/l, 0.4% formulation) will help hold the finished crop.

**In northern European conditions:** Use B-Nine/Alar at 5,000 ppm (5.9 g/l, 85% formulation or 7.8 g/l, 64% formulation) at 7 days after transplant. Follow these with a Bonzi drench 6 to 8 ppm (1.5 to 2.0 ml/l, 0.4% formulation) depending on environmental conditions. If additional PGR is needed, a Bonzi spray at 30 ppm

(7.5 ml/l, 0.4% formulation) will help hold the finished crop.

#### **In all conditions:**

Burgundy Velour, Plum Vein and Red Velour are more vigorous within the Easy Wave group. They can take higher rates of paclobutrazol drench (1 to 2 ppm more) than the others.

For hanging basket production, Burgundy Velour will benefit from one additional Bonzi 30 ppm spray.

**Note:** Topflor can be used in place of Bonzi at 2/3 the rate of Bonzi.

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

#### **Photoperiod**

Wave petunia lighting requirements vary by location, variety and production week.

Easy Wave petunias are less sensitive to daylength than Wave petunias. Most Easy Wave varieties will flower successfully at 10 hours. Easy Wave Pink, Plum Vein and Red Velour flower best with 11-hour daylength. The crop time for Easy Wave varieties will be shorter with longer days, such as 12 hours.

When producing Easy Wave petunias early in the year when days are short, decrease crop times by using Photoperiodic lighting after transplanting. Day extension or night break lighting are acceptable.

#### **Crop Scheduling**

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

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

#### **Total Crop Time:**

**Container Size:** 1801 flats, Wave- Pink 306-Pack

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

**Spring:** 10 to 12 weeks

**Summer:** 8 to 10 weeks

**Container Size:** 4-in. (10-cm) pot

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



**Spring:** 10 to 12 weeks

**Summer:** 8 to 10 weeks

**Container Size:** 6-in. (15-cm) pot

**Number of Plants:** 2-3 plants per pot

**Spring:** 10 to 12 weeks

**Summer:** 8 to 10 weeks

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

**Number of Plants:** 3-4 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.

