

# Wonder Wave Series Spreading Petunias: Growing On to Finish

## *Detailed Ride the Wave® Lighting Chart*

### Important Notes for Producing Top-Quality Wonder Wave Plants

- **Wonder Wave® petunias are long-day plants.** See **Growing On to Finish – Photoperiod/Light** for specific details.
- **Because of their very vigorous growth, Wonder Wave petunias require a higher rate of plant growth regulators than standard petunias.** See **Growing On to Finish – Growth Regulators** for specific details.
- **Tips for finishing larger liners.** See below.

### Plug and Larger Liner Production

Refer to the separate **Wonder Wave Spreading Petunias Plug and Liner Production** Grower Facts for complete details.

### Growing On to Finish from Plugs Container Size

Containers should be 12-cm (4.8-in.) or larger.  
**12 to 15-cm (4.8 to 6-in.) pots:** 1 plant per pot.  
**25-cm (10-in.) baskets:** 3 plants of **Wonder Wave Purple**, **Wonder Wave Pink** or **Wonder Wave Pearly**, or 4 plants of **Wonder Wave Blue**, **Wonder Wave Rose**, **Wonder Wave Salmon** or **Wonder Wave Lavender** per basket.

### Media

Use a well-drained, disease-free, soilless medium with a pH of 5.5 to 6.3 and a medium initial nutrient charge.

### Temperature

**Nights:** 55 to 65°F (13 to 16°C)

**Days:** 65 to 75°F (16 to 18°C)

**Wonder Wave** can be grown as cool as 50°F (10°C) Crop timing (time to flower) is related to average temperature when grown under proper day length. **Wonder Wave** plants will take longer to flower when grown in cooler conditions.

If properly acclimated, **Wonder Wave** petunias can tolerate temperatures several degrees below freezing.

### Photoperiod/Light

*Ride The Wave* petunia lighting requirements vary by location, variety and production week. Refer to the *Supplemental Lighting Chart* on the following page.

Light **Wonder Wave** until March 15.

Start long-day or night-interruption conditions at 5-leaf count or earlier. Continue long-days until plants have a minimum of 12 leaves or until proper natural daylength is reached. When producing **Wonder Wave** petunias early in the year when days are short, decrease crop times by continuing to use supplemental lighting. Day extension or night break (providing a 4-hour night interruption from 10:00 p.m. to 2:00 a.m.) are acceptable.

Both HID and incandescent lights are equally effective for flower induction. For initiation, light levels of 10 f.c. (100 Lux) at 3 m (10 ft) above plant canopy is recommended. However plants grown under incandescent lights will stretch more and need more PGRs to control plant size. Incandescent lights will also affect plant habit by causing shoots to be more upright than under short days, particularly for **Wonder Wave Rose** and **Wonder Wave Pearly**. Plants will resume their normal spreading habit under natural light conditions in the garden. Keep light levels as high as possible while maintaining moderate temperatures. High light levels or PGR applications may cause white “splashes” or star patterns to appear on the blooms of **Wonder Wave Pearly**.

### Fertilizer

**Wonder 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 (1.5-2.0 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. To assure consumer satisfaction, an optional top dressing with slow-release fertilizer can be applied 10 days before shipping.

## Growth Regulators

The following growth regulator schedule is used for growing on **Wonder Wave** petunias at the PanAmerican Seed Co. Rijsenhout facility in the Netherlands. This “recipe” results in 6-in. (15-cm) pots of heavily branched **Wave** plants with a spread of approximately 10 to 12 in. (25 to 30 cm) when flowering begins – the perfect look for point of sale. For **Wonder Wave Rose** and **Wonder Wave Misty Lilac**, the pots will be covered with blooms. For **Wonder Wave Blue**, **Wonder Wave Pink**, **Wonder Wave Purple** and **Wonder Wave Lavender**, the first flowers will appear closer to the center of the pot.

### 6-in. (15-cm) Pots

Apply a B-Nine/Alar (daminozide) spray at 2,500 to 5,000 ppm (2.9-5.9 g/l, 85% formulation or 3.9-7.5 g/l, 64% formulation) 7 to 10 days after transplanting. Repeat 7 days later. Use a Bonzi drench one time at 6-8ppm (1.5-2 ml/l, 0.4% formulation) for **Wonder Wave Lavender**, **Wonder Wave Rose** and **Wonder Wave Blue** a lower could be used. Apply this drench 3 to 4 weeks after transplanting or when shoots have reached the edge of the pot. Follow with a Bonzi spray one time at 12 to 28 ppm (3-7 ml/l, 0.4% formulation) one week later for additional control if necessary.

Somewhat dry conditions during the finishing stage will also keep **Wonder Wave** petunias more compact; allow plants to wilt slightly between waterings. If plants are grown pot-tight, PGR applications must be done more often or at higher rates than plants that are spaced over time. High temperatures or a moist growing regime may also necessitate greater PGR application rates to produce the best product.

### Hanging Baskets

Can be treated as a 15 cm pot.  
Lower rates if more growth is needed.

B-Nine/Alar improves branching, but may delay flowering about 1 week. Bonzi does not appear to affect flower timing. Plants grow out of either plant growth regulator almost immediately after transplant to the landscape.

## Common Problems

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

## Crop Scheduling

**Sow to transplant (264-cell plug):** 5 to 6 weeks

### Transplant to flower:

**Spring:** 7 to 10 weeks under long days

**Summer:** 4 to 7 weeks under long days with high light and minimum night temp. of 65° F (18°C).

### Total Crop Time:

**Spring:** 12 to 16 weeks

4.8-in. (12-cm) pot	1 plant per pot	12-14 weeks
6-in. (15-cm) pot	1 plant per pot	12-14 weeks
10-in. (25-cm) basket	3-4 plants per basket	14-16 weeks

**Summer:** 9 to 13 weeks

4.8-in. (12-cm) pot	1 plant per pot	9-11 weeks
6-in. (15-cm) pot	1 plant per pot	9-11 weeks
10-in. (25-cm) basket	3-4 plants per basket	10-13 weeks

**Wonder Wave Lavender**, **Wonder Wave Blue**, **Wonder Wave Pearly**, **Wonder Wave Salmon** and **Wonder Wave Rose** flower up to one week earlier than **Wonder Wave Purple** and **Wonder Wave Pink**.

## Growing On to Finish from Large Liners

### Photoperiod

**Wonder Wave** needs natural day during spring when day length is longer than 11 hours.

*Ride The Wave petunia lighting requirements vary by location, variety and production week. Refer to the Supplemental Lighting Chart on the following page*

### Growth Regulators

One or more (if grown pot-to-pot) Bonzi 20 to 32ppm (5-8 ml/l, 0.4% formulation) spray applications based on temperature, weather conditions and cultural practice. All other environmental conditions follow the normal production.

### Crop Scheduling

**Sowing to transplant:** 6 to 7 weeks for direct sowing; 7 to 9 weeks for transplant from small plug.

**Transplant to flower:** 5 to 6 weeks from 50-cell liner (1 more week for **Wonder Wave Purple** and **Wonder Wave Pink**); 5 to 7 weeks from 72-cell liner (1 more week for **Wonder Wave Purple** and **Wonder Wave Pink**).

## Hanging Basket Tips

# PanAmerican Seed™

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At the end of production, maintain fertilization and utilize PGRs. Do not eliminate fertilization to control growth just prior to shipping. Apply fertilizer at half rate and, to hold plant habit, utilize PGRs. Provide good air circulation at the plant level. This reduces potential for disease and die-off.

Do not allow plants to wilt. Maintain moderate moisture levels. This will provide better plant performance and color in the center of the basket.

**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

## Handy Tips For Retailers

Keep **Wonder Wave** plants fresh and healthy at point-of-sale:

- Display **Wonder Wave** petunias in filtered sunlight – in direct sun, the plants dry out quickly and require more frequent watering.
- Keep **Wonder Wave** petunias watered. The soil should never dry out completely.
- In the display, space **Wonder Wave** petunias with the leaves just touching between the plants.
- Feed the plants with a liquid fertilizer once a week at the ratio recommended on the label.
- Remind home gardeners that **Wonder Wave** petunias grow rapidly. These annuals can quickly fill in a square meter of garden space in just a few weeks.

## Home Gardener Information

Spread the word to consumers about: **Wave-Rave.com** – it's loaded with helpful gardening tips and care instructions.

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