

Spreading Petunia Tidal Wave®

(*Petunia X hybrida*)

Germination

Because their spreading habit begins after transplanting, you can produce Tidal Wave plugs 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 mmhos/cm (1:2 extraction).

Sowing

Covering Tidal Wave seed is not recommended. Water adequately to completely dissolve the pellet.

Temperature

Germination: 72 to 76°F (22 to 24°C)

Cotyledon stage: 68 to 75°F (20 to 24°C)

True leaves: 65 to 70°F (18 to 21°C)

Hold plugs: 60 to 65°F (16 to 18°C)

Light

Tidal Wave plugs require light during Stage 1.

Stage 1: 10 f.c. (100 Lux) or more

After germination: 1,000 to 2,500 f.c. (10,000 to 30,000 Lux)

Seedling maturity: Up to 5,000 f.c. (54,000 Lux) if temperature can be controlled.

Humidity

Maintain 100% relative humidity (RH) until cotyledons emerge. RH can be reduced gradually to approximately 50% as plugs mature.

Soil Moisture

Apply above-average amounts of soil moisture during Stage 1 for optimal germination.

Plug Production

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Fertilizing

At radicle emergence: 50 ppm N from low phosphorus-nitrate form fertilizer.

As cotyledons expand: Increase to 100 to 150 ppm N. Maintain medium EC between 1.0 and 1.5 mmhos/cm (1:2 extraction).

Growth Regulators

Control Tidal Wave 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.

B-Nine: 1 to 2 applications at 5,000 ppm 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.

Bonzi: 1 application at 6 ppm as a spray during late Stage 3.

Growing On to Finish

Container Size

Containers should be 4-in. (10-cm) or larger.

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

6 to 8-in. (15 to 20-cm) pots: 2 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 6.3 and a medium initial nutrient charge.

Temperature

Nights: 57 to 65°F (14 to 16°C)

Days: 61 to 75°F (16 to 18°C)

Tidal 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. Tidal 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

Tidal Wave petunias require more fertilizer than is usually recommended for petunias. For best results, apply a balanced fertilizer with 200 to 300 ppm N with every other irrigation. At finish, feed to avoid lower yellow leaves. 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 Tidal Wave petunias at the PanAmerican Seed Co. Elburn, Illinois (Midwestern United States) research facility. This "recipe" results in 6 to 8-in. (15 to 20-cm) pots of heavily branched Tidal Wave plants with a spread of approximately 8 to 10 in. (20 to 25 cm) when flowering begins – the plants will be covered with blooms and have the perfect look for point of sale.

6 to 8-Inch (15 to 20-Cm) Pots: Apply a B-Nine spray at 3,000 to 5,000 ppm 7 to 10 days after transplanting. Repeat 7 days later. Use a Bonzi drench one time at 5 ppm, 3 weeks after transplanting or when shoots have reached the edge of the pot. Follow with a Bonzi spray one time at 30 ppm after visible bud for additional control if needed.

Hanging Baskets: Apply a B-Nine spray at 3,000 to 5,000 ppm 7 to 10 days after transplanting. Repeat 7 days later. Use a Bonzi spray one time at 30 ppm, 3 weeks after transplanting. If needed, a second Bonzi spray can be done.

B-Nine 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.

Note: Be sure to check local regulations regarding the use of plant growth regulators. Always follow current manufacturer label instructions.

Photoperiod

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

Flowering is fastest with daylengths greater than 13 hours. Tidal Wave petunias are responsive to daylength. When producing Tidal Wave petunias early in the year when days are short, decrease crop times

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by using supplemental lighting after transplanting. Day extension or night break are acceptable.

Crop Scheduling

Sow to transplant (392-cell plug): 5 to 6 weeks

Transplant to flower:

Spring: 6 to 9 weeks under long days

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

Total Crop Time:

Spring: 11 to 15 weeks

4-in. (10-cm) pot 1 plant per pot 11-13 weeks
6 to 8-in. (15 to 20-cm) pot 2-3 plants per pot 11-13 weeks
10-in. (25-cm) basket 3-4 plants per basket 13-15 weeks

Summer: 9 to 13 weeks

4-in. (10-cm) pot 1 plant per pot 9-11 weeks
6 to 8-in. (15 to 20-cm) pot 2-3 plants per pot 9-11 weeks
10-in. (25-cm) basket 3-4 plants per basket 10-13 weeks

Common Problems

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

Handy Tips for Retailers

Keep Tidal Wave petunias fresh and healthy at point-of-sale:

- Display Tidal Wave petunias in filtered sunlight – in direct sun, the plants dry out quickly and require more frequent watering.
- Keep Tidal Wave petunias watered. The soil should never dry out completely.
- In the display, space Tidal Wave plants 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 Tidal Wave petunias grow rapidly. These annuals can quickly fill in a square yard of garden space in just a few weeks.

Green Thumb Tips

Choose a full sun location for Tidal Wave petunias – at least 6 hours of direct sunlight is best. Keep Tidal Wave petunias well-fed and don't let them dry out between waterings. Due to the vigorous growth of Tidal Wave petunias, home gardeners will achieve best results from feeding plants with an all-purpose fertilizer every 10 to 14 days, especially when grown in containers. Apply fertilizer at the recommended package rates.

Tidal Wave plants exhibit an intriguing trait when it comes to growth. The habit is based on how closely the plants are spaced in the garden – the closer the spacing, the taller the plants will grow because they use each other as support.

- Spaced a minimum of 12 in. (30 cm) apart in the garden, Tidal Wave petunias form a dense, mounded hedge. The stiff stems help to maintain this habit through the season. At a 12-in. (30-cm) spacing, Tidal Wave plants reach a mounded height of 16 to 22 in. (40 to 55 cm).
- Grown in a restricted space with additional support such as a chain link fence or bush, these eye-catching petunias will grow an extra 1 to 2 ft. (30 to 60 cm) upward like a vine!
- Spaced up to 24 in. (60 cm) apart in the garden, Tidal Wave petunias perform more like a ground cover, spreading 2.5 to 3 ft. (75 to 90 cm) per plant. Silver and Hot Pink grow slightly taller, with a height of 10 to 12 in. (25 to 30 cm), compared to the 8 to 10-in. (20 to 25-cm) garden height of Cherry and Purple.

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