

Spreading Petunia Tidal Wave®

(*Petunia x hybrida*)

Germination

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

Because their spreading habit begins after transplanting, you can produce Tidal Wave plugs like other petunia plugs.

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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 18°C)

Days: 61 to 75°F (16 to 24°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-in. (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.

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

Crop Scheduling

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

Transplant to flower:

Spring: 8 to 10 weeks under long days

Summer: 7 to 8 weeks under long days with high light and minimum night temperature of 65° F (18°C)



Total Crop Time:

Spring: 11 to 15 weeks

6 to 8-in. (15 to 20-cm) pot 1-3 plants per pot 11-13 weeks

10-in. (25-cm) basket 3-4 plants per basket 13-15 weeks

Summer: 9 to 13 weeks

6 to 8-in. (15 to 20-cm) pot 1-3 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

Important Notes for Growing & Using Wave and Tidal Wave Petunias in the Landscape

- Pick the right Wave petunia for your needs. Wave and Tidal Wave have distinct habits. Wave offers a thick, ground-hugging ocean of color. Tidal Wave grows outward, then up for a big, shrublike shape. Tidal Wave looks great growing alongside a fence – plants will grow up and over the fence!
- Start with “fresh” plugs. Avoid starting from rootbound plugs. Plants grown from rootbound plugs may not be able to generate enough roots to adequately sustain themselves when planted outside. Wave and Tidal Wave plugs that have been scheduled and transplanted promptly will root out better in the container and perform better when planted in the landscape. Allowing the containers to dry out slightly between watering

encourages better root development. Do not let plants wilt.

- Plant well-rooted plants. Avoid planting poorly rooted plants into the landscape. Poorly rooted plants may wilt quickly if the temperatures become very warm soon after planting.
- Acclimate plants before planting. As a general rule, greenhouse or nursery-grown plants will adapt better in the landscape if they are hardened off prior to planting. Exposing plants to the outside temperatures and light allows the soil to dry between watering and helps reduce transplant shock.
- Follow good soil preparation practices. Wave and Tidal Wave petunias tolerate a wide range of soil conditions. However, tilling the soil for good aeration, adding amendments, raising the beds to provide good drainage, maintaining the proper pH (6.5 to 7.0 is optimum), and using a broad spectrum fungicidal drench all contribute to successful landscape plantings. Plants will take off more quickly if a liquid feed is used before planting. See “Provide Adequate Nutrition” for more details.
- Petunias prefer sun. Wave and Tidal Wave petunias thrive in bright, sunny locations with at least 6 hours of direct sunlight. Sun is a MUST to keep these plants covered with blooms and looking terrific all season long.
- Space adequately. For fast fill, space Wave petunias 12 to 18 in. (30 to 45 cm) apart in the landscape. Wave petunias spread 3 to 4 ft. (90 cm to 1.2 m), so they can be spaced as far as 24 in. (60 cm) apart. Spacing plants closer than 12 in. (30 cm) can lead to overcrowding and contribute to disease.
- Space Tidal Wave a minimum of 12 to 15 in. (30 to 38 cm) apart. At this spacing they will form dense mounds of 18 to 24 in. (45 to 60 cm) in height. When spaced at 18 to 24 in. (45 to 60 cm), Tidal Wave will spread more like a ground cover from 2.5 to 4 ft. (75 cm to 1.2 m).
- Irrigation. Wave and Tidal Wave petunias are excellent landscape performers. However, like any other plant, they need adequate water after planting in order to get established in the landscape. During the season, do not overwater. Night watering is not recommended. Morning watering is preferred.
- Water Management. Do not let Wave or Tidal Wave petunias dry out to a wilt between waterings as too severe of wilt may lead to increased susceptibility and may limit nutrient uptake. Do not over-water or allow the plants to continually have wet roots. This can lead to disease. Mulching plants can help through conserving moisture.
- Provide adequate nutrition. Wave and Tidal Wave petunias are vigorous growers and benefit from heavier feeding than standard petunias, therefore give plenty of feed throughout the life of the planting. Before Planting: A good way to get the



Additional Tips for Using Wave and Tidal Wave Petunias in Containers

- Wave and Tidal Wave petunias are multi-purpose! In addition to making a wonderful color impact in gardens, they're spectacular in large containers, street planters and large window boxes. For fantastic showings in hanging baskets, choose Easy Wave petunias.
- Containers dry out more quickly than ground plantings. Since containers need to be watered more frequently, nutrients are likely to be leached from the containers more quickly. As a result they may also require more frequent feeding.
- Keep your Wave and Tidal Wave petunias well-fed and don't let them dry out between waterings. Apply a liquid fertilizer once a week or use a combination of liquid and slow-release fertilizers, following the rates recommended on the labels.

For more information on all Wave spreading petunias, visit **Wave-Rave.com** or **BallLandscape.com**.

