

Petunia Vegetative Sun Spun

(*Petunia x hybrida*)

A Ball FloraPlant Product

Propagation

- Chose a well-drained medium with an EC of 0.75 to 0.80 mmhos and a pH of 5.6 to 6.0.
- Stick cuttings within 12 to 24 hours of arrival. Cuttings can be stored overnight, if necessary, at 45 to 50°F (7 to 10°C).
- Soil temperature should be maintained at 68 to 74°F (20 to 23°C) until roots are visible.
- Begin fertilization with 75 to 100 ppm N when roots become visible. Increase to 150 to 200 ppm N as roots develop.
- Once roots are visible, the media should be kept moderately wet and never saturated. This will help prevent iron deficiency and the associated chlorotic foliage which can develop.
- Appropriate water management, air and light levels should eliminate the need for chemical Plant Growth Regulators (PGRs).
- Avoid stretch by moving crop to cooler air temperature during the last weeks of propagation.
- A pinch in propagation will help to encourage early branching. Sun Spun Petunias can be pinched 18 to 24 days after sticking, when roots are well developed, to promote early branching and improve habit.
- Sun Spun Petunias should be ready for transplant 3 to 4 weeks after sticking.

Growing On to Finish

Media

- A pH of 5.6 to 6.0 is optimum.
- Sun Spun Petunias prefer a well-drained soil.

Temperature

Night: 52 to 62°F (11 to 17°C)

Day: 58 to 75° (14 to 24°C)

Light:

- Sun Spun Petunias should be grown under moderate light levels; 5,000 to 8,000 f.c. (50,000 to 80,000 Lux) is the ideal range.
- Low light levels promote stem stretch and reduced plant quality.
- For Sun Spun Petunias, flowering is best under long days of Spring and Summer. Generally, flowering will be heaviest in April to September. Crop times will be significantly lengthened under short daylengths.
- For fastest flowering during short daylength, maintain night temperatures at 58 to 60°F (14 to

16°C) and use lighting to provide a daylength of 12 to 13 hrs.

Watering

The medium should be allowed to dry between waterings. However, periods of sustained wilting should be avoided. Petunias are susceptible to Botrytis and root diseases – avoid high humidity, constantly saturated media and wet foliage.

Fertilizer

- Sun Spun Petunias have a high feed requirement.
- Use constant feed with a balanced fertilizer at 250 to 300 ppm N with additional iron as needed.
- A full complement of minor elements should be provided to the plant.
- Regular leaching with clear water will help to reduce buildup of excess salts in media.

Media pH Management

- Vegetative petunias are relatively inefficient users of iron. Plants can develop iron deficiencies at media pH levels considered normal for most vegetative crops. If untreated, symptoms can become severe very quickly and almost irreversible.
- Plants must be monitored regularly for early, visual signs of high pH (interveinal yellowing on youngest leaves). Regular soil pH tests are an excellent way to identify movements in pH before they create visual symptoms, which can be difficult to reverse.
- The most effective and reliable method to correct and control iron deficiency is to apply a chelated iron product as a soil drench.
- Foliar application of iron sulfate can alleviate mild deficiency symptoms but will not be effective long-term and can result in phytotoxicity to flowers and foliage if applied improperly.

Pinching

- Sun Spun Petunias should be pinched 10 to 14 days after transplant to encourage basal branching.
- For a larger basket or container, a second pinch can be applied, but will delay flowering approximately 2 weeks.

Controlling Growth

- Use high light levels and cool temperatures to control growth.
- To control growth and improve flowering and habit, growers can use 1 or more applications of B-Nine

(1,500 to 2,500 ppm) starting 7 to 14 days after transplant.

- Mature plants which are approaching shipping size can be drenched with Bonzi (0.25 to 1.0 ppm) to significantly slow vegetative growth while allowing flowering to continue.
- Use of PGRs can delay flowering 1 to 2 weeks. Avoid spraying once flower buds appear.
- In general, more frequent applications of any growth regulator at a lower concentration will produce the best results.
- These recommendations for plant growth regulators should be used only as general guidelines. Growers must trial all chemicals under their particular conditions.

Common Problems

Insects: Aphids, thrips, whitefly, leafminers, fungus gnats.

Diseases: Botrytis, Rhizoctonia, Pythium.

All Sun Spun Petunia cuttings are derived from culture and virus-indexed stock from the **Ball Certified Plants®** program.

One of the most important disease problems associated with Sun Spun Petunias is Tobacco Mosaic Virus (TMV). In North America, contact your Ball sales rep or call the Ball Technical Services team at 800 879-BALL for information on TMV identification. Outside of North America, contact your local distributor.

Problem: Plant collapse

Causes: Wet media for an extended period (Pythium); Rhizoctonia due to planting too deep

Problem: Delayed flowering

Causes: Daylength too short; Late application of growth regulators

Problem: Excessive vegetative growth

Causes: High ammonia concentration in the soil; Over-fertilization under low light conditions; Low light levels and over-watering; wet media

Problem: Poor branching

Causes: Low fertilization; lack of nitrogen

Problem: Stretched plants

Causes: Low light levels

Problem: Chlorosis

Causes: Iron deficiency; High pH; Nitrogen deficiency

Crop Schedule & Uses

Unrooted Cuttings:

4-In. (10-Cm) Pot 1 PP*: 9-12 weeks

6 to 8-In. (15 to 20-Cm) Pots 2 to 3 PP*: 10-13 weeks

10 to 12-In. (25 to 30-Cm) Pots 3 to 5 PP*: 12-16 weeks

Rooted Cuttings:

4-In. (10-Cm) Pot 1 PP*: 6-8 weeks

6 to 8-In. (15 to 20-Cm) Pots 2 to 3 PP*: 7-9 weeks

10 to 12-In. (25 to 30-Cm) Pots 3 to 5 PP*: 9-12 weeks

*PP: Plants per pot or 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.

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