

GROWERTALKS

Culture Notes

12/20/2011

Pleasing Petunias

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Writer's note: The following excerpt on petunias is from the 18th edition of the Ball RedBook. This is a celebration of two Octogenarians. All- America Selections and the Ball RedBook are both 80 years young in 2012.

Virtually every American gardener has petunias in their garden. They're a mainstay for bedding plant growers from coast to coast, thriving in all kinds of conditions. Superior breeding and continual renewal of varieties has kept the petunia flame fanned since the 1940s and 1950s. Just when you think petunias might be getting a bit stale, breeders introduce new forms, new habits and new colors.

In many ways, the evolution of petunias has paralleled the development of the industry. They easily made the leap from being grown in fields and dug bare root to being grown from seedlings in cell packs. They leaped from open seed trays to plug production—the transition was bumpy at first, but now plug production techniques are well-refined.

Propagation

Sow pelleted petunia seed onto a well-drained, disease-free medium with a pH of 5.5 to 5.8. Do not cover. Provide 100 to 400 f.c. (1.1 to 4.3 klux) of light to prevent watery-looking seedlings and to improve germination. Provide substrate temperatures of 71F to 76F (22C to 24C). Maintain moist substrate conditions, but do not saturate the medium. (Wave petunias require above-average amounts of substrate moisture and light during Stage 1). Radicles will emerge in three to five days.

A 288-plug tray will take from 4 to 6 weeks depending on variety to be ready to transplant to larger containers.



In recognition of All-America Selections 80th anniversary, *GrowerTalks* is featuring a series of Culture Notes articles on previous AAS winners during 2012.

Growing on

Be sure to schedule multiple crops so you will always have fresh petunias available. Transplant ready petunia plugs promptly. Transplant 1 plug/cell or 4-in. (10-cm) pot, 2 to 3 plugs/6-in. (15-cm) or 1-gal. (4 l), and from 5 to 7 plugs/10-in. (25-cm) basket.

Select a well-drained, disease-free peatlite medium with a high starter charge and a pH of 5.5 to 6.3. Peatlite and peat-bark mixes are excellent. Water in immediately after planting, but be aware that petunias are very sensitive to overwatering. Allow the medium to dry slightly between irrigations.

Basic production temperatures are 65F to 75F (18C to 24C) days and 62F to 68F (17C to 20C) nights. However, you'll want to stay on the lower end of the ranges to produce the best-quality crop and to make them more manageable. Once plants are budded, you can reduce nights to 50F (10C) to hold them. Lower temperatures on flowering flats also increases postharvest life of finished trays.

Feed at every other irrigation with 150 to 200 ppm, alternating between 20-10-20 and 15-0-15 and maintaining the pH between 5.8 to 6.0.

Grow plants under the highest light levels possible: 4,000 to 7,000+ f.c. (43 to 75+ klux). Provided your petunia bedding plant plugs were lighted in the plug stage, they should have initiated flowers.

As a general rule, apply growth regulators such as B-Nine (2,500–5,000 ppm), Bonzi (15 to 50 ppm), and Sumagic (10 to 30 ppm) for the first time when plants are established. B-Nine can be sprayed, while Bonzi or Sumagic may be sprayed or drenched at the lower rates (once only). Petunia varieties respond differently to growth regulators, so you'll be experimenting. Test with your first application at lower rates and adjust as needed. Do not apply B-Nine growth regulators after visible bud.

The crop time from transplanting a 288-plug to flowering cell packs is 4 to 6 weeks, for 4-in. (10-cm) pots is 5 to 7 weeks, and a 10-in. (25-cm) basket requires 7 to 8 weeks. **GT**

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