

GROWERTALKS

Columns

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Petal-ling Petunias: How to Finish Better & Faster

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Whether in pots, baskets or combos, spreading petunias are a major economic component of most growers' spring assortments. Between the vigorous growth and masses of vibrant flowers, even the most experienced grower can face some challenges with this crop. Here are four common questions we hear each spring:

How can I get my petunias to flower earlier? The majority of petunias are long-day plants. With most varieties and locations, petunias flower naturally in early to mid-April. The actual daylength required varies by variety and can be as long as 14 hours. This long-day requirement may be obligate (required) or facultative (hastening), depending upon variety.

Growers can flower a crop earlier by manipulating photoperiod to satisfy the long-day requirement. This is most economically achieved by providing night interruption lighting, using incandescent bulbs, from 10:00 p.m. to 2:00 a.m. through March 20. Alternatively, daylength extension may be used, but it is often more expensive for most growers. Newer LED technologies are effective. If using incandescents, place 100-W light bulbs 4 ft. above the crop at 4-ft. spacing. Regardless of the source, the goal is to provide 2 $\mu\text{m}/\text{sq. ft.}/\text{sec}$ of light at crop level. Keep in mind that recent breeding efforts have resulted in plants that are essentially day neutral in their photoperiod requirements. Growers can avoid photoperiod needs completely by purchasing pre-treated plants.

How do I prevent yellowing foliage? Assuming the root system is healthy, two kinds of yellowing are often encountered—overall chlorosis caused by low fertility and chlorosis of the young tissue caused by iron deficiency.

Avoiding low fertility: Spreading petunias are heavy feeders. Plan to feed your crop at 300 ppm with constant liquid feed for the entirety of the crop. Alternatively, a controlled-release feed applied at half rate will provide a base, with 200 ppm constant liquid feed meeting the rest of the crop needs. We recommend Nutricote 13-13-13 (100 day) or Osmocote 15-9-12 (5 to 6 month) for this application. Rates are specifically tailored to your container size.

Avoiding iron deficiency: Start by maintaining the media pH at 5.3 to 5.8 to promote iron availability. Then, provide extra iron to the crop, either from a high-iron feed or from supplemental iron. For high-iron feeds, turn to Plantex 19-2-19, Peters 15-3-25 or Jack's 20-3-19. If 20-10-20 or 21-5-20 is used as the backbone of your fertilizer program, plan to apply chelated iron (Sprint 138 or Sprint 330). Sprint can be applied as a one-time drench at 5 oz./100 gal. Be sure to rinse leaves following this drench.

How can I rein them in? Vigorous growth of spreading petunias makes them appealing for consumers, but can be challenging in production. Fortunately, petunias are very responsive to PGRs. Rates provided below are recommend for vigorous, spreading types; product recommendations and rates vary significantly for compact, mounding types and traditional seed varieties used in flats; e.g., Florel isn't recommended for bedding-types of petunias.

Florel used in place of hand pinching provides superior branching. Treat cuttings at 500 ppm (1.6 oz./gal.) as soon as active growth resumes after transplant. Repeat at two-week intervals as needed. Under long days, high light and warm conditions, flowers can be expected in 4 to 6 weeks after the last application.

Bonzi can be used as a 45 ppm foliar spray (1.5 oz./gal.), or a 4 ppm drench (13.3 oz./100 gal.). Bonzi drenches are most effective when plants first reach the edge of the container. Remember that Bonzi drench volume is based on pot size. Alternatively, some growers prefer a 20 ppm Sumagic foliar spray (5.2 oz./gal.).

B-Nine is effective as a 5,000 ppm foliar spray (4 Tbls/gal.), but two or more applications may delay flowering.

How do I keep them looking their best? First-line defense choices for preventing Botrytis include Affirm, Medallion, Pageant Intrinsic and Palladium. For preventing powdery mildew, consider Actinovate SP, Cease, Eagle, Heritage, Pageant Intrinsic, Regalia PTO or Strike Plus. Other products are highly effective and key parts of a rotation strategy.

Check labels for rates and application intervals to suit your crop assortment and operation, including effective OMRI options. Always read and follow all label directions. **GT**

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