

perennial solutions



By Paul Pilon

Viola 'Starry Night'

This cool-season perennial has great landscape appeal and no vernalization requirement, which means producing flowering plants is mostly a function of temperature and time.

Most homeowners and gardeners are very familiar with pansies and violas, which occupy the fall and early spring landscapes. Most pansies are produced as bedding plants as are various hybrids of *Viola x wittrockiana*. Many individuals only view pansies and violas as annuals and do not consider producing the perennial species and

cultivars that can offer great landscape performance year after year.

Viola 'Starry Night' (*V. cornuta*), also commonly known as 'Lord Primrose', is a reliable cool-season perennial that has great landscape appeal. 'Starry Night' forms neat, compact evergreen mounds reaching 6-10 inches tall and 8-10 inches wide. It produces an abundance of sweetly fragrant primrose blooms with lavender edges. When grown under stress-free conditions, it will bloom from spring to autumn. To reduce heat stress during the summer months, it is beneficial to produce them in areas with partial shade and provide adequate irrigation. Violas are commonly used in containers, patio pots and small mass or border plantings. 'Starry Night' performs well across much of USDA Hardiness Zones 5-8.

Propagation

'Starry Night' is vegetatively propagated by using unrooted tip cuttings. Since a plant patent is being sought, unlicensed propagation of this cultivar is prohibited.

Unrooted cuttings can be successfully rooted by sticking them directly into a pre-moistened, well-drained growing medium. Dipping the cuttings into a solution of indolebutyric acid at rates of 750-1,000 ppm is not essential for successful rooting but does tend to reduce rooting time and provide a slightly higher rooting percentage. Place cuttings under low misting regimes for about the

first 10 days of propagation. Misting and humidity levels gradually can be reduced as cuttings form calluses and root primordia. They will usually be well rooted in 3-4 weeks with soil temperatures maintained at 68-73° F.

Production

Viola 'Starry Night' is most commonly produced in 1-gal. or smaller containers with a single liner planted in the center of the pot. At the time of transplanting, the soil line of the liner should be even with the growing medium of the container it is transplanted into. Planting too deeply could lead to stem and crown rot. Violas perform best when grown in a moist, well-drained medium with a slightly acidic pH of 5.5-6.0. A media pH above 6.0 can result in boron and iron deficiency and may lead to an increased incidence of black root rot caused by the fungus *Thielaviopsis basicola*.

Violas are light feeders; providing moderate to high fertility levels causes them to appear lush and leafy and delays flower development. Growers commonly deliver nutrients using either a constant liquid fertilization program, feeding at rates of 75- to 100-ppm nitrates, or a controlled-release fertilizer incorporated at a rate equivalent to three-fourths lb. of elemental nitrogen per yard of growing medium.

For example, if your controlled-release fertilizer formulation is ►



'Starry Night' forms neat, compact evergreen mounds reaching 6-10 inches tall and 8-10 inches wide. (Photo: C. Raker & Sons, Inc.)

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15-9-12 (meaning it contains 15 percent nitrogen), you would need to incorporate 5 lbs. of this product per yard of media to obtain three-fourths lb. of elemental nitrogen (three-fourths lb. is 15 percent of 5 lbs.).

'Starry Night' requires an aver-

age amount of irrigation and does not tolerate overly wet conditions. When irrigation is necessary, I recommend watering thoroughly then allowing the soil to dry slightly between waterings.

With its compact growth habit, it

is usually not necessary to control plant height. However, during periods of low light levels when grown at high plant densities or with luxury nutrient levels, excessive plant growth might occur and require some type of height management



Violas are commonly used in containers, patio pots and small mass or border plantings.

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strategy. Most of the commercially available plant growth regulators are effective at controlling the height of violas. They are particularly sensitive to applications of products containing paclobutrazol and uniconazole; use both caution and low rates when applying these products. Late applications of PGRs may delay flowering.

Insects And Diseases

Growers commonly observe aphids, spider mites and thrips feeding on violas. Other insects commonly observed on viola include fungus gnats, shore flies, slugs and whiteflies. In most cases, these insects can be detected with routine crop monitoring and do not require proactive strategies.

There are numerous diseases growers are likely to observe under certain growing conditions including the soil pathogens Phythium, Phytophthora, Rhizoctonia and Thielaviopsis and foliar pathogens Alternaria, Botrytis, Cercospora, Colletotrichum (anthracnose), downy and powdery mildew, Phyllosticta, Ramularia, rust and Sphaceloma (scab). Most of these diseases do not occur that frequently but may become prevalent under proper conditions for each pathogen.

To control foliar diseases, it is best to manage the environment by providing proper plant spacing and adequate air movement, reducing free moisture on leaves and controlling humidity. The onset of root rot diseases may be prevented by avoiding overly moist conditions and high salt levels. If growers have historically faced these diseases on viola crops, it may be highly beneficial to follow preventative programs using the appropriate chemicals.

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Top: 'Starry Night' produces an abundance of sweetly fragrant primrose blooms with lavender edges. **Bottom:** Without requiring vernalization for flowering and being a day neutral plant, producing flowering violas is mostly a function of temperature and time.

Forcing

Viola 'Starry Night' is easy to force into bloom. Without requiring vernalization for flowering and being a day neutral plant, producing flowering violas is mostly a function of temperature and time. Although growers do not normally manipulate the photoperiod, producing plants under long days will decrease time to flower and increase the size of the leaves. The best quality plants are produced when production temperatures are kept cool. Production temperatures of 60-65° F at night and 70-75° F during the day are optimum. Warmer production temperatures lead to tall, poorly branched plants. Remember, they are cool-season plants and prefer to be grown at cool temperatures. Providing low temperatures will produce nice crops but will require additional time to reach flowering.

Availability

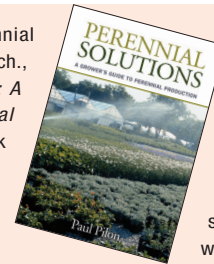
Viola 'Starry Night' was brought to the North American market by Plant Haven, Inc. Currently,

unrooted cuttings and rooted liners can be obtained through Ball Seed sales representatives. **GPN**

LearnMore

For more information related to this article, go to www.gpnmag.com/lm.cfm/gp110607

Paul Pilon is president of Perennial Solutions Consulting, Jenison, Mich., and author of *Perennial Solutions: A Grower's Guide To Perennial Production*, available now. The book is a guide to propagation and growing containerized perennials with chapters on media, fertilization, insect and disease manage-



ment, weed control, propagation, forcing, plant growth regulators, overwintering, and individual cultural programs and schedules for many of today's most popular perennial species. Pilon can be reached by phone at (616) 366-8588 or E-mail at paul@perennial-solutions.com. Get a copy of his book at www.perennial-solutions.com.

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