

perennial solutions



By Paul Pilon

Penstemon barbatus Pinacolada Series

Showy flowers and a compact habit make the six colors in the penstemon Pinacolada series an intoxicating pick for containers and border plantings.





From top: 'Pinacolada Blue' 'Pinacolada Deep Rose' (Photos: Syngenta Flowers) enstemon barbatus Pinacolada is an easy-to-grow, first-year-flowering perennial recently introduced by Syngenta Flowers. This series offers several attributes growers commonly look for, including a compact growing habit, uniform and showy flowers, extended bloom time, short

production time and few cultural problems. The Pinacolada series consists of six colors: Blue, Deep Rose, Light Rose, Red, Violet and White. These cultivars produce an abundant display of blooms that completely cover the entire plant. They branch freely, and blooming is uniform across all of the colors.

They produce compact plants reaching 8-12 inches tall and 6-8 inches wide at maturity. Pinacolada is suitable for production in USDA Hardiness Zones 3 to 8. It performs best when grown in sunny locations in the North and under partial shade in the South. Penstemon is commonly used in containers, patio pots, and in small mass or border plantings. In the landscape, they attract hummingbirds into the gardens, and once established, they are fairly drought tolerant.

With its container and garden performance, ease of production and flower power, the Pinacolada series is an impressive and reliable performer that will complement any commercial perennial program and can be marketed easily alongside annuals in the spring.

Propagation

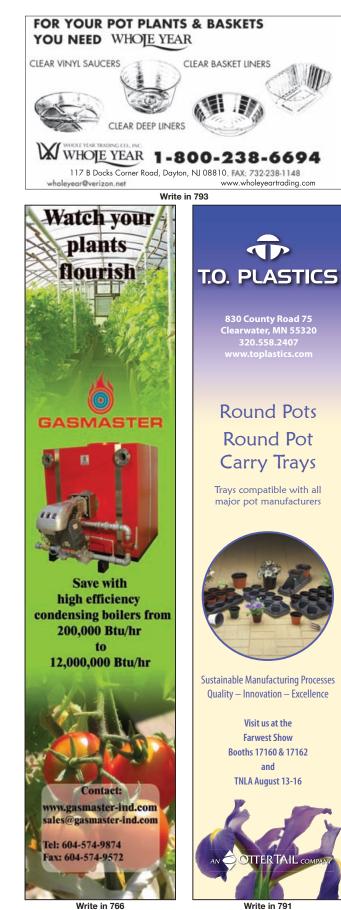
Penstemon Pinacolada cultivars can be easily propagated by seed and are commonly sown in 288- or 220-cell plug trays. Sow two to three seeds per plug cell. Light is required for germination; do not cover the seed with germination mix or vermiculite after sowing. Moisten the seed flats and move them into a warm environment, where the temperatures can be maintained at 64-68° F for germination. Keep the media moist but not wet during germination (moisture is easily observed on the surface). It is best to use a germination chamber where uniform moisture levels and temperatures can be maintained; this increases the percent germination and improves the germination rate.

The seeds should be germinated in 10 to 15 days after sowing. Once germinated, they can be grown with temperatures from 60-64° F. Following germination, reduce the moisture levels somewhat, keeping the media surface wet to the touch but not saturated. As the plugs become more developed, allow the growing media to dry slightly between irrigations. (Media color changes from dark black to medium brown.) Fertilizers can be applied once the true leaves are present, applying 150-ppm nitrogen every third irrigation or 50-75 ppm with every irrigation, using a balanced water-soluble source. When the plugs are grown at these temperatures, they are usually ready for transplanting in six to seven weeks.

Production

The Pinacolada series is most commonly produced in small container sizes (1-quart to 1-gallon). With small container sizes, plant a single plug in the center of the pot; with larger containers, plant multiple plugs in each pot (for example, three 288-cell plugs or two 128-cell plugs into 1-gallon pots). When transplanting, the growing medium should be even with the top of the plug.

Penstemon performs best grown in a slightly dry to moist, well-drained medium with a slightly acidic pH: 5.8 to 6.2. Many commercially available peat- or bark-based growing



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mixes work well, provided there is adequate drainage. Early in production, they require an average amount of irrigation; when irrigation is necessary, water them thoroughly, then allow the soil to dry slightly between irrigations. In late production, they will require an above-average amount of irrigation and should be watered more frequently.

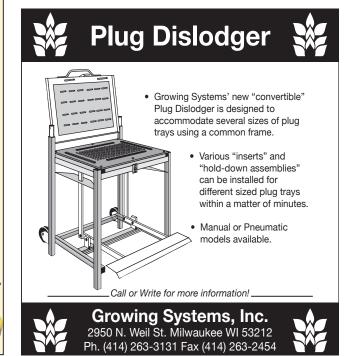
They are moderate feeders. Nutrients can be applied using water-soluble sources, providing 75-125 ppm using a constant liquid fertilizer program or 150-200 ppm as needed. Controlledrelease fertilizers also can be incorporated into the growing mix before planting to effectively provide nutrients to containerized penstemon; use an incorporation rate between the CRF's low and

medium recommended rate. With the compact growth habit of the Pinacolada series, it is usually not necessary to control plant height. However, under certain circumstances, it may be beneficial to tone the plants as needed using plant growth regulators. Spray applications of daminozide (B-Nine or Dazide) at 2,500 ppm, paclobutrazol (Bonzi, Paczol or Piccolo) at 15-20 ppm, or uniconazole (Concise or Sumagic) at 3-5 ppm will effectively tone the plants.





'Pinacolada Red olada Light Rose



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Insects and Diseases

Although penstemon can be produced relatively free of diseases and insects, growers frequently observe aphids, thrips and powdery mildew during production. Other pests or pathogens they may observe on occasion include caterpillars, impatiens necrotic spot virus, root rot, rust and spider mites. Insects and diseases can be detected with routine crop monitoring; control strategies may not be necessary unless scouting activities indicate actions should be taken.

Forcing

Penstemon Pinacolada is a firstyear-flowering perennial and can easily be scheduled and grown to produce plants in bloom throughout the growing season. They do not require cold for under low light conditions. flowering, and there are no benefits observed following a cold

treatment. Penstemon can be safely overwintered and grown successfully following a vernalization period. There is also no need to bulk them up to fill out the containers. Pinacolada cultivars can be grown using fresh, nonvernalized plugs in the spring. They are day-neutral plants

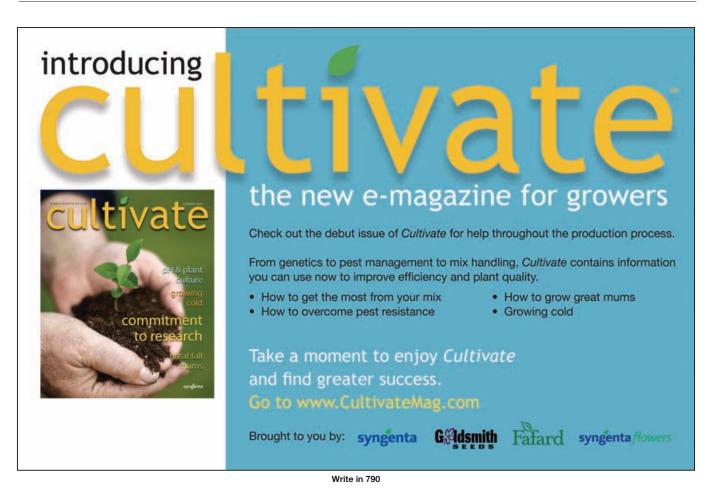
that will flower under any photoperiod and can be forced into bloom under natural day lengths. The length of the photoperiod has no effect on the time to flower or the number of blooms produced. For quicker and higher-quality flowering, grow them under high light intensities; they will still bloom under lower light levels, but the time to flower is increased slightly and the number of blooms and overall appearance is slightly reduced

Plant quality also is improved

when they are grown under cool growing conditions. For the best quality, grow them with 24-hour average temperatures of 60-64° F. This can be obtained using consistent day and night temperatures or using cool nights (55-60° F) and warm days (65-70° F). At these temperatures, Pinacolada cultivars will reach flowering nine to 11 weeks after transplanting.

Availability

Penstemon barbatus Pinacolada cultivars are available to the industry as seeds, plugs and finished containers. Seeds can be obtained from Syngenta Flowers (www.syngentaflowersinc.com) or from many reputable seed distributors and plug growers. Plugs can be acquired from Gro-N-Sell (www.gron-sell.com), Northwest Horticulture (www.northwesthort.com), Pacific Plug & Liner (www.ppandl.com)



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and many reputable perennial plug producers or plant brokers. GPN

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