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By Paul Pilon

Produced as a bedding plant or cut flower, this dianthus works as a perennial, too.

Dianthus 'Bouquet Purple'

ianthus 'Bouquet Purple' has been produced as a bedding plant or cut flower for a few years, and it is still underutilized as a perennial crop. Bouquet Purple has many desirable perennial characteristics such as: quick finishing time from plugs, easy flowering that can be scheduled, hardiness in USDA Zones 4-10 and few known cultural problems. Bouquet Purple is a seed-propagated, interspecific F1 hybrid that produces lavender flowers on strong, well-branched stems. Throughout the country, it has been a terrific performer and has been named winner of the 2000 Minnesota Select Perennial award and the 2001 Mississippi Medallion award.

Bouquet Purple was bred by Linda Laughner, a breeder at PanAmerican Seed Company at the Santa Paula, Calif., facility. This variety, which reaches 18-36 inches, does not require staking and produces higher yields of salable stems than several other dianthus varieties in the marketplace. It should be noted that the plant height will generally be taller when it is produced under greenhouse conditions as compared with plants grown in the landscape, which often only reach 18-24 inches. Bouquet Purple is well-suited for commercial greenhouse and commercial cut flower production and performs well in the landscape.

The genus dianthus was named

"interspecific" hybrid is made by crossing two different species within the same genus. This type of breeding is rather difficult but usually results in hybrids with the best characteristics from two different species. At this time, the breeder will not disclose which species were used to create Bouquet Purple.

PROPAGATION

Dianthus Bouquet Purple can easily be started from seed. Most greenhouses sow the seed in 200-cell or larger plug trays filled with a growing medium with both good aeration and water-holding capacity. At sowing, it is recommended to cover the seed with medium-grade vermiculite to help preserve moisture around the seed. Germination will occur in seven days at 72° F. Once germinated, plants can be grown with temperatures between 60 and 72° F. At these temperatures, Bouquet Purple will finish the plug stage in approximately 6-8 weeks. Do not attempt to harvest seed from this variety, as it is a hybrid and the seedlings will not be true-to-type.

PRODUCTION

Bouquet Purple performs best when grown in a moist, welldrained media with good aeration and water-holding capacity. When planting, be careful not to plant the plugs too deeply, as this could lead to crown rot. I would recommend applying a fungicide drench, such as Subdue Maxx, immediately after transplanting. This variety is a moderate feeder and grows well under a constant liquid fertilizer program with fertilizer rates of 50-100 parts per million (ppm) nitrate or by incorporating a controlled-release fertilizer at a rate equivalent to one pound of nitrogen per yard of growing medium. The pH should be maintained between 6.0 and 6.5. Water thoroughly as needed, allowing the soil to dry between waterings. Due to its sturdy stems, Bouquet Purple can tolerate overhead irrigation better than other cul-



by the famous botanist Theophrastus, from the Greek words "dios," meaning divine, and "anthos," which translates to flower. The common name most often used for this genus is "pinks." This common name refers to the ragged edges of the flowers, which often appear to have been cut by pinking shears. Interspecific dianthus hybrids are fairly new to the marketplace. An

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A 50-cell flat transplanted from a 288-cell tray at four weeks. (Photo courtesy of Swift Greenhouse)

tivars of dianthus. The best quality is achieved when plants are grown in full sun or in greenhouses with high light intensities, preferably 5,000-9,000 foot-candles. The height of the plant will be reduced when produced under high light levels and elevated temperatures.

Controlling height is not a concern for cut flower production, as stem length is desirable when using in flower bouquets and placing into vases. However, controlling stem elongation may be necessary for this variety when grown as a greenhouse or perennial crop. Dianthus cultivars are responsive to several of the commercially available growth regulators. When necessary, apply Bonzi at 30 ppm or B-Nine at 2,500 ppm. Two applications 10 days apart should provide adequate control. Before applying these chemicals, the height can often be effectively controlled by providing adequate spacing between the plants and by withholding water and nutrients.

Occasional outbreaks of aphids may be observed and can usually be eliminated by applying a preventative drench of Marathon 60WP two weeks after transplanting. Following a preventative powdery mildew program is also recommended. Some growers are reporting Bouquet Purple to be phytotoxic to applications of the chemical Pipron, which is generally excellent for powdery mildew control. When implementing a preventative program for powdery mildew on perennial crops, I often rotate between different chemical classes, including the chemicals Systhane 40WP, Compass 50WG and Terraguard 50W. Often, growers can reduce the occurrence of powdery mildew by maintaining the relative humidity below 85 percent. For growers who do not apply Marathon to their dianthus, I have found a preventative biweekly application of insecticidal soap to be very effective at simultaneously controlling both aphids and powdery mildew.

For container production, Bouquet Purple is suitable for production in 4-inch to 1-gallon containers. For 1-gallon production, planting three 200-cell plugs into each pot is recommended.

Bouquet Purple is considered a day-neutral plant. Therefore it does not have a critical photoperiod necessary to achieve flowering. Regardless of the photoperiod, Bouquet Purple will flower faster when grown under higher light intensities. Providing supplemental lighting is not necessary, but it will reduce the time to flower, especially when grown under low light levels. Depending on the light intensity, flowering is often achieved about eight weeks after transplanting when grown at 70° F. After the first flush of flowers is harvested or deadheaded, a second round of flowering will occur in another 8-10 weeks.

AVAILABILITY

Dianthus Bouquet Purple is brought to the marketplace by Pan American Seed Company. The seed is available from Ball Seed Company and other reliable seed distributors. Plugs or finished containers can be purchased from many reputable plug producers or finished growers throughout the country. **GPN**

Paul Pilon is head grower at Sawyer Nursery, Hudsonville, Mich. He can be reached by E-mail at pjpexpress@juno.com.



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