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Aster dumosus 'Sapphire'

By Paul Pilon



The increased popularity of perennials has created season-long demand for flowering perennial crops. Growers are now offering frost-to-frost programs, supplying flowering plants to the marketplace throughout the growing season. Historically, garden mums and fall pansies have dominated autumn plant sales, but recently, perennials have very much become a component of fall plant sales. With their ease of production and natural bloom times, fall asters are well suited for late-season sales.

'Sapphire' forms a massive display of large, fluffy, lilac blue flowers with yellow centers. Flowering occurs from late August through October. The plant remains compact, reaching only 12-16 inches in height. Asters prefer full sun, although in the South they perform best when grown under partial shade. They are both heat and cold hardy in Zones 4-11. 'Sapphire', as with many aster cultivars, is very versatile and can be utilized in a number of ways, including containers, borders and mass plantings. 'Sapphire' is suitable for production in a wide range of container sizes — from 4-inch up to 1-gal. With these characteristics, 'Sapphire' can be marketed alongside fall bedding plants and makes a good component for combination pots.

Propagation

'Sapphire' is vegetatively propagated from tip cuttings by licensed propagators. Since a plant patent is being sought (PPAF-plant patent applied for), unlicensed propagation of this cultivar is prohibited.

Production

Growers producing 6-inch or smaller containers usually plant one liner per pot. When larger sizes are grown, planting multiple liners per pot is the common practice. 'Sapphire' performs best when grown in a moist, well-drained medium with a slightly acidic pH of 6.0-6.5. Asters are heavy feeders and perform best when a constant liquid fertilization program is used, feeding at rates of 150-200 ppm nitrogen. Controlled-release fertilizers can be incorporated into the growing mixes at medium to high rates; applying 1.25-1.5 lbs. of nitrogen per yard of growing medium is recommended. It may be necessary to leach with clear water or to reduce the fertility rate on occasion if the soluble salts accumulate.

'Sapphire' requires frequent irrigation, particularly as plants become more developed. When irrigation is necessary, I recommend watering thoroughly, then allowing the soil to dry slightly between waterings. Once the flowers begin to open, growers often switch to applying only clear water.

'Sapphire' should be grown with night temperatures of 60-65¼ F and day temperatures of 65-75¼ F. During the last two weeks of production, as the crop nears open bloom, lowering the night temperature to 55-60¼ F will help intensify the color of the bloom.

Growers commonly pinch asters to promote more branching and create a fuller pot. Asters grown in controlled environments or forced to bloom out of season often require pinching. Pinching usually occurs within two weeks of planting a rooted cutting into the final container, after the roots reach the sides and the bottom of the pot. Typically, growers make a soft pinch, leaving 4-6 leaves. Small container sizes, such as 4-inch pots, are usually pinched one time. Larger container sizes may require two pinches to create fuller pots and more blooms. If a second pinch is needed, it should occur 3-4 weeks following the first, leaving 3-4 leaves above the initial pinch. When producing asters for natural season blooming, all pinching should occur between July 25 and August 10. Later pinches delay flowering and may result in inadequate plant size at flowering.

Controlling the plant height may be necessary when producing 'Sapphire'. In many cases, the height of the plant can be manipulated using proper crop scheduling and pinching practices. Providing adequate spacing between the plants will reduce plant stretch caused by competition. Under certain growing conditions or high plant densities, it may be necessary to use chemical plant growth regulators. In the Northern parts of the country, I would recommend applying B-Nine (Crompton) at 2,500-3,750 ppm. Applying 1-2 applications 7-10 days apart should provide adequate height control. The first application should occur after pinching — once the new shoots are about 1 inch in length.

Pests & diseases

Aphids, spider mites, thrips and whiteflies occasionally will become problematic. Of these insect pests, aphids and whiteflies are the most prevalent. Preventative spray applications of systemic chemicals such as Endeavor (Syngenta Professional Products), Flagship (Syngenta), Marathon II (OHP) or Tri-Star (Cleary Chemical) will usually keep asters free of aphids and whiteflies.

Botrytis, powdery mildew, Rhizoctonia foliage blight and rust are common diseases of aster crops. Botrytis often causes the lower leaves to become yellow and brown; it is most prevalent when plants are grown at high densities and with poor air circulation. Powdery mildew appears as small, white talcum-like colonies but, under the right conditions, may engulf the plant with a "powdery" appearance. Rhizoctonia foliage blights form brown-black necrotic spots on leaf surfaces and stems, with the leaves dying back from the tips in advanced stages, often leading to plant death. Rust causes yellow spots to appear on the upper leaf surfaces and bright orange to brown pustules to form on the undersides.

All of these diseases can be reduced by using adequate crop spacing, avoiding overhead irrigation late in the day, providing adequate air circulation and controlling humidity. Routine scouting is recommended to detect these problems early. Growers should also consider implementing preventative spray programs using the appropriate chemicals to control these pathogens.

Forcing

Forcing 'Sapphire' into bloom out of season is relatively easy, and it can be programmed to bloom throughout the spring and summer months. Asters require short days for flower bud initiation and development. Production under long days causes them to remain vegetative. During naturally long days, it may be necessary for growers to create short-day photoperiods by blocking out all of the light. Short-day conditions are created by pulling black cloth or black plastic over the production site, ensuring the plants only receive 12 hours of light each day. The "black out" area should be completely dark, as even 1 foot-candle of light can be perceived by asters, negating the full benefit of providing darkness. Short days should typically begin one week after the final pinch for 4-inch containers or two weeks from the final pinch for 6-inch or larger pots. Asters respond quickly to short days and can begin flowering within six weeks from the onset of short photoperiods when grown at the temperatures mentioned above.

Availability

'Sapphire' is being marketed by Proven Winners and is available from EuroAmerican Propagators, Four Star Greenhouse and Pleasant View Gardens.

Paul Pilon

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