Bellis perennis
Bellissima Series

This vigorous series of English daisies forms compact, low-growing rosettes that produce large, double flowers in early spring.

By Paul Pilon

Bellis perennis is a delicate, cool-season perennial produced by growers for spring and autumn programs. Bellis is considered a biennial and often is produced as an annual and marketed alongside bedding plants. Like many cool-season plants, bellis does not tolerate the extreme summer heat of much of the United States or the severe northern winters. Despite its seemingly fragile nature, many growers and landscapers use bellis for the colorful displays it delivers during cool production periods.

Bellis perennis 'Bellissima Series' is a reliable, vigorous series of cultivars that has been named Fleuroselect Quality Mark winners. The series contains 'Bellissima Red', 'Bellissima Rose', 'Bellissima Rose Bicolor', 'Bellissima White' and 'Bellissima Mix'. English daisies form compact, low-growing rosettes reaching 4-6 inches in height and 5-8 inches in diameter. The Bellissima series has great flower power as it produces masses of large, fully double flowers in the early spring. Commercially, Bellissima cultivars bloom for long durations, up to 18-20 weeks, when produced under optimum conditions.

Bellis belongs to the asteraceae family that includes many commercially grown perennials including achillea, aster, centaurea, dorumicum, echinops, echinacea, erigeron, gaillardia, helianthus, heliopsis, leucanthemum, ligularia, rudbeckia and stokesia. English daisies often are used in containers, patio pots and small mass or border plantings. The Bellissima series performs well across much of USDA Hardiness Zones 4-8. As mentioned above, bellis are cool-season plants and perform best when grown under these conditions. They tend to struggle and may perish under extreme heat or during extended dry periods.

Propagation

Bellissima is easily propagated by seed and can have a 90 percent yield potential rating. Bellis seeds are commonly sown in 288- or 220-cell plug trays and covered lightly with germination mix or medium-grade vermiculite. The covering is optional, but it helps maintain a suitable environment around the seed during this phase and can improve the uniformity of germination. Seed flats should be moistened and moved to a warm environment where the temperatures can be maintained at 65-72°F for germination. Starting bellis inside a germination chamber will increase both the germination rate and percent germination while decreasing the time necessary for all of the seeds to sprout. It is beneficial to maintain high humidity (95 percent) until the cotyledons have emerged. The seeds should be germinated in 3-7 days.

Once germinated, seedlings can be grown with temperatures from 60 to 68°F. Following germination, reduce the moisture levels somewhat, allowing the growing medium to dry out slightly before watering to help promote rooting. Fertilizers are usually applied once the true leaves are present. Apply 75-100 ppm nitrogen every third irrigation or 50 ppm with each irrigation using a balanced, water-soluble source. At these temperatures, Bellissima will finish the plug stage in 5-7 weeks.

Left: 'Bellissima Mix' works well as a border plant. Right: Despite its seemingly fragile nature, many growers use bellis for the colorful displays it delivers during cool production periods. (Photos: Ball Horticultural Co.)
Growing On

Bellissima is often produced in 1-qt. or smaller containers with a single plug planted in the center of the pot. After the plug has been transplanted, the growing medium of the pot should be even with the top of the plug. English daisies perform best when grown in a moist, well-drained medium with a slightly acidic pH (5.5-6.5). They are light feeders. Providing moderate to high fertility levels causes them to appear lush and leafy. Growers commonly deliver nutrients using either a constant liquid fertilization program, feeding at rates of 50-75 ppm nitrates, or a controlled release fertilizer incorporated at a rate equivalent to three-fourths lb. of nitrogen per yard of growing medium. When irrigation is necessary, I recommend watering thoroughly then allowing the soil to dry slightly between waterings.

Aphids are the most troublesome insect pests of bellis. Unless preventative programs have been put into place, I don’t recall observing an aphid-free crop of English daisies. I usually apply a preventative drench application of Marathon 60WP (OHP) to ensure the absence of aphids for the duration of the production cycle. Whiteflies and leafhoppers may also be observed feeding on bellis.

Botrytis is likely to occur late in the crop cycle once the canopy closes in and plants begin to bloom. In most cases, Botrytis can be prevented or reduced by providing adequate spacing and good air circulation at all times, maintaining a relative humidity below 70 percent, selling plants when the flower buds just begin to open and, if necessary, implementing a preventative fungicide spray program using products such as Decree (SePro) and Daconil (Syngenta Professional Products). With their compact growth habit, Bellissima usually does not need any height management. However, in the winter months, during periods of low light levels, when grown at high plant densities or when grown with luxurient nutrient levels, excessive plant growth might occur, requiring some type of height management strategy. The growth of bellis can often be controlled by providing adequate spacing between the plants. It may be necessary, although not common, to use PGRs to control the growth of English daisies. In northern parts of the country, I recommend applying a tank mixture of...
Providing low temperatures will produce nice crops but will require additional time for plants to flower.

**Availability**

The Bellissima series was brought to the market by PanAmerican Seed Company. Seed is available through Ball Seed. Plugs can be acquired from many perennial plug producers or plant brokers.

Paul Pilon is president of Perennial Solutions Consulting, Jenison, Mich. He can be reached at (616) 366-8588 or paul@perennial-solutions.com.

Forcing

The Bellissima series is easy to force into bloom and is most commonly produced for early spring sales. Plants do not have a cold requirement, but cold is beneficial and will reduce the time to bloom slightly and increase the number of blooms produced. English daisies will flower under any photoperiod and can be forced into bloom under natural day lengths.

There are three common practices to produce flowering bellis: The first method is to plant plugs into the final container during early to mid fall, allow them to bulk up slightly, vernalize them during the winter and force them to bloom in the early spring using low production temperatures of 50-60°F for 4-6 weeks. The second practice entails transplanting vernalized plugs in the late winter and forcing them at 55-60°F for 5-7 weeks. The drawback of this second method is the plants are often in full flower before the pots are completely filled out. The third and most common practice entails transplanting an unvernalized plug into the final container during the late winter and forcing it at 60-65°F for 5-7 weeks. Remember, bellis are cool-season plants and prefer to be grown at cool temperatures. They can tolerate temperatures in the 40-45°F range.

B-Nine (Chemtura Corp.) at 2,000 ppm plus Sumagic (Valent USA) at 3 ppm. Applying one or two applications seven days apart should provide adequate height control.

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