perennial solutions

Salvia x sylvestris ‘Marcus’

By Paul Pilon

This dwarf meadow sage is well suited for container production. Avoid crown and root rots by refraining from excessively moist or wet conditions.

Salvia ‘Marcus’ is a dwarf selection of meadow sage with many notable characteristics for commercial growers, landscapers and homeowners. Compact spikes of deep-violet flowers are produced above bushy clumps of attractive gray-green foliage in the late spring and early summer. When blooming, the clumps remain compact, reaching 10-12 inches tall. Extending bloom times can be achieved by removing the flower spikes after they fade. The open flowers effectively attract hummingbirds, butterflies and bees into the landscape.

‘Marcus’ performs well throughout USDA Hardiness Zones 4-9 and AHS Heat Zones 12-1. Salvias generally prefer locations with full sun; however, in the southern United States, locations with filtered shade are optimal. Once they are established in the landscape, salvia are quite drought tolerant. Meadow sage is commonly used for accent, border and mass plantings, and with its compact growing habit, ‘Marcus’ performs exceptionally well in containers.

Propagation

‘Marcus’ is a patented cultivar and is vegetatively propagated from tip cuttings by licensed propagators. Asexual propagation is prohibited without a license for propagation.

Tip cuttings measuring approximately 2 inches in length should be harvested from non-flowering stock plant. Cuttings that are already in bloom will take longer to root and have a lower survival rate than purely vegetative starting materials. The best results are obtained in the spring or early summer. During the summer heat, the cuttings will often set there for a long time without initiating roots and turn yellow; many times plant death will occur.

The rooting medium in the plug flat should be moistened prior to sticking. The base of the cuttings can be dipped into a rooting hormone, such as a solution of indolebutyric acid (IBA) at rates between 500 and 1,000 ppm prior to sticking. Salvia can successfully root without rooting compounds but tend to root slightly faster and more uniformly when these treatments are provided.

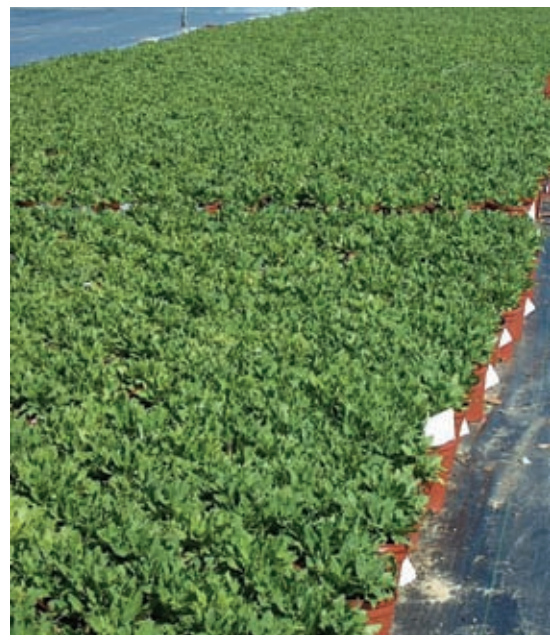
Place the cuttings under a low misting regime for the first 7-10 days of propagation. When possible, it is best to propagate under high humidity levels (90-percent relative humidity) with minimal misting. The misting can gradually be reduced as the cuttings form callus and root primordia. The cuttings ➧

Salvia ‘Marcus’ has compact spikes of deep-violet flowers produced above bushy clumps of attractive gray-green foliage in late spring and early summer. (Photo: Image Botanica)

are usually rooted in less than 3-4 weeks with soil temperatures ranging from 68 to 74° F. For best results, the air temperature during rooting should be maintained above 60° F and below 80° F. It is beneficial to begin constant liquid feeding with 150-ppm nitrogen at each irrigation beginning 10 days from sticking.

Production

'Marcus' is very well suited for container production, and it commonly is produced in 1-quart to 1-gal. containers. Salvia perform best in a well-drained peat or bark-based medium with a slightly acid pH between 5.6 and 6.2. When planting, the plugs or bareroot divisions should be planted so the original soil line of the plug is even with the surface of the new container's growing medium. They do not tolerate excessively moist or wet conditions; these conditions often lead to crown and root rots. When irrigation is necessary, water them thoroughly and allow them to dry out between waterings.



'Marcus' is very well suited for container production, and is commonly produced in 1-quart to 1-gal. containers. (Photo: Paul Pilon)

They are light to moderate feeders requiring only modest amounts of fertility. When planting salvia, I recommend incorporating a controlled-release fertilizer into the growing media at a rate equivalent to three-fourths lb. of elemental nitrogen per yard of growing medium. Another method to deliver fertility to this crop would be using a constant liquid fertilizer program, delivering 100-ppm nitrates to the crop at each watering.

With its compact habit, it is usually not necessary to control plant height when producing 'Marcus'. The height can usually be controlled by providing adequate space between each plant, which reduces the competition for light and prevents them from growing taller. Under certain circumstances, particularly when produced at high plant densities, it may be necessary to tone them with plant growth regulators. In the Midwest, I recommend toning 'Marcus' by applying B-Nine (daminozide) at 2,500 ppm; a single application is often sufficient.

Insects And Diseases

There are relatively few diseases and insects affecting the production of salvia, and seldom does significant plant injury or loss occur. As mentioned earlier, crown and root rots are likely to occur, espe-

With its compact growing habit, 'Marcus' performs exceptionally well in containers. (Photo: Paul Pilon)

cially when produced under wet growing conditions. Botrytis may be observed in situations where there is a dense plant canopy, little air movement and water remaining on the leaves for long durations. Aphids, twospotted spider mites, thrips and whiteflies are the most common insects that may be observed feeding on salvia 'Marcus'.

Forcing

Producing flowering salvia 'Marcus' out of season is relatively easy provided a few guidelines are followed. Salvia are cold-beneficial plants; providing a cold treatment reduces the time to produce blooming plants and enhances bloom uniformity. It is beneficial to bulk salvia in small containers under short-day conditions for 4-6 weeks prior to providing the cold treatment. I recommend providing cold to the plugs or small containers for 6-9 weeks at 35-40° F. After the cooling is achieved, provide photoperiods (day length) of 16 hours by extending the day if necessary, or use a 4-hour night interruption during the middle of the night, providing a minimum of 10 foot-candles of light at plant level.

'Marcus' is a long-day beneficial plant and will flower best when grown with long photoperiods. The time it takes to reach flowering depends on the growing temperature after the plants are placed under long-day conditions. Plants grown at 64° F will flower in about eight weeks, while plants grown at 68° F will flower in as little as six weeks. It will take approximately two additional weeks to reach flowering for plants that do not receive vernalization and when grown under short day conditions. GPN

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Paul Pilon is president of Perennial Solutions Consulting, Jenison, Mich., and author of *Perennial Solutions: A Grower's Guide To Perennial Production*. The book is a guide to propagation and growing containerized perennials with chapters on media, fertilization, insect and disease management, 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 at (616) 366-8588 or paul@perennial-solutions.com. Get a copy of his book at www.perennial-solutions.com.