



By Paul Pilon

Lobelia cardinalis 'Fan Scarlet'

This award winner works well as a container plant or in the landscape.

Lobelia cardinalis is an eye-catching perennial in garden centers, container plantings and in the landscape. Lobelia 'Fan Scarlet' is a Fleuroselect Gold Medal winner with many desirable characteristics for commercial perennial growers. It has attractive green to bronze foliage that takes on a more bronze appearance when grown outdoors. It remains compact, reaching only 20 inches in bloom. The vibrant scarlet flowers appear in early summer and will continue to bloom until frost if they are deadheaded.

Lobelias are short-lived perennials with full hardiness in USDA Zones 6-10. They prefer moist growing conditions but do not tolerate standing water. They can be grown in full sun unless the growing conditions are dry, causing them to require some shade during the heat of the day.

PROPAGATION



Photo courtesy of Ernst Benary of America

Fan Scarlet is a seed-propagated cultivar. Most growers sow multiple seeds per cell because the seed is very small and has a germination rate of 70-80 percent. When sowing, it is recommended not to cover the seed and to place the plug flats into a germination chamber or greenhouse, maintaining soil temperatures of 65-72° F with high humidity until they have germinated. With these conditions, germination will usually occur in 14-21 days. Placing the plug flats in a germination chamber is not necessary but will most likely improve the germination rate and decrease the time to germinate. It takes 12-14 weeks from sowing for 72-cell plug flats to reach transplantable size.

PRODUCTION

Lobelias perform best when grown in a moist, well-drained medium with good aeration and water-holding capacity. When planting, the top of the starter plug should be even with the soil line of the finished container. I recommend applying a fungicide drench, using a broad spectrum fungicide such as Banrot (Scotts Company) after transplanting.

When planting lobelias, I incorporate a controlled-release fertilizer into the potting substrate at a rate equivalent to 1 lb. of nitrogen per yard of growing medium. For example, when using a formulation that contains 20 percent nitrogen such as 20-9-12, you would need 5 lbs. of the fertilizer per yard of growing medium to provide 1 lb. of elemental nitrogen. Another method to deliver fertility to this crop would be through a constant liquid fertilizer program, delivering 75-100 ppm nitrates to the crop at each watering. The pH should be maintained at 5.8-6.4. When providing irrigation, water thoroughly and dry slightly between waterings.

Generally, insects do not cause significant crop damage to lobelia crops. Scouting may reveal the presence of several greenhouse insect pests: aphids, thrips and two-spotted spider mites. Other pests may be observed feeding on lobelia in nursery or outdoor production sites, including leafhoppers, leafrollers, slugs and snails.

Of these pests, snails and slugs are probably the most unfamiliar to commercial growers. They are both members of the mollusk phylum and are very similar in structure and biology, except

snails have an external spiral shell while slugs are shell-less. They can be detected by their physical presence; look for leaves with irregular holes and smooth edges or the "slime trail" left on leaf sur-

faces. To control snails and slugs growers often use baits containing metaldehyde such as Deadline M-P (Pace International) or iron phosphate, which is available as Sluggo (Western Farm Service).



Photo courtesy of Sawyer Nursery

Baits take time for results to be observed and do not provide complete control of these pests. If additional control is necessary, chemical applications of Mesuro (Gowan Company) can be applied.

If produced under overly wet conditions, root and crown rot diseases such as Pythium or Phytophthora are more likely to occur. This is especially true early in the production cycle until plants become established and while they are being produced under short-day conditions and remain in the rosette form. During these periods water sparingly. Preventative applications of fungicidal drenches using products such as Banrot, Cleary's 3336 (Cleary Chemical Corporation) and Subdue (Syngenta Professional Products) will help to control the occurrence of Pythium and Phytophthora. With good watering practices, adequate plant spacing and plenty of air circulation the occurrence of most diseases can almost be negated.

Lobelias are naturally tall perennials when grown as containerized plants; therefore, high plant density situations would normally require some method of controlling plant height. Before using chemicals to reduce plant height, it is usually beneficial to provide adequate space between each plant, which will reduce the competition between plants for light and prevent the plants from growing taller. Lobelias respond to most commercially available growth regulators; the most effective ones are Sumagic (Valent), A-Rest (SePRO) and B-Nine (Crompton Uniroyal). In the Midwest, I would recommend applying one of the above growth regulators, beginning with these application rates: 5

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ppm Sumagic, 25 ppm A-Rest or 2,500 ppm B-Nine. It may be necessary to make 2-3 applications at seven-day intervals. In other locations, it might be necessary to apply the weekly applications using different rates. Regardless of location, it is better to apply lower rates of growth regulators frequently as opposed to applying a single higher rate application.

FORCING


Producing flowering Fan Scarlet out of season is relatively easy, provided a few guidelines are followed. Generally, it is recommended to vernalize plugs or containers of lobelia for at least three weeks at 40° F. As with many cultivars of lobelia, Fan Scarlet will flower without vernalization, but a short cold treatment is recommended to increase plant vigor and the uniformity of flowering time.

After cooling has been achieved, I recommend providing long-day conditions. Lobelias are day-neutral plants and will flower under any photoperiod but will flower up to two weeks quicker when the daylength is over 14 hours following a cold treatment. Long-day conditions can be achieved by day extension or night interruption, providing a minimum of 10 foot-candles of light during these treatments.

Fan Scarlet can be successfully forced into bloom when grown at temperatures between 60 and 80° F. I would recommend growers use production temperatures of 65-70° F to force this lobelia cultivar. At these temperatures, Fan Scarlet will be blooming in approximately 8-10 weeks.

AVAILABILITY

Fan Scarlet seed is available from Ernst Benary of America

and from numerous seed distributors. Plugs are available from many perennial plug producers, and finished containers may be purchased from many reputable greenhouses and nurseries throughout the country. 

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