

Lobelia Vulcan Red

(*Lobelia x speciosa*)

Germination

Approximate seed count (pelleted): 30,800 to 44,800 S./oz. (1,100 to 1,600 S./g)

Key flowering facts:

- First-year-flowering perennial to USDA Hardiness Zone 6-10.
- Photoperiod response: obligate long-day plant with critical daylength at 14 hours.
- Vernalization: not required.

Media

Use a well-drained, disease-free, soilless media with a pH of 5.8 to 6.2 and EC about 0.75 mS/cm (1:2 extraction).

Sowing

Sow 1 seed per cell in 288 or 4 seeds per cell in 84 plug trays. Lightly cover is only needed when grown under dry conditions.

Stage 1 – Germination takes 7 to 9 days.

Soil temperature: 65 to 72°F (18 to 22°C)

Light: Light improves germination.

Moisture: Keep soil wet (level 4) during Stage 1.

Humidity: Maintain 95 to 97%+ relative humidity (RH) until radicles emerge.

Plug Production

Stage 2

Soil temperature: 65 to 68°F (18 to 20°C)

Light: Can be up to 2,500 f.c. (26,900 Lux).

Moisture: Maintain soil moisture at level 4.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N; less than 0.7 mmhos/cm EC).

Stage 3

Soil temperature: 60 to 65°F (16 to 18°C)

Light: Can be up to 2,500 f.c. (26,900 Lux).

Moisture: Allow the soil moisture to dry to level 3.

Fertilizer: Increase fertilizer to rate 2 (100 to 175 ppm N; 0.7 to 1.2 mmhos/cm EC)

Growth Regulators: Not needed.

Stage 4

Soil temperature: 60 to 65°F (16 to 18°C)

Light: Up to 5,000 f.c. (54,000 Lux).

Moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Note: *L. speciosa* needs to be grown at less than 13 hours short day conditions to keep vegetative growth and avoid premature flowering. Long days together with warm conditions make plants stretch easily, resulting in weaker plants in growing-on phase.

Growing On to Finish

Container Size

Gallon: 1 to 2 plugs per pot

2 Gallon: 3 to 4 plugs per pot

Media

Use a well-drained, disease-free, soilless media with a pH of 5.8 to 6.2 and a medium initial nutrient charge (EC 0.75 mmhos/cm).

Temperature

Nights: 60 to 65°F (16 to 18°C)

Days: 65 to 70°F (18 to 21°C)

Note:

Vulcan Red is frost sensitive, so grow at minimum of 40°F (3°C).

Light

Keep as high as possible, as this will improve foliage, more intense purpling.

Photoperiod

Vulcan Red is an obligate long day plant and requires daylength minimum 14 hours for flowering.

Vulcan Red flower can be induced during plug stage under long day conditions, which causes premature flowering with weak and thinner stems. Therefore, keeping plug production at less than 13 hours is recommended. Otherwise, it may be necessary to transplant an extra 1 or 2 plugs for larger pot size.

When transplanting in extreme long day conditions (16 hours or longer), extra plugs may also be needed even from short day treated plugs.

Irrigation

Keep media moisture medium moist (level 3; substrate color is brown to dark brown). Let top soil dry in between waterings but avoid drought stress; grow evenly moist but not wet.

Fertilizer

Vulcan Red generally needs moderate fertilization. Apply fertilizer at rate 2 to 3 (between 150 to 225 ppm N; 1.0 to 1.5 mmhos/cm).

Growth Regulators

Bonzi (paclobutrazol) 30 ppm (7.5 ml/l, 0.4% formulation) or Sumagic (uniconazole) 5 ppm (9.1 ml/l, 0.055 % formulation) in early growing stage can be applied for height control.

Pinching

Not needed.

Crop Scheduling

Sow to transplant (288 cell plug): 7 to 9 weeks; 84 cell plug takes a week longer

Transplant to flower: 14 to 19 weeks when grown under proper daylength of 14 hours or more.

Total crop time: 21 to 28 weeks

Common Problems

Insect: Leafminer, Aphids, Snails, Slugs

Disease: Phytiun, Phytophthora, Root and Crown Rot

Garden and Landscape Information

- Finished height: 24 to 32 in./60 to 80cm
- Finished spread 10 to 14 in./25 to 35cm
- Garden spacing: 16 to 20 in./40 to 50 cm

Note: Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific chemical being used in accordance with all regulations.

