

Monarda Balmy

(*Monarda didyma*)

Propagation

- Choose a well-drained medium with an EC of 1.0 to 1.25 mmhos and a pH of 5.8 to 6.2.
- Stick cuttings the day of arrival if possible. Otherwise, store at 45°F (7°C) for not more than 18 hours before sticking.
- Soil temperature should be maintained at 70 to 72°F (21 to 24°C) until roots are visible.
- A rooting hormone of 500 ppm can be applied to promote early, uniform rooting.
- Mist at moderate to high levels for the first 24 to 48 hours to rehydrate cuttings. Avoid over-application of mist after this period.
- Begin fertilization with 50 to 75 ppm N when roots become visible.
- During root development, maintain moderate moisture levels in the soil. Avoid saturation of media.
- Pinching once in the propagation tray at 21 to 25 days after sticking will promote a well-branched finished plant.
- Rooted cuttings should be ready for transplanting 28 to 35 days after sticking.

Growing On to Finish

Media

- Use media with good aeration and drainage.
- Prefers a medium that is high in organic matter.
- A pH of 5.8 to 6.2 is optimum.

Temperature

- **Nights:** 55 to 65°F (13 to 18°C)
- **Days:** 60 to 65°F (16 to 18°C)
- Temperatures below those recommended will slow plant growth significantly.
- An average daily temperature of 60°F (16°C) is optimal, but plants will tolerate a wide range of warm temperatures.
- Monarda are facultative long day plants. Vernalization is not necessary for flowering; however, vernalization has been shown to hasten flowering by up to 2 weeks.

Light

- Will perform best under moderate to high light levels of 5,000 to 8,000 f.c. (50,000 to 80,000 Lux).
- Plants grown under short days will benefit from extended day lighting to hasten flowering; however, this is not required.
- Finish Monarda outside under full sun conditions

for best quality.

Watering

- The media should be allowed to dry slightly between watering and never saturated. However, plants should not be allowed to wilt at any time.
- Leach regularly to avoid the buildup of high soluble salt levels.

Fertilizer

Use a balanced fertilizer at a rate of 125 to 150 ppm. Periodic use of a calcium-based fertilizer should help optimize the nutrient levels.

Pinching

Plants should be pinched once in the propagation tray and can be pinched a second time 1 to 2 weeks after transplant to create very full plants.

Controlling Growth

Under most conditions, will not require growth regulator treatments. Plants will respond to B-Nine at 2,500 ppm if growing conditions cause stretch.

Common Problems

Insects: Whitefly, Spider Mite

Diseases: This Monarda is very resistant to Powdery Mildew; however, if grown under poor air circulation and high humidity, PM may be present.

Problem: Plant collapse

Causes: Plants grown in saturated media for extended periods of time (Pythium); Rooted cuttings transplanted too deeply

Problem: Excessive vegetative growth and lack of flowers

Causes: Excessive ammonium-based fertilizer; Over-fertilization under low light conditions; Low light and over-watering; saturated media

Problem: Yellowing of young foliage

Causes: Saturated media

Problem: Foliage necrosis

Causes: High soluble salts in media; Excessive water stress; Pesticide application

Problem: Poor branching and thin plants

Causes: Low fertilization during early stages of growth; Low light conditions

Crop Schedule & Uses

(Crop Schedule in Weeks. Spring planting is recommended)

1 PPP* 1-quart (10-cm) pot

Unrooted cutting 12 - 14 weeks

Rooted cutting 8 - 10 weeks

1 PPP* 1-gallon (15-cm) pot

Unrooted cutting 14 - 16 weeks

Rooted cutting 10 - 12 weeks

3 PPP* 2 to 3-gallon (25 to 30-cm) pot

Unrooted cutting 14 - 16 weeks

Rooted cutting 10 - 12 weeks

*PPP: Plants per pot

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.

