

Monarda Balmy™ Series

M. didyma

DarwinPerennials™

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 for not more than 18hr before sticking.
- Soil temperature should be maintained at 70 to 72°F (21 to 24°C) until roots are visible.
- A rooting hormone of 500ppm 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 two 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. Not required however.
- 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 anytime.
- 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 2,500ppm 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.

Problems	Causes
Plant collapse	Plants grown in saturated media for extended periods of time (<i>Pythium</i> ,) Rooted cuttings transplanted too deeply
Excessive vegetative growth and lack of flowers	Excessive ammonium-based fertilizer Over-fertilization under low light conditions Low light and over-watering; saturated media
Yellowing of young foliage	Saturated media
Foliage necrosis	High soluble salts in media Excessive water stress Pesticide application
Poor branching and thin plants	Low fertilization during early stages of growth Low light conditions

Crop Schedule & Uses

(Crop Schedule in Weeks. Spring planting is recommended)

	1qt (10-cm) Pot 1 PPP*	1gal (15-cm) Pots 1 PPP*	2 – 3 gal (25–30-cm) Pots 3 PPP*
Unrooted cutting	12-14	14-16	14-16
Rooted cutting	8-10	10-12	10-12

*PPP: Plants per pot

DarwinPerennials™

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