

Technical Guide

MONARDA

Grand Marshall™ ('Achall') USPP#19582

Grand Mum™ ('ACmum') USPPAF

Grand Parade™ ('Acrade') USPP#19580

License for propagation is required.

RECEIVING and HANDLING

UNROOTED CUTTINGS: Open boxes and inspect material as soon as possible after receiving. Do not allow boxes to sit in direct sunlight. If necessary to store before sticking, keep in the boxes in a cooler at 41° to 45°F (5° to 7°C).

PROPAGATION

Cell Flat Size: 128, 72, 30 cell

Media: Propagation media with high porosity and water-holding capacity. Should not contain bark or slow-release fertilizer.

Propagation Air Temperature: 70°F (21°C)

Hormone: None.

Fertilizer: Once rooting begins, fertilize with a 50 to 100 ppm nitrogen fertilizer at least once a week.

Common Propagation Pests: Fungus gnat larvae.

Common Propagation Diseases: Bacterial leaf spot.

Cutting Handling: Monardas are generally fast rooters. A broad-spectrum fungicide drench targeting *Fusarium* and a fungus gnat larvaecide is recommended within 24 hours of stick.

Before using any pesticides be sure they are registered for use. Follow label directions. The label is the law.

Pinching: Pinch cells once after moving out of propagation.

Weeks in Propagation: 2 to 3 weeks

General Mist Schedule: Place under high mist for a few days. Then move to a moderate mist until rooting begins. When you see roots, move to a low mist until cuttings root down.

Weeks to Ready: 6 to 8 weeks

VARIETY FEATURES

- Grand Marshall™ has large raspberry flowers and showy reddish bracts
- Grand Mum™ has large lavender-pink flowers
- Grand Parade™ has lavender-purple blooms and a compact habit
- Highly mildew resistant
- Attract butterflies
- From Morden Research Centre in Canada



Monarda Grand Marshall™



Monarda Grand Mum™

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TRANSPLANT LINERS

Pot Size: Transplant liner into 6- to 8-inch pot (15 to 20 cm) or standard 1-gallon (4 litre) pot with one cell per pot.

Media: Porous soil with good drainage.

Vernalization Trials: Vernalization trials are executed by placing cell flats in a cold greenhouse set at 38°F (3°C). Fluctuations in temperature occur based on natural day and nighttime temperatures in Lancaster PA.

Vernalization Trial Results: Vernalization is required for best performance.

GROWING ON

Media pH: Optimum not tested. Standard for 1-gallon (4 litre) pot is 5.5 to 6.5 .

Media EC: Optimum not tested. Standard for 1-gallon (4 litre) pot is 1.5 to 3.

Moisture: Plants should be kept evenly moist.

Fertilizer: While actively growing, plants perform well with a constant liquid feed of 100 to 150 ppm nitrogen.

Supplemental Lighting: Not required when finishing in natural season. Long days required for best performance.

Temperature: Recommend growing outdoors for least amount of stretch.

Common Pests: Spider mites

Common Diseases: Powdery mildew; however, these varieties are highly resistant to powdery mildew.

Pinching: Pinch at least once in cell flat if growing from unrooted cuttings. Otherwise, no pinch is necessary.

Crop Maintenance: None.

Growth Regulators: None tested.

SCHEDULING RECOMMENDATIONS

(Based upon outdoor trials in Lancaster, PA)
Plant vernalized liners for fastest, most uniform flower canopy.

Grand Marshall™: Plant vernalized liners outdoors in May for finished flowering plants in 8 to 9 weeks. Unvernalized plants will flower but about 2 to 3 weeks later than vernalized plants with less flower canopy and show.

Grand Mum™: Plant vernalized liners for flowering plants in about 9 weeks.

Grand Parade™: Plant vernalized liners in May for finished flowering plants in 9 to 10 weeks.

SPECIAL FEATURES

Grand Marshall™ grows into a sturdy, mid-size plant with large raspberry flowers. Reddish bracts are showy before flowers even open and are fairly persistent while flowering.

Grand Mum™ is a mid-size plant with strong stems and mildew resistant dark green leaves. Large, lavender-pink flowers. More rounded habit in landscape.

Grand Parade™ grows into a dwarf, compact *Monarda* with lavender-purple blooms. Plants are well suited for containers and do not fall open.

All three varieties are highly mildew resistant and attract butterflies. Breeding from the Morden Research Centre in Canada.

CONTAINER STATISTICS

Light: Full Sun

Flowering Container Height:

Grand Marshall™: 24 inches (61 cm)

Grand Mum™: 18 to 22 inches (46 to 56 cm)

Grand Parade™: 16 inches (41 cm)

GARDEN STATISTICS

Light: Full Sun

Height: Shorter in ground than in pots

Grand Marshall™: 24 to 26 inches (61 to 66 cm)

Grand Mum™: 22 inches (56 cm)

Grand Parade™: 12 to 16 inches (30 to 41 cm)

Spread:

Grand Marshall™: 22 inches (56 cm)

Grand Mum™: 24 inches (61 cm)

Grand Parade™: 20 inches (51 cm)

USDA Hardiness Zone: 3 to 8

AHS Heat Zone: 9 to 1

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Monarda Grand Parade™



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