



# Monarda

## ZONE HARDINESS 4 – 9

### NUTRITION

**pH:** 5.8 – 6.5

**EC:** (2:1 extraction method) 1.0 – 2.0

Moderate to high fertilization is recommended. 100ppm – 200 ppm N

### TEMPERATURE for forcing from liners

**Forcing/Growing on:** 65 F – 72 F Night, 65 F – 72 F Day

**Holding:** 60 Night – 65 F Day

### WATERING

Keep the soil evenly moist during all stages of growing.

*Monarda* require average to slightly above average amounts of irrigation, as they do not tolerate overly dry growing conditions.

### TIMING

**Supernova® 28 Liner to Trade Gallon/True Gallon:** 10 – 14 weeks with one plug per container. A typical planting date for spring forcing would be Week 10 for finishing in Week 24. Long days should be maintained during the entirety of this crop time.

**50 Liner to Quart:** 10 – 14 with one plug per container. A typical planting date for spring forcing would be Week 10 for finishing in Week 24. Long days should be maintained during the entirety of this crop time. Planting a Standard 50 liner into a 1 gallon container and bulking in the summer/fall is also a great way to finish a larger high quality spring crop.

### VERNALIZATION

Vernalized plants grow more vigorously and tend to flower more rapidly and uniformly than plants with no exposure to cold.

If purchased in the spring, our Supernova® 28 and 50 liners have been vernalized for proper flowering.

### PLANTING

*Monarda* perform best when planted in a well-drained, porous growing medium. When your plants arrive, they may appear dead, but the growing points on the *Monarda* when shipped

dormant are resting below the soil line. It will only take 4 – 7 days for new growth to appear once they are planted. Plant the dormant plug so that the soil line of the plug is even to or just slightly below the soil line of the fresh planting media.

When growing perennials, we recommend using an aged or composted pine bark based media as opposed to annual growing mixes that traditionally tend to be heavier in peat. Bark adds weight and stability to the growing mix and tends not to compress and shrink over time, thus adding the longevity that can be needed on long-term crops such as perennials.

### LIGHT/LIGHTING

Long days are required for *Monarda* to flower properly. Maintain long days through the entirety of the forcing cycle. *Monarda* enjoy full sun and high light conditions.

### TRIMMING/PINCHING

To promote branching, it is recommended to pinch them two weeks after transplanting.

### GROWTH REGULATORS

A tank mix of B-Nine® (daminozide) at 2,500ppm + Sumagic® (uniconazole) at 3ppm is effective, if toning is necessary.

### PEST and DISEASE MANAGEMENT

Aphids and Spider Mites are the most prevalent insect pests associated with *Monarda*. A good routine scouting program is recommended to ensure that these and other insect such as Caterpillars, Grasshoppers, Leafhoppers, Leafminers, Slugs, Thrips and Whiteflies don't cause additional damage. Scout and spray preventively for Powdery Mildew. Other foliar diseases should also be scouted for to prevent outbreaks of Leaf Spot, Crown Rot, Rust and Southern Blight. Avoid wet/dry cycling in late fall, as this can increase the instance of Crown and Stem rots.

### OTHER TIPS

When growing larger containers, it is best to bulk them in the summer/fall the year before they are to be sold.



*The rates and chemicals listed are based on our southeast Michigan growing conditions, and are not recommended for nationwide application. Please adjust the rates and spray applications to your location and facility.*