



## Medallion™

### MELAMPODIUM PALUDOSUM

**Minimum Germination Rate:** 75%

**Seed Product Form:** Raw

### FLOWERING

**Flowering Mechanism:** Day-neutral plant – will flower regardless of daylength.

**Flowering Type:** Day neutral – high irradiance will enhance flowering.

### PLUG CULTURE

The timing approximations are based on optimal culture recommendations below:

**Germination 1** (approximately day 1 – 10): From the time a seed is sown until radicle emergence takes place; usually with the root penetrating the media and some cotyledon development. Humidity in the air is 95 – 98% (humidification). Expect radicle emergence in 6 – 8 days.

**Cover:** Seeds may be covered lightly with coarse vermiculite to maintain optimum moisture levels during germination.

**Media:** • pH: 5.8 – 6.2

• EC: 0.5 – 0.75

**Light:** Light is not necessary for germination.

**Moisture:** Saturated (5), from day 1 – 8 or until radicle emergence (approximately day 8). If you are unable to dehumidify on day 8, decrease the starting moisture level from saturated (5) to a wet (4+).

**Humidity:** 100% from day 1 – 8 or until seed coats are shed.

**Temperature:** 65°F (18°C) until day 10.

**Fertilizers:** Maintain EC of 0.5 – 0.75.

**Germination 2** (approximately day 11 – 18): From the time cotyledon is observed until it is fully expanded. The roots have expanded throughout the media.

Dehumidify from 98% to 50% in the air. Media moisture during the wet cycle is usually 4 and 3 during the dry cycle; this wet-dry cycle should take place within 12 – 24 hours for most plants. Melampodium has a fairly high water demand. Don't let plants dry out too often or too severely, or leaf edges can burn.

**Media:** pH: 5.8 – 6.2. EC: 0.75 – 1

**Light:** 2,000 – 3,000 foot candles (20,000 – 30,000 lux); 6 – 10 mols of light.

**Moisture:** Dry back media to wet (4) and alternation to moist (3) within 18 hours at radicle emergence (approximately day 8).

**Dehumidify:** Lower relative humidity to 40% (approximately day 8). Provide horizontal airflow to aid in drying down the media through evapotranspiration, allowing better penetration of oxygen to the roots.

**Temperature:** Once cotyledons are observed, reduce temperature to 60°F (16°C).

**Fertilizers:** 14-4-14 or 17-5-17 at 60 – 100 ppm nitrogen as needed for an EC in the soil of 0.75 – 1.

**Fungicides:** Preventative fungicide may be applied for Thielaviopsis and Rhizoctonia between day 7 and 10.

**Plug Bulking/Flower Initiation** (approximately day 19 – 28): The time it takes for the shoots to proportionately fill the plug cell and for roots to develop throughout the media.

**Media:** pH: 5.8 – 6.2, EC: 1 – 1.50

**Light:** 3500 – 5500 foot candles (35,000 – 55,000 lux); 12 – 20 mols of light.

**Temperature:** 60°F (16°C)

**Moisture:** Alternate between moisture level wet (4) to moist (3). Allow the soil to approach moist (3), before re-saturating to wet (4). If media is allowed to dry back further than (3), root damage may occur resulting in leaf edge burn.

**Fertilizers:** 14-4-14 or 17-5-17 at 75 – 125 ppm nitrogen, as needed for an EC in the soil of 1 – 1.5.

**Growth Regulators:** If needed, spray B-Nine (daminozide) at 1,500 – 2,500 ppm rates higher than 2,500 ppm may cause distortion of the foliage.

**Fungicides:** Preventative fungicide may be applied for Rhizoctonia, Pythium, and Phytophthora.

**Initiated Bulking** (approximately day 29 – 35): Seedlings develop from juvenile

to mature, usually determined by the number of leave present (cultivar specific). Seedlings are receptive to initiation and flower bud development.

**Light:** Provide 4,750 – 7,500 foot candles (47,500 – 75,000 lux) or 17 – 28 mols of light.

**Temperature:** 60°F (16°C)

**Fertilizer:** 14-4-14 or 17-5-17 at 75 – 150 ppm nitrogen, as needed for an EC in the soil of 1.25 – 1.75.

**Fungicides:** Preventative fungicide may be applied for Rhizoctonia, Pythium, and Phytophthora.

### GROWING ON

The timing approximations are based on optimal culture recommendations below:

**Transplant to Finish** (approximately day 36 -70): Optimize plant shoot and root growth; usually 1:1 ratio. Flower buds are usually present and developing.

**Media:** pH: 5.8 – 6.2, EC: 1.25 – 1.75

**Light:** Provide 5,000 – 7,500 foot candles (50,000 – 75,000) or 18 – 28 mols.

**Temperature:** 55° – 59°F (12° – 15.6°C)

**Moisture:** Alternate between moisture levels wet (4) and moist (3). Allow media to approach level (3) before re-saturating to wet (4).

**Humidity:** 40%

**Fertilizers:** 14-4-14 or 17-5-17 at 100 – 175 ppm, as needed for an EC in the soil of 1.7 – 2.

**Growth Regulators:** B-Nine (daminozide) at 1,500 – 2,500 ppm.

**Fungicides:** Preventative fungicide may be applied for Rhizoctonia, Pythium, and Phytophthora.

### TECHNIQUES TO ENHANCE POST HARVEST QUALITY

**When to Treat:** 1 – 2 weeks prior to finish or shipping.

**Growth Regulators:** B-Nine (daminozide) at 1,500 – 2,500 ppm.

**Fertilizer:** Potassium nitrate drench at 150 ppm nitrogen.

**Common Diseases:** Pythium, Rhizoctonia and Phytophthora. Monitor moisture and humidity levels and use preventative fungicide drenches.

**Common Pests:** Aphids, White Flies and Thrips. Use pesticides according to label directions.

PRODUCT USE	GARDEN SPECIFICATIONS
Pots, containers, mass plantings	<b>Light:</b> Full sun <b>USDA Hardiness Zone:</b> NA <b>AHS Heat Zone:</b> NA

	Garden Height	Garden Width
<b>Medallion</b>	20 – 25" (50 – 62 cm)	20 – 25" (50 – 62 cm)

### MELAMPODIUM SCHEDULING IN WEEKS

	Medallion
<b>Total crop time</b>	8 – 10
<b>'128' plug crop time</b>	5 – 6
<b>'200' plug crop time</b>	4 – 5
<b>'288' plug crop time</b>	3 – 4
<b>Transplant to finish crop time</b>	
<b>6" crop</b>	10 – 11, depending on number of plugs transplanted
<b>8" crop</b>	11 – 12, depending on number of plugs transplanted

The shortest crops times may be achieved when following recommended optimal culture. Deviation in environmental conditions will result in longer crop times.

*Note: These suggestions are only guidelines and may have to be altered to meet individual grower's needs. Check all chemical labels to verify registration for use in your region.*