Dipladenia Madinia[®] Petite

Culture Guide

Mandevilla hybrida

Product form: Vegetative

Containers: Packs, Pints, Quarts, Gallons

Habit: Mounded

Garden Specifications

Garden Height: 10–12" (25–30 cm) tall **Garden Width:** 10–12" (35–30 cm) wide

Exposure: Full Sun USDA zone: 10–11 AHS zone: 12–4

Product use: Containers, Hanging Baskets, Patio

Pots, Combos



Propagation of Unrooted Cuttings

Root emergence: 12-14 days

Rooting hormone: Recommended. A 0.1% (1,000 ppm) IBA concentration using either powder or liquid formulations can be applied to the lower portion of the cutting stem. Be careful not to coat the leaves or entire cutting—excess application can cause burning and damage to the cutting. Another option is to apply an overhead heavy spray to the cuttings (penetrating the rooting media) using water-soluble K-IBA at 250–300 ppm 24–48 hours after sticking. Do not use overhead applications of alcohol-based IBA solutions (ex. Dip'N Grow®).

Bottom heat temp.: 72–74 °F (22–23 °C) for the first three weeks. After roots are well developed, temperatures can be lowered to hold and tone the cuttings.

Misting: Mist schedules vary depending on light and temperature conditions. Apply just enough moisture to rehydrate the cuttings and keep them from wilting. Cuttings should be hydrated and in a non-wilted stage within 24 hours after sticking. Cuttings that continue to wilt heavily after 24 hours will callus unevenly and will be delayed in rooting. CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help rehydrate the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated. Applying too much mist early on can lead to foliar disease and tissue breakdown.

Rec. tray size: 105-cell (30 mm)

Propagation timing: 5–6 weeks for a 105-cell plug; add more rooting time for significantly larger plug sizes.

Temperature

Day: 72–74 °F (22–23 °C) **Night:** 72–74 °F (22–23 °C)

Lighting

Day extension lighting: Beneficial

Light intensity: 1,000–1,200 foot candles (200–250 µmol·m⁻²·s⁻¹) for the first two weeks after sticking or until root development occurs. Light levels can be increased up to 3,000 foot candles (600 µmol·m⁻²·s⁻¹) as rooting increases and the cutting matures.

Day length response: Facultative long day

Daily light integral (DLI): 4–6 mol·m⁻²·d⁻¹ for the first two weeks after sticking or until root development occurs. DLI can be increased to greater than 12 mol·m⁻²·d⁻¹ after root formation.

Media pH: 5.8-6.2

Media EC: SME EC: 0.9-1.3 mS/cm, PourThru EC: 1.4-2.0 mS/cm

Fertilizer: Begin fertilization at 100 ppm nitrogen when roots become visible. Rates can be increased up to 200 ppm nitrogen after roots become well developed. Use primarily Cal-Mag® Plus (calcium nitrate + magnesium nitrate) fertilizers in propagation to prevent unwanted stretch.

Pinching: Recommended

Plant growth regulators (PGRs): To control growth after rooting, a spray of B-Nine® WSG (3,500-4,000 ppm) can be used. Sprays of Configure® (150-300 ppm) or Atrimmec® (200 ppm) can also be used to improve branching on the young rooted plants. These Configure® or Atrimmec® sprays should be applied to actively growing plants and done ideally 5-7 days before pinching. Do not spray B-Nine® WSG, Configure®, or Atrimmec® on stressed or weak cuttings. For all sprays listed above, the mist should be off for a minimum of one hour for the PGR to absorb into the leaf tissue.

Finishing

Temperature

Day: 76-78 °F (24-26 °C) Night: 70-72 °F (21-22 °C)

Average daily temperature: 73-75 °F (23-24 °C)

Lighting

Day extension lighting: Beneficial

Light intensity: 4,000-6,000 foot candles (800-1,200 μmol·m⁻²·s⁻¹)

Day length response: Facultative long day Daily light integral (DLI): 16-18 mol·m⁻²·d⁻¹

Transplanting: Transplant directly into the finished container. Place the rooting media slightly below the level of media in the container. Make sure that the root ball is covered and that the cutting is situated in the center of the pot.

Media pH: 5.8-6.2

Media EC: SME EC: 1.5-2.1 mS/cm, PourThru EC: 2.3-3.2 mS/cm

Fertilizer: 200-250 ppm N

Pinching: Yes, 1 pinch is recommended 14–17 days after transplant.

Plant growth regulators (PGRs): Sprays of Configure® (300 ppm) or Atrimmec® (200-400 ppm) applied early after transplant can be used to improve branching. No other PGRs are required to control growth due to their petite habit.

Tech tip: Madinia Petite Dipladenia have a controlled growth habit and was bred for improved branching and early flowering. They make very nice quart products. An early pinch (either in propagation or shortly after transplant) will encourage branching. High light and warm temperatures will improve quality and help reduce crop times.



CHRYSAL Try Chrysal Alesco®, a postharvest foliar spray, to protect ethylene sensitive crops during shipping and retail.

Moisture level: Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 4.

- 2 MEDIUM: Soil is light brown in color, no water can be extracted from soil, and soil will crumble apart.
- 4 WET: Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.

Common pests: Aphids, Whiteflies, Thrips, Mealybugs, Spider Mites

Common diseases: Cercospora and Corynespora fungal leaf spot, Fungal root, Basal stem rot

Scheduling

SIZE	CROP TIME	PLANTS PER POT
Large Packs	6-7 weeks	1 ppp
1.0 pint (4 inch)	6–7 weeks	1 ррр
1.0 quart (4.5 to 5 inch)	7–8 weeks	1 ррр
1.25 to 2.5 quart (5.5 to 6.5 inch, trade gallon)	8-9 weeks	3 ррр
1.5 gallon hanging basket (10 inch basket)	10-11 weeks	5 ppp

Estimated finish crop time is from transplant of a 105-cell tray and finished at an average daily temperature (ADT) of 73 °F (23 °C).

Example crop schedule for a 1.0 quart

WEEKS FROM TRANSPLANT	DESCRIPTION
1 week	Provide ADT of 73 °F (23 °C) or higher and DLI levels above 15 mol·m-2·d-1
2 weeks	Apply a spray of Configure® (300 ppm) to improve branching. Pinch plants when they are well rooted into the container. Begin scouting regularly for pests
8 weeks	Finish

