**Dahlia Sincerity**

**Culture Guide**

**Botanical name:** *Dahlia x hybrida*

**Product form:** Vegetative

**Containers:** Gallons, Hanging Baskets

**Habit:** Mounded

**Garden Specifications**

**Garden Height:** 18–24” (45–60 cm) tall

**Garden Width:** 14–18” (35–45 cm) wide

**Exposure:** Part Sun

**USDA zone:** 10–11

**AHS zone:** 10–3

**Product use:** Containers, Hanging Baskets, Landscapes, Patio Pots, Combos

**Propagation of Unrooted Cuttings**

**Root emergence:** 8–10 days

**Rooting hormone:** Not Recommended

**Bottom heat temp.:** 70–74 °F (21–23 °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 in rehydration of the cuttings. Misting should be significantly reduced after 2–3 days and after cuttings become fully hydrated.

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

**Propagation timing:** 3.5–4 weeks for a 105-cell plug; add more rooting time for significantly larger plug sizes.

**Temperature**

**Day:** 72–74 °F (22–23 °C)

**Night:** 70–72 °F (21–22 °C)

**Lighting**

**Day extension lighting:** Mandatory to 14 hours

**Light intensity:** 4,000–6,000 foot candles

**Day length response:** Facultative Short Day

**Daily light integral:** 16–18 mols/day

**Transplanting:** Transplant directly into the finished container. Place the rooted cutting and rooting media relatively deep in the container. Dahlias need deep and sturdy planting to provide good support and balance in the pot for the maturing plants.

**Media pH:** 5.8–6.2

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3,000 foot candles (600 micro mols) as rooting increases and the cutting matures.

**Day length response:** Facultative Short Day

**Daily light integral:** 4–6 mols/day for the first two weeks after sticking or until root development occurs. DLI can be increased to greater than 12 mols/day after root formation.

**Media pH:** 5.8–6.2

**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® (calcium nitrate + magnesium nitrate) fertilizers in propagation to prevent unwanted stretch.

**Pinching:** Not Recommended

**Plant growth regulators (PGRs):** Sincerity has a moderately vigorous habit and may require a PGR treatment in propagation. If needed to control growth after rooting, sprays of B-Nine® WSG (1500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine WSG (1500 ppm) can also be used to control growth and improve branching. Do not spray Florel 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:** 64–66 °F (18–19 °C)

**Night:** 66–68 °F (19–20 °C)

**Average daily temperature:** 69–71 °F (20–21 °C)

**Lighting**

**Day extension lighting:** Beneficial to 14 hours

**Light intensity:** 4,000–6,000 foot candles

**Day length response:** Facultative Short Day

**Daily light integral:** 16–18 mols/day
Media EC: SME EC: 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm
Fertilizer: 200–250 ppm N
Pinching: Not necessary. Pinching will delay flowering by 1 week.

Plant growth regulators (PGRs): Sincerity has a sturdy, well-branched habit and will need moderate PGR treatments during finishing. Sprays of B-Nine® WSG at 2500 ppm are recommended at 4 weeks and 6 weeks after transplant to help control growth. Sprays of Florel® at 250 ppm at 4 weeks and 5.5–6 weeks after transplant will also help to control growth and can be used instead of the B-Nine WSG sprays. The Florel sprays will also help prevent late-season flower peduncle stretch. A Bonzi® drench at 2–4 ppm can be used to hold plants for sale.

Tech tip: Long-day lighting (day length extension or night interruption) is needed during propagation to avoid premature flowering and tuber formation. The ideal photoperiod during finishing to provide the correct balance between vegetative growth and flower formation is between 13–14 hours. Growing under very short natural days (< 12 hours) will result in short plants, fast flowering, and root tubers. Provide warm temperatures early on in finishing to allow plants to establish after transplant. Sincerity grows best under moderately warm temperatures. Avoid extreme heat stress, especially under relatively high light intensities. Plant the rooting cutting relatively deep to provide good support and balance in the pot for the maturing plants. Scout and treat for a range of insects and diseases, including spider mites, thrips, and powder mildew.

Moisture level: Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 4.
1 - DRY: Soil is tan to gray in color, trays are extremely light, and soil pulls away from sides of container.
2 - MEDIUM: Soil is light brown in color, no water can be extracted from soil, and soil will crumble apart.
3 - MOIST: Soil is brown in color, strongly squeezing the soil will extract a few drops of water, and trays are light with no visible bend.
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.
5 - SATURATED: Soil is dark brown and shiny, free water is present at the surface of the soil, water drips freely from the bottom of the tray, and trays are heavy with a visible bend in the middle.

Common pests: Aphid, spider mite, thrips, leaf miner
Common diseases: Botrytis, powdery mildew, basal stem rot

Scheduling

<table>
<thead>
<tr>
<th>Size</th>
<th>Crop Time</th>
<th>Plants Per Pot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.25 to 2.5 quart (5.5 to 6.5 inch, trade gallon)</td>
<td>8–10 weeks</td>
<td>1 ppp</td>
</tr>
<tr>
<td>3.0 quart to 2.0 gallon (7.5 to 10 inch)</td>
<td>9–10 weeks</td>
<td>2–3 ppp</td>
</tr>
<tr>
<td>1.5 gallon hanging basket (10 inch basket)</td>
<td>10–11 weeks</td>
<td>3 ppp</td>
</tr>
<tr>
<td>2.0 gallon hanging basket (12 inch basket)</td>
<td>10–11 weeks</td>
<td>4 ppp</td>
</tr>
<tr>
<td>3.0 gallon hanging basket (14 inch basket)</td>
<td>10–11 weeks</td>
<td>5 ppp</td>
</tr>
</tbody>
</table>

Estimated finish crop time is from transplant of a 105-cell tray and finished at an average daily temperature (ADT) of 68 °F (20 °C).

Example crop schedule for a 2.5 quart

<table>
<thead>
<tr>
<th>Weeks From Transplant</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 week</td>
<td>Provide average daily temperatures of 68 °F (20 °C) and DLI levels above 15 mols/day. Pinch plants when they are rooted into the pot. Make sure photoperiod is between 13–14 hours per day</td>
</tr>
<tr>
<td>4 weeks</td>
<td>Apply a spray of B-Nine® WSG at 2500 ppm or a spray of Florel® at 250 ppm to control growth</td>
</tr>
<tr>
<td>6 weeks</td>
<td>Apply a spray of B-Nine WSG at 2500 ppm or a spray of Florel at 250 ppm to control growth. Scout for spider mites, aphids, thrips, and powder mildew and treat if needed</td>
</tr>
<tr>
<td>7 weeks</td>
<td>Apply a broad-spectrum fungicide drench to prevent late-season basal stem and root rot</td>
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<tr>
<td>9 weeks</td>
<td>Sale</td>
</tr>
</tbody>
</table>

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