

# Dahlia Happy Days™

## Culture Guide

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

**Product form:** Vegetative

**Containers:** Quarts, Gallons

**Habit:** Mounded

### Garden Specifications

**Garden Height:** 14–18" (45–55 cm) tall

**Garden Width:** 14–16" (45–50 cm) wide

**Exposure:** Full sun

**USDA zone:** 10–11

**AHS zone:** 10–3

**Product use:** Containers, 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:** 72–74 °F (22–23 °C)

### **Lighting**

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

**Light intensity:** 1,000–1,200 foot candles (200–250 micro mols) for the first two weeks after sticking or until root development occurs. Light levels can be increased up to

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

**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:** Not Recommended

**Plant growth regulators (PGRs):** Happy Days has moderate vigor and will generally need a PGR treatment in propagation. To control growth after rooting, sprays of B-Nine® WSG (1,500–2,500 ppm) are usually sufficient. A tank-mix spray of Florel® (350–500 ppm) + B-Nine® WSG (1,500–2,500 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:** 70–72 °F (21–22 °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

**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

**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 7–10 days after transplant.

**Plant growth regulators (PGRs):** Happy Days has moderate vigor and will generally need PGR treatments during finishing. Sprays of B-Nine® WSG (2,500–3,500 ppm) are usually sufficient to control growth. A Bonzi® drench (2–4 ppm) can also be used to control growth or 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. 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. 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 Powdery mildew.



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, Spider mites, Thrips, Leafminers

**Common diseases:** Botrytis, Powdery mildew, Nasal stem rot



Happy Days™ Purple Imp.

## Scheduling

Size	Crop Time	Plants Per Pot
1.0 quart (4.5 to 5 inch)	7–8 weeks	1 ppp
1.25 to 2.5 quart (5.5 to 6.5 inch, trade gallon)	8–10 weeks	1 ppp
3.0 quart to 2.0 gallon (7.5 to 10 inch)	9–10 weeks	2–3 ppp
1.5 gallon hanging basket (10 inch basket)	10–11 weeks	3 ppp
2.0 gallon hanging basket (12 inch basket)	10–11 weeks	4 ppp
3.0 gallon hanging basket (14 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 68 °F (20 °C).

## Example crop schedule for a 2.5 quart

Weeks From Transplant	Description
1 week	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
2 weeks	Apply a spray of B-Nine® WSG (2,500 ppm) to control growth
5 weeks	Evaluate plants and apply a Bonzi® drench at 3–4 ppm if needed to control growth. Scout for Spider mites, Aphids, Thrips, and Powder mildew and treat if needed
6 weeks	Apply a broad-spectrum fungicide drench to prevent late-season basal stem and root rot
9 weeks	Ship stage

syngenta®flowers

All photos are either the property of Syngenta or are used with permission.

© 2020 Syngenta. **Important: Always read and follow label instructions. Some products may not be registered for sale or use in all states or counties. Please check with your state or local extension service to ensure registration status. Some or all of the varieties may be protected under one or more of the following: Plant Variety Protection, United States Plant Patents and/or Utility Patents and may not be propagated or reproduced without authorization.** The trademarks or service marks displayed or otherwise used herein are the property of a Syngenta Group Company. All other trademarks are the property of their respective owners.