Dahlia

Best Practices

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Propagation

Lights: Night-interruption lighting will reduce the likelihood of tuber formation.

- If daylength extension lighting is used, a daylength ≥14, but ≤16 hours is recommended. **(Morning extension preferred)**

Only need to be lit in prop! (If Finishing in natural long-days- 2019 & 2025 Culture Study (Selecta Dahlias)

Media: EC: 0.75-0.80
pH: 5.5-5.8

Rooting IBA:
500-1000ppm (Basal Dip)
100-200ppm (Spray)

Media Temperature: 68-74°F
20-23°C

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Propagation (cont.)

Fertilization: 75-100 ppm N when roots become visible

- **Increase to 150 to 200 ppm N** as roots develop
- **Avoid high phosphorous and ammoniacal nitrogen** during the rooting process to reduce stretch and unwanted vegetative growth.

Crop time: 3- 5 WKs (Can be done in as little as 3 WKs)

Picture to the left: URC is having an issue from stock or was not properly lit in prop.

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Finishing Temperatures & Strategy

Nights: 60-65°F 15-18°C *Days*: 65-75°F 18-24°C

- Temperatures significantly below this range will encourage tuber formation and delay flowering.
- Warmer than recommended temperatures will promote a more open habit and weak stems. Temperature induced “flop”.
- Negative-dif or 5F°(2C°) Morning-dip, can be used to control growth without significant delay.

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Transplanting

Dahlia Liners should be **transplanted "DEEP"**

- The **1st set of leaves** are **below the media line** in the pot**.**
- If liners **are tall or stretched** sitting on the bench **prior to transplant** you can even **bury the liner another 2-3 nodes** below the media line in the pot.

This will help maintain the stability of the plant as it matures.

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Dreaded “Floppy” Dahlias

#1 Issue with Finished Quality!

“The flop” is **easy** to **prevent,** but **hard** to **fix.**

Prevented at transplant from liner to finish with **proper planting depth.**

DAHLIAS

Dreaded “Floppy” Dahlias

#1 Issue with Finished Quality!

“The flop” is **easy** to **prevent,** but **hard** to **fix.**

Plant “DEEP” like the picture to the right.

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Pinch or No Pinch?

Answer: Depends on the pot size!

Smaller Pots (4-5in./QT): Can be produced without a pinch

6in. : Grower choice

8in.+ : Pinch recommended

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Finishing PGRs

Dazide (1,000 to 2,500 ppm) &
Cycocel (500 to 1,000 ppm) spray tank mix.

- The first application should be made 14 to 21 days after transplanting or when active growth is visible

Dazide 2500-3700ppm: (Spray) To control peduncle stretch

Bonzi, Piccolo, Paclo

- **Sprays: 5-10 ppm**
- **Drenches: 1-3 ppm**

Note: Lower rates preferred. Avoid if possible. Higher rates can lead to PGR application/color delay cycle that is hard to break.

Finish Daylengths after Transplant:

14-hr cont.	ND 2WAT	ND 1WAT	ND 0WAT

ND= Natural Day length, WAT= Weeks after Transplant

All Transplant: WK7, Pictured:WK13

Ex: 14hr continuous during the 2 Week period after transplant, Natural Daylength after 2 week lighting period.

Dalaya Purple White

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Finish Daylengths after Transplant:

14-hr cont.	ND 2WAT	ND 1WAT	ND 0WAT

ND= Natural Day length, WAT= Weeks after Transplant All Transplant: WK7, Pictured:WK13

Ex: 14hr continuous during the 2 Week period after transplant, Natural Daylength after 2 week lighting period.

Dalaya Yellow

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Finish Daylengths after Transplant:

14-hr cont.	ND 2WAT	ND 1WAT	ND 0WAT

ND= Natural Day length, WAT= Weeks after Transplant All Transplant: WK7, Pictured:WK13

Ex: 14hr continuous during the 2 Week period after transplant, Natural Daylength after 2 week lighting period.

Dalaya Fireball

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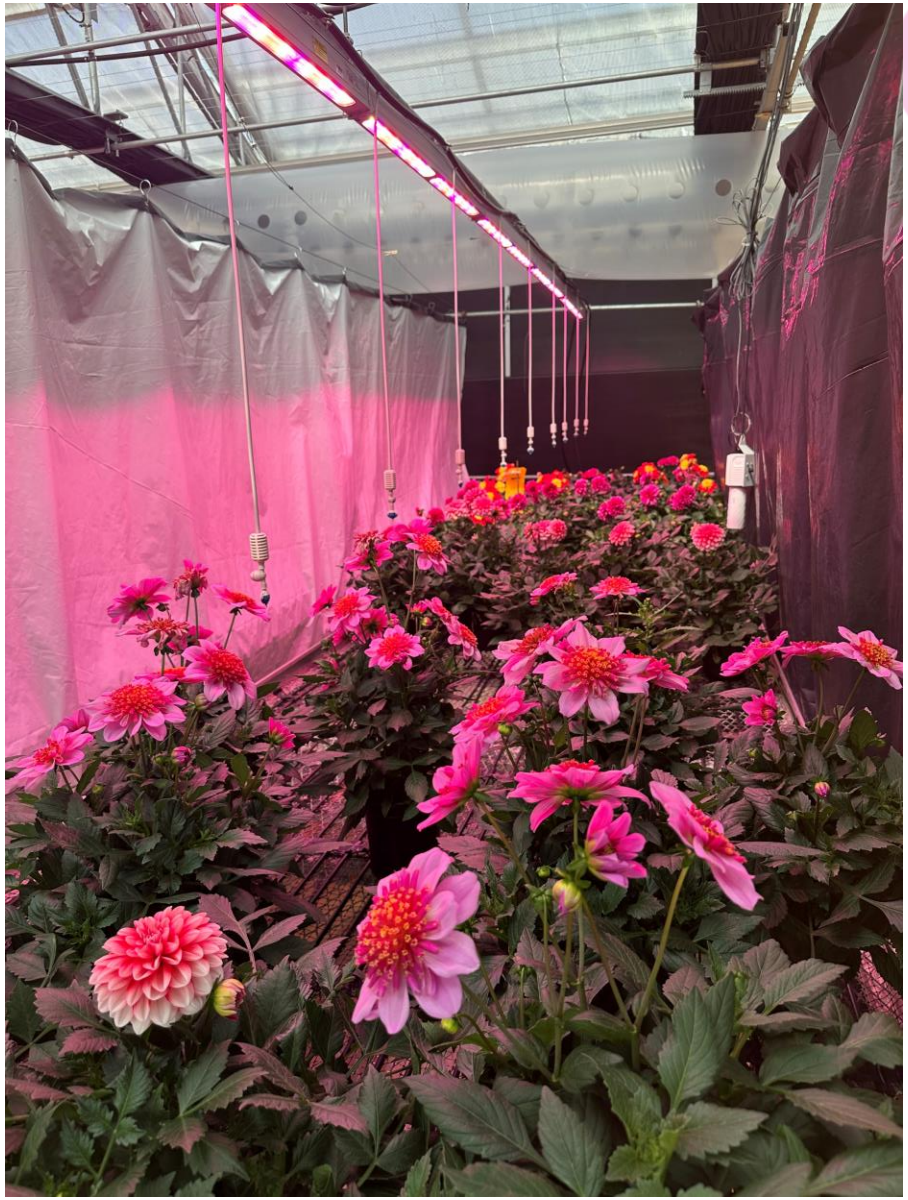
Key Take-Aways on providing daylength extension when finishing in long-days.

≥12hrs Natural daylength = No need to provide supplemental daylength in finish.

≤11 Natural Daylength = Provide supplemental or extension to min. ≥14hr daylength.

- With new breeding and selections, only provide additional daylength in propagation, when propagating in natural short-days and finishing in long-days.
- Additional daylength after transplant in long-days will delay flowering in some varieties.
- For a uniform timed crop across all colors, **DO NOT provide additional daylength** when **finishing in natural long-days**.



West Chicago Dahlia finishing Research

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Pests & Diseases

Powdery Mildew- Enemy #1

Prevention is the best most effective control.

Si has been used to enhance chemical preventative rotations and assist in warm weather transplant shock.

Weekly Silicon Applications (Ag-Sil)

- Drench 150ppm
  - (2.5oz/100gal or 1gallon stock solution 1:100 injector) SiO_2
- Once a week w/feed from the time of transplant to finish
- 6-8oz/pot
- Cannot be combined with any other sprays or drenches
- Silicon is hydrophilic. Do not leave bag opened (place in airtight container) – becomes hard and unusable.

In Addition to conventional prevention spray rotation that includes, but is not limited to products such as: Positiva, Mural, Seido Broadform, Avelyo, Palladium, Pipron

Pests & Diseases

Powdery Mildew- Enemy #1

We screen heavily in selection process for any level of resistance for PM.
Below is us vs a competitor.

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Pests & Diseases

- **Thrips:** Will attack even immature plants with no open flowers, once flowers open, they seem to be as attractive to as gerberas- spray preventatively in rotation that attacks all life cycles.

- **Spidermites**: **"Drying down" to hold finished plants,** seems to send up a neon sign to spidermites "feed here"- spray preventatively before canopy closes.

- **Pythium:** Budded and in color, is not the time to switch "drying down" in place of a PGR for growth control, stress will allow pythium to attack.

Dahlia Venti 2.5 QT Spring Sample Schedule

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Crop Stage	Propagation (4 weeks)					Finish Stage (8 weeks)						
Week of Production	4	5	6	7	Transplant Week 8	9	10	11	12	13	14	15
Temperature	68-72°F 20-22°C		62-65°F 16-18°C			65°F ADT						
Notes	• Dazide 2500ppm ***or*** • Dazide 2500ppm + Cycocel 1000ppm if needed. **Remember:** Do not pinch liners and bury 1-2 nodes at TP. A tall liner is not an issue with normal node formation. **≥14-hr Day-length extension**					• Weekly applications of AgSi • WK9 Spray 2500ppm Dazide or 2500ppm Dazide+1000ppm Cycocel • Can grow with a negative-DIF temperature strategy • WK11 Final Space or when leaves begin to touch • ~WK12 Paclo drench 1-2ppm • ~WK13 Possible 2500ppm Dazide spray to control peduncle stretch						