

# Dahlia

## Best Practices



**selecta** <sup>one</sup>®

# DAHLIAS

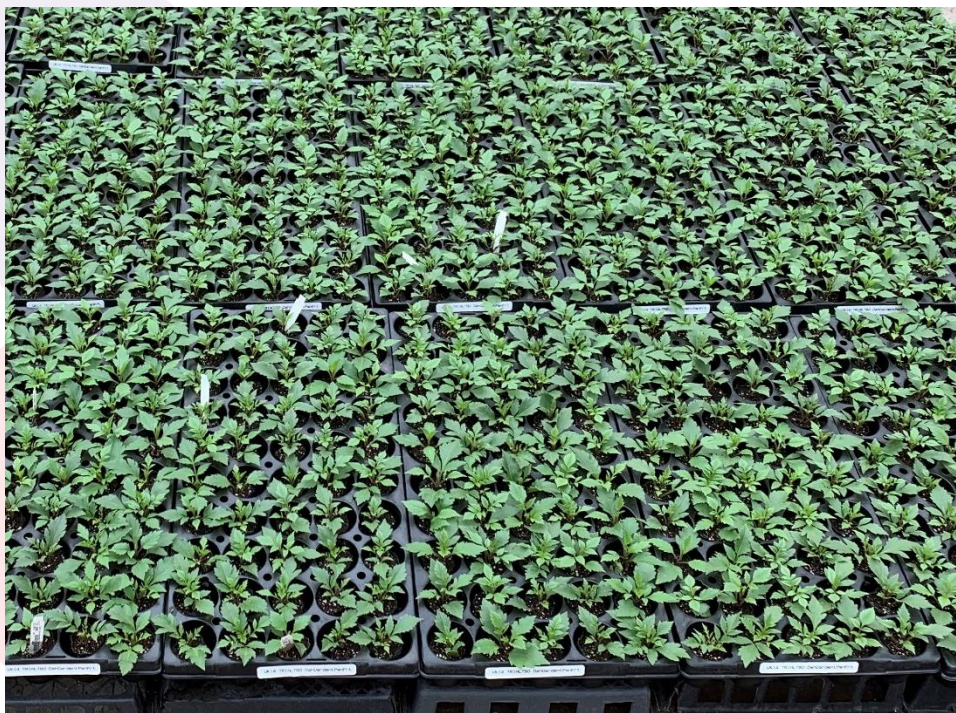
## Propagation

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

- If daylength extension lighting is used, a daylength  $\geq 14$ , but  $\leq 16$  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    Days: 65-75°F  
15-18°C            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 **1<sup>st</sup> 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.***





# DAHLIAS

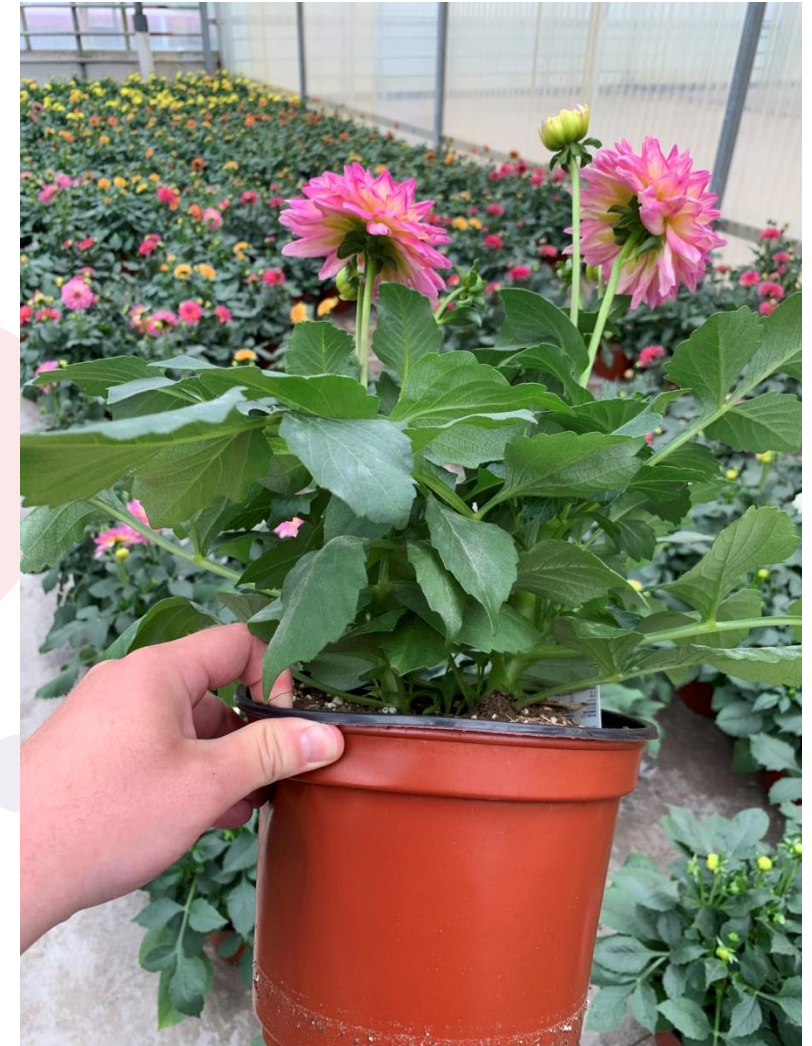
selecta<sup>one</sup>

## 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

selecta<sup>one</sup>

## Dreaded “Floppy” Dahlias

#1 Issue with Finished Quality!

“The flop” is  
easy to  
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hard to fix.

Plant “DEEP”  
like the picture  
to the right.





# DAHLIAS

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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





# DAHLIAS

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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**

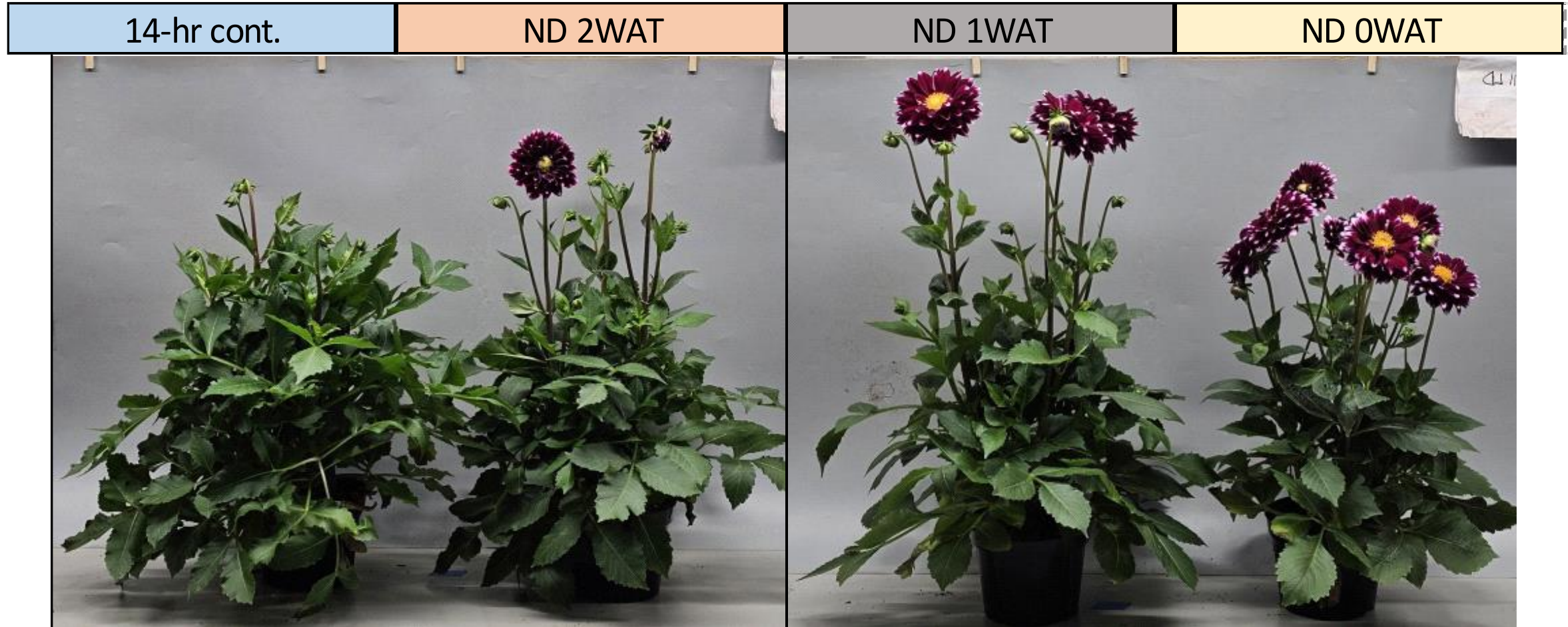
- Sprays: 5-10 ppm
- Drenches: 1-3 ppm

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





# Finish Daylengths:



ND= Natural Day length, All TP WK12 ~Equinox

WAT= Weeks after Transplant

## Dalaya Purple White



# Finish Daylengths:

14-hr cont.

ND 2WAT

ND 1WAT

ND 0WAT



ND= Natural Day length, All TP WK12 ~Equinox

WAT= Weeks after Transplant

## Dalaya Yellow



# Finish Daylengths:

14-hr cont.

ND 2WAT

ND 1WAT

ND 0WAT



ND= Natural Day length, All TP WK12 ~Equinox

WAT= Weeks after Transplant

## Dalaya Fireball

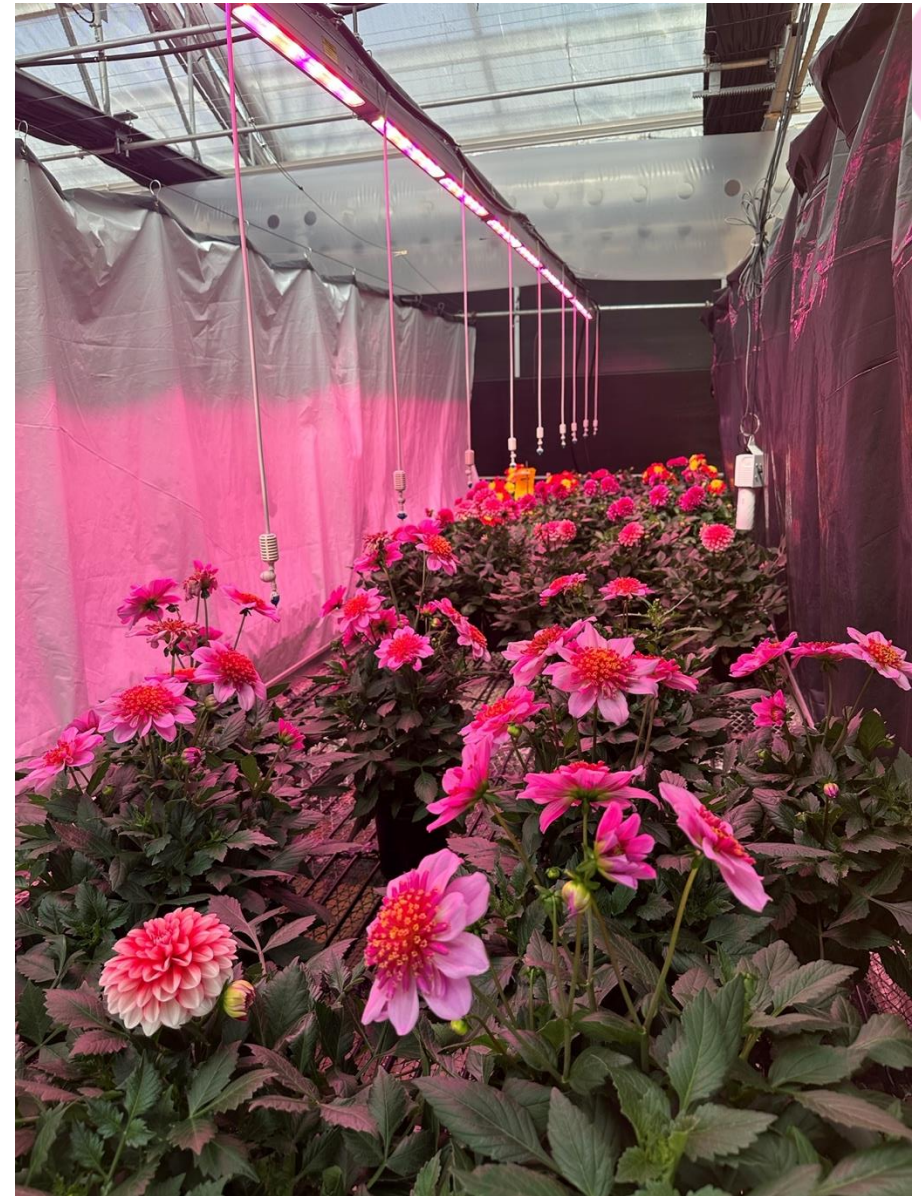


# Key Take-Aways on providing daylength extension when finishing in long-days.

**$\geq 12$ hrs Natural daylength** = No need to provide supplemental daylength in finish.

**$\leq 11$  Natural Daylength** = Provide supplemental or extension to min.  $\geq 14$ hr 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



### **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<sub>2</sub>
- 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



### **Powdery Mildew- Enemy #1**

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





- **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

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	<ul style="list-style-type: none"><li>Dazide 2500ppm <i>or</i></li><li>Dazide 2500ppm + Cycocel 1000ppm if needed.</li></ul> <p><b>Remember:</b> Not pinching liners and need to bury 1-2 nodes at TP, a taller liner than normal is not an issue with normal node formation.</p> <p><b>≥14Hr Day-length extension</b></p>						<ul style="list-style-type: none"><li>Weekly applications of AgSi</li><li>WK9 Spray 2500ppm Dazide or 2500ppm Dazide+1000ppm Cycocel</li><li>Can grow with a negative-dif temperature strategy</li><li>WK11 Final Space or when leaves begin to touch</li><li>~WK12 Paclo drench 1-2ppm</li><li>~WK13 Possible 2500ppm Dazide spray to control peduncle stretch</li></ul>						