The major production decision for the poinsettia crop should have been made between propagation and the start of short days. The time between short days and flowering should be mainly for monitoring and making small adjustments to reach the desired finished plant height. If you have to make major adjustments this year between short days and flowering, I would suggest you take careful notes so you can make adjustments to next year’s poinsettia crop at an earlier time.

Although height seems to be variable between years, the most late-height issues (either too short or too tall) occur because incorrect decisions relative to timing and PGR applications were made before the start of short days.

The growth of the poinsettias between short days and flowering is largely determined by cultivar, height at the start of short days, and PGR applications (both chemical and rate of application) before the start of short days. There is no question that weather also plays a role in the growth during the short day to flowering period; however, the weather effect is easy to control if the correct decisions are made before the start of short days and excellent production practices are used to grow the crop after short days begin.

During this period between short days and flowering, it’s extremely important that you continue to monitor fertilizer application. Periodic checks to make sure the injector is working properly is important to catch malfunctions before they show up in crop growth. Sampling root medium for laboratory analysis will assure the crop is receiving the correct nutrition. A 2:1 calcium-to-magnesium ratio with adequate calcium levels in the root medium is very important for poinsettia stem strength and avoiding bract-edge burn issues at flowering. Poinsettias have a higher molybdenum requirement than other crops. The fertilizer applied should have higher molybdenum content or a supplemental molybdenum application needs to be made to the poinsettia crop.

Insects and diseases should be monitored weekly in addition to the preventative chemical applied for control. Make sure you have developed a control strategy to prevent a white fly problem at flowering. There are very
few chemicals that can be safely used after bract development to control insects. I find that in addition to chemicals, greenhouse environment and watering methods can provide very important disease control in poinsettia production. Root rot diseases are most often associated with overwatering and overly wet greenhouses. Good watering practices is your very best root-rot control. Botrytis in poinsettias is directly associated with humid, wet, dark greenhouses. During wet dark weather, ventilation and heating to reduce humidity are required to control botrytis. Always water plants earlier in the day to avoid wet leaves into the night.

Hopefully, only small adjustments in production need to be made for plant height to follow the graphical tracking curve. If adjustments are made on a weekly basis, it will be much easier to control the final height without major changes near flowering. The quality of the finished crop will also be much better if weekly adjustment in DIF or Morning Dip can be used to control the height. Heavy applications of PGRs after the start of short days will significantly delay flowering and reduce bract size.

Chemicals used to increase the height of the poinsettia crop before flowering should only be used to salvage an otherwise non-salable crop. Those chemicals can weaken the stems and fade bract color if multiple applications are made at high rates to produce plants of acceptable size at flowering.

Even, steady production decisions during the short day to flowering grow period will produce the very best finished plants. Making small, timely decisions will avoid the need for drastic changes in production most often caused by procrastination. 

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