# **GROWERTALKS**

### Columns

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## The ABCs of PGRs on Poinsettia

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Poinsettias respond well to several plant growth regulators (PGRs), which is good news for growers. Smart PGR use enables growers to manipulate plant growth to meet crop specs, manage crop quality and maximize profitability through space optimization.

Many factors influence PGR application strategies, including plant and pinch dates, temperature, ethephon applications, the overall health of the crop, and the desired finished appearance of the crop. As an aside, the use of graphical tracking with poinsettia crops provides valuable information to guide PGR applications. One great resource is Dümmen-Ecke's graphical tracking tool, which is available at <a href="http://tinyurl.com/EckeOnTarget">http://tinyurl.com/EckeOnTarget</a>.

#### **Enhanced branching**

Ethephon (e.g., Collate, Florel, Verve) is used to encourage strong and even branching by making foliar applications five to seven days before and after the hand pinch. This also reduces internode elongation and, therefore, less PGRs are generally needed to finish the crop. Naturally compact cultivars may not respond well to ethephon, so trial first on any new varieties.

#### Reduced internode elongation

Chlormequat (e.g., Citadel, Cycocel) is typically used as a foliar spray to the point of glisten. Under warm conditions, foliar sprays may need to be repeated as often as 5- to 7-day intervals. If the spray volume is heavy enough to cause spray droplets on foliage, yellowing is likely to occur where the "puddles" appear, regardless of the application rate. Avoid application after October 15 in the North or October 28 in the South, due to the risk of reduced bract size.

Daminozide (e.g., B-Nine, Dazide) can be used as a tank-mix partner with chlormequat to give significantly more hold than chlormequat alone. The tank mix should be applied as a foliar spray to the point of glisten. GGSPro generally recommends only one application of the tank mix per crop—apply prior to September 25 in the North and October 1 in the South. Later treatments can produce a significant delay in the onset of color and a reduction in bract size.

Flurprimidol (Topflor) is a relatively new PGR that's very active on poinsettias when applied as a spray or drench. Due to limited grower experience with flurprimidol, GGSPro encourages growers to conduct small-

scale trials to get a feel for the best rates and application methods for their conditions.

Paclobutrazol (e.g., Bonzi, Paczol, Piccolo) "micro drenches" were named and developed by Dr. Jim Barrett at the University of Florida. Very low rates of paclobutrazol are drenched on the poinsettia crop as often as once a week, in combination with graphical tracking, to achieve optimal crop height, with little or no risk of reducing bract size. Starting in late October, higher drench rates can be used to provide stronger hold if needed, with a slight reduction in bract size.

#### Increasing height, expanding bracts

Gibberellins A4A7 + 6 BA (e.g., Fascination, Fresco) is a combination of two gibberellins and a cytokinin for use as a foliar spray to add height to a poinsettia crop that's too short. It may also be used to expand bracts that are too small as a result of cooler production or other factors. Some success has been achieved using this combination product to overcome an over-application of PGRs used for height reduction.

Always read and follow the entire product label. Not all products are labeled for use in all states. Products other than those listed here may also be safe and effective. **GT** 

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