

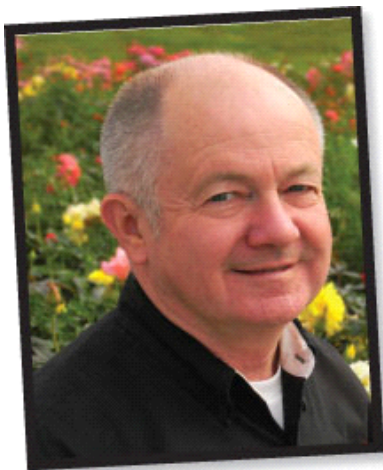
GROWERTALKS

Culture Notes

9/15/2010

Common Poinsettia Problems

Dr. P. Allen Hammer



DR. P. ALLEN HAMMER

The plants are too tall: There's nothing you can do to reduce the plant height but micro-drenches of Bonzi, Paczol or Piccolo (Paclobutrazol) in 0.25-1.0 ppm, depending on cultivar and climate to prevent additional stretch. (Consult a trusted source for specific recommendations if you haven't used the technique.) Also, remember the dose of chemical applied to the pots is extremely important, therefore both the rate of chemical solution, as well as the amount of solution applied per pot, determines dose. Over-application of a PGR at this stage will result in reduced bract size and delayed flowering.

The plants are too short: It's difficult to increase height at this stage without reducing plant quality. If the plants are so short as to make them unsalable, spray applications of Fascination or Fresco (BA/GA) to add

height. This treatment can result in "softer" plants and faded bract color, so these spray applications should be made with care and trusted advice. A positive DIF can also be used to increase height, but I think this should only be used with days of sunlight, which is not often the case in much of North America in November. High day temperatures in November can result in "soft" growth, faded bract color, and loss of cyathia, particularly under poor light conditions.

The plants are too early: Cool temperatures can be used to delay or hold many poinsettia cultivars, however not all. Make sure the cultivars you finish cool are proven for cool finish. Some cultivars will be significantly delayed with very small bracts when night temperatures are below 67F (19.5C). Also, white bract poinsettia cultivars will become more "creamy" in color at finishing temperatures below 67F (19.5C). I suggest 60F (15.5C) night/cloudy days as a good cool-finish temperature. On sunny days, the grower can let the greenhouse rise to 70F (21C), but not above 60F (15.5C) on cloudy days. Growers in high light areas often use 55F (13C), but that should only be used with great care and experience.

The plants are too late: Late flowering of the poinsettia crop is almost impossible to correct in November particularly if the crop has been growing at 67F (19.5C) night temperatures. Poinsettia bract development will be slower at night temperatures below 67F (19.5C), but will not be faster at night temperatures above 67F (19.5C). In fact, bract development can be delayed on some cultivars when the night temperature is above

67F (19.5C). Don't be quick to raise the greenhouse temperature too high, thinking you will speed flowering. Bract development is much more time-related instead of temperature-related.



Watering: In November, the days are shorter, there is less sunlight, and the plants have really slowed in growth, so the water requirement is greatly reduced. Overwatering in November is likely to result in plant loss from pythium root rot. At this stage, the crop is much better on the dry side than wet. Also, with cool, dark weather, it's best to water in the early morning than late in the day so plants are drying going into the night period. Along with watering, be sure you are controlling relative humidity by venting and heating even on those cold winter days. Allowing humidity to

increase to save energy will result in reduced plant quality and increased disease pressure, particularly botrytis.

Fertilizing: Fertilizer application rate should be reduced to the 100 ppm rate, but fertilizer application should not be eliminated in finishing. Nitrogen deficiency at this stage will result in reduced plant quality from lower leaf yellowing, which will get worse with post-harvest conditions. A low rate of fertilizer application is also important for bract development and bract color.

Insects: Always scout the crop for whiteflies in early November so hot spots can be treated as early in bract development as possible. Finding whiteflies at shipping is almost impossible to adequately control safely for bracts in a timely manner. There are some newer insecticides that can be used, but seek expert advice and use only as an emergency treatment. **GT**

Dr. P. Allen Hammer is a retired professor of floriculture at Purdue University, West Lafayette, Indiana, and is now in product development and support for Dümmen USA.