# Poinsettia Tips 1988

#### P. Allen Hammer

<u>Propagation</u> - A 70°F <u>minimum</u> night temperature is a must. Sterilize pots, benches, flats, and knives before taking cuttings. As cuttings begin to root, reduce the amount of mist (this is extremely important with poinsettias). Fertilize the cuttings as soon as roots form (even under the mist).

Fertilization - Poinsettias require relatively high applications of nitrate nitrogen and potassium. We would recommend 300 ppm N and K at each watering. Be sure to use a high nitrate to ammonia nitrogen formulation. Your fertilizer should also contain a phosphorus source. If you are using phosphoric acid for pH control, that addition will supply adequate phosphorus. We do not recommend calcium nitrate in Indiana because it just adds to your pH problem. Add an Epsom salt (1 lb./100 gal. water) drench every 4 to 6 weeks to supply magnesium. Do not add to your normal fertilizer solution. Several have asked about molybdenum additions. I personally feel that the "peat-lite special" fertilizers or a soluble trace element mix has adequate molybdenum. However, it will not cause harm to add additional molybdenum at the rate of 0.1 ppm.

stock solution -1 oz. (28.4 g) of ammonium or sodium molybdate 2-1/2 pt. (40 fl. oz.) (1200 ml) of water

for application -0.15 fl. oz. (4.5 ml) of stock solution/100 gal. of water

<u>Pinching</u> - a hard pinch leaving 4 to 5 nodes is recommended. Our research indicates a more attractive plant (form) and much greater uniformity in shoot growth is possible when only 4 to 5 nodes are left on the pinched plant.

Height Control - Most are using Cycocel spray at 1500 to 3000 ppm. A-Rest at 10 to 15 ppm also has been effective. Several sprays at the lower concentrations give more uniform control than a single spray at the higher concentrations. Consult your "Guide to Making Growth Retardant Solutions" (HO-130) for mixing instructions. Send me a note if you do not have a chart. We recommend growth retardants not be applied after mid-October unless you have a severe height problem. Bonzi can be used for height control of poinsettias. Our results suggest that 1 or 2 applications at 15 ppm may be adequate for the Hegg types and 1 or 2 applications at 30 ppm may be adequate for the V-14 types. See the research results in this bulletin. Bonzi should not be applied after the start of short days. Our concentrations are based on 1/2 gallon of spray material/100 square feet of bench area. Your results will be very different if you vary from this rate of application. If you have not used Bonzi, I would try it on a trial basis for the first year. A trial is only a small part of your crop.

Time of first application of growth regulators is generally:

- Pinched plants when the new shoots following pinching are 1-1/2 to 2 inches long.
- Single stemmed plants when 1-1/2 to 2 inches of new growth occurs after panning.

Schedules - Lighting (long days) should be used on the Hegg cultivars. We recommend using incandescent lamps as in your chrysanthemum program from 10:00 p.m. to 2:00 a.m. Timing is much easier when lighting is used. Once the crop is in flower, night temperatures can be reduced to save fuel in December and enhance bract color. Night temperature can be reduced by 2 degrees every 3 days to 60°F. The following schedules are guidelines to help in your planning. Everyone will need to make adjustments for your own greenhouse and production methods. Give me a call if you have questions. Note we have separated the Hegg and V-14 types.

### Suggested Poinsettia Production Schedules for Indiana

# **Hegg Types**

# Single Stem 3 Plants/6" Pot

Flower - November 25		Flower - December 9	
July 29		August 12	
4 weeks		4 weeks	
August 26		September 9	
		1 week	
November 25		December 9	
Night Temperatures			
July 30 - Aug. 26	70°F	Aug. 12 - Sept. 8	70°F
Aug. 27 - Nov. 25	65 <sup>0</sup> F	Sept. 9 - Dec. 9	65°F
	July 29 4 weeks August 26 2-1/2 weeks September 13 1-1/2 weeks September 23 9 weeks November 25	July 29 4 weeks August 26 2-1/2 weeks September 13 1-1/2 weeks September 23 9 weeks November 25  Night 1	July 29 August 12 4 weeks August 26 2-1/2 weeks September 9 1 week September 13 1-1/2 weeks September 23 October 7 9 weeks November 25  Night Temperatures  August 12 4 weeks September 9  Night Temperatures  Aug. 12 - Sept. 8

# **Hegg Types**

### Pinched 1 plant/6" Pot

		Flower - November 25		Flower - December	9
Propag	gation	July 15		July 29	
		4 weeks		4 weeks	
Pan		August 12		August 26	
		3 weeks		3 weeks	
Pinch		September 2		September 16	
		1-1/2 weeks			
Lights	On	September 13		September 16	
		1-1/2 weeks		3 weeks	
Lights	Off	September 23		October 7	
		9 weeks		9 weeks	
Flowe	r	November 25		December 9	
		Night Temperatures			
		July 16 - Aug. 11	70 <sup>0</sup> F	July 29 - Aug. 25	70°F
		Aug. 12 - Nov. 25	65°F	Aug. 26 - Dec. 9	65°F

# Suggested Poinsettia Production Schedules for Indiana

# V-14 Types

### Single Stem 3 Plants/6" Pot

	Flower - Novemb	er 25	Flower - December	9
Propagation	July 29		August 12	
D	4 weeks		4 weeks	
Pan	August 26		September 9 2 weeks	
Black Cloth	2 weeks September 9 2 weeks		2 weeks	
Natural Days	September 23		September 23	
Flower	9 weeks November 25		11 weeks December 9	
	Night Temperatures			
	July 29 - Aug. 25	70°F	Aug. 12 - Sept. 8	70 <sup>0</sup> F
	Aug. 26 - Nov. 25	65 °F	Sept. 9 - Dec. 9	65°F

# V-14 Types

# Pinched 1 plant/6" Pot

	Flower - Novemb	er 25	Flower - December 9	)
Propagation	July 8		July 22	
Pan	4 weeks August 5		4 weeks August 19	
Pinch	3 weeks August 26 2 weeks		3 weeks September 9 2 weeks	
Black Cloth	September 9 2 weeks		2 Weeks	
Natural Days	September 23 9 week		September 23 11 weeks	
Flower	November 25		December 9	
	Night Temperatures			
	July 8 - Aug. 4	70 <sup>0</sup> F	July 22 - Aug. 18	70 <sup>0</sup> F
	Aug. 5 - Nov. 25	65 <sup>0</sup> F	Aug. 19 - Dec. 9	65 <sup>0</sup> F