

2nd International Geranium Conference**16,17,18 September 1987****The Pennsylvania State University****Keller Conference Center**

For additional information contact
Dr. Richard Craig, Department of Horticulture
 106 Tyson Building
 University Park, PA 16802
 (814) 863-2191

Poinsettia Tips 1987

Propagation - A 70°F minimum 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.

Add molybdenum at the rate of 0.1 ppm Mo:

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

Pinching - 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. We are in the process of writing some recommendations for Bonzi. I would suggest caution in the use of Bonzi as a growth retardant. Bonzi certainly should not be applied after the start of short days.

Time of first application is generally:

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

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.

Response 3 1/2 wks wil flower

Suggested Poinsettia Production Schedules for Indiana

Hegg Types
Single Stem 3 Plants/6" Pot

Flower -	November 26	Flower - December 9
Propagation	July 30 4 weeks	August 12 4 weeks
Pan	August 27 2-1/2 weeks	September 9 1 week
Lights On	September 15 1-1/2 weeks	September 16 3 weeks
Lights Off	September 24 9 weeks	October 7 9 weeks
Flower	November 26	December 9

Night Temperatures

July 30 - Aug. 26	70°F	Aug. 12 - Sept. 8	70°F
Aug. 27 - Sept. 23	65°F	Sept. 9 - Oct. 6	65°F
Sept. 27 - Oct. 6	62°F	Oct. 7 - Oct. 17	62°F
Oct. 7 - Nov. 26	65°F	Oct. 18 - Dec. 9	65°F

Hegg Types

Pinched 1 plant/6" Pot

	Flower - November 26	Flower - December 9
Propagation	July 16 4 weeks	July 29 4 weeks
Pan	August 13 3 weeks	August 26 3 weeks
Pinch	September 3 1-1/2 weeks	September 16
Lights On	September 15 1-1/2 weeks	September 16 3 weeks
Lights Off	September 24 9 weeks	October 6 9 weeks
Flower	November 26	December 9

Night Temperatures

July 16 - Aug. 12	70°F	July 29 - Aug. 25	70°F
Aug. 13 - Sept. 23	65°F	Aug. 26 - Oct. 6	65°F
Sept. 24 - Oct. 6	62°F	Oct. 7 - Oct. 15	62°F
Oct. 7 - Nov. 26	65°F	Oct. 16 - Dec. 9	65°F

Suggested Poinsettia Production Schedules for Indiana

V-14 Types

Single Stem 3 Plants/6" Pot

	Flower - November 26	Flower - December 9
Propagation	July 30 4 weeks	August 12 4 weeks
Pan	August 27 2 weeks	September 9
Black Cloth	September 10 2 weeks	
Natural Days	September 24 9 weeks	September 23 11 weeks
Flower	November 26	December 9

Night Temperatures

July 30 - Aug. 26	70°F	Aug. 12 - Sept. 8	70°F
Aug. 27 - Sept. 9	65°F	Sept. 9 - Sept. 22	65°F
Sept. 10 - Sept. 23	62°F	Sept. 23 - Oct. 6	62°F
Sept. 24 - Nov. 26	65°F	Oct. 9 - Dec. 9	65°F

V-14 Types

Pinched 1 plant/6" Pot

	Flower - November 26	Flower - December 9
Propagation	July 9 4 weeks	July 22 4 weeks
Pan	August 6 3 weeks	August 19 3 weeks
Pinch	August 27 2 weeks	September 9 2 weeks
Black Cloth	September 10 2 weeks	
Natural Days	September 24 9 week	September 23 11 weeks
Flower	November 26	December 9

Night Temperatures

July 9 - Aug. 6	70°F	July 22 - Aug. 18	70°F
Aug. 7 - Sept. 9	65°F	Aug. 19 - Sept. 22	65°F
Sept. 10 - Sept. 23	62°F	Sept. 23 - Oct. 6	62°F
Sept. 24 - Nov. 26	65°F	Oct. 7 - Dec. 9	65°F