

CONTROL OF HEIGHT ON POINSETTIAS WITH GROWTH RETARDANTS

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Cycocel continues as the best material available on the market for reducing stem elongation of poinsettias. Recommendations as presented on the trade label and as set forth in the July 1962 issue of the Massachusetts Flower Growers' Bulletin appear effective.

The benefits of repeat applications were studied at the Waltham Field Station during the fall of 1962. Rooted cuttings were planted at two week intervals and were treated with one and two applications of Cycocel at the recommended rate, or were left untreated, as checks. The results are shown in Table I.

TABLE I. Heights of Four Propagations of Poinsettias Receiving Various Applications of Cycocel. All applications were at the recommended rate.

<u>Date of planting rooted cuttings</u>	<u>Height (inches)</u>		
	<u>No Cycocel</u>	<u>One application of Cycocel</u>	<u>Two applications of Cycocel</u>
August 1	34.9	26.5	23.5
August 15	32.2	25.8	20.5
August 29	27.3	19.7	18.9
September 12	25.6	16.5	15.5

From Table I, it can be seen that considerable reduction in height was gained as a result of repeat treatments on the earlier propagations, while an insignificant reduction was realized for later propagations. These figures suggest that one application of Cycocel

is adequate on material planted after September first, but earlier plantings would benefit from two applications. For these earlier plantings, one treatment two weeks after planting into small pots is suggested, with a second application one to two weeks after panning if still greater height reduction is desired. Some reduction in bract diameter results from this second application of Cycocel, but it is not proportional to the reduction in height.

A new material from the U. S. Rubber Company, B-995, shows some promise for use on poinsettias when used as a spray application, but more research is needed before practical recommendations can be made.

SUGGESTIONS FOR PLANTING IN CARNATIONS

1. Leach all benches before taking out the crop for replanting. Take soil samples for testing.
2. Add coarse concrete sand if needed and peat moss. An inch of sand may be a better medium to add to your particular situation than the peat moss. It is probably cheaper and under most soil conditions will increase porosity of the soil allowing for more oxygen and better drainage.
3. Add lime and superphosphate as recommended from the soil tests. Do not add dried manures for they are potent especially in hot weather, and as a result of steam sterilizing will break down fast to produce high soluble salts and high ammonia.
4. Thoroughly mix the peat moss, sand, lime and phosphate into the soil. Some of these new rototillers look very promising for working the soil but it is still this writer's opinion that the best way to get the best results is to turn over the soil in the bed by hand using a square edged shovel making sure that all cracks are properly spaced $3/8$ " apart and free of accumulation of roots or other debris that would impair drainage. Boards over 5" wide should have $3/4$ " holes bored in them at 4" intervals.
5. Keep soil level in benches 1" below the sides. Some soils may be level with sides at planting and will settle enough to give this 1". Others will need to be finished lower. Remember also that as plants come from flats with a 3" x 3" ball the soil in the benches should not be as high before planting.
6. Sterilize soil at 130°F for one hour. It should not take more than 3 hours to bring up a bench or bed to this temperature.

A 2" main trapped near the outlet of the house is ideal. Also use a 1½" to 2" hose and have it as short as possible to reduce condensation, otherwise you may have a wet job of steaming, a condition not desirable.

7. Bench plants that came from clean, healthy stock plants (cultured). Such plants take off better, give and produce better quality flowers. There will be less loss by disease. The young plants should have been well covered through their early growth with a fungicide such as Zineb or Captan and an insecticide such as malathion, Aramite or Kelthane.
8. Depth of Planting. As more growers are planting from flats, again, the depth of planting will have to be cautiously watched. It is best to set the ball at least level or slightly above the soil line in the bench. Great care should be taken to see that plants are as uniform as possible in regards to development and that they are free from disease.
9. Maintaining proper nutrient levels. Young plants in the flat should be fed previous to moving into their new location. After roots are established in the new beds, the young plants should be fed again. The amount to use will depend on whether the continuous or intermittent program is used. Frequent soil samples sent in for testing is a further guide to your nutrition program. Two growers (Devita and Patten) last year report excellent results from using a light application of an organic fertilizer along with their regular feeding programs. One pound per 100 sq. ft. of Agrinite every two or three weeks, Turf Feed, milorganite, or any organic fertilizer having an analysis of a 6-8% N seemed to give better growth and a more constant supply of nitrogen as shown by the soil analysis.
10. Keep ahead of the stringing and when watering always add enough water so that the benches "drip" across the bottom of the bench.

SNAPDRAGON MEETING AT PENN STATE - Mark your calendar-August 6 to 8. All roads lead to the Penn State University at University Park. On Thursday there is a whole afternoon devoted to snapdragons, both production and handling. Variety trials in greenhouse, too! Society business meeting in evening. Greenhouse Florist Conference starts with the famous Open House at greenhouse Tuesday evening. For program and information on lodging, drop a line to Dr. John Mastalerz, Greenhouse Florists Conference, Tyson Hall at Penn State.