POINSETTIA CUTTING PRODUCTION*

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Economic conditions associated with greenhouse production make it more essential each year to obtain maximum yields of cuttings from poinsettia stock plants. Larson & Langhans (1) reported that stock plant production of poinsettias increases appreciably with increases in the growing temperature. Shanks (2) advocated pinching all shoots at the same time and same level for early season pinching. Widmer and Lough (3) reported that production was increased by 5.5 cuttings per plant when all shoots were cut back to one level on June 30, in contrast to no pinching or pruning of the check plants on June 30.

The 1961 Barbara Ecke Supreme #1 poinsettia stock plants in the University greenhouse were divided into three groups. They were pruned as follows on June 8.

(1) Tip - the tips of the largest shoots were removed.
(2) Even - the tops of the shoots were removed to one uniform level.
(3) All - the tops of the shoots were removed to a uniform level as in treatment #2, and the tips of all shoots below this level were also removed.

No further pinching or pruning was done after June 8. Half of the plants were grown in the air-supported plastic greenhouse and the other half were grown in the new glass greenhouse. There were five plants per treatment at each location to make a total of 30 stock plants.

Cutting production is shown in Table 1.

Table 1. Cutting production of Barbara Ecke Supreme poinsettia stock plants.

Date of propagation	Plastic greenhouse Stock plant treatment			Glass greenhouse Stock plant treatment		
	Tip	Even	All	Tip	Even	All
July 20	107	84	90	91	81	72
July 26	5	5	5	3	1	2
August 18	69	47	54	44	45	32
August 26	124	111	102	68	60	69
September 14	55	52	52	81	65	67
Total	360	299	303	287	252	242
Total for both houses	647	551	545			

No differences were evident between cutting production in the "even" and "all" treatments. Plants in the "tip" treatment produced 2.7 more cuttings per plant in the glass greenhouse and 4 more cuttings per plant in the plastic greenhouse. These differences were evident with the first flush of cuttings as well as with some of the later propagation dates.

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The production of 12 extra cuttings per stock plant in the plastic greenhouse may be attributed to a higher air temperature. Widmer (4) reported the temperature differences in a previous paper.

Possible reasons for the greater cutting production with the "tip" treatment may include the following: (1) side shoots often break sooner from a soft pinch and (2) more of the foliage was removed from the "even" treatment plants in the pruning process.

Conclusions

1. Temperature control remains the most effective means of increasing cutting production.

2. Tip pinching of the larger shoots is more effective than pruning all shoots back to one level.

3. Maintaining high growing temperatures and pinching the plants properly will provide the greatest number of poinsettia cuttings.

Literature cited

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