Extending the Day Length on Poinsettias

by Darrell Messick

Early blooming of poinsettias has been a problem for several years. It is well known that daylength is the most important factor causing bud initiation on the poinsettia.

Rooted cuttings of the variety Barbara Ecke donated by Park Floral Company of Englewood, Colorado, were potted in sterilized soil on September 2, 1953. On September 22, light treatments were started on 255 plants while 85 were kept as a control treatment, receiving normal daylength throughout their life cycle. The lighting period used was 6:00 to 9:00 p.m. Forty watt bulbs were suspended 5 feet apart and $2\frac{1}{2}$ feet from the tops of plants. Lighting was discontinued on 85 plants each of the following dates: September 27, October 2 and October 7. The poinsettias were panned on October 13. Nitrogen and potash were supplied by liquid feeding. Night temperature was 62° F.

Results

Extending the day length to Sept. 27, Oct. 2 and Oct. 7 did not affect the flowering time under these conditions. All treatments and the unlighted plants were in an optimum stage for Christmas. Apparently these plants initiated flower buds October 7 or later. This may not always be true in Colorado. The weather during September and October of 1953 was mild and sunny, giving a maximum of day length and naturally delaying poinsettias to the limit. Propagations made earlier than August 1 may benefit by additional day length. October 7 would be about the latest date that the variety Barbara Ecke should be lighted.

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