

Bulletin 318

Edited by David E. Hartley

December 1976

PINCHING CARNATIONS

Douglas Hilliard and Joe J. Hanan¹

Many growers have their own special method for giving the first pinch to a carnation plant. However, provided a sufficient number of leaf pairs are left on the plant, pinching method has no great effect on the resulting number of breaks. The condition of the cutting, how it is grown, and the time of year probably have greater influence. Pinching a plant to four leaf pairs will obviously limit breaks to four, but on the other hand, pull-pinching, or allowing the terminal stem to develop a visible bud, is no guarantee that more than four breaks will be obtained.

Carnations were planted August 1, 1975, in a fiberglass-covered greenhouse, in gravel, at 3 plants per sq.ft. density. Fertilization was automatic with $\rm CO_2$ injection. At intervals, 6 rows (36 plants) were chosen at random for various types of pinching. The pinches were:

- 1. Pull-pinch 5 days after planting (Aug. 6).
- 2. Pull-pinch 10 days after planting (Aug. 11).
- 3. Pinch to leave 4 leaf pairs (Aug. 11).
- 4. Pinch to leave 5 leaf pairs (Aug. 16).
- 5. Pinch to leave 6 leaf pairs (Aug. 20).
- Wait until the terminal bud had developed to approximately pea-sized and then pinching to leave 10 leaf pairs.

In the pull-pinch, the plant was held down with one hand and the upright, terminal leaves were removed with the other hand with a sharp upward pull. If the plant was turgid, and sufficient care exercised, the terminal meristem was removed. But, it was common to miss with the result that the plant often had to be pinched again at a later date.

The number of vegetative breaks resulting from these methods were counted and the results are shown below:

Treatment Number	Mean Number of Breaks
1	4.4
2	4.6
3	4.0
4	4.3
5	4.4
6	4.7

The four breaks per plant for four leaf pairs were significantly fewer than the 4.6 and 4.7 breaks for treatments 2 and 6. Vigorously growing carnations should probably not be pinched to fewer than 5 leaf pairs. Pull-pinching 10 days after planting also provides a maximum number of breaks, but takes longer and many plants may be missed. There does not appear to be any reason for allowing the terminal on vegetative cuttings to develop a visible bud before pinching.

This bulletin is published in cooperation with Colorado State University Experiment Station and Cooperative Extension Service. The information given here is supplied with the understanding that no product discrimination is intended and that no endorsement of a product is implied.

Undergraduate and Professor respectively.