## Carnation Return Crops 1951-52

by

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A return crop from the time a flower is cut takes from 3-9 months. The return crop from a September cut takes 5-9 months while the return crop from a February cut takes 3-5 months. Shoots left after flowers are cut after mid-January usually flower in June. The return crop from the September cut comes in over a long period of time while the return from the February cut gives a high percentage of flowers in a relatively short period in June and early July. These are some of the results of the work this past year on carnation timing.

Knowledge of the time required for a crop to come into flower allows the grower to better anticipate when he will be getting a heavy cut and also when to plant and pinch to bring the flowers into a favorable market. Carnation flowers take a long time to develop making the actual flowering time very dependent on climatic conditions.

The Long Island carnation growers are particularly interested in finding out how long it takes for a return crop to come into flower and how it is effected by shoot length and shoot position on the stem. By repeating this work several years, the effect of yearly climatic differences will show up. Future experiments will also take into consideration the position of the plant on the bench.

This experiment was carried out at the Oscar Maier range, Jerusalem Avenue, Wantagh, Long Island, New York. Once a month, from September to February as flowers were cut, the shoots left on the stem had a wood plant label attached. On this tag were, the date the flower was cut; the position of the shoot on the stem; and the length of the shoot. Varieties used were Red Sim, White Sim, and Hercules. As the tagged shoots developed the tags moved up on the plants. When the shoots flowered the tags were collected and the date of harvest stamped on the back of the tag. There was some loss of tags due to broken stems and failure to find the tags when the flowers were cut. A recovery was made of 940 of 1292 tags used, or 72%.

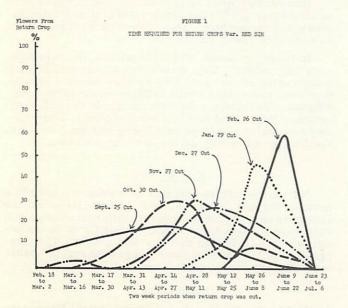


Figure 1 shows the return crops of variety Red Sim. The return crop for each period is figured as a per cent of the total number of flowers from that return

crop. The flat curve for the return from the September 26 cut extends from the end of February to mid-June (5 - 9 months) with the largest production of flowers in April (7 months). This curve shows a rather even harvest over a long period of time. This is in contrast with the higher more pointed curve representing the return from the February 26 cut which shows that most of the flowers were cut in a short period of time. The return from the February cut came in from mid-May to early July (3 - 5 months) with peak production in mid-June (4 months). With more sunlight and warmer weather as the season advances one would expect this more rapid development, four months for the return from the February crop as compared to seven months for the return from the September cut. White Sim and Hercules differed somewhat in behavior but followed the same general trend of a spreading out of the return crop from fall cuts and quicker and heavier cropping of the return from the January and February cuts.

It is evident from the work done, that long shoots of Red Sim tend to come in earlier but there is no clear cut difference in the time required for long and short shoots to come into flower. Shoot length is more of a factor in Hercules. The effect of shoot position is not very marked in the Sim varieties but is quite pronounced in Hercules. The more vigorous shoots come in faster regardless of position or relative length at tagging time. Hercules tends to produce more vigorous shoots nearer the top and these are long at the time flowers are cut giving more of an effect of shoot length and position.

The experiment is being continued with Red Sim in 1952-53 to compare two years results and to determine the effect of the location of the plant on the bench. The 1951-52 results show the return crop takes 7 months from a September 26 cut to 4 months from a February 26 cut; the later the cut the heavier the peak of the return crop; shoot length and position affect the time of the return crop of Hercules to some extent but the Sim varieties do not show such a marked trend. In cutting flowers it is not important to save shoots after mid-January as they come during the lower priced period in June.

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Your Editor,

Linneth Post