Some Effects of Fall Pinching on Red Delight Roses

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Soft pinching of greenhouse roses during the late summer and early fall is an accepted practice by which fall production can be reduced to more nearly coincide with the limited markets during September and October. The percentage of total canes pinched varies with individual growers and with marketing possibilities during this period. Most growers feel that the additional vigor of the plants resulting from pinching will bring about increased production later in the season, when markets are usually more favorable.

To investigate the effects of fall pinching on distribution of yield and on average grade of roses, three benches of 2-year Red Delight were pruned and all returning canes soft pinched. The plants were cut back gradually beginning May 19, 1955. The first breaks returning were soft pinched on June 22. Canes resulting from this pinch were in bloom around August 1, unless they were repinched.

One plot of 44 plants was set aside at random in each of three benches for each pinching treatment. No further pinching was done on one set of plants, while on the other, 1/2 of one break per plant was soft pinched weekly from July 15 to October 4.

Distribution of flowers by months.

The monthly yields per treatment are shown in the table. The non-pinched plants produced almost three times as many roses during August, September and October when markets are less certain. During all months after October, with the exception of December, the yield was greater from those plants pinched during the late summer and fall. The pinched plants produced 18% more flowers from November 1 to June 15.

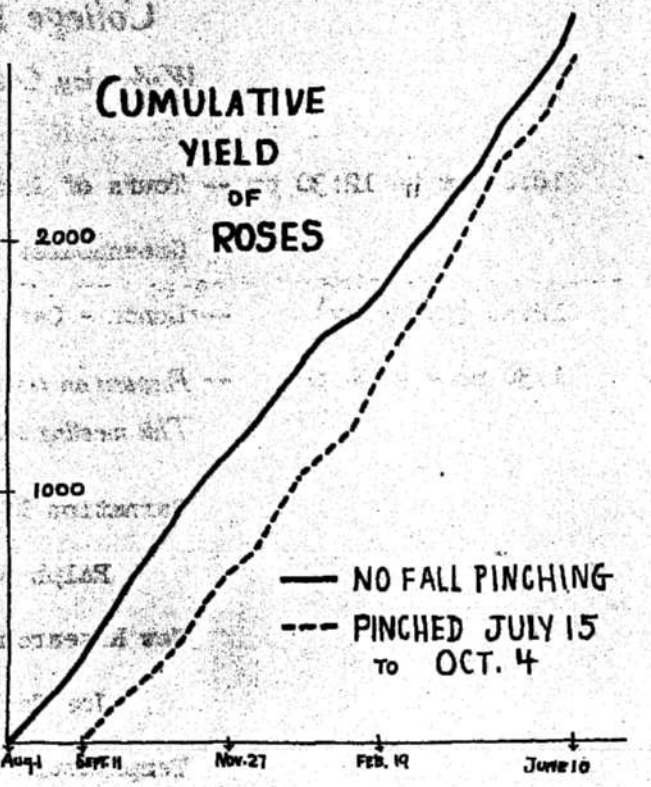
Yield by months

	Unpinched	Pinched
July	11	---
August	291	4
September	317	158
October	235	144
November	298	373
December	256	224
January	186	254
February	295	376
March	232	307
April	304	370
May	269	288
June (2 weeks)	215	241
Total	2909	2739

Effect on grade

The average stem length was increased by fall pinching from 15.1 inches for unpinched to 15.9 for those plants pinched during July to October. This increase was due largely to the heavier yield from non pinched plants early in the season when stems are shorter.

The accompanying chart shows cumulative yields from the two pinching treatments. Non pinched plants gained over 500 roses early in the season, but this difference decreased steadily throughout the rest of the season. In numbers of flowers, the pinched plants did not catch up. Translating the results to dollar returns the pinched plants would be considerably ahead most years.



Cooling on Pink Delight Roses

The results obtained from cooling roses can be just as spectacular as those from cooling carnations. Two benches of the variety Pink Delight were used for comparison during the summer of 1956. These plants occupied identical positions in two houses, one of which was cooled with evaporative pads and exhaust fans while the other was ventilated by conventional methods. Maximum day temperatures were 12 to 18 degrees cooler in the air conditioned house and much more uniform from day to day.

The plants were one year old when pruned gradually during June and July. All breaks returning from the prune were soft pinched once then allowed to flower. The yield and grade of roses from August 12 to September 15 for the two benches are shown in the table.

	Grade of roses in inches of stem						Total	Mean stem length
	work	9	12	15	18	21	24		
Cooled	3	4	5	16	40	47	110	225	21.1
Uncooled	9	9	36	63	49	44	29	239	17.2

All roses with stems above 24 inches in length were cut down to 24's, which slightly warps the 21.1 inch average length for cooled roses. The relative lack of roses in the grades up to 15-inch indicates the value of cooling on Pink Delight. The head size was increased by cooling an estimated 50% and the foliage was larger and thicker on the cooled roses. The varieties Red Delight, Better Times, and Golden Rapture were improved just as much by cooling, but plantings were not arranged for exact comparisons. Mildew did not appear in the cooled house possibly because of constant use of a sulphur vaporizer.