

EFFECT OF POSITION ON CANE ON ROOTING OF ROSA FORTUNIANA CUTTINGS¹

As production of Florida-grown roses grafted on Rosa fortuniana understock has increased a number of growers have observed variation in percentage rooting of cuttings when making a number of cuttings from a large cane. Some growers felt that percentage rooting was affected by distance of the cutting from tip of cane, with the area of poorest rooting occurring about one foot from the growing tip. Most growers indicated that this problem was more prevalent during winter months than during other periods of the year.

In an attempt to verify or disprove this observation an experiment was initiated at the University of Florida in November, 1963. Four foot canes were cut from stock plants of Rosa fortuniana, and each cane was divided into eight cuttings six inches long. Two leaves were left on each cutting to achieve better uniformity between cuttings of various ages. Cuttings were stuck in $2\frac{1}{4}$ inch peat pots containing a mixture of 50% German peat and 50% Perlite and kept moist by an intermittent mist system.

Eight treatments comprised the experiment, with treatment numbers designated as follows:

TREATMENT	DISTANCE BETWEEN BASAL END OF CUTTING AND GROWING TIP OF CANE:
1	6
2	12
3	18
4	24
5	30
6	36
7	42
8	48

Cuttings were stuck on November 16, and rated on December 9, and December 19, 1963. No difference existed between treatments at the December 9 rating. Some differences were noted at the December 19 rating, after cuttings had been in the rooting medium for almost five weeks. However, results were quite different from observations of growers in the field. Best treatments were 1 through 6, with the poorest treatments being numbers 7 and 8.

Therefore, results of this experiment indicate that an area of potentially poor rooting percentage does not exist on canes of Rosa fortuniana when grown under conditions similar to those used in this experiment. However, percentage of rooting does decrease when cuttings are made from the basal end of canes more than three feet long.

¹ This experiment was conducted by Ira E. Broome under the direction of Dr. J. N. Joiner as part of the requirements of OH-499 - Special Problems in Ornamental Horticulture.