THE EFFECT OF CUTTING METHODS ON QUALITY AND PRODUCTION OF BETTER TIMES ROSES

By W. D. Holley and Roger Farmer

Six thirty-five foot benches of grafted Better Times roses were benched in uniform soil on June 21, 1949. The benches were separated into three plots each, forty-four plants per plot, with the end rows in each bench set off as buffer rows. The six replications for each treatment were systematically arranged in the house so each cutting method would receive all possible exposures.

Plants were soft pinched until August, and cutting of blooms began September 14. Three cutting methods were employed as follows:

- 1. Cut leaving two five-leaflet eyes except canes which were near pencil size and larger. These latter were cut off to the knuckle.
- 2. Cut leaving two five-leaflet eyes on all canes.
- 3. Cut leaving one five-leaflet eye on all canes.

Weak stems were either cut off entirely with the flower or cut below the knuckle. Blind wood was pinched or thinned only when it showed signs of growing.

The cut roses were graded commercially into works and three-inch stem gradations from nine to twenty-four inches. To make an individual length, the head of the rose had to be over the line. Roses with weak stems or small heads were cut down to a lesser grade or to works.

The number of roses in the various grades cut from each plot together with averages for each cutting method are presented in the table on page 5.

Bench A was a south bench hence the greater production in plots 14, 2A, and 3A.

Cutting methods 1 and 2 produced significantly more roses as would be expected from earlier work. Method 1 produced more roses in the twenty-four inch grade because of the "knuckle" cutting. This was offset by there being more eighteen and twenty-one inch roses in method 2. Methods 1 and 2 are equally good for this climate of high light intensity. The difference in overall production in favor of method 2 is not statistically significant.

These cutting methods had no apparent effect upon the number of work roses. Of the total cut, ten to ten and one-half percent were graded as work roses.

Since these records were for the purpose of obtaining basic information on roses in this climate, works were described as they were graded. A description of the works and when they occurred will be included in the September Bulletin.

Method 3 reduced the total production by approximately 3 and 4 roses per plant when compared to Methods 1 and 2 respectively. This reduction was greatest in 9, 12 and 15-inch grades, as the totals for the top three grades from each method were almost identical.

Production and Grades of Better Times Roses from Three Cutting Methods 1949-50

Plot*	and the second				Been			Total Cu
	Works	9 in.	12 in.	15 in.	18 in.	21 in.	24 inup	For Plot
lA	129	231	299	278	200	86	85	1308
1B	119	221	296	305	146	71	54	1212
1C	129	183	312	321	203	78	74	1300
1D	128	198	308	314	142	64	65	1219
1E	123	179	262	251	172	85	78	1150
1F	112	162	296	291	181	89	61	1192
Average	123.3	195.7	295.5	293.3	174.0	78.8	69.5	1230
2A	144	266	369	330	206	91	45	1451
2B	114	208	346	326	189	76	44	1303
2C	143	174	270	282	203	121	70	1263
2D	115	177	276	306	194	86	49	1203
2E	130	167	309	309	173	100	54	1242
2F	162	230	285	265	176	69	30	1217
Average	134.7	203.7	309.2	303.0	190.2	90.5	48.6	1280
3A	136	233	301	291	172	65	34	1232
3B	111	152	258	266	205	83	32	1107
3C	106	139	249	296	211	74	32	1107
3D	117	154	214	254	177	116	47	1079
3E	122	152	214	239	213	105	54	1099
3F	108	123	221	262	193	85	33	1025
Average	116.7	158.8	242.8	268.0	195.2	88.0	38.7	1108

^{*}Each plot contained 44 plants - spaced 4 per row across a 42" bench. Rows were 12" apart. Plot designation - 2 refers to cutting method.

A refers to bench number.