

Regional Rootstock Trial

John Edstrom
Bill Krueger
 UC Farm Advisors

This trial was planted in March 1997 at a 22x24 foot spacing to evaluate 7 rootstocks as part of a statewide standardized rootstock evaluation. The main variety is Nonpareil (1/2) with pollinizers of Carmel (1/6), Monterey (1/6) and Aldrich (1/6). The area was slip plowed and is irrigated with dual microsprinklers. Each combination was planted in 8 reps of 8 trees.

RESULTS:

Measurements show little difference in tree size between the 7 rootstocks during 2000, a season of vigorous growing conditions. Trunk size, measured as circumference, ranged from 42 cm to 47 cm, but, no statistical differences were found between rootstocks. (Table 1)

Last year's data showed I-82 (released as 'Nickels') and Hansen trunks were larger than the others while Atlas was the smallest. This year, apparently tree growth leveled out these differences. No difference was found for tree height between the rootstocks, all measured about 17 feet.

Numerical yields tended to be greater for Atlas, Viking and Lovell during the first harvest of this trial (Table 2). However, no statistically valid differences were found in production. Intensive pruning to train trees for eventual limb shaking may have affected early yields in this block.

Ratings made throughout bloom on Nonpareil showed only minor differences in bloom progression. Atlas, Bright and 'Nickels' all tended to be slightly delayed in flowering. However, ratings made at full bloom and petal fall showed no differences in bloom timing between any rootstock. No measurable differences in crop maturity were found. Possibly tree vigor in this young block reduced any differences this year. No tree mortality occurred this season.

NICRAC Roots Rpt 00 a

Table 1.

*Trunk Circumference
(cm.)*

<u>Rootstock</u>	<u>Mean</u>
Atlas	42.2
Bright	45.3
Viking	42.8
Nickels	44.2
Hansens	47.9
Lovell	42.2
Nemagard	42.2
Brights - 2	ns 45.3

Table 2.

Yield - lbs. Per Tree

<u>Rootstock</u>	<u>Mean</u>
Atlas	6.9
Brights	4.7
Brights - 2	4.2
Hansens 536	5.9
Nickels (I-82)	5.7
Lovell	6.5
Nemaguard	4.5
Viking	ns 6.4

