

Regional Rootstock Trial

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This trial was planted in March 1997 at a 22x24 foot spacing to evaluate 7 rootstocks as part of a statewide standardized rootstock evaluation. Included in the evaluation are three peach almond hybrids (Hansens 536, Nickels and Brights) two peach/almond/plum/apricot hybrids (Atlas & Viking) and two peach, (Lovell and Nemaguard). The test variety is Nonpareil (1/2) with pollinizers of Carmel (1/6), Monterey (1/6) and Aldrich (1/6). All pollinizers are on Brights hybrid rootstock. The area was slip plowed and is irrigated with dual microsprinklers. Each combination was planted in 8 reps of 8 trees.

RESULTS

Some differences are now beginning to show between the seven rootstocks after the fifth growing season. Hansens 536 has slightly larger trunk circumference, followed by Brights, Nickels, Nemaguard and Lovell. Atlas trunk size was somewhat smaller.

Crop yield also showed differences, with Lovell, Atlas, Viking, Hansen 536 and Nickels producing more than Brights and Nemaguard.

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. Generally, PA hybrid rootstocks delay harvest maturity a few days to a week but in these young, vigorous trees no delays were found. No tree mortality occurred this season. Observations appear to show Monterey trees on Brights are as small as Carmel/Brights. This is in contrast to the comparative larger size of Monterey over Carmel when planted on Lovell. Also, the canopy shape of Aldrich/Brights appears broader and less upright than nearby Aldrich trees on Lovell root. Some scaffold breakage at the crotch has occurred with Aldrich.

Trunk Size and Yield

	<u>Circumference in cm</u>	<u>Lbs./Tree</u>
Hansens536	56.150 abc	9.50 abc
Bright	53.038 bc	8.60 cd
Nickels I-82	52.629 bcd	8.77 bcd
Nemaguard	51.988 bcd	8.40 cd
Viking	51.713 bcd	9.80 abc
Lovell	51.088 cd	10.30 a
Atlas	50.550 d	10.20 ab
LSD P=0.05		

		A	56.150	Hansens536		
C	B		53.038	Bright		
C	B					
C	B	D	52.629	Nickels I-82		
C	B	D				
C	B	D	51.988	Nemaguard		
C	B	D				
C	B	D	51.713	Viking		
C		D				
C		D	51.088	Lovell		
		D				
		D	50.550	Atlas	LSD	P=0.05

Yields 2001 (Can combine into one table w circ)

Lbs/tree

Lovell	10.3a
Atlas	10.2ab
Viking	9.8abc
Hansen536	9.5abc
Nickels (I-82)	8.77bcd
Brights Hyb	8.6cd
Nemaguard	8.4cd
	LSD P =0.05