

Dual Variety Row Almond Production

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Our strategy is simply to increase cross pollination by alternating two compatible varieties down the same row and comparing yields of the same two varieties planted in solid rows. Solid rows of Padre are compared to solid rows of Mission versus rows alternating with Padre and Mission (M•P•M) down the row. Solid rows of Butte border all treatment rows as a pollinizer. All trees are planted to Lovell peach rootstock at 15' x 20' spacing for 145 trees per acre on Class II soil.

Yield results for 2000 show no advantage to alternating two varieties down the same row. The bloom was strong with good overlap between all three varieties. Weather during bloom was quite conducive to bee flight. Such optimal conditions in past years has neutralized the alternating advantage.

The effect of Butte pollen on the set of Padre and Mission is significant in this block. In past years we have determined by paternity testing that Butte pollen sets Padre flowers in solid rows of Padre which significantly “masks” the real potential advantage of alternating Mission in the row. We again tested Padre and Mission nuts for the pollen parent with the help UCD Pomology Department. Results of the 2000 analysis are

not yet available.

Even with the equalizing effect of Butte pollen in this test we find that in many years (1993, 1994, 1995, 1996 & 1998) alternating varieties shows about a 10% yield advantage. Rows planted with alternating M•P•M or P•B•P would likely show a greater yield advantage verses solid rows of 2 varieties than our test where a third variety, (Butte) is planted. Further, the true value of alternating varieties should be evaluated by calculating the income received from higher yields. Grower returns for almonds during years of poor set conditions generally exceed normal year prices and so the economic advantage to alternating is greater than simply the percentage yield increase.

Kernel – Lbs./Acre

<u>Plot</u>	<u>Mean</u>
Padre	2447
Padre M	2584
Mission	2123
Mission-P	2204

Weight – gms/Kernel

<u>Plot</u>	<u>Mean</u>
Padre	1.043
Padre M	0.984
Mission	1.156
Mission-P	1.082

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