

## ALTERNATE YEAR PRUNING TRIALS 1987

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Objective

To evaluate cost savings, production and quality from annual pruning, versus alternate year pruning on mature prune trees.

Procedure

Three treatments comparing annual pruning, no pruning in even years, and no pruning in odd years were initiated in 1986. The treatment locations are Tehama, Sutter and Merced Counties. Fresh yield/tree, dry away, dry yield/tree, dried count/lb, and dried fruit size distribution are being evaluated. This experiment will be ongoing until 1991.

Results

Dry yield per tree was significantly higher on nonpruned treatments at the Tehama and Merced locations with no differences occurring between treatments at the Sutter experiment. Dried count/lb was reduced at the Merced location due to the increased yield. Smaller fruit on the 86 unpruned treatment were noted at the Tehama and Sutter locations. A noticeable field observation occurring in all locations is that pruning time after the unpruned year takes about 20-25% more time to accomplish.

(See tables 1 and 2)

Conclusions

Little or no pruning in light crop years helped to increase dry yield/tree in Tehama and Merced Counties. Pruning in heavy crop years (1987) did not always reduce dry yield nor did it always promote increased fruit size. Several more years are needed to evaluate these treatments and the cost benefit ratio before biennial pruning can be recommended as a grower practice.

TABLE 1  
Alternate Year Pruning Trials

County	Treatment	Fresh yield per tree (lbs)	dry-away	Dry yield per tree (lbs)	Dried ct/lb	Screen size (%) 24>
Tehama	Annual pruning	507 AB	3.13 B	162 AB	72 C	24 B
	No pruning even years (pruned 87)	490 B	3.23 A	152 B	82 A	31 A
	No pruning odd years (not pruned 87)	539 A	3.14 B	172 A	76 B	25 B

Data average of 32 replications

Sutter	Annual pruning	197 A	2.73 AB	72 A	83 AB	35 A
	No pruning even years (pruned 87)	192 A	2.76 A	69 A	85 A	34 A
	No pruning odd years (not pruned 87)	193 A	2.66 B	73 A	80 B	31 A

Data average of 29 replications

Merced	Annual pruning	198 A	2.41 A	83 AB	89 B	33 A
	No pruning even years (pruned 87)	192 A	2.44 A	79 B	88 B	35 A
	No pruning odd years (not pruned 87)	206 A	2.40 A	86 A	95 A	40 A

Data average of 25 replications

Mean separation within columns by Duncan's multiple range test at 5% level of significance.

TABLE 2

## Alternate Year Pruning Trials

County	Treatment	Dry yield per tree (lbs)		Dried ct/lb		dry-away		Screen size 24>	
		1986	1987	1986	1987	1986	1987	1986	1987
Tehama	Annual pruning	72(P)	162(P)	42	72	2.60	3.13	0	24
	No pruning even years	105(UP)	152(P)	48	82	2.70	3.23	2	31
	No pruning odd years	76(P)	172(UP)	44	76	2.60	3.14	1	25
Sutter	Annual pruning	32(P)	72(P)	51	83	2.70	2.73	1	35
	No pruning even years	31(UP)	69(P)	52	85	2.60	2.76	2	34
	No pruning odd years	34(P)	73(UP)	51	80	2.60	2.66	2	31
Merced	Annual pruning	58(P)	83(P)	62	89	2.20	2.41	8	33
	No pruning even years	82(UP)	79(P)	69	88	2.20	2.44	13	35
	No pruning odd years	53(P)	86(UP)	63	95	2.40	2.40	8	40

P = pruned

UP = unpruned