
In the first year, dry tonnage in a heavily canopied 13-year-old Payne walnut orchard was significantly reduced by mechanized pruning (hedging) when compared with either no pruning or hand pruning. In the second year, yield from plots hedged did not differ significantly from those hand or non pruned. No significant difference in walnut quality existed either year of the test. Information is needed on the effects of light and shoot vigor on lateral bud fruitfulness and the influence of hedging in modifying these conditions.

Mechanical Pruning - W. Schreader, D. Ramos

The ten observation plots of mechanically hedged older trees treated in November 1971 for a rejuvenation effect were observed again in 1973. No further treatments were made on these trees due to the excessively wet winter of 1972-73. (See 1973 Abstracts of Reports from Farm Advisors' Conference for description of pruning treatments.)

Anderson-Barngrover Orchards

Plot 1 - The trees grew somewhat less in 1973 averaging 12-18 inches of growth mostly in areas associated with previous pruning cuts.

Plot 2 - Continued rejuvenation of growth occurred on most severely cut trees. The grower mechanically pruned the remainder of this block, about 50 acres, in the fall of 1973.

Farmington Land Co. (The grower sold this property in three parcels this year which divided the treated area up.)

Plot 3 - Excellent tree vigor was observed in this orchard this year. An unusual, and unexplained, death of wood of the previous year's growth occurred this spring on some trees in this orchard. No nutritional disturbance could be determined by Dr. Kay Uriu, nor were any plant pathogens found by Dr. Bill Moller. This problem will receive attention again in the spring of 1974. No comparable problem was observable in any of the other plots located outside of this property.
Plot 4 - Excessive regrowth continued to be the general pattern in this plot indicating we should have either cut more lightly or on only two sides of the trees rather than on four.

Plot 5 - Trees are still growing excessively with three or more feet not uncommon.

Bill Hosie Orchard

Plots 6, 7, and 8 - Very little response or regrowth even in most heavily pruned trees.

Bob Prouty Orchard (Property sold and trees to be removed in 1974.)

Plots 9 and 10 - Same as 1972

No effort was made to secure the yield per tree or the grade of nuts in these treatments. The experience from these observations is expected to be of use in establishing replicated experiments in the future.