Chemically Induced Fruit Set

G. C. Martin, C. Nishijima, L. B. Fitch

French prune flowers treated with gibberellin at full bloom and again two weeks later set a significant amount of fruit. While the control averaged 2.1% set, the various gibberellin treatments averaged 5.9 to 11.0% set.

French prune flowers treated with DPX-1840 at full bloom, set no fruit. This material performed as an extremely good thinning agent without any apparent phytoxicity symptoms.

Artificial Prune Pollination

G. S. Sibbett

An experiment was conducted in an isolated orchard of Burton prune, a self sterile variety, testing effects of aircraft applications of pollen on fruit set. The orchard did not have pollinators planted. Prune flowers bagged to exclude pollen during application flights and honeybees thereafter did not set fruit. Those flowers bagged only during pollen flights then opened to allow bees to visit flowers set .27% fruit. Those flowers left open during flights set 2.7% fruit. In this latter case, an acceptable crop was obtained although was not as heavy as those orchards where adequate pollinator trees were present.

Mechanical Prune Pruning

G. S. Sibbett, D. E. Ramos

Mechanical topping, hand pruning, and hand pruning plus topping were compared for their effect on production and quality of French prune. Cost of pruning was also noted. Topping and hand pruning reduced dry tonnage approximately 13% when compared to the other treatments. No difference in fruit quality existed between treatments. Topping alone cost approximately $.15 per tree. Topping plus hand pruning cost $.50 per tree and hand pruning alone cost $.90 per tree. The test is being continued.