

# Deciduous



**T**HE DECIDUOUS FRUIT FIELD STATION was established in Santa Clara Valley in 1920 to investigate problems involved with the growth and care of deciduous fruits. The Station was planned to serve the interests of growers in the coastal counties, as well as those in regions with similar climatic conditions.

The University of California leased a small plot of land for five years near the

city of Mountain View and converted existing buildings to office and laboratory space. W. L. Howard of the Department of Pomology was placed in charge and Station operations continued until 1925, at which time it was closed. The Station staff during this early period included W. L. Howard, Pomologist; A. H. Hendrickson, Pomologist; F. J. Veihmeyer, Irrigation Engineer; B. A. Rudolph, Plant

Pathologist and E. O. Essig, Entomologist. Some of the problems worked out at this time included: Brown Apricot Scale control, control of brown rot of apricots, irrigation techniques, pruning methods; and considerable research was conducted on Oak Root fungus.

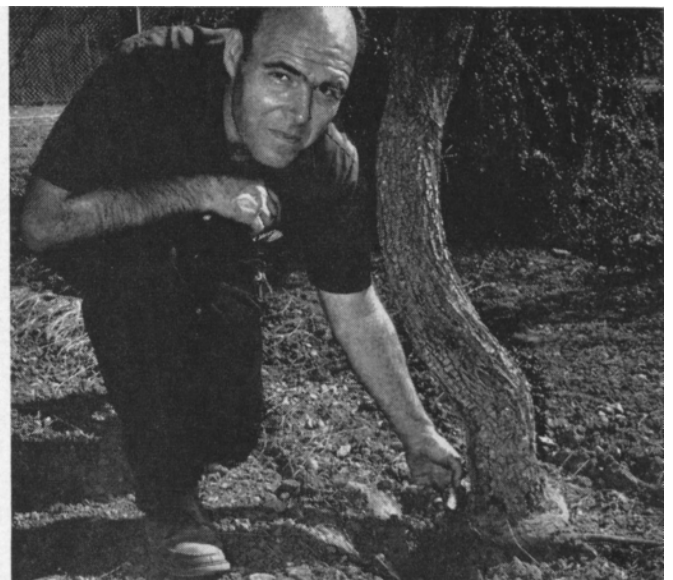
Late in 1925, the University of California reopened the Field Station in temporary housing in San Jose. B. A. Rudolph was placed in charge. Thirteen acres were leased from the Women's Relief Corps Home (for Civil War veterans' wives), located on Winchester Road in San Jose. The Women's Relief Corps Home property consisted of a total of 18 acres. Buildings were completed late in 1928 and the Station moved to its present site.

The Station was again staffed with a number of research workers from the Departments of Plant Pathology, Entomology, Irrigation and Biological Control, plus some technicians and graduate students. During the 1930's, the staff was gradually withdrawn; and when World

Armilaria (Oak Root fungus) test plot below showing new replanting in foreground and older plantings in background.



White layer shows Oak Root fungus under bark near the base of this ornamental tree in the Armillaria test plot at Station.



# Fruit Field Station

## SAN JOSE

War II broke out, all men were brought into Berkeley and Davis to fill teaching needs, leaving only Dr. B. A. Rudolph. Staff members at the Station during this period included: Harold E. Thomas and W. T. Horne, Plant Pathology; L. M. Smith, Homer Lowe and O. H. Lovell, Entomology; Stanley Flanders, Biological Control; Veron Givens, Irrigation; and Michael Shapovalov, U. S. D. A.

In 1951, a group of growers and legislators had the leased property deeded to the University through legislation. At this time the administration of the Station was transferred to the Field Station Administration at Davis under the direction of Ben A. Madsen. In June, 1953, Alfred M. Amstutz was appointed Superintendent of the Station. During 1963, an additional five acres belonging to the Women's Relief Corps Home was obtained and is now being put under cultivation.

Outstanding accomplishments at the Station include development of the Shasta and Lassen strawberry varieties in 1935 and, in recent years, the Tioga, Fresno,

Torrey and Solano varieties. The first experimental field work in the development of techniques for soil fumigation of strawberries to control verticillium wilt was conducted at the Station. The system of holding strawberry transplants in cold storage from harvest time in December or January for "summer planting" in July or August, as now practiced in the Santa Clara Valley, was another Station accomplishment. The oldest test plot on *Armillaria* (Oak Root) fungus in the state is still producing valuable research information on resistant species. Some new olive rootstocks resistant to verticillium wilt are now scheduled for a commercial field planting test. The first chemical control program for cyclamen mite in strawberries was researched at the Station. Walnut blight and apricot brown rot control with Bordeaux was also developed at the San Jose Station. Cooperative research with other field stations in the evaluation of new fruit varieties has also been part of the Station activities over the years.

### CURRENT MAJOR PROJECTS AT THE DECIDUOUS FRUIT FIELD STATION WITH PERSONNEL AND DEPARTMENTS

- Cultural Problems of Small Fruits: R. S. Bringham; Victor Voth, Pomology, Davis.
- Breeding, Cytology and Genetics of Small Fruits: Bringham; Voth.
- The Relation of Climate to Deciduous Fruit Production in California: Dillon S. Brown, Pomology, Davis.
- Cultural Problems of the Walnut: E. F. Serr, Pomology, Davis.
- Cherry Breeding: Paul E. Hansche, Pomology, Davis.
- Cultural Problems of the Pear: William H. Griggs, Pomology, Davis.
- Armillaria on Walnut Rootstocks: E. F. Serr, Pomology, Davis, R. D. Raabe, Plant Pathology, Berkeley.
- Verticillium Wilt of Olives: Stephen Wilhelm, Plant Pathology, Berkeley.
- Diseases of Strawberries and Cane Fruits: Wilhelm.
- Verticillium Wilt of Prunus Species: Wilhelm.
- Studies of Resistance in Plants to Armillaria Root Rot: Robert D. Raabe, Plant Pathology, Berkeley.
- Heat Therapy of Virus-Infested Trees: George Nyland, Plant Pathology, Davis.
- The Integrated Control of Insects and Mites on Pome fruits in Northern California: John L. Nickel, Entomology and Parasitology, Berkeley.
- The Integrated Control of the Codling Moth on Deciduous Fruit: Nickel.
- Strawberry Insect Investigations: William W. Allen, Entomology and Parasitology, Berkeley.
- Verticillium Wilt in Strawberries: Bringham; Wilhelm.
- Soil Residues of Herbicides: A. H. Lange, Extension Specialist, Botany, Davis.

Cherry orchard containing the five new U. C. varieties of sweet cherries plus other selections being tested at the Station.



Light trap, hanging in pear orchard at the Station, allows check of insect flights in studies of pest control methods.

