

Kearney Horticultural Field Station



Office and laboratory building at Kearney Field Station, with equipment building seen in left background and one of several residences, right background.



Tea plots, left photo, at Kearney Field Station included plantings of 70 clones for tests of adaptability to Valley conditions.



USDA plum breeding trials underway at Kearney Field Station, left photo.

Special trellising for grape vines in bunch rot test plot at Kearney Field Station, right photo.

KEARNEY HORTICULTURAL FIELD STATION, newest of 10 operated by the University of California Division of Agricultural Sciences, is now in full operation with a comprehensive schedule of research projects keyed basically to the horticultural future of the San Joaquin Valley. The 230-acre site, near Reedley, Fresno County, was acquired in 1962 with contributions totaling \$128,500 from some 361 growers and agribusinessmen—matched with funds from the University of California's Kearney Foundation. The station was named after the early-day Fresno rancher and philanthropist, M. Theo Kearney.

Research at the station concerns mainly vineyards and tree crops. Particular emphasis is being placed on new crop possibilities for the new lands being developed in response to urbanization pressures in established growing areas. The availability of new water for the San Joaquin Valley has also created new research needs, including salinization studies recently begun at the station. Other major research areas will include problems associated with more concentrated cropping practices, mechanical harvesting, and control of insects and plant diseases. One project, probably unique in the nation, involves a planting of some 70 tea clones being studied to evaluate the feasibility of this crop for the San Joaquin Valley.

Official groundbreaking for new buildings at the station—administration building including offices, laboratories, and meeting rooms; shop-equipment build-



ing; and four residences—was conducted in the spring of 1964. Another building yet to come will house the already staffed San Joaquin Valley Regional Research and Extension Service Center. This Agricultural Extension Service facility, first of its kind in the state, has six specialists already at work on regional problems, and more may eventually be assigned to work at the center.

Facilities

Field station facilities are being used for research work by the following departments of the University of California: Agricultural Engineering, Davis; Agronomy, Davis; Botany, Davis; Horticultural Sciences, Riverside; Plant Pathology, Davis; Pomology, Davis; Vegetable Crops, Davis; Viticulture and Enology, Davis; Water Science and Engineering, Davis; and Agricultural Extension Service Farm Advisors of Fresno and Kings counties. USDA's Crops Research Division, Fresno, also makes use of station facilities.

Research projects already completed at the station include: Irrigated Sorghum Yield Trials, V. L. Marble, E. J. Gregory, and D. Sumner, Department of Agronomy, Davis; Grape Herbicide Variety Screening Trial, A. H. Lange and L. A. Lider; Herbicide Residue Study, Lange and B. B. Fischer, Department of Botany, Davis; Control of Corn Virus Diseases, R. J. Shepherd, D. H. Hall, D. Smeltzer, and farm advisors; and Sweet Potatoes, D. H. Hall, Department of Plant Pathology, Davis.

CURRENT RESEARCH PROJECTS INCLUDE

- Agronomy**
Evaluation of the Adaptation and Production of Tea in California—L. G. Jones and K. H. Ingebretsen
- Plant Pathology**
Diseases of Orchard Trees—E. E. Wilson and E. F. Serr
Diseases of Grapes, Bunch Rot—W. B. Hewitt, A. C. Goheen, L. Cory, J. C. Dutra, and T. Kosuge
Disease of Orchard Trees—J. M. Ogowa and E. E. Wilson
- Pomology**
Cultural Problems of the Walnut—E. F. Serr and H. I. Forde
Investigations of Cultural Problems of the Olive—H. T. Hartmann, R. H. Vaughn, E. C. Maxie, K. Uriu, H. Brewer, and J. H. Whisler
- Vegetable Crops**
Experimental Analysis of Between-field Variations in Certain Attributes of Market Quality in Cantaloupes—R. M. Davis, Jr.
- Viticulture & Enology**
Grape Variety Test Plot and Certified Mother Block at Kearney Field Station—C. J. Alley, L. A. Lider, A. J. Winkler, and W. B. Hewitt
Trial of Promising Wine Grape Selections—H. P. Olmo
Mechanical Harvesting, Breeding and Selection of Long-stemmed Wine Varieties—H. P. Olmo
Stock-scion Nutrition Trial—J. A. Cook and L. A. Lider
- Viticulture & Enology & Ag. Engineering**
Mechanical Harvest: Trellis & Pruning Design—H. P. Olmo and H. E. Studer
- Water Science & Engineering & Vegetable Crops**
A Comparison of Sprinkler & Furrow Irrigation on Cantaloupe Production—Robert M. Hagon and R. M. Davis, Jr.
- Water Science & Engineering & Agricultural Extension Service**
Soil Amendments & Their Effect on Water Infiltration in Eastside Soils—L. P. Christensen, C. Houston, L. Werenfels, and L. Doneen
- USDA**
Stone Fruit Breeding, Plum Breeding, Apricot Breeding—J. M. Weinberger
Almond Breeding—R. W. Janes

PROJECTS INITIATED

- Botany**
Weed Control in Cantaloupes—A. H. Lange and Dan May
- Plant Pathology & Viticulture & Enology**
Grape Viruses—W. B. Hewitt, A. C. Goheen, and L. A. Lider
- Pomology**
Nitrogen Nutrition of Peaches—A. A. Hewitt, E. C. Maxie, and L. L. Claypool
Plum Training & Peach Training—A. A. Hewitt
Non-production of Japanese Plums—C. O. Hesse and J. Beutel
Stone Fruit Variety Evaluation—C. O. Hesse
- Pomology & Water Science & Engineering**
Plum Irrigation—R. M. Hagan, K. Uriu, and P. E. Martin
- Viticulture & Enology**
Climatic Responses of Grapes—L. A. Lider, W. M. Kliewer, J. A. Cook, C. J. Alley, and H. B. Schultz (Ag. Engineering)
- Water Science & Engineering**
Pesticide Movement During Infiltration & Drainage—J. H. Biggar and D. L. Nielsen
- Horticultural Sciences, Riverside**
Fig Selection Tests—W. B. Storey and I. J. Condit
- Fresno County Extension Service**
Bush Bean Variety Trial—Dan May



Plum tree training trials underway at Kearney Field Station, above, show stakes used for wiring limbs and trunk into desired positions.



Walnut variety test plot given a dormant season check, above, and grape virus study plot irrigation, below, at Kearney Field Station.

