Near Santa Paula, 11.4 acres of land, leased on a long-term, free rent, free water basis from the Limoneira Company for scientific research on problems affecting citrus and avocado, are being used by the Department of Horticultural Science, Riverside, California. The photos show (left) a section of the avocado planting, and (right) a section of mandarin planting. Genetic studies are being carried on in both plots—studies aimed at development of better commercial varieties for the areas of California where these crops can be grown. The avocado studies are under the direction of B. O. Bergh. The mandarin hybrids developed by J. R. Furr will be studied for commercial adaptability by P. B. Lombard. Resident scientist on the Limoneira tract is S. B. Boswell.

THE CAMERA LOOKS at AGRICULTURAL RESEARCH

Rapid cooling of eggs immediately following laying is essential to maintain maximum interior quality. The use of new high speed equipment in the poultry industry results in the packaging of eggs which have not yet reached the optimum storage temperature of 55°F.

Farm Advisor Don Bell of Orange County and Extension Agricultural Engineer Robert Curley (shown below) are working on a project designed to determine the cooling rates of eggs packed in various types of containers. Eggs are pre-heated to a temperature of 90–95°F, packed in suitable containers and placed in a typical farm storage room held at 55°F. Thermocouples are placed in representative eggs and temperatures are recorded periodically as the eggs are cooled.

A 30°F drop in temperature was found to occur in approximately four hours time with several methods of packing, while the same drop took over thirty hours with other methods.

Poor fruit set, an important problem for California avocado growers, is being worked on by University scientists in several locations. The trees shown in the photo below are part of a test planting at the South Coast Field Station, near Santa Ana, and resulted from a cross between Zutano, a standard variety, and Persea flocossa, which is known for setting a large crop of poor-quality fruit. The hybrids shown produced a rather large set but the fruit was of only medium quality so more back-crossing work is scheduled to try to improve the product. This and similar genetic work on other plots in southern California is being conducted by Dr. B. O. Bergh, Department of Horticulture, on the Riverside Campus.
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Leaf. 138. Describes an easy, inexpensive test for nurserymen and seed dealers to separate viable from dead citrus seeds.

DRAINAGE OF IRRIGATED LAND. Cit. 504. Discusses ways and means of installing drainage systems; may help to determine whether or not installation is advisable.

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RISK AND DIVERSIFICATION FOR CALIFORNIA CROPS. Cit. 503. Discusses the relative variations in yields, prices, and incomes that may be expected from year to year in various crops.

PREVENTING SPRING FROST DAMAGE IN VINEYARDS. Leaf. 139. Discusses four economical methods to reduce frost damage and three methods requiring some capital outlay and operational costs.

DONATIONS FOR AGRICULTURAL RESEARCH
Contributions to the University of California, Division of Agricultural Sciences

BERKELEY
American Potash Institute, Inc. .................. $3,000.00
For study of potassium nutrition of plants
Michigan-California Lumber Company ............... 900.00
For aerial photographic survey of diseased timber

DAVIS
California Beet Growers Association, Ltd. .......... 1,500.00
For study of mechanical harvesting and bulk handling of apricots
Consolidated Mining and Smelting Co., Cominco Products, Inc. 800 pounds fertilizer
For experimental work with potatoes
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For use in pilot plant creamery
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RIVERSIDE
Mr. A. Hartwell Bradford ............................ 2,000.00
For field research work in citrus
California Avocado Society ......................... 650.00
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Esso Research and Engineering Company ............ 2,000.00
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Sunkist Growers, Inc. ................................. 1,000.00
For chemical research in citrus fruit decay

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