

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° 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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Director

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