

THE SOUTH COAST FIELD STATION

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For more than a decade consideration has been given to the acquiring of a tract of land in the coastal area of Ventura or Grange County for experimental purposes. In this endeavor the University has had the strong support of the California Avocado Society. At first the area to be considered was small, but later former Dean Hutchison decided to obtain an area of sufficient size to serve the needs of the departments working on the agricultural problems of the southern coastal area. Several sites were examined, but these proved inadequate. In time it was learned that it might be possible to acquire land in Orange County from the Irvine Company. A committee from the Agricultural Division of the University reviewed the proposed area and recommended the acquisition of 200 acres. The purchase was completed in mid December of last year.

The tract, located immediately northeast of the U.S. Marine Air Base at El Toro, is divided into two unequal parts by a road and a drainage channel. The southern portion of about 120 acres gross will be developed first. After allowing for building site, drainage channels, roads, and reservoir, the net area is about 95 acres.

Dr. Paul F. Sharp, Director, California Agricultural Experiment Station, appointed a statewide nine-man committee which is to be concerned with the research program of the South Coast Field Station and the coordination of research activities on the Station. It does not have operational responsibilities. Director Sharp's instructions to the Committee included the following: "Longtime projects requiring appreciable amounts of land should be screened very carefully because of the continuing budget burden which such budgets entail. At the start a large portion of the land should be held in reserve for future needs and expansion."

SOILS: The soils on the station are deep, low in soluble salts, and of medium texture. They are water-lain deposits which were eroded from the hills to the east.

TOPOGRAPHY: The topography is relatively smooth, with a difference in elevation between the high and low parts of about 90 feet. A flood control channel courses the upper and central portions of the tract, while there is some overland flow from the southeast during heavy storms. Improvement of existing flood channels and extension of flood control measures to the southeastern border is contemplated.

WATER SUPPLY: In addition to acquiring the property previously mentioned a well and easement for a pipeline from it was also acquired. This well, located some $\frac{3}{4}$ miles from the southwest line of the station, is a potential source of domestic water.

Irrigation water will be obtained during the initial years from the Irvine Company and later through purchase from the Metropolitan Water, District of Southern California. The water system of the Irvine Company will transport the water to the station at a maximum rate of 2 cubic feet per second (900 gallons per minute) and in amounts up to 500 acre-feet during any 12-month period.

LAND DEVELOPMENT: The land, which has been dry-farmed, will be chiseled to breakup any compacted layers that might have been formed by cultivation. Areas to be planted to row crops will in the main be leveled to relatively flat grades, while in the areas where sprinkling is to be the method of water application, grading will be kept to a minimum.

As the point of water delivery is at the low corner of the station, it will be necessary to pump the water against a static head of about 91 feet to a reservoir, of some 8 acre-feet capacity, which will be at the high corner of the property. A dual irrigation system will be provided, a low pressure concrete pipe system to serve furrow and flood irrigated areas, the other, a pressure system for sprinkler irrigation and for fire protection at the building site.

BUILDING SITE: This is to be located along Irvine Blvd. to the south of Lambert Road some 500 feet. Plans are being developed which envision buildings placed around an interior court. During the early stages of the development, much of the area which will eventually be utilized for buildings will be used for nursery.

LAND ALLOCATIONS: As previously mentioned, this station is to serve all departments of the Division of Agriculture, provided they are working on problems of concern to Southern California agriculture. Four departments headquartered at Davis have requested land. They include Agronomy, Pomology, Vegetable Crops, and Viticulture.

As the initial requests for land far exceeded the land available, it was necessary to stipulate that no work be done on the station that *can* be performed equally well on a main station, or in cooperation with growers. Tentative allocations of land area have been made. These allocations should provide land on which the full range of avocado production problems can be studied.

In order that the area may be kept free of disease for as long as feasible, stringent regulations are being adopted to control the movement of plants and seed into and within the station.

In summary, the committee, in making the allocations, has been mindful of the avocado problems and has tried to evaluate these requirements in relation to other needs. It should be borne in mind that the orchard will bear fruit which can be used for laboratory studies. So, the work at the station represents only part of the research this facility makes possible. Every effort will be made to make rapid progress on the development of the South Coast Field Station.