

50 Years of Extension-Research

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CALIFORNIA'S AMAZING PROGRESS in agriculture can be attributed in a large part to new discoveries and developments by the University's Division of Agricultural Sciences. The respective roles of the Experiment Station to conduct research and of the Agricultural Extension Service to extend, refine, adapt, or modify this research to fit local conditions or situations, cannot be neatly separated; nor should they be. Acting as a synchronized team, the Experiment Station and the Agricultural Extension Service have brought laboratory discoveries to the production stage in a remarkably short time. Cooperation and substantial financial assistance from growers have made this team approach so successful. The importance of field research is reflected in the nearly 6,000 test plots established on farms by county staff members last year.

The Agricultural Extension Service began 50 years ago with state funds appropriated July 1, 1914. At that time, there were farm advisors in only four counties—Humboldt, San Diego, Yolo and San Joaquin. Today, there are 532 farm and home advisors and specialists working in 50 general fields and in several

hundred crop and commodity programs. Eighty home advisors and 15 area specialists provide homemaking information in all 58 California counties. Membership in 4-H clubs in California, under farm and home advisor supervision, totals nearly 37,000 boys and girls, in 1,000 clubs.

Recent changes in programming have permitted more specialization in some crops and commodities. This is possible by assigning specialists in specific fields to work in two or more counties. This degree of specialization would not be possible if all farm and home advisors were restricted to a single county.

As an educational arm of the University of California, the Agricultural Extension Service cooperates with county governments and the U. S. Department of Agriculture to offer out-of-school knowledge in field, orchard, ranch, home and youth activities. USDA contributes 18% of the funds used, individual counties pay for office space and clerical help, and the University of California pays the balance of the cost of the Extension program.

Plot work over the past 50-year history of the Agricultural Extension Service has

been a highly effective method for developing and teaching new information and for local adaptation of research developed by the Experiment Station. Increasing scientific specialization in recent years has placed even more emphasis on the need for field research through the Extension Service.

A total of 5,889 test plots were established in 1963 by county staff workers. Seventy per cent of these plots were conducted solely by Extension personnel; 24% were in cooperation with the Experiment Station, and 6% in cooperation with other agencies. Test plots to collect data accounted for 47% of the total, while plots to demonstrate better methods or crops accounted for 21%. Nearly a third were observation plots.

Farmer cooperation was received in all counties with individual farmers contributing facilities ranging from a small fraction of an acre to 14,000 acres and from one animal to 16,000 head of dairy cattle in one trial. In 1963, California farmers made available for experimental work: 70,827 acres of land, 62,312 dairy animals, 125,525 head of livestock, 4,472,360 poultry, 2,940 trees, 31,874 plants and many other miscellaneous items.

It is not possible to place an exact dollar estimate on the value of these facilities made available to the University by growers, but it is easy to realize that the cash value could amount to several million dollars. Of even more significance, however, are the research opportunities not otherwise available, the chances to demonstrate research findings where they can be immediately observed by growers, and the continuous two-way communication between farmers and the University.

While individual growers are seldom in a position to carry out thorough investigations on their problems, the scope of the program described and the wide range of grower cooperation clearly reflect the importance and need for experimentation in the Agricultural Extension Service program.

This issue of *California Agriculture* is devoted largely to articles describing field research conducted by Extension Service staff members or in cooperation with Experiment Station scientists.

