

THE MACADAMIA NUT A NEW COMMERCIAL CROP FOR CALIFORNIA

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President of the California Macadamia Society.

The Macadamia nut has reached the status of a commercial crop in Hawaii and to a lesser extent in its native land—Australia.

In the United States the Macadamia nut is grown in Florida and California. However, there are many more trees, new plantings and general interest in the commercial possibilities of the Macadamia nut in California.

The Macadamia has been grown in California for over fifty years as back yard trees and ornamentals. There are possibly a thousand mature producing trees scattered around the southern seven counties of the state. There is a magnificent tree in Coronado on the property of Mr. C.W. Heincke. This tree was planted in 1897, according to the best information, and last year produced 159 pounds of nuts by actual measure. Generally speaking these trees are growing singly at widely separated locations, as ornamentals and with little or no care. It is the unusual case when they are irrigated or fertilized, yet with very few exceptions they are bearing crops of edible nuts. However, since the close of World War II and the exposure of thousands of service people to the outstanding eating qualities of these nuts in Hawaii, there has been an awakened and growing interest in this fruit as a commercial money crop.

The Department of Subtropical Horticulture, College of Agriculture, University of California at Los Angeles, has devoted much study to the subject of the Macadamia nut. Dr. C. A. Schroeder heads the research at U.C.L.A. The subtropical orchard at Westwood contains a wide selection of seedling and grafted specimens. Practically every standout variety developed in Hawaii and Australia has been imported and propagated for this collection. E. F. Froelich, Laboratory Technician in Subtropical Horticulture at U.C.L.A., has become extremely proficient at handling

Macadamia grafts and cuttings.

The collection of varieties at Westwood is of great value in developing an industry in California, for here they will be fruited out, studied as to quality and production, so that nurserymen and farmers will know which varieties to plant. This is exactly the method by which Hawaii brought their Macadamia industry from a submarginal to a profitable operation. In addition, the highly cooperative attitude of Dr. Schroeder and Mr. Froelich plus their thorough knowledge, are of the greatest value in these difficult beginning days.

The Agricultural Experiment Station of the University of California at Riverside has

studied the Macadamia to some extent and one of the most important characteristics was developed by Dr. George Zentmyer. He discovered in the laboratory that Macadamias are not injured by the root-rot fungus which kills avocados. Field tests have demonstrated the same thing, and it has been observed that hundreds of Macadamias replanted where avocados have died out from root-rot are thriving and apparently not affected by the cinnamon fungus which caused the death of the avocado trees.

The Macadamia nut has demonstrated that it has real value in southern California as an ornamental and as a family orchard tree. It requires similar care and similar soil, water, temperature and fertilizer as the avocado. It is much less subject to pests than citrus. It is a top candidate for replacing declined avocado trees. It appears to have good potentialities as a money crop in commercial plantings. These potentialities will have to be developed by hard and persistent work, especially in selection of varieties and pioneering of acreage plantings.

According to recent studies, the Macadamia will yield somewhat less tonnage of fruit per acre than the avocado but will bring a much higher price per pound to the farmer. It is estimated that a well cared for Macadamia orchard, planted to select varieties, will produce two to three tons of in-shell nuts per acre and bring a net price to the farmer of thirty five cents per pound. One large scale buyer has stated that he can use 500,000 pounds per year at the above price.

The problem of processing and marketing appears to be readily soluble since there is already an enthusiastic acceptance of the nut for its outstanding eating qualities, and processing machinery has been available for many years.

There are several nurserymen who are experimenting actively in the propagating of Macadamias from seed, graftage and by cuttings of imported and local varieties. These efforts along with the assistance of the University specialists, should lead to a real commercial venture in the near future. At present there are possibly 35 to 40 acres of young orchards, in plantings of from one-half to five acres. More are being initiated steadily. These are being planted on various soil types and under differing thermal conditions. One two-acre orchard has just started to bear a substantial crop. The answers to many questions regarding the economic possibilities of the Macadamia nut in California should develop rapidly.

Another feature of interest is the recent birth of the California Macadamia Society. This was initiated in November of 1953 as the culmination of many inquiries and much interest. It was thought that such a society could guide the infant industry, correlate information, register outstanding trees, study varieties, set up standards, etc. The organization is patterned along the lines of the California Avocado Society and is aiming to do as good a job for its members and the public. Inquiries about the California Macadamia Society may be addressed to the Secretary, Mrs. I. M. Westree, 1288 Las Flores Drive, Carlsbad, California.

A very important recent development in the Macadamia industry is the decision of the University of California to establish a joint committee of the Subtropical Horticultural Department, U.C.L.A., and the Department of Horticulture, Citrus Experiment Station, to study the Macadamia, its cultural problems, propagation, varieties and especially its

commercial potential. This committee is spearheaded by Dr. C. A. Schroeder and Dr. Wm. B. Storey. Dr. Schroeder is the foremost California authority and Dr. Storey is the foremost Hawaiian authority.

The Macadamia has passed beyond the purely speculative and has entered the great potential stage. Its culture is now well known; its production is reasonably well established; the market and market price are assured. This combination indicates a highly profitable future.

¹*California Avocado Society Yearbook, 1951*

²*Dr. G. A. Zentmyer is Associate Plant Pathologist, University of California, Citrus Experiment Station, Riverside, California.*