

REPORT OF SUBTROPICAL FRUIT VARIETIES COMMITTEE

Throughout the many years of its existence, the Subtropical Fruit Varieties Committee has had as its objective the development of information concerning the several subtropical fruits other than citrus and avocados. Special attention has been given to the location of outstanding seedlings of the several species such as sapotes, guavas, feijoa, macadamia, and others which are well adapted to some climatic areas in southern California, but which are not grown on a commercial scale. As the result of its constant inquiry into location and behavior of outstanding specimens, many excellent seedlings have been brought to light in seedling plantings as dooryard trees or frequently as specimens which were selected primarily for their ornamental value.

Perhaps the species which has commanded the most attention throughout the past decade is the macadamia. Previous reports of this committee have mentioned the virtues and characteristics of this plant and its fruit, both as an ornamental of considerable decorative value and as an edible nut of potential commercial promise in southern California, especially in avocado areas presently threatened by the onslaught of the cinnamon fungus. The committee has been responsible in part for the location of many of the better macadamia specimens which have been reported in southern California. As the result of the efforts of several of the members of the committee, these specimens have been given preliminary evaluation upon which selections were made for trial plantings of the seedling clones in several areas. While not entirely responsible for its development, the Subtropical Fruit Varieties Committee has been helpful and has fully supported the formation of the California Macadamia Society, which is patterned after the California Avocado Society in its organization. Both the Subtropical Fruit Varieties Committee and the California Macadamia Society have been of mutual benefit and have continued to work together with the common objective of seeking all possible information concerning the culture of the macadamia of California.

Recent field trips by the committee have been primarily in San Diego and Orange counties. One of the field tours in Orange County allowed the committee to view the site of the new South Coast Field Station now in preparation, where the University will provide land for conducting experiments on, and location of, varietal collections of subtropical fruits.

The development of this station, located on the Irvine Ranch properties, is anticipated with great interest, for plans are under way for trial plantings of macadamia, sapote, litchi, guavas, and other subtropical fruits. Such varietal collections and trial plantings will be of great value to the committee and to other interested parties for the evaluation of varieties and selection of clones of potential commercial value among the several fruits.

A well-known planting, visited by the committee from time to time, has been the macadamia planting on the Dr. Schneider place, Oceanside. This, the oldest of the larger macadamia orchards, was originally set out by the late Mr. Ted Todd in 1946,

who planted 203 seedling trees from a seed source in Santa Ana. Another group of these same seedlings was planted on Loren Mead's place in La Habra, and another portion planted at the Eichler place in Yorba Linda. The trees at Eichler's have failed to develop well, for various reasons, but those at Mead's and Schneider's places have grown well and produced a number of seedlings which appear to have potential value as possible clones, to judge from their high production and reasonably good fruit quality based on preliminary observations. These trees are under study by the University in cooperation with the California Macadamia Society. While the Schneider orchard had been partially neglected for several years, it has been subjected to a program of good cultural practices during the past year and has subsequently shown remarkable recovery and response. An exceptionally heavy crop has been observed for the 1956 season in this orchard, probably the result of the increased water and fertilizer which has been provided.

Many fine plantings of macadamia, both grafted trees and selected seedlings, have been set out in various parts of San Diego County. These trial plots consist of small groups, ranging from three to over 100 trees each. None are of sufficient age, at this time, to bear fruit. A few have borne their first blooms, which should produce some nuts for the 1956 crop.

Among other fruits observed in San Diego County was the loquat seedling collection of O. R. Macbeth in Carlsbad. Over one hundred , trees are found in this collection. A wide range of fruit character and great differences in flavor are noted among the seedlings.

While the loquat formerly was grown on a larger scale, it still remains a fruit of considerable value, especially for the dooryard orchard. The use of quince rootstock can provide smaller trees suitable where space is a limiting factor. Fruit thinning, blossom removal, and protection of the fruit from birds, although of moderate cost in time and effort, are highly rewarding in the production of excellent fruit quality in the loquat. Thinning of blossom clusters is most easily accomplished and results in larger and better fruits.

Mr. Ted Westree of Carlsbad has one of the most extensive collections of young macadamia varieties of both local and foreign varieties and selections. Many of these specimens are now beginning to produce fruit and will be observed with interest. Among other subtropical fruits which Mr. Westree has been developing by selection and propagation is the *Carissa grandiflora*, from which a selection has been made having a yellow marking on the fruit. The parent plant of this clone is located in Balboa Park, San Diego. Propagated specimens have borne fruit at the Carlsbad Hotel. The carissa variety is unnamed. The Surinam cherry, *Eugenia uniflora*, also has been grown in great numbers at this nursery. From among over two hundred seedlings one clone has been selected for propagation. Grafting of the cherry has been successfully accomplished in the field and appears to be a satisfactory means of reproducing the clone. Another species which has attracted attention throughout the world, and which is found in this nursery, is the Acerola or Barbados cherry (*Malpighia punicifolia*). While seedling specimens only have been planted in California at this time, attempts have been made to introduce superior clones from Florida and the West Indies, where intensive studies are under way on the culture and development of this fruit. The acerola has gained prominence because it contains six or more times the Vitamin C content of a

comparable weight of citrus fruits.

The carob demonstration orchard near Vista, which has created considerable interest among all who have visited the unique project, is, indeed, a magnificent demonstration of a well-planned and executed variety trial. Many of the carob varieties imported from the Mediterranean region now have produced fruits. Some clones have demonstrated good yields of fine quality fruit. The Sfax has produced pods in sufficient quantity to allow a trial production of carob candy as a by-product. This candy, which simulates high quality chocolate, proved equal in quality to that produced from the best imported materials. Considerable progress has been made in the propagation of carob clones. Information has been developed concerning the optimum conditions for, and best methods of, top-working orchard trees.

Again, the Subtropical Fruit Varieties Committee invites questions concerning the many fruit species which can be grown in California. It is also urged that new plantings or outstanding specimens be called to the attention of the committee for record and observation. Committee members may be contacted directly or through the secretary of the California Avocado Society.

COMMITTEE MEMBERS

Dr. C. A. Schroeder, Chairman

Carter Barrett

Phillip H. Cassidy

Dr. J. Eliot Coit

E. R. Eggers

James G. France

Frank Gilloon

George Goodall

Philip H. Greene

H. B. Griswold

Don Gustafson

Dean Halsey

Charles S. Knowlton

Ralph G. LaRue

Loren J. Mead

Chaffee Young

J. J. Coony

Floyd Cooper

Calvin Delphey

Les Dodd

Marvin Miller

Col. Wells W. Miller

Ben Needham

Dean F. Palmer

Dr. Horace F. Pierce

Marvin Rounds

Stanley L. Shepard

Kenneth Smoyer

W. D. Storey

Elwood E. Trask

Nelson Westree