

## AVOCADO VARIETY TRIALS



Winslow

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The first avocado variety orchard at the University of California Citrus Experiment Station, Riverside, was planted in 1919 with additional varieties added in 1920, 1923, and 1927. The varieties consisted of those that appeared to be of commercial value at that time. Among them were the Fuerte, Benik, Nimlioh, Manik, Lamat, Mayapan, Sharpless, Queen, Itzamna, Chappelow, Northrop, Dickinson, Caliente, Kashlan, Tiger, Tamayo, Button, Anaheim, Puebla, and numerous seedlings.

Today, avocado growers will not recognize most of these, although a few of them are grown commercially, notably the Fuerte. None of the above varieties, with the exception of the Fuerte, are grown commercially in the interior valleys of Southern California. None of the many seedlings tested proved to be of any value for further trial. In 1951, this small orchard was removed to furnish acreage in a desirable location for more important uses. At this time, the land *is* used for the study of avocado diseases and other problems.

In 1943, a second variety orchard was planted in a suitable location. In this orchard, 36 varieties were planted and 17 strains of the Fuerte were included. The varieties were largely ones that had been introduced since the original orchard was planted in 1919.

This orchard serves as a trial planting of varieties that offer promise of being adapted to the inland valleys, where there is now considerable interest in growing avocados commercially. It has been the policy to discard varieties that have no value as soon as we could be sure about them, and to add any new ones that seemed to be promising as suggested by the Variety Committee of the California Avocado Society. While trees of some unsuitable varieties have been pulled out, they are usually topworked to new ones. Topworked trees produce quicker than a replanted tree, and enable the observer to determine in less time whether the variety used is promising.

Since 1945, a total of 27 new varieties has been added to the collection. This does not mean that some varieties were discarded after three years' trial. In some cases, four or five trees of the same variety had been planted originally, and one or more of these were topworked to other varieties.

Beginning in 1950, ten varieties that were unproductive have been discarded. They are Nabal, E28, Macpherson, Karen, Middleton, Gottfried, Leucadia, Henry's Select, Gerkin, and Carr. Of the original planting, 16 are in the doubtful class and probably will be discontinued by topworking to other varieties that appear worth a trial. We are hopeful about some of the new varieties that have been added in recent years, but insufficient time has elapsed to form definite conclusions.

To this point, our progress report has been discouraging to the person interested in planting avocados in the inland valleys, but the situation is not as dark as it may seem. A number of varieties will produce well in the inland valleys and may be considered to be of promise commercially, based on their behavior in the Riverside trials.

Those that may be mentioned at this time are the Duke, an old variety whose fruit matures in September; the Clifton, maturing in October; the Zutano, maturing in December; and the Emerald, maturing in January. All of them belong to the Mexican race and bear green-skinned fruit. For spring and summer fruit, the Hass and Ryan are promising. The dark-skinned Hass is of excellent quality, while the Ryan, which resembles the Fuerte, is only fair. Both need locations where frost damage is not a serious hazard.

Since the avocado industry is handicapped by having an excessive number of varieties to market, it is not the purpose of a variety trial to add to the confusion. It is hoped that the number of varieties recommended for inland valley planting finally can be confined to a limited number. It may take some time to determine the best ones for commercial planting. The varieties mentioned above for trial are among those most promising at this time. Perhaps none of them should be planted extensively in any locality until proved by local experience. Avocado varieties have a way of behaving differently within a distance of only several miles.