

1943 Observations of Avocado Varieties

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The importance of confining our efforts in the study of avocado varieties largely to those which show promise of meeting commercial requirements, is being more and more realized and emphasized.

With the Fuerte as an ideal commercial fruit, the picture before us is that of a fruit of similar characteristics. Although this type of fruit is the ideal one, it is also a fact that if a dark-colored fruit is found which otherwise meets the requirements for a commercial avocado, it may prove of importance in some districts, especially if marketable at a time of the year when the markets are short of good avocados. There is evidence that a dark fruit can be sold in spite of the color handicap, if the fruit has quality and is backed up by a sales effort.

The importance of reducing the number of varieties now being marketed is emphasized in the Annual Report of Calavo Growers for the year ending September 30, 1942.

It would undoubtedly simplify the work of all marketing agencies, thereby resulting in greater efficiency. Their figures show that 96% of deliveries to the two packing houses consisted of 10 varieties: Fuerte, Nabal, Dickinson, Anaheim, Itzamna, Spinks, Taft, Queen, Carlsbad, and Panchoy, and 4% of the deliveries consisted of 96 varieties and some unnamed seedlings. Of total deliveries, 93% consisted of 5 varieties.

Several of the present leading varieties which give considerable trouble from a marketing standpoint should be eliminated and replaced by others.

Some of the newer varieties being studied have had widespread distribution throughout southern California, having been planted as commercial orchards in many cases.

Although most of the individual trees and commercial plantings of these varieties are too young to furnish very much information as to future performance in the several avocado-growing districts, nevertheless, there are indications of their adaptability in many of the locations where they are on trial. The Edranol is a vigorous upright tree, bearing fruit both in coastal and in transitional districts. However, the fruit is more free of corkiness in districts under coastal influence. Indications point to the fact that for strictly coastal areas in Santa Barbara and Ventura counties, the Edranol is a good variety to plant for a spring to summer and early fall fruit.

The Ryan, another Fuerte-like, green fruit, is finding favor in spite of the usually large seed. Because of its fine quality Calavo Growers have placed this variety on the Calavo list. The tree is slow in coming into bearing and unfortunately the evidence points to its being strongly alternating in bearing habit. It has been planted quite generally in nearly all districts. The season is late spring, summer, and early fall, filling a need for a fruit at

that time of the year.

Another variety familiar to most avocado growers is the Hass, also being quite generally tested in all districts. In many instances fairly large plantings have recently been made. The Hass is precocious, occasionally bearing the second year, especially when it has been introduced as a top-worked tree. In sections which are not too cold or where protected, this variety is giving a good account of itself. It is a fine flavored, late spring to early fall fruit, with a small seed and in spite of its roughness and dark color when soft, has fairly good marketability when wisely handled. It is considered to be an upright tree, but is vigorous and will spread if grown in a deep, sandy loam soil. Trees planted in orchard form under ideal conditions for growth should be given plenty of space with planting distances up to 30 feet.

The Hellen, another green summer and fall fruit, gives promise of not only being a vigorous tree, but fairly precocious and a consistent bearer. This variety also is being grown in most districts, but the greatest hope for it at present is in the coastal and near-coastal sections. Young trees at Santa Paula and at Carpinteria, in spite of tree vigor, are bearing quite a number of fruits. The Hellen is a tree having a spreading habit and should be planted with about the same allowance for space as the Fuerte.

There is considerable information to indicate that the Edranol, Ryan, Hass, and Helen will each have a long marketing season when all growing districts are taken into consideration.

The MacArthur, a green, bell-shaped fruit, is looked upon as a commercial avocado along the coast in Santa Barbara and Ventura counties and so far as information is available, should be confined to that district.

The Henry Select, also quite widely distributed throughout southern California, is a high quality fruit, maturing during October and November at Escondido. The trees under test in other districts are still young and in very few cases have they borne much or any fruit. Some fruit has been borne on trees in protected areas in Orange county and at Carpinteria and Santa Paula. The Henry Select is a vigorously growing tree and should probably be planted no closer than 45 feet apart, under most ideal conditions.

The Nowels is a green, Fuerte-like fruit, in which there is marked interest in both coastal and transitional areas. Its season appears to be October to February. Good reports have come from it in the coastal districts of Santa Barbara county. It is a vigorous grower, shows evidence of being a consistent producer in the district in which it originates, Huntington Park.

The observations on the performance of the Colt are not encouraging, although some trees have borne quite a number of fruits. It is a high-quality, green fruit, maturing in late spring to early summer. The trees appear to be ' vigorous.

The Juan, except for one top-worked tree at Carpinteria, has had light yields according to my records. This fruit is high in quality and matures in the fall. On rootstocks so far used it has not been a vigorous grower.

The Clifton, a green Mexican variety, has borne fruit at Mr. Chenoweth's place at Fallbrook. It shows indications of alternating in its bearing habit and cracks transversely. However, future reports from other districts where this variety is being tried, may prove

more favorable.

The Irving, a registered variety from Carlsbad, will be tried under coastal conditions, and may have promise since the original tree bears consistently fine-quality, green fruit.

The Middleton, while a good quality fall fruit, has proved itself to be a home planting fruit only, because of transverse checking, which takes place at time of full maturity.

The Zutano, originating at Fallbrook, has proved its value in that locality as a precocious, prolific bearer and a vigorous growing tree. The season is late fall to January or February. This variety is now being tried under various climatic influences from coastal to inland locations. A young graft at the Citrus Experiment Station produced some fruits last year and has set a good crop for 1943.

The Wurtz, a green Fuerte-like fruit originating at Encinitas, matures during the summer period. It is precocious, prolific, and consistent in bearing. Its worst characteristic, as grown at Encinitas, is its large seed.

The Macpherson, a patented avocado, originates at Encinitas, California. It is a green fruit, desirable in appearance, and has a good flavor. The trees are now being propagated and distributed throughout California. This variety has not yet proved its value as a producer, although the tree is an upright, vigorous growing one.

Other registered varieties being grown for trial are:

Bonita in Ventura and Santa Barbara counties. An early fall fruit.

Emerald, San Diego coastal area. Season November to January in San Diego county.

Encanada, both transitional and coastal districts. A green summer fruit with considerable promise.

Lois, a green, medium-sized fruit originating at Carlsbad. A late spring and summer fruit.

Mundo, also a summer and early fall fruit on the coast in Santa Barbara and Ventura counties.

Pierce, a summer and early fall fruit on the coast in Santa Barbara and Ventura counties.

Some popular varieties not on the official list and not registered are under trial. Among them is a green fruit originating near Vista, which is mature from May to July in that district. It is called the Twomey, although not officially named. The variety is under trial in other districts.

The Lodge is another green Fuerte-like fruit originating at La Mesa. The fruit matures in the late fall. It is being tried as individual trees in several districts, and has some promise as an avocado for that period of the year.

The Carr, which has also been called the Alice Mirandi, is a dark, Mexican race, thin-skinned fruit of fair size. It is being propagated and grown in the intermediate area, and quite a volume of the fruit is being marketed.

The Mary Martin is a fruit which is being patented by Armstrong nursery. It originated east of San Diego and the tree has shown indications of bearing consistently. The fruit is green, with a medium seed and pyriform to ovate in shape. Some of the fruits look something like a small elongated Nabal. It has a good flavor. The maturity season is late spring to fall at San Diego.

Many Fuerte-like seedlings are under trial, some of which appear to have sufficient merit to warrant careful study. In our files at the Citrus Experiment Station we have descriptions, oil tests, and other information on many seedlings to which some attention has been given by owners and others. Among these are 73 which, according to the information available, are worthy of consideration and should be studied.

In the avocado variety orchards at the Citrus Experiment Station there are now located 90 varieties.* These plantings include many of the older varieties and also many of the newer ones to which attention is now directed. Most of the newer varieties planted this spring are on several different root-stocks.

The following suggestions for plantings are made for the several southern California districts. These are made in the light of present available information and are experimental in the case of most varieties. As observations are made on some of the latest ones they may be added to the suggested plantings while some of these being made, may be dropped.

North Coastal: Santa Barbara, Ventura County: Fuerte, Edranol, MacArthur, Hellen, Hass, Ryan.

South Coastal: San Diego County: Anaheim, Carlsbad, Nabal, Hass, Ryan, Hellen, Wurtz.

Transitional Near Coast: Los Angeles and Orange County: Fuerte, Hass, Ryan, Edranol, Hellen, Nowels, Encanada.

Intermediate: Los Angeles County and warm, dry valleys of other counties:
Fuerte, Hass, Ryan, Hellen, Henry Select.

Inland San Diego County: Fuerte, Ryan, Hass, Hellen, Henry Select, Edranol, Zutano.

Interior: Fuerte, Henry Select, Duke, Zutano, other Mexican varieties.

* (named varieties)

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