

AVOCADO VARIETIES IN FLORIDA

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In Florida, as in California, the most important problem before the avocado growers is that of varieties. In each state the extension of planting awaits in large measure the testing of the many varieties now available and the selection therefrom of those half-dozen or so, best suited to rank as the standard commercial sorts.

WEST INDIAN VARIETIES-

With few exceptions, bearing avocado trees in Florida, both seedling and budded, belong to the so-called West Indian race. Of the many varieties of this race which have already been propagated and named, the most important and the best known variety on the market today is the Trapp, introduced by Mr. George B. Cellon, of Miami, in 1902. It has proven a reliable heavy bearer, and the fruit is good in quality, maturing from October to January after most of the other varieties have gone. The fruit, moreover, has a distinct characteristic shape which has served to identify it on the market where Trapps command a substantial premium over unknown varieties. Of the 500 acres of budded groves in Florida, upward of 90 per cent are Trapp. Other satisfactory West Indian sorts are now available which ripen from July to January. While most of these, including Trapp, are ideal commercial sorts, they are all somewhat more susceptible to cold than the Mexican lime or lemon guava, so that their culture in this country will doubtless be limited to the best protected sections of south Florida. Within this reasonably safe area, however, there is room for a considerable development and it may be expected that Florida will ship in the near future large quantities of avocados of the West Indian varieties from July to January.

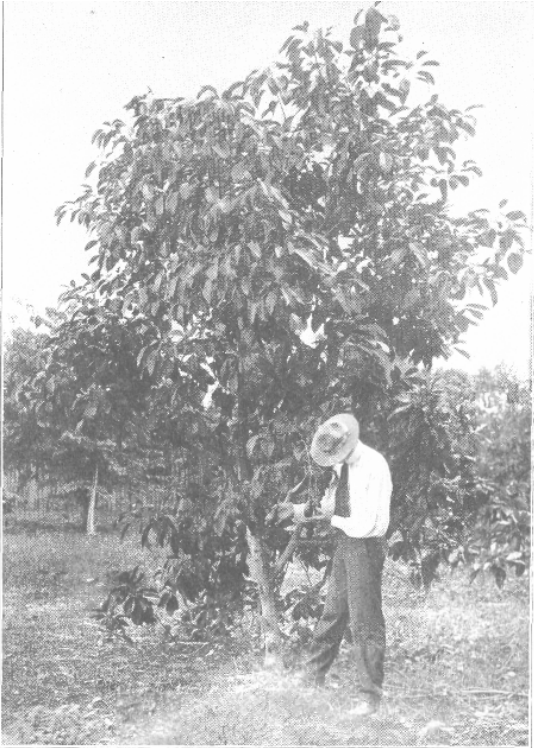


Plate I. Figure 1
Fuerte Top-worked on Seedling Stock
 Fifteen months' growth. U. S. Plant Introduction
 Garden, Miami, Florida.

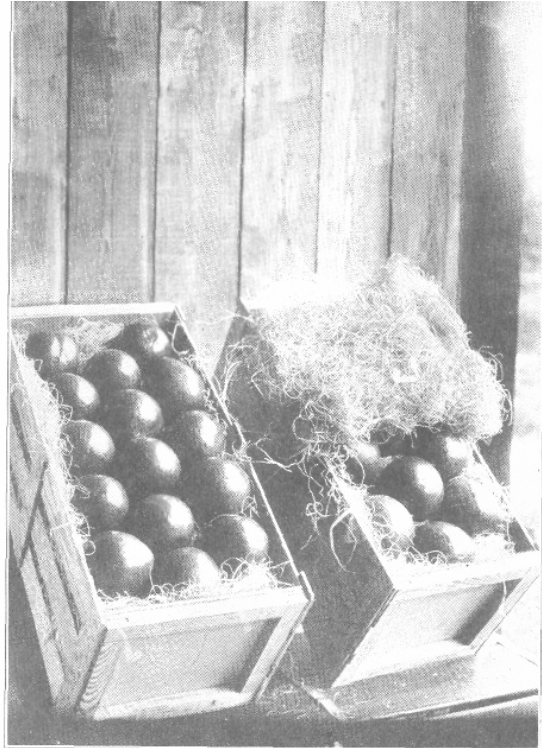


Plate I. Figure 2
A Packed Crate of Trapp Avocados
 Some growers prefer a partition across center of crate.

GUATEMALAN VARIETIES

Guatemalan varieties of avocados have recently attracted great interest in Florida on account of their late season of maturity and superior hardiness as compared with the West Indian sorts. The first trees of this race bore in Florida in 1912 and during the last six years budwood of many varieties has been introduced from California. Several trees have already fruited but none of them have been sufficiently tested to determine fully their value in Florida. Fuerte bore for the first time in Florida at the Miami Plant Introduction Station last November and December, where the tree has attracted much attention on account of its exceedingly vigorous growth. The fruits of the first crop were somewhat disappointing in quality, possibly as a result of the excessively rapid growth of the two-year-old tree on which they were borne. This behavior indicates that even the best California varieties must be thoroughly tested for Florida conditions. Taft also has fruited once or twice in Florida, ripening from February to May, and is considered worthy of further trial. Taylor is the only Guatemalan variety that has originated in Florida, having been grown from seed at the Miami Station. Its season here is January to April, and it has so far been a fairly profitable variety. Murrieta has fruited in Florida but shows the same tendency of lack of vigor noted in California. A very interesting variety introduced from Guatemala, by way of Honolulu, is now fruiting at the Miami Station. This has been propagated recently under the name of Beardslee but may have the prior name of McDonald. The first fruits ripen in April and in vigor of tree, lateness of season, and quality, this is considered by Mr. Edward Simmonds, in charge of the station, as one of the most promising of the many varieties which he has tested.

The Guatemalan varieties, as clearly indicated in the recent Florida freeze, are considerably more frost resistant than the West Indian type. At a temperature of 26° they were for the most part untouched, while West Indian varieties nearby were severely cut back. At 22°, however, four-year-old trees of several Guatemalan varieties were killed to the ground, indicating that the average Guatemalan ranks in hardiness about with the lemon. Even a superior hardiness of 2 to 4 degrees would prove of great advantage in extending avocado culture to parts of Florida too cold for the West Indian race. Moreover, there is a much greater variation of frost resistance among Guatemalan than among West Indian varieties, and some,—Fuerte and Puebla for example,—promise to be much hardier than the average. No attempts have been made so far to protect Florida avocado groves by firing; doubtless because the frosts in that state, while severe, appear only at long intervals of ten years or more.

The factor of late season interests Florida growers fully as much as hardiness. In Florida the Guatemalans mature from one to three months earlier than the same varieties in California. With the Guatemalan season from December to May, and with the West Indian ripening from July to January, Florida growers expect to harvest avocados practically every month in the year. At the present time Guatemalan varieties may be considered as very promising for Florida although the most conservative growers and nurserymen fully realize that they must be more fully tested before they can be extensively planted.

MEXICAN RACE

Mexican varieties have never attracted much attention in Florida, the few Mexican trees in that state being seedlings bearing very inferior fruit. Interest has been created in this race, however, by the marked hardiness shown, during the recent freeze, of several trees which withstood temperatures of 20° and proved to be as hardy as orange trees. The hardiness, together with the excellent quality of the best Mexican varieties, will doubtless result in a considerable planting, especially for home and local use, in sections of the state too cold for the West Indian and Guatemalan types. Harman is perhaps the most promising of the Mexican varieties which have as yet fruited in Florida. It ripens at Miami in July, and the fruit, while small, is excellent in quality. The tendency of the fruit to crack and decay at the apex at maturity was noted here as in California but to a much smaller degree. Chappelow has fruited for several years at the home of Professor P. H. Rolfs, near Miami, but is very poor in quality there, in contrast to the high quality reported in California. While most growers consider Mexican varieties too small for commercial planting, many feel that it is quite probable that large fruiting varieties combining desirable size with hardiness and high quality will eventually be found. A seedling Mexican tree at the Miami Station now bears fruit of a pound in weight and of fine quality. While this tree is unfortunately a shy bearer, it illustrates the possibilities of the type.

Until the Guatemalan varieties are more thoroughly tested, commercial plantings in Florida will consist largely of West Indian sorts. Most growers will plant 75 per cent or more of their acreage to Trapp. Many will plant a small part of their groves to the best summer varieties, as these are already in excellent demand and doubtless have a great

future as an ideal hot weather food. In most groves a few each of the most promising Guatemalan and new West Indian varieties will be planted for testing. A heavy demand is anticipated in Florida for avocados for home plantings. Even the more tender sorts can be grown in sheltered dooryards with some weather protection as far north as their commercial range, while the Mexican varieties can doubtless be grown throughout the orange belt.

Prospective Florida growers fully realize the importance of testing most carefully the many varieties now on trial and selecting from each the most desirable strains as well as eliminating all inferior types. To this end, several of the leading nurserymen of the state are keeping careful book records of the production and behavior of each individual tree in their groves. Records of this sort will make it possible to determine accurately and fully the comparative value of new varieties as well as strains within these varieties. With their wide range of hardiness, season, quality, and their future possibilities, avocado varieties offer a fascinating field for careful horticultural study of this sort.