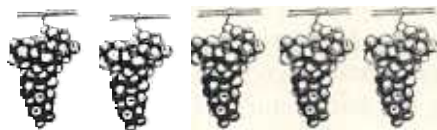


lection that produced good crops became the standard by which still better varieties were selected; all of these thousands of varieties thereby live in the varieties we grow. And the soul of the nations began to grow when the first men began to feel the comfort and security of group cooperation, and to feel ennobled when they had served the group well and guilty when they had not; it grew more dependably when they expressed these feelings on the walls of their caves, on clay tablets, on papyrus, and eventually with the printing press.

Growth of a nation's soul is not as simple as the stream of fruit varieties, a

continuous progress from good to better. People have given it elements of nobility and elements of snarling selfishness, either of which may dominate it under different influences and leadership. If a young man is anxious for his life, growing into the soul of his nation, to support only the noble part, I believe he can do no better than to cultivate the qualities of Marcus Aurelius: his serene acceptance of misfortune and hardship, his fair and patient weighing of opinions and evidence, his inflexible loyalty to truth and to duty, his faith in the capacity and destiny of man, and his human love and reverence.



Avocado Varieties in Florida

By H. S. Wolfe,
Department of Horticulture
University of Florida

When the late George Cellon started the first commercial propagation of the avocado at Miami in 1900, there were only seedlings of the West Indian race in

Florida from which to select varieties. Up until 1912 the situation remained essentially unchanged, and dozens of West Indian seedlings were selected and propagated as varieties. Most of these are only of historical interest today, but the first two varieties ever named, Trapp and

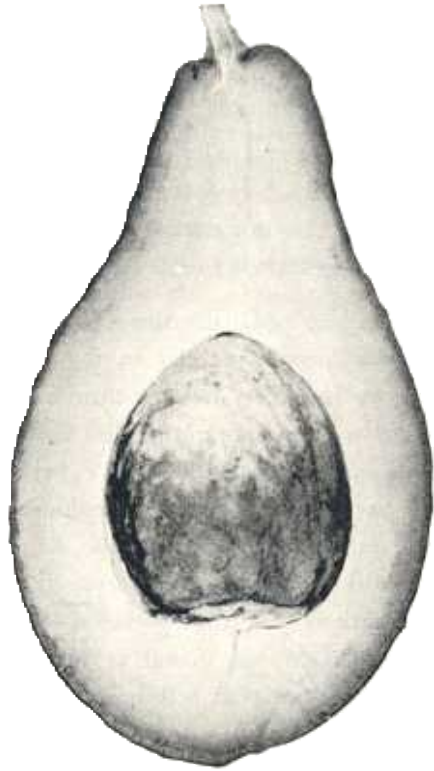
Pollock, are still well known if no longer popular for planting. Trapp was the dominant commercial variety for 30 years and on the recommended list for 40 years—quite a record in the avocado world.

Guatemalan Seedlings

In 1912 the first Guatemalan seedlings fruited in Florida, arousing great interest by their winter season of fruiting. Citrus canker was threatening to wipe out the rapidly growing grapefruit industry in southern Florida, and the winter avocados seemed just the crop to replace grapefruit. The natural result of this intense interest was the importation of dozens of varieties of the Guatemalan race, either at second hand from California or at first hand from Central America. The role played in this connection by Wilson Popenoe for the U. S. Department of Agriculture is well known. Few of those many introductions are still found in Florida groves, but Taylor and Nabal are still popular, and Itzamma, Linda and Schmidt are still in commercial plantings.

Inter-racial Hybrids

About 1920 a new type of avocado made its appearance — the inter-racial hybrid. Guatemalan varieties interplanted among West Indian varieties, frequently produced seedlings which demonstrated that pollen of the West Indian types had fathered them. These inter-racial hybrids were intermediate in fruiting season to the parent races, maturing in the late fall and early winter. With the passing years, these hybrids have largely displaced the varieties of the parent races from Florida groves.



Lula, the most popular avocado in Florida at the present time.

Most of these hybrids are seedlings of Guatemalan varieties pollinated by West Indian sorts. The most popular of all varieties in Florida today is Lula, which is of Guatemalan x Mexican parentage, like the famous Fuerte variety of California. Lula has a comparatively large seed and is the most subject to attack by scab of all varieties in Florida, but it is hardy to cold and bears so well that these faults are overlooked. Also, Lula matures its fruit in November and December, which is the most profitable season for Florida production.

Lula is a good example of the part played by chance in horticultural varieties. The seed from which it developed had been thrown away by Mr. Cellon because he did not care for the flavor of the fruit in which it had developed, but his thrifty wife rescued and planted the seed. The variety bears her name today.

Not all of the Guatemalan x West Indian seedlings have been worthy additions to the variety list, but their representation in Florida plantings has steadily increased. The first of these hybrid varieties, Collinson and Winslowson, were extensively planted in the decade 1921-1931, but have been replaced almost entirely since then by newer varieties. Collinson was found to be male sterile, producing no pollen, and Winslowson produced big fruit which were easily hurt by cold if not prematurely shed. In 1932 these varieties constituted 30% of all Florida plantings, while today they are less than 5%.

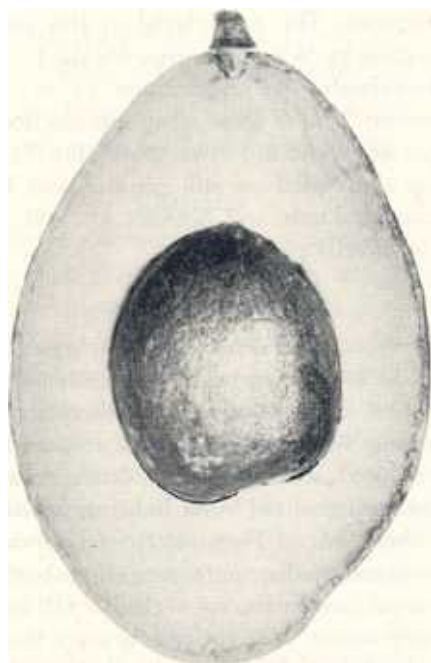
Booth Seedlings

Two of the Booth seedlings, Booth 7 and Booth 8, are among the leaders today in Florida. Fruited on his home place by Mr. Will Booth of Homestead from seed of Guatemalan varieties interplanted with West Indian, the 11 Booth seedlings were never given names and are known only by number. The other nine are of minor value, but these two bear heavy crops of attractive fruit of good size. Booth 8 matures in November and Booth 7 in De-

cember, and they are of opposite bloom type from Lula and Taylor, so that they are very well suited for interplanting with these older varieties. These four varieties make up about half of all commercial plantings in the state today.

Characteristics of Newer Varieties

Each year brings new varieties as contenders for the honor of commercial recognition. Quality is not an important factor in rating avocado varieties, since all avocados are of good quality if properly matured and there is not a great deal of difference between them. There is some difference between varieties of very high oil content and those of rather low, but in each group are some of the varieties considered of finest flavor. Seed size is



Booth 8, a Guatemalan seedling, which is included among the leading avocado varieties in Florida.

AVOCADO VARIETIES IN FLORIDA

very important since this may range from less than 10% to more than 25% of the whole fruit weight, yet when a variety is of exceptional productivity it is hard to give too much weight to this factor. Heaviness of bearing is the principle criterion in judging worth, especially if the season of maturity is during November, December and January. The public has indicated its preference for a green-skinned avocado, and so the varie-

ties with red or purple color at maturity have dropped out of sight. Other things being equal, disease resistance is a desirable quality, but as Lula illustrates, the lack of this quality does not handicap a variety of outstanding productiveness. Hardiness to cold is also a characteristic of some importance, since in a year when Florida experiences a freeze, the crop on trees of varieties with exceptional cold hardiness has increased value.



Nut Varieties For New York State

By L. H. MacDaniels,
Cornell University

Success in growing nut trees in New York State depends just as much upon the right choice of varieties as does the growing of any other fruit. In this State the all important climatic factors of low temperature, length of growing season and total summer heat are not favorable for most kinds of nut trees except in favored locations. These are confined mostly to Western New York along the shores of the Great Lakes and to the Fin-

ger Lakes and the Lower Hudson Valley, particularly Long Island.

Pecans

Most kinds of nut trees that are adapted to growing in the North are native in the range extending much further South. Some, as for example the pecan, cannot be grown in New York State at all. Even the most northern varieties will not fill satisfactorily anywhere in New York State except possibly on Long Island.