Proc. Fla. State Hort. Soc. 46:143-149. 1933.

## THE MARKETING OF AVOCADOS

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Let me *say* at the start, that the man in those honor this new section of the Horticultural Society is named—W. J. Krome—was not only a pioneer in the breeding of avocados, but he was also a pioneer in the marketing of avocados, and his practices and selections of varieties, grading and general marketing have been, even in the pioneer days, sufficiently good so that they are still standard.

It will be better both from a consideration of the time available and the effectiveness of what I may say, to re-title this paper and limit it to "*The Marketing of Florida Avocados from the Grower's Standpoint.*" Even thus restricted, this is a large subject coming under the general heading of unfinished business.

I think it can be fairly said today that the avocado industry has been going through its experimental stage up to this time. A little history is in order here. The first avocado trees to be brought into Florida were imported by Dr. Perrine about one hundred years ago. In the 1880's and '90's when the first real settlements around Miami were being made, some small plantings of avocados were made. Most of the fruit from these was used locally, though a few are said to have been shipped to Key West.

By 1900 a few small shipments of Florida fruit were finding their way to New York City. In that year Mr. Geo. Cellon, who had located shortly before just northwest of Miami, noted that Mr. D. H. Hughes of Miami was shipping a few avocados. Some of these were picked considerably later than the usual season for the earlier West Indian seedlings then bearing around Miami. Mr. Cellon found that these had been obtained from Mr. Harlan Trapp, who had a tree of late fruit growing on his place on Bayshore Drive in Coconut Grove.

From his own previous experience as a nurseryman and from talking to Mr. John Beach of West Palm Beach, Mr. Cellon concluded that if the growing and selling of avocados were ever to become an industry, it would be necessary to have a production of known and uniform varieties. Such varieties must be produced by budding or grafting in nursery form and planted in commercial acreage. In this way, the most promising seedlings then existing could be grown in sufficient quantity to attract the attention of the best buying trade and on the basis of standardized fruit, the avocado had plenty of merit to sell in increasing quantities.

Mr. Cellon at that time started the first commercial avocado nursery by budding from the original Trapp, also from a seedling growing in the north side of Miami, which he called "Pollock." It is to this foresight of Mr. Cellon, that we owe the real start of avocado growing in Florida on a commercial basis, and it is in this way that the marketing of Florida avocados obtained its real start.

The period following 1900 witnessed a gradual increase in plantings of avocados in Dade County. In the early days the bulk of the plantings were of seedling stock but Mr. Cellon had chosen very wisely in his first selection of standard varieties with the material which he had, and a larger proportion of plantings came to be made in budded varieties. Increasing amounts of the fruit were shipped to New York City, New Orleans and other large cities as well as throughout Florida. At the same time, the importations of Cuban fruit were increasing. Up to 1914 some avocados were imported into San Francisco from the Hawaiian Islands and into Texas from Mexico. These imports generally sold at low prices but they had then, as they still have, a valuable function in acquainting many people with the merits of the avocado who might otherwise never have tried it.

Roughly, by 1915 it may be said that the marketing of Florida avocados had become commercially established. The principal production was still from seedlings of the West Indian race, mostly during the months of July, August and September. However, the standard and best known avocado was the Trapp, marketed principally in October and November, with a small amount of fruit reaching the markets as late as Christmas. The planting and production of the Pollock variety had always been limited, partly because of its conflict with Cuban and local seedlings and partly because of its uncertain bearing. It was an axiom in the marketing of Trapp avocados, that the later they were shipped the more money they brought. Prices in the principal cities for Trapp avocados ran to extreme prices for Christmas trade and at times even for Thanksgiving. Imports from Hawaii and Mexico had been ended and the Cuban importations were usually finished by the end of September.

About this time it became known that a few avocado trees were fruiting in Southern California. Their Mexican seedlings matured in the summer and their Guatemalan seedlings came on the market in the winter and spring. Several trees from Guatemalan had been brought in by the Department of Agriculture and began to produce winter fruit at the Plant Introduction Station on Brickell Avenue in Miami. It became evident that the Florida season might be considerably extended at its most profitable season by planting the best of these Guatemalan importations. With a new field opened up, experimentation became the order of the day. The leading nurserymen, principally Mr. Krome and Mr. Cellon imported a number of the most promising varieties from California. When this new budwood was topworked into bearing trees, it produced very quickly and the most desirable new varieties thus hopefully planted proved to be rather shy bearers and with a few exceptions have now been discarded.

As it gradually became evident that many of these Guatemalan importations were not thoroughly at home here, the avocado nurserymen and growers turned to still another field; the finding of local hybrids. By "hybrid" is meant a cross between two of the three races of avocados, that is, West Indian, Guatemalan and Mexican. Mr. Edward Simmons of the Plant Introduction garden in Miami was a leader in this field and he brought into bearing about 1915 a seedling called the "Collinson." This variety is still one of the best known hybrids. Shortly afterward the Rolfs or Winslowson and the Lula were originated. It was felt that these hybrids of local origin would be more at home than imported varieties, and with the best of them there should be the free bearing tendency

of the West Indian parent combined with the later season and resistance of cold weather of the Guatemalan parent. Most of the interest in new varieties from 1918 on has been in these new hybrids, as the numbers of possible crosses of varieties are to be found, this is their most likely source.

The commercial crops of Florida avocados increased more rapidly between 1918 and the time of the boom. While we do not have definite figures, it is probable that the largest crop ever raised in the state with the possible exception of this past season was that of 1923. The new Guatemalan hybrid varieties lengthened the season so that it began gradually to extend to February and even March and April. The trade at first did not take so kindly to the hard rough shelled later varieties. Not until California began to ship winter fruit was there any competition for this late fruit and it brought excellent prices. One result of these good prices was the further increase in the interest in growing the avocado. This encouragement is responsible for the present acreage of about three thousand acres of avocados which Florida now possesses. In the boom years of 1925 and '26 however, interest in avocados languished and the hurricane in September 1926 destroyed and injured many trees so that the 1926-'27 production was very limited.

In 1928 the Florida Avocado Growers Exchange was organized. This was the first and only effort made for the co-operative marketing of our fruit and the elimination of much of the competition between smaller shippers. The Exchange has marketed roughly from sixty to seventy-five per cent, of the avocados grown in Dade County. In 1928, its first year, it marketed approximately 270,000 pounds of fruit and in 1929, even with the second hurricane of that year, it marketed about 365,00 pounds. In 1930 the crop was again smaller as a result of the storm of the previous fall, the Exchange marketing a little in excess of 250,000 pounds. In 1931 with more favorable conditions the volume increased to 725,000 pounds. During the season just past, between June 27th, 1932, and March 1st this year, the Exchange has marketed a total of 1,077,036 pounds. This indicates a total crop probably equal to the largest previous crop of 1923. I speak as an interested party and believe that the Exchange method of marketing presents the best solution yet arrived at for securing the recognition of Florida avocados that they deserve and the average price which they should bring.

During these years, however, we have seen a very large increase in the competition against our fruit from other sources. These sources, as you know, are two, Cuba and California. I hardly need tell you that the Cuban production consists nearly altogether of West Indian seedlings. Very little of it is produced in commercial groves, in the sense that we know them. In no recent season that I know of has the entire crop of the island been shipped; in fact, only that part is shipped on which the Cuban interests figure they can get at least some return above their charges. The imports of Cuban fruit increased gradually from the beginning of the century until 1925-26, when they exceeded five million pounds. There followed three years of smaller shipments as tropical hurricanes had not been kind to them either. However, in 1930-31, and again in this past season, imports of their avocados have exceeded nine million pounds annually. The bulk of this fruit competes with our shipments during July, August and September and to some extent, their season is also lengthened. In 1932 their imports were in excess of a million pounds in both June and October. These imports are centered in the ports of New York

City and New Orleans, also in Tampa, Key West and Galveston. From these ports, an increased redistribution has been made to interior points, so that in the summer and early fall there is no part of the country untouched, except the far west and northwest.

California became avocado conscious about 1915. The past ten or twelve years have witnessed a very rapid development in commercial acreage in that State until now it has reached a total of at least 10,000 acres. Much of this planting is still so young it is bearing very little or nothing yet, but the increase in California production has been very rapid. It exceeded one million pounds for the first time in their season, ending September,

1927. In 1929 it exceeded two million pounds. In 1931 it exceeded three and one-half million pounds and in the year ending September 1st, 1932, the production was in excess of four million pounds. Their crop is lighter in the current season, but we are advised that they will probably have next season a crop at least twice as large as any previous crop. With the coming into bearing of a large part of their acreage, they are predicting a crop of twelve to fifteen million pounds within three years. Their principal season of production has been in the months of December, January, February and March. It has been only in their season of heavy production that they have made shipments to the East; that is, they have been marketing about 75 per cent, of their fruit on the Pacific coast, principally in their own State. With increased production, however, these shipments to the East, in competition with us, are bound to extend over a larger period. As a matter of fact, in their largest season to date, their first car to the East started forward on October 28th, 1931. We may expect from them an increased competition during November and, possibly, even October. We have already seen Florida, Cuban and Californian avocados selling at the same time in New York City. In other words, Cuba has, up to date, been crowding the markets with all the fruit which has any chance of bringing a small margin above fixed charges and is doing this from before the time of our first shipments well through October and, to some extent, through November. California, then, takes up the battle, and their shipments to the East are now extending until June, which far outlast our latest fruit. We have no time in our entire season when we are not faced with active competition from one source or the other. Furthermore, it must be remembered that while from cur viewpoint the Florida avocado is the avocado, actually, during the past three years, our total production has been less than 10 per cent, of the total amount of avocados marketed in the United States.

The above summary gives us a general idea of where our industry stands today. The question now is "Where do we go from here?" I said before that we have been through our period of experimentation; that is, we have been shipping a fair volume long enough to have an accurate idea of what constitute our best varieties, our best season and our best markets. With the intensive competition that we have, it is decidedly up to us from now on to eliminate any weaknesses and capitalize our strong points. It is the only way that we can maintain and further advance the profitable marketing of the increased volume of fruit that we shall normally have, year after year. Every factor in our markets should have our most careful study and we should never let up in our effort to secure the perfection that is necessary if we are to maintain the reputation that the Florida avocado has had in the past.

The first step in the effective marketing of avocados is the selection of proper varieties.

With a good quality of fruit to start with, our marketing is already half done. It is this angle that I wish to impress on you above all others, because proper marketing of avocados begins with the grower, his selection of varieties and the quality of fruit that he raises. Let us go into this matter of suitable varieties more in detail. We have, as I mentioned, early, straight West Indian fruit, medium and late hybrids and late Guatemalans. These have originated from time to time in a hit-or-miss manner, without any thought of correlating one with the other. I might qualify this by saying that we have made an effort to find fruit that will come in at what was formerly our time of highest prices, and we have made more or less effort to have a succession of varieties beginning in June and July and extending through until March and April. We have no single variety that normally extends for more than one-third of our nine or ten-month season and, therefore, a succession of varieties is one of the essentials in our plantings. However, when we go beyond this, we find that we have in bearing in southern Florida, a highly miscellaneous assortment of fruit of almost every size, shape, color, texture and eating quality that can be imagined. We might as well acknowledge to ourselves frankly that in the present era of standardized merchandise we are not going to get to first base unless we concentrate on the qualities which the market prefers, and secure just as near uniform quality as we possibly can. No marketing program, whether cooperative or individual, no matter how ambitious, how thorough or well financed, will be effective until we have standardized quality to work with that has high appeal to the trade. If we are raising avocados on any scale, we are raising them to sell, and the sooner we subordinate our own personal likes and dislikes to the verdict of the buying trade as expressed in sales and others, the better we will be enabled to keep the Florida avocado on the map.

I wonder if any of you have seen the variety score card for avocados which is sent out by the California Avocado Association to its members. The desirable characteristics of California avocados are here divided up under certain headings and sub-heads. The requisite qualities of avocados are divided under this system into four main classifications:

- 1. Marketability
- 2. Yield
- 3. Vigor of growth
- 4. Hardiness

The Calavo Growers co-operate with them in securing reports from their salesmen and connections. It is the heading of "Marketability" with a possible maximum of forty out of one hundred points on the California score card, that we are interested in right now. Under the heading of "Marketability" they have five sub-heads:

- a) Flavor
- b) Appearance
- c) Keeping quality
- d) Commercial size
- e) Ease of determining condition to eat.

From our new point these five qualifications are not equal in importance. I am going to re-list them as follows:

- a) Keeping and shipping quality
- b) Commercial size
- c) Appearance

I do not mean to say that flavor is not important. It is very important, but there is the matter of individual taste entering here which might confuse us. Neither can this be as accurately graded as the three important points I have just listed. There may be a difference in opinion as to the relative importance of these three angles in judging our fruit, but they are all sufficiently important so that I do not think our commercial varieties of the future can be effectively sold without a fair score in all three of them.

1. Taking the keeping and shipping quality of the fruit first, we should not consider further propagation of any variety that will not normally carry in good condition to our markets and maintain this condition for a reasonable length of time. Any variety to have commercial value should be able to stand cold storage at the usual temperature prescribed, around 40 degrees for a moderate length of time, say two or three weeks. The varieties that we want should do this without break-down or discoloration of either the flesh or skin. Anything short of this is reflected in a tendency to discourage the handling of avocados by both the wholesale and retail trade.

2. The fruit of any desirable variety should run in size principally around three-quarters to a pound in weight. Such fruit will pack in the present standard lug, fourteen, sixteen and eighteen, or in the old vent or iced crate thirty-six, forty-six and fifty-four size. This should not be understood as meaning a hard and fast limit. There is a small proportion of the existing demand for avocados which runs to larger and smaller fruit than this. There is some trade on which these off sizes can be pushed. In most varieties that we raise there is likely to be some proportion of fruit which runs under or over this arbitrary limit, but there will ordinarily be plenty to take care of a, possible ten to fifteen per cent, of the trade who call for either large or small fruit. We have found in our considerable experience in the Florida Avocado Growers Exchange, covering a period of years, that some of our varieties which run very large or small are not received with favor. If they are shipped in large quantities, they not only sell at a discount, but they have a tendency to slow up the entire market for avocados.

3. The fruit that we want and the fruit that the trade will pay the best prices for should be reasonably smooth in appearance. Practically all of our early fruit qualifies in this respect, but when it comes to late varieties, this is more difficult to attain. The demand for Florida avocados is based on the sales of reasonably smooth-skinned fruit and we can maintain a market preference for Florida fruit much better in late season on fruit of this appearance. The color should be green, but we now have a few varieties of good quality fruit which, when ripe, are brown, purple or practically black. Much of the trade does not like these and the consumer is confused and liable to mistake them for fruit that is overripe or spoiled. Moreover, when cut, the interior appearance of our fruit should be a rich, even color and texture, without noticeable fibre and with a reasonably small, tight seed. As a less important consideration, we should keep in mind that the trade ordinarily has some preference for the short, pyriform or pear-shaped avocado. We have now some excellent round fruit. If the other qualities of this round fruit are excellent, we should not discard it for pear-shaped fruit of poor quality, but, as between equal quality of the two shapes, the pear-shaped is preferred to the round.

I shall not go into the matter of varieties. You are familiar enough, I feel sure, and with various kinds of fruit you are now growing to realize easily which gualify under such analysis. You will probably agree with me that not many of our varieties fully qualify; that is, we do not yet have all the varieties we need to give us a succession that will pass this grading. We need a great deal more experimental work. We should be quick to try and slow to adopt. We should do everything possible to avoid any break in our shipments through the season because of differences in size, shape and appearance. Every break of this kind adds" to sales resistance and the greatest uniformity we can secure means greater ease in keeping our fruit moving in satisfactory volume and at satisfactory prices, in the many markets we ship. Every change we make in! the quality, appearance and size of our fruit gives our competition an advantage and will do so unceasingly in the future. Our fruit has generally maintained a considerable premium over Cuban fruit, almost as much because of the superior uniformity of our budded varieties as for any other reason. In California, they have been able to standardize on one variety, the Fuerte, which now comprises nearly two-thirds of their output. This one variety is available through five months of their season and forms an even larger part of their shipments to competitive Eastern markets. The practical result of this from the growers' standpoint is that no further trees should be planted, whatever their season of maturity, which do not produce fruit which grades high under this system. We will all be financially better off if we will rework the varieties which do not qualify into something that does, just as rapidly as possible.

This is the first, and I believe by long odds, the most important single step. If we will keep it steadily in mind, we shall have done more to keep the avocado in favor with the trade throughout the country than any other one thing can do. Of course, this is not the whole story. After we have done everything we can to secure varieties that are most desirable commercially, we will have to watch several other very important items in any successful marketing program. Briefly these are:

1. The picking of all varieties at the proper stage of maturity. We should be on our guard at all times against the shipping of fruit obviously immature. This has not been a great problem in the past, as our older growers and shippers have been raised on the theory that the longer the fruit is held, the more valuable it is. This is no longer true in all cases and, with the further changes that are bound to take place in the picture, we may some day come to find that the opposite is true. Neither should Florida fruit be held during our warm weather until such time as it is so mature that its normal period between picking and ripening is too short to enable us to get it safely to market. Should the time come when the pre-cooling of our fruit, at least for the largest markets, proves to be a sound business procedure, this last may be to some extent disregarded. At present, our whole marketing system is based on the shipping of small quantities by express to many markets.

2. That all possible care and precaution should be taken to insure picking, hauling and packing of our fruit with a minimum of bruising and damage. The avocado, at least the

West Indian varieties, is very easily bruised or cut, and without extreme care, waste and loss are bound to occur. The retailer is discouraged and price suffers.

3. Both the packing and packages in which the Florida avocados are shipped should be standardized. The Florida Avocado Growers Exchange uses a lug or flat copied from the California package. This has proven both effective and satisfactory to the general trade, and is now used for about 90 per cent, of the shipments out of the State. In this package ordinarily only one layer of fruit is placed, so that when the lid is removed in the market, all the fruit is immediately visible to the purchaser. Furthermore, the old days when fruit of mixed sizes and grades could be shipped in one package have passed. The sizing of our fruit should be standardized, just as fully as oranges or grapefruit are standardized. The grading should be fully up to all requirements of any other fruit industry. We have no present government grades in avocados, but we can make our own U. S. number one and if strictly adhered to, this will produce the same confidence in the trade that is felt toward the most dependable grades put up by our other fruit industries.

4. The material in our packages, the woodwool for padding fruit, and the exterior appearance, especially the use of labels and lettering, should be such as to attract the trade to the Florida product and, incidentally, we should not hesitate to proclaim to the world on our packages that our fruit is *Florida* avocados.

These are all primary requirements for the profitable marketing of avocados. There still remains the matter of effective selling, distribution, and advertising. In itself, it is a large and complicated question, requiring more time than I have, and I doubt whether it comes under that part of the subject in which you, as members of the Horticultural Society, are primarily interested.

The total consumption of avocados in the United States has not even been guessed at. The Calavo Growers estimate that their largest production so far has meant only 1-30th of one pound per capita per annum for the people of the United States. This is one Florida product which has not yet suffered from over-production. We have at times suffered from under-consumption. We need to place before millions more in the cities of this country the unique advantage of the avocado in food value and healthful properties. That is another subject which will have to be worked out as we are financially able to do so out of the crops we shall market in the future. The Florida avocado is now favorably regarded by the trade. The marketing of additional volume, while it is difficult under present financial conditions, presents no obstacles that can not be overcome by hard work and the same marketing principles that apply to all other products.

I want to leave with you, however, one outstanding idea; that is, the definite responsibility resting on everyone in the State who is interested in avocado growing, in eliminating undesirable fruit and standardizing on uniform varieties of the greatest commercial desirability. If you will do this, our marketing problems will be more than half solved. The Florida avocado is quite capable of holding its own with any competition that has so far appeared. We can, by the exercise of intelligence and persistence, carry it to a still higher position.