

## THE CASE FOR TOPWORKING AVOCADOS TO STANDARD VARIETIES

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In the 1957-58 seasons, which were our last good year, Florida shippers reported a total of 587,571 bushels of avocados. 49% of them were Lulas and Booth 8's. But 45 different named varieties were reported altogether, not to mention 18,000 bushels of seedlings and unclassified varieties. And while the two most popular varieties accounted for 49% of the total, the 30 bottom ranking varieties accounted for only 5.3% — excluding the multitude of stray dogs and cats called "Seedling and Unclassified." No wonder shippers tear their hair! And no wonder housewives can't tell a good avocado from a bad one.

Nevertheless, these minor varieties accounted for over 30,000 bushels of fruit, and the outlaws—"Seedlings and Unclassified"—bring the total to about 50,000. How many trees does this represent? I'm afraid it represents at least 50,000 trees. Some of these produce fine fruit and might be kept, but unquestionably our industry would be much better off if most of them were eliminated. If this meant destroying the trees, with complete loss to the owners, there wouldn't be much point in even discussing the problem. But it doesn't. On the contrary, while the industry as a whole would benefit from the elimination of the host of seedlings and undesirable varieties, the ones who would benefit the most, and the quickest, are the owners of these trees. All that is necessary is to topwork them to standard varieties.

Let me give you an illustration. Many years ago I bought a ten acre grove which was about half Waldins and half Taylors, Tafts and Lindas. The first thing we did was topwork all except the Waldins to Booth 8. The following season the grafts bloomed, producing an average of slightly over a bushel apiece. Within three years the crops of Booth 8's alone had returned more than the cost of the grove. Another instance: after the freeze of Feb. 6, 1958, we topworked 300 frostbitten Fuchs to Booth 8, leaving about the same number of Fuchs as they were. Now, as this is written in October, 1959, those grafts have about half a box of fruit per tree, in a generally poor year when the Fuchs beside them bore practically nothing. The same kind of example could be cited for Lulas, and probably for several other good commercial varieties.

You can see that only two or three crops are lost when a tree is topworked, and the increased yield and higher price of the new crops soon make up for the loss. The difference in yield between good and poor varieties is trully amazing. In a grove which contained Lulas, Booth 8's, Fuchs and Collinsons, the Lulas and Booth 8's have averaged over 5 bushels per tree for many years, while the Fuchs and Collinsons averaged about one bushel per tree, until they were finally cut down and topworked to the heavier bearing varieties.

The question immediately arises, "If it's that good, why isn't it done?" The answer is complicated. Actually a certain amount of topworking is done every winter, although it is only a fraction of what might be done profitably. One reason no more is done lies in the ignorance of many growers of how much they have to gain by topworking their cull varieties. They don't have the opportunity to make or see comparisons like those I recounted a moment ago. Then too, who is to say which the best varieties are? The two leaders, Lula and Booth 8, are not sufficient in themselves, and after them comes a number of varieties that have commercial value in varying and arguable degree, and with a great deal of duplication, from the standpoint of the market. And even in the case of the poorest varieties we find growers who are certain that their off-beat, no-good product is just what the industry needs more of. This emotional approach may have merit when applied to backward children but it is not helpful in the consideration of an essentially business proposition such as avocado growing.

Finally, there is the difficulty of getting anybody to do the work. Men competent to topwork avocados are rare; I don't know of more than half a dozen, myself, although this is not a particularly difficult type of propagation to learn.

We need a three-fold program, designed to:

1. Decide among ourselves exactly what varieties we will concentrate upon.
2. Acquaint, all growers with the advantages of changing to those standard varieties, and
3. Make it easier for a grower who decides to have his trees topworked to get somebody who can do it for him.

The first point may seem obvious to a shipper, but if it were as obvious to all us growers we wouldn't have the present mess of different varieties. The County Agent's staff at Homestead has made some progress along the line of compiling a list of standard, recommended varieties. We certainly need one. If ten different varieties that ripen at the same time are all equally good we still need to decide on one of them and renounce the other nine, in order to reduce the confusion of marketing. I urge that this task be continued by the County Agent and his assistants. Then, when a list has finally been decided upon, let's stick to it.

I will muddy the water by giving my own ideas about such a list. In the first place it should be short. The period during which an early variety such as Pollock can be picked for commercial shipment is four to six weeks, but in the later varieties such as Lula it lengthens out to almost four months. So the whole eight-month shipping season can be easily spanned with four varieties. Why, then, use 40? We could ship from July through February using Pollock, Waldin, Booth 8 and Lula. Or would that make matters too simple? Let me suggest that Simmonds might be preferable to Pollock, as it seems to bear more heavily, and that we really need some other, more prolific variety to replace them both. I have one I call Nadir that I hope will amount to something but I'm not as optimistic about it as I was a few years ago. There are a few others which may turn out to be worthwhile but I don't believe any of them has been proved as yet.

Then in late September we run into some market resistance to Waldins, not because they aren't good then—they're at their prime—but because the skin gets a light green

color and the trade prefers a dark green fruit. Ivy Futch, at Lake Placid, has done very well by slipping his Tonnage variety into the market then. I really don't think much of Tonnage but there may be a place for limited amounts of it or some other early hybrid, between the end of the Waldin season and the beginning of the Booth season. One thing is certain; the way *not* to fill that gap is with immature Booth 8's.

Then, in late fall and winter, there is a market for a certain amount of big, high quality fruit, that is not competitive with the smaller Booths and Lulas being shipped then. Monroe or Choquette, or possibly Hall, might supply that demand. But what we're trying to get away from is using Monroe, Choquette, Hall, Rue, Byars, Pumpkin and I don't know what else to do the job that would be done much better by a single variety.

You can see that compiling a list of "standard" varieties is not an easy task. I hope you will agree, however, that is an important and necessary one.

The second and third parts of the program I proposed should be done by the County Agent's office and by the shippers. They are the ones the grower looks to for advice, and from whom he asks explanation for poor returns. But it isn't enough to tell a grower his Lindas and Winslowsons won't sell. Tell him what varieties will sell, and be in a position to recommend somebody who can topwork his trees to those varieties.

I understand that in California a few years ago, a similar effort to reduce the number of undesirable varieties by topworking them was made, with considerable success. Among the things they did was compile a list of persons qualified to do that kind of work. Then when a grower wanted his trees grafted he could get a list of names and addresses from the County Agent's office or from the packing house where he took his fruit. We could do the same thing here easily, and I'm sure skilled operators who can do cleft grafting would be glad to cooperate. But the sad truth is that at the present there aren't enough trained men to do the job. We need to teach new men. I don't know how this can be done but surely some arrangements could be made either to apprentice promising workers to the present old masters or to make this kind of training available to agricultural students in the local high schools. The work isn't easy but I know from my own experience that it pays very well indeed.

So, leaving these several questions propounded but unanswered, I shall close by showing a series of slides of cleft grafting avocados that Burt Colburn made. I think they are wonderful, and I'm sure you will, too.