

## SOME IDEAS OF AVOCADO CULTURE

T. U. Barber

Read at Grower's Institute, Anaheim, June 9, 1931.

Your chairman, Judge Halm, asked me to speak before this meeting. This was impossible as I would be away at the time. Then Mr. Halm requested me to write a letter that would be read to you.

I wish to congratulate the committee and the chairman for starting the Avocado Institute. I fully expect and hope that it will have an annual position on the horticultural calendar, as is the case with the old and established Citrus Institute. There are many things interesting to the avocado grower, such as different methods of operation, varieties, etc., and since each individual has his own ideas about them much good could be derived from a discussion of them. After many years of avocado growing I have mine; and it is about some of these I wish to speak.

Selection of suitable varieties is most important to the new grower. This should be done by going over the district in which he is planting. Do not use any general list of varieties. Pick out in your district the outstanding commercial fruits that are now producing in large enough quantities to be thoroughly tested, both as to production and market conditions. Each district is different as to varieties; and while one may be excellent at Whittier, it may be a poor producer in San Diego, and so on. In the past we have used the *Southern California* information; in the future we should use only that of the *local district*.

In the first years of your trees' life, consider *growth only*, and then you will be repaid by trees that are able to produce abundantly. Every new grower is anxious for his trees to fruit, and many trees have been stunted by overbearing in the early years. It is very difficult to rebuild a tree which has been stunted by over-production.

Train your trees with a center *leader*. Trees ten to fifteen years old carrying heavy crops are showing too much limb breakage. When trees begin to carry crops of five hundred to a thousand pounds of fruit, they require limb bracing. This is a much more difficult task than with the walnut. So far, I have used many kinds of braces with props but have found nothing better than heavy galvanized wire and large screw eyes (No. 1) to carry the main limbs. The trees without the center leader and consequently no center point to tie the side branches up to, have been the ones to break. They seem to gradually flatten out until the braces become even with the limbs and then with the first wind down they come, breaking, in many cases, all the fruit-laden branches which are below them. Experience with several seasons of heavy crops and large trees have shown the central leader type tree to be far superior to the cut off and spreading type. The only help for a spreading type tree is to put in a heavy central post high enough to act as a center pole

from which the brace wires can be run down to all the side limbs.

As I go around the country looking at producing groves, the amount of deadwood left in the trees is very noticeable. This makes many of the scars shown on our fruit and lowers the market grade, consequently the return to the grower. Deadwood develops constantly and it is a good practice to remove the wood twice each year.

Many times new growers ask: "How much should I irrigate?" I think the only answer to this is—keep the trees growing steadily during the growing season. California has so many different soil conditions that there cannot be any set rule. I have seen trees over irrigated on the heavy adobe and clay soils but never on the open, well-drained sand and gravel type soils.

It is in just such things as irrigation and tree training that the owner living on his grove, giving it his constant personal care, can improve his avocado grove. Live on your property and watch each tree as an individual. It is a pleasure and brings excellent results.

After twenty years of avocado operation I have come to the conclusion that there is much to learn. Very much more than I expected years ago.

The prospective avocado grower is often made to believe that avocados are very heavy producers because they have been shown individual trees with enormous crops. There is only one way to get this information and that is by taking the average production of an acre or more over a period of four or six years. This will tell a different story. The poor years and the poor trees cut the average per tree down materially. At present I do not believe the avocado is bearing the tonnage of oranges per acre per year. This is one of the most interesting things to me at the present time and I am hoping to increase my production by working over the low producing trees.

The avocado industry is an excellent business if properly operated in a good location with varieties suited to the district.