

Early Experiences in Avocado Growing

Wm. Hertrich

Address given by Mr. Wm. Hertrich, Curator of the Huntington Botanical Gardens, at a meeting of the L. A. County Farm Bureau, held October 2, 1936, at the William Perm Hotel, Whittier, California.

Mr. Chairman and Fellow Avocado Growers:

I would like to give you a brief resume this evening, of my experiences in growing avocados which covers a period of twenty-five or more years. I have known of Avocados botanically for a great many years having seen the first description of them in George Nicholson's "Illustrated Dictionary of Gardening" where reference is made to a full description and illustration in Curtis' Botanical Magazine of May, 1851, the official publication of the Royal Botanic Garden at Kew, England. It is stated in that magazine that Avocado was most likely a misnomer for "Aguacate" the name used for the fruit in Lima, Peru, according to Ulloa, and they could not understand why the fruit was called Alligator Pear. It is also stated in this article that the avocado was grown in Europe in various botanical gardens as well as in some private estates where the proper facilities were available but that the tree very rarely bloomed, and never fruited.

When I came to California in 1903 I saw, for the first time, an avocado tree planted in the open. The following year I tasted the fruit for the first time but as it was a little over-rips did not care for it. Soon thereafter I became associated with the Huntington interests. Early in 1905 Mr. Huntington came out one afternoon with a dozen avocado seeds in his pocket. He said, "Hertrich, do you know what these are?"

I said "I think they are avocado seed."

He said, "No, they are not; they are alligator pear seeds. I have eaten the fruit several times at the Jonathan Club and have begun to like them. Do you think you could grow these here? Could we plant an orchard?"

I said, "I think we can grow them here, but I don't know about the orchard. If you are willing to stand the financial strain, I will be glad to make the experiment."

TWO "FREEZES" EXPERIENCED

So we began to collect seeds and fruit—he, wherever he could in the Jonathan Club and I, wherever I could find and obtain them. At the end of a two year period we had about 500 seedlings planted in containers, some were six feet high. In the spring of 1908 I began to plant them out. We planted about 400 in orchard form. Not knowing the size the trees would attain, I used the orchard schedule of twenty-five feet square. The soil was very sandy, and as a matter of fact too loose and open. The trees began to

grow much faster than I anticipated. After a year or two we began to realize that they would have to be budded if we were to obtain any fruit at all within a reasonable time. Then the question was how to obtain the buds. It was very difficult in those days to obtain any buds. I had some seedlings, Murrieta Green and others, and we budded them with little success. We improved however, as we went along. By 1910 we had a fairly good looking orchard. In 1912 we had a very cold night when the temperature dropped down to 25 degrees. Then I discovered how hardy an avocado tree was. This low temperature did not kill the trees. The next year new growth was made to a remarkable extent only to be caught by the severe frost of 1913, when the temperature, for three consecutive nights, dropped down to between 24 and 22. You all know what happened. I became greatly discouraged and gave up the idea of growing avocados in San Marino. The following spring we started to remove the stumps, intending to plant something else in their place. However, when we pulled out the second tree we saw that it had begun to make eyes a couple of inches below the surface of the ground. This was so encouraging that we left the stumps in the ground and during the following summer they started to sprout and produced new shoots. But what was formerly an orchard of avocado trees turned out to be an orchard of avocado bushes because there were from four to a dozen sprouts to each root stock. We thinned out the sprouts and two years later began to bud with Fuertes, Spinks, Sharpless, Lyons, Guatemalans, Pueblas and other varieties, and also with some promising seedlings. We succeeded in re-establishing the orchard only to have another setback in 1922. However, this one was not as severe as the one of 1913. Then too, the trees were considerably larger in 1922 and could withstand the frost more effectively. After that the trees made very large growth. As a matter of fact for years I had to thin them out. In some places I had to cut out entire trees as the space allotted to each tree, of twenty-five feet square was entirely inadequate.

EXPERIMENT ANALYZED

However, financially the experiment was a flop—a complete flop, but even so, worth the trouble and effort we had taken. I was willing to stand behind it, if Mr. Huntington was willing to finance it. The high cost of the enterprise was perhaps due to several reasons. First of all, the location was too cold for an avocado orchard. It was selected because it was available with no thought of other considerations. Secondly, the soil was not suitable, being too loose and too porous. But the greatest trouble was due to the fact that we were not able to have bud wood from selected trees with records. I am a strong believer in using only buds from carefully selected trees.

In order to test the results for my own satisfaction, with the use of different soil, I bought two dozen trees, two of each variety. I planted half of them in the light, sandy soil and half in an entirely different location in heavier soil, a heavy loam. I thus proved that the trees in the light soil made twice as much growth as those in the heavy soil but the trees in the heavier soil bore more heavily. I always had an idea that this would be the case but was not willing to take out the old well-established trees because of their non-bearing quality thinking that they might possibly begin to bear. They have improved but are not paying trees. Some of the early trees must be at present 45 feet high. To give you a little idea of the immense size these trees attained—I had five trees, three Kist

and two Rey, their trunks were 12 inches in diameter and they were about 40 feet high. I am now making an experiment in using buds from trees with good records and topwork some of the old Fuertes over in order to ascertain whether the bud selection is of first importance.

FIRST CALIFORNIA ORCHARD

In short this is the story of experiments with probably the first orchard planted here. I do not know of any orchard planted before 1908 but should be glad to hear if any one here does.

I am sorry to say that the slides I intend to show this evening are not of avocado culture. I was asked to present a paper this spring before the Alpine

Conference, an organization affiliated with the Royal Horticultural Society of London. While traveling about Europe I took many photographs of gardens, buildings, etc. I have brought some of these slides with me and should be very glad to entertain you for a half hour or so.

(Editor's Note: See page 49 for article describing how Huntington orchard came through the Jan., 1937, freeze.)