

MY EXPERIENCE IN GROWING AVOCADOS

Mrs. Margaret Stewart

Los Angeles, California

Whether we make the growing of avocados a science or a hobby, depends upon our natural inclinations, but I assume that every one here hopes to become at some time a commercial grower. To such as do, the experience of one who has in some measure been a pioneer in the industry may prove helpful.

In the summer of 1912 I became obsessed with the idea of planting an orchard of avocados, and as soon as possible in the spring of 1913, I planted five acres of budded trees, adjoining a lemon grove which we owned at San Fernando. So interested was I in the small trees that I refused a trip to Europe, preferring to encourage in various ways the growth of my orchard. One of these ways consisted in bribing my chauffeur to shade the trees from the sun by placing a half shingle behind them. (They were about twelve inches high.) Then I, being a person of high enthusiasm and not timid, resolved to increase my acreage. With this in view, and with my husband safely in Europe, I bought the adjoining ten acres and made haste to plant more avocados.

Being compelled to wait until a hay crop, then on the land, was harvested, the planting was made about the last of July. The trees had been grown, for the most part, in pots in a lath-house, and being set out during a week of great heat, many died, and I lost considerably over a thousand dollars. This, together with the high-priced land, the cost of installing water pipes, the paying of from \$5 to \$15 a tree, and the expenses incidental to planting and caring for the orchard, was making my venture a decidedly costly one.

Thinking it the better way, I told my husband immediately on his return how I had employed my time, and incidentally his money. I may add that while he had no faith in the avocados, he rather liked me, and my orchard stands as a monument of that very fortunate condition. Thus encouraged, I finished the planting of the orchard as soon as trees could be gotten, and early in the spring of 1914 the planting was finished.

I had planted trees of the Taft, Meserve, Dickinson, Ganter, Dickey, Challenge, Royal, Fuerte, Puebla, Knight, and Linda varieties. Later, I planted one or two of the following varieties: Trapp, Walker's Prolific, Fowler, Carton, and, unfortunately, a few Harmans.

Having finished the planting, I began to look forward impatiently to the not-far-distant day, I hoped, when the trees would be loaded with fruit, and I could haughtily consider to whom among the clamoring and tearfully beseeching fruiterers I should consign my fruit. Need I say that no such conditions have obtained.

My orchard planted in 1913 consists of Tafts, Meserves, and Dickinsons.

The Tafts are beautiful trees of splendid shape and foliage, many of them over twenty

feet high and correspondingly wide. Not one has bloomed as yet, and unless one expects to live to be a very old person, it seems a mistake to plant the Taft. The fact of its being a summer fruit is against it, and I am seriously considering re-budding my trees to either the Fuerte or the Puebla, or to the Knight trees.

If I were planting today, in the light of my small experience, these are the only varieties I should plant, making an exception possibly in favor of the Challenge. My Challenge trees bore very well last year for trees planted in 1914, producing beautiful, large fruit, whose oil content seemed unusually high, owing possibly to the hot growing season, which seems to develop very richly flavored fruit.

The Dickinson and Meserve trees are, this year for the first time, setting rather heavy crops of fruit. These trees are as large as the Taft trees, and the orchard is indeed a beautiful one with the vigorous new growth.

Perhaps I am too impatient for the trees to bear. The trees planted in the spring of 1914 have kept my faith alive. Every one who goes about the planting of an avocado orchard will lose that first great enthusiasm and come to the more sober realization that bringing a grove into bearing is a slow and most expensive undertaking. We are all beginners, trying to establish a paying industry, uncertain as to the kind of trees to plant, their care, etc. I think we are too prone to give a roseate view to others about to engage in the same undertaking.

I do not believe that the avocados we are planting today will stand a great deal of frost, and I think many will plant in localities unsuited to the trees. My place is especially frost free, being a warm, southern slope along the foothills. During the cold spells of last winter and this spring, my trees were untouched, while three miles south where my foreman has a few trees of the same varieties, the frost injured them badly.

I understand that most of the orchards being planted for sale in acre lots are being planted to the Harman variety, which probably will stand a great deal of frost. If it does, that is its only virtue. I consider it absolutely worthless, and am rebudding the few trees I have. I know that bitter disappointment will attend the purchase of one acre of avocados, with the hope that a self-sustaining orchard will result in three years' time. Not only will disappointment come to those who can ill afford mistakes, but it will hurt the industry immeasurably.

My Pueblas planted in 1914 bore an average of 15 to 20 fruits per tree, and this year have set thousands. The Fuertes were smaller and did not bear so heavily, but are setting now a number of fruits. The Challenge and the Royal both bore some fruit, and the Ganters bore several hundred, many of the trees bearing over 100 fruits.

With all the faults of the Ganter before me, I have hesitated about re-budding the trees at this time. I personally prefer the flavor of the Ganter to that of any fruit grown here. By peeling the fruit with a sharp knife and serving it diced or in halves, as we often serve it, it is easy to manage with a fork and most palatable. The trees set such enormous quantities of fruit that we could well afford to give a daily demonstration in some prominent shop, where the thousands of people who have never tasted an avocado might be led to realize what a very welcome addition the avocado is to one's diet. However, the fruit people dislike to handle this variety, and offer very little for it. I find the

main trouble with the fruit is that it is allowed to hang on the trees too long. If picked at the proper time, it keeps splendidly.

The most famous tree in my orchard is a small Dickey, not over 3 feet high, that last year matured 42 fruits which sold for \$32. My experience with the Dickey trees may prove interesting. I originally had 50 trees of this variety. After a time they began to turn yellow and die, notwithstanding all our efforts to save them. In watching the trees closely, it occurred to me that possibly a certain constriction at the union of the bud and stock was responsible for the trouble, causing a damming back of the nutrient fluid. I, therefore, made three longitudinal cuts with a sharp knife through the bark at each bud union. Much to my surprise and delight, the trees responded beautifully, throwing out a vigorous new growth and losing entirely the yellow tinge. The 16 trees that are left from the 50 planted are all growing splendidly.

I have since used the same method with two or three Royal buds, with the same result.

My trees have been very free from disease and are this year making a magnificent growth, owing to the great quantity of water we are giving them. We have used practically no fertilizer, except a small amount of nitrate of soda around the little Dickey which bore the surprising quantity of fruit. This last winter we planted alfalfa throughout the entire orchard of lemons and avocados and are using the heavy growth as a mulch about the trees. The soil is being kept in excellent condition. We have a long, hot summer in San Fernando, during which the ground becomes very hot, and this condition we can overcome by the use of the mulch.

I think, however, that the warmth has much to do with the early maturity of the fruit. My Pueblas were all ripe the first ten days of December, and the Challenge and the Fuerte fruits were picked dead ripe by the 20th of January. The Dickey and the Royal ripened early in February. I think most pears are picked too green, and much of the fine flavor is lost thereby.

I have done practically no pruning, preferring to let the trees branch close to the ground, providing shade for the roots and a better surface to withstand the winds. I have planted a windbreak of Monterey cypress, although I have never had a fruit blown off.

The cultivation and irrigation of the trees is continued all through the fall, as we have no fear of the frost and do not harden up the new growth early.

I have found that after the first year, when a tree is in good condition, any limb may be removed without danger of die-back. I have been interested in doing a bit of end-branch pruning and find that many more' fruits remain on a branch as a result. Where a tree is growing very vigorously, the tendency is to drop the fruit, especially if the trees do not get almost continuous irrigation.