

## HISTORY OF THE SHARPLESS AND THE MONROE AVOCADOS, AND MY OBSERVATIONS AND EXPERIENCES IN PROPAGATING THE SAME

### B. H. Sharpless

*Santa Ana, California*

According to the best information we can gather on the subject, the avocado tree, cataloged as the Sharpless avocado, is a seedling, set out in the year 1901 by David Gockley. Mr. Gockley having died before the tree came into prominence, we have been unable to learn definitely where he got the seedling, but the fruit is of the thick, hard-skinned Guatemalan type.

The tree was planted under the overhanging branches of an immense old blue-gum row, which caused it to grow rather tall and slender, but young trees in my orchard, budded from the Sharpless tree, show sturdy, spreading growth.

The Sharpless tree bore its first crop, consisting of 20 fruits, in 1912, being at that time eleven years old. Buds from the Sharpless tree, put into top-worked trees, set fruit at twenty-two months from budding, and buds put into nursery stock are in heavy bloom this spring, three years from budding. In 1913, the Sharpless tree bore 20 fruits; in 1914, 75 fruits; in 1915, 250 fruits; and the crop harvested in the winter and spring of 1916-17 consisted of 700 fruits.

Because of the insistent demand and the limited supply, we cut the fruit from the tree only when it showed by a slight change of color, that it was beginning to ripen. We adhered strictly to this plan and made weekly shipments from the first of October to the middle of February. Later in the season we found by experimenting that the fruit would stay on the tree in perfect condition several weeks after it had colored all over. From these facts I am convinced that the entire crop might have been harvested a month later. We propose to establish this fact this coming season by beginning shipments in November.

The Sharpless avocado shows remarkable tenacity in holding onto the tree. One fruit on exhibit today was cut from the tree this morning (May 18th), being two years from blossom.

Although several fruits hung on the tree during March, according to analysis made by Professor Jaffa of the University of California, the fruit reached its highest state of perfection in January. The analysis made in January showed 20.54 per cent fat content, while previous analyses made in August and September showed 15 and 16 per cent fat.

One dozen of the Sharpless fruits on exhibit today were cut from the tree February 24, having been in cold storage nearly three months, which fact speaks for itself in regard to the keeping quality of this fruit.

The Sharpless avocado is a pyriform fruit, weighing from 1 to 1 1/2 pounds, the average being about 20 ounces. The skin is thick and hard, and is maroon in color when fully ripe. The flesh is cream color, with a rich, nutty flavor, and practically free from fiber. The seed is very small in comparison with the edible portion and is tight in the cavity.

The Monroe avocado is just coming into prominence as one of the very desirable, early spring fruits, ripening in April, May and June. The tree came into bearing at ten years of age, producing 5 fruits at that time. Its second crop was 60 fruits, and the crop for 1917 is estimated at 150 fruits with a heavy blossom at present for the coming season.

It is easy to bud, a vigorous, erect grower, and young trees, budded in the nursery on Lemon Heights near Tustin, have come into bearing at two years of age.

The fruit is of the thick-skinned, Guatemalan type, and is dark green in color, which turns a lighter shade, showing a creamy tinge when ripe. It weighs 1 to 1 1/4 pounds. The flesh is smooth and creamy, free from fiber and of delicious flavor. The seed is of medium size, completely filling the cavity. Fruits have been submitted for analysis, but reports have not been received in time for this paper.

Having had considerable experience in budding citrus nursery stock. I anticipated no difficulty when I decided to propagate from the Sharpless tree. My first experience in avocado nursery work in 1915 was very much like that of the average novice in avocado budding, and I will not bore you with a record of its failures and disappointments, except to say that only about 5 per cent of the buds took.

I found a great difference of opinion among those whose advice I sought as to what kind of bud to use, some advising me to use buds that were only a tiny, undeveloped knot above the leaf stem, and from that on up to buds in full growth, an inch or more long. By experimenting with all kinds, we were able, by the process of elimination, to learn what type of bud would give the best results.

This may not apply to other varieties of the avocado, but in budding from the Sharpless and the Monroe trees, I get good results by cutting buds from the young, vigorous growth, using plump, full buds that seem almost, but not quite, ready to burst into growth. Last year (1916), I put 1800 buds into vigorous field-grown stock of different ages, and when winter came, I estimated that I had a set of 95 per cent.

Of this 1800 seedlings, 400 were from seed from Florida fruit, which in my inexperience I had bought and planted, thinking such large seed would make fine, thrifty plants. I was not mistaken in this, as they grew rank and fast, and set the buds well, but during the cold spell in December they froze to the ground, being a total loss.

My nursery was located in the lower corner of my orchard on the north side of a big blue-gum row, which served, I think, to back the frost up and hold it in the nursery. The seedlings from the local, hardy stock were damaged to the extent that the top foliage was more or less browned, but when the spring growth started, I found that a good percentage of the dormant Sharpless buds in the hardy stock had weathered the winter frost and other misfortunes, and with the first warm weather they pushed out into fine, vigorous growth.

Young two and three-year-old Sharpless trees, 100 yards from the nursery, were untouched by the frost.