

Avocado Growers Tour

Avocado Department, San Diego County Farm Bureau October 26, 1932

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Escondido

After a very pleasant drive, Wednesday p. m., October 26th, 1932, some seventeen members of the Avocado Department of San Diego County Farm Bureau met at the Carrillo Hotel in Santa Barbara. The start of the tour was made at 8:00 a. m. the next morning, as Sidney Anderson, Farm Advisor, took us in charge.

The first stop was made at the new \$1,750,000 Court House of Santa Barbara County. We then visited an old Mexican seedling tree located at 24% Arrellaga Street, Santa Barbara, planned in 1885 by a Mr. White. Of late years, the tree has borne little fruit, but is in splendid condition.

We then visited the grove of Dr. Franklin, of Goleta. Part of the planting was on a hillside, and the ages of the trees varied from 1932 resets to the original planting in 1925. The soil on the hillside varies in depth, but is generally shallow. Trees are in fair condition—overhead irrigation is used; sulphate of ammonia is applied in three applications, two pounds per tree per application. The trees on the flat ground are on a fairly heavy black loam, and here the furrow system and clean cultivation are used.

From Dr. Franklin's place, we drove to the planting of Mr. Yaggy. Mr. Yaggy's trees are mostly Fuertes, 11 years old and older. They are rather small for their age but showing a fine growth the past year. Here the overhead system is used. He does little pruning—trees not well shaped and cultivates up to the tree. Uses barnyard and chicken fertilizer—light crop on the trees at present. Dothiorella present on the off bloom fruit at this time and showing some signs of developing on other regular bloom fruit.

Then to the Bradbury and Murphy ranch. Most of these trees were planted in 1927 and Bermuda grass seed was sown as a permanent cover crop and from all appearances it is fulfilling the requirements. The grass is mowed and placed under the trees for mulch. Last year they gave the trees 196 pounds of nitrogen to the acre, from sulphate of ammonia; also twenty tons of cow manure per acre. Seven irrigations of two inches per irrigation. Last year the rose beetle did considerable damage to the trees. They have been controlled by tree tanglefoot. There is a fair crop on the trees at present and a decided improvement in the general conditions of the orchard in the past year. In years of heavy rainfall, the sod will stop all erosion,, but I question the advisability of planting Bermuda grass.

From there, we went to Ventura and had lunch at Townsend's cafe, and afterward visited the Hardman and Fay planting. These are very fine young trees and show indications of producing much more than the average for the district. Their cultural methods and fertilizer program coupled with their care in selection of root stock and

buds may bring a production of Fuerte and Puebla fruit above the average.

Mr. Blanchard, Farm Advisor, was ill, so the Thille Brothers took us in charge. We then visited a young planting belonging to them, where the greatest care was exercised in the selection of the seed and root stock. The seed was bought from Mr. Gardner of Orange County who has a very fine old seedling which has been a heavy producer. Two years ago, it produced 3300 fruit in one year. The tree is now 13 years old. The buds in this nursery were the best from the Newman and Elliott orchards. They use the semi-terrace and furrow system. Considerable mottled leaf (or little leaf) is showing at this time; will be interesting to watch developments as time goes on.

We then noticed in driving past one of the old walnut orchards that trees 40x60 were almost touching where alternate rows had been removed lately.

We also noticed that practically all of the new plantings of lemons seemed to be spaced 14x24 as protection from the wind.

Next we inspected the Borchard Avocado trees. These are very large trees and have a very rich deep soil. Trees are eleven years old and the Fuertes have never had a crop. Spinks have a fair crop, Challenge fair to good,, and Itzamna will average good. Only two irrigations are required in this orchard per year. There is also present some mottled condition. He uses eight tons of bean straw per year and no other fertilizer. There are practically 20,000 acres of this soil available for planting to avocados, if sufficient production could be had, but so far every indication points to heavy tree growth and but light crops. Lord help us if they ever learn to produce heavy crops of fruit there.

We then visited the Daily ranch. There are some older trees around the house which have never produced much fruit. Mr. Daily is propagating a Fuerbe which may be a producer in that section. This year it is a blank. They also have 1500 young trees back near the hills which are in a more favorable location for avocados. The trees are planted 22x22, and include 45 varieties, as this is an experimental planting. Very deep rich soil and furrow irrigation. Mottled condition showing on some of the trees.

We then drove to Pasadena, where we stopped for the night at the Pasadena Athletic Club. The start was made at 8:00 a. m., Friday morning, for the J. D. Hoffman ranch. There they have 2300 trees, planted from 1916 to 1921. These trees are mostly large. Very little fruit this year,, but over a period of years have produced very satisfactorily. The Pueblas on this ranch seem to be of an off type—small and not the typical shape. Some work will be done in trying to place the type. The soil is light and shows lack of organic matter. Topworking would be the only solution to Hoffman's Puebla question.

We then visited the Robert's grove at Sierra Madre. Here we found the trees large and closely planted; clearly shows the lack of pruning when they were young, consequently what fruit there is, is in the top of the trees only. Underhead irrigation is used. Very little fruit this year on these trees or on younger trees in the same orchard which are being allowed to develop into the same type of tree as the older ones.

Then to the Barber Grove on North Whittier Heights. There the trees are from 12 to 17 years old. These trees are large and are very fine, but very closely planted, and if some were removed, it would be necessary to expect that he would have some more fruit, as they can only produce fruit in the top. He used 20 tons of barnyard fertilizer to the acre

and 6 pounds of sulphate of ammonia to the tree this year. Uses the furrow system with one furrow below the tree in connection with two above. Trees are in better condition since the lower furrow has been used. Am anxious to see at what time he must remove each alternate tree.

We then visited the Hardy Grove (one of the Hart planting). This grove is very fine and has a heavy crop on the trees this year. Has had a very satisfactory production record for several years.

Then to the old Shumaker Grove, one of the oldest and largest avocado orchards in the district, and which has a wonderful production record. Also as in other large trees, fruit was all in the tree tops.

Grover Russell, who was with the party, showed us a very fine young grove belonging to himself.

We then visited the Elliott Orchard which is always of interest to us as much money and time have been spent by the owners in the interests of the avocado industry. There are at present 45 varieties left and some 200 trees this year will be topworked to Cantel, Nabal and Benik.

Then, after lunch, Farm Advisor Wahlberg took charge and the first visit was to the Union Oil Company's property at La Habrá. The trees were very large and the crop light. We saw some unsuccessful topworking of large trees where no sap limb was left; several had died and on others sun blotch had developed, presumably from the stock. There are some very fine six year old grafts.

The wiring system used in this orchard is the same as in general use. A very good system, if the screw eyes are moved out near the end of the limb as the limb develops. Otherwise there is great danger of the limb becoming loaded with fruit and breaking at the screw eye.

In the A. C. Pickering Orchard, the seed was planted in orchard form seven years ago. One half the orchard was interplanted in lemons. Some of the lemon trees were left until a year ago, when they were removed, while others were removed four years ago. They also showed the advantage of a good windbreak. The furrow system is used and only on one side of each tree, each irrigation. Water runs 48 hours in each furrow. Barnyard is applied every two years and no commercial fertilizer. Trees have made a very satisfactory growth,, although a light crop of fruit this year.

We then visited E. E. Knight orchard at Yorba Linda and saw a jungle of varieties. Most of the original planting was of the Rey variety. This is a good example of a permanent Bermuda sod. Portable overhead sprinklers are used. Mr. Knight is conducting some fertilizer experiments. Probably little can be gained by these experiments on this particular plot, as there is little chance of having a crop under any condition. He stated that 75% of all nitrogen should be applied when the fruit is two-thirds grown and one-third applied in the winter.

Next came the Marcy Ranch. Most of the trees were Tafts and had no crop this year. They use furrow and overhead sprinklers with Bermuda sod. Also, they have one block of old Tafts (18 years old) where the Woodbury system of irrigation is used. It has proven very satisfactory on this particular piece of soil. In most soil types it cannot be

used with success.

Outstanding points on the trip:

We must visualize our trees as they will appear in the future and work toward that end.

Pruning depends somewhat on your particular condition as to planting condition and cultural methods.

Too close planting will cause trees to fruit only in the top and the lower branches will be choked out and gradually eliminate themselves. When the trees are planted too closely it is possible to take out each alternate tree and produce more fruit.

I do not want Bermuda sod in my orchard as long as I can keep it out—of that I am sure.

Some of the best orchards are clean cultivated with tractor and tractor tools, not seeming to hinder the development of the tree or the set of fruit, provided reasonable care is exercised in the operation. There seems to be good and bad for each irrigation system, for different cultural methods and different pruning systems, different soils and different climatic conditions, but I am sure if we will stay with the old horse sense method and not be too radical in our practices and work out our drones, that we can still grow avocados successfully.