

Mexican Explorations of 1948

J. Eliot Coit

The objectives of the exploration trip described below have been well stated in the accompanying article by Popenoe and Williams.

Mr. Carl Crawford of Santa Ana and the writer arrived at the Mexico City Airport on the morning of August 20th. We were met by Mr. Carl Schmidt, the man who discovered the original Fuerte Avocado tree at Atlixco, and sent fruit and budwood from it to West India Gardens at Altadena, California thirty-seven years ago. We enjoyed several long conversations with Mr. Schmidt who related to us, for the benefit of my note book, many interesting details of the original find. We were assured that the original introduction of Fuerte to California consisted of one and only one shipment of budwood cut from the original seedling tree growing in the patio of Sen. Alejandro LeBlanc in Atlixco.

The Parent Fuerte Tree

For some years this famous tree, which has been so much photographed and written about, has been dead. Carl Crawford secured permission to saw it off near the ground for the purpose of ascertaining its age by counting the growth rings in the wood. This indicated the tree was 61 years old at the time of its death. The dead trunk was then set up on its stump and held in an upright position by props of lumber. At the time of our visit a garden patch of corn was growing around it and the old monument nearby, which was placed there by this Society in 1938. Recently the citizens of Atlixco have placed a beautiful tiled commemorative plaque in the wall of the house facing the street. We visited the young Fuerte tree brought from California by the Avocado Society earlier this year and planted with ceremonies in the Atlixco plaza. The tree was in good condition but had not made any growth. The basin around it had been lined with cement, leaving only about an inch to spare between trunk and cement. Senor Colin promised to use his influence to get the cement removed before harm is done.

Rancho Xahuentla

Through the courtesy of Mr. Carl Schmidt we were taken to the office of Senor H. Gilly in Puebla, who drove us out to his beautiful Rancho Xahuentla which lies about two miles from Atlixco. Senor Gilly raises very highly bred white beef cattle of the Charolais breed, and sells young bulls to cattle raisers around the country. He said he had no foot and mouth disease and showed little concern about it. Senor Gilly and his charming wife showed great hospitality in making the entire party his guests for several days. This proved most convenient as the Rodiles grove of some 5000 seedling avocado trees, described in previous articles lies adjoining this ranch.

The old hacienda consists of a square of adobe buildings with a very large enclosed

patio. Flowers bloomed in profusion, and at this high altitude colors were very brilliant. Many differently colored bougainvilleas clambered over the walls. From the roof of the old bell tower the view of the valley and surrounding mountains is most impressive. The great snow covered cone of Popocatepetl, in all its magnificence and grandeur, stands nearby; and from its melting snows flow streams to irrigate the valley.

The Fuerte Orchard at Xahuentla

In 1944 Sen. Gilly, recognizing that there were no budded avocados available for any Mexican market, decided to try to grow a budded Fuerte orchard at Xahuentla. After consulting Carl Crawford about it, and receiving encouragement, he sent a representative to Santa Ana to learn about nursery methods.



At the Airport in Mexico City.
Dr. J. Eliot Coit with Ing. Salvador Sanchez Colin, Director General of Agriculture.

Mr. Crawford took him to visit an avocado nursery, and later gave him a detailed program of directions in writing. Budwood of a heavy bearing strain of Fuerte was secured and brought to Xahuentla. Crawford accompanied Sen. Gilly to Queretaro where a supply of Mexican race seed, suitable for rootstocks was secured. Subsequently Crawford visited Xahuentla a number of times. He placed the first buds and gave directions and demonstrations to Julian, the man in charge of the nursery. Thus more than a thousand budded Fuerte trees were grown and planted in orchard form. Another lot of seeds were planted, and in 1946 Crawford, in company with Harlan Griswold and Carter Barrett, on their return from Guatemala, stopped at Xahuentla where Barrett gave additional suggestions and instructions. By this time Julian had become fairly proficient in budding avocados.

The writer was much interested in inspecting this nursery and orchard of young budded trees, and was happy to give additional recommendations with respect to certain difficulties which had developed. Julian had been replaced by Avelena as nurseryman, and instruction was given him. The present orchard comprises about 35 acres of level land with good soil situated near the hacienda. Budded Fuerte trees are planted about

34 feet apart and interspersed with two new varieties known as Rodiles No. 1 and No. 2. The oldest Fuerte trees are three years old, well grown for their age, and almost all of them had fruits ranging in numbers from one to fifteen per tree. The fruits are large and of very good appearance, practically free from anthracnose. Apparently this fruit will be mature in September and should hold for picking until late December. Rainfall at Xahuentla averages about 33 inches a year,

At this date (August 21st) Fuerte trees were in heavy bud with an occasional spray of open blossoms. The fruit was mature and marketed from September 15 to October 15. The foliage was infested with a yellow mite, similar to our brown mite except in color. Damage was negligible. The spectacular leaf gall, so common in Mexico, was observed, but appeared to be harmless. The wood borer, which has done so much damage to old trees in adjoining Rodiles orchard, was not observed to be attacking these vigorous young trees. However, Sen. Gilly has purchased a good new power spray rig for use in case it may be needed. We observed this spray rig at work in the Rodiles grove, where an application of benzene hexachloride was said to be effective in controlling the borer. If this first commercial avocado planting continues to receive good care, I see no reason why it may not prove a decided success.

How About Competition for California?

Several persons have expressed some concern with respect to the possibility that if this pioneer orchard proves profitable, the industry there may expand to a point to give California growers competition in United States markets. Both Wilson Popenoe and Carl Crawford have assured me that this is impossible, and I fully agree with them. In the first place the only avocados seen on any Mexican city market are nondescript seedlings of all shapes, sizes, colors, and degree of maturity. A good pack of uniform Fuerte fruit would be heartily welcomed and it would be many years before local demand could be satisfied. Travelers are wont to relate that in Latin American city markets they could buy large avocados at a few centavos each. This is true, and I have found the same thing when visiting city markets from Hermosillo to Guadalajara and on across the country to Vera Cruz. What impresses me is the fact that the avocados priced at a few centavos each were not worth any more than that. But within a few feet of a basket of these poor cheap avocados is very likely to be seen a stack of boxes of beautiful red apples from Hood River, Oregon, selling at from 10 to 15 cents each, American money. Also quantities of well packed grapes from Chile selling at up to 25 cents a bunch, American money. The Mexicans like fruit and will pay good prices for quality packs.

However, assuming that, after many years, the Mexican market could be over supplied with good Fuertes by local growers, importation to this country would face an embargo on account of the avocado seed weevil, and if that is overcome in time, importers would still face the 7 ½ cent per pound import duty.

Avocados of the Gulf Coast

After completing the exploratory work in the Rodiles orchard, Dr. Schroeder left for Los Angeles and the remaining members of the party divided. Drs. Popenoe, Williams, Dean

Ryerson, Carl Crawford and Sen. Colin went west from Mexico City as described in their article. Drs. Cintron and Cooper, Mr. Padgett and myself made the circuit from Puebla via Tehuecan, Las Flores, Orizaba, Cordoba, Vera Cruz and Jalapa, back to Puebla and Mexico City. We visited several coffee plantations, where very large trees of West Indian avocados and the Chenene avocado were used for shade. The latter is *Persea Schiediana*, the fruit of which is very large, flattened, with a very large seed and with so little flesh as to be without commercial value. It may possibly prove of some value at a rootstock. The three members of this group from Texas were especially interested in looking for seedling hybrids between West Indian and Guatemalan which might be of promise for testing in Rio Grande Valley. However, nothing of this kind was found of sufficient promise to warrant taking budwood. It would require much more time than was at our disposal to really survey the possibilities. Several interesting commercial plantings of papaya were visited and notes and photographs taken. In much of this country the Mexican lime grows wild everywhere, the fruit being used in Mexico in place of lemons. In fact, nowhere did we see a single lemon tree or any lemon fruits in the markets. From Orizaba around to Jalapa the mango flourishes, many very fine large trees are seen in every pasture and some in orchard form. They are practically all of the same type as the yellow fruited Manila mango. The season for mangoes was almost over, but plenty were found in the markets and at modest prices.

One evening at Cordoba Dr. Cintron announced that he would prepare a wonderful avocado dish known as "Guacamole." After having purchased the avocados, onions, peppers and other ingredients in a nearby market, and clearing off a cafe table, he proceeded to prepare a large bowl full. Those of us unaccustomed to such a rich and highly flavored dish, partook rather sparingly. Our abstemiousness did not worry Cintron who personally saw to it that none went to waste.

I was fortunate in having three companions all of whom spoke Spanish fluently. Two of them were experienced in tropical botany. Thus I was introduced to the Latin and common names of many interesting trees and flowering plants, which on previous visits had only caused me to wonder and admire.

Returning to Mexico City we were joined by the other party at the Hotel Cortez. In an upper room the last evening was spent in comparing notes and earnest discussion.