

Exploring for *Persea* in Orizaba, Mexico

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Different areas of the state of Veracruz in Mexico have been explored for avocados since 1935, when Dr. Wilson Popenoe (2) first collected in this state including the Orizaba region. The Orizaba region is in the state of Veracruz.

In 1951, Zentmyer (4) explored the entire region around Xalapa (also known as Jalapa) for native avocados and other species of *Persea*. In 1973, L. Jefferson Klure, also from the University of California, collected in the state of Veracruz, especially in the areas of Jalacingo and Misantla north of Xalapa (1).

In June 1980, a fourth trip to the region was organized by Zentmyer and Schieber. The area covered was from Fortin de las Flores to south of Xalapa, including also the area towards the slopes of volcano Orizaba. With a truck and with a native guide, we drove through a steep narrow road, passing diverse ecological zones nearly to the snow-capped Orizaba volcano (18,700 feet), the third highest mountain in North America, after Mount McKinley and Mount Logan.

The highlight of this trip was the finding of *Persea nubigena* on these slopes. In our explorations, this constitutes the most northerly report for this species in Latin America. We had previously reported it as far north as the state of Chiapas (3) in Mexico, and as far south as the mountains of Costa Rica.

These recent collections were started from Fortin de las Flores, going to the north towards Huatusco and Jalapa (see map). A second trip was made towards the volcano Orizaba; that is, from Coscomatepec to Tetelcingo on the slopes of the snow-capped volcano. During these two separate trips, several *P. drymifolia* collections were made and also several collections of *P. schiedeana* in markets. The two trips are followed chronologically, according to towns passed and collections made.

1. Fortin de las Flores north to Huatusco

Fortin de las Flores is warm, with an altitude of 1,000 meters above sea level. It is very tropical, with palm trees growing in the region. Here several West Indian trees were detected. In Monte Blanco, driving toward Huatusco, trees of *P. drymifolia* known as "Negritos" (little blacks), were seen, and also fruit was collected in the market. It is strange that this species grows here, since also coffee and sugarcane grow in the region. Also in Monte Blanco, several West Indian trees were seen. In Chocaman, the next town toward Coscomatepec, we saw shade trees for coffee, several trees of the Mexican race of avocado, with large leaves and anise scent.

E. Schieber selected Pedro as a guide here, a "campesino" or peasant living near Chocaman with his family. He told me that trees of Chinini (*P. schiedeana*—now known as Chinini as in Chiapas) grow sporadically here. We saw one tree during the collecting trip. The fruit of Chinini is often stolen here because of its price: 7 pesos (or about one third of a U.S. dollar).

Several trees of Negritos (not known here as Matuloj as in Guatemala) were found in the locality of Chocaman. It is of interest that in Mexico, they use the leaves of *P. drymifolia* to prepare barbecued meat, also for cooking beans and for "tamales," taking advantage of the anise scent. Pedro told us here that there is an "Aguacate de Volcan" or "Volcanero" on the slopes of Orizaba volcano; this was the reason to drive up toward the Orizaba volcano.

In Huatusco (a larger town) it was Sunday, and the market was visited where several collections were made that included Negritos, Chinenes and West Indian types. These collections were recorded as Mexico 111 to Mexico 118.

North of Huatusco towards Jalapa (also known as Xalapa), we saw many old trees of *P. schiedeana*. The region is very similar to Cartago, in Costa Rica. The trees had no fruit (in June).

Returning toward Coscomatepec, we detected several trees of Chinini [*P. schiedeana*]. The night was spent in Coscomatepec. Many Negritos, or "Chiquitos" as they call *P. drymifolia* here, were seen in this locality visited years ago also by Zentmyer. It is of interest again to find so many Negritos growing here, since it is a warmer region. Also two trees of Chinini were found in this area, in a coffee plantation.

2. Coscomatepec to Tetelcingo

In search of the "Aguacate volcanero" we started with Pedro from Coscomatepec up toward the volcano Orizaba. Pedro was convinced that there is a so called "Aguacate volcanero" up there, so we drove directly to the slopes of volcano Orizaba. In the region of the town San Nicolas, we collected Negritos from several trees.

After driving one hour, on the "cuesta" of Tetelcingo we found a tree of "Aguacate Cimarrón" as shepherds call it, high on the slopes of Mt. Orizaba; this was a tree of *Persea nubigena*. A shepherd, Señor David Gonzales Huerta, told us that it has "sencilla su carne," meaning it has very little flesh. He was born in 1917, and the tree was always there, he told us proudly.

The *P. nubigena* tree was growing between large rocks of limestone. The tree had no mature fruit, but leaves collected were typical of *P. nubigena* and the description of the fruit is the same as for *P. nubigena*. At the time of the visit to this region, the fruit was 1 cm in diameter, still very small. My guide and Don David continued in big discussion while I was photographing the tree and the leaves. They told each other that the leaves "no tratiende"; that means, had no odor at all. Then they pointed out a Negrito tree nearby and said the leaves "si traciende," meaning that they have anise scent.

In Teteltingo, "campesinos" or peasants informed us that many old trees of "Aguacate Cimarrón" were cut down in recent years, just to harvest the fruit. We thought, what a

way to harvest the fruit! Here Mexicans eat the fruit of *P. nubigena*.

The highlight of this collecting trip was to find a tree of *P. nubigena* as far north as the Orizaba region of Mexico. Previously we have only collected this species as far north in Middle America as in the state of Chiapas, near San Cristobal délas Casas (3), in southern Mexico.

We did not find any "Aguacate volcanero" on driving up the slopes of volcano Orizaba, as our guide Pedro had mentioned the first day, though possibly the *P. nubigena* there was the "Aguacate volcanero." Someday we hope to find this "Aguacate Silvestre" or wild avocado deep in the Mexican forests.



Figure 1. Small Mexican towns sometimes have avocado trees in their "patios." Young tree at left is a Negrito (*Persea drymifolia*).



Figure 2. Guide Pedro with branch of *Persea nubigena* from the slopes of the volcano Orizaba.



Figure 3. Guide Pedro standing between large tree of *Persea drymifolia* ("Negrito") on left, and *P. nubigena* on right.



Figure 4. We collected many "Negritos," as *Persea drymifolia* is called in the Orizaba region.



Area explored for *Persea*, June 1980

Literature Cited

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