

EXPLORING FOR PERSEA ON VOLCANO QUETZALTEPEQUE, GUATEMALA

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On an avocado rootstock collecting trip in February 1981, we drove with the truck from Guatemala city towards Esquipulas, a shrine center near the Honduras-El Salvador border. The trip was on asphalt until reaching Jutiapa in eastern Guatemala, then we turned off northeast on a poor, abandoned gravel road toward Ipala. The region was not really typical of Guatemala, being very dry like a desert, with cacti and strange shrubs growing on the hills. This is a very desolate region and very sparsely populated, hi contrast to the green western highlands of Guatemala.

With Martin, our guide, we stopped in Agua Blanca, as the sun was going down in the deserted hills, and camped at the edge of the town, which is like a town from a western film. It was dry and hot; and while Martin was making dinner, curious little children were surrounding us. After dinner we went to town, where there were two lively bars making noise in the otherwise calm night. Returning to the truck, we put the fire out and went to sleep. Suddenly, around 11:00 p.m., two gun shots woke me (Schieber); and I thought that "guerilleros" were around! Martin woke, and said he thought there were some firecrackers; however, I was suspicious. Then, two drunk men passed close to our truck; and in the moonlight with their guns they disappeared along the gravel road out of town.

Next morning, we started toward Ipala and Quetzaltepeque. Dr. Lucille Kopp, in her monograph of the genus *Persea* (1), indicates that *Persea schiedeana* had been collected on Ipala volcano. We saw no trees on the slopes of this volcano, primarily because trees had been cut for wood. In the evening, we reached the town of Quetzaltepeque at the base of the volcano. Here we camped close to a river for the second night.



Fig. 1. Fruit of "Chucte" with one (far left) fruit of "Matuloj," collected at the Quetzaltepeque market.

Quetzaltepeque market

Very early in the morning, we saw many fruit of Chucte [*Persea schiedeana*] in the Quetzaltepec market (Fig. 1). This was surprising, since Chucte is normally in season in February, fruit being mature in August in other regions of Guatemala. We were surprised about the quantity and diversity of Chuctes as well as at the price: 20-25 cents (U.S.). This is a very high price for any avocado in Guatemala.

A collection of "Matuloj" [*Persea drymifolia*] was also found here at the market. This is the farthest east and south that we have collected this species in Central America. After visiting the local market, we started on a gravel road toward the volcano Quetzaltepeque.

Slopes of volcano Quetzaltepeque

A large population of "Aguacate de Mico," known here as "aguacate conchudo," or hard-shell avocado, was found on the slopes of the volcano.

Trees were seen along the abandoned road up to the summit of the volcano. About 20 minutes up the road from the town of Quetzaltepeque, the first trees of "Chuctes" (*P. schiedeana*) were detected. One in particular, Gu-1039 (Fig. 2), was of special interest, as it was one of the largest trees of this species we have encountered. This tree is located near a sawmill, half way to the crater of the volcano.

Crater of volcano

At the area close to the summit (Fig. 3) and near the continental divide of the Sierra Madre, several young trees of "Aguacate de Mico" were seen (Fig. 4). Near the crater, a very large tree of Chucte was detected and photographed (Fig. 5); this was recorded as Gu-1059. It is a vigorous tree, growing well in the cool climate near the crater of the

volcano. Some young trees of *P. donnell-smithii* were detected, also, near the summit of the volcano. Kopp (1) reports earlier collections of *P. donnell-smithii* and also of *P. standleyi* on the slopes of the volcano Quetzaltepeque. We could not detect *P. standleyi* even though we searched for it extensively after a native guide described a wild avocado with very small fruit. Many trees have been cut from the slopes of the volcano in the past 10 or 20 years.

While we were in Quetzaltepeque, some natives informed us that an "aguacate" with fruits about 3 centimeters in diameter grows on the slopes of the volcano. However, we were not able to locate this avocado.



Fig. 2. Very old "Chucte" tree (*Persea schiedeana*) (Gu-1039) at left of the road to the crater of the volcano Quetzaltepeque



Fig. 3. Near summit of volcano Quetzaltepeque. Observe the original cloud forest above road.



Fig. 4. "Aguacate de Mico," a young tree growing near the crater of volcano Quetzaltepeque.

Another native told us that "Aguacate Dulce," or sweet avocado, grows in the Quetzaltepeque region. Natives eat both skin and pulp of this *Aguacate Dulce*, as is also done in Mexico. According to their description, it is *Persea drymifolia*, a collection we also found in the market. This was of great interest since this is the most southern report of *P. drymifolia* for middle-America.



Fig. 5. Vigorous *Persea schiedeana* tree (Gu-1059) growing in the cloud forest of the volcano Quetzaltepeque.

Literature Cited:

1. Kopp, Lucille. 1966. A taxonomic revision of the genus *Persea* in the Western Hemisphere. (*Persea-Lauraceae*). *Memoirs of New York Botanical Garden* 14, 117 pages.

Dedication

The authors dedicate this article to our Mayan guide, Martin Cumes S., of Lake Atitlan, who died September 10, 1981, after helping us for seven years in our *Persea* explorations.



Martin Cumes S.