## Collecting Persea schiedeana in the Baja and Alta Verapáz, Guatemala

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On the 350 kilometer journey from Lake Atitlán to the Alta Verapáz, the road passes through several ecological zones. From the "altiplano," or highland, with its pine and oak forests and cold climate crops including wheat, it drops from 8,000 to 5,000 feet to reach the valley of Guatemala City. After leaving the Guatemalan capital, the road becomes the Atlantic highway heading northeast. For two hours it crosses desert before reaching the locality of El Rancho. Here it branches to the north and climbs to the Sierra of Santa Elena. The Sierra with its limestone and pine trees offers a magnificent view to the northeast towards Puerto Barrios in the Atlantic. Santa Elena has a checkpoint where vehicles are fumigated against the Med-fly and sprayed with copper to avoid spread of coffee rust disease. Beyond Santa Elena, it reaches the locality of Santa Barbara. It has the charm of a western mining town and is situated in the transition zone between cold climate pine and the warmer rainforest.


Fig. 1. Fred Guillemet with a Persea schiedeana selection G 755 in the greenhouse at UC Riverside. This collection was made in the Alta Verapáz.


Fig. 2. The rainforest near Purulha, Baja Verapáz.

## Purulhá Region

The next morning we head to Purulhá in the Baja Verapáz. Twenty-four years ago, G.A. Zentmyer made the first collections of $P$. schiedeana C. G. Nees (Fig. 1) in the Purulhá region (1, 2). This species is known in the Baja Verapáz and Alta Verapáz as coyou, not chucte as in the Chiquimula and Jalapa provinces of Guatemala. Several types of $P$. schiedeana are found in the Purulhá region. These trees are intermingled with Persea donnell-smithii, whose fruit constitutes an important source of food for the Quetzal bird. Purulhá is surrounded by cone-shaped mountains and a beautiful rainforest (Fig. 2).

## Tactic Region

After the visit to Purulhá, we follow a small river through a valley to reach Tactic. Tactic is the main center for coyou in the Alta Verapáz. The market of Tactic offered us the best opportunity to collect diverse types of fruit of the coyou (Figs. 3 and 4). This year, during four trips to the region, we made some 34 different collections. The trees are scattered around Tactic in inaccessible mountains. In the Tactic region are many Mayans (Quekchi) with small farms, and the women bring in the coyou fruit from long distances. All shapes of fruit are encountered here, from pear-shaped, short- and longnecked to ovoid. All sizes are seen. Most of the fruit are yellow-green and later become dark brown when ripe. We located one large coyou tree near Tactic, at the La Esmeralda farm. It is recorded as G 874 and we made collections of both fruit and budwood.


Fig. 3. The Tactic market in Alta Verapáz.


Fig. 4. A Tactic woman selling coyou at the market.

## Parachoch Area

This area is located in a small valley following a secondary river that has its confluence with the important river Palochic crossing northern Guatemala towards Lake Izapa in northeastern Guatemala. Several coyou trees were detected and their fruit collected.

## Santa Cruz Region

Before reaching Cobán, the capital of Alta Verapáz, we come to the town of Santa Cruz.

We have collected P . schiedeana in the market for many years. The market is very distinctive in that only women are present. They look at us with strange eyes when we wander through the market. The women sit so still and talk so softly that is almost like being in a church. In Guatemala, the markets are usually noisy; but in towns like Santa Cruz and San Juan Chamelco which we visit later, it is peaceful. Since the women talk only Aukshi, our Mayan guide, Daniel, has difficulty communicating since he speaks only Cakchiquel, besides Spanish. The people of Alta Verapáz speak very little Spanish. It is difficult to buy fruit in this market, but we manage by using signs.

## Cobán Area

Cobán is the capital of the province of Alta Verapáz and has the largest market in the province. Coyou fruit comes from far away places as well as from trees in nearby patios in the city. We have made several collections this year. Here coyou and quillou are the names used for the trees and fruit of $\mathbf{P}$. schiedeana.

## San Pedro Carcha

Located north of Cobán, San Pedro Carcha is the second largest city of the Alta Verapáz region. It has a European flavor even though the main population is Mayan (Quekchi). In this region, we located an interesting coyou (G 1151) tree that bears fruit during three months of the year (Fig. 5).


Fig. 5. On the road to San Pedro Carcha", Daniel, our Mayan guide, is holding fruit of a coyou tree recorded as G 1151.

## San Juan Chamelco

Located to the east of San Pedro Carcha, this little Quekchi town has a local market.

Several years ago with Martin Grande we made collections of G 755, the coyou selection that is currently of great interest to researchers at the University of California at Riverside because of its resistance to root rot (Fig. 1). When this important collection was made the fruit was ripe and its color was brown, not green.

I remember how we camped out in the plaza in front of the beautiful old colonial church and in the far distance in the middle of the night a marimba was playing...

## Finale

While returning on the Panamerican highway during our last trip to Baja and Alta Verapaz, an army officer stopped us at a checkpoint to see our identification papers. He discovered our three bags with approximately 200 pounds of coyou fruit that we had collected a day before in Tactic and Cobán. When I explained the purpose of these coyou collections, he answered kindly "these are not coyou, these are chucte." Daniel, my Mayan guide, and I were speechless! I asked him if he was born in eastern Guatemala and he quickly replied "yes, from Chiquimula!"

## Literature Cited

Schieber, E. and G.A. Zentmyer. 1977. Collecting Persea schiedeana in Guatemala. California Avocado Society Yearbook 61. Pages 91-94.
Schieber, E. and G.A. Zentmyer. 1979. Exploring for Persea in Northern Guatemala. California Avocado Society Yearbook 63. Pages 41-45.

