Parajubaea cocoides, a New Record for Peru

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1. Crowns of *Parajubaea cocoides*.

Parajubaea cocoides **(Fig. 1) is recorded for the first time in the wild, in Peru.**

The Cordillera of the Andes in Peru, rising from the Pacific coast in the west and dipping down into the Amazon River basin in the east, ranges from 1000 to 3500 meters above sea level. The Cordillera carries remnants of very humid rainforest frequently covered in clouds. This forest is loosely termed by villagers, high forest (*selva alta*), *rupa rupa*, *yungas* or "eyebrow

forest" (*ceja de selva*). This way of characterizing the forest is more common on the eastern flank that slopes down toward the Amazon River basin.

However, on the western slope that fronts the Pacific Ocean, mainly along Peru's northern coast (in the departments of Piura, Lambayeque and La Libertad) one can still find patches of tropical cloud forest that formerly extended from Ecuador almost to the twelfth parallel in the south, in what is now the department of Lima, along Peru's central coast. These ecosystems of cloud forest are characterized by a very high biodiversity and intense rainfall, which is accentuated along the Pacific Ocean when the phenomenon of "El Niño" occurs.

Within the great biodiversity of these ecosystems, it is quite common to find palms at different altitudes in these *yungas* or cloud forests, particularly *Ceroxylon* accompanied by *Syagrus*, *Wettinia* and *Iriartea*. These palm

2. *Parajubaea cocoides* in the village of Tabaconas, Province of San Ignacio (Cajamarca), Peru.

3. One of the comon, but unidentified species of *Bactris* in the region of Tabaconas.

genera were recorded for Peru three centuries ago, when the first expeditions of European naturalists began to cross these lands conducting inventories of the local flora and fauna, and describing geographic features and towns.

It was odd that one particular genus of high-altitude Andean palms, *Parajubaea*, had been recorded only in Ecuador, Colombia and Bolivia did not appear to occur in Peru (Pintaud et al. 2008). This is more surprising if we realize that the northern Andes within Peruvian territory and the southern Andes within Ecuadorian territory form a great region with many common ecosystems. In this northern region of Peru, a wild population of *Parajubaea cocoides*, also called Quito palms, was recently discovered. Until now this species had been recorded only as being cultivated in Ecuador (Quito) and Colombia (Pasto) and was not known with certainty from the wild. The newly discovered population in Peru may be the only wild population existing in South America.

The discovery was made when Nicole Bernex, of the Center of Research and Applied Geography at the Catholic University of Peru, and Fernando Roca, SJ, from the Institute of

Environmental Sciences at the same university (IDEA-PUCP), went to the Tabaconas River valley in order to give a series of workshops on the environment to the area's peasants at the invitation of the bishop of Jaén, Santiago García de la Rasilla, SJ.

The palms identified as *Parajubaea cocoides* are found in the Peruvian Andean region, in the district of Tabaconas (1900 m above sea level), located in the province of San Ignacio, in the northern part of the department of Cajamarca. In spite of great deforestation this zone has excellent potential for sustainable development due to the variety of ecosystems and its great biodiversity. The National Sanctuary of Tabaconas-Namballe is located in this region. The small town of Tabaconas, the district capital, was built between these palms, and there are still some palms about 3–5 km away from the center of the town (Fig. 2 & Back Cover), in the outlying neighborhoods. According to the settlers, "to build the town we destroyed the forest but we left many of the palms…" In a meeting with the Dr. Andrew Henderson, a specialist in Latin American palms at the New York Botanical Garden, we were informed that these palms were probably a hundred years old.

The inhabitants of Tabaconas do not exceed 1000. They have begun to develop crafts using fruits from *Parajubaea cocoides*. This use of the fruits will endanger the natural regeneration of this rare palm. There are no major traditional uses attributed to these palms, unlike *Ceroxylon*, the wood of which is commonly used, or *Bactris* (very common in the zone), the fruit of which is much in demand and commercialized by companies that have sprung up along the northern Peruvian Pacific coast. There are at least two species of *Bactris* (Fig. 3) with abundant populations in the valley, but they remain unidentified, although the villagers claim that they can classify up to four species. It is surprising to learn that they only consume the fruit but not the *palmito* (the heart-of-palm).

The Tabaconas-Namballe National Sanctuary (in the departments of Piura and Cajamarca) is a protected natural zone in the department of Cajamarca, in the province of San Ignacio, in northern Peru. It consists principally of the Tabaconas River basin and has at least four different ecosystems: Amazonian tropical dry forest, humid forest (*bosque premontano*), Amazonian cloud forest and paramo. The altitudes range from 1000 to 3600 meters about sea level. The Tabaconas-Namballe National Sanctuary is the habitat of the spectacled or Andean bear (*Tremarctos ornatus*) and of the great tapir of Latin America, *tapir pinchaque* or great beast (*Tapirus pinchaque*). We also found many unusual birds such as the Andean Cock of the Rocks (*Rupicola peruviana*), the national bird of Peru, and different trogon species, relatives of the Central American quetzal. Also, three years ago, in the Ocol forest, in the department of Amazonas, at least two new *Ceroxylon* species were discovered. This new record of *Parajubaea cocoides* represents an important addition to the palms of Peru, a country where we still "have many things to discover in nature."

Literature Cited

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