

# *Bactris major* along the Pacific Coast of Mexico

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1. Mature fruits of  
*Bactris major* var.  
*major*.

There are some plants that one vividly remembers from childhood, and although seemingly ordinary at the time, these can later turn out to be more interesting and noteworthy than initially considered. Every year for as long as I can remember, I have visited my grandparents' ranch on the coast of Michoacán, Mexico. I do not recall exactly when I first encountered *los bordones*, *Bactris major* Jacquin var. *major*, but it was probably during those first years of infancy before one's memories become fixed. However, for as long as I do remember, I have loved these exotic fruits (Fig. 1). This may be in part due to their general scarcity and that it was always a special joy to be able to eat these delicacies.

I remember fondly setting out to collect the fruits of *el bordón* and someone having fortunately warned me of the wasps that often form dense colonies in these palms (Fig. 2). Over time, my interest in plants has expanded. I now see things differently than as a child and realize the importance of some things that I had long taken for granted, including *los bordones*. Therefore, it is a pleasure to share this note on the distribution of *Bactris major* var. *major* – *el bordón*.

The neotropical genus *Bactris* includes 73 species and 21 varieties (Henderson 2000). The majority of these are found in Central and South America, but a few are present in the Antilles; two occur in Mexico. The purpose of this note is to report for the first time the presence of *B. major* var. *major* in two states along the Pacific coast of Mexico: Guerrero and Michoacán. As a result, the known distribution of the genus is expanded by several hundred kilometers.

In his monograph of *Bactris* in Flora Neotropica, Henderson (2000) emphasized five taxonomic complexes that required more study. These five taxonomic groups are widely distributed, morphologically variable, and in general poorly represented in herbaria. *Bactris major* constitutes one of these complexes. Henderson (2000) distinguished three varieties within *B. major*, but he mentioned that there are characters that are not always clear, and as in the other taxonomic complexes, more

collections are needed in order to understand their variation. *Bactris major* var. *infesta* (Martius) Drude is present in Bolivia, Brazil, Ecuador, Guyana, Peru, Suriname and the Amazon region of Venezuela. Variety *socialis* Drude is endemic to Bolivia. In contrast, the typical variety is distributed in Mexico, Central America, Colombia, the Guyanas, Trinidad and Tobago, Venezuela and Brazil. The only other taxon of *Bactris* present in Mexico is *B. mexicana* Martius var. *mexicana*, a species distributed in México (Campeche, Chiapas, Tabasco, Oaxaca, Quintana Roo and Veracruz) and Central America.

The two Mexican species of *Bactris* are readily distinguished if mature fruits are present. In *B. mexicana* they are relatively small (less than 2 cm) and orange, but in *B. major* they are relatively large (more than 2 cm) and blackish. Sterile plants can be determined by the number and position of the pinnae. *Bactris major* possesses leaves with 24–46 pinnae that are regularly positioned in a single plane, whereas *B. mexicana* presents leaves with 8–29 pinnae, either arranged in groups in various planes or concentrated at intervals in a single plane.

In Michoacán *Bactris major* var. *major* is known locally as *bordón*. This name, translated into English as “walking stick,” refers to the stems, which are used precisely in this manner. Curiously, this meaning coincides with that of the generic epithet, and is derived from the

2. Wasp nest along a petiole of a *bordón* leaf.





3. Colonial habit of *Bactris major* var. *major* in Michoacán, Mexico.

Greek word "bactron," cane or staff. The stems of *bordón* are straight, light and durable, and they have various uses. In Veracruz baskets are made from them, and the fruits are consumed by domesticated animals. In coastal Guerrero and Michoacán the stems have been used in the construction of houses, as well as curtain rods; however, their use is increasingly less common. It is worth noting here that the stems of *B. mexicana* var. *mexicana* are also used in for making brooms, and according to Quero (1994) it is possible that this species, in addition to others in the genus, could serve as a substitute for rattan.

In Mexico *Bactris major* var. *major* has been reported from the states of Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Veracruz and Yucatán (Henderson 2000, Quero 1992, 1994). It is here reported from Guerrero and Michoacán. In the last two states *B. major* var. *major* occurs in relatively easily accessible sites, but plants are generally restricted to small patches within heavily grazed or agricultural areas. This colonial palm (Fig. 3) grows sporadically in mangroves and moist soils near sea level. Moreover, it also prospers in disturbed areas and savanna vegetation, where it is mostly associated with bodies of water.

For these reasons it is considered vulnerable. Although *Bactris major* is recognized as having special protection under the Norma Oficial Mexicana (as its synonym *Bactris balanoidea* in NOM-059-ECOL-2001), it receives no particular management.

If *el bordón* does not have a marked cultural or economic relevance at present, it is quite possible that it will in the future. It certainly has an important ecological role within its ecosystem. There are studies on the floral biology of *Bactris* (Essig 1971, Listabarth 1996), but these only included a few species. Many kinds of insects (*Trigona* bees, Curculionidae weevils and Nitidulidae beetles) are attracted to the ephemeral flowers of *Bactris*, and the life-cycles of the beetles depend on this plant, because they feed, reproduce and lay their eggs on its inflorescences, in addition to serving as pollinators (Listabarth 1996). There is still much to learn about these palms, and it is the duty of both professional and amateur botanists to explore and conserve such resources.

MATERIAL EXAMINED. México. Campeche: km 30 carr. Escárcega a Candelaria (Tres Marías), *Chavelas, Hernández & Quero ES-330* (MEXU); 8 km al E de Candelaria, a orilla del Río Candelaria, *Lot & Novelo 868* (MEXU). Chiapas: 19 mi E of Zapata on the Zapata-Balacán road, *G. & J. Davidse 9433* (MO); cerca ruinas, al Río Chiniquija, *Miranda 8471/25* (MEXU). Guerrero: Municipio de la Unión, 1 km al este de Troncones, sobre la brecha a Buenavista; 17°46'30"N, 101°42'45"W, *Ramírez-Amezcuca & Steinmann 1264* (IEB). Michoacán: Municipio de Lázaro Cárdenas, estero al norte del rancho El Malacate, sobre la brecha El Malacate-Solera de Agua; 18°00'35"N, 102°26'20.1"W, *Ramírez-Amezcuca & Steinmann 1612* (IEB). Quintana Roo: 1 km al S de La Unión, *Escalante 807* (MEXU); La Unión a orillas del Río Hondo, *Quero 2532* (MEXU). Tabasco: Tucta, a 2 km del Inst. Cult. Nacajuca, *Calzada 4919* (MEXU); desviación a Jonutla, carretera Vista Hermosa-Escarcega, a 200 m de

la desviación, 17°42.869'N 92°07.752'W, *Guadarrama & Ortiz 5197* (MEXU); Reforma Blanca, *Matuda 3192* (MEXU); Mpio. Centla, Arroyo Limoncillo, 12 km al noreste de la estación biológica, cerca de Frontera, 18°29'8.56"N 92°38'25.14"W, *Novelo & Ramos 2111* (MO); Mpio. Centla, Laguna El Cometa y canal de acceso proveniente del Río San Pedro, cerca del límite NE de la Reserva, 18°28'12.18"N 92°26'59.94"W, *Novelo & Ramos 2340* (MEXU, MO); Mpio. Centla, Rancho La Guadalupe, junto al río Usumacinta, cerca de Tres Brazos, a aproximadamente 10 km al sureste de Frontera, 18°21'57.12"N 92°38'27.12"W, *Novelo & Ramos 2687* (MO). Veracruz: Las Choapas (Zona petrolera: Los Soldados), *Rodríguez s.n.* (MEXU).

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