

Desmoncus as a Useful Palm in the Western Amazon Basin

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Unlike the rattans of the Old World, the New World has few climbing palms. Most species of *Desmoncus* are climbers, and also one species of *Chamaedorea*. Many names have been proposed in *Desmoncus* but only about 7 species exist, most of them occurring in the Amazon region. However, the total range of the genus is from southern Mexico through Central America and northern South America as far south as Paraguay. The genus also occurs in Trinidad and just reaches the Lesser Antilles.

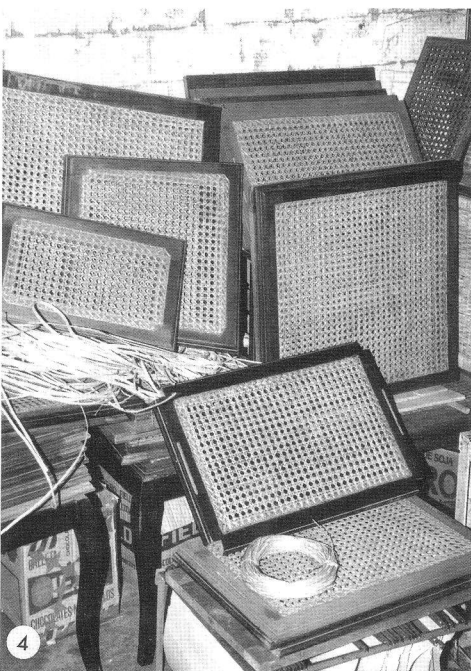
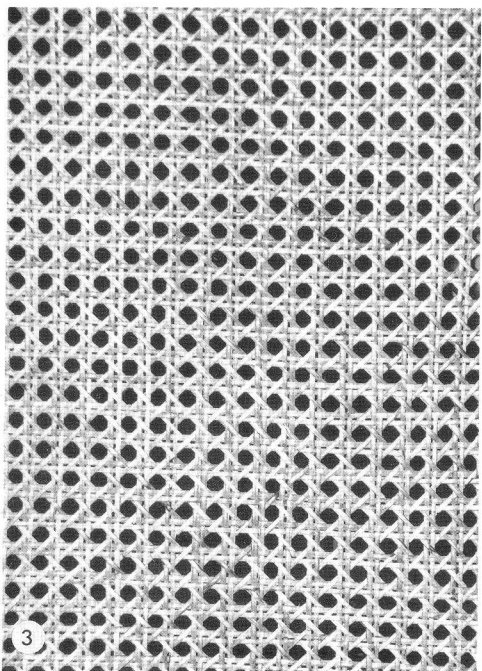
Desmoncus is poorly known but very interesting, both morphologically and ecologically. Different species can be either spiny or non-spiny and have climbing or non-climbing stems with distichously or spirally arranged leaves. The rachis can be developed or not developed into a cirrus, and the pinnae can have filiform or acute apices. The spicate or branched inflorescences can be either solitary or multiple at each node. Ecologically the genus is interesting because of its unusual reproductive behavior. Unlike other New World palms, several nodes will flower and fruit simultaneously. The species prefer light gaps and other open areas in the forest, but habitat can range from forest to river margins, disturbed areas or savannas, to flooded areas near the sea.

Most interesting is the climbing habit itself, and adaptations associated with this habit are responsible for the ethnobotanical importance of the genus. Although the stems of *Desmoncus* are flexible, they have great tensile strength. The genus is apparently widely used for weaving material, but

there are few reports in the literature (Bailick and Beck 1990). The most detailed account is by Schultes (1940), who reported on basket making with *Desmoncus* by Chinantec Indians in Mexico. Schultes also reviewed the scant literature. Since then there have been a few additional reports (e.g., Gentry 1986). Gentry (1988) reported on the usefulness of *D. cirrhifera* in the Chocó region of Colombia, where the stems are used to make nets and shrimp traps. Gentry and Blaney (1990) briefly mentioned a cottage industry using *Desmoncus* stems in Iquitos, Peru. Here we report further on this small industry.

Near Iquitos at least two species are used. We first encountered one of these, still undescribed, in western Brazil, on the upper Rio Juruá in Acre. It is a massive palm (Fig. 1), reaching over 20 m into the canopy. One of its most distinctive features is the fibrous and spiny ocrea. Another interesting feature is the apparently solitary stem. It is locally common in the western Amazon region in Ecuador, Peru, and western Brazil, but is most often seen as free-standing juveniles in the forest understory. Adult plants reach 20 m or more into the canopy and are difficult to see and even more difficult to collect.

A second, and more common species, *Desmoncus polyacanthos*, also occurs near Iquitos. Here both species are called "vara casha." Stems are collected by country people, on demand from the manufacturer in the city. The plant is cut at ground level and the sheathing leaf bases are stripped away. The stem is then rolled up (Fig. 2) and taken to the city. Stems are used either



1. *Desmoncus* in the western Amazon basin in Brazil. 2. The stem stripped of its leaf bases and coiled up. 3. Detail of woven stems. 4. Piano stool seats made from woven stems.

in private houses, where cottage industries manufacture furniture or baskets, or in small factories or workshops where artisans make furniture.

Processing is a skillful task, that needs to be completed by two days after collection. First the stems are cut into 6 m long sections. Then the stem is cut lengthways in half and the soft central pith is removed. Then the halves are further cut into two or four strips, depending on the thickness of the stem. The strips are refined by drawing them over a sharp blade. The final strips are about 2 mm thick. For 1 kg of prepared strips, 10 kg of raw stems are needed. The strips are extremely strong and impossible to break by pulling; however, they are relatively easily broken by bending.

The most common use in Iquitos for the *Desmoncus* strips is for weaving (Fig. 3), using a wooden frame, into chair backs and seats, headboards of beds, cabinet doors, and especially piano stools (Fig. 4). These items are sold locally, but demand is generally low. There is, however, a demand from tourists for these attractive woven articles.

We believe these palms and their uses are worthy of consideration as a sustain-

able resource of the kind used in extractive reserves in the western Amazon basin.

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