

Commercial Palm Products of Brazil

DENNIS JOHNSON

University of Houston, Houston, Texas 77004

It comes as no surprise that Brazil, which ranks as the largest tropical country in the world, has the greatest number of native palm species (Corner 1966: 230). The country also holds the distinction of having the largest number of commercial palm products, defined as those for which statistics are published on a regular basis. Some of the products have been discussed in previous studies. Moses (1962) in a general paper on Brazilian palms provides information on most commercial products; Kitzke and Johnson (1975) and Hodge (1975) mention some Brazilian products as part of their world surveys of commercial palm products.

The purpose of this paper is to examine the current status of commercial palm products derived from native Brazilian species. This focus excludes only the coconut, which is grown widely in Brazil and especially along the east coast. Although the oil palm (*Elaeis guineensis*), known in Brazil as dendê, has been grown for many years in the state of Bahia, and in recent years has been established as a new plantation crop in the Amazon, production levels apparently do not justify inclusion in national statistics.

Table 1 lists 14 palm products derived from 13 different species. Production is highly concentrated in individual states, with the Northeast and Amazon regions standing out. The degree of concentrated production ranges from 60 to 100 percent and is a reflection of the density of native stands of the individual species in those states. The products are separated into commodity groups to facilitate discussion.

Oil seed represents the largest and most economically important group, with babaçu being predominant. Babaçu production comes largely from the extensive palm forest which covers much of Maranhão and the neighboring state of Piauí. These two states, in reverse order, also account for most of the tucum oil seed production. Ouricuri, or licuri as it is also known, oil seed comes entirely from Bahia, southernmost state of the Northeast region. Macaúba palms have a broad distribution in Brazil, but commercial exploitation is concentrated in Minas Gerais in the Southeast region of the country. A very small amount of oil seed comes from the murumuru palm of Pará state in the lower Amazon.

The seed oil from all of these palms is edible and is used domestically for cooking oil, shortening, and soapmaking. All production comes from the exploitation of native stands. Fresh tucum, macaúba, and murumuru fruits are edible but relatively unimportant as food because they contain only a small amount of fruit pulp. The Food and Agricultural Organization of the United Nations publishes each year a production yearbook which includes statistics on palm seeds and oil. The figures reported for Brazil appear to represent the combined production of this group of palms. The potential of these and a number of other promising Amazonian oil palms is discussed in a recent paper by Balick (1979).

Fiber ranks as the second most important group of palm products, led by piçava which is derived from *Attalea funifera* in Bahia and *Leopoldinia*

Table 1. Brazil: Commercial palm products—1977

Portuguese and scientific names	Production in metric tons	Leading production state and percent of national total	
OIL SEED			
Babaçu <i>Orbignyia speciosa</i> Barb. Rodr.	236,755	Maranhão	76
Tucum <i>Astrocaryum tucuma</i> Mart. <i>A. ayri</i> Mart.	8,556	Piauí	77
Ouricuri or Licuri <i>Syagrus coronata</i> Becc.	7,364	Bahia	100
Macaúba <i>Acrocomia</i> sp. (<i>A. sclerocarpa</i> Mart.)	2,062	Minas Gerais	94
Murumuru <i>Astrocaryum murumuru</i> Mart.	29	Pará	86
FIBER			
Piaçava <i>Attalea funifera</i> Mart. <i>Leopoldinia piassaba</i> Wallace	50,290	Bahia	97
Crina Vegetal or Butia <i>Butia capitata</i> Becc.	1,617	Santa Catarina	60
Carnaúba <i>Copernicia prunifera</i> Mill (H. E. Moore)	1,557	Ceará	90
Buriti <i>Mauritia flexuosa</i> L.	961	Maranhão	97
Tucum <i>Astrocaryum tucuma</i> <i>A. ayri</i>	101	Ceará	68
WAX			
Carnaúba <i>Copernicia prunifera</i>	19,074	Ceará	64
Ouricuri or Licuri <i>Syagrus coronata</i>	112	Bahia	100
FOOD			
Açaí <i>Euterpe oleracea</i> Mart.	53,623	Pará	93
Açaí, Juçara <i>Euterpe oleracea</i> <i>E. edulis</i> Mart.	35,123	Pará	85

Source: *Anuário Estatístico do Brasil—1979*.

piassaba in Pará. Both palms yield a leaf sheath fiber used to make stiff brushes and brooms. Crina vegetal, also known as butia, literally means "vegetable horsehair." It is a leaf fiber

used as a filling material in mattresses and upholstered furniture. *Butia capitata* which provides this product is a popular subtropical ornamental palm in the United States and bears a tasty

orange fruit. Production originates from Santa Catarina and other southern states of Brazil.

Carnaúba fiber is a new commercial product in the sense that its production statistics were first reported in 1974. This reflects the increasing use of the leaf fiber to make hats, bags, mats, etc. for the domestic tourist trade in Ceará. Buriti is another palm important in Maranhão. The leaf and leaf stalk fibers have the widest application of any of this group. Buriti fruits are also used to make a soft drink and a sweet preserve. Tucum leaf fiber is used, especially in Ceará, to make fishing nets and hammocks. The leaves of all of these palms are also used as thatching material. Production of leaf fiber comes entirely from the wild stands of palms.

Two vegetable waxes are derived from palms and the carnaúba is probably familiar because of its use in making floor and car polishes. The cuticle wax from the leaf of the carnaúba palm is industrialized in Ceará and neighboring states of the drier portions of the Northeast. The carnaúba palm is cultivated to a limited degree for wax, but the majority of the production comes from natural stands which get some management. Ouricuri wax is very similar chemically to carnaúba wax and can serve as a substitute in most products, but production is very small and is a secondary product to the oil seed of the palm.

Edible palm fruits number in the dozens in Brazil, but only the açai is included in national statistics. Açai palms occur in great numbers in the

lower Amazon and the ripe fruits are gathered and used to make a popular soft drink and to flavor ice cream. Large numbers of açai palms are felled to extract the palm heart, palmito, which supports a sizable industry in Pará. The juçara palm (*Euterpe edulis*) grows in the Southeast and South regions of Brazil where it provided the majority of Brazilian palmito production before the native stands were depleted. Unfortunately, the same over-exploitation is occurring in the Amazon.

Brazil possesses a valuable renewable resource in the native palm stands which provide commercial products. All of the palms discussed here have potential for systematic management and plantation cultivation, especially those which currently yield two commercial products. The fact that some degree of industrialization already exists is an added advantage and incentive for Brazil to lead the way toward maintaining and expanding the diversity of palm products.

LITERATURE CITED

- BALICK, MICHAEL J. 1979. Amazonian oil palms of promise: a survey. *Economic Botany* 33(1): 11-28.
- CORNER, E. J. H. 1966. *The natural history of palms*. University of California Press, Berkeley and Los Angeles.
- HODGE, W. H. 1975. Oil-producing palms of the world—a review. *Principes* 19(4): 119-136.
- KITZKE, EUGENE D. AND DENNIS JOHNSON. 1975. Commercial palm products other than oils. *Principes* 19(1): 3-26.
- MOSES, THOMAS. 1962. Palms of Brazil. *Principes* 6(1): 26-37.