

Attalea funifera

LC

Taxonomic Authority: Mart.

Global Assessment Regional Assessment

Region: Global

Endemic to region

Synonyms

Attalea acaulis Burret, Repert. Spec. Nov. Regni Veg. 32: 10
Lithocarpus coccifor O.Targ.Tozz. ex Steud., Nomencl. Bot., ed.
Sarinia funifera (Mart.) O.F.Cook, Natl. Hort. Mag. 21: 78 (19)

Common Names

PIAÇAVA Portuguese

Upper Level Taxonomy

Kingdom: PLANTAE

Phylum: TRACHEOPHYTA

Class: LILIOPSIDA

Order: ARECALES

Family: PALMAE

Lower Level Taxonomy

Rank:

Infra-rank name:

Plant Hybrid

Subpopulation:

Authority:

General Information

Distribution

Attalea funifera, more commonly known as the Piassava palm is endemic to the Atlantic coast of Brazil, predominantly in Bahia, but also occurring north to Sergipe and Alagoas.

Range Size

Area of Occupancy:

Extent of Occurrence: 51056

Map Status:

Elevation

Upper limit: 50

Lower limit: 0

Depth

Upper limit:

Lower limit:

Depth Zones

Shallow photic Bathyl Hadal

Photic Abyssal

Biogeographic Realm

Afrotropical

Antarctic

Australasian

Neotropical

Oceanian

Palearctic

Indomalayan

Nearctic

Population

Piassava appears to be separated into three coastal subpopulations: one is located in Ilhéus and the other two subpopulations are located further northwards in Estância and Alagoas. A survey of the tree and shrub species of a 0.3 ha (25 m x 120 m) plot of heath forest, that is managed as long fallow piassava forest, showed that it was dominated by piassava (85 out of 185 individuals) (CTRR 1996).

Total Population Size

Minimum Population Size:

Maximum Population Size:

Habitat and Ecology

Most specimens of Piassava are found on poor sandy soils in disturbed restinga vegetation. Flowering and fruiting occurs throughout the year. Outcrossing is affected by sap beetles (*Mystrops* sp.) and weevils (*Phyllotrox tatianae*) (Voeks 1985). Individual palms change gender during their life cycle, producing first staminate and later pistillate flowers (Voeks 1988b). The regional climate is a Koppen Af tropical rain forest type. Mean annual rainfall ranges from 1,800-2,100 mm, with no pronounced dry season. Mean monthly temperatures reach a low of 21°C in August and a high of 25°C in February (Milde 1983). Soils grade from oxisols in the interior zones to spodosols nearer the coast. Responsive to this edaphic transition, the vegetation changes from tall, broadleaf evergreen formations mata higrofila to shorter, heath-like forests, restinga. Piassava is facultatively restricted

to sandy spodosols, although it readily colonizes oxisolic areas that have been deforested (Voeks 1990). The vegetation is characterized by largely buttress-free, broadleaf evergreen trees with relatively heavy loads of lianas and epiphytes (Mori et al. 1982, CTRR 1996).

System		Movement pattern		Crop Wild Relative
<input checked="" type="checkbox"/> Terrestrial	<input type="checkbox"/> Freshwater	<input type="checkbox"/> Nomadic	<input type="checkbox"/> Congregatory/Dispersive	<input type="checkbox"/> Is the species a wild relative of a crop?
	<input type="checkbox"/> Marine	<input type="checkbox"/> Migratory	<input type="checkbox"/> Altitudinally migrant	

Growth Form	Definition
Tree - size unknow	Tree (any size), also termed a Phanerophyte (>1m)

Threats

"Its fibre has represented a commercially important product since the 16th century, for anchor ropes and later in the manufacture of brooms and brushes. Destructive harvest methods during Brazil's Imperial period resulted in near extirpation of the species. Destructive extraction methods involved cutting down the whole tree and it was recorded that approximately 5 % of the entire piassava population was destroyed on an annual basis (Webering 1937). By the 1890s piassava was commercially extinct as an export commodity. As a poorly regulated extractive product subject to intense international demand and inappropriate modes and levels of exploitation, piassava supplies declined rapidly. Privatization of the royal forests led to more sustainable harvest and management techniques. Fibre-rich extraction now represents an economically sustainable land use. Piassava-rich lands are managed as long fallow, second growth forests" (CTTR 1996).

	Past	Present	Future
1 Habitat Loss/Degradation (human induced)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3 Harvesting (hunting/gathering)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.3 Fuel	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.3.1 Subsistence use/local trade	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.4 Materials	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Conservation Measures

A. funifera is present in the Reserva Biológica do Mico-leão (IBAMA) - Ilhéus and the Discovery Coast Atlantic Forest Reserve-Ilhéus. It is also present in the Botanischer Garten Rio de Janeiro [Brasilien]. It is not listed on CITES and seeds from this species are not present in the Millennium Seed Bank, UK.

"Under current practices, piassava fibre is collected on a yearly cycle. Rather than killing the palms, fibre collectors climb the tree and cut away from the nearly senescent outer fronds with a machete. Piassava is frequently managed as part of a long-fallow system. Every thirty to sixty years the vegetation is cut and burned. Only piassava individuals are spared. Following the fire, previously established piassava seedlings vigorously re-sprout through the charred remains. In five to eight years, the palm fronds have grown large enough to produce harvestable fibre. Within 20 years, the forest is numerically dominated by adult piassava. Given the present mode of harvest and management, piassava palm fibre has made the transition from destructively exploited export product to sustainably managed regional resource" (CTTR 1996).

	In Place	Needed
1 Policy-based actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.3 Community management	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Research actions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.2 Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.6 Uses and harvest levels	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3.9 Trends/Monitoring	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Habitat and site-based actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4.4 Protected areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Species-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5.7 Ex situ conservation actions
 5.7.2 Genome resource bank

Countries of Occurrence

	PRESENCE							ORIGIN				
	Year Round	Breeding Season only	Non-breeding season only	Passage migrant	Possibly extinct	Extinct	Presence uncertain	Native	Introduced	Re-Introduced	Vagrant	Origin uncertain
Brazil	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Alagoas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bahia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sergipe	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

General Habitats

	Score	Description	Major Importance
1 Forest	1	Suitable	Unset
1.6 Forest - Subtropical/Tropical Moist Lowland	1	Suitable	Unset

Ecosystem Services

Insufficient Information available Species provides no ecosystem services

Species Utilisation

Species is not utilised at all

Purpose / Type of Use	Subsistence	National	International
11. Other household goods	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Handicrafts, jewellery, decorations, curios, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Food - animal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Fibre	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

"Fibre collectors climb the tree and cut away from the nearly senescent outer fronds with a machete. After being stripped from the fronds, the fibre is hauled to a common cleaning area and manually separated. The borra fibre, a papery material, is sun dried, woven into thatch, and sold as roofing material for fashionable homes and beach cabanas. After being cleaned, sorted into grades, and cut, the fibre bales are forwarded to broom and brush manufacturers throughout Brazil (Voeks 1996). The fruits contain edible kernels (Voeks 1996)" (CTTR 1996).

Trend in the level of wild offtake/harvest in relation to total wild population numbers over the last five years:

Trend in the amount of offtake/harvest produced through domestication/cultivation over the last five years:

CITES status: Not listed

IUCN Red Listing

Red List Assessment: (using 2001 IUCN system) Least Concern (LC)

Red List Criteria:

Date Last Seen (only for EX, EW or Possibly EX species):

Is the species Possibly Extinct? Possibly Extinct Candidate?

Rationale for the Red List Assessment

A. funifera is assessed as Least Concern (LC). The species is common in its natural range. The extent of occurrence (EOO) does not meet the threshold for a threatened category and some subpopulations occur within the protected area network. Also, the improved management of this species indicates it is now harvested in a more sustainable way.

Reason(s) for Change in Red List Category from the Previous Assessment:

- Genuine Change
 - Genuine (recent)
 - Genuine (since first assessment)
- Nongenuine Change
 - New information
 - Knowledge of Criteria
 - Incorrect data used previously
- Taxonomy
- Criteria Revisio
- Other
- No Change
 - Same category and criteria
 - Same category but change in criteria

Current Population Trend: Stable

Date of Assessment: 07/04/2009

Name(s) of the Assessor(s): Christine Loftus

Evaluator(s):

Notes:

% population decline in the past:

Time period over which the past decline has been measured for applying Criterion A or C1 (in years or generations):

% population decline in the future:

Time period over which the future decline has been measured for applying Criterion A or C1 (in years or generations):

Number of Locations:

Severely Fragmented:

Number of Mature Individuals:

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