

Bactris glaucescens

LC

Taxonomic Authority: Drude

Global Assessment Regional Assessment

Region: Global

Endemic to region

Synonyms

Bactris anisitsii Barb.Rodr., Palm. Paraguay.: 19 (1899).
Bactris glaucescens Drude in C.F.P.von Martius & auct. suc. (eds.
Bactris tucum Burret, Repert. Spec. Nov. Regni Veg. 34: 22

Common Names

COQUINHA Portuguese
TUCUM 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

Bactris glaucescens is distributed across the south western region of the Amazon from Brazil through to Bolivia and north eastern Paraguay (Henderson 2000). Occurrences in eastern Brazil are uncertain.

Range Size

Area of Occupancy:
Extent of Occurrence:

Map Status:

Elevation

Upper limit: 300
Lower limit: 100

Depth

Upper limit:
Lower limit:

Depth Zones

Shallow photic Bathyl Hadal
 Photic Abyssal

Biogeographic Realm

Afrotropical
 Antarctic
 Australasian
 Neotropical
 Oceanian
 Palearctic
 Indomalayan
 Nearctic

Population

There are two collections to the east of Brazil (P. Von Luetzelberg 355 and Weddell 2488) quite far from the rest of the known distribution; it is uncertain whether B. glaucescens is still extant in these localities. The collection of P. Von Luetzelberg at Pilao Arcado is now likely to be under water due to the damming of the Rio Sao Francisco (Henderson 2000). In Paraguay, B. glaucescens is referred to as common by collectors.

Total Population Size

Minimum Population Size:

Maximum Population Size:

Habitat and Ecology

Reported to occur in gallery forest, seasonally inundated forest or savannas, often on clayish soils from 100-300 m elevation (Henderson 2000; Moraes 2004).

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	

Life History

<u>Age at Maturity</u>	Female:	Units for Age:
	Male:	
Size at Maturity (in cm)	Female:	
	Male:	
Longevity:		Units for Longevity:
Average Reproductive Age:		Units for Reproductive Age:
Maximum Size (in cm):		
Size at Birth (in cm):		
Gestation Time:		Units for Gestation:
Generation Length:		
Justification:		
Reproductive Periodicity:		Average Annual Fecundity or Litter Size:
Annual Rate of Population Increase:		Annual Rate of Population Increase:
Natural Mortality:		

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

Threats

General threats to the habitat in which *B. glaucescens* occurs include: a growing agricultural frontier, increased colonization, the creation of many new highways and future roads which will cross an area of the Southwest Amazon Basin with low population density, indigenous lands, protected areas and well-conserved forests and savannas high in biodiversity; massive modification of the Rio Paraguay and Paraná rivers and the implementation of gas pipelines. Other pressures include cattle ranching, hunting, species collection, introducing exotic species, frequent burning of the savannas, gold mining, and dam construction (Conservation International 2009; WWF 2001).

B. glaucescens is the most important food item in the diet of the pacu fish (*Piaractus mesopotamicus*, Characidae). Large pacus are especially important in dispersing *B. glaucescens* seeds and since the best seed dispersers are the largest fishes, which are preferred by commercial fisheries, it is predicted that the ongoing over-fishing in freshwater ecosystems will have major impacts on the dispersal system of these fish-dependent plants (Galetti et al. 2008).

	Past	Present	Future
8 Changes in native species dynamics	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8.7 Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10 Human disturbance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
10.6 Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Conservation Measures

B. glaucescens is present in the Noel Kempff Mercado national park in Bolivia. It is not listed on CITES and seeds from this species are not present in the Millennium Seed Bank, UK. There is no evidence of the conservation status being previously assessed. Close monitoring of the pacu fish populations is needed as well as further monitoring of *B. glaucescens* recruitment, which could be severely affected if pacu fish populations continue to decline.

	In Place	Needed
3 Research actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.2 Population numbers and range	<input 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 checked="" type="checkbox"/>
4.4 Protected areas	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5 Species-based actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.7 Ex situ conservation actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5.7.2 Genome resource bank	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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
Bolivia	<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"/>
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"/>
Bahia	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Goiás	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mato Grosso	<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"/>
Mato Grosso do Sul	<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"/>
Paraguay	<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
2 Savanna	1	Suitable	Unset
2.2 Savanna - Moist	1	Suitable	Unset
5 Wetlands (inland)	2	Marginal	Not applicable
5.2 Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	2	Marginal	Not applicable

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
16. Other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In annually flooded wetlands of the Pantanal, *Bactris glaucescens* is particularly important for the fish food web and for its grouped or isolated distribution in the overall area (Macedo et al. 2002).

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

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

CITES status: Not listed

Livelihood Value

Primary Product

Scale of Assessment:

Name of Location/Country/Region:

Date:

Description of product (eg. skin, meat, horn, fibre, etc.):

For Single Species Harvest

Estimated annual harvest of the product:

Units:

When Part of a Multi-species Harvest for this Product:

Estimated annual multi-species harvest:

Units:

The species contribution to the total harvest (%):

Amount of this species within multi-species harvest:

Users

Primary level of human reliance on the product:

Who are the primary harvesters of this resource? By gender/age?

By socio-economic group?

Specify other:

Value to Livelihoods

Proportion (%) of total population benefiting from this product:

Proportion (%) of household consumption (if dietary as a % of protein/carbohydrate) for this product:

Proportion (as a %) of household income for this product:

Value to Economy Annual cash income from this product - gross (in US\$):

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

B. glaucescens has a wide range in the lower Amazon region. In parts of the distribution it is likely to be exposed to some threatening processes and an additional concern is the decline in the Pacu fish, a key disperser of seed for this species, in the Pantanal region of Brazil. At present it does not meet any of the thresholds for a threat category and so is rated as Least Concern.

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: 01/04/2009

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:

Bibliography

Conservation International, 2009, Brazil's Kayapó: Powerful Allies in the Amazon, , ,

Galetti, M.; Donatti, C. I.; Pizo, M. A. & Giacomini, H. C., 2008, Big fish are the best: seed dispersal of *Bactris glaucescens* by the pacu fish (*Piaractus mesopotamicus*) in the Pantanal, Brazil., *Biotropica*3, 386-389, ,

Henderson, A., 2000, *Bactris* (Palmae) Flora Neotropica Monograph 79, 181, The Organization for Flora Neotropica by The New York Botanical Garden Bronx, New York,

Macedo, M., Ferreira, A. R. and da Silva, C. J., 2002, Fructification of *Bactris glaucescens* Drude (Arecaceae/Palmae) and the Hydrological Cycles in the

Municipality of Barão de Melgaço, Mato Grosso Pantanal, Brazil, Neotropical Ecosystems, Proceedings of the German-Brazilian Workshop,

Hamburg 2000. GKSS-Geesthacht , , ,

Moraes R.,M., 2004, Flora de palmeras de Bolivia. Herbario Nacional de Bolivia, Instituto de Ecología, Carrera de Biología, Universidad Mayor de San Andrés, La Paz., , ,

Riffle, R.L. & Craft, P., 2003, An Encyclopedia of Cultivated Palms, 528, Portland, Or. ; Cambridge : Timber Press, 2003.,

World Wildlife Fund, 2001, WWF Ecoregion Profiles, , World Wildlife Fund © 2001,