

Pau Brasil

Paubrasilia echinata

Other Names: Brazilwood, Pernambuco, Caesalpinia echinata

Family: Fabaceae

Natural Range: Brazilian Atlantic Forest

IUCN Conservation Status

Endangered (EN)

The pau brasil is the national tree of Brazil, the country to which it gave its name. The species is only found within several remnants of the Atlantic Coastal Forest where it provides important habitat for orchids and other epiphytes.

The species also has played a significant role in Brazil's social and economic history. A dye, taken from the tree's heartwood, has been exploited by collectors, known as brasileiros, since 1501. It also provides an immensely valuable, and almost indestructible, timber used to manufacture bows for stringed instruments, for construction and to make traditional hunting tools.

The extensive collection and export of the dyewood from pau brasil trees resulted in the loss of large areas of forest and the enslavement of local people. By the time alternative synthetic dyes became available in 1875, dramatic population declines in the tree had already taken place, and these declines continued until the 1920s. Natural stands were almost completely destroyed but some populations remained in a few areas on the coastal plain, where they have since suffered from deforestation.

Today, the bark and dye extract are used locally for medicinal purposes, and research is being undertaken to determine if the bark can be used to treat cancer. The exploitation of the timber has continued, especially for bow manufacture. The problem is exacerbated by the high level of wood wasted during processing; between 70-80 percent is lost as logs are converted to bow blanks, and a further 70-80 percent is lost in processing these into bows. No comparable substitute material is known and it is seen as an

essential material to bow-making, still unsurpassed after several hundred years. It is estimated that a single violin bow costs up to \$5000 and uses 1 Kg of wood. Despite national legislative protection, there is a significant trade in *C. echinata* for bow making. This is estimated to be worth millions of (US) dollars a year and is likely to represent significant illegal exploitation.

Pau brasil is listed on the official list of threatened Brazilian plants by the government wildlife agency IBAMA, and there is currently a reintroduction programme for pau brasil at Linareas Reserve.

The Global Trees Campaign, has worked on the conservation of this tree through two projects; one, working with Brazilian NGO Amainan Brasil encouraging awareness and conservation among local communities in the Atlantic rainforest around Cairu (Projeto Pau Brasil) and the other working with the Margaret Mee Foundation and Rio Botanic Garden, studying the distribution, genetic variation and ethno-botanical uses of Pau Brasil in Rio de Janeiro State.

In June 2007, Pau Brasil was included on Appendix II of [CITES \(the Convention on International Trade in Endangered Species\)](#), thus imposing regulations on international trade in the species. GTC's work was extensively quoted in the proposal that led to the listing.

Selected references:

Fauna & Flora International (1997). Conservation and management of Pau brasil *Caesalpinia echinata* – An action plan. Report from the workshop - Partners Botanical Gardens of Rio de Janeiro, Margaret Mee Foundation, Fauna & Flora International, Cambridge, UK.

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IBAMA. (1992). Lista oficial de espécies da flora Brasileira ameaçadas de extinção. (unpublished). 4pp.

Sociedade Botânica do Brasil. (1992). *Centuria plantarum Brasiliensium extinctionis minitata*. Sociedade Botânica do Brasil. 175pp.References:

The Global Trees Campaign was a partnership between Fauna & Flora International and Botanic Gardens Conservation International.

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