

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Other Proposals

A. PROPOSAL

Inclusion of Dalbergia nigra in Appendix I.

B. PROPONENT

The Federative Republic of Brazil.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Angiospermae
12. Order: Fabales
13. Family: Fabaceae (Cronquist)
(Previously Leguminosae, subfam. Papilionoideae)
14. Genus: Dalbergia
Species: Dalbergia nigra (Fr. Allem.)

There are many species of Dalbergia distributed pantropically. Taxonomic categorization of the Dalbergia genus is difficult, and estimates of the total number of species vary between 100 (Lewis, 1987) and 200 (Record, 1942).

- 15: Common Names: English: Brazilian rosewood, palisander
French: palissandre du Brésil
Spanish:
Brazilian: Jacaranda, jacaranda-caviuna, caviuna

16. Code Numbers:

2. Biological Data

The biology of the genus Dalbergia is discussed in a variety of timber texts and treaties, including Walker (1989), Rizzini (1971) and Record (1942). Mattos & Coimbra Filho (1975) provide considerable details on the species D. nigra. Valuable recent information detailing the conservation status of this timber can be obtained from the FAO Forestry Paper, No. 77 (1986).

21. Distribution: Indigenous populations of D. nigra occur solely in Brazil. Here they are located in the southern regions of Bahia, and south as far as Minas Gerais. This range encompasses Rio de Janeiro and Espírito Santo States, and is partially commensurate with the Atlantic Coastal Forests of Brazil.
22. Population: D. nigra is a highly prized and valuable timber species, and has been exploited for this distinctive texture, fragrance and beauty for over 300 years (Record & Mell, 1924). It is likely that D. nigra has always been an uncommon

tree, even before intensive logging in its favoured habitat. In the 1920's, Record and Mell (1924) noted that typical primary stands of this species comprised only 2.2% of the merchandable timber species and only 0.3% of the total stand of this species. Reports for several decades now testify to decreasing population of D. nigra, with timber specimens becoming rare and foresters having to venture increasing distances from towns to find them (Mattos & Coimbra Filho, 1957; Hueck, yr?; Record, 1942; Walker, 1989). Rizzini (1971) reported that in forests at the centre of its distribution, the D. nigra concentration was 0.8 trees/hectares, with a volume of 1.4 m³/ha. Large diameter specimens of D. nigra are particularly rare (Rizzini, 1971). In 1986 the FAO (Forestry Paper No. 77) concluded that D. nigra is now in danger of extinction.

These reduction in population are due to the combined effects of centuries of extensive logging and the concurrent destruction of Brazil's Atlantic Coastal Forests. FAO (1986) reported the absence of commercial plantations.

23. Habitat: Dalbergia nigra occurs over a range of climatic zones ranging between hot and damp to humid, savannah climates (FAO, 1986). Specimens are found with a greater frequency on undulating or mountainous terrain. The species rarely reaches the coast, probably due to the low occurrence of suitable fertile soils (FAO, 1986).

3. Trade Data

The national and international trade and utilization of Dalbergia nigra are concentrated on the timber produced by the species. D. nigra has been extensively used for more than 300 years in the production of very high class furniture, including cabinets and pianos. Restricted supplies, especially of large trees, have led to increased use of the timber for wood carving and sculpture.

Brazilian exports of D. nigra in 1924 totalled 2,776 tons (Tropical Woods, 1928). By 1957-61 exports had fallen only slightly, to 924 Mbdft (Rizzini & Filho, 1973), which approximates 2,300 tons. These exports comprised both logs and lumber. Though small amounts of other Dalbergia or Machaerium spp. may have been included, D. nigra was the predominant species (Record & Mell, 1924). Recent export statistics reveal substantial reductions in export quantities, to 385 tonnes in 1984 (Banco do Brasil, see Appendices). The major importer of D. nigra was West Germany, followed by substantially smaller amounts into the United States and United Kingdom. There are no records of trade in D. nigra as unprocessed logs.

Demand for D. nigra will continue due to the high quality and attractiveness of the timber. Supply has been reduced by over utilization combined with deforestation of Brazil's Atlantic Coast Forests. There are no commercial plantations, and research on possibilities regarding the cultivation of D. nigra is only just beginning (FAO, 1986).

Details on illegal trade are unknown.

4. Protection Status

41. National: Details on National Parks and Reserves which contain specimens of D. nigra have not been forthcoming. However, as the most valuable timber comes from old specimens (Record, 1942), it is likely that specimens of substantial size and age will be logged unless adequate precautions are taken.

The export of unprocessed logs has been banned by the Brazilian Government.

The exploitation of Brazil's Atlantic Coastal Forests was forbidden by Decree No. 9.547 of 25 September 1990 (see Appendices).

42. International: No international protection measures are operative.
43. Additional Protection Needs: Genetic resources conservation of D. nigra is a priority. Information is available at the Centro de Recursos Geneticos, CENARGEM/EMBRAPA, Brasilia.

5. Information on Similar Species

Of the 100-200 species of Dalbergia worldwide, at least 15 are valuable for timber production (Record & Mell, 1924). Four of these are found in South America, all in Brazil (Record, 1942; Record & Mell, 1924; Mattos & Coimbra Filho, 1957):

<u>D. nigra</u> Fr. Allem.	Jacaranda caviuna; palisander
<u>D. spruceana</u> Benth.	Jacaranda do Para
<u>D. frutescens</u> (Vel.) Britton	Sebastiao de Arruda; tulipwood
<u>D. cearensis</u> Ducke	Pau violeta; kingwood
<u>(D. discipularis</u> Rizz & Fill,	described in 1973 in Portuguese language references)

D. nigra is found in the coastal forests, has a characteristic fragrance and a deeply coloured, brown-violet, richly variegated lumber (Record, 1942). Timber from other Dalbergia species can be distinguished from D. nigra by a variety of characteristics, most noticeable in the colour variation and the nature of theummy or resinous material of the heartwood (Record, 1942). In timber from D. cearensis (kingwood), the dark regions are generally narrow and regular, thus differing from D. nigra which is very irregularly streaked (Timber of the New World). D. spruceana comes from the lower Amazon regions (Record, 1942), and has a mild scent and no distinctive taste (Timber of the New World). D. frutescens (tulipwood) is a small, often misshapend tree which has a characteristic yellow or red coloured wood.

Timber from D. nigra may also be confused with that of Machaerium spp. Thoco timber can be readily distinguished from the true Dalbergia by the absence of large pores and the compact nature of the Machaerium spp. parenchyma (Record, 1942).

6. Comments from Countries of Origin
7. Additional Remarks
8. References

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