

AMENDMENTS TO APPENDICES I AND II OF THE CONVENTION

Ten Year Review Proposals

A. PROPOSAL

Deletion of Tachigali versicolor from Appendix I.

B. PROPONENT

The Swiss Confederation.

C. SUPPORTING STATEMENT

1. Taxonomy

11. Class: Magnoliopsida (Dicotyledonae)
12. Order: Fabales
13. Family: Leguminosae (= Fabaceae)
131. Subfamily: Caesalpinioideae
14. Genus: Tachigali Aubl.
(syn. = Tachigalia Juss.)
15. Species: T. versicolor Standley & L.O. Williams 1952
16. Common Names: English:
French:
Spanish: Caña fistula, Plomo, Reseco, Pellejo de toro
17. Code Numbers:

2. Biological Data

21. Distribution: The species occurs in southeastern Costa Rica, Panama, and northwestern Colombia (Foster, 1977; Croat, 1978). The knowledge of its occurrence in Colombia is fairly recent, not having been known for example by Holdridge and Poveda (1975).
22. Population: In Costa Rica, this tree is "rather infrequent but distributed throughout the climax forest area" (Standley and Williams, 1952). "Trees are solitary or in small colonies" (Allen, 1956). It is occasional in Corcovado National Park (Hartshorn and Poveda, 1983). In Panama, the species is common on Barro Colorado Island (Croat, 1978), where there are about 59 plants with a dbh of more than 1 cm per hectare in the old forest (S.P. Hubbell and R.B. Foster, pers. comm. to M.D. Loveless, ca 1988). Foster (1977) reported on monitoring its reproduction there over a 10-year period. This tree is highly unusual in that it dies within a year after flowering; replacement populations (from seedling cohorts, which are very large) seem to occur at about 4 years offset from each other; saplings also seem to be reasonably plentiful (Foster, 1977;

Loveless, in litt. to U.S. Management Authority, 20/03/89). Whether the species reproductive strategy requires conservation concern anywhere in its range is unknown.

23. Habitat: In Costa Rica, the trees occur on "forested hills along the upper Río Piedras Blancas, vicinity of Río Esquinas, provincia de Puntarenas, altitude 30 m" (Standley and Williams, 1952). In Panama, the species is known from: (1) tropical moist forest in the Canal Zone and (the province of) Panama; (2) tropical wet forest in Colón; and (3) premontane wet forest in the North-East part of the Canal Zone, Colón and Darién (Croat, 1978).

3. Trade Data

31. National Utilization: The hard, pale-brown wood is reported to be used locally for general construction (Allen, 1956; Oldfield, 1988).
32. Legal International Trade: No evidence (Oldfield, 1988). Not mentioned in A Handbook of Hardwoods (1972). According to Record and Hess (1943), there are no special uses for the timber of any species of Tachigali, and the genus is not likely to be of any commercial value. Holdridge and Poveda (1975) state that this species awaits an exhaustive study of its potential. Logs of fallen specimens are persistent in the forest (Loveless in litt. to U.S. Management Authority, 20/03/89).
33. Illegal Trade: None known.
34. Potential Trade Threats: Not known. (Resolution Conf. 4.26 encourages completion of the 10-year review.)

4. Protection Status

41. National: The Costa Rican Dirección General Forestal [in litt. to the IUCN Threatened Plants Unit (TPU), 1980] stated that an interdepartmental Commission was established to analyze the situation for this and other native plant species regulated by CITES, together with other potentially threatened plant species in Costa Rica.
42. International: Unknown. Resolution Conf. 2.19 does not appear to support the CITES listing of this species, in view of its more extensive distribution and therefore larger (but unknown) population size, its known abundance at least in part of Panama, and the apparent lack of international trade interest in it.
43. Additional Protection Needs: Unknown. The species is not one of the plants Costa Rica included in the Annex to the Convention on Nature Protection and Wildlife Preservation in the Western Hemisphere [OEA/Ser.A/74a (SEPF); cf. Prance and Elias, 1977]. Panama is also a Party to the Western Hemisphere Convention, but has not listed plants. Colombia has signed but not ratified that Convention, nor submitted a species list.

5. Information on Similar Species

The genus includes 24 species, especially in Amazonia; this is the only species of Tachigali outside South America, and the only one with striate pubescence on the ovary (Dwyer, 1954). The very prominent foliose stipules are a useful field character in Costa Rica (Holdridge and Poveda, 1975). Logs on the forest floor are identifiable from wood anatomy during field work (Loveless in litt. to U.S. Management Authority, 20/03/89).

6. Comments from Countries of Origin

None; to be sought.

7. Additional Remarks

Reproduction occurs synchronously at intervals of about 4 years, but not all trees flower and die at once. The species seems to be almost completely outcrossed (Hamrick et al., 1989). The number of mature individuals thus varies from year to year (Foster, 1977; Loveless in litt. to U.S. Management Authority, 20/03/89).

Submitted on behalf of the Chairman, Plants Committee. Proposed for transfer to Appendix II by U.S.A.; notice in U.S. Federal Register 54(53) [21/03/89]: 11511-11555. Because of this U.S. legal public process through announcements in the U.S. Federal Register, the United States normally cannot initiate a more expansive legal position (i.e. change from downlisting to delisting) at a later date than that (e.g. March) public notice [although it still can adopt a different position on acquiring new information during a Meeting of the Conference of the Parties (e.g. COP7)].

8. References

Allen, P.H., 1956. The Rain Forests of Golfo Dulce. Univ. Florida Press, Gainesville, Fla., U.S.A. 417 pp.

Croat, T.B., 1978. Flora of Barro Colorado Island. Stanford University Press, Stanford, Calif., U.S.A.

Dwyer, J.D., 1954. The tropical American genus Tachigalia (Caesalpinioideae). Ann. Missouri Bot. Gard. 41: 223-260.

Foster, R.B., 1977. Tachigalia versicolor is a suicidal neotropical tree. Nature 268 (5621): 624-626.

Hamrick, J.L., M.D. Loveless and R.B. Foster, 1989, in prep. The mating system of Tachigalia versicolor, a monocarpic tree. (Presented 6/87 at Soc. for Study Evol. meetings, Bozeman, Mt., U.S.A.)

A Handbook of Hardwoods, 1972. Building Research Establishment Report. HMSO, London.

Hartshorn, G.S. and L.J. Poveda, 1983. Checklist of trees, pp. 158-183 in D.H. Janzen, ed. Costa Rican Natural History. Univ. Chicago Press, Chicago, Ill., U.S.A. 816 pp.

- Holdridge, L.R. and L.J. Poveda A, 1975. Arboles de Costa Rica Vol. 1.
Centro Científico Tropical, San José, Costa Rica.
- Oldfield, S., 1988. Rare Tropical Timbers. IUCN, Gland, Switzerland
and Cambridge, U.K. 37 pp.
- Prance, G.T. and T.S. Elias, eds., 1977. Extinction is Forever.
New York Botanical Garden, Bronx, N.Y., U.S.A. 437 pp.
- Record, S.J. and R.W. Hess, 1943. Timbers of the New World. Yale
University Press, New Haven, Conn., U.S.A.
- Smithsonian Institution. n.d. (1978?). Plant taxa on Appendix I of
the Convention. Endangered Flora Project, Washington, D.C.
Manuscript.
- Standley, P.C. and L.O. Williams, 1952. Ocho géneros de arboles y
arbustos nuevos para Centro América. Ceiba 3: 27-28.