

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA



Sixteenth meeting of the Plants Committee  
Lima (Peru), 3-8 July 2006

Advice and guidance on proposals to amend the Appendices

PROPOSALS TO AMEND THE APPENDICES FOR POSSIBLE CONSIDERATION AT COP14

1. This document has been prepared by the Secretariat.
2. Resolution Conf. 11.1 (Rev. CoP13) on Establishment of committees provides in its Annex 2 that, within the policy agreed to by the Conference of the Parties, the Animals and Plants Committees "shall provide advice and guidance to the Conference of the Parties, the other committees, working groups and the Secretariat, on all matters relevant to international trade in animal and plant species included in the Appendices, which may include proposals to amend the Appendices".
3. When establishing its priorities for the period 2004-2007, the Plants Committee agreed that it could possibly review and evaluate drafts of or ideas for proposals from a scientific perspective and make recommendations for their improvement (see document PC15 WG1 Doc. 1).
4. The Annex to this document has been submitted by Paraguay.

Issues for consideration

5. The Plants Committee is invited to review the draft proposal in the Annex to this document, and to provide guidance and advice as appropriate.

Status of the genus *Bulnesia* spp. with a view to its inclusion in CITES Appendix II

Dr Fátima Mereles (Paraguay), representative of Central and South America and the Caribbean

1. Background

During his visit to Paraguay, I had the opportunity to discuss with my colleague Obdulio Menghi of the Fundación Biodiversidad–Argentina (Biodiversity Foundation–Argentina) the status of *Bulnesia sarmientoi*, both in Argentina and in Paraguay.

Over at least the last three years, wood of this species has been exported in large quantities, from both Paraguay and Argentina. It appears that it is being exported mainly in the form of wood flooring, but further research on this is needed.

Based on the information collected in the two countries, the wood – which is apparently impregnated with a special substance that does not, however, conceal its strong natural scent – is being exported to China and/or Taiwan, Province of China. At least two businesses of that origin are operating in the two countries. However, the destination of these exports needs to be investigated in greater detail.

During the 12th meeting of the Conference of the Parties to CITES (Santiago, 2002), Germany submitted a proposal (Prop. 12.54) to include *Guaiaacum* spp. in CITES Appendix II, which stated, in section 5 on *Information on similar species*:

*Two species of the Zygophyllaceae family, Bulnesia sarmientoi Lorentz ex Griseb. and Bulnesia arborea (Jacq.) Engl., are also used for oil extraction and share the common names lignum-vitae and guaiac with the Guaiaacum species (Mereles, pers. comm., 2002; Mabberley, 1997; Benítez Díaz, in litt., June 2002). They are, however, not recorded in the database of internationally traded medicinal plant species held by the German Federal Agency for Nature Conservation (Lange & Schippmann, 1997). International trade in these species and their products is therefore unlikely.*

That statement may have been true at the time that the aforementioned proposal was written, but it is not the case at present.

We have recently become aware that a European country has confiscated several shipments of *Bulnesia sarmientoi* extract because it was being sold as 'Guajak' (guaiac), for which it is apparently being used as a substitute. The Customs officials know that Guajak (*Guaiaacum* spp.) requires CITES documents and they have therefore confiscated the shipments. Because *Bulnesia sarmientoi* is not a CITES species, trade data on this species are not being compiled. However, it appears that there is significant trade in this species with Europe, albeit in a different form from the trade taking place with China and/or Taiwan, Province of China.

For example, *Bulnesia sarmientoi* essence is being exported from Paraguay by Mennonite colonists (Chortitzer Komitee Cooperative) to several countries, including France, Germany and the United States of America. It is used mainly as the base for strong perfumes, for which reason France and Germany are major markets. Research is still needed to determine whether Argentina also exports the essence.

It is also essential to ascertain whether the *Bulnesia* extract imported in Europe and other countries also comes from the species *Bulnesia arborea*. If so, it might be necessary to draft a proposal encompassing the entire *Bulnesia* genus, in addition to highlighting the issue of 'similar species'.

## 2. Taxonomy, characteristics and uses

2.1 Family:	Zygophyllaceae
Scientific name:	<i>Bulnesia sarmientoi</i> Lorentz ex Griseb.
Scientific synonyms:	<i>Bulnesia gancedoi</i> Rojas Acosta
Common names:	English: lignum vitae, Paraguay lignum vitae, guaiac, guaiacwood, gaiacwood, vera, verawood French: gaiac Spanish: palo santo, guayacán (Bolivia) Guaraní: ybyrá ocái Nivaclé: jooc Lengua-Maskoy: meemong Maká: ticiyuk

The latter four are indigenous languages of Paraguay (Mereles & Degen, 1994).

### 2.2 Distribution of the genus *Bulnesia*:

Geographic distribution of the genus is highly fragmented and discontinuous (Hunziker, 1980). It ranges from Mexico to northern Colombia and Venezuela, including Central America and the Caribbean, and is also found in the Chaco region of South America (Argentina, Bolivia and Paraguay). Other groups are found in southern Chile and in Africa.

Distribution of *Bulnesia sarmientoi* Lorentz ex Griseb: endemic to the Chaco region of Argentina (northern provinces of Chaco, Formosa and Salta), Bolivia (south-east, department of Santa Cruz to Sierra de Chiquitos) and Paraguay (departments of Presidente Hayes, Boquerón and Alto Paraguay). In Paraguay, the species is widely distributed, being found in virtually three-quarters of the Paraguayan Chaco region.

### 2.3 Characteristics of *Bulnesia sarmientoi* wood:

Sapwood: creamy white-yellowish colour

Heartwood: green, brownish-green and bluish-green. Prominent grain pattern.

Soft sheen; fine, even texture; very pleasant fragrance.

It is one of the hardest and heaviest of woods (1100-1280 kg/m<sup>3</sup>); it is very strong and decay-resistant, even underground, because of its resin content.

Regeneration is good, but growth is very slow.

### 2.4 Population status: Paraguay has conducted only one census. In the other range States, the *B. sarmientoi* population can only be estimated. In principle, no evident conservation problems exist, but given the explosion in trade in the wood, coupled with the economic situation of the two countries, we cannot be certain that extraction of the species is taking place according to a management plan that will ensure its sustainability.

### 2.5 Uses: The oil (essence), guaiacol, is extracted from the wood and distilled for export as a perfume base. The resin is separated using organic solvents and is used in the manufacture of varnishes and dark paints.

Local use of the wood: The wood is used to make durable poles, beams, posts and pillars for construction in the Chaco region (especially in Mennonite communities). It is also used for woodworking and for firewood, as it lights easily and produces a very fragrant smoke. Indigenous groups use the wood for craftwork. The bark can be brewed to make a tea that is used by traditional healers to treat gastric pain.

Other uses: The wood is used to manufacture bushings (Tortorelli, 1956) which are used as such in Europe for ships of shallow, medium and deep draught. In Paraguay, large lots of planed logs have been observed, stacked by diameter, starting at a diameter at breast height (DBH, measured at a height of 1.40 m) of less than 10 cm.

Recently, as noted above, the wood has been exported in large quantities as wood flooring to Taiwan Province of China.

### 3. Timetable for action

From the foregoing, it is evident that a proposal should be drafted to include *Bulnesia* spp., or at least *Bulnesia sarmientoi*, in CITES Appendix II. Paraguay intends to submit such a proposal for consideration during the next meeting of the Conference of the CITES Parties (The Hague, 2007), and is therefore presenting this document for consideration by the CITES Plants Committee. In accordance with the terms of the Convention, the proposal should be ready by 4 January 2007 at the latest.

### 4. Preparatory work and financing

Preparing a proposal of this type requires a thorough understanding of the nature of current trade in *Bulnesia sarmientoi* wood, wood products and possibly other products in Argentina and Paraguay. It also means consulting with other range States; compiling export statistics; developing a questionnaire on the use of the species in its range, aimed at local communities that have been using the wood for hundreds of years to make craft items typical of the region; and determining the uses of the oil, etc. For that purpose, a minimum amount of financing will be required to enable travel to north-eastern Argentina and, for Paraguay and even Bolivia, to the extent possible, to make it possible to collect the information needed to draw up the proposal. Funding will also be needed to cover the cost of meetings of the proposal authors. Accordingly, if the Plants Committee finds that the situation of the species is cause for concern, as we believe it is, we would appeal to potential donors for funding to allow this work to move forward, since, unfortunately, neither the regional representative nor the Fundación Biodiversidad–Argentina, who have agreed jointly to prepare the proposal, has the funds to carry out the task.

If it is confirmed that the species *B. arborea* should also be included in Appendix II, because it is subject to significant trade in the same parts and products or other products, the range States of that species will also need to be consulted and requested to provide the necessary information.

### 5. Conclusion

Regardless of the Committee's decision, it is quite clear that the situation of *Bulnesia* is worrying and that, sooner or later, international cooperation will be required to ensure its sustainable trade. The Plants Committee is therefore asked to examine the information presented above and to support the submission of a proposal to include *Bulnesia* spp., or at least *Bulnesia sarmientoi*, in Appendix II.

Members of the Committee, range States of *B. arborea* and countries that import parts or products of *Bulnesia* spp. are requested to provide all available information on the conservation status of and international trade in these species.