AMENDMENTS TO APPENDICES I AND II OF THE CONFERENCE

Other Proposals

A. PROPOSAL

Transfer of <u>Uebelmannia</u> spp. from Appendix II to Appendix I.

B. PROPONENT

The Republic of Brazil.

C. SUPPORTING STATEMENT

1. <u>Taxonomy</u>

10. Division:

Magnoliophyta (angiosperms; flowering plants)

11. Class:

Magnoliopsida (dicotyledons)

12. Order:

Caryophyllales (centrosperms)

13. Family:

Cactaceae

14. Species:

<u>Uebelmannia</u> Buin.: all 4 species and varieties, as listed

below: <u>U. buiningii</u> Donald 1968

<u>U. flavispina</u> Buin. & Brederoo 1973 <u>U. gummifera</u> (Backeb. & Voll) Buin. 1967 [syn. <u>Parodia gummifera</u> Backeb. & Voll 1949;

syn. <u>U. meninensis</u> Buin. 1968;

syn. <u>U. meninensis</u> var. <u>rubra</u> Buin. 1973]

U. pectinifera Buin. 1967

var. pectinifera

[syn. <u>U. p.</u> var. <u>multicostata</u> Buin. 1975]

var. <u>horrida</u> Braun 1984

var. pseudopectinifera Buin. 1972

The above list corresponds to that in Eggli & Taylor, eds (1992) with synonymy according to N.P. Taylor (pers. comm.)

2. Biological Data

21. <u>Distribution</u>: <u>Uebelmannia</u> is narrowly endemic to the Municípios of Diamantina, Rio Vermelho and Itamarandiba, Minas Gerais, with a disjunct taxon (<u>U. pectinifera</u> var. <u>horrida</u>) at a single small site in Mun. Bocaiuva, MG.

- 22. <u>Population</u>: The ecology of this genus is very specific and populations are extremely local. Some contain 100s, others 10s of individuals. In total, only about 13 populations of the genus are known: 6 of <u>U. gummifera</u> s.l., c. 4 of <u>U. pectinifera</u> s.l., 1 of <u>U. flavispina</u> and 2 of <u>U. buiningii</u> (U. Eggli, unpubl.; Uebelmann 1984). <u>U.buiningii</u> is now on the verge of extinction according to a recent report (Braun & Esteves Pereira, 1988).
- 23. <u>Habitats</u>: The genus is restricted to <u>campo rupestre</u> vegetation. <u>U. gummifera</u> and <u>U. buiningii</u> are found only on slopes of deep, white quartz sand or gravel. <u>U. pectinifera</u> and <u>U. flavispina</u> occur on arenitic rock with lichens and Velloziaceae (Zappi 1989). These substrates are extremely oligotrophic.

3. Trade Data

- 31. <u>National Utilization</u>: No data relating directly to any <u>Uebelmannia</u> species are available.
- 32. <u>Legal International Trade</u>: During the period 1983-89 world trade in <u>Uebelmannia</u> varied, the greatest amount occurring between 1984 and 1986 (WTMU 1991). During these three years 4,407 plants of <u>Uebelmannia</u> were in international trade, and of these 3,040 were exported from Brazil. These exports included all 4 species recognized here. Nearly all such exports were declared as artificially propagated material, but during this same period two Brazilian shipments of wild-collected <u>Uebelmannia</u> were confiscated by Dutch Customs officials (Ministry of Agriculture and Fisheries [The Netherlands] 1987). These confiscated shipments had been declared as artificially propagated, but contained many 100s of wild-collected individuals.
- 33. <u>Illegal Trade</u>: Extent unknown, but at least one Swiss nursery company is known to have imported wild-collected <u>Uebelmannia</u> during the 1970s and early 1980s (N.P. Taylor, pers. comm.), during which time satisfactory trade figures were not recorded. It is possible that these were wrongly declared as artificially propagated individuals. In the 1980s wild-collected specimens of <u>Uebelmannia</u> were regularly offered for sale in the Netherlands, Belgium, and Germany, although no legal imports have been recorded. Two nurseries in Brazil hold stocks of illegally collected specimens of <u>Uebelmannia</u>, one of these in a quantity of more than 1000 specimens.

34. <u>Potential Trade Threats</u>

- Whole Live Specimens: So far as is known all trade in plants of Uebelmannia is in the form of whole live specimens or as stems grafted on to stocks of other Cactaceae. The latter form of propagation is being successfully practised in southern California (USA) with <u>U. pectinifera</u> and <u>U. flavispina</u> (N.P. Taylor, pers. comm.). Most commercial growers agree that cultivation and propagation of <u>U. gummifera</u> and <u>U. buiningii</u> is extremely difficult. Thus it is probable that the majority of plants traded in the past of these two species were of wild-collected origin.
- 342. <u>Parts and Derivatives</u>: Trade in seeds of Appendix II species usually is not monitored by CITES, so its extent is unknown. However, it is known that

commercial seed-gathering of Cactaceae is practised in Brazil, and seeds of some taxa are offered for export by the kilogram to wholesale outlets (U. Eggli, pers. comm. to N.P. Taylor). It is probable that endangered <u>Uebelmannia</u> species may be exploited in this way. It is known that at least one of the nurseries mentioned under 33 is specializing in wild-collected seeds of e.g. <u>Uebelmannia</u>.

4. Protection Status

- 41. <u>National</u>: The export of wild-collected Cactaceae and Orchidaceae from Brazil is a violation of the Portaria Normativa 122 (21.03.1985).
- 42. <u>International</u>: All species of <u>Uebelmannia</u> have been included in Appendix II of CITES since 1973.

5. Information on Similar Species

<u>Uebelmannia</u> is taxonomically isolated within the Cactus Family and amongst the most easily recognized genera of Brazilian cacti. Members of the genus have curiously roughened, brownish, reddish or dark purple epidermis, additionally covered in minute, waxy plates in <u>U. pectinifera</u>. This species and the allied <u>U. flavispina</u> have spines arranged in a more or less comblike fashion from very closely set areoles which enables them to be distinguished from the Mexican species, <u>Astrophytum myriostigma</u>. <u>U. gummifera</u> and <u>U. buiningii</u> have strongly tuberculate ribs, few straight spines and large, yellow flowers, which are woolly and bristly on the outside. This combination of characters enables them to be distinguished from superficially similar taxa of Chilean <u>Copiapoa</u> and Andean <u>Parodia</u>. (See Buining 1973, 1975, for morphological data).

6. Comments from Country of Origin

Country of origin is proponent.

7. Additional remarks

Although trade in wild-collected <u>Uebelmannia</u> cannot be demonstrated to be occurring at the present time, it is essential that such exploitation does not take place in the future. Collection of any of the 4 <u>Uebelmannia</u> species from their wild populations will rapidly bring these ecologically specialized and very rare taxa to the brink of extinction.

8. References

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- WTMU. 1991. Review of significant trade in species of plants listed on Appendix II of CITES. 1983-89. Wildlife Trade Monitoring Unit. World Conservation Monitoring Centre, Cambridge, U.K.
- Zappi, D.C. 1989. A família Cactaceae nos Campos Rupestres da Cadeia do Espinhaço, Minas Gerais, Brasil. Unpubl. MSc. thesis, Univ. Sao Paulo.