CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

Other proposals

A. Proposal

Inclusion of the seeds of Mexican cacti in Appendix II of CITES, except for those obtained by artificial propagation in special production centres.

B: Proponent

Mexico

C: Supporting Statement

1. Taxonomy

1.1 Class		Dicotiledonae
1.2 Order		Cactales
1.3 Family		Cactaceae
1.4 Genus and species		many
1.6 Common names		
	Spanish	Cactáceas Cactos Cactus
1.7 Code numbers		None

2. Biological Parameters

The biology and ecology of the Cactaceae are well documented in Backeberg, 1966; Bravo, 1978; Bravo and Sánchez-Mejorada, 1991a and 1991b; Hernández y Godínez, 1994; and Taylor et al., 1994.

2.1 Distribution

This species is distributed on both American continents from Canada in North America to the southern tip of South America (Bravo, 1978).
In Mexico the greatest number of genera and species are found in the arid or semiarid regions that form more than 50 percent of the total Mexican territory.

There are an estimated 800 species of cacti in Mexico, roughly 80 percent of which are endemic, and there are many species with a limited range, low population density, small populations or low propagation rates.

It should be mentioned that there are 257 species of cacti, of which 92 percent are endemic, on the Mexican list of endangered species.

2.1.1 Ecotypes

Cactaceae grow in all types of environments except aquatic and in all types of climates ranging from arid and semiarid to temperate and cold climates as well as hot climates with a high level of rainfall.

2.2 Reasons for Los of Habitat

Habitat is lost to the construction of dams and roads and through changes in land use such as the expansion of agriculture and livestock raising, urban development and tourism.

3. Utilization and Trade

3.1 National utilization

Since the pre-Hispanic period, Cactaceae have been an important natural resource for the inhabitants of the arid and semiarid regions of Mexico. Bravo (1991) reports that cactus seeds have a high nutritional content and are a source of carbohydrates, fats, proteins and sugars. They are used for the preparation of flour and pastes, for the extraction of vegetable oils and for local consumption. Cacti are also eaten fresh, mixed with other fruit or as a condiment.

The real economic importance of cactus seeds is its use for horticulture, primarily for the production of ornamental plants.

There is no accurate information on the origin, quantities and prices of cactus seeds collected in the wild.

There are several plant nurseries in Mexico that use seeds from breeding plants and from specimens produced through artificial propagation in breeding centres and seed production. Some of the production centres use seeds obtained through artificial propagation that could be sold.

Although Mexico is considered a centre for the distribution of Cactaceae, wild populations of Mexican cacti are subject to factors such as the destruction, modification and breaking up of their habitat and the illegal collection of plants and seeds for commercial purposes. These activities affect natural propagation and the structure of the populations of wild species and threaten their survival.

The regulation of trade in seeds of Mexican cacti will bring economic benefits to local inhabitants in the natural range of the species. Local inhabitants will become vigorous protectors of these plants. And cactus seeds will find their real value as a profitable resource for the country of origin. This will also lead to the conservation and protection of this resource allowing its sustainable use and regulate collection and illegal export.

Sustainable use and regulations will be enhanced by technical criteria for the use of seeds based on studies of breeding, germination, survival and potential species replacement. Seeds available on the market will be certified.

The income created by the legal sale of Mexican cactus seeds will permit an improvement in the quality of life of the inhabitants of the arid and semiarid areas and will finance studies on the biology, ecology and the use of this resource, as well as create pressure in favour of the conservation of the species and existing monitoring programmes.

4. Conservation and Management

4.1 Legal status

4.1.1 National

Since 1930, legislation in Mexico regulates the collection and export of plants, fruit and cactus seeds for scientific and commercial use with the intention of structuring the use of this important natural resource.

The following laws are examples of specific legislation passed by the Mexican government:

1930 Regulation of the collection and use of plants, fruits and cactus seeds.

1934 Agreement establishing species of cacti whose gathering for export is prohibited.

1934 Agreement on the collection and use of plants, fruit and cactus seeds.

1934 Explanation at the time of the agreement establishing species of cacti included in the agreement.

1935 Law 32-1-61940 ratifying the prohibition on the export of cacti.

1936 Law 31-1-87312 establishing conditions for the importation of cacti.

1936 Agreement determining the species of cacti whose collection continues to be prohibited for export.

1937 Decree modifying export duties for cacti, etc.

1940 Agreement declaring the conservation and improvement of wild orchids and cacti to be of public benefit.

1941 Decree modifying export duties on cacti and other plants.

1941 Amendment to the decree modifying export duties on cacti and other plants.

1988 Adoption of the law on ecological equilibrium and environmental protection.

1994 Adoption of the Official Mexican Standard (NOM-059-ECOL-1994) listing certain species and subspecies of wild terrestrial and aquatic fauna and flora to be endangered species, threatened with extinction or subject to special protection and setting specifications for their protection.

1996 Decree modifying, extending and cancelling some of the articles of the law on ecological equilibrium and environmental protection.

1996 Decree modifying, supplementing and cancelling several chapters of the penal code of misdemeanours.

4.1.2 International

At the present time, there are 46 species of Mexican cacti included in Appendix I of CITES and other species included in Appendix II. Nonetheless, seeds are not regulated in accordance with the content in Article I, paragraph B, section iii of the CITES Convention and Resolutions Conf. 4.24 and 6.18. Note No. 4 covers all plant parts and their by-products, except seeds and pollen.

The use, gathering and purchase of seeds as phytogenetic resources are regulated by the Convention on Bio-diversity that establishes specifications for the use of germ plasma in an effort to encourage conservation of the species and to benefit the countries of origin of these resources.

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