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



Nineteenth meeting of the Plants Committee Geneva (Switzerland), 18-21 April 2011

Trade in Agavaceae native to Mexico and the United States of America

1. This informative document has been prepared by the United States of America and Mexico.\*.

## **Background**

- 2. At the 18th meeting of the Plants Committee (PC18, Buenos Aires, 2009), the Management Authority of Switzerland submitted Document PC18 Doc. 21.1 *Trade in Agavaceae*, under the agenda item "Any other business." Document 21.1 provided information about wild-collected specimens of North American (i.e., Mexico and the United States) Agavaceae species exported to the European Union. Accordingly, cold hardy species of Agavaceae are becoming increasingly popular for use in landscape and indoor plantings, thereby increasing the demand for such plants, in particular large mature specimens.
- 3. Included with Document PC18 Doc. 21.1, were photographs of wild-collected specimens of 12 species (Annex 1) of the genera: *Agave, Dasylirion, Nolina*, and *Yucca* (family Agavaceae) that were exported to the European Union for the ornamental plant trade. None of the species included in Doc. 21.1 are listed in the Appendices of CITES.
- 4. At PC18, the Committee requested Switzerland to collaborate with Mexico and the United States to provide trade information on the species concerned, with a view to presenting a joint document on the issue at a future meeting of the Committee. Subsequently, the Management Authority of Switzerland provided trade data for specimens of species imported from Mexico and the United States to the respective Scientific Authorities.
- 5. The Scientific Authority of the United States is working on this issue with national customs and State officials, and the CITES Authorities of Mexico. The Scientific Authority of Mexico is working with national forestry agencies and the CITES Management and Enforcement Authorities

<sup>\*</sup> The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

- of Mexico. Both Parties are seeking cooperation with other Parties with regards to obtaining import trade data of commercial shipments of specimens of non CITES-listed Agavaceae. Based on our review of Agavaceae in trade, we will determine whether any of the species are of conservation concern and warrant listing in the Appendices of CITES.
- 6. In this regard, the Scientific Authority of Mexico is conducting a study to evaluate the conservation status, use, and threats of *Yucca queretaroensis* in Mexico, in order to assess the pertinence of including it in the CITES Appendices following the criteria of Resolution Conf. 9.24 (Rev. CoP15), and to modify its current conservation status established on National Legislation (NOM-059 SEMARNAT-2010). Preliminary results will be presented at PC20 (2012).

Annex 1: Species reported in Document PC18 Doc. 21.1, *Trade in Agavaceae*, nomenclature, distribution, and conservation status information.

Species and authority	Accepted nomenclature	Distribution	Conservation status in the United States	Conservation status in Mexico under Mexico's National Legislation <sup>*</sup>
Agave neomexicana Wooton & Standley 1913	Agave parryi subspecies neomexicana (Wooton & Standley) B. Ullrich 1992	New Mexico and Texas, USA; and Coahuila, Mexico	Apparently secure in New Mexico, and imperiled in Texas (1994 review)	Not listed
Agave parrasana Berger 1906	Accepted	Coahuila, Mexico	NA	Pr = special protection
Dasylirion miquihuanense Bogler 1998	Accepted	Nuevo León and Tamaulipas, Mexico	NA	Not listed
Dasylirion quadrangulatum Watson 1879	Accepted	Northeast Mexico	NA	A = threatened
Dasylirion texanum Scheele 1850	Accepted	Texas, USA; and Coahuila, Mexico	Secure (1992 review)	Not listed
Yucca carnerosana (Trelease) McKelvey 1938	Accepted	Northeast Mexico	NA	Not listed
Yucca elata (Engelmann) Engelmann 1882	Accepted	Arizona, New Mexico, Nevada, Texas, and Utah, USA; and Mexico	Secure (1988 review)	Not listed
Yucca faxoniana Sargent 1905	Accepted	Texas, USA; and Chihuahua and Coahuila, Mexico	Apparently secure (1992 review)	Not listed

Species and authority	Accepted nomenclature	Distribution	Conservation status in the United States	Conservation status in Mexico under Mexico's National Legislation <sup>*</sup>
Yucca queretaroensis Piña Luján 1989	Accepted	Queretaro and Hidalgo, Mexico	NA	Pr = special protection
Yucca rostrata Engelmann ex Trelease 1902	Accepted	Texas, USA; and Chihuahua and Coahuila, Mexico	Unknown	Not listed
Yucca thompsoniana Trelease 1912	Accepted	Texas, USA; and Mexico	Vulnerable (2002 review)	Not listed
Yucca torreyi Shafer 1908	Uncertain. Accepted: Kartesz (in press); Turner	New Mexico and Texas, USA; and Mexico	Apparently secure (1996 review)	Not listed
Comment: DNA and morphological evidence supports Y. torreyi as a distinct species (Clary 1997).	et al. 2003; and USDA 2000. Not accepted: Synonym of <i>Y. faxoniana</i> (Govaerts 2006); and synonym of <i>Y. treculeana</i> (Hess & Robbins 2002; ITIS 2011).			

<sup>^</sup>Conservation status in the United States: As reported by NatureServe. 2010. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia, U.S.A. On-line at: http://www.natureserve.org/explorer; accessed February 16, 2011).

## References cited:

Clary, K. H. 1997. Phylogeny, character evolution, and biogeography of *Yucca* L. (Agavaceae) as inferred from plant morphology and sequences of the internal transcribed spacer (ITS) region of the nuclear ribosomal DNA. Doctoral Dissertation. University of Texas, Austin, Texas, USA.

Govaerts, R. 2006. World Checklist of Arecaceae. The Board of Trustees of the Royal Botanic Gardens, Kew. *Yucca torreyi* Shafer in N.L.Britton & J.A.Shafer, North American Trees: 157 (1908), nom. illeg. [Accepted as synonym of synonym of *Yucca faxoniana*]. On-line at: http://www.kew.org/wcsp/. Accessed March 17, 2011.

<sup>\*</sup>Conservation status in Mexico: native species of conservation concern are listed in the Official Mexican Standard NOM-059-SEMARNAT-2010, under the General Wildlife Law (*Ley General de Vida Silvestre*), which is implemented by the General Direction of Wildlife (*Dirección General de Vida Silvestre* (DGVS)) of the Ministry of Natural Resources (SEMARNAT). DGVS is the CITES Management Authority for Mexico.

- Hess W. J. and R. L. Robbins. Flora of North America. 2002. Flora of North America North of Mexico 26: 1-723. Oxford University Press, New York, Oxford. [Accepted as synonym of Yucca treculeana]. On-line at: http://www.efloras.org/florataxon.aspx?flora\_id=1&taxon\_id=135226. Accessed March 17, 2011.
- Integrated Taxonomic Information System (ITIS). On-line database at: http://www.itis.gov. Accessed March 17, 2011.
- Kartesz, J.T.. The Biota of North America Program (BONAP). 2011. North American Plant Atlas On-line at: http://www.bonap.org/MapSwitchboard.html. Accessed March 17, 2011. Chapel Hill, North Carolina, USA [in press].
- Turner, B.L., H. Nichols, G. Denny, and O. Doron. 2003. Atlas of the vascular plants of Texas. Vol. 2. Botanical Research Institute of Texas, USA.
- United States Department of Agriculture (USDA)/Natural Resources Conservation Service. 2000. Database of Plants of the Unites States and its Territories (ver. 5.1.1). Baton Rouge, Louisiana, USA. On-line at: http://plants.usda.gov. Accessed March 17, 2011.