

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



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

Periodic review of plant species included in the CITES Appendices

SELECTION OF SPECIES FOR REVIEW FOLLOWING COP15

1. This document has been prepared by the Chair of the Working Group on the Periodic Review, with the assistance of the Scientific Authority of Mexico .
2. After the 18th meeting of the Plants Committee (PC18, Buenos Aires, 2009), the Chair of the Working Group on the Periodic Review, Jonas Lüthy (Switzerland), resigned, and the Plants Committee appointed Dr Patricia Dávila-Aranda (Mexico) in his place through correspondence.

Background

3. At its third meeting (New Delhi, 1981), the Conference of the Parties adopted Resolution Conf. 3.20 (*Ten-year Review of the Appendices*) in recognition that the periodic review of the trade and biological status of a species was an efficient method for evaluating the effectiveness of the Convention with respect to international trade in the species.
4. At CoP14 (The Hague, 2007), Resolution Conf. 14.8 (*Periodic review of the Appendices*) was adopted, stipulating that the Plants and Animals Committees shall establish a schedule for the Periodic Review and identify a list of taxa they propose to review during the next two intersessional periods between meetings of the Conference of the Parties. The list should be established at the first meeting of the scientific committees after the meeting of the Conference of the Parties that initiates the review period.
5. In compliance with Resolution Conf. 14.8, this list of species should exclude from the Periodic Review the following groups of species:
 - a) Species that were the subject of listing proposals at the previous two meetings of the Conference of the Parties (whether or not the proposals were adopted);
 - b) Species listed under the new criteria [Resolution Conf. 9.24 (Rev. CoP15)] in the last 10 years;
 - c) Species subject to ongoing reviews, such as the Review of Significant Trade [Resolution Conf. 12.8 (Rev. CoP13)] or periodic reviews conducted within the last 10 years; or
 - d) Species subject to other reviews targeted by valid Decisions and Resolutions of the Conference of the Parties.

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.

6. At CoP15 (Doha, Qatar 2010), the Secretariat presented a new draft resolution (CoP15 Doc. 62), to amend Resolution Conf. 14.8; but the document was rejected with the exception of paragraph 17, which requests the Conference of the Parties to allocate funds for the Periodic Review.

Selection of species as candidates for periodic review in the intersessional period between CoP15 and CoP17, based on the information available on the international trade therein

7. Considering that the potential number of species to be reviewed is so enormous as to be unmanageable, it was decided to modify slightly the original protocol for the assessment of taxa for consideration, contained in the Annex to Resolution Conf. 14.8.
8. UNEP-WCMC was requested to provide the trade records for the period 1998-2008.
9. Following the criteria established in Resolution Conf. 14.8 for the selection of candidate species for a periodic review, those species that met the exclusion criteria listed in paragraph 5. a)-d) above were excluded from the analysis. Additionally, the families Cactaceae and Orchidaceae and the genus *Euphorbia* (dealt with in document PC19 Doc.14.2) were also excluded.
10. Furthermore, Appendix-I and -II species not recorded in trade for the past 10 years were identified.
11. With regard to Appendix-I species recorded in trade, those with source code W (wild) and purpose-of-transaction code T (commercial) were identified.
12. With regard to Appendix-II species recorded in trade for specimens with source code W (wild), I (confiscated or seized) or U (unknown) and purpose-of-transaction code T (commercial), those recorded in trade during the last 10 years were identified. These were divided into two lists:
- a) Species with fewer than three trade records; and
 - b) Species with more than three trade records, with an indication of the trade frequency and trend. The frequency was estimated by looking at the number of transactions and the trend by analysing whether trade was increasing, holding steady or decreasing over time. In order to create potential groups of species for review, it was decided to classify the frequency and the trend as high, low or irregular (Table A).

Table A: Classification of frequency and trend in international trade.

	FREQUENCY	TREND
HIGH	More than seven years with trade records	Scale of international trade increasing considerably in at least the last two trading years
LOW	Fewer than seven years with trade records	Scale of international trade decreasing considerably in at least the last two trading years
IRREGULAR	Various	Indeterminate pattern

Results

13. The following species groups were identified:
- a) 15 Appendix-I species that have not been in trade for 10 years (Annex 1);
 - b) 7 species and 2 genera in Appendix I of which specimens of wild origin are traded for commercial purposes (Annex 2);
 - c) More than 1,700 Appendix-II species that have not been in trade for 10 years;
 - d) The Appendix-II species that were found in trade were broken down into two major lists:

- i) 93 species with up to 3 trade records; and
- ii) 84 species with more than 3 trade records. This list was subdivided into 5 groups based on the frequency and trend of the trade therein:

Table B: Trade frequency and trend for species included in Appendix II having more than 3 trade records

Group	Pattern of trade	Number of species
1b	High frequency and high trend	10*
2b	High frequency and low trend	2
3b	Low frequency and high trend	16
4b	Low frequency and low trend	33 ¹
5b	Irregular frequency and trend	21
<i>Total</i>		84

Summary of results

14. Even after applying selective trade filters, there are numerous species that could potentially be included in the Periodic Review, especially among those in Appendix II where there are more than 1,700 species for which there is no evidence of international trade in the past 10 years and over 120 species that have very low levels of trade. On the other hand, there are 9 species in trade showing high frequency and high trend. Finally, about 40 species show irregular patterns of trade frequency and trend, or high frequency and low trend, or low frequency and high trend. Against this background, attempts were made to simplify the information with the intention of presenting more manageable lists of taxa to be considered for the Periodic Review.

Recommendations to the Plants Committee

15. Review the following taxa from Appendix I, whose wild populations are in international trade for commercial purposes, especially those traded in relatively high quantities (*Encephalartos* spp., *Aloe polyphylla*, *Saussurea costus*, *Fitzroya cupressoides*) – see Annex 2 – given that these transactions are in contravention of the provisions of the Convention.
16. Review the following groups of taxa with a view to possibly lowering their level of protection (Appendix I) or delisting them (Appendix II).
- a) 15 species included in Appendix I, that for the 10-year period studied have not been in international trade at all (Annex 1).
 - b) 26 genera included in Appendix II, of which either none of its constituent species was in international trade in the 10 years studied, or else such trade was sporadic (species with fewer than three records of trade, species traded at low trend and low frequency) – see Annex 3.
 - c) 27 species included in Appendix II, which either were not in international trade or else such trade was sporadic (species with fewer than three records of trade, species traded at low trend and low frequency) – see Annex 4.
17. Review the following groups of taxa to assess whether they are in the appropriate Appendix or whether it is necessary to increase their level of protection:
- 9 species listed in Appendix II, which were in international trade at high frequency and high trend (Annex 5). In these cases consideration should be given to increasing the level of protection.

* Groups used to draw up the recommendations to the Plants Committee.

APPENDIX-I SPECIES WHICH HAVE NOT BEEN RECORDED IN TRADE FOR 10 YEARS

Family	Species	Range
LILIACEAE	1. <i>Aloe alfredii</i>	Madagascar
	2. <i>Aloe vossii</i>	South Africa
LEGUMINOSAE	3. <i>Platymiscium pleiostachyum</i>	Costa Rica, El Salvador, Honduras, Nicaragua
NEPENTHACEAE	4. <i>Nepenthes rajah</i> *	Malaysia
PALMAE	5. <i>Chrysalidocarpus decipiens</i>	Madagascar
ZAMIACEAE	6. <i>Ceratozamia alvarezii</i>	Mexico
	7. <i>Ceratozamia euryphyllidia</i>	Mexico
	8. <i>Ceratozamia mixeorum</i>	Mexico
	9. <i>Ceratozamia morettii</i>	Mexico
	10. <i>Ceratozamia robusta</i>	Mexico
	11. <i>Ceratozamia sabatoi</i>	Mexico
	12. <i>Ceratozamia whitelockiana</i>	Mexico
	13. <i>Ceratozamia zoquensis</i>	Mexico
	14. <i>Encephalartos aplanatus</i>	Swaziland
	15. <i>Encephalartos powysorum</i>	Kenya

* At PC9 (Darwin, Australia 1999), the Working Group on the Review of the Appendices reviewed the genus *Nepenthes* and made some recommendations, such as retaining some species in their current Appendix and transferring others from Appendix I to Appendix II.

APPENDIX-I SPECIES WITH RECORDS OF WILD SPECIMENS (W)
TRADED FOR COMMERCIAL PURPOSES (T)

Species	Quantity of specimens traded in the past 10 years	Type of specimen
1. <i>Microcycas calocoma</i>	4	Live
2. <i>Ceratozamia spp.</i>	5	Live
3. <i>Encephalartos munchii</i>	5	Live
4. <i>Encephalartos turneri</i>	15	Live
5. <i>Encephalartos spp.</i>	183	Live
6. <i>Aloe polyphylla</i>	200	Live
7. <i>Saussurea costus</i>	190	Live
8. <i>Fitzroya cupressoides</i>	1000	Carvings
9. <i>Dalbergia nigra</i>	1	Carvings

APPENDIX-II GENERA THAT HAVE NOT BEEN RECORDED IN TRADE FOR 10 YEARS, HAVE BEEN RECORDED UP TO THREE TIMES, OR SHOW LOW TREND AND FREQUENCY

	Genera / number of species	*
1.	<i>Alluaudiopsis</i> ¹	2
2.	<i>Alsophila</i> ²	266
3.	<i>Anacampseros</i>	13
4.	<i>Anigozanthos</i>	5
5.	<i>Avonia</i>	9
6.	<i>Banksia</i>	27
7.	<i>Boronia</i>	40
8.	<i>Byblis</i> ³	4
9.	<i>Calochlaena</i>	5
10.	<i>Ceropegia</i> ³	154
11.	<i>Cnemidaria</i>	23
12.	<i>Conospermum</i>	15
13.	<i>Culcita</i>	2
14.	<i>Decaryia</i> ¹	2
15.	<i>Dicksonia</i> ²	18
16.	<i>Didierea</i> ¹	3
17.	<i>Dryandra</i>	2
18.	<i>Dudleya</i> ⁴	2
19.	<i>Lepidozamia</i>	2
20.	<i>Lewisia</i> ³	3
21.	<i>Sarracenia</i> ⁵	22
22.	<i>Sphaeropteris</i> ²	98
23.	<i>Sternbergia</i>	7
24.	<i>Taxus</i>	2
25.	<i>Tillandsia</i>	2
26.	<i>Verticordia</i>	6

* At PC9 (Darwin, Australia 1999) Annex 3, the Working Group on the Review of the Appendices recommended:

¹ Delete from the Appendices the family Didieraceae, which comprises the genera *Didierea*, *Alluaudia*, *Alluaudiopsis* and *Decaryia*.

² Review the tree ferns that are not recorded in trade: *Cyathea* (including *Nephelea*, *Alsophila* and *Sphaeropteris*) spp., *Cibotium barometz* and *Dicksonia sellowiana*.

³ Delete from the Appendices.

⁴ Transfer from Appendix I to II.

⁵ Retain in Appendix II for look-alike reasons.

SPECIES THAT HAVE NOT BEEN RECORDED IN TRADE FOR 10 YEARS,
HAVE BEEN RECORDED UP TO THREE TIMES, OR SHOW LOW TREND AND FREQUENCY

Species
1. <i>Alocasia sandariana</i>
2. <i>Areca ipot</i>
3. <i>Batocarpus costaricensis</i>
4. <i>Caesalpinia echinata</i>
5. <i>Caryocar costaricense</i>
6. <i>Cephalotus follicularis</i>
7. <i>Chrysalidocarpus lutescens</i>
8. <i>Cynometra hemitomophylla</i>
9. <i>Cystodium sorbifolium</i>
10. <i>Darlingtonia californica</i>
11. <i>Fouquieria columnaris</i>
12. <i>Frerea indica</i> *
13. <i>Kalmia cuneata</i>
14. <i>Lophosoria quadripinnata</i>
15. <i>Macropidia fuliginosa</i>
16. <i>Oreomunnea pterocarpa</i>
17. <i>Phoenix hanceana</i>
18. <i>Pimelea physodes</i>
19. <i>Quercus copeyensis</i>
20. <i>Rauvolfia serpentina</i>
21. <i>Ravenea louvelii</i>
22. <i>Salacca clemensiana</i>
23. <i>Solanum sylvestre</i>
24. <i>Tachigali versicolor</i>
25. <i>Taxus fuana</i>
26. <i>Thermopsis mongolica</i>
27. <i>Vantanea barbourii</i>

* At PC9 (Darwin, Australia 1999), the Working Group on the Review of the Appendices recommended deleting it from the Appendices.

APPENDIX-II SPECIES RECORDED IN TRADE FREQUENTLY AND IN LARGE VOLUMES

Species
1. <i>Aloe ferox</i> ¹
2. <i>Cyathea australis</i> ²
3. <i>Cyclamen cilicium</i> ³
4. <i>Cyclamen coum</i> ³
5. <i>Cyclamen hederifolium</i> ³
6. <i>Galanthus elwesii</i> ³
7. <i>Gonystylus bancanus</i>
8. <i>Pachypodium brevicaule</i>
9. <i>Panax quinquefolius</i>

¹ *Aloe ferox* was selected for the Review of Significant Trade after CoP11 (Gigiri, 2000), but was finally excluded because the trade therein was not considered unsustainable (PC12 Doc. 11.2.3).

² At PC9 (Darwin, Australia 1999), the Working Group on the Review of the Appendices recommended revising tree ferns, such as *Cyathea* (including *Nephelea*, *Alsophila* and *Sphaeropteris*) spp., *Cibotium barometz* and *Dicksonia sellowiana*.

³ Its retention in the Appendices was recommended at PC9, Annex 3.