

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



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

Amendments to the Appendices

ASSESSMENT OF TRADE IN EPIPHYTIC CACTI AND REVIEW OF LISTING
OF CACTACEAE SPP. IN APPENDIX II (DECISION 15.89)

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.
3. At its 15th meeting, the Conference of the Parties adopted Decision 15.89 directed to the Plants Committee, as follows:

The Plants Committee shall assess trade in epiphytic cacti, considering the information of document CoP15 Doc. 55 and focusing especially on the genera Disocactus, Epiphyllum, Hattoria, Lepismium, Pseudorhipsalis, Rhipsalis and Schlumbergera. The Plants Committee shall consult with range States and if appropriate, encourage and support range States to submit proposals to exempt certain taxa of epiphytic cacti from Appendix II for consideration of the 16th meeting of the Conference of the Parties. If there are many range States for a certain taxon, rendering it difficult to allocate responsibilities, or if range States do not take action, the Plants Committee shall prepare such proposals.

Background

4. Epiphytic cacti were implicitly included in Appendix II in 1975, with the listing of the family Cactaceae. All cactus species included in Appendix II are listed with Annotation #4, which reads:

All parts and derivatives, except:

- a) *seeds (including seedpods of Orchidaceae), spores and pollen (including pollinia). The exemption does not apply to seeds from Cactaceae spp. exported from Mexico, and to seeds from Beccariophoenix madagascariensis and Neodopsis decaryi exported from Madagascar;*
- b) *seedling or tissue cultures obtained in vitro, in solid or liquid media, transported in sterile containers;*

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.

- c) *cut flowers of artificially propagated plants;*
 - d) *fruits, and parts and derivatives thereof, of naturalized or artificially propagated plants of the genus Vanilla (Orchidaceae) and of the family Cactaceae;*
 - e) *stems, flowers, and parts and derivatives thereof, of naturalized or artificially propagated plants of the genera Opuntia subgenus Opuntia and Selenicereus (Cactaceae); and*
 - f) *finished products of Euphorbia antisiphilitica packaged and ready for retail trade.*
5. At CoP10 (Harare, 1997), annotation 6 was added to the Appendices for the species of the family Cactaceae included in Appendix II, indicating that artificially propagated specimens of the following hybrids and/or cultivars are not subject to the provisions of the Convention:
- *Hatiora x graeseri*
 - *Schlumbergera x buckleyi*
 - *Schlumbergera russelliana x Schlumbergera truncata*
 - *Schlumbergera orssichiana x Schlumbergera truncata*
 - *Schlumbergera opuntioides x Schlumbergera truncata*
 - *Schlumbergera truncata* (cultivars)
6. At CoP15 (Doha, 2010), the Management Authority of Switzerland presented document CoP15 Doc. 55 on *Trade in epiphytic cacti (Cactaceae spp.)*, arguing that international trade was not a major threat to epiphytic cacti as the trade in wild specimens is very small, given that artificially propagated epiphytic cacti dominate international trade since mass propagation from cuttings is relatively easy, fast and cheap.
7. With the aim of complying with Decision 15.89, this document presents the results of the analysis of trade in epiphytic cactus species of the genera *Disocactus*, *Epiphyllum*, *Hatiora*, *Lepismium*, *Pseudorhipsalis*, *Rhipsalis* and *Schlumbergera*, from data provided by UNEP-WCMC for the period 1998-2008.

Analysis of epiphytic cacti included in Appendix II

8. UNEP-WCMC was requested to provide trade data (imports, exports and re-exports) for all epiphytic cactus species included in CITES Appendix II, for the period 1998-2008, covering all sources and all transaction purposes.
9. The species in international trade were broken down into two groups:
- a) Low risk from trade: Species with specimens traded under source code A (artificially propagated).
 - b) Potential risk from trade: Species with specimens traded having source code W (wild), I (confiscated or seized) or U (unknown), together with their IUCN conservation status.
10. The range States of all species were identified.

Results of the analysis of epiphytic cacti included in Appendix II

11. We received 835 trade records of epiphytic cacti covering 66 species for the period 1998-2008. The genera covered by these records were: *Epiphyllum*, *Hatiora*, *Lepismium*, *Pseudorhipsalis*, *Rhipsalis* and *Schlumbergera*. There were no records for *Disocactus*.
12. For each species we recorded the number of specimens traded and identified two groups:
- a) Taxa at low risk from trade: artificially propagated specimens of 55 species, 3 subspecies and 2 hybrids contained in 6 genera. Account was also taken of the trade data which were available only at the genus level (Annex 1).
 - b) Taxa at potential risk from trade: 15 species and 2 subspecies, contained in 6 genera (Annex 2), of which specimens of wild (W), confiscated or seized (I) or unknown (U) origin were traded.

13. The trade records were grouped as follows:
 - a) Species recorded once or twice in trade, indicating the number of transactions, the number of specimens traded in each transaction, the form in which they were traded, the years in which these transactions occurred and the source code (Table 1, Annex 2).
 - b) Species recorded in trade more than twice, showing the number of transactions, the number of specimens traded in each year, the total number of specimens (live plants and dried plants) traded and the source code, for each genus or species (Table 2, Annex 2).
14. Finally, the range States of the species of the genera described in the Decision were identified, for future consultations (Annex 3).

Analysis and interpretation of the information

15. The genus *Disocactus* did not appear in any trade records.
16. Although most of the trade data for specimens of wild, confiscated or seized, and unknown origin are recorded only at the genus level, evidence shows that this international trade is minimal (1 %) by comparison with artificially propagated specimens (99 %).
17. Of the species which have specimens recorded with a wild, confiscated or seized, or unknown source code, only *Lepismium cruciforme* is included in the IUCN Red List (Data Deficient).
18. Based on the information gathered, consideration could be given to delisting the genera *Disocactus*, *Epiphyllum*, *Hatiora*, *Lepismium*, *Pseudorhipsalis*, *Rhipsalis* and *Schlumbergera*, following consultations with the range States.

Recommendation to the Plants Committee

19. The Plants Committee may wish to:
 - a) Begin a process of consultation with the range States of the species of the genera *Disocactus*, *Epiphyllum*, *Hatiora*, *Lepismium*, *Pseudorhipsalis*, *Rhipsalis* and *Schlumbergera* (Annex 3), raising the possibility of deleting them from Appendix II, taking into account their conservation status and possible look-alike problems.
 - b) Prepare, in conjunction with the Secretariat, a draft Notification to the Parties to be used for that consultation.
 - c) Present the results of that consultation at the 20th meeting of the Plants Committee.

Number of specimens (live or dried plants) of Appendix-II epiphytic cacti that were artificially propagated (source code A) and traded in 1998-2008.

Species	No. of specimens
1. <i>Epiphyllum anguliger</i>	616
2. <i>Epiphyllum cartagense</i>	6
3. <i>Epiphyllum crenatum</i>	4319
4. <i>Epiphyllum grandilobum</i>	1
5. <i>Epiphyllum guatemalense</i>	2
6. <i>Epiphyllum hookeri</i>	1005
7. <i>Epiphyllum oxypetalum</i>	510
8. <i>Epiphyllum phyllanthus</i>	9527
9. <i>Epiphyllum pittieri</i>	3
10. <i>Epiphyllum</i> spp.	6870
11. <i>Epiphyllum thomsonianum</i>	1
12. <i>Hatiora gaertneri</i>	95216
13. <i>Hatiora herminiae</i>	20
14. <i>Hatiora rosea</i>	936
15. <i>Hatiora salicornioides</i>	112818
16. <i>Hatiora</i> spp.	69019
17. <i>Hatiora</i> x <i>graeseri</i>	1288
18. <i>Lepismium aculeatum</i>	16
19. <i>Lepismium bolivianum</i>	408
20. <i>Lepismium cruciforme</i>	938
21. <i>Lepismium houlettianum</i>	273
22. <i>Lepismium ianthothele</i>	10
23. <i>Lepismium lumbricoides</i>	3803
24. <i>Lepismium micranthum</i>	1
25. <i>Lepismium monacanthum</i>	90
26. <i>Lepismium paranganiense</i>	2
27. <i>Lepismium</i> spp.	177
28. <i>Lepismium warmingianum</i>	2740
29. <i>Pseudorhipsalis ramulosa</i>	33
30. <i>Pseudorhipsalis</i> spp.	30
31. <i>Rhipsalis baccifera</i>	164897
32. <i>Rhipsalis baccifera</i> ssp. <i>horrida</i>	1346
33. <i>Rhipsalis burchellii</i>	7128
34. <i>Rhipsalis campos-portoana</i>	40
35. <i>Rhipsalis cereoides</i>	2
36. <i>Rhipsalis cereuscula</i>	6470
37. <i>Rhipsalis clavata</i>	2145

38. <i>Rhipsalis crispate</i>	2
39. <i>Rhipsalis dissimilis</i>	14
40. <i>Rhipsalis elliptica</i>	484
41. <i>Rhipsalis ewaldiana</i>	1101
42. <i>Rhipsalis floccosa</i>	55
43. <i>Rhipsalis goebeliana</i>	2718
44. <i>Rhipsalis grandiflora</i>	132
45. <i>Rhipsalis hoelleri</i>	3
46. <i>Rhipsalis lindbergiana</i>	20
47. <i>Rhipsalis mesembryanthemoides</i>	17050
48. <i>Rhipsalis micrantha</i>	977
49. <i>Rhipsalis neves-armondii</i>	19
50. <i>Rhipsalis pachyptera</i>	2
51. <i>Rhipsalis paradoxa</i>	225
52. <i>Rhipsalis pentaptera</i>	25
53. <i>Rhipsalis pilocarpa</i>	23280
54. <i>Rhipsalis puniceodiscus</i>	23
55. <i>Rhipsalis russellii</i>	27
56. <i>Rhipsalis</i> spp.	267511
57. <i>Rhipsalis sulcata</i>	17
58. <i>Rhipsalis teres</i>	9955
59. <i>Rhipsalis trigona</i>	353
60. <i>Schlumbergera kautskyi</i>	630
61. <i>Schlumbergera opuntioides</i>	200
62. <i>Schlumbergera orssichiana</i>	219
63. <i>Schlumbergera russelliana</i>	3732
64. <i>Schlumbergera</i> spp.	776328
65. <i>Schlumbergera truncata</i>	409131
66. <i>Schlumbergera</i> x <i>buckleyi</i>	7

Table 1. Number of records and quantity of specimens of wild (W), confiscated or seized (I) or unknown (U) origin of epiphytic cacti in international trade in 1998-2008.

	Species	No. of records	Year	Quantity of specimens	Origin
1	<i>Hatiora gaertneri</i>	1	2004	12 live	I
2	<i>Lepismium aculeatum</i>	1	2005	3 dried plants	W
3	<i>Lepismium cruciforme</i>	1	2008	1 dried plant	I
4	<i>Pseudorhipsalis himantoclada</i>	1	2008	1 dried plant	I
5	<i>Rhipsalis cereuscula</i>	1	2008	1 dried plant	I
6	<i>Rhipsalis clavata</i>	1	2002	1 live	I
7	<i>Rhipsalis grandiflora</i>	1	2008	1 dried plant	I
8	<i>Rhipsalis micrantha</i>	1	2001	4 dried plants	W
9	<i>Rhipsalis occidentalis</i>	1	2001	1 dried plant	W
10	<i>Schlumbergera russelliana</i>	1	2004	2 live	I
11	<i>Epiphyllum hookeri</i>	2	1999/2000	3 live	W / I
12	<i>Epiphyllum oxypetalum</i>	2	2003/2006	21 g of extract / 2 live	I / W
13	<i>Hatiora rosea</i>	2	2001/2002	49 live	I / W
14	<i>Hatiora spp.</i>	2	2002/2003	470 live	I / I
15	<i>Rhipsalis baccifera</i> ssp. <i>horrida</i>	2	1998/2005	1 live / 1 dried plant	W / W
16	<i>Rhipsalis baccifera</i> ssp. <i>mauritiana</i>	2	2002/2003	4 live	W / W
17	<i>Schlumbergera truncata</i>	2	1998/2003	2 live	U / I

Table 2. Number of specimens of species or genera of epiphytic cacti of wild (W), confiscated or seized (I) or unknown (U) origin that were recorded more than twice in trade in 1998-2008. Specimens were of dried or live plants.

Genera/Species	No. of records	Year and number of specimens	Quantity of specimens	Origin
1. Epiphyllum spp.	17	1998 13	61	W, I and U
		1999 18		
		2000 4		
		2001 6		
		2002 3		
		2003 10		
		2004 1		
		2006 4		
		2007 1		
2008 1				
2. Lepismium spp.	4	1999 2	10	I, W
		2001 7		
		2006 1		
3. Rhipsalis baccifera	10	1999 1	32	W
		2000 6		
		2001 16		

Genera/Species	No. of records	Year and number of specimens	Quantity of specimens	Origin
		2005 3		
		2006 1		
		2007 5		
4. <i>Rhipsalis</i> spp.	17	1999 8	71	W, I and U
		2000 14		
		2003 5		
		2004 4		
		2005 6		
		2006 13		
		2007 3		
		2008 18		
5. <i>Schlumbergera</i> spp.	8	1998 1	702	W, I and U
		2000 223		
		2001 70		
		2002 1		
		2003 389		
		2005 4		
		2007 14		

Geographic range of epiphytic cacti

Species or genera	Range States
1. <i>Disocactus ackermannii</i>	Mexico
2. <i>Disocactus amazonicus</i>	Brazil, Colombia, Costa Rica, Ecuador, Nicaragua, Panama, Peru, Venezuela (Bolivarian Republic of)
3. <i>Disocactus aurantiacus</i>	Guatemala, Honduras, Mexico, Nicaragua.
4. <i>Disocactus biformis</i>	Guatemala, Honduras
5. <i>Disocactus cinnabarinus</i>	El Salvador, Guatemala, Honduras, Mexico
6. <i>Disocactus eichlamii</i>	Guatemala
7. <i>Disocactus flagelliformis</i>	Mexico
8. <i>Disocactus kinnachii</i>	Costa Rica
9. <i>Disocactus macdougallii</i>	Mexico
10. <i>Disocactus macranthus</i>	Mexico
11. <i>Disocactus martianus</i>	Mexico
12. <i>Disocactus nelsonii</i>	Guatemala, Honduras, Mexico
13. <i>Disocactus phyllanthoides</i>	Mexico
14. <i>Disocactus quezaltecus</i>	Guatemala
15. <i>Disocactus shrankii</i>	Mexico
16. <i>Disocactus speciosus</i>	Mexico
17. <i>Epiphyllum anguliger</i>	Mexico
18. <i>Epiphyllum cartagense</i>	Costa Rica, Panama
19. <i>Epiphyllum crenatum</i>	Belize, Guatemala, Honduras, Mexico, Panama
20. <i>Epiphyllum grandilobum</i>	Costa Rica, Panama
21. <i>Epiphyllum guatemalense</i>	Guatemala, Honduras, Mexico
22. <i>Epiphyllum hookeri</i>	Belize, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Trinidad and Tobago, Venezuela (Bolivarian Republic of).
23. <i>Epiphyllum oxypetalum</i>	Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Nicaragua
24. <i>Epiphyllum pittieri</i>	Costa Rica, Nicaragua, Panama
25. <i>Epiphyllum phyllanthus</i>	Argentina, Bolivia (Plurinational State of), Brazil, Colombia, Ecuador, French Guyana, Guyana, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela (Bolivarian Republic of)
26. <i>Epiphyllum</i> spp.	Argentina, Belize, Bolivia (Plurinational State of), Costa Rica, Colombia, Ecuador, El Salvador, French Guyana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Uruguay, Venezuela (Bolivarian Republic of).
27. <i>Epiphyllum thomasianum</i>	Costa Rica, Ecuador, Guatemala, Honduras, Mexico, Nicaragua
28. <i>Hatiora gaertneri</i>	Brazil
29. <i>Hatiora salicornioides</i>	Brazil
30. <i>Hatiora x graeseri</i>	No data
31. <i>Hatiora herminiae</i>	Brazil
32. <i>Lepismium ianthothele</i>	Argentina, Bolivia (Plurinational State of)
33. <i>Lepismium paranganiense</i>	Bolivia (Plurinational State of)
34. <i>Lepismium</i> spp.	Argentina, Brazil, Paraguay, Bolivia (Plurinational State of), Peru, Uruguay

Species or genera	Range States
35. <i>Pseudorhopsalis ramulosa</i>	Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti (ex), Honduras, Jamaica, Mexico, Nicaragua, Peru, Venezuela (Bolivarian Republic of)
36. <i>Rhopsalis baccifera</i>	Antigua and Barbuda, Argentina, Belize, Bolivia (Plurinational State of), Brazil, British Virgin Islands, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, French Guyana, Guyana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Madagascar, Martinique, Mexico, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Sri Lanka, Suriname, Trinidad and Tobago, United States, United States Virgin Islands, Venezuela (Bolivarian Republic of).
37. <i>Rhopsalis burchellii</i>	Brazil
38. <i>Rhopsalis clavata</i>	Brazil
39. <i>Rhopsalis elliptica</i>	Brazil
40. <i>Rhopsalis lindbergiana</i>	Brazil
41. <i>Rhopsalis mesembryanthemoides</i>	Brazil
42. <i>Rhopsalis pachyptera</i>	Brazil, Guyana, Suriname
43. <i>Rhopsalis sulcata</i>	Brazil
44. <i>Rhopsalis baccifera</i> ssp. <i>horrida</i>	Madagascar
45. <i>Pseudorhopsalis himantoclada</i>	Costa Rica, Panama
46. <i>Rhopsalis cereuscula</i>	Argentina, Bolivia (Plurinational State of), Brazil, Paraguay, Uruguay
47. <i>Rhopsalis grandiflora</i>	Brazil
48. <i>Rhopsalis micrantha</i>	Colombia, Costa Rica, Ecuador, Guatemala, Peru
49. <i>Rhopsalis occidentalis</i>	Ecuador, Peru, Suriname
50. <i>Rhopsalis</i> spp.	Angola, Antigua y Barbuda, Argentina, Belize, Bolivia (Plurinational State of), Brazil, British Virgin Islands, Colombia, Comoros, Costa Rica, Cuba, Dominican Republic, Ecuador, Ethiopia, French Guyana, Guatemala, Guyana, Haiti, Honduras, Jamaica, Kenya, Madagascar, Martinique, Mauritius, Mexico, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Seychelles, Sierra Leona, South Africa Sri Lanka, Suriname, Trinidad and Tobago, United Republic of Tanzania, United States, United States Virgin Islands and Venezuela (Bolivarian Republic of).
51. <i>Rhopsalis baccifera</i> ssp. <i>mauritiana</i>	Angola, Comoros, Ethiopia, Madagascar, Mauritius, Réunion, Seychelles, Sierra Leona, South Africa, Sri Lanka
52. <i>Hatiora rosea</i>	Brazil
53. <i>Hatiora</i> spp.	Brazil
54. <i>Lepismium aculeatum</i>	Argentina, Brazil, Paraguay
55. <i>Lepismium cruciforme</i>	Argentina, Brazil, Paraguay
56. <i>Lepismium bolivianum</i>	Bolivia (Plurinational State of)
57. <i>Lepismium houlettianum</i>	Argentina, Brazil
58. <i>Lepismium lumbricoides</i>	Argentina, Bolivia (Plurinational State of), Brazil, Paraguay, Uruguay
59. <i>Lepismium micranthum</i>	Peru
60. <i>Lepismium monacanthum</i>	Argentina, Bolivia (Plurinational State of)
61. <i>Lepismium warmingianum</i>	Argentina, Brazil, Paraguay
62. <i>Pseudorhopsalis</i> spp.	Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Haiti (ex), Honduras, Jamaica, Mexico, Nicaragua, Panama, Peru, Venezuela (Bolivarian Republic of).
63. <i>Rhopsalis campos-portoana</i>	Brazil

Species or genera	Range States
64. <i>Rhipsalis cereoides</i>	Brazil
65. <i>Rhipsalis crispata</i>	Brazil
66. <i>Rhipsalis dissimilis</i>	Brazil
67. <i>Rhipsalis ewaldiana</i>	Brazil
68. <i>Rhipsalis floccosa</i>	Argentina, Bolivia (Plurinational State of), Brazil, Paraguay, Peru, Venezuela (Bolivarian Republic of)
69. <i>Rhipsalis goebeliana</i>	Bolivia (Plurinational State of)
70. <i>Rhipsalis hoelleri</i>	Brazil
71. <i>Rhipsalis neves-armondii</i>	Brazil
72. <i>Rhipsalis paradoxa</i>	Brazil
73. <i>Rhipsalis pentaptera</i>	Argentina, Bolivia (Plurinational State of), Brazil
74. <i>Rhipsalis pilocarpa</i>	Brazil
75. <i>Rhipsalis puniceodiscus</i>	Brazil
76. <i>Rhipsalis russellii</i>	Brazil
77. <i>Rhipsalis teres</i>	Brazil
78. <i>Schlumbergera x buckleyi</i>	No data
79. <i>Rhipsalis trigona</i>	Brazil
80. <i>Schlumbergera opuntioides</i>	Brazil
81. <i>Schlumbergera kautskyi</i>	Brazil
82. <i>Schlumbergera spp.</i>	Brazil
83. <i>Schlumbergera orssichiana</i>	Brazil
84. <i>Schlumbergera russelliana</i>	Brazil
85. <i>Schlumbergera truncata</i>	Brazil