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



## Sixteenth meeting of the Conference of the Parties Bangkok (Thailand), 3-14 March 2013

# CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

## A. Proposal

Inclusion of *Cyphostemma laza* in CITES Appendix II in compliance with Article II, paragraph 2(a) of the Convention and the Resolution Conf. 9.24 (Rev. CoP13), Annex 2 (a), paragraph A.

## B. Proponent

Madagascar<sup>\*</sup>.

- C. Supporting statement
- 1. <u>Taxonomy</u>
  - 1.1 Class:Dicotyledons1.2 Order:Rhamnales
  - 1.3 Family: Vitaceae
  - 1.4 Genus and author: Cyphostemma laza Descoings (1931)
  - 1.5 Synonyms:
  - 1.6 Common names: Malagasy: Laza, Lazambohitra
  - 1.7 Code numbers:
- 2. Overview

The *Cyphostemma laza* is a liana with a single, slender, bottle-shaped trunk at the base and can reach 10 metres in height. The bark is covered with leaf scar rings.

This species endemic of Madagascar is collected in the wild and has become rare. However, it is not yet protected by CITES.

This document suggests that *Cyphostemma laza* meets the criteria for listing in CITES Appendix II in compliance with Article II, paragraph 2(a) of the Convention and Resolution Conf. 9.24 (Rev. CoP13) Annex 2(a), Paragraph A. Regulation of trade in the species is required to ensure that the harvest of specimens from the wild is not reducing the wild population and that further harvesting and other influences do not threaten the survival of the species.

<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.

## 3. <u>Species characteristics</u>

3.1 Distribution

This species is found in the western part of Madagascar (Morondava and surrounding area) and in the southern part (Mikea forest, Manombo, Andohahela Strict Nature Reserve and Beza Mahafaly Reserve).

The geographic distribution of Cyphostemma laza is provided in Annex 1.

3.2 Habitat

*Cyphostemma laza* is found in dry semi-deciduous forests/thickets and forest remnants in southwestern and southern Madagascar on tropical ferruginous soils, rocky ground, limestone plateaux and red sand.

3.3 Biological characteristics

Cyphostemma laza flowers from February to April. The fruiting period is between December and March.

3.4 Morphological characteristics

It is a plant with an elongated conical trunk which can reach 1 to 2 metres in height, climbing stems with thick bark, with numerous, very prominent elongated brown lenticels. The leaves are numerous, compound, odd-pinnate and strong with oval stipules. The flowers are public entities ovoid, red to reddish-brown at maturity and has ovoid seeds.

3.5 Role of the species in its ecosystem

The fruit of certain Cyphostemma species is eaten by fruit bats and birds (Flörchinger et al., 2010).

# 4. Status and trends

4.1 Habitat trends

The dry thorny forest/thicket formation of the south-west covers an area of about  $18,355 \text{ km}^2$ , 4.5 % of which is found in protected areas. This type of forest has decreased by 29.7 % since the 1970s (Moat & Smith, 2007).

Dry forest in the west covers 31,970 km<sup>2</sup>, 17.1 % of which is found in protected areas. This type of forest has considerably decreased, by 39.7 %, since the 1970s (Moat & Smith, 2007).

These formations are fragile and easily degraded. Degradation has resulted in open forests and even grassy savannahs.

4.2 Population size

About 250 individuals have been counted in the Andoharano forest north of Toliara, in the Tongobory forest in Betioky and in the Elomaka forest in Amboasary Sud (2006).

*Cyphostemma laza* occurs at a relatively low density (between 40 and 70 individuals per hectare), which is the reason for the low specific abundance of 80 to 140 mature individuals (Table 1).

Parameters	Sites				
Falaneters	Beroboka	Andranomena			
Total area of study plots (ha)	0.3	0.3			
Number of mature individuals in 0.1ha	4	7			
Average specific density (ind/ha)	40	70			
Estimated area occupied by species (ha)	2	2			
Estimated total abundance	80	140			

# Table 1: Density and abundance of Cyphostemma laza (2011)

## 4.3 Population structure

The absence of commercially exploitable individuals has been observed in the collection areas visited. The regeneration potential is extremely low for *Cyphostemma laza*: 28.6 % in Beroboka and 166.7 % in Andranomena.

## 4.4 Population trends

In the collection areas, the commercially exploitable individuals have become increasingly rare. In addition to massive collection for export, the destruction of the habitat by various anthropogenic activities has led to a gradual decline in the number of existing populations (a future decline of 73.3 % is expected).

## 4.5 Geographic trends

*Cyphostemma laza* is a less widespread species, with an estimated area of occurrence of 76,156.2 km<sup>2</sup> and area of occurrence of 135 km<sup>2</sup>. The area actually occupied by the species continues to decrease annually owing to fires and clearing due to the extension of crop fields.

5. Threats

Forests are rapidly disappearing and have become fragmented owing to charcoal production, agricultural extension for corn, and brushfires to obtain new pastures for livestock.

In addition, the abusive collection in the wild of *Cyphostemma laza* for export is a real threat and is detrimental to the survival of the species.

6. Utilization and trade

## 6.1 National utilization

This species is an ornamental plant in very high demand on the international market because of its climbing form and its bulbous trunk.

## 6.2 Legal trade

Cyphostemma laza was exported very much prior to 2007 (Table 2).

Table 2: Number of seedlings of Cyphostemma laza exported per annum
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Years	2003	2004	2005	2006	2007	2008
Number of exported seedlings	419	1,177	2,487	7,814	0	0

Source: Management Authority and Permanent Secretariat, CITES Madagascar, 2009.

## 6.3 Parts and derivatives in trade

Cyphostemma laza is exported in the form of live plants.

#### 6.4 Illegal trade

No illegal trade of Cyphostemma laza has been recorded to date. The species is rarely sold nationally.

6.5 Actual or potential trade impacts

This species is collected in the wild to sell on the international market. Specimens reaching an exploitable size are becoming rare in the field. Exports could thus lead to the absence of natural regeneration and the decline and even the disappearance of populations in certain collection areas. This would constitute, in the long term, a serious threat to the survival of the species.

Since the geographic distribution of the species is fragmentary, collectors change collection areas when specimens they seek have been depleted.

#### 7. Legal instruments

7.1 National

Since the species is not yet listed in the CITES Appendixes, its exploitation is not subject to CITES regulations. The collection and export are only regulated by the authorization procedures at national level.

7.2 International

The inclusion of the species in CITES Appendix II will ensure that exports are accompanied by a CITES permit that attests to the fact that the specimens were collected in compliance with existing laws and using methods that are not detrimental to the survival of the species.

In addition, specimens of species in Appendix II will benefit from significant trade studies monitoring and updating their biological and ecological data.

#### 8. Species management

#### 8.1 Management measures

The number of specimens authorized for export depends on the status of the species stock in a horticultural centre. Only one collection request per species per operator is granted in order to establish parental stock and/or mother plants. Then, operators must propagate the plants *ex situ*. Export permits and authorizations are only issued for artificially produced species.

#### 8.2 Population monitoring

This species has already been the subject of a significant trade study for it to be included in CITES Appendix II in 2010. Its conservation status according to the IUCN criteria has changed from vulnerable VU B2b (i, ii, iii) to endangered EN (A2c, B2).

#### 8.3. Control measures

8.3.1 International

The listing of this species in Appendix II will ensure that exports are accompanied by a CITES permit that attests to the fact that the specimens were collected in compliance with existing laws and using methods that are not detrimental the survival of the species.

8.3.2 Domestic

Certain populations of this species are found in protected areas (Andranomena, Kirindy, Kirindy Mitea, Tsimanampetsotsa, Beza Mahafaly, Andohahela).

8.4 Captive breeding and artificial propagation

Propagation of this species by seed is easy but slow.

Propagation by cuttings is possible.

8.5 Habitat conservation

The fact that the habitats of *Cyphostemma laza* are found in protected areas already constitutes longterm conservation of the habitat of this species. The new recently delimited protected areas, such as Amorn'ny Onilahy and Ekodida, could also contain this species and contribute to ensuring its continued existence and the conservation of its habitat.

8.6 Safeguards

To ensure the continued existence of the species, export permits and authorizations should strictly be issued solely for the artificially propagated species. The species should be on the list of species of concern and whose ex-*situ* propagation is necessary.

9. Information on similar species

Not applicable

10. Consultations

The other countries have not been consulted because this species is endemic to Madagascar.

11. Additional remarks

This species was already the subject of a proposal for inclusion in Appendix II at CoP15 in Doha (Qatar) in 2010. The biological and ecological data obtained were updated and supplemented to prepare this new proposal for the listing of the species in Appendix II.

Under an agreement between the CITES Secretariat and the European Union, *Cyphostemma laza* will be the subject of further research in 2012 to supplement the existing data.

# 12. <u>References</u>

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# Webography

- <u>http://www.efloras.org</u>
- <u>www.tropicos.org</u>
- <u>http://www.aridlands.com/catalog/product\_info.php?cPath=56&products\_id=4538</u>

- http://www.aridlands.com/catalog/product\_info.php?cPath=56&products\_id=4538

# 13. List of annexes

- Annex 1: Illustrations and geographic distribution of *Cyphostemma laza*
- Annex 2: Preliminary data on the Web trade of Malagasy succulent plants species coordinated at RBG Kew. A Web survey investigating the current Web-based trade in Malagasy succulent species has been carried out. The species include both CITES-listed species and species not currently listed.

# Illustrations and geographic distribution of Cyphostemma laza



Cyphostemma laza overview (Ravaomanalina, 2006)



*Cyphostemma laza* fruit (Ravaomanalina, 2006)



Cyphostemma laza seedling (Ravaomanalina, 2006)



		V	Vebsite	location		Specimen type for sale				Source of specimens for sale			Price range in USD			
Species	USA	EU	Other	Unknown	Total	Mature	Seedling	Seeds	unknown	Wild	Propagated	unknown	Per plant		Per seed	
													Min	Max	Min	Max
Operculicarya decaryi	11	4	2	1	18	9	1	5	3		1	17	14.95	400.00	0.39	0.86
Senna meridionalis	3		1		4	3		1		1		3	20.35	150.00	0.51	
Adenia firingalavensis	1	1	1		3	2		1		1		2	75.00	236.72	1.41	
Adenia subsessifolia	1	1			2	2						2	8.00	15.65		
Cyphostemma laza	<mark>3</mark>	2	1		<mark>6</mark>	<mark>3</mark>	1	1	<mark>1</mark>			<mark>6</mark>	<mark>28.00</mark>	<mark>65.00</mark>	<mark>1.18</mark>	
Uncarina stellulifera	3	1			4	1		3			1	3	70		0,66	2,52
Uncarina grandidieri	10				10	7	3						30	500		

Preliminary data on the Web trade of Malagasy succulent plants species coordinated at RBG Kew A Web survey investigating the current Web-based trade in Malagasy succulent species has been carried out. The species include both CITES-listed species and species not currently listed.