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

Seventeenth meeting of the Conference of the Parties
Johannesburg (South Africa), 24 September – 5 October 2016

CONSIDERATION OF PROPOSALS FOR AMENDMENT OF APPENDICES I AND II

A. Proposal

Downlisting of Dyscophus *antongilii* from Appendix I to Appendix II

B. Proponent

Madagascar*

C. Supporting statement

1. Taxonomy

1.1	Class:	Amphibia
1.2	Order:	Anura
1.3	Family:	Microhylidae Gunther 1859, subfamily Dyscophinae
1.4	Genus, species:	*Dyscophus antongilii* Grandidieri 1877
1.5	Scientific synonyms:	
1.6	Common names:	English: Tomato Frog French: La grenouille tomate, crapaud rouge de Madagascar Malagasy: Sahongoangoana, Sangongogna, Sahogongogno (and similar writings)

2. Overview

The genus *Dyscophus* contains three species of large microhylids composing the subfamily Dyscophinae endemic to Madagascar. *D. antongilii, D. guineti and D. insularis*. *Dyscophus antongilii* is red-orange in coloration and commonly called the tomato frogs because of its appearance. It is well-known and iconic amphibian species. Described by Alfred Grandidier in the 1877, *D. antongilii* occurs in a moderate area of northeast and east of Madagascar. *Dyscophus antongilii* has been listed within CITES Appendix I since 1987 while the other two species currently have no CITES listing but proposed to be inserted into Appendix II for this year by a separate proposal. Some studies on the species led by F. Andreone demonstrate that this species is frequently found outside of protected area and one of the strategies to conservation purpose is the trade. The species is listed as Near Threatened on the IUCN Red List. It lives in anthropogenic habitats (including urban areas) and secondary forests. The original proposal to have this species listed in

* *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.*

Appendix I was extremely short, and appears to be based on almost no supporting data, but just on few observation and anecdotal considerations.

3. Species characteristics

3.1 Distribution

This species is very common in two main areas: (1) the Antongil bay area and the localities Andevoranto, Antongil bay (including Mahalevona), Fizoana, Iaraka, Maroantsetra, Rantabe, Voloina, and (2) in the area close of Ambatovaky Special Reserve, including Iampirano (sometimes reported as Lampirano) and Antara.

3.2 Habitat

Dyscophus antongilii is very common in the town of Maroantsetra where it inhabits most gardens and breeds in ponds and ditches. It is also common in cultivated areas around the village on Antara and Iampirano/Lampirano. It lives in primary rainforest, coastal forest, secondary vegetation, degraded scrub, and highly disturbed urban areas. It is a very adaptable species, but possible declines in Maroantsetra indicate that there might be a limit to the extent that it can persist in urbanized habitats. It appears to be localized to sandy ground near the coast, and breeds in ditches, flooded areas, swamps, and temporary and permanent still or very slowly flowing water.

3.3 Biological characteristics

These frogs have very sticky skin secretions which can produce local swellings in humans. Specimens breed regularly after rainfalls (no particular explosive breeding behaviour) and can be observed all-year round after rains. 1000-15000 small black eggs are laid and hatch 36 hours later. Calls: A series of short low-pitched notes which is repeated after some intervals. The Malagasy name for this frog “Sangongon” is onomatopoetic and based on these sounds (Glaw and Vences, 2007).

3.4 Morphological characteristics

Dyscophus antongilii is a large conspicuously coloured frog. M 60- 65 mm, F 85-105 mm. Morphology similar to *D. guineti*. Colour uniformly yellow-orange in males, orange-red in females, sometimes with dark colour below dorsolateral folds.

3.5 Role of the species in its ecosystem

Unknown, but suspected to be predator of ground dwelling insects, and a potential food source of snakes.

4. Status and trends

4.1 Habitat trends

Degraded and anthropogenic habitats suitable for this species appear to be increasing.

4.2 Population size

Not known. It is locally abundant, especially in and around Maroantsetra (the best known locality for this species), and in the Ambatovaky Special Reserve region.

4.3 Population structure

Age structure has been studied in *Dyscophus guineti* with their lifespan ranging from 3-7 years and sexual maturity reached between years 2 and 4 (Tessa et al., 2011).

4.4 Population trends

Surveys undertaken around Maroantsetra in 2006 suggest that the population here seems to be declining (Andreone *et al*. 2006). Nevertheless the species still remains common in Maroantsetra. In Ambatovaky Special reserve its population is stable and abundant.

4.5 Geographic trends

No available information on the habitat trends

5. Threats

Pollution of water bodies is a potential threat. Unrestricted collection for international trade could damage local populations, but collecting quotas are always set in Madagascar for Appendix II species. .

The recent detection of the pathogenic amphibian chytrid fungus *Bd* and ranavirus in Madagascar are also of concern since *Dyscophus* species have been shown to be susceptible to this pathogen in captivity (Oevermann et al., 2005), however to date amphibian population declines and mortality have not been observed due to disease in situ (Bletz et al., 2015)

6. Utilization and trade

6.1 National utilization

D. antongili is sometimes collected and used for display at zoological parks in Madagascar (e.g., Ivoloina). Local guides show them to tourists in Maroantsetra

6.2 Legal trade

All international commercial trade of *Dyscophus antongilii* has been illegal since 1987, the date of its insertion into Appendix I.

6.3 Parts and derivatives in trade

None.

6.4 Illegal trade

Dyscophus guineti has been found within confiscated smuggled shipments of Malagasy wildlife, despite being legal to trade.

6.5 Actual or potential trade impacts

Potential trade impacts are expected to be minor as Appendix II quotas will be kept low. The potential trade impact may go towards a protection of the species itself, by encouraging people to conserve their breeding sites and viewing them as a resource worth protecting. Valorisation through tourism has already been noticed: locals are familiar with this frog and can quickly find them when required as tourist attraction (Glaw and Vences, 2007).

7. Legal instruments

7.1 National

According to the decree 2006-400 about categorisation of the species, *D. antongilii* is classified as category I and Class I which means it is totally protected .

7.2 International

Appendx I in the CITES classification.

8. Species management

8.1 Management measures

There are no species-based management measures currently in place.

8.2 Population monitoring

There are no population monitoring programs being carried out for the species.

8.3 Control measures

8.3.1 International

The control measures on the international level is constituted by the appendix I measures in each Country CITES members.

8.3.2 Domestic

Permits are required from the Ministère de l'Environnement, de l'Ecologie,de la Mer et des Forêts to collect wildlife for commercial purposes.

8.4 Captive breeding and artificial propagation

Dyscophus antongilii has been bred in captivity on numerous occasions at zoological institutions and is occasionally bred for commercial purposes by private breeders (Li Vigni, 2013).

8.5 Habitat conservation

Dyscophus amtongilii is found the Ambatovaky Special Reserve, and may also occur in other protected areas such as Mananara Nord Biosphere Reserve and Makira National Park.

The request to downlist it into Appendix II is expected to motivate local people to conserve breeding sites that could otherwise get damaged from pollution.

8.6 Safeguards

The CITES Madagascar Scientific Authority will recommend conservative quotas for commercial collecting which will not threaten this locally abundant species.

9. Information on similar species

Very similar and possibly conspecific to *D. guineti* which differs by colour pattern. The study made by Orozco et al demonstrates that the species is a true species.

10. Consultations

IUCN SSC ASG Madagascar, Scientific Authorities CITES Madagascar

11. Additional remarks

The original proposal to have this species listed in Appendix I was extremely brief, and appears to be based on almost no supporting data. The species at this time (1987) was believed (by some) to be restricted to small populations that were highly sensitive to habitat degradation. There was no evidence provided, that demonstrated a population decline occurring as a result of trade.

12. References

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