

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



Twenty-fourth meeting of the Animals Committee
Geneva, (Switzerland), 20-24 April 2009

Review of Significant Trade in specimens of Appendix-II species

SPECIES SELECTED FOLLOWING COP13

1. This document has been prepared by the Secretariat.
2. At its 21st meeting (Geneva, May 2005), the Animals Committee agreed that, under the terms of paragraph b) of Resolution Conf 12.8 (Rev. CoP13), a review of trade in *Mantella* spp. should be undertaken.
3. The Secretariat notified the range State of the selected species, explained the reason for this selection and requested comments regarding possible problems with the implementation of Article IV of the Convention.
4. At its 22nd meeting (Lima, July 2006), the Animals Committee reviewed the available information in accordance with paragraph g) of Resolution Conf. 12.8 (Rev. CoP13) and agreed not to eliminate *Mantella* spp. from the review.
5. IUCN was engaged to compile information about the biology and management of and trade in *Mantella* spp. and to provide a preliminary categorization of these species, in compliance with paragraphs h) and i) of Resolution Conf. 12.8 (Rev. CoP13) (see document AC23 Doc. 8.4).
6. Having reviewed the information and preliminary categorization at its 23rd meeting (Geneva, April 2008), the Animals Committee decided to retain four species from the genus *Mantella* (*M. crocea*, *M. expectata*, *M. milotympanum* and *M. viridis*, all endemic to Madagascar) in the Review of Significant Trade. The Committee asked Madagascar to provide additional data on the population estimates and on its non-detriment findings in order to be able to reconsider the status of these species at its 24th meeting.
7. At its 23rd meeting, the Animals Committee also adopted the following recommendations concerning several species from the genus *Mantella* for which it considered that the trade was 'of least concern' and that were therefore eliminated from Review of Significant Trade (see AC23 Summary Record):
 - For *Mantella aurantiaca*, Madagascar was asked to inform the Secretariat of any quota that may be set and the Secretariat was to keep the Animals Committee informed;
 - For *Mantella baroni*, Madagascar was asked to review the quota for this species and it agreed to do so;

- For *Mantella bernhardi*, the Animals Committee may consider the species again should the quota be re-established; and
 - For *Mantella betsileo*, Madagascar was asked to analyse the taxonomic split into two species and adapt the export quota accordingly, and it agreed to do so.
8. On 20 May 2008, the Secretariat wrote to the Management Authority of Madagascar and asked it to provide by 31 December 2008 additional data on the population estimates and on the non-detriment findings for *Mantella crocea*, *M. expectata*, *M. milotympanum* and *M. viridis* so that the Animals Committee may reconsider the status of these species at its 24th meeting.
 9. The Management Authority of Madagascar responded on 30 December 2008 with information on *Mantella baroni*, *M. bernhardi*, *M. betsileo*, *M. crocea*, *M. expectata*, *M. milotympanum* and *M. viridis*. This information is provided in Annex 1 to the present document.
 10. On 31 December 2008, Madagascar sent to the Secretariat its proposal for 2009 export quotas for CITES-listed species including the following species from genus *Mantella*: *M. aurantiaca*, *M. baroni*, *M. bernhardi*, *M. betsileo*, *M. crocea*, *M. ebenau¹*, *M. expectata*, *M. laevigata*, *M. madagascariensis*, *M. milotympanum*, *M. nigricans*, *M. pulchra* and *M. viridis*. This information, together with the quotas established for the previous years, is provided in Annex 2 to the present document.
 11. In accordance with paragraphs k) and l) of Resolution Conf. 12.8 (Rev. CoP13), the Animals Committee is requested to:
 - a) revise the preliminary categorization proposed by IUCN and, in doing so, either eliminate the species from the review, or formulate recommendations to address problems related to the implementation of Article IV, paragraphs 2 (a) and 3, differentiating between short-term and long-term actions and setting deadlines; and
 - b) identify any problems in the course of the review that are not related to the implementation of Article IV, paragraphs 2 (a) and 3, that should be addressed by the Secretariat.

¹ Synonym of *M. betsileo* according to the Checklist of CITES species.

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Ambohitsaina, 30 December 2008

From the Scientific Authority for fauna
Department of Animal Biology

to

The Director, Natural Resource Utilization
CITES Management Authority of Madagascar

Subject: Reply to your letters No. 2043/MEFT/SG/DGEF/DVRN/SGE and 323/MEFT/SG/DGEF/DVRN/SGFF
of 10 September 2008 and 7 October 2008

Dear Director,

Please find attached the reply to your two letters referenced above, requesting information and scientific opinions on the species *Mantella*, *Hoplobatrachus tigerinus* and *Dyscophus antongilii*, which were the subject of recommendations from CITES in Geneva. This response was drawn up during the two-day workshop which we held at the University of Antananarivo on 29 and 30 December 2008, with the participation of the experts concerned.

Yours faithfully,

for the Scientific Authority

Dr Daniel RAKOTONDRAVONY

ESTABLISHMENT OF QUOTAS FOR THE SPECIES COVERED IN LETTERS NO.
2043/MEFT/SG/DGEF/DVRN/SGE AND 323/MEFT/SG/DGEF/DVRN/SGFF
of 10 September 2008 and 7 October 2008

By the Scientific Authority for fauna of Madagascar

The method for calculating the quotas is the same as that used at the 2006 workshop organized by the Scientific Authorities.

Mantella aurantiaca

Trade in this species has been suspended for about a decade. However, studies have been carried out and population data are available, including the figures provided by Rabemananjara *et al.*, 2008 [1], who estimated a density of 836 to 1,317 specimens per hectare at the Andranomandry and Torotorofotsy sites.

It has been noted that this species may be confused with *M. milotympanum* (Rabemananjara *et al.*, 2008 [2]) but an identification guide for the species most in trade has been drawn up to resolve this problem (CITES Management and Scientific Authorities, 2006 [3]).

The precautionary quota has been set at 2,500 specimens.

It has been noted that the species exists in four zones including several locations outside the protected areas.

Mantella baroni

This species can be confused with *M. madagascariensis*. The problem has been resolved by the identification guide for the species most in trade [3].

There are five harvest sites (Glaw and Vences, 2007 [4]).

According to [1], density is 605 to 900 specimens per hectare.

The quota is set at 5,500 specimens.

Mantella bernhardii

No quota was set for this species until 2005, when a zero quota was established (www.cites.org).

According to [1], density varies between 600 and 4,480 specimens per hectare.

Despite the high number of sites examined by Rabemananjara *et al.*, 2005 [5], Vieites *et al.*, 2006 [6] discovered that the Manombo population may consist of a different species. Consequently, the number of harvest sites should be limited to the north of Manombo, resulting in the establishment of a precautionary quota of 650 specimens.

Mantella betsileo

This species has been split: *M. ebenau* in the populations encountered in the northern region, starting from Maroantsetra, and *M. betsileo* in those found in the south-western part (Rabemananjara *et al.*, 2007 [7], Glaw and Vences, 2007 [4] and Mercurio and Andreone, 2008 [8]).

On the basis of the distribution and density data gathered in the protected areas during the two species' reproduction period, a precautionary quota of 2,500 specimens is set for each of them.

It is recommended that exact information on the harvest locations be given, in order to avoid confusion between the two species.

Mantella crocea

The range of this species is located along the Zahamena-Mantadia corridor (new protected areas) and in the Ampangadianatrandraka site (outside the protected area) (Bora *et al.*, 2008 [9]). Thus harvesting is very localized, and in consequence the precautionary quota is set at 500.

This species is highly polymorphic (Rabemananjara, 2008 [10]).

Mantella expectata

New data on its distribution (Mercurio *et al.*, 2008 [11]) and phylogeography (Crottini *et al.*, 2008 [12]) are available.

A number of threats face this species, including the drainage and fragmentation of its habitat [4].

Its updated IUCN status is: Endangered (EN) on the basis of Andreone *et al.*, 2008 [13].

The species is present within the Isalo National Park and in 17 sites outside the protected area [11]. A precautionary quota of 250 specimens has been established.

Mantella milotympanum

This species has a very localized distribution, in Fierenana (new protected area and Alliance for Zero Extinction) (Randrianirina, 2005 [14], [9]).

In addition to the studies carried out by Vieites *et al.* in 2005, distribution and density studies are in progress.

The quota is therefore set at 0.

Mantella viridis

This species has a very localized distribution, being found only within a radius of 5 km between Antongombato and the Montagne des Français ([4], Mercurio and Andreone, 2008 [15]).

Long-term ecological studies are in progress.

A quota of 250 is proposed.

Dyscophus antongilii

This species is listed in CITES Appendix I.

Although adapted to open areas, it is generally found in an urban environment (Tessa *et al.*, 2008 [16]).

Several sites have been identified, such as Maroantsetra, Soanierana Ivongo Antara and Lampirano/lampirano around Ambatovaky.

Population studies are in progress.

Hoplobatrachus tigerinus

This is an alien species introduced into Madagascar, eaten in large quantities by the local population.

Studies on its distribution, population density and the production chain are in progress.

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Quotas established for Madagascar for the years 2005 to 2008 and proposed quota for 2009

Species	2005	2006	2007	2008	2009
<i>Mantella aurantiaca</i>	in prep./ en prep./ en prép.	-	-	-	2 500
<i>Mantella baroni</i>	5 000	5 000	5 000	5 000	5 500
<i>Mantella bernhardi</i>	0	0	-	-	650
<i>Mantella betsileo</i>	5 000	5 000	5 000	5 000	2 500
<i>Mantella cowani</i>	0	0	-	-	-
<i>Mantella crocea</i>	1 000	1 000	1 000	1 000	500
<i>Mantella ebenau</i>	-	-	-	-	2 500
<i>Mantella expectata</i>	1 000	1 000	1 000	1 000	250
<i>Mantella haraldmeieri</i>	0	0	2 000	2 000	-
<i>Mantella laevigata</i>	2 000	2 000	500	500	2 000
<i>Mantella madagascariensis</i>	500	500	1 000	1 000	500
<i>Mantella milotympanum</i>	1 000	1 000	1 000	1 000	0
<i>Mantella nigricans</i>	1 000	1 000	3 000	3 000	1 000
<i>Mantella pulchra</i>	3 000	3 000	1 000	1 000	3 000
<i>Mantella viridis</i>	1 000	1 000	1 000	2 000	250