

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

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Twenty-sixth meeting of the Animals Committee  
Geneva (Switzerland), 15-20 March 2012 and Dublin (Ireland), 22-24 March 2012

REVIEW OF SIGNIFICANT TRADE IN SPECIMENS OF APPENDIX-II SPECIES

The attached information document has been submitted by Madagascar in relation to agenda item 12<sup>\*</sup>.

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<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.*

**Etude de commerce important de spécimens d'espèces de l'Annexe II [résolution Conf. 12.8 (Rev. CoP13) paragraph d)]**

CITES Ref: RPJ/VEZ/Sig. trade-AC25/*Catalaphyllia jardinei*, *Mantella bernhardi*, *Plerogyra sinuosa* & *Trachyphyllia geoffroyi* [20 Août 2011]

**Object: Catalaphyllia jardinei, Plerogyra sinuosa, Trachyphyllia geoffroyi, Mantella bernhardi**

This document is a reply to the letter from Mr. David H. W. Morgan, dated 20 August 2011, following resolution Conf. 12.8 (Rev. CoP13), to provide commentaries on the eventual problems regarding the application of Article IV concerning four species.

The exportation of specimen of marine species *Catalaphyllia jardinei*, *Plerogyra sinuosa*, *Trachyphyllia geoffroyi* is not conform to the Article IV, par. 2a), 3 & 6a. It is realized without the deliverance of an exportation permit.

Concerning *Mantella bernhardi*, the exportation is in compliance to the Article IV. The quota of 650 was calculated using formula that was developed by the Scientific Authority in Madagascar. This formula uses a series of standardized parameters that take into account life history, forest dependency, geographical distribution, and information on population density or size.

Madagascar's quota formula:

**Parameters**

N = population size

S = surface area

fn = d+t+r

fa = h+c

np = number of proposed collection sites

**d = distribution**

Locally rare = 0.10

Locally common = 0.25

Widespread, fragmented = 0.50

Widespread, continuous = 1.00

**t = extent of occurrence**

a = 0.10

b = 0.25

c = 1.00

**h = habitat**

Degraded = 1.00

Secondary = 0.25

Primary = 0.10

**r = reproduction**

Type 'r' = 1.00

Type 'k' = 0.25

**c = collection pressure**

Strong = 0.10

Weak = 0.25

**Annual quota = Density (fn\*fa)np or N(fn\*fa)np**

The Scientific Authority (Fauna) for Madagascar considers a quota of 650 to be non-detrimental to *M. bernhardi* because:

- It is precautionary compared to the national population size;
- The density is between 600 and 4,480 individuals per hectare (Rabemananjara et al. 2005);
- The species has a distinctive coloration, consequently is easy to identify. The Scientific Authority (Fauna) of Madagascar, and its partners produced an identification guide to mantella frogs, including *M. bernhardi* (Jovanovic et al. 2007);
- Collect is only allowed outside of protected areas and Manombo where a different species could be occurred (Vieites et al. 2006). It's clearly stipulate in permits issued by the Management Authority.

**References**

Jovanovic, O. F. Rabemananjara, O. Ramilijaona, F. Andreone, F. Glaw & M. Vences 2007 *Frogs of Madagascar, genus Mantella*. – Washington, Conservation International (Tropical Pocket Guide Series).

Rabemananjara F.C.E., Bora, P., Cadle J. E., Andreone F., Rajeriarison E., Talata P., Glaw F., Vences M. & Vieites D. R., 2005. New records, potential distribution and conservation of *Mantella bernhardi*, an endangered frog species from south-eastern Madagascar. *Oryx* 39 (3), July 2005. pp. 339-342.

Vieites D. R., Chiari Y., Vences M., Andreone F., Rabemananjara F., Bora P., Nieto-Romàn S. & Meyer A., 2006 - Mitochondrial evidence for distinct phylogeographic units in the endangered Malagasy poison frog *Mantella bernhardi*. *Molecular Ecology* 15, 1617-1625.