



## Revision of *Platycalymma* Westwood, 1889, and the synonymy of *Ichromantis* Paulian, 1957 (Mantodea, Iridopterygidae, Tropicodantinae)

ROGER ROY<sup>1</sup> & GAVIN J. SVENSON<sup>2,3,4</sup>

<sup>1</sup>Muséum national d'Histoire naturelle, Entomologie, C.P.50, 45 rue Buffon, F – 75231 Paris cedex 05, France.

<sup>2</sup>Research and Collections, New York State Museum, 3140 Cultural Education Center, Albany, New York, 12230, USA.

<sup>3</sup>Department of Biology, Museum of Southwestern Biology, University of New Mexico, 167 Castetter Hall, MSC03 2020, Albuquerque, New Mexico, 87131, USA.

<sup>4</sup>Corresponding author. E-mail: gavin.svenson@gmail.com

### Abstract

The endemic Malagasy praying mantis genus *Platycalymma* Westwood, 1889, is taxonomically treated with a re-description of the genus and of the type species, *P. latipennis* Westwood, 1889. The genus *Ichromantis* Paulian, 1957, is newly determined as a junior synonym to *Platycalymma*, which results in the inclusion of two additional species within the genus, *P. befasica* (Paulian, 1957) and *P. dichroica* (Paulian, 1957), both re-described within this study. In addition, we add three new species to the genus described from Madagascar: *P. annulicornis* n. sp., *P. mahafalica* n. sp. and *P. viettei* n. sp. A key to the six species in English and French is provided for increased accessibility to the people of Madagascar. Illustrations of major features used to diagnose species are provided including the head, pronotum, apex of abdomen and male genitalia. Species distribution is presented and locality coordinates are provided in print as well as being available for download as a KML file viewable in Google Earth.

**Key words:** Mantodea, Tropicodantinae, *Platycalymma*, revision, classification, taxonomy, Madagascar

### Résumé

**Révision de *Platycalymma* Westwood, 1889, et synonymie de *Ichromantis* Paulian, 1957 (Mantodea, Iridopterygidae, Tropicodantinae).** Le genre de mante endémique malgache *Platycalymma* Westwood, 1889, fait l'objet d'une nouvelle diagnose et d'une redescription de son espèce type *P. latipennis* Westwood, 1889. Le genre *Ichromantis* Paulian, 1957, est nouvellement considéré comme synonyme récent de *Platycalymma*, ce qui fait que les deux espèces qu'il renferme y sont incluses et deviennent *P. befasica* (Paulian, 1957) et *P. dichroica* (Paulian, 1957), toutes les deux redécrites dans cette étude. De plus nous ajoutons pour le genre trois nouvelles espèces également de Madagascar: *P. annulicornis* n. sp., *P. mahafalica* n. sp. et *P. viettei* n. sp. Une clé est fournie pour les six espèces en anglais et en français, et des illustrations représentent, outre leurs habitus, les têtes, les pronotums, les extrémités des abdomens et les genitalia mâles. Enfin la distribution des espèces est présentée avec les coordonnées des localités sous forme imprimée afin d'être disponibles pour le téléchargement dans un fichier KML visualisable dans Google Earth.

### Introduction

The genus *Platycalymma* was created by John Obadiah Westwood (1889) based on a female specimen collected in Madagascar he named *P. latipennis*. He listed under the description of *P. latipennis* two species supposed to be congeneric including *Miopteryx madagascariensis* SAUSSURE, 1870 and *Mantis tortricoides* DE HAAN, 1842. Though he took no further action with *M. tortricoides*, he subsequently moved *M. madagascariensis* under *Platycalymma* and included a short description. However, we guess he was somewhat hesitant about this action since he included a question mark before the name of *madagascariensis* appeared after *Platycalymma*. In a treatment by Saussure & Zehntner (1895), *Platycalymma* was included as a subgenus under *Tropicodantis* STÅL, 1877, but then returned to