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A remarkable new species of *Mythomantis* Giglio-Tos, 1916 from northern Borneo, with notes on the systematics of Deroplatyinae Westwood, 1889 (Mantodea: Mantidae)

CHRISTIAN J. SCHWARZ^{1,2,*} & MARTIN HELMKAMPF^{1,3}

¹University of Würzburg, Department of Animal Ecology and Tropical Biology, Theodor Boveri Institute, Am Hubland, D-97074 Würzburg, Germany

²Present address: Ruhr University Bochum, Faculty of Biology and Biotechnology, Conservation Biology Unit, Universitätsstraße 150, D-44780 Bochum, Germany

Email: ChristianSchw@gmx.de

³Present address: Arizona State University, School of Life Sciences, Tempe, AZ 85287, United States

Email: Martin.Helmkampf@asu.edu

* Corresponding author (both authors contributed equally to this work)

Abstract

A conspicuous new species of praying mantid, *Mythomantis serrata* sp. nov., from the Malaysian part of Borneo is described and illustrated. A key to the three known species of the genus *Mythomantis* and their known geographic distribution is provided. Several morphological characters, most notably those in the male genitals, suggest a close relationship between *Mythomantis* and the Southeast Asian genera *Pseudempusa* and *Deroplatys*. As a consequence, we propose to transfer *Mythomantis* from Angelinae to Deroplatyinae, and *Pseudempusa* from Miomantinae Rivetinini to Deroplatyinae, while removing *Brancsikia* from this subfamily.

Key words: Mantodea, Angelinae, Deroplatyinae, *Mythomantis serrata*, *Pseudempusa*, taxonomy

Introduction

The enigmatic praying mantid genus *Mythomantis* Giglio-Tos, 1916 has recently been revised by Roy (2004), who also provided comments on the history and systematic position of the genus, and depicted the male genitalia for the first time. The genus currently comprises two Sunda species, *M. confusa* (Westwood, 1889) and *M. gracilis* Werner, 1922 (Roy 2001, 2004).

M. confusa was first described by De Haan (1842) as the female of a “pair” he named *Mantis heteroptera*. Westwood (1889), who had recognized the female to be not conspecific with the male, retained the specific epithet *heteroptera* for the male and named the female *Euchomena confusa*, without having seen the specimen (Roy 2004). Werner (1922) briefly described *M. gracilis* after a male from Ambon Island that he had initially assigned to *M. confusa* (Werner 1921). All authors since Beier (1935b) have assigned *Mythomantis*, together with *Euchomenella* Giglio-Tos, 1916 and *Tagalomantis* Hebard, 1920 to the subfamily Angelinae (former tribe Angelini) (Beier 1964, Roy 2001, 2004, Ehrmann 2002, Otte & Spearman 2005).

Here we present a third species featuring unique pronotal characters, otherwise fitting well into the diagnosis of *Mythomantis*. The first specimen raising our interest was a male which was collected by light-trapping during an ecological study focusing on the diversity of praying mantids along a disturbance gradient in Sabah, Borneo (Helmkampf *et al.* 2007). K. Schütte, ZMUH, (pers. comm.) later drew our attention to four other specimens, all males, deposited in the Natural History Museum London (NHM). Recently (2009), another male was collected by G. J. Svenson (CMNH) in northern Sarawak. No other specimens seem to be known to date.

earlier draft of this manuscript. Thomas Lessman (www.WorldHistoryMaps.info) created the SE Asia map under the Creative Commons CC-by-nc-nd-3.0 US License. Matthias Borer (Neuchâtel, Switzerland), Sören Materna (Heroldsbach, Germany), Tobias Schulze (Obermichelbach, Germany) and Kai Schütte provided morphological data. We also thank Peter Chong (Innoprise Inc.), Chey Vun Khen (Forest Research Centre, Sandakan), Glen Reynolds (British Royal Society) and Jan Beck (University of Basel) for the opportunity to work in the Danum Valley Conservation Area.

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