

# Review of the genera *Glabromantis*, *Paraoxypilus*, and *Phthersigena* (Mantodea: Nanomantidae: Fulciniinae)

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**ABSTRACT.** Three genera of the mantis subfamily Fulciniinae (Mantodea: Nanomantidae: Fulciniinae) are revised. In the genus *Glabromantis* two species are recognized, in *Paraoxypilus* five species and in *Phthersigena* one species is recognized. The genus *Myrmecomantis* is synonymized with *Paraoxypilus*. *Paraoxypilus laticollis* is a new synonym of *P. kimberleyensis*. *P. distinctus* and *P. flavifemur* are new synonyms of *P. tasmaniensis*. *Phthersigena centralis*, *Phthersigena insularis*, *Phthersigena minor*, *Phthersigena timorensis* and *Paraoxypilus insularis* are new synonyms of *Phthersigena conspersa*. *Glabromantis melania* is a new synonym of *Glabromantis nebulosa* and *Glabromantis pallidifemur* is a new synonym of *Glabromantis unicornis*.

## Introduction

The Paraoxypilina (Fulciniinae, Paraoxypilini) are small mantids (body length 20–30 mm) that have a unique spination pattern on the raptorial forelimb. They appear to be restricted to the Australasian region. They live on tree branches and trunks or on the ground and are cryptically coloured, often with various tubercles and spines on the dorsal side of the body. The females of most species are brachypterous or apterous and some species are ant mimics. It seems likely that ants form at least part of the diet for many species. The unique morphology of the forelimb spination may be an adaptation to this diet. Some species display rhythmic movements of the fore limbs, sometimes referred to boxing behaviour. It is not clear what the function of this behaviour is.

In the most recent classification of the Mantodea as a whole by Schwarz & Roy (2019), the Paraoxypilina contained eight genera, seven of which were restricted to the Australasian region. Apart from Milledge (1990), there have been no taxonomic studies on this group since the original species descriptions. The form of the male genitalia, which is considered crucial for species diagnoses in modern treatments, were not examined in earlier descriptions so there has been a need to fully describe and illustrate them. Therefore, the aim of this study was to revise the genera *Glabromantis*, *Paraoxypilus* and *Phthersigena* to help provide further taxonomic clarity to this poorly known group of mantids.

**Keywords:** Praying mantis, taxonomy, Fulciniinae, Australia

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