Revision of the Genera Sphodropoda, Trachymantis and Zopheromantis (Mantodea: Mantidae: Mantinae)

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ABSTRACT. The genera *Sphodropoda* Stål, *Trachymantis* Giglio-Tos and *Zopheromantis* Tindale are revised. Aspects of their biology are discussed and distributions given. One new species of *Sphodropoda*, *S. lepida*, is described. *Sphodropoda moesta* Giglio-Tos, *S. mjobergi* Sjöstedt and *S. papua* are new synonyms of *S. tristis* (Saussure). *Sphodropoda dentifrons* Stål is transferred to *Trachymantis*. *S. loripes* Tindale is transferred to *Zopheromantis*. *Z. trimaculata* Tindale is a new synonym of *Z. loripes*.

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Sphodropoda Stål, Trachymantis Giglio-Tos and Zopheromantis Tindale are three closely related mantid genera, known only from mainland Australia and, in the case of Sphodropoda, Papua New Guinea, the Solomon Islands and possibly Fiji. All are shrub and tree dwellers, and most of the species inhabit drier regions.

Stål (1871) erected Sphodropoda as a subgenus of Hierodula Burmeister and included a single species, H. (Sphodropoda) tristis (Saussure). Westwood (1889) elevated Sphodropoda to generic level. Trachymantis was erected by Giglio-Tos (1917) for T. obesa Giglio-Tos and Zopheromantis by Tindale (1924) for Z. trimaculata Tindale. Beier (1935) incorrectly synonymized Zopheromantis with Hierodula without giving reasons. Zopheromantis is recognized here as a valid genus.

Materials and methods

Methods and terminology follow Milledge (1990, 1997). The following abbreviations are used for male genitalia: *apr*, apical process of left phallomere; *dpr*, distal process of ventral phallomere; *pa*, phalloid apophysis. Measure-

ments are in mm and range from the smallest specimen examined to the largest, except where an insufficient range of material was available, when single measurements are given. Abbreviations used for institutions where material is held are as follows: AM, Australian Museum, Sydney; ANIC, Australian National Insect Collection, Canberra; BMNH, The Natural History Museum, London; NHRM, Swedish Museum of Natural History, Stockholm; NMV, Museum Victoria, Melbourne; SAM, South Australian Museum, Adelaide; WAM, Western Australian Museum, Perth; ZMHU, Zoologisches Museum der Humbolt-Universitat, Berlin.

Relationships

These three genera appear to form a closely related group, sharing a number of characters including well-developed preacetabular spine, facial shield as wide as high, denticules between teeth on outer margins of fore femora and bifurcate distal process in the male genitalia. Beier (1964) placed *Sphodropoda* and *Trachymantis* in his Miomantini, a tribe