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Meschiidae, a new family of Lygaeoidea (Hemiptera: Heteroptera) from India and Australia, with descriptions of a new genus and two new species

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Abstract

Meschiidae **fam. nov.** is erected for the genera *Meschia* Distant, 1910, containing four species: *M. pugnax* Distant, 1910 and *M. quadrimaculata* Distant, 1910 from India, *M. woodwardi* Scudder, 1957 from Queensland, Australia, and *M. barrowensis* **sp. nov.** from Barrow Island, Western Australia, and the related *Neomeschia* **gen. nov.** with type species *N. queenslandensis* **sp. nov.** from Queensland, Australia. A key to all Australian species and genera is provided. Redescriptions are provided for *Meschia*, its type species *M. pugnax*, and *M. woodwardi*. Relationships, and reasons for the new family placement of *Meschia*, are discussed.

Key words: *Meschia*, *Neomeschia*, new taxa, type specimens, redescriptions, keys, figures, diagnoses, distribution, family placement, Heterogastridae, Pachygronhidae

Introduction

The genus *Meschia* Distant was erected to include two new species, *M. pugnax* Distant the type species and *M. quadrimaculata*, both from India (Distant 1910). Scudder (1957b), during his revision of the genus, added one more species, *M. woodwardi* Scudder from south Queensland, and provided a key to the three described species.

Meschia was placed in the subfamily Heterogastrinae of the family Lygaeidae by Distant (1910) because of the character of the basal cell in the hemelytral membrane. Scudder (1957b) during a revision of the genus *Meschia*, in which he described *M. woodwardi* from southern Queensland, also treated the genus as a member of the subfamily Heterogastrinae. Later Scudder (1957a, 1962a), in an attempt to provide a key to the genera of Heterogastrinae, conducted a generic review and revision and described several new genera and species. In the latter work, he commented that the three genera previously placed in the Heterogastrinae, namely *Idiostolus* Berg, *Trisecus* Bergroth, and *Meschia* Distant, do not belong and will be considered elsewhere. Subsequently, Scudder (1962b) erected a new subfamily, Idiostolinae, to include the former two genera, i.e., *Idiostolus* and *Trisecus*. Slater (1964) in his catalogue of the Lygaeidae of the world listed *Meschia* as a genus under “Genera of unknown systematic position.”

Malipatil (1968, unpublished) during his preliminary studies on Indian Lygaeidae (Hemiptera) for his Master of Science (M.Sc.) thesis at the Indian Agricultural Research Institute, New Delhi, studied the type species *M. pugnax* based on 7 male and 1 female specimens collected from Pusa (Bihar state) and Delhi, and proposed that this genus to be placed in a new subfamily, Meschiinae, of the family Lygaeidae. More recently Cassis & Gross (2002) placed *Meschia* as a genus of “Rhyparochromidae: Rhyparochrominae: Unplaced,” following the revised family classification of Henry (1997). No further work on the subfamily or family placement of *Meschia* has been attempted until now.

In the present study, an attempt has been made to redescribe the type species, *M. pugnax*, based on additional specimens from India and *M. woodwardi*, and to describe a new species, *M. barrowensis*, from Barrow Island (Western Australia). A related new genus, *Neomeschia*, with type species *N. queenslandensis* **sp. nov.** is herein described from Boyne Island via Gladstone (Queensland). A key to all Australian species and genera is provided.

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