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## Lectotype designations and taxonomic corrections on species of Lygaeoidea (Hemiptera: Heteroptera) described by Gustav Breddin

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### Abstract

Types of selected species of Lygaeoidea (Hemiptera: Heteroptera) described by Gustav Breddin, so far of unknown depository, were re-examined and the taxonomic and nomenclatural problems that existed among those species are discussed and resolved as required. The holotype of *Dieuches schultheissi* Breddin, 1906 is documented. Lectotypes are designated and documented for the following taxa: Lygaeidae: *Aethalotus horni* Breddin, 1907; *Aspilogeton nubicola* Breddin, 1901; *Lygaeus hospes* Fabricius, 1794 var. *celebensis* Breddin, 1901; Oxycarenidae: *Oxycarenum musculus* Breddin, 1907; Rhyparochromidae: *Lisepochroa blandula* Breddin, 1907; *Notochilaster teres* Breddin, 1907; *Dieuches horni* Breddin, 1906; *D. jacobsoni* Breddin, 1906; *D. nudipes* Breddin, 1906; *D. villosulus* Breddin, 1906; *Poeantius brevicollis* Breddin, 1907; *Pamera recincta* Breddin, 1901; *Paromius robustior* Breddin, 1907. The following taxonomic changes are proposed: *Naphius schultzei* (Breddin, 1913), new combination (transferred from *Rhyparochromus*); *Graptostethus verticalis* (Dallas, 1852) = *Pyrrhobaphus scutellatus* Breddin, 1907, new subjective synonym; *Naphius schultzei* (Breddin, 1913) = *Naphius capensis* Scudder, 1971, new subjective synonym.

**Key words:** Lygaeoidea, Breddin, lectotype, new synonymy, Oriental Region, Neotropical Region

### Introduction

Gustav Breddin (1864–1909) was a prolific author of Heteroptera having a significant impact primarily on Pentatomoidea, Coreoidea, Reduviidae, and Lygaeoidea. Except of a remembrance containing a list of his most important publications (Schröter 1910) and some brief obituaries (Dixey 1910, Kuhnt 1910), no detailed biography or complete bibliography of Breddin has ever been published.

Breddin described 75 species and 7 infrasubspecific taxa (“varieties”) of Lygaeoidea. The majority of the types of these taxa are now deposited in the Senckenberg Deutsches Entomologisches Institut in Müncheberg (DEIC) (catalogued by Gaedike 1971), but several other types are scattered at the Senckenberg Museum in Frankfurt am Main (Schröder 1964), the Zoological Museum in Hamburg (Weidner 1972), the Natural History Museum in Berlin (Museum für Naturkunde, former Zoological Museum of the Humboldt University Berlin, ZMHB) (J. Deckert, *pers. comm.*), the Zoological Collection of the Martin Luther University in Halle-Wittenberg (MLUH) (K. Schneider, *pers. comm.*), the Hungarian Natural History Museum in Budapest (HNHM), and the Museum and Institute of Zoology of Polish Academy of Sciences in Warsaw (MZPW) (T. Huflejt, *pers. comm.*). Probably type material has been deposited elsewhere, too. The above three papers and a personal communication of J. Deckert (ZMHB) list type materials of 55 lygaeoid taxa; type depositories of an additional 27 taxa have remained unknown so far.

Descriptions by Breddin are usually detailed and therefore most of the species described by him are easy to recognize. However, Breddin rarely indicated the number of the specimens on which his descriptions were based, therefore most of his types have to be considered as syntypes following Recommendation 73F (“Avoidance of