

New species of *Euschistus* (*Euschistus*) from Jamaica, *Euschistus* (*Mitripus*) and *Ladeaschistus* from southern South America (Hemiptera: Heteroptera: Pentatomidae: Pentatominae)

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Abstract

Three new species of the Carpororini are described: *Euschistus* (*Euschistus*) *baranowskii* Eger & Bianchi sp. nov. from Jamaica, *Euschistus* (*Mitripus*) *saramagoi* Bianchi, Cioato & Grazia sp. nov. from Brazil, and *Ladeaschistus* *borgesii* Bianchi, Cioato & Grazia sp. nov. from Argentina, Bolivia and Brazil. Comparative illustrations of external and internal genitalia of the species are provided.

Key words: Brown stink bug, Carpororini, new species, *Euschistus* (*Euschistus*) *baranowskii*, *Euschistus* (*Mitripus*) *saramagoi*, *Ladeaschistus* *borgesii*

Introduction

Euschistus Dallas, 1851 is the largest genus within Carpororini (*sensu* Rider, 2015; K.R. Barão pers. comm.), containing 76 species grouped in four subgenera: *Euschistus*, *Euschistomorphus* Jensen-Haarup, 1922, *Lycipta* Stål, 1862 and *Mitripus* Rolston, 1978. The genus is broadly spread in Nearctic and Neotropical regions and members of the genus are generally known as brown stink bugs. This genus is diagnosed primarily by the following characters: metasternum not produced, peritreme reaching less than 2/5 of the distance from ostiole to lateral margin of segment, femora unarmed, scutellar width at end of frena ½ or less of basal scutellar width, eyes contiguous with pronotum, superior face of tibiae sulcate, mandibular plates and clypeus or both rounded apically and usually subequal in length, bucculae evanescent or truncate at base of head, antennae five-segmented. The external morphology within the genus is variable, the body length ranging from 7 to 14 mm and humeral angles being undeveloped to strongly projected as spine or obtuse projection. These characters along with pygophore morphology have been used to define subgenera, and to sort out groups of species within the genus (e.g. *E. sulcatus* group, *E. crenator* group, see Rolston 1974). The nominal subgenus can be considered a taxonomic dumping ground, since the species belonging to it have been included because they do not share the diagnostic characters of the remaining subgenera.

The subgenus *Mitripus* was erected by Rolston (1978) based mainly on male genital structures; one pair of small tubercles located on segment X about midway between base and apex of segment X; thecal processes originating within theca; and the lateral walls of the genital cup each bearing a large carina or carinae. *Mitripus* includes the 10 following species: *E. (M.) acutus* Dallas, 1851; *E. (M.) anticus* Stål, 1860; *E. (M.) convergens* (Herrick-Schaeffer, 1842); *E. (M.) grandis* Rolston, 1978; *E. (M.) hansi* Grazia, 1987; *E. (M.) irroratus* Bunde, Grazia & Mendonça 2006; *E. (M.) latus* (Dallas, 1852); *E. (M.) legionarius* Breddin, 1914; *E. (M.) paranticus* Grazia, 1987; and *E. (M.) tauricornis* Stål, 1872.

Ladeaschistus Rolston, 1973 was erected to include three species of *Euschistus* in which the femora are armed on the inferior face with conspicuous tubercles, superior ridge of the pygophore is tectiform, and parameres are inversely bent. Included species are *Ladeaschistus armipes* (Stål, 1872), *L. bilobus* (Stål, 1872) *L. trilobus* (Stål, 1872), and *L. boliviensis* Rolston, 1973.