

THE LYGAEOIDEA *SENSU LATO* OF MAGALLANES REGION: CHECKLIST AND IDENTIFICATION KEY TO THE SPECIES

LOS LYGAEOIDEA *SENSU LATO* DE LA REGIÓN DE MAGALLANES: LISTA DE ESPECIES Y CLAVE DE IDENTIFICACIÓN

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ABSTRACT

The species of Lygaeoidea and Idiostoloidea from Magallanes are listed and keyed. A total of 5 species have been recorded from Magallanes: 2 Lygaeidae, 2 Idiostolidae, 1 Rhyparochromidae, all of these phytophages and endemic. The first reports of synanthropic interactions for Lygaeoidea in Magallanes are provided.

Key words: Heteroptera, Lygaeidae, Idiostolidae, Rhyparochromidae, Magallanes, Chile.

RESUMEN

Se listan las especies de Lygaeoidea e Idiostoloidea de la Región de Magallanes. Se entrega una clave de identificación ilustrada para las especies del grupo. Se registran en total 5 especies, 2 de Lygaeidae, 2 de Idiostolidae y una de Rhyparochromidae, todas nativas y fitófagas. Se reportan las primeras interacciones sinantrópicas para Lygaeoidea en Magallanes.

Palabras clave: Heteroptera, Lygaeidae, Idiostolidae, Rhyparochromidae, Magallanes, Chile.

INTRODUCTION

Lygaeoidea is one of the largest superfamilies on Heteroptera comprising about 4000 species on

500 genera (Schuh & Slater, 1995). This group has a great diversity of trophic habits. Most of the species are phytophages, but several prey on other arthropods, and a small group, the Cleradini, feed

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on vertebrate blood (Schuh & Slater, 1995). Several lygeoid bugs are considered of great economic importance (Sweet, 2000).

The taxonomic history of this group is highly complex; several taxa have been moved from different ranks from superfamily to tribe. Henry (1997), in his phylogenetic analysis clarified and stabilized the higher classification of the group.

In the Magallanes Region the knowledge of Lygaeoidea and related groups is poor, and most of the published accounts come from the results of old expeditions. Additionally, several species have been misidentified because of their similar appearance, and the lack of identification tools. The purpose of this work is to provide a checklist and a key of the species of Lygaeoidea and Idiostoloidea present in the Region.

MATERIAL AND METHODS

A bibliographic compilation of records of Lygaeoidea and Idiostolidae from Magallanes has been made. The checklist follows the following format: under the species name each reference is listed by the author, year in parenthesis, name of the species that author used, and exact localities in Magallanes that author provided. Immediately below the species name, the original combination is written in parenthesis. On systematics I follow Henry (1997). Photos were taken with a digital camera adapted to a stereoscopic microscope.

RESULTS

Lygaeoidea Schilling, 1829

Lygaeidae Schilling, 1829

Ischnorhynchinae Stål, 1872

Syzygites poecilus (Spinola, 1852)
(*Pachymerus poecilus* Spinola, 1852)

Signoret (1885): *Kliydocerys hyalinatus* (Tierra del Fuego)

Bredden (1897): *Ischnorhynchus hyalinatus* (Is. Navarino, Puerto Toro; Is. Hoste)

Haglund (1899): *Ischnorhynchus hyalinatus*

(Río Tres Pasos)

Scudder (1962): *Polychisme poecilus* (Is. Navarino: Puerto Williams, Seno Grandi; Is. Picton; Is. Bertrand)

Remarks: I have observed this species at the following localities: Parque Nacional Torres del Paine, Punta Arenas, Fuerte Bulnes.

Prado (2008) listed this species in the Artheneidae: Artheneinae, citing (Slater & Brailovsky, 1986); however, Prado (2008) misinterpreted that paper. Slater & Brailovsky (1986) placed *Polychisme ferruginosus* (Stål, 1874) in the Artheneinae and erected the new tribe Polychismini to include it. In the same paper, they resurrect the genus *Syzygites* Berg to place *S. poecilus* and clearly state (p. 411) that *S. poecilus* is retained in the Ischnorhynchinae. Subsequently, Kerzhner (1997) again placed the genus *Polychisme* in the Ischnorhynchinae.

Orsillinae Stål, 1872

Nysius irroratus (Spinola, 1852)
(*Heterogaster irroratus* Spinola, 1852)

Bredden (1897): *Nysius irroratus* (Tierra del Fuego)

Remarks: I have observed this species at the following magellanic localities: Parque Nacional Torres del Paine, Puerto Natales, Punta Arenas, Fuerte Bulnes, Puerto del Hambre. Additionally this species was collected around window frames, inside homes in the region. It is likely that *Nysius puberulus* Berg, 1895, known only from Tierra del Fuego (Argentina), will eventually be found in the Magallanes Region.

Rhyparochromidae Amyot & Serville, 1843

Rhyparochrominae Amyot & Serville, 1843

Bergidia polychroma (Spinola, 1852)
(*Pachymerus polychromus* Spinola, 1852)

Berg (1895): *Pamera polychroma* (Punta Arenas)

Breddie (1897): *Bergidia polychroma*
(Punta Arenas)

Haglund (1899): *Plociomera ohlini*
(Magallanes)

Scudder (1962): *Bergidia polychroma*
(Is. Navarino, Puerto Williams; Tierra del Fuego;
Punta Arenas)

Ashlock (1986): *Bergidea polychroma*[sic]
(Magallanes)

Remarks: This species has been collected
in Punta Arenas and Puerto Natales, in walls and
around window frames of homes frequently in the
evenings on outside.

Idiostoloidea Scudder, 1962

Idiostolidae Scudder, 1962

Idiostolus insularis (Berg, 1883)
(*Idiotropus insularis* Berg, 1883)

Breddie (1897): *Idiostylus insularis* [sic]
(Tierra del Fuego)

Scudder (1962): *Idiostolus insularis* (Is.
Navarino, Seno Grandi, Puerto Williams; Is.
Bertrand; Puerto Eden)

Schaefer & Wilcox (1969): *Idiostolus*
insularis (Is. Bertrand, Is. Navarino; Seno
Grandi, Puerto Williams; Puerto Natales, Puerto
Edén).

Carvajal & Faúndez (2011): (Is. Bayly;
Parque Nacional Torres del Paine).

Idiostolus schaeferi Faúndez, Carvajal &
Ashworth, 2014

Faúndez *et al.* (2014): *Idiostolus schaeferi*
(Última Esperanza, Seno Guillardí)

Key to the species of Lygaeoidea and
Idiostoloidea present in Magallanes Region

- 1(2) Profemora with two spines.....
- Bergidia polychroma*
- 2(1) Profemora unarmed.....2
- 3(4) Head wide (Fig. 1), coloration grayish,
black and yellow.....*Nysius irroratus*

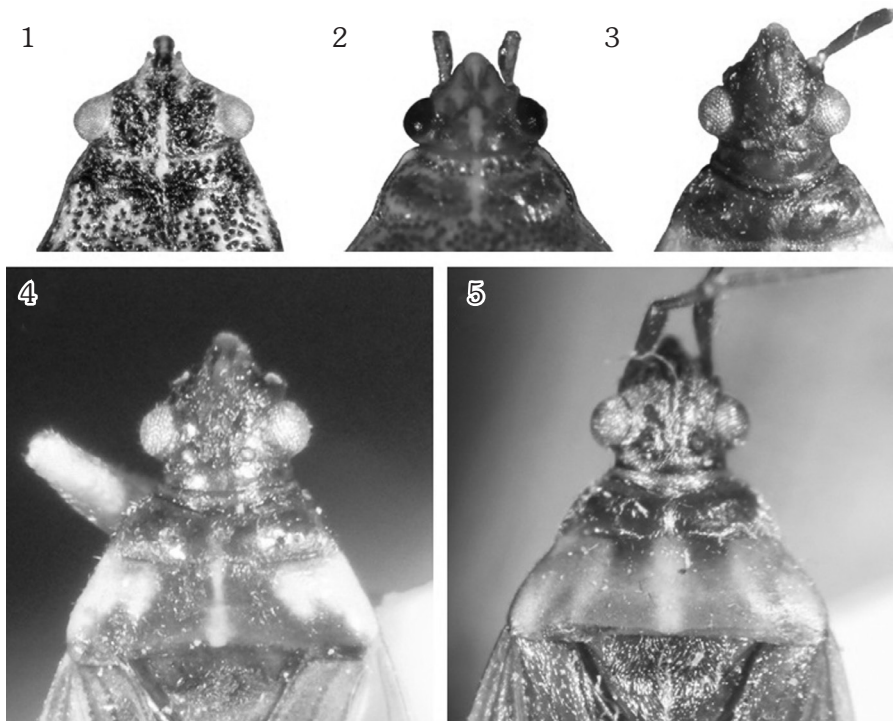


Fig. 1. *Nysius irroratus*, Head; Fig.2. *Syzigitis poecilus*, Head; Fig. 3. *Idiostolus schaeferi*, head; Fig. 4. *Idiostolus schaeferi*, pronotum; Fig. 5. *Idiostolus insularis*, pronotum.

- 4(3) Head elongate (Figs. 2 and 3), coloration reddish, brownish, yellow and white.....5
 5(6) Scutellum covered by dense punctation.....*Syzygits poecilus*
 6(5) Scutellum unpunctated.....7
 7(8) Pronotum subtriangular, sides strongly inclined (Fig. 5).....*Idiostolus insularis*
 8(7) Pronotum trapezoid, sides less inclined (Fig. 4).....*Idiostolus schaeferi*

CONCLUSIONS

There are 2 species of Lygaeidae, 2 of Idiostolidae, and 1 of Rhyparochromidae in Magallanes. All of the species present in Magallanes are phytophages, and endemic to the region.

The present report of *Nysius irroratus* and *Bergidia polychroma* in and around homes represent the first synanthropic records to Lygaeoidea in Magallanes. This behavior is probably the result of the bugs being attracted to sun-heated walls and warmer window frames of the homes during cold weather.

Further research is needed to learn more about the biology of these lygaeoids in Magallanes, and to assess their economic impact.

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