Synopsis of *Lytopsenella* Kieffer (Hymenoptera: Bethylidae)

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Abstract

*Lytopsenella* Kieffer, 1905, is a Bethylinae genus with two species and is hitherto restricted to southern Chile. The genus is recognized by having the marginal cell in the fore wing closed and elongate. The goal of this study is to summarize the taxonomic knowledge of the species. *L. herbsti* (Kieffer, 1904) and *L. testaceicornis* (Kieffer, 1910) are revised and illustrated. Additional taxonomic variations are added and geographic distributions are broadened. *Lytopsenella* is recorded from Argentina for the first time. A key for both species are provided.

Key words: Hymenoptera, Bethylidae, *Lytopsenella*, Taxonomy, Neotropical

Introduction

The two extant species of *Lytopsenella* Kieffer, 1905, is hitherto restricted to southern Chile. There are also four extinct species of this genus from Baltic amber (Upper Eocene), *L. crastina*, *L. setigera* and *L. simplex* described by Brues (1923) and *L. kerneggeri* described by Ohl (1995). The genus is easily recognized within Bethylinae, because all members have the marginal cell in the fore wing closed and elongate.

Bethylinae are mainly gregarious ectoparasitoids, mostly developing on the larval Lepidoptera (Polaszek & Krombein, 1994). However, the hosts are known for only a small proportion of the subfamily. As far as known, nothing is recorded regarding the hosts of *Lytopsenella*, but Evans (1964) reported that there is a specimen of *L. herbsti* (Kieffer, 1904) deposited at Museum of Comparative Zoology labeled as having been taken while attacking an adult cantharid beetle.

The genus was proposed by Kieffer (1911) to accommodate two species of *Eupsenella* Westwood, 1874 that according to him had “cellule radiale ouverte à la marge” (= radial cell opened on the margin). However, both species have the marginal cell completely closed. However, the main difference between both genera is that the marginal cell is long in *Lytopsenella*, whereas it is short in all other members of *Eupsenella*.

The main goal of this study is to summarize the taxonomic knowledge of the two species of *Lytopsenella*.

Material and methods

Specimens. Efforts were made to study specimens from the type series of both species. In addition, all Neotropical species of other genera of Bethylinae (*Goniozus* Förster, 1756 and *Prosierola* Kieffer, 1905) were investigated in order to find other *Lytopsenella* species. Many collections were visited and material requested but little unsorted specimens were found.

Collections. The material was kindly provided by the following institutions:

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