



Morphologic study of male genitalia and female description of *Schistopeltis lizeri* Rehn (Blaberidae, Zetoborinae, Triboniini)

ALEJANDRA DEL CARMEN VALVERDE¹, FRANCISCO ANTONIO CRESPO²
& MÓNICA SANDRA IGLESIAS¹

¹Departamento de Biodiversidad y Biología Experimental, FCEN. Universidad de Buenos Aires. 4 piso Pabellón II, Ciudad Universitaria (C1428EHA), Buenos Aires, Argentina. E-mail: valverde@bg.fcen.uba.ar & iglesias@bg.fcen.uba.ar

²Departamento Vectores. Administración Nacional de Laboratorios e Institutos de Salud “Dr. Carlos G. Malbrán”. Av. Vélez Sarsfield 563 (C1281AFF), Buenos Aires, Argentina. E-mail: fcrespo@anlis.gov.ar

Abstract

The genital sclerites of the male, the female and the mature nymph of *Schistopeltis lizeri* are described. The genitalia of *S. lizeri*, *S. microschiistos* and *S. peculiaris* are compared. The generic status of *Schistopeltis* is validated although it has close relationship with *Tribonium*.

Key words: Blaberidae, genitalia, taxonomy, systematic, nymph, *Tribonium*

Introduction

Schistopeltis Rehn 1916 includes three species with Neotropical distribution: *S. peculiaris* Rehn 1916, *S. lizeri* Rehn 1928 and *S. microschiistos* Vélez & Gutiérrez 2010 (Beccaloni 2007). The genital sclerites of the male in the genus were studied for the first time by Roth (1970) on *S. peculiaris*. Recently, Vélez and Gutiérrez (2010) rediagnosed the genus and described the new species *S. microschiistos*, discussing the male genital sclerites and the external morphology of the female. Any nymphal instar of *Schistopeltis* had never been studied so far.

The male genital sclerites and external morphology of the female of *S. lizeri* were unknown. The aim of the present study is to describe the genital sclerites of the male of *S. lizeri* to complete the genus knowledge in this aspect. We also herein describe the female and one nymphal stage of *S. lizeri*. Finally, we compare the species of the genera *Schistopeltis* and *Tribonium* Saussure 1862, which are closely related (Rehn 1916; Roth 1970), and discuss their taxonomic status.

Material and methods

The insects studied came from the nature reserve “El cachape” province of Chaco, Argentina, 26°49’S–59°08’W [datum WGS84]. Two males, one female and one mature nymph were captured under the bark of a tree of genus *Salix* (Salicaceae Mirb.) (Crespo *et al.* 2010). All specimens are deposited in the entomological collection of Museo Argentino de Ciencias Naturales (MACN) “Bernardino Rivadavia”, Argentina.

To study and photograph the genital structures of male, the abdomen was cut and treated with KOH (10%) and acetic acid; after washing with water, they were finally mounted in glycerin on temporary microscopic slides.

We compared our material with the type specimens of *S. peculiaris* and *S. lizeri* deposited at the Academy of Natural Sciences of Philadelphia (ANSP), USA. We did not see the specimens of *S. microschiistos* deposited at the “Colección Entomológica de la Universidad de Antioquia” (CEUA), Colombia but its authors sent us the photographs of this species, which we analyzed carefully and collated with ours.