



Redefinition of the *vittata* species group of *Epicauta* Dejean (1834) (Coleoptera: Meloidae) and taxonomic revision of the species from southern South America

MARÍA PAULA CAMPOS-SOLDINI¹ & SERGIO ALBERTO ROIG-JUÑENT²

¹Laboratorio de Entomología CICyTTP-CONICET, Diamante, Entre Ríos, CP: 3105, Argentina; Materi y España.

E-mail: mariapaulacampos@gmail.com

²Laboratorio de Entomología IADIZA-CONICET; Mendoza CC507, 5500, Argentina; Av. A. Ruiz Leal s/n, Parque Gral. San Martín.

E-mail: saroig@mendoza-conicet.gov.ar

Abstract

The *Epicauta vittata* group are commonly known as striped blister beetles and was defined by previous authors to include 32 species, 18 from North America, Central America and northern South America, and 14 from southern South America. In the present revision we revised 22 species from South America, excluding the following southern South American species: *E. borgmeieri* Denier, 1935; *E. floydwernerii* Martínez, 1955; *E. franciscana* Denier, 1935; *E. fulginosa* (Oliver, 1795); *E. purpureiceps* (Berg, 1889); *E. rutilifrons* Borchmann, 1930; and *E. zebra* (Dohrn, 1876) because they do not have the diagnostic characters of the group. The species of the *E. vittata* group from southern South America are: *E. bosqi* Denier, 1935; *E. clericalis* (Berg, 1881); *E. grammica* (Fischer, 1827); *E. leopardina* (Haag-Rutemberg, 1880); *E. luteolineata* Pic, 1933; *E. missionum* (Berg, 1881); *E. monachica* (Berg, 1883); *E. rutilifrons* Borchmann, 1930; plus two more species *E. excavata* (Klug, 1825); and *E. semivittata* (Fairmaire, 1875) until now not included in other groups. We provide a complete diagnosis of the *E. vittata* group from southern South America, redescribing and illustrating all included species. Detailed descriptions and illustrations of female and male genitalia are presented for the first time for these species. Finally, we provide an identification key for the ten species presently included in the *E. vittata* group, and update the geographic distribution of each species.

Key words: *Epicauta*, *vittata* group, southern South America, biodiversity, blister beetles

Introduction

The genus *Epicauta* Dejean (1834), with about 360 recognized species, is one of the largest genera of Meloidae. It is found on all continents except Australia. Within the Americas it is widely distributed, with its highest species diversity in semi-arid temperate regions. It is poorly represented in boreal habitats, at high elevations, and in those arid and semi-arid regions lacking predictable summer precipitation (Pinto, 1991).

The *E. vittata* group was defined by Adams and Selander (1979), who placed 32 species in the group distributed throughout the Americas. They characterized this group by the color pattern of the elytra, and with other anatomical characters in the adult stage. They also presented information on the ecology, behavior, and reproductive biology of seven endemic species from North America, and three species from South America (Adams and Selander, 1979).

Pinto (1991) divided the genus *Epicauta* into 18 species groups; one of them the *E. vittata* group. He studied eight species from North and Central America, but he did not mention any species from South America. He characterized the *E. vittata* group by the color pattern of the elytra, (expressed by vestiture and underlying cuticle), and also used morphological and genital structures, as well as characters of first-instar larvae and courtship of the Northern and Central American species.

The main purpose of the present study is to redefine the *E. vittata* group from South America and to redescribe and illustrate 10 species from southern South America, including illustrating the morphology of the genitalia in both sexes. Finally, we provide an identification key for the ten species from southern South America, and update their geographic distributions.