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Article



A new species of *Zoniopoda* Stål (Orthoptera: Acridoidea: Romaleidae) from Argentina and its phylogenetic position within the genus

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Abstract

A new species of the romaleid grasshopper genus *Zoniopoda* Stål (Romaleidae: Romaleini) is described and illustrated from the Sierras Chicas of Córdoba Province, central Argentina. A cladistic analysis based on morphological characters indicates that the genus *Zoniopoda* constitutes a monophyletic group and that *Zoniopoda serrana* **n. sp.** must be assigned to Iheringi species group based on synapomorphies of the pronotum and body color. The new species is similar to *Z. similis* Bruner from Paraguay, Bolivia and Brazil, from which it can be distinguished by the color pattern of the body, shape of the pronotal dorso-median carina and characters of the male terminalia and epiphallus. This paper has been formatted with embedded links to images of the type specimen, maps based on georeferenced specimen data for the genus and an updated key to the species of *Zoniopoda* available on the Orthoptera Species File (OSF) online (http://orthoptera.speciesfile.org).

Key words: Romaleini, grasshoppers, Zoniopoda serrana n. sp., Sierras Chicas

Introduction

The family Romaleidae (lubber grasshoppers), mainly distributed in the Neotropical Region, is one of the most diverse native South American families, with representatives in wide range of habitats, from semi-arid conditions to tropical rain forest (Carbonell 1977). Romaleini is the only romaleid tribe known to occur in Argentina, with 36 species distributed in this country (Eades *et al.* 2010; Carbonell *et al.* 2006). The Romaleini genus *Zoniopoda* Stål was recently revised by Carbonell (2007) and comprises ten valid species divided into two groups based on body color patterns and characters of the dorsal median carina of the pronotum. All known species of this genus occur in the southern part of South America, east of the Andes. Although there is not much information about the general habitat of all the species, it seems that some of them prefer grasslands while others inhabit arbustive vegetation (Carbonell 2007). In Argentina, *Z. tarsata* is the only species of economic importance (Lange *et al.* 2005; Carbonell *et al.* 2006), with damages reported in San Juan, La Pampa and Buenos Aires provinces, mainly on alfalfa crops, native grasslands, olive groves and tobacco plantations (COPR 1982).

The Tarsata species group comprises species with body and legs marked with black and other colors in characteristic patterns and dorsal carina of the pronotum smooth in lateral view, while the species of the Iheringi group are characterized by the body uniformly green, tarsi and hind tibiae (sometimes also middle tibiae) may be red and dorsal carina of pronotum granulate or denticulate in lateral view (Carbonell 2007).

Only four out of the ten known species of *Zoniopoda* occur in Argentina, two of them belong to the Tarsata species group [*Z. omnicolor* (Blanchard) and *Z. tarsata* (Serville)] and the other two, *Z. iheringi* Pictet & Saussure and *Z. juncorum* Berg, to the Iheringi species group.

Recent surveys in Cerro La Banderita from the Sierras Chicas mountain range of Córdoba province (Argentina) resulted in the discovery of a new species of *Zoniopoda* found in grasslands between 1300 to 1420 meters of altitude.