



Three new species of Tettigoniidae from Mexico (Orthoptera: Tettigoniidae; Phaneropterinae; Insarini and Odonturini)

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Abstract

Three new species of Katydid from Mexico are described in *Insara* Walker, 1869: *I. oaxacae* and *I. acutitegmina*, respectively, collected in Oaxaca and Chiapas states and *Arachnitus apterus* **n. sp.** of *Arachnitus* Hebard, 1932 from Puebla and Oaxaca states.

Key words: Phaneropterinae, Insarini, Odonturini, *Insara*, *Arachnitus*

Introduction

The Mexican Orthoptera fauna numbers approximately one thousand species. This figure is continuously increasing, of course, due to the description of new taxa. During our field trips in Mexico, we had the chance to collect three new species of Ensifera, all belonging to the subfamily Phaneropterinae of the Tettigoniidae: two belong to the Insarini Rehn & Hebard, 1914 and one to the Odonturini Brunner von Wattenwyl, 1878. The two new species of Insarini are represented by very few specimens (although we collected in their localities several times). For one species, *Insara oaxacae* **n. sp.**, both sexes are described, but on the basis of two specimens collected in two different localities. Their marked morphological characteristics allowed us to consider them as belonging to the same species. *Insara oaxacae* **n. sp.** shows some characters of *Brachyinsara* Rehn & Hebard, 1914, restricted to California, San Diego County, U.S.A., and Magdalena Island in Baja California, Mexico. The generic classification of the Insarini probably needs a complete revision. Concerning the new species of *Arachnitus* Hebard, 1932, this species is characterized by the complete absence of tegmina and wings. The known distribution of the new species is not far from that of *Arachnitus filicrus* Hebard, 1932: the areas of the two species are connected but they appear not to be mixed in the same locality, so that they are parapatric without being syntopic.

Material and methods

Pictures of living specimens were taken with a Nikon D70 digital camera with Sigma micro lens 105 mm, pictures of mounted specimens were taken with a Nikon Coolpix 4500 on a Optech EMX-210-2. Measurements (taken using a micrometric ocular and a Optech EMX-210-2 microscope) are in millimetres, for each measurement min and max are given followed by holotype measurement (with asterisk) average and standard deviation between brackets.