



<http://dx.doi.org/10.11646/zootaxa.4013.2.10>

<http://zoobank.org/urn:lsid:zoobank.org:pub:DD8B8ECA-B3F5-4122-8D9C-E088D56B4546>

The microlepidopterous natural enemy *Brachymeria subrugosa* Blanchard, 1942 (Hymenoptera, Chalcididae): identity, hosts and geographic distribution

DANIEL ALEJANDRO AQUINO¹, MARCELO TEXEIRA TAVARES², EZEQUIEL BALDUCCI³,
VERÓNICA BACA⁴ & SARA QUINTANA DE QUINTEROS⁴

¹División Entomología - Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, Museo de La Plata, Paseo del Bosque s/n. CP 1900. La Plata, Buenos Aires, Argentina. E-mail: daquino@fenym.unlp.edu.ar

²Depto Ciências Biológicas, Universidade Federal do Espírito Santo, 29.075-910, Vitória, ES, Brasil

³Estación Experimental de Cultivos Tropicales Yuto, INTA. RN N° 34 Km 1286 (4518), Yuto, Jujuy, Argentina

⁴Laboratorio de Zoología Agrícola. Facultad de Ciencias Agrarias, UNJU, Jujuy, Argentina

Abstract. A lectotype is designated for *Brachymeria subrugosa* Blanchard 1942 (Hymenoptera: Chalcididae). The species is diagnosed, redescribed, and compared to *B. subconica* Bouček, both of which are illustrated by macrophotography. Taxonomic notes, new parasitoid/host associations and new geographical records are also given for *B. subrugosa*. *Brachymeria annulipes* (Costa Lima 1919), a junior secondary homonymy of *Chalcis annulipes* Walker 1834, is proposed as a junior synonym of *B. subrugosa* **syn. nov.**

Key words: parasitoid, Chalcidoidea, Lepidoptera

Resumen. Se designa lectotipo para *Brachymeria subrugosa* Blanchard 1942 (Hymenoptera: Chalcididae). Se realiza una diagnosis y una descripción de la especie y se compara con *B. subconica* Bouček; se proveen ilustraciones y macrofotografías de ambas especies. Se brindan notas taxonómicas, nuevas asociaciones hospedador/parasitoide y nuevos registros geográficos para *B. subrugosa*. *Brachymeria annulipes* (Costa Lima 1919), homónimo junior secundario de *Chalcis annulipes* Walker 1834, es propuesto como sinónimo junior de *B. subrugosa* **syn. nov.**

Palabras clave: parasitoide, Chalcidoidea, Lepidoptera

Introduction

The family Chalcididae is widely distributed, showing a high diversity in tropical lowlands (Delvare 1995). The family includes 87 genera and 1464 species classified in 5 subfamilies (Noyes 2015). The species of this family are predominantly solitary, primary endoparasitoids of Lepidoptera and Diptera, though a few species attack Hymenoptera, Coleoptera, Neuroptera and even Strepsiptera; a few may be gregarious (Noyes 2015) and species of Dirhinini (the former Dirhininae) are ectoparasitoids (Delvare 2006). *Brachymeria* Westwood belongs to the subfamily Chalcidinae and includes 51 species described from the Neotropical region (De Santis 1989; Tavares *et al.* 2006). Apparently, there are almost 300 species of *Brachymeria* in the world (Noyes 2015) and many dozens in the New World. Most of these develop in the pupae of Lepidoptera, Coleoptera, Diptera and Hymenoptera as primary parasitoids, idiobionts, but some develop as secondary parasitoids attacking the puparia or cocoons of Tachinidae, Braconidae and Ichneumonidae primary parasitoids. Some Neotropical *Brachymeria*, such as *B. subrugosa* Blanchard 1942, attack insects of economic importance (Tavares & Aquino 2014), but this species has been frequently misunderstood and misidentified. As a consequence, its host relationships have been linked to other *Brachymeria* species, mainly *B. subconica* Bouček 1992. In this contribution we clarify the identity of *B. subrugosa*, and report parasitoid/host associations and new geographic records at country or state level.