





A new species of *Gonatocerus* (Hymenoptera: Mymaridae) parasitic on proconiine sharpshooters (Hemiptera: Cicadellidae) in the New World

SERGUEI V. TRIAPITSYN¹, DANEL B. VICKERMAN¹, JOHN M. HERATY¹ & GUILLERMO A. LOGARZO²

¹Department of Entomology, University of California, Riverside, California, 92521, USA. E-mail: serguei.triapitsyn@ucr.edu; danel.vickerman@ucr.edu; john.heraty@ucr.edu ²USDA-ARS South American Biological Control Laboratory, 3130 Buenos Aires Place, Washington, D.C. 20521-3130, USA. E-mail: glogarzo@speedy.com.ar

Abstract

A new species of *Gonatocerus* Nees (Mymaridae) is described from the states of San Luis Potosí and Tamaulipas in Mexico, with additional records from Argentina and Peru. Type specimens of *G. uat* S. Triapitsyn **sp. n.** were reared in Mexico from the eggs of proconiine sharpshooters (Cicadellidae: Cicadellinae: Proconiini) in the genera *Homalodisca* Stål and *Oncometopia* Stål. Taxonomic and molecular evidence from five gene regions (28S-D2, ITS1, ITS2, COI, COII) is provided to help differentiate the new species from the morphologically similar taxon, *G. ashmeadi* Girault, which also belongs to the *ater* species group of *Gonatocerus*.

Key words: Mymaridae, Gonatocerus, taxonomy, Proconiini, egg parasitoid, molecular, parsimony

Introduction

Gonatocerus Nees is a large, speciose, and common genus of Mymaridae (Hymenoptera). Huber (1988) provided an overview of the genus and revised two of its species groups in North America. Many members of the *ater* species group are known to be egg parasitoids of various proconiine sharpshooters (Cicadellidae: Cicadellinae: Proconiini) (Triapitsyn 2002a, 2002b; Triapitsyn *et al.* 2002). In the course of a "classical" biological control program against the glassy-winged sharpshooter, *Homalodisca coagulata* (Say) (Triapitsyn & Hoddle 2001, 2002), a new species of *Gonatocerus* was reared in Tamaulipas, Mexico, from eggs of at least two undetermined species of *Homalodisca* Stål and *Oncometopia* Stål, likely from some of those mentioned by Coronado-Blanco *et al.* (2000). The new species was first believed to be a mere color variant of the common and