



A new species of *Gonatocerus* (Hymenoptera: Mymaridae) from Argentina, an egg parasitoid of *Tapajosa rubromarginata* (Hemiptera: Cicadellidae)

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Abstract

Specimens of *Gonatocerus virlai* S. Triapitsyn, Logarzo & de León **sp. n.**, which belongs to the *ater* species group of *Gonatocerus* Nees (Mymaridae), were reared in Argentina mostly from wild-collected and sentinel eggs of the sharpshooter *Tapajosa rubromarginata* (Signoret) (Cicadellidae: Cicadellinae: Proconiini) on citrus and corn plants. The distribution and host associations (both natural and laboratory) of *G. virlai* are given. Under quarantine laboratory conditions in the USA, it was successfully reared for many generations on an unnatural host, the glassy-winged sharpshooter, *Homalodisca vitripennis* (Germar).

Key words: Mymaridae, *Gonatocerus*, taxonomy, Cicadellidae, Proconiini, egg parasitoid, Argentina

Introduction

In the New World, many members of the *ater* species group of the common and speciose fairyfly genus *Gonatocerus* Nees (Hymenoptera: Mymaridae) are known to be egg parasitoids of various sharpshooters (Hemiptera: Cicadellidae: Cicadellinae: Proconiini) (Triapitsyn 2002, 2006a).

During surveys for sharpshooter egg parasitoids in Argentina, at least 15 species of *Gonatocerus* were recently reared and identified, mostly from sentinel eggs of *Tapajosa rubromarginata* (Signoret) (Jones 2001; Jones *et al.* 2005; Logarzo *et al.* 2005; Pilkington *et al.* 2005; G.A. Logarzo & S.V. Triapitsyn unpublished data). Among them, a new species was collected in Tucumán Province in December 2000 from eggs of *T. rubromarginata* on citrus plants, and in 1995 it was also reared in Tucumán from eggs of the same leafhopper host on corn plants by E.G. Virla. Since then it has been reared from sentinel eggs of *T. rubromarginata* in other provinces of Argentina, and also re-collected on numerous occasions in Tucumán. This species, described and named here as *Gonatocerus virlai* sp. n., is considered a promising candidate for introduction into California for biological control of the glassy-winged sharpshooter, *Homalodisca vitripennis* (Germar) (Hoddle & Triapitsyn 2005—as *Gonatocerus* sp. 6). A colony of *G. virlai* sp. n. (originating from San Miguel de Tucumán, Tucumán, Argentina) had been successfully maintained on eggs of an unnatural host, *H. vitripennis*, in *Euonymus japonica* leaves at the Department of Entomology, University of California in Riverside (UCR), California, USA quarantine laboratory since 2002 (Hoddle & Triapitsyn 2005) until December 2006,