



## ***Thaumastaneis nigricans*, a new species of a remarkable ant-mimetic Larginae (Hemiptera: Largidae) and the discovery of an ant-mimetic complex**

PABLO MATÍAS DELLAPÉ<sup>1</sup> & MARÍA CECILIA MELO<sup>2</sup>

<sup>1</sup>Universidad Nacional de La Plata, Facultad de Ciencias Naturales y Museo, División Entomología, Paseo del Bosque, 1900 La Plata, Argentina. E-mail: pdellape@fcnym.unlp.edu.ar

<sup>2</sup>Instituto de Limonología, “R.A. Ringuelet” (ILPLA), CC 712 (1900) La Plata, Buenos Aires, Argentina. E-mail: cecimelo@ilpla.edu.ar

### **Abstract**

*Thaumastaneis nigricans*, a new species of Larginae from Bolivia, is described and compared with *T. montandoni* Kirkaldy & Edwards, the only other species known of the genus. This latter species is recorded from Paraguay for the first time, and its association with a *Camponotus* ant worker (Hymenoptera: Formicidae) and a Trigonidiidae cricket (Orthoptera) is mentioned. Several features of *Thaumastaneis montandoni* are illustrated via SEMs.

**Key words:** *Thaumastaneis*, Largidae, myrmecomorphic, new species, ant mimicry

### **Introduction**

Myrmecomorphy has been identified in nine arthropod orders (Mantodea, Orthoptera, Phasmida, Hemiptera, Thysanoptera, Coleoptera, Diptera, Lepidoptera, and Hymenoptera), and modification of body structure to resemble ants is known in eleven families of Heteroptera (Alydidae, Colobathristidae, Enicocephalidae, Geocoridae, Largidae, Miridae, Nabidae, Oxycarenidae, Pyrrhocoridae, Rhyparochomidae, and Saldidae). Poppius and Bergroth (1921), in an extensive paper, described several new myrmecoid heteropteran genera and species.

According to McIver and Stonedahl (1993), myrmecomorphic insects display some structural modifications that enhance mimicry, including silvery reflective hairs to increase body shine or, when arranged in bands, to act as an interruptive agent; changes in surface texture corresponding to smooth, roughened, or pitted areas on the ants' body; and sometimes thoracic or abdominal spines to mimic those on the alitrunk and petiole of some ants. All these features are found in *Thaumastaneis* species.

This largid genus was described by Kirkaldy & Edwards (1902) for *T. montandoni*, a myrmecomorphic species from Brazil. Hussey (1927) and Van Doesburg (1966) redescribed the genus and species, based on specimens from Brazil and Suriname, respectively. Schaefer (2000) described the fifth instar and extended the species' distribution to Bolivia. Carpintero *et al.* (2006) recorded this species from Argentina. Schaefer & Ahmad (unpublished data) are revising the Neotropical genera of Largidae, and they mention a close phylogenetic relationship between *Thaumastaneis* and the Neotropical myrmecomorphic genus *Vasarhelyecoris* Brailovsky & Barrera, mainly based on the patterns of pubescence on the abdomen. In the present paper we describe a new species of *Thaumastaneis* from Bolivia, and report an ant-mimetic complex involving *T. montandoni* Kirkaldy & Edwards.

The studied material belongs to the collections of the Museo de La Plata (MLP), Museo Argentino de Ciencias Naturales (MACN), and Instituto Miguel Lillo Entomological Collection (IML). Scanning electron