



A new genus and two new species of Orthotylineae (Hemiptera: Heteroptera: Miridae) from central Australia

ANNA A. NAMYATOVA¹, MICHAEL ELIAS & GERASIMOS CASSIS

Evolution & Ecology Research Centre, School of Biological, Earth and Environmental Sciences, University of New South Wales, Sydney, NSW, Australia, 2052

¹Corresponding author. E-mail: anna.namyatova@gmail.com

Abstract

Witchelinamiris **gen. nov.** and *W. mchughi* **sp. nov.** and *W. viridimaculatus* **sp. nov.** are described as new to science. Digital images, scanning electron micrographs, and illustrations of the male genitalia are provided for both species, and illustrations of the female genitalia are provided for *W. viridimaculatus*. Information on collection methods and host plants is included.

Key words: Heteroptera, Miridae, Orthotylineae, new genus, new species, taxonomy, Bush Blitz, Australia

Introduction

The Heteroptera are a suborder of insects within the order Hemiptera, which are both diverse and poorly documented in Australia (Cassis & Gross 1995, 2002, Cassis *et al.* 2007, 2010). The plant bug family Miridae is the most diverse of all the land bug families in the world, including Australia, where we consider that not even 20% of continental species are described (Cassis *et al.* 2007).

One of us [GC], with colleagues, has conducted a national survey of true bugs, with particular emphasis on land bugs, since 1995 to the present, with emphasis on the documentation of host plant relationships (Cassis *et al.* 2007, 2010). This work has resulted in the discovery of multiple new species, many of which are now being described in a modern format (Cassis 2008, Cassis & Symonds 2008, Tarnnic & Cassis 2008, Cassis *et al.* 2010). The recent Bush Blitz species discovery program, implemented by the Australian Biological Resources Study, in partnership with BHP Billiton, Earthwatch Australia, and AusPlots, has resulted in further discovery of new land bug taxa. As a result, hundreds of new species have been discovered, most of them belonging to the Miridae (Symonds & Cassis 2009, 2010). From these surveys, a new species of Orthotylineae (*Harveycapsus dimorpha* Cassis *et al.* 2010) and two new species of Tingidae (*Lasiacantha darwini* and *L. nipha* Cassis & Symonds in press) were described from the Charles Darwin Reserve in Western Australia

In this work, we continue this taxonomic documentation process, with the description of a new genus and two new species, collected from the Witchelina reserve in the northwest of South Australia, as part of a Bush Blitz survey in that state (Namyatova *et al.* 2010).

As part of this work, we are pleased to name a new species for the late Robert James McHugh, who was instrumental in the acquisition of the Witchelina Station for its inclusion in Australia's Reserve System.

Material and methods

Specimens. Unique specimen identifiers (= USI) have been applied to all study materials, with each specimen having a unique numeric code and matrix code. The collection event data have been databased in the Plant Bug Inven-