



## A new *Oncylocotis* Stål (Hemiptera: Heteroptera: Enicocephalidae) from Sabah: a predacious species associated with the yellow crazy ant, *Anoplolepis gracilipes* (Smith) (Hymenoptera: Formicidae)

PAVEL ŠTYS<sup>1</sup>, PETR BAŇAŘ<sup>2,4</sup> & JOCHEN DRESCHER<sup>3</sup>

<sup>1</sup>Charles University in Prague, Faculty of Science, Department of Zoology, Viničná 7, CZ-128 44 Praha 2, Czech Republic.

E-mail: pavelstys@gmail.com

<sup>2</sup>Moravian Museum, Department of Entomology, Hviezdoslavova 29a, Brno, CZ-627 00 & Forestry and Game Management Research Institute, Department of Forest Protection, Jíloviště – Strmady, Praha 5 – Zbraslav, CZ-156 04, Czech Republic

<sup>3</sup>University of Wuerzburg, Department of Animal Ecology and Tropical Biology, Biozentrum, Am Hubland, Wuerzburg, D-97074, Germany. E-mail: drescher@biozentrum.uni-wuerzburg.de

<sup>4</sup>Corresponding author. E-mail: petrbanar@seznam.cz, pbanar@mzm.cz

### Abstract

We describe *Oncylocotis* (*Oncylocotis*) *inexpectatus* **n. sp.** (Hemiptera: Heteroptera: Enicocephalomorpha: Enicocephalidae) from Malaysia (Sabah). It is the first species of this widely distributed Old World genus from Borneo. Some plesiomorphic anatomical features of the species are discussed and illustrated; e.g., the clypeus subdivided into well delimited anteclypeus and postclypeus; prescapite present; male abdominal segment 8 not modified for genital purposes, and abdominal segments 1–8 bearing spiracles in both males and females. New data on subdivision of the abdomen and venation of the clavus in enicocephalids are provided. The predacious *O. inexpectatus* **n. sp.** was found in association with the invasive 'yellow crazy ant', *Anoplolepis gracilipes* (Smith) (Hymenoptera: Formicidae) which is ranked among the 100 most devastating invaders worldwide. We bring together the information on this association and review the known cases of myrmecophily in the infraorder Enicocephalomorpha. A list of insect species found as inquilines of *A. gracilipes* in Sabah is included.

**Key words:** *Oncylocotis inexpectatus* **n. sp.**, taxonomy, morphology, clypeus, abdomen, clavus, field ecology, myrmecophily

### Introduction

In the present paper we describe a new species of the genus *Oncylocotis* Stål, 1856 from Sabah, Malaysia. We point out some notable plesiomorphic and apomorphic features of anatomy of its abdomen, and summarize and discuss the available field data concerning its association with the yellow crazy ant, *Anoplolepis gracilipes* (F. Smith, 1857) (= *A. longipes* Jardon, 1881; Hymenoptera: Formicidae).

The Oriental species of *Oncylocotis* have been summarily treated under *Didymocephalus* Jeannel, 1942 and partly, erroneously, also under *Stenopirates* Walker, 1873 by Jeannel (1942), and under *Oncylocotis* by Usinger (1945); for synonymy and present conception of these nominal genera see Štys (1969, 1986, 2002). The keys and diagnoses by Jeannel may be only used for exclusions because of then excusable poor knowledge of Oriental and Malesian species (Jeannel 16 species and subspecies, Usinger's list with 14 species). We estimate that today less than 5% of the Oriental and Malesian species have been described (Baňar & Štys, unpublished), none from Borneo. Normally, we would not consider an isolated description of a single Oriental species, however special circumstances are involved: it is associated with a invasive species, the 'yellow crazy ant'.

Jochen Drescher (JD) studied the ethology and phylogeography (Drescher *et al.* 2007, 2010) of this ant in Sabah, Malaysia and discovered and collected the new enicocephalid species as a first definite predator in the