



## A new species of *Aphelocheirus* (Hemiptera: Heteroptera: Aphelocheiridae) from southern India

ROBERT W. SITES<sup>1</sup>, M. ARUNACHALAM<sup>2</sup> & S. SUNDAR<sup>2</sup>

<sup>1</sup>Enns Entomology Museum, Division of Plant Sciences, University of Missouri, Columbia, Missouri 65211, USA.

E-mail: sitesr@missouri.edu

<sup>2</sup>Sri Paramakalyani Centre for Environmental Sciences, Manonmaniam Sundaranar University, Alwarkurichi-627412, Tamilnadu, India

### Abstract

A new species of *Aphelocheirus* (Hemiptera: Heteroptera: Aphelocheiridae) inhabiting riffles of a stream in Kerala state in southern India is described. *Aphelocheirus kaygieyess* n. sp. is diagnosed by widely separated hemelytra and the pattern of dark maculation on the vertex. This species is compared to other Indian species of *Aphelocheirus*. Seven species of *Aphelocheirus* are known now from India.

**Key words:** *Aphelocheirus*, Aphelocheiridae, Nepomorpha, Heteroptera, new species, lotic, India

### Introduction

Aphelocheiridae is a family of predominantly tropical aquatic bugs that is restricted to the Old World. With 89 described species, the family achieves its greatest diversity in Southeast Asia and the number of species in tropical areas further westward is dramatically fewer. For example, 15 species are known from Thailand (Sites 2006), whereas only 6 species are known from India (Thirumalai 2007, 2008) and 5 from mainland Africa (La Rivers 1971).

The known Indian fauna of *Aphelocheirus* includes four species of the nominate subgenus, *Aphelocheirus*, and two of the subgenus *Micraphelocheirus*. Characteristics of the known species in India were summarized and compared in the recent excellent treatment by Thirumalai (2008). Presented here is the description of the seventh species in the genus from India.

### Material and methods

Photographs of the type locality identified as L-1139 are available in a Locality Image Database via a link from the internet site of the Enns Entomology Museum, University of Missouri. All measurements are given in millimeters. Length of the body is measured from the anterior margin of the head to the posterior margin of the abdomen, width across abdominal segment III. Abdominal segment numbers are expressed as Roman numerals.

### Systematics

#### *Aphelocheirus kaygieyess* n. sp.

Figs. 1–6

**Description.** Brachypterous male. Size (n=1): Length, 7.84 mm. Width, 5.20 mm. Maximum width across abdominal segment III. Overall appearance ovate (Fig. 1), flattened. Dorsally, mostly dark brown with highly contrasting yellow meso- and metanota and areas on head. Ventrally, mostly yellowish.