



## *Aphelocheirus* (*Aphelocheirus*) *narmadaensis* sp. nov. (Hemiptera: Nepomorpha: Aphelocheiridae) from Madhya Pradesh, India

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### Abstract

*Aphelocheirus* (*Aphelocheirus*) *narmadaensis* sp. nov. (Hemiptera: Aphelocheiridae) is described and illustrated from Central India (Madhya Pradesh). A list of congeners so far known from India and their distributional records are provided.

**Key words:** Aphelocheiridae, *Aphelocheirus narmadaensis* sp. nov., Madhya Pradesh, Indian distributional records

### Introduction

The family Aphelocheiridae (Benthic Water Bugs) is closely related to Naucoridae and treated as a distinct family by Štys & Jansson (1988) followed by Mahner (1993), Kanyukova (1995), Zettel (1998, 2000), and Liu & Zheng (2000); the members of the family are known from all parts of the Eastern Hemisphere, with greater diversity in tropical Asia (Polhemus & Polhemus, 1988). Inhabiting the bottom of streams and lakes up to a depth of 10 metres, these bugs are considered highly specialised by plastron breathing, greatly modified abdominal spiracles ("rosettes") and a pair of hydrostatic sense organs on the second abdominal ventrite in adults, and a closed tracheal system in immature stages. Globally, this family contains the single genus, *Aphelocheirus*, Westwood, 1883 with ca. 80 species accommodated under two subgenera, *Aphelocheirus* s.str and *Micraphelocheirus* Hoberlandt & Štys, 1979 (Polhemus & Polhemus 1989; Kanyukova, 1995; Zettel, 1998, 2000; Liu & Zheng, 2000; Zettel & Papáček 2006). In India, five species are known under both subgenera from the Western Ghats of Karnataka, Kerala, and Tamilnadu, the Eastern Himalaya (Sikkim), and the sub-Himalayan regions of Assam and Meghalaya (Thirumalai, 2007).

While studying the unidentified aquatic and semi-aquatic hemipteran collections deposited in the Central Regional Station of the Zoological Survey of India, Jabalpur, the author came across five examples of *Aphelocheirus* collected during the Narmada Survey in 1964–65 from the River Narmada flowing at Barman Village, Narasimhapur district, Madhya Pradesh, India. They belong obviously to an undescribed species of the nominotypical subgenus. The new record is the first of the family from Central India, as hitherto aphelocheirids were only known from the southern and northeastern parts of India.

### Material and methods

The material studied consists of alcohol-preserved specimens. Male genitalia and its associated structures are dissected and mounted using Canada balsam on glass slides, deposited in Central regional Station, Zoological Survey of India, Jabalpur, Madhya Pradesh. Material has been studied with Olympus SZ 61 binocular micro-