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A new species of *Velia* (Hemiptera: Heteroptera: Veliidae) from West Bengal, India

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Abstract

A new Oriental species of water crickets, *Velia* (*Cesavelia*) *mitrai* sp. nov. is described from the vicinity of Darjeeling, West Bengal, India. It was collected from a shaded stream with slow current, situated at an altitude of 2006 m a.s.l. within the Neora Valley National Park. This species is the fourth member of this genus known from India.

Key words: *Velia*, *Cesavelia*, *mitrai*, new species, Neora Valley National Park, Darjeeling, West Bengal, India

Introduction

The skating water bugs in the genus *Velia* Tamanini, 1955 sometimes also known as “water crickets”, are members of the subfamily Veliinae (Andersen, 1982), and are distributed across Eurasia and in northern Africa. The species of this genus occurring in South Asia were described in the subgenus *Haldwania* Tamanini, 1955 (Tamanini 1955, Andersen, 1981, Polhemus & Polhemus 1998, Tran *et al.* 2009). However, this subgenetic name has recently been determined to be a homonym, and the replacement name *Cesavelia* Koçak & Kemal, 2010 was proposed (Koçak & Kemal, 2010); this replacement name is used herein in preference to *Haldwania*. The Oriental *Velia* species are restricted to the temperate high mountain areas of northern India, Nepal, central and southern China, and northern Vietnam (Tran *et al.* 2009), where they occur on shaded, slow-flowing, high altitude streams, often frequenting dark places beneath undercut banks. Among the Asian Veliidae, these bugs can be recognized by their relatively large size, elongate body form, and long, relatively slender legs, which possess small, irregularly arranged teeth on the metafemur of male and an unarmed metatrochanter in the female. Hitherto, only three species of *Velia* have been recorded from India: *V. anderseni* Tran *et al.*, 2009, *V. steelei* Tamanini, 1955 and *V. championi* Tamanini, 1955. Here we report the discovery of a fourth Indian species of *Velia*, taken in the vicinity of Darjeeling, West Bengal.

Material and methods

The specimens were collected from a slow-flowing, shaded stream using a short-handled aquatic net, and preserved in 70% alcohol. In the lab they were studied and photographed under a Leica M205A stereo zoom microscope. The male and female genitalia and their associated structures are kept in separate glass vials containing 70% ethyl alcohol. The male genital segments and female genitalia were dissected with the help of a fine forceps and immersed in 10% Potassium Hydroxide (KOH) solution for 24 hours at room temperature in order to clear the soft tissues and allow better discrimination of hard structures.

All measurements are given in millimeters.