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Two new species of *Metrocoris* Mayr (Hemiptera: Heteroptera: Gerridae) from India

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Abstract

Metrocoris morsei **sp. nov.**, and *Metrocoris shillongensis* **sp. nov.**, are described from India and compared with known congeners. *Metrocoris morsei* **sp. nov.** from Great Nicobar Biosphere Reserve (GNBR), Nicobar Islands, cannot be assigned to any of the known species groups of *Metrocoris*, so it forms the *Metrocoris morsei*-group. *M. shillongensis* **sp. nov.** from Shillong, Meghalaya, belongs to the *M. obscurus*-species group and is the second species in this group. The distribution maps of these two new species are given.

Key words: Halobatinae, Nicobar Islands, Meghalaya

Introduction

Metrocoris Mayr, 1865 is the most diverse genus of water striders in the Oriental Region in the subfamily Halobatinae; these are mainly marine, and widespread from the Arabian Peninsula to Southeast Asia and in south and southwest China. *Metrocoris* are small in size (range 2.85 mm – 7.6 mm), characterized by black stripes and spots on a yellow to orange body, and are found in pools, rivers, waterfalls, seepage rocks, and slow to fast running forest streams. The front leg of most of *Metrocoris* males have well-developed teeth and spines for grasping females during mating (Cheng *et al.* 2001). Sixty-five species of *Metrocoris* are presently known globally, of which 13 species are reported from India (Thirumalai, 2002).

In the present paper, two new species are added and still more new species of *Metrocoris* are expected to be described from India. There is no previous record of the genus *Metrocoris* from Andaman and Nicobar Islands, so the present discovery of *M. morsei* **sp. nov.**, is of zoogeographic importance. *M. obscurus* Chen & Nieser, 1993 is the only known species for this species group from North Myanmar and Southwest China (Chen & Nieser, 1993), hence the second species *M. shillongensis* **sp. nov.** is a new addition to this species group.

Material and methods

The Andaman and Nicobar Islands are in the Union Territory of India, comprising 345 islands situated in the Bay of Bengal (Raghunathan & Sivaperuman, 2010). The Nicobar Islands are believed to be the continuation of the Mentawai islands to the south and southeast of Sumatra in Indonesia. Meghalaya is one of the north east states of India, covers an area of about a 300 kilometers in length and about 100 kilometers in breadth and Shillong is the capital of the state. For the present study the material was collected from Great Nicobar Biosphere Reserve (GNBR), Great Nicobar Island, during explorations between 2010 and 2012. The collections from Shillong were available in the Central Entomological Laboratory (CEL), Zoological Survey of India (ZSI), Kolkata.

Metrocoris morsei **sp. nov.** was collected from slow-running well shaded streams; the substratum had gravels and cobbles in GNBR. The habitat details of *Metrocoris shillongensis* **sp. nov.** were not available with the locality label. The insects were collected by a D-frame aquatic net and the material was preserved in 75 percent ethanol. Specimens were studied, photographed, and measured with a Leica Stereozoom Microscope (Leica M205A). All measurements are given in mm. The distribution maps (Figs. 3 & 4) were prepared by using DIVA-GIS.

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Comparative notes. *M. shillongensis* **sp. nov.** is closely related to *M. obscurus* Chen & Nieser, 1993. In *M. obscurus* the first antennal segment is subequal to the length of the remaining three segments together, but in the new species the first segment is distinctly less that the remaining three segments together. The fore femoral tooth is distal to the notch in *M. obscurus* but in *M. shillongensis* **sp. nov.** the tooth is on the middle of the inner subapical notch. In *M. obscurus* the interocular dark mark is bifid at both anterior and posterior ends, but in *M. shillongensis* **sp. nov.** only the anterior end is bifid. Tergite one has a pair of yellow marks in *M. shillongensis* **sp. nov.**, but this mark is absent in *M. obscurus.* In *M. obscurus* the eye width is larger than the posterior eye width but in *M. shillongensis* **sp. nov.** the eye width is less than the posterior eye. The distal outer margin of the male paramere is protruded medially in *M. obscurus,* but in *M. shillongensis* **sp. nov.** the distal outer margin is simple and not protruded.

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