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### ***Short Communication***

## **FIRST REPORT OF *MICRONECTA DECORATA* LUNDBLAD, 1933 (MICRONECTIDAE : CORIXOIDEA : HEMIPTERA : INSECTA) FROM LOWER SHIWALIK HILLS, INDIA**

### **INTRODUCTION**

The superfamily Corixoidea comprises of truly aquatic bugs and is found in stagnant waters or parts of streams with very little water current. These Nepomorphan water bugs are characterised by broad triangular unsegmented rostrum with transverse grooves. The fore-tarsus is single segmented and widened, also known as 'Pala'. The possession of a strigil on the right side of 6<sup>th</sup> dorsal abdominal segment in males is characteristic to the members belonging to the super family. This organ helps in maintaining the subelytral gas store while surfacing during mating in Corixidae and the function among the members of Micronectidae are yet to be understood (Popham *et al.*, 1984; Nieser, 2002).

The family Micronectidae, hitherto, considered as the subfamily Micronectinae has been raised to the family level taxon by Mahner (1993) and Nieser (2002) while doing cladistic analysis. Micronectids popularly called 'Pigmy Water Boatman' characterised by the presence of an exposed scutellum and three segmented antennae, are the one of the most truly aquatic hemipterans of India. They tend to go unnoticed because of their very small size of less than 4 mm length.

Of the two genera *Micronecta* Kirkaldy and *Synaptonecta* Lundblad, the former is represented by 21 species and the latter by a single species *S. issa* in India (Thirumalai, 1999). Most of these species are known by macropterous forms.

During a recent survey to Lower Shiwalik Hills in Himachal Pradesh, 4 males, 4 females and 12 immature stages of *Micronecta decorata* Lundblad were collected from a marshy area in Sansarpur Terrace near Karis, Pong Dam, Kangra District, Himachal Pradesh (31°55'16" N and 75°55'5" E), is the first record of the species from India.

While studying the aquatic Hemiptera of Sumatra, Java and Bali, Lundblad (1933) described *M. decorata* from Java and Sumatra. Much later, Fernando and Cheng (1974) and Nieser (2002) recorded *M. decorata* from Malaysia and Singapore respectively. This species is characterised

by a large free lobe of 8<sup>th</sup> tergite in male which is apically broad with a small median projection (Plate 1. IV). The claw of Pala slightly diverged distally without subapical tooth (Plate 1. III) The right paramere is gradually curved with indistinct tubercles or hairs and gradually tapered (Plate 1. V) The left paramere has a well developed ventral lobe, the tip is bent inwardly with wrinkles (Plate 1. VI). The length of adult macropterous males 1.87–1.91 and females 1.63–1.68 mm. The adults are small, light brown and elongate (Plate 1. I & II). The pronotum is unicolorous and corium with very poorly contrasting brown broken longitudinal stripes. There are two large dark spots in the anterior half of the lateral margin of hemelytra and the third one at the base of membrane.

The occurrence of Malayan elements of aquatic and semi-aquatic Heteroptera in India is a recognized fact and is established in a few families (Thirumalai 1986, 1996, Thirumalai & Dam, 1996). However, the present record of *Micronecta decorata* from lower Shiwalik part of Himachal Pradesh constitutes an interesting report since this species are so far known from Indonesia, Malaysia and Singapore only. Though the occurrence of fauna of Malayan derivatives is largely concentrated in Assam-Burma area, the present report of *M. decorata* from Western Part of Himalaya indicates intrusion of faunal extensions westward as a narrow tongue on the Himalaya (Mani, 1974).

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