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On the genus *Hydrometra* Latreille (Hemiptera: Heteroptera: Hydrometridae) from India with description of two new species

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Abstract

Two new species of the genus *Hydrometra* Latreille, 1796, are described from the Oriental Region. *Hydrometra cherukolensis* sp. nov. is described from Kanyakumari District, Tamil Nadu, India, belongs to the *Hydrometra julieni* species group, and is closely related to *H. julieni* Hungerford & Evans, 1934 and *H. julienoidea* Polhemus & Polhemus, 1995. *Hydrometra nicobarensis* sp. nov. is described from the Great Nicobar Biosphere Reserve (GNBR), Andaman and Nicobar Islands, India, belongs to the *Hydrometra lineata* species group and this new species is closely related to *H. borneensis* Zettel & Yang, 2004. *Hydrometra okinawana* Drake, 1951, collected from GNBR, Andaman and Nicobar Islands, and is the first record for India. *Hydrometra butleri* Hungerford & Evans, 1934, is redescribed and notes on *H. greeni* Kirkaldy, 1898 are given. All together five species of *Hydrometra*, *H. butleri*, *H. cherukolensis* sp. nov., *H. greeni*, *H. nicobarensis* sp. nov. and *H. okinawana* are reported in the present study from India. A key to the species of *Hydrometra* of India and the distribution maps are also provided.

Key words: Taxonomy, Water measurers, Andaman and Nicobar Islands, Tamil Nadu

Introduction

Hydrometridae is a family of semi-aquatic bugs commonly called marsh treaders or water measurers that is distributed in all zoogeographical regions except Antarctic region. The elongated head and body, makes them resemble as a walking stick on water surface of lentic and lotic ecosystems. In this family, there are three subfamilies namely, Hydrometrinae, Heterocleptinae and Limnobotodinae comprising seven living genera in the world (Andersen, 1977, 1982a). The subfamily Hydrometrinae includes 110 species under four genera namely *Bacillometra* (South America), *Chaetometra*, *Dolichocephalometra* (Marquesas Islands) and the cosmopolitan *Hydrometra* (Yang & Zettel, 2005). The genus *Hydrometra* contains nearly 100 species, of which 20 species are distributed in Southeast Asia (Andersen & Weir, 2004; Yang & Zettel, 2005). The anteclypeus is one of the most important characters for the distinction of species groups. Based on this character, Zettel & Chen (1996) divided the Southeast Asian mainland *Hydrometra* spp. into four species groups, namely *H. longicapitis* group, *H. julieni* group, *H. papuana* group and *H. lineata* group. Most of the species of *Hydrometra* having anteclypeus with anterior margin round, acute or spine-like, but others have broad anteclypeus with truncate or concave anterior margin type is considered as the most plesiomorphic character state (Andersen 1977, 1982b). The species with broad anteclypeus defines a distinct, widely distributed group and in the Oriental Region, four species namely *H. brevitarsus* Zettel & Yang, *H. gilloglyi* Hungerford & Evans, *H. heoki* Zettel & Yang, and *H. julieni* Hungerford & Evans belong to this group. The fifth species *H. cherukolensis* sp. nov. of the *H. julieni* species group of oriental region is described here. Thirumali (2002) reported three species namely *H. butleri*, *H. greeni* and the unconfirmed *H. bifurcata?* Hungerford & Evans, 1934 from India. In the present study two new species namely *H. nicobarensis* sp. nov. from Great Nicobar Island and *H. cherukolensis* sp. nov. from Kanyakumari District, Tamil Nadu and a new record to India, *H. okinawana* Drake, from Great Nicobar Island are added to fauna of Indian aquatic bug. At present, a total of six species namely *H. butleri*, *H. cherukolensis* sp. nov., *H. greeni*, *H. nicobarensis* sp. nov., *H. okinawana* and the suspicious *H. bifurcata?* are known from India.

Material examined. INDIA, ANDAMAN AND NICOBAR ISLANDS, Nicobar District, Great Nicobar Island, GNBR, Gandhi Nagar, 16 ft, N 6°49.990', E 93°53.991', 23.iv.2012, 1 ♂ (micropterous), Coll. E. Eyarin Jehamalar, (Reg. No. 3157/H15). The examined material is deposited in National Zoological Collection, ZSI-HQ, Kolkata.

Diagnosis. (Fig. 6A). Micropterous ♂ length 8.63, width at metacetabula 0.55, n=1; colour, dark brown; anteclypeus long, conical with acute tip, narrow before apex (Fig. 6B); occurs in apterous, micropterous or brachypterous forms; anterolateral region of seventh abdominal sternum of male with a pair of thorn like projection on each side (Figs. 6D, E); caudal process of male very short (Figs. 6C–E).

Distribution: INDIA: Great Nicobar Island. Elsewhere: Borneo, Japan, Malaysia, Singapore and Thailand (Drake, 1951, Miyamoto, 1964, Polhemus, 1992, Sites & Polhemus, 2003, Yang & Zettel, 2005).

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