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A new species of water mite (Acari, Hydrachnidia) from Assam, India, found in the gut contents of the fish *Botia dario* (Botiidae)

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Abstract

Water mites (Hydrachnidia) occur sporadically in the gut of freshwater fishes. In this study, nine water mite items were found in the gut contents of the fish *Botia dario* (Hamilton, 1822) (Botiidae) collected in a floodplain wetland (beel) in the river island Majuli, Assam, India. *Torrenticola episce* is described as new to science; *Torrenticola haliki* Pešić & Smit 2010, *Monatractides oxystomus* (K. Viets, 1935) and *Hygrobates* cf. *sinensis* Uchida & Imamura, 1951, are reported for the first time from India.

Key words: Acari, Hydrachnidia, new species, taxonomy, fishes, gut content, India

Introduction

The checklist of Indian water mites includes 275 species in 70 genera and 25 families (Pešić *et al.* 2010). Recently, two additional water mite species were reported from streams in the eastern Himalayan region (Pešić *et al*. 2012a). Moreover, one new species of the marine water mite family Pontarachnidae was reported from the West Indian coast (Pešić *et al*. 2012b). However, large portions of the country, especially of north-eastern India which belong to the Indo-Burma Biodiversity Hotspot, are still poorly documented.

In this study water mites were collected during a gut content analysis of the fish *Botia dario* (Hamilton, 1822) collected in a wetland (known as beel in Assam) in the Brahmaputra flood plains of the Eastern Indian state of Assam. *Botia dario* (Bengal Loach) colonizes creeks and streams throughout much of the middle to lower Ganges and Brahmaputra river drainages in northern India, Bangladesh and Bhutan (Kottelat 2012). In total, nine water mite items were found in the gut contents of a single loach specimen. Four species were identified, all new for the fauna of India, including one species new for science.

Material and methods

Sixty specimens of *Botia dario* (Hamilton, 1822) were collected in June, 2012 from the Kakarikata beel (Majuli Island, Assam State, India). Majuli Island is one of the largest riverine islands in the world (26º45' N – 27º12' N and 93º39' E –94º35' E, 60 – 95 m asl). The island is bordered by the river Brahmaputra on the south, the river Subansiri on the north-west and Kherkatia Suti in northeast. Large number of wetlands and rivulets constitute excellent breeding ground for numerous fishes (Das and Bordoloi 2012). Kakarikata beel (Fig. 1A) (26º56'20.92"N and 94º06'54.87"E) is connected with the river Brahmaputra through a channel with water depth from 0.9 to 3.6 m in winter, and from 3.0 to 7.6 m in the rainy season. The total beel area is about 40 hectares. The range of physico-chemical parameters of water was as follows: pH 6.5–8.2, dissolved oxygen content 3.8–8.4 mg/L, free carbon

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