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On the genus *Calyptobates* Polhemus & Polhemus (Hemiptera: Heteroptera: Gerridae) from India with description of a new species and a key to the species of World

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Abstract

Calyptobates rajani sp. nov. is described from Great Nicobar Island, Andaman and Nicobar Islands, India. This new species is closely related to *C. andaman* Polhemus & Polhemus, 1994, described from Andaman Islands, India. Two species of *Calyptobates* Polhemus & Polhemus including the new species are presently known from India. A key to the species of *Calyptobates* from world and the distribution map of Indian species are also provided.

Key words: taxonomy, Trepobatinae, Great Nicobar Island, Great Nicobar Biosphere Reserve

Introduction

Calyptobates Polhemus & Polhemus (1994) are small water striders (range 1.51 mm–2.32 mm) belonging to the tribe Naboandelini in the subfamily Trepobatinae, and characterized by having the mid-femur stout, shorter than hind femur, and distinctly shorter than mid tibia. Members of this subfamily occur mostly as apterous forms, with macropterous forms uncommon, having the fore wing venation greatly reduced with two closed cells in the basal third of the wing. *Calyptobates* occur in well-shaded pond and slow flowing cool waters, usually along rain forest streams, and can be recognized by the presence of yellow or orange longitudinal marks; absence of a gray pruinose mark on middle of mesonotum; a mostly yellowish mesosternum and black abdominal venter. *Calyptobates* is distributed from Australia northwestward through Papua New Guinea, the Moluccas, Indonesia, the Andaman and Nicobar Islands, and Sri Lanka (Polhemus & Polhemus, 1994, 2000). *Calyptobates andaman* Polhemus & Polhemus (1994), earlier reported as *Calyptobates* sp. by Polhemus & Starmühlner (1990) from Andaman Islands, has until now been the only species known from India and the present description of *Calyptobates rajani* sp. nov. from Great Nicobar Island adds one more species in this genus to the fauna of the country. Presently eleven species of *Calyptobates*, including our new species from Great Nicobar Island, are known globally. Of these, the *Calyptobates* sp. occurring on Sri Lanka, has not yet been identified to species level due to the lack of apterous males (see Polhemus & Polhemus, 2000).

Material and methods

The studied material was collected from slow flowing shady streams in the Andaman and Nicobar Islands, India, by using a D-frame aquatic net and preserved in 75 percent ethanol. The photographs and measurements were taken through a Leica stereo zoom microscope (Leica M205A), using the software Leica application suite (LAS V3.8). All measurements are given in mm. The type specimens are deposited in Central Entomological Laboratory, ZSI, Kolkata, India and the materials from South Andaman, are deposited in National Zoological Collection, ZSI, Kolkata, India. The distribution maps (Figs. 3A–D) were prepared by using DIVA–GIS.

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