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Two new species of *Pleciobates* (Hemiptera: Gerromorpha: Gerridae) from India, with a key to the species of *Pleciobates*

E. EYARIN JEHAMALAR^{1,4}, KAILASH CHANDRA¹, HERBERT ZETTEL², SRIMOYEE BASU¹, BIJITA BARMAN³, SUSMITA GUPTA³ & K.A. SUBRAMANIAN¹

¹Zoological Survey of India, New Alipore, Kolkata- 700 053, West Bengal, India.

E-mail: jehamalar@gmail.com; kailash611@rediffmail.com; srimoyeebasu3422@gmail.com; subbuka.zsi@gmail.com

²Natural History Museum, International Research Institute for Entomology, Burgring 7, A-1010 Vienna, Austria.

E-mail: herbert.zettel@nhm-wien.ac.at

³Department of Ecology and Environmental Sciences, Assam University, Silchar- 788 011, Assam, India.

E-mail: vaantiii9@gmail.com; susmita.au@gmail.com

⁴Corresponding author. E-mail: jehamalar@gmail.com

Abstract

Two new species of water striders in the genus *Pleciobates* are described from India and compared with allied species. *Pleciobates bengalensis* Jehamalar, Basu & Zettel **sp. nov.** is described from the Jalpaiguri District, West Bengal and *Pleciobates expositus* Jehamalar, Chandra & Zettel **sp. nov.** (Hemiptera: Gerridae) is described from the Dhubri District, Assam. A key to the species of *Pleciobates* and a distribution map of the species of *Pleciobates* from India are provided. For the first time the genitalia of *Pleciobates* females are described in detail.

Key words: Ptilomerinae, water strider, Assam, West Bengal, taxonomy

Introduction

Pleciobates Esaki, 1930 is a genus of Ptilomerinae, a subfamily that includes 15 genera mainly distributed in the Oriental, Malesian, and southern Palaearctic Regions, except for *Potamometroides madagascariensis* Hungerford, 1951 from Madagascar. Ptilomerine water striders inhabit moderate to fast flowing forest streams and rivers and are morphologically adapted to life in such habitats by an enhanced locomotory system: The middle legs which do the main work for rowing and jumping are extremely elongated and their bases are translocated from the body's balance point backwards. The abdomen is strongly reduced in several genera, including *Pleciobates*.

Pleciobates was described from peninsular Malaysia based on *Pleciobates tuberculatus* (see Esaki, 1930). Thirumalai (1986) later described two new species from southern India, *P. indicus* and *P. nostras*, but they do not fit the modern definition of the genus (e.g., by Zettel & Chen, 1996; Chen *et al.*, 2005). Whereas *P. nostras* was transferred to *Stridulobates* Zettel & Thirumalai, 2001, *P. indicus* remains a species *incertae sedis* and probably requires the description of a new genus (Zettel & Thirumalai, 2001a). Thirumalai (1992) recorded *P. tuberculatus* from southern India. However, re-examination of the material showed that the female belongs to *Stridulobates anderseni* Zettel & Thirumalai, 2001 and the male to *Jucundus custodiendus* Distant, 1910 (Zettel & Thirumalai, 2001a, b). Two further species, *P. vietnamensis* and *P. pacholatkoi* were described from Vietnam and Thailand by Zettel & Chen (1996). Although the distribution of the latter species extends to Myanmar (Zettel, 2011), *Pleciobates* was considered absent from India until the discovery of new species in Assam and West Bengal in 2011 and 2013, respectively.

Pleciobates is closely related to two genera which are strictly Southeast Asian: *Andersenius* Zettel & Chen, 1996 from Vietnam, and *Pleciogonus* Chen, Nieser & Wattanachaiyingcharoen, 2002 from Thailand (Zettel & Chen, 1996, Chen *et al.*, 2002). These three genera share a very long first antennomere (Figs. 1, 2A, B), a row of

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