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Spiralothelphusa gibberosa, a new freshwater crab (Brachyura: Gecarcinucidae) from Thrissur district, Kerala, India

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Abstract

A new species of freshwater crab, *Spiralothelphusa gibberosa* n. sp. is described from rice fields near Kizhoor in Thrissur district of Kerala in southern India. The new species is easily differentiated from its congeners by its first male pleopod (G1), which has a long, less strongly twisted terminal segment and distal portion of subterminal segment in addition to a setose hump on the outer margin of the non-twisted portion. Key to the species of the genus *Spiralothelphusa* Bott, 1968, is provided. We recognized *S. wuellerstorfi* (Heller, 1862), as a new record to Maharashtra based on specimens wrongly identified as *S. hydrodroma* (Herbst, 1794), by Pati & Sharma (2014).

Key words: Crustacea, Decapoda, *Spiralothelphusa*, taxonomy, new species

Introduction

The genus *Spiralothelphusa* Bott, 1968, family Gecarcinucidae (*sensu* Klaus *et al.* 2009), is represented by three Indian species [*S. hydrodroma* (Herbst, 1794), *S. senex* (Fabricius, 1798), and *S. wuellerstorfi* (Heller, 1862)] and two Sri Lankan species [*S. fernandoi* Ng, 1994, and *S. parvula* (Fernando, 1961)] (Ng & Tay 2001; Bahir & Yeo 2005). *Spiralothelphusa* is morphologically similar to *Oziotelphusa* Müller, 1887, due to its convex carapace, smooth epibranchial region, acute median tooth on the epistomal median lobe, and stout and almost triangular male abdomen (Ng & Tay 2001; Bahir & Yeo 2005). Both the genera can be nevertheless differentiated from each other by the structure of the first male pleopod (G1). The terminal segment and distal portion of the subterminal segment of the G1 is longitudinally twisted clockwise to varying degrees in *Spiralothelphusa*, whereas the longitudinal twisting is absent in *Oziotelphusa* (see Bahir & Yeo 2005).

Only two species, *S. hydrodroma* and *S. wuellerstorfi*, were hitherto reported from Kerala state: *S. hydrodroma* from Kochi, Kozhikode, Palode, Thiruvananthapuram, Travancore (modern-day central and southern Kerala) and Vembanad Lake (Alcock 1910; Krishna Pillai 1951; Deb 1998; Dev Roy *et al.* 2009), and *S. wuellerstorfi* from the Malabar coast (Milne-Edwards 1869; Wood-Mason 1871; Ortmann 1893; Rathbun 1904; Ng & Tay 2001).

Pati & Sharma (2014) discussed the systematics of the freshwater crabs in the collection of the Zoological Survey of India (ZSI), Western Regional Centre (WRC), Pune. They reported 15 specimens (7 males and 8 females) of *S. hydrodroma* from Tadoba National Park in Chandrapur district of Maharashtra. Based on species description and figures of *S. hydrodroma* in Pati & Sharma (2014), it is clear that their specimen identification is incorrect. The first author examined all the above specimens (ZSI WRC-C.522–524, 534) and we here recognize these specimens as *S. wuellerstorfi* due to some distinctive gonopod features: G1 terminal segment and distal portion of subterminal segment strongly twisted clockwise full turn, long twisted portion, two third length of non-twisted portion, terminal segment tip gently curved downwards, outer margin of non-twisted portion lacking hump, long G2 distal segment, 0.5 times length of basal segment (Pati & Sharma 2014: pl. XI, figs. 11D–F). *Spiralothelphusa wuellerstorfi* has so far been reported from Madras and the Malabar coast (Ng & Tay 2001).