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***Macrobrachium indianum* (Decapoda: Palaemonidae), a new species of hill stream prawn from Pambar River, Kerala, India**

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Abstract

Macrobrachium indianum new species is described from the Pambar River, Kerala, S. India. The species shares certain characters with *M. gurudeve* Jayachandran & Raji, 2004, *M. bombayense* Almelker & Sankolli, 2006 and *M. kulkarnii* Almelker & Sankolli, 2006, while it differs remarkably from these three species in distinctive diagnostic characters: rostral formula 7–8/3–4 with 1 postorbital teeth, one tooth above orbit; carapace smooth with distal end of rostrum directed downwards; cephalothorax longer than rostrum; in second chelate leg, proximal cutting edge of movable finger with two weak denticles, one weak denticle in immovable finger, carpus longer than merus, merus shorter than propodus and longer than ischium; dactylus the shortest podomere. Five thick and a few thin reddish brown bands of chromatophores are seen on carapace. Pigmentation is found mid and ventro-laterally on abdominal segments, pereopods have chromatophores at the distal part of podomeres.

Key word: Taxonomy, Palaemonidae, *Macrobrachium*, Pambar River, Kerala, India

Introduction

Prawns are found globally distributed in lentic and lotic habitats. Several researchers have contributed to the taxonomy and distribution of freshwater, estuarine prawns and marine shrimps from all over the world (Henderson & Matthai, 1910; Jayachandran, 2001). Perusal of the literature shows that the numerically dominant genus *Macrobrachium* is restricted to fresh and brackish water except for the enigmatic, single record of undescribed species from Canadian waters (De Grave *et al.*, 2008). The taxonomy of the freshwater prawns has been intricate due to the morphological plasticity and intra specific variations overshadowing the genetic affinities of related species. The catalogue of estimated species and subspecies of shrimps by De Grave & Fransen (2011) reveals that 244 species of *Macrobrachium* have been described globally. According to Radhakrishnan *et al.* (2012) the genus *Macrobrachium* is represented by 62 species, followed by 3 new species and one subspecies from India *viz.* *M. prabhakarani* Pillai & Unnikrishnan, 2012, *M. snpurii* Pillai & Unnikrishnan, 2013a, *M. aemulum keralauni* Pillai & Unnikrishnan, 2013b and *M. abrahami* Pillai *et al.* 2014, resulting in 65 species and 1 subspecies from India.

A perusal of the literature on alpha taxonomy of *Macrobrachium* shows that Jayachandran (2010) had reported twenty species and one sub species from Kerala. They include *M. rosenbergii*, *M. aemulum*, *M. idae*, *M. idella idella*, *M. idella georgi*, *M. indicum*, *M. rude*, *M. novoehollandiae*, *M. equidens*, *M. sulcatus*, *M. latimanus*, *M. scabriculum*, *M. divakarani*, *M. elatum*, *M. josephi*, *M. canarae*, *M. sankolli*, *M. veliense*, *M. gurudeve*, *M. jayasreei*, and *M. kunjuramani*. Other five species and one subspecies reported from Kerala are *M. striatum*, *M. madhusoodani*, *M. prabhakarani*, *M. snpurii*, *M. abrahami* and *M. aemulum keralauni*. Among these *M. divakarani* and *M. josephi* have been listed as unavailable names in Carideorum catalogus (De Grave & Fransen, 2011). During the extensive survey of palaemonid prawns in the 41 west flowing and 3 east flowing rivers of Kerala, the present authors collected several species from the east flowing Pambar River (>700 m Mean Sea Level). Among these, six specimens showed morphometric and meristic characters that did not conform to any other known species of *Macrobrachium*, hence described as new species, herein.

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