

# **Article**



## Caridina vithuraensis sp. nov. (Decapoda: Atyidae) from Vamanapuram River, Kerala region of Western Ghats, India

JAYACHANDRAN, KUNJURAMAN VIJAYAMMA & TESSA THOMAS

Kerala University of Fisheries and Ocean Studies, Panangad P O, Cochin 682 506, Kerala, India. E-mail: chandrankyj@gmail.com

#### **Abstract**

A new species of *Caridina* H. M. Edwards, 1837, namely, *C. vithuraensis*, collected from Kallar, a tributary of Vamanapuram River, Kerala at Vithura is being described in this paper. The species is characterized by: small shrimps having short rostrum, extending to the tip of 1<sup>st</sup> segment of antennular peduncle, rarely reaching beyond, rostral formula: 11–19/2–5 (2–5 post-orbital); carpus of 1<sup>st</sup> pereiopod deeply excavated, 1.3 to 1.45 times as long as broad; dactylus of 3<sup>rd</sup> pereiopod ends in a terminal spine and with 5–7 accessory spines; dactylus of 5<sup>th</sup> pereiopod with 24–45 comb-like spinules; appendix interna on endopod of male 1<sup>st</sup> pleopod is prominent; uropodal diaeresis with 16–20 spines; telson conical in shape with 4–6 pairs of spinules on the dorsal and 6–8 spinules at the distal end. The species shows affinities with species like *C. malayensis* Cai *et al.*, 2007; *C. congoensis* Richard & Clark, 2009 and *C. roubaudi* Richard & Clark, 2009. However they can be separated based on the specific characters given in Table 1.

**Key words:** Atyidae, *C. vithuraensis*, new species, Western Ghats of India, India

### Introduction

The genus *Caridina* H. Milne Edwards, 1837 is one of the species rich genera in the family Atyidae and they are abundant in the freshwaters of tropical ecosystems. The family contains a total of 43 genera and 279 species (De Grave *et al.*, 2009). From India 25 species and from Kerala State 15 species have been reported so far (Pillai, 1964; Tiwari & Pillai, 1968; 1971; Thomas *et al.*, 1973; Jalihal *et al.*, 1984; Richard & Chandran, 1994; Ebenezer & Richard, 1999; Dutta, 2001; Jayachandran, 2005; Jayachandran *et al.*, 2008; Mariappan & Richard, 2006; Tessa Thomas & Jayachandran, 2007; Silas & Jayachandran, 2010). Western Ghats of India is one of hot spots in species diversity and about 10 species of *Caridina* have been reported from here. While analyzing a recent collection of shrimps from the Vamanapuram River, a new species of *Caridina* was collected and is described here in.

## Methods

Collections were taken by using scoop net and also by dragging a rectangular small mesh sized net along the banks from different regions of Kallar at Vithura (about 30 km away from Trivandrum, the capital city of Kerala State), a tributary of Vamanapuram River at Vithura about 30 km away from Trivandrum, the capital city of Kerala State, India on 25-03-2007. Comparative taxonomic studies and species status confirmation have been made by consulting relevant literature (Pillai, 1964; Tiwari & Pillai, 1968; 1971; Thomas *et al.*, 1973; Choy, 1984; Jalihal *et al.*, 1984; De Silva, 1990; Guo *et al.*, 1992; Hung *et al.*, 1993; Short, 1993; Guo & Suzuki, 1996; Cai & Li, 1997; Guo & De Grave, 1997; Liang & Yan, 1997; Ebenezer & Richard, 1999; Ng & Cai, 2000; Dutta, 2001; Jayachandran, 2005; Cai & Anker, 2004; Cai & Shokita, 2006; Jayachandran *et al.*, 2008; Mariappan & Richard, 2006; Tessa Thomas & Jayachandran, 2007; Richard & Clark, 2009; Silas & Jayachandran, 2010).