



## A new species of the hermit crab genus *Ciliopagurus* Forest (Crustacea: Decapoda: Anomura: Diogenidae) from southern India

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### Abstract

The diogenid hermit crab genus *Ciliopagurus* Forest, 1995 is currently represented by 18 recent species, 17 species from the Indo-West Pacific and one species from the eastern Atlantic. In this paper, we describe a new species, *Ciliopagurus grandis*, from off Kerala State, southern India. This new species is compared with six congeneric species, *C. albatrossi* Forest, 1995, *C. caparti* (Forest, 1952), *C. krempfi* (Forest, 1952), *C. liui* Forest, 1995, *C. macrolepis* Forest, 1995, and *C. shebae* (Lewinsohn, 1969). It is characteristic in having weakly armed antennal acicles.

**Key words:** Decapoda, Anomura, Diogenidae, *Ciliopagurus*, new species, Kerala, India

### Introduction

The hermit crab genus *Ciliopagurus* Forest, 1995 is one of the three diogenid genera characterized by the possession of stridulating apparatus on the mesial surfaces of the chelae (Forest 1995a). It is immediately distinguished from the other two genera, *Trizopagurus* Forest, 1955 and *Strigopagurus* Forest, 1994, by the presence of distinct, setose transverse ridges or striae on the chelipeds and ambulatory legs. Currently 18 Recent species are represented in *Ciliopagurus* (McLaughlin *et al.* 2010), of them 17 species are distributed in the Indo-West Pacific region (Forest 1995; Poupin 2001; Poupin & Malay 2009). Two fossil species are also known (Forest 1995b; Bakel *et al.* 2003).

During a survey on the hermit crab fauna in the Kerala State, southern part of India, carried out by the junior authors, specimens representing *Ciliopagurus* have been collected, among them an undescribed species. This paper serves to describe a new species, *C. grandis* n. sp., based on six specimens. The new species is compared with *C. albatrossi* Forest, 1995, *C. caparti* (Forest, 1952), *C. krempfi* (Forest, 1955), *C. liui* Forest, 1995, *C. macrolepis* Forest, 1995 and *C. shebae* (Lewinsohn, 1969). Differentiating characters of these species are discussed.

The type material is deposited in the Natural History Museum and Institute, Chiba (CBM) and the museum collections of the Department of Aquatic Biology and Fisheries, University of Kerala, India. General terminology follows McLaughlin & Bailey-Brock (1975) and McLaughlin *et al.* (2007), except for numbering of thoracic sternites. Shield length (sl), measured from the tip of the rostrum to the midpoint of the posterior margin of the shield, indicates specimen size.

### Taxonomy

#### *Ciliopagurus grandis* n. sp.

(Figs 1–5)

**Material examined.** *Holotype*: male (sl 13.7 mm), off Sakthikulangara, Kerala State, India, depths 10–15 m, 24–29 January 2011, CBM-ZC 10663.