



Calappid and leucosiid crabs (Crustacea: Decapoda: Brachyura) from Kerala, India, with the description of a new species of *Mursia* Desmarest, 1823, from the Arabian Sea and redescription of *M. bicristimana* Alcock & Anderson, 1894

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Abstract

Eleven species of calappid and leucosiid crabs were identified from by-catch landed by trawlers at four fishing ports in Kerala, India that were surveyed in 2007 and supplemented by material obtained in January 2013. Four species are reported for the first time from India, six are new records for Kerala. The status of *Mursia bicristimana* Alcock & Anderson, 1894, is clarified and the species redescribed. A new species of *Mursia* is described from the Gulf of Aden, Arabian Sea.

Key words: Calappidae, Leucosiidae, *Mursia bicristimana*, *Mursia* new species, Indian Ocean, Kerala, India

Introduction

The southwestern coast of India is rich in fishery resources, providing a quarter of the marine fish landings in India (Pillai *et al.* 2007). The mechanization of the fishing industry, which started in the 1950s, increased awareness of the environmental impacts of commercial fishing, including changes to habitats and effects on non-target species (Kumar & Deepthi 2006; Anonymous 2012). Specific alarms have been raised with regard to bottom trawling as it may cause substantial modifications to the benthic communities (Kurup *et al.* 2003), but apart from sketchy observations, little is known about the implications of bottom trawling on the local benthic biota. Forty-three species of brachyuran crabs were listed in a study of by-catch landed by trawlers in five Kerala fishing ports surveyed in 2005/6 as part of a biodiversity assessment (Kumar *et al.* 2007). The calappid and leucosiid crabs obtained during the 2007 survey were examined as part of this study. Freshly collected material was obtained by the authors in January 2013. The results of these collections are herein reported.

Materials and methods

By-catch landings of bottom trawlers were collected during February to November 2007 from four of the largest fishing ports of Kerala, India: Neendakara, Munambam, Ponnani and Azhikkal. Additional material was obtained in January 2013, when the authors revisited Neendakara. Specimens were preserved in 10% formalin and retained at the Department of Aquatic Biology & Fisheries, University of Kerala, Thiruvananthapuram, India.

Abbreviations. CL = carapace length; CW = carapace width; DABFUK = Department of Aquatic Biology & Fisheries, University of Kerala; NHM = Natural History Museum, London, UK; ovig. = ovigerous; SMF = Senckenberg Museum, Frankfurt; USNM = National Museum of Natural history, Smithsonian Institution, Washington D.C.; ZMMU = Zoological Museum of Moscow University.

New York. The first two authors thank the financial support of Kerala State Council for Science, Technology and Environment for the research work.

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