



A new genus and new species of leucosiid crab (Crustacea: Decapoda: Brachyura) from coral reefs in the Indo-West Pacific

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Abstract

A new genus and new species of leucosiid crab, *Coralliocryptus caementa* n. sp., is described from Indo-West Pacific coral reefs in the Ryukyu Islands (Japan), Vanuatu, and Comoros. Although the new genus exhibits superficial resemblance to the Iphiculidae in having prominent vertical spiniform teeth on the cutting edges of the chela and the female abdomen consisting of freely articulated somites, the deeply excavated female sterno-abdominal cavity, which is completely covered by the abdomen, unambiguously places this unique taxon in the Leucosiidae. The highly eroded, coral-rubble mimic carapace suggests some degree of relationship between *Coralliocryptus* and some other ebaliine genera, e.g., *Alox* Tan & Ng, 1995, *Oreophorus* Rüppel, 1830, *Oreotlos* Ihle, 1918.

Key words: Crustacea, Decapoda, Brachyura, Leucosiidae, new genus, new species, Indo-West Pacific

Introduction

Numerous species of Indo-West Pacific leucosiid crabs resemble pieces of coral rubble so well that it is almost impossible to see them unless they move (e.g., Tan & Richer de Forges 1993; Tan & Ng 1995). Between 2007 and 2011, the authors independently obtained specimens of an unusual coral rubble mimic from Japan and Vanuatu. Joseph Poupin (Institut de Recherche de l'École Navale, France) then kindly sent the authors specimens of an unusual leucosiid from the Comoro Is. in the Indian Ocean that also turned out to be conspecific with the Western Pacific material. While the carapace of these specimens resembles those of genera like *Alox* Tan & Ng, 1995, *Oreophorus* Rüppel, 1830, and *Oreotlos* Ihle, 1918, their chelae and female abdomen are unlike any of these genera, with sharp vertical and spiniform teeth along the cutting margins of finger as well as freely articulated abdominal somites, superficially resembling those of Iphiculidae Alcock, 1896, another leucosioid taxon (see Ng *et al.* 2008). These specimens are here referred to as a new genus and new species of Ebaliinae.

Specimens examined are deposited in the Natural History Museum and Institute, Chiba (CBM), Japan; Muséum national d'Histoire naturelle (MNHN), Paris; and Zoological Reference Collection (ZRC) of the Raffles Museum of Biodiversity Research, National University of Singapore. Measurements provided, in millimeters, are of the maximum carapace length and width, respectively. For detailed data of the collections from Mayotte, Comoro Is., see Bouchard *et al.* (in press). The abbreviations G1 and G2 are used for the first and second male gonopods, respectively.

Systematics

Family Leucosiidae Samouelle, 1819

Subfamily Ebaliinae Stimpson, 1871

***Coralliocryptus* n. gen.**

Type species. *Coralliocryptus caementa* n. sp., by monotypy.