Kume tigra, a new genus and new species of carupine swimming crab (Crustacea: Brachyura: Portunidae) from Kume Island, Ryukyu Islands, Japan*

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Abstract

A new genus and species of swimming crab of the family Portunidae Rafinesque, 1815, is described from Kume Island, Ryukyu, Japan. The new genus of the subfamily Carupinae Paul'son, 1875 is allied to the genera Pele Ng, 2011, and Libystes A. Milne-Edwards, 1867, but differs in the shapes of the carapace, thoracic sternum, third maxilliped, merus of the cheliped, fifth pereiopod, male abdomen and gonopods.

Key words: Kume tigra, new genus, new species, taxonomy, Kumejima, Ryukyu Islands, Japan

Introduction

During the Kumejima Marine Biodiversity Expedition “KUMEJIMA 2009”, an interesting species of portunid crab was collected from a depth of 55 m by a SCUBA diver. This species is similar to Pele Ng, 2011, and Libystes A. Milne-Edwards, 1867, but differs from them in several generic characters. The present study describes it as a new species in a new genus.

The present study follows the classification used in Ng et al. (2008) and De Grave et al. (2009) in which the Carupinae is recognised as a subfamily within the Portunidae. On the basis of a detailed cladistic analysis of adult characters, Karasawa et al. (2008) argued that the Catoptrinae Borradale, 1903, (including Libystes and Catoptrus A. Milne-Edwards, 1870) should be recognised as a distinct family. However, Schubart & Reuschel (2009), using molecular datasets, demonstrated that Libystes and Catoptrus are clearly nested in a clade that includes most of the other portunids, indicating that the group is probably just a subfamily of the Portunidae.

The measurements provided, in millimeters, are carapace length and width, respectively. The abbreviations G1, G2 and P2–P5 are used for the male first and second gonopods and second to fifth pereiopods, respectively. Specimens examined are deposited in Muséum national d’Histoire naturelle (MNHN), Paris; the Ryukyu University Museum, Fujukan (RUMF), Okinawa, Japan; and the Zoological Reference Collection (ZRC) of the Raffles Museum of Biodiversity Research, National University of Singapore. Comparative material of Libystes and Pele used for this study have been listed in Ng (2011).

Taxonomic account

Family PORTUNIDAE Rafinesque, 1815