Two new species of Holthuisana, 1969 (Crustacea: Decapoda: Brachyura: Gecarcinucidae) from West Papua, Indonesia

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Abstract

Two new species of gecarcinucid crabs of the genus Holthuisana Bott, 1969, are described from the islands of Waigeo and Batanta in West Papua Province, Indonesia. Holthuisana lipkei n. sp. differs from the allied H. alba Holthuis, 1980, from Papua New Guinea by having fully developed pigmented eyes, smooth carapace, smooth and distinctly gaping second major chela, and the relatively more slender male first gonopod. Holthuisana tikus n. sp. resembles H. subconvexa (Roux, 1927) from Papua Province but differs by possessing indistinct and shallow epigastric lobes on the carapace, the absence of a subdistal tooth on the upper margin of the ambulatory merus of pereiopods 2-5 and a relatively stouter male first gonopod. The taxonomic status of Holthuisana and its constituent species is also discussed.

Key words: Crustacea, Decapoda, Brachyura, Gecarcinucidae, Holthuisana, new species, Indonesia

Introduction

The second year (12 April to 11 May 2008) of the e-Win (Ekspedisi Wydia Nusantara) expedition organized by the Indonesian Institute of Sciences surveyed the islands of Batanta and Salawati in Indonesia’s West Papua Province. The marine ecosystems of this region have been extensively surveyed over the last decade, but, the area’s terrestrial and the freshwater biodiversity are poorly known. The freshwater crab material reported on here was kindly supplied by Nanang Supriyatna and Endang Cholik, who collected these specimens during their mammal and insect surveys on the islands of Waigeo and Batanta. The specimens were caught either in traps set for mice or insects or were picked up by hand from the forest floor during the first and the second e-Win expeditions. Among the present material were two new species of Holthuisana Bott, 1969 (Gecarcinucidae). Prior to these expeditions, no freshwater crab species had been reported from these islands, but two new species of karst sesarmid crabs have been reported (Wowor & Ng 2009).

Measurements given are listed as carapace width by length. The width was measured across the widest part of the carapace, and the length from the median point of the frontal margin to the median point of the posterior of the carapace. All measurements are in millimetres. The abbreviations G1 and G2 are used for the male first and second gonopods, respectively. The Indonesian terms Gua, Sungai and Kampung refer to cave, river and village, respectively. The higher classification follows that of Klaus et al. (in press) in which the Parathelphusidae Alcock, 1910, is synonymised with the Gecarcinucidae Rathbun, 1904. Specimens examined are deposited in the Museum Zoologicum Bogoriense (MZB), Indonesian Institute of Sciences, Cibinong, Java; and the Zoological Reference Collection (ZRC) of the Raffles Museum of Biodiversity Research, National University of Singapore.