



Two new species of sesarmid crabs (Crustacea: Decapoda: Brachyura) associated with limestone formations in West Papua, Indonesia

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Abstract

Two new species of karst sesarmid crabs of the genus *Karstarma* Davie & Ng, 2007, are described from western Papua, Indonesia. *Karstarma ardea* n. sp. differs from the allied *K. ultrapes* (Ng, Guinot & Iliffe, 1994) from the Solomon Islands by its proportionately shorter ambulatory legs and the shape of its vulva. *Karstarma waigeo* n. sp. is closest to *K. balicum* (Ng, 2002) from Bali, Indonesia, but differs in its proportionately longer ambulatory legs and in the morphology of the male first gonopod.

Key words: Crustacea, Decapoda, Brachyura, Sesarmidae, *Karstarma*, new species, Indonesia

Introduction

As part of its 40th anniversary, the Indonesian Institute of Sciences organized the first e-Win (Ekspedisi Wydia Nusantara) expedition from 27 May to 15 June 2007 to survey the island of Waigeo in Indonesia's West Papua Province. Although rich in marine biodiversity, the terrestrial and freshwater fauna is still poorly known.

Through the kindness of Cahyo Rahmadi, who conducted cave research on the island, several interesting specimens obtained from the karst formations of Gua (= cave) Kalepale and Gua Aleg Afni were passed to us for study. Among the material obtained were two new sesarmid species of *Karstarma* Davie & Ng, 2007. *Karstarma* currently contains 12 species from the West Pacific, all of which are found associated with caves and limestone formations (Ng 2002; Naruse & Ng 2007; Davie & Ng 2007; Ng *et al.* 2008).

The terminology follows Ng (2002), Davie & Ng (2007) and Husana *et al.* (in press). The abbreviations G1 and G2 are used for the male first and second gonopods, respectively; CL and CW denote the carapace length and width in millimetres, respectively. 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.

Systematic account

Sesarmidae

Karstarma Davie & Ng, 2007

Remarks. There is a problem with the spelling of the name of this genus. In the text of the original description, Davie & Ng (2007) spelled the name “*Karstarma*” five times but as “*Karstama*” nine times; with