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A new species of troglobitic crab of the genus *Stygothelphusa* Ng, 1989, from Sarawak, Malaysia (Crustacea: Decapoda: Brachyura: Gecarcinucidae)

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Abstract

A new species of cave crab, *Stygothelphusa antu* **new species**, is described from limestone formations in Temurang, Sarawak, Malaysia. The new species is the most highly adapted to a cavericolous lifestyle among the four known species of *Stygothelphusa*, having a pale body pigmentation, reduced eyes and elongated pereopods. In contrast, the other three species have normal eyes that almost completely fill the orbits. The new species also differs from its congeners by a number of carapace, pereopod and gonopod characters.

Key words: Crustacea, Brachyura, Gecarcinucidae, *Stygothelphusa*, new species, cave, Sarawak, Malaysia

Introduction

The Bornean gecarcinucid genus *Stygothelphusa* Ng, 1989, which is restricted to Sarawak, Malaysia, is currently represented by three species: *S. bidiensis* (Lanchester, 1900), *S. nobilii* (Colosi, 1920), and *S. cranbrooki* Ng, 2013. Although all three species have been found only inside caves, none are regarded as true or obligate troglobites as their eyes are not reduced, even though they have pale body coloration and elongated ambulatory legs (see discussion in Ng 2013).

The second author recently collected specimens from a cave system in Temurang, Sarawak, which not only belonged to an undescribed fourth species of *Stygothelphusa*, but proved to be the most highly adapted for a cavericolous lifestyle among congeners, with the eyes and corneas reduced in size. It is the first true troglobitic species of *Stygothelphusa* known. The new species is herein described.

Specimens examined are deposited in the Zoological Reference Collection of the Raffles Museum of Biodiversity Research, National University of Singapore (ZRC). The terminology used follows Ng (1988); and the measurements provided (in millimetres) are of the carapace width and length, respectively. The abbreviations G1 and G2 are used for the male first and second gonopods, respectively.

Taxonomy

Family Gecarcinucidae Rathbun, 1904

Stygothelphusa Ng, 1989

Type species. *Potamon* (*Thelphusa*) *bidiense* Lanchester, 1900, by original designation; gender feminine.

Remarks. The taxonomy of *Stygothelphusa* Ng, 1989, has been reviewed and discussed at length by Ng

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