Copyright © 2010 · Magnolia Press

## Article



## A new species of mud shrimp of the genus *Espeleonaushonia* Juarrero & Martínez-Iglesias, 1997 (Decapoda: Gebiidea: Laomediidae) from Palau

FERNANDO ALVAREZ<sup>1,3</sup>, JOSE LUIS VILLALOBOS<sup>1</sup> & THOMAS M. ILIFFE<sup>2</sup>

 <sup>1</sup>Colección Nacional de Crustáceos, Instituto de Biología, Universidad Nacional Autónoma de México, Apartado Postal 70-153, México 04510, D.F., México. E-mail: falvarez@servidor.unam.mx, hiriart@servidor.unam.mx
<sup>2</sup>Department of Marine Biology, Texas A&M University at Galveston, Galveston, Texas 77553-1675, U.S.A.
E-mail: iliffet@tamug.edu
<sup>3</sup>Corresponding author

## Abstract

A new species of *Espeleonaushonia* is described from a single specimen collected in an underwater cave in Babeldaob Island, Republic of Palau. The new species is placed in *Espeleonaushonia* based on the following characters: exopod of third maxilliped well developed, propodus of first pereopod with spines on dorsal surface and along mesial and lateral margins; second pereopod not chelate with dactylus densely setose, fifth pereopod with simple dactylus, fourth to sixth abdominal pleura with serrate ventrodistal angle, and both rami of uropods completely divided. The description of this new species represents the first report of the genus from the tropical southwest Pacific.

Key words: Espeleonaushonia, Naushonia, new species, Laomediidae, Palau

## Introduction

The genus *Espeleonaushonia* Juarrero & Martínez-Iglesias, 1997, was erected to place the Cuban species *E. augudrea* Juarrero & García, 1997, which differed from *Naushonia* Kingsley, 1897, in that it was collected in a cave and showed some degree of adaptation to cave life. The diagnostic characters of the new genus are: reduced eye and body pigmentation, a third maxilliped with well developed exopod, first pereopods with numerous spines on propodus, external margin of dactylus of the first pereopod with teeth, second pereopod simple with a dense brush of setae, dactylus of fifth pereopod simple, ventral margins of pleura of pleomeres 2–5 serrate, and both rami of uropods completely divided (Juarrero *et al.*, 1997).

Recently, Dworschak *et al.* (2006) described *Naushonia carinata*, which became the eighth species in the genus; amended Juarrero *et al.* (1997) diagnosis of *Espeleonaushonia* in that the eyes could have more or less reduced corneal pigmentation; and transferred *Naushonia manningi* Alvarez, Villalobos & Iliffe, 2000, collected from a cave in the Bahamas to *Espeleonaushonia*. Dworschak *et al.* (2006) also provided a list of all the known species in both *Naushonia* and *Espeleonaushonia* which is omitted here.

In this contribution, we describe a new species of *Espeleonaushonia* from Babeldaob Island, Republic of Palau, based on a single specimen collected in a marine cave in near total darkness. Both *Naushonia* and *Espeleonaushonia* include species which have been described based on 1 to 5 individuals (Martin & Abele 1982; Berggren 1992; Ngoc-Ho 1996; Juarrero *et al.* 1997; Alvarez *et al.* 2000; Komai 2004; Dworschak *et al.* 2006) and are rarely captured (Langton & Brodeur 1978). Due to its rarity, its morphology which is clearly different from the other two species of *Espeleonaushonia*, and because it comes from a region without previous records of the genus, we deemed justified to describe a new species based on a single organism. The single specimen described herein is deposited in the Colección Nacional de Crustáceos (CNCR), Instituto de Biología, Universidad Nacional Autónoma de México. Other abbreviations used are: cl, carapace length; tl, total length.