



## A new genus and new species of hermit crab (Crustacea: Anomura: Paguroidea: Diogenidae) from the eastern tropical Pacific

MANUEL AYÓN-PARENTE<sup>1</sup> & MICHEL E. HENDRICKX<sup>2</sup>

Laboratorio de Invertebrados Bentónicos, Unidad Académica Mazatlán, Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México, P.O. Box 811, Mazatlán, Sinaloa, 82000. México.

E-mail: <sup>1</sup>manuel@ola.icmyl.unam.mx; <sup>2</sup>michel@ola.icmyl.unam.mx

### Abstract

*Tetralobistes* **gen. nov.**, a presently monotypic genus of hermit crab of the family Diogenidae, is described to accommodate a new species, *Tetralobistes bicentenarius* **sp. nov.** In many characters, *Tetralobistes* **gen. nov.** is similar to *Areopaguristes* Rahayu & McLaughlin, 2010, *Paguristes* Dana, 1851, and *Pseudopaguristes* McLaughlin, 2002. However, it differs most significantly in the morphology of the male first pleopods and lacks male second and female first pleopods. The most conspicuous character separating *Tetralobistes* **gen. nov.** from the other three genera is the shape of the telson, with a typical subdivided (four-lobes) posterior margin.

**Key words:** Crustacea, Decapoda, Paguroidea, Diogenidae, new genus, new species, eastern Pacific

### Introduction

During the last decade there has been a significant increase in the number of genera and species of hermit crabs described worldwide. Descriptions of new taxa were based on thorough revisions of the systematics of the group, combined with the examination of freshly collected and museum specimens (e.g., Lemaitre & McLaughlin 2006, McLaughlin & Rahayu 2008, Ayón-Parente & Hendrickx 2009).

Despite the fact that hermit crabs are usually very abundant in coastal ecosystems, particularly in the tropics, they are often small to medium-sized and superficially similar, thus making their correct identification difficult. During the study of the hermit crabs of the family Diogenidae from the Mexican Pacific, a small series of specimens of this family was collected in shallow water at Matanchen Bay, Nayarit, Mexico. The very small size and attractive color pattern set these specimens apart from previously collected species and clearly were of a new species. Furthermore, some characters of generic value were observed, indicating that this species did not fit within any of the currently recognized genera of Diogenidae. Although the specimens show some similarity to *Paguristes* Dana, 1851, *Pseudopaguristes* McLaughlin, 2002, and *Areopaguristes* Rahayu & McLaughlin, 2010 (a genus-group name recently proposed to replace the preoccupied name *Stratiotes* Thomson, 1899), they are so morphologically different that a new monotypic genus is justified for this new species.

### Material and methods

The material was obtained in June 2005, November 2006 and October 2010, from hand-collected samples from Matanchen Bay, Nayarit, Mexico. McLaughlin (1974, 2003) is followed for general terminology. Shield length (SL in mm) was measured from the tip of the rostrum to the midpoint of the posterior margin of shield. Specimens are deposited in the Regional Collection of Invertebrates (EMU) in the Laboratorio de Invertebrados Bentónicos, ICML, UNAM, in Mazatlán, Mexico, in the Crustacean Collection of Los Angeles