



A new species of *Paguristes* Dana, 1851 (Anomura, Paguroidea, Diogenidae) from the Mexican Pacific

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Abstract

A new species of the hermit crab genus *Paguristes*, *P. haigae* **n. sp.**, is described and illustrated from material collected in the Gulf of California, Mexico. *Paguristes haigae* **n. sp.** closely resembles *P. tortugae* Schmitt, 1933, from the western Atlantic and *P. aztatlanensis* Glassell, 1937 and *P. oculiviolaceus* Glassell, 1937, both previously known from the eastern tropical Pacific. *Paguristes aztatlanensis* features a proportionally much longer shield than *P. haigae* **n. sp.**, an acute rostrum, longer than in *P. haigae* **n. sp.**, and its ocular peduncle is proportionally shorter than in the new species; pereopods 2 and 3 are proportionally longer in *P. aztatlanensis* than in *P. haigae* **n. sp.** and third maxilliped of *P. haigae* **n. sp.** is armed while it is unarmed in *P. aztatlanensis*. *P. oculiviolaceus* possesses a relatively much longer antennule than *P. haigae* and the armature of the carpus of chelipeds varies in these two species. *Paguristes haigae* **n. sp.** also shows somewhat resemblance to *P. bakeri* Holmes, 1900 and *P. holmesi* Glassell, 1937, but these two species have the anterior lobules of the telson unarmed while it is armed with 2–4 spines in *P. haigae* **n. sp.**

Key words. Decapoda, Anomura, Diogenidae, *Paguristes haigae* new species, Gulf of California, Mexico

Introduction

Among the genera of hermit crabs of the family Diogenidae, the genus *Paguristes* Dana, 1851, is the best represented in the eastern tropical Pacific (12 species) and in the Mexican Pacific (10 species) (Hendrickx & Harvey 1999). A total of six or possibly seven undescribed species were recognized in the early 1970's (see Haig *et al.* 1970; Ball & Haig 1974) but were never formally described. Material that presumably belonged to an undescribed species of *Paguristes* was recently assigned to the genus *Stratiotes* Thomson, 1899, a genus very similar to *Paguristes* (Rahayu 2005). Two other species from the eastern Pacific also need to be transferred to *Stratiotes* (see Ayon Parente & Hendrickx 2006). Considering the urgent need for a thorough review of species of *Paguristes* and allied genera occurring in the central eastern Pacific, all specimens of *Paguristes* as well as other unidentified hermit crabs of the family Diogenidae available in the invertebrate collection of the Laboratorio de Invertebrados Bentónicos, ICML, UNAM, in Mazatlán, Sinaloa, were reviewed. Among these, we found specimens clearly distinct from all species of *Paguristes* currently known for the area and that are described herein as a new species.

Specimens were obtained during the GUAYTEC I, II and CORTES 3 cruises in the Gulf of California, Mexico, and are deposited in the reference collection of Benthic Invertebrates in the Laboratorio de Invertebrados Bentónicos, ICML, UNAM, in Mazatlán, Sinaloa (EMU). Terminology for the descriptions and protocol for measurements follows McLaughlin (2004), while the terminology for male gonopods follows McLaughlin & Provenzano (1974). Abbreviations are: SL, shield length; stn, sampling station.