



A new species of *Hemus* (Majoidea: Majidae: Mithracinae) from the Pacific coast of Panamá, with a key to the genus

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Abstract

A new species of spider crab, *Hemus magalae* n. sp. (Majidae), is described from a single male specimen from Islas de las Perlas, Pacific Ocean coast of Panamá. This species differs from its congeners with respect to many features of the carapace including mid-line elevation and lateral dentition. *Hemus* A. Milne-Edwards, 1875, now includes four species, three from coastal waters of the eastern Pacific Ocean and one from shallow waters in the tropical western Atlantic Ocean. A key to the Pacific and Atlantic species of *Hemus* is provided.

Key words: spider crab, Panamá, mitochondrial DNA

Introduction

Species of the genus *Hemus* A. Milne-Edwards, 1875, commonly inhabit subtidal rock or shell substrates. Individuals of all species are generally small, less than 10 mm in carapace length, and characterized by a broad rostrum, broad first movable antennal article, slender chelipeds, and cristate pereopods. As currently treated, *Hemus* (*sensu* Ng *et al.* 2008) comprises three species: *H. analogus* Rathbun, 1898, *H. cristulipes* A. Milne-Edwards, 1875, and *H. finneganae* Garth, 1958. *Hemus* was formerly classified within the family Mithracidae (Martin and Davis 2001), but recently repositioned within the majid subfamily Planoterginae Števčić, 1991 (Ng *et al.* 2008). Ongoing molecular phylogenetic analyses by the authors (Windsor and Felder, in preparation) suggest that *Hemus* should once again be placed in Mithracinae *sensu* Ng *et al.* (2008), an assignment followed in the present work.

A collection made off the Pacific coast of Panamá in 2007 yielded material of a fourth, as yet undescribed, species of *Hemus*. This new species differs from the other two Pacific species with respect to carapace elevation, ornamentation of the ambulatory pereopods, breadth of the rostrum, breadth of the first movable article of the antennae, and structure of the male first gonopod (pleopod) (see Remarks). Although only one specimen was collected, its unique morphology warrants its description as a new species. Gene sequence comparisons (herein as well as by Windsor and Felder, in preparation) also support its independent recognition.

Methods

The single specimen was collected aboard R/V *Urraca* in February 2007 while dredging at a depth of 27 m on a rock and shell substrate off Islas de las Perlas, Panamá. The specimen was preserved in 70% ethanol and archived in the University of Louisiana Lafayette Zoological Collection (ULLZ 9408), a number under which its extracted DNA continues to be archived for molecular analyses. This specimen was subsequently deposited as the holotype in the National Museum of Natural History, Smithsonian Institution (UNSM 1149374). Tissue was harvested from a pereopod and DNA was extracted for use in molecular phylogenetic analysis at the University of Louisiana Lafayette.