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DESCRIPTION OF TWO NEW ASSOCIATED INFAUNAL DECAPOD CRUSTACEANS (AXIANASSIDAE AND ALPHEIDAE) FROM THE TROPICAL EASTERN PACIFIC

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ABSTRACT

Two new species of infaunal decapod crustaceans are described based on material collected in Bahía Málaga, Pacific coast of Colombia, in 2009. The mud-shrimp Axianassa darrylfelderi sp. nov. (Axianassidae) appears to be most closely related to A. australis Rodrigues & Shimizu, 1992, A. canalis Kensley & Heard, 1990, and A. jamaicensis Kensley & Heard, 1990. The new species may be distinguished from each of them by a combination of morphological features, mainly on the uropodal exopod, antennal acicle, third maxilliped and first pleonite. The shrimp Leptalpheus canterakintzi sp. nov. (Alpheidae), associated with burrows of A. darrylfelderi sp. nov., undoubtedly represents the eastern Pacific sister species of the western Atlantic L. axianassae Dworschak & Coelho, 1999, which lives exclusively in burrows of A. australis. The two species are reliably distinguishable only by the proportions of the merus and propodus of the third pereopod. Leptalpheus azuero Anker, 2011, previously known only from the Pacific coast of Panama, is reported for the first time from Bahía Málaga, Colombia.

KEY-WORDS: Decapoda; Shrimp; Mud-shrimp; Infauna; Symbiosis; Axianassidae; Alpheidae; *Axianassa*; *Leptalpheus*; Transisthmian species; East Pacific; New species; New record.

INTRODUCTION

The mud-shrimp genus *Axianassa* Schmitt, 1924 in the monogeneric family Axianassidae currently includes 10 species, four in the western Atlantic (Schmitt, 1924; Kensley & Heard, 1990; Rodrigues & Shimizu, 1992), two in the eastern Pacific (Kensley & Heard, 1990), and four in the Indo-West Pacific (Anker, 2010, 2011a; Liu & Liu, 2010; Komai, 2014). All species of *Axianassa* inhabit coastal waters, burrowing in silt-sand or mud substrates in various intertidal and subtidal habitats, down to about 42 m.

However, most species have been collected on intertidal mud and sand flats, often close to mangrove stands, or in siltier parts of backreef lagoons.

The alpheid shrimp genus *Leptalpheus* Williams, 1965 currently contains the highest number of infaunal symbiotic species in the family (14), the majority of them (11) distributed in very shallow tropical and subtropical parts of the western Atlantic and eastern Pacific (Williams, 1965; Ríos & Carvacho, 1983; Dworschak & Coelho, 1999; Anker *et al.*, 2006a, 2008, 2011b; Salgado-Barragán *et al.*, 2014), the remaining found in the tropical Indo-West Pacific

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