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A new species of the genus *Typton* Costa (Crustacea: Decapoda: Palaemonidae: Pontoniinae) from the eastern tropical Pacific

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Abstract

A new species of commensal shrimp of the genus *Typton* from holothurians is described and illustrated. The specimens were collected from a single specimen of *Holothuria* (*Halodeima*) *inornata* Semper, 1868 at a depth of 7 m. This is the first record of an association between a shrimp of the genus *Typton* and echinoderms. With this record, five species of *Typton* are now known from the eastern Pacific region and four of them are found in the Mexican Pacific. In *Typton granulosus* **sp**. **nov**., the distal part of the outer margin of the uropodal exopod is serrated, a feature shared with *T. fapespae* Almeida *et al*., 2014, *T. holthuisi* De Grave, 2010, *T. prionurus* Holthuis, 1951, *T. serratus* Holthuis, 1951, and *T. spongicola* Costa, 1844. However, the new species can be separated from the other five species of the genus by several morphological characters.

Key words: Mexican Pacific, Caridea, holothurian associate, symbiosis, eastern Pacific

Introduction

The genus *Typton* Costa, 1844 which currently counts 18 species (De Grave & Fransen 2011; Almeida *et al*. 2014), is characterized by a single rostral spine, non-filtratory mouthparts, a normal labrum, exopods of maxillipeds with slender flagella bearing only four plumose terminal setae, a reduced scaphocerite, and by the presence of shearing cutting edges on the fingers of the minor second pereiopod (Holthuis 1993; Bruce 1995, 2009). Species of *Typton* have been recorded from the East and West Atlantic, the East Pacific, and the Indo-Pacific. They are found in shallow waters to 81 m, mostly in sponges, but they have also been collected among stones (Holthuis 1951; Bruce 1978; Ďuris *et al*. 2011). In the eastern tropical Pacific the genus *Typton* is represented by four species *T. hephaestus* Holthuis, 1951, *T. serratus* Holthuis, 1951, *T. crosslandi* Bruce, 1978, and *T. tortugae* McClendon, 1911, the latter considered an amphiamerican species recorded from Bermuda, Florida, U.S.A., and the Gulf of California, Mexico (Holthuis 1951; Wicksten 1983; Hendrickx 1993).

During sampling operations in Bahía Chamela, Jalisco, Mexico, specimens of *Typton* were collected on the sea cumcumber *Holothuria* (*Halodeima*) *inornata* Semper, 1868. After a careful morphological review these specimens were recognized as belonging to an undescribed species closely related to the eastern Pacific *T. serratus* and the Atlantic *T. fapespae* Almeida, Anker & Mantelatto, 2014, *T. holthuisi* De Grave, 2010, *T. prionurus* Holthuis, 1951, and *T. spongicola* Costa, 1844. Additional material of this new species was also located in the Regional Collection of Marine Invertebrates in Mazatlán, Mexico. In order to facilitate comparison of the new species with *T. fapespae*, the description largely follows terminology used by Almeida *et al*. (2014).

The material was deposited in the Regional Collection of Marine Invertebrates (EMU), Instituto de Ciencias del Mar y Limnología, Universidad Nacional Autónoma de México (UNAM), in Mazatlán, and in the Reference Collection of the Laboratorio de Ecosistemas Marinos y Acuicultura (LEMA-CR), CUCBA, in Zapopan, Jalisco, Mexico. Drawings were made under a dissection microscope equipped with a camera lucida. Abbreviations: CL, total carapace length (rostrum included); POCL, post-orbital carapace length.

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