

NOTES AND NEWS

ON THE PRESENCE OF THE PONTONIINE SHRIMP, *TULEARIOCARIS HOLTHUISI* HIPEAU-JACQUOTTE, 1965 (DECAPODA, PONTONIINAE) ON THE PACIFIC COAST OF PANAMA

BY

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The echinoid-associated pontoniine shrimp, *Tuleariocaris holthuisi* Hipeau-Jacquotte, 1965 is a widely distributed species known from the east coast of Africa (Hipeau-Jacquotte, 1965; Bruce, 1982), the north-east coast of Australia (Bruce, 1990), Tahiti (J. Poupin, pers. comm.) and Hawaii (Castro, 1971; Hoover, 1998), as well as from the Gulf of California (Wicksten & Hernández, 2000), representing one of the very few Pontoniinae cases of a distribution spanning the Indian Ocean, as well as the western and eastern Pacific Ocean (Bruce, 1972, 1987; De Grave, 2001). Previously, the only record of this species from the eastern Pacific was based on two specimens collected in the Gulf of California, Mexico (Wicksten & Hernández, 2000). Herein, we report an ovigerous female of *Tuleariocaris holthuisi* found in the Coiba National Park on the Pacific coast of Panama, confirming its presence in the eastern Pacific and significantly increasing the known range of the species. Postorbital carapace length (pcl., in mm) is used as a standard length. The specimen collected is deposited in the first author's (IM) personal collection in the Laboratory of Ecology and Morphology of Marine Invertebrates, A. N. Severtzov Institute of Ecology and Evolution of RAS, Moscow (LEMMI).

Family PALAEMONIDAE Rafinesque, 1815

Subfamily PONTONIINAE Kingsley, 1878

Genus *Tuleariocaris* Hipeau-Jacquotte, 1965

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***Tuleariocaris holthuisi* Hipeau-Jacquotte, 1965**
(fig. 1)

Tuleariocaris holthuisi Hipeau-Jacquotte, 1965: 248, pls. 1-5 [type locality: Madagascar].

Material examined. — One ovigerous female (pcl. 1.7 mm) (LEMMI), Pacific coast of Panama, Coiba National Park, Isla Isabella, on spines of sea urchin *Diadema mexicanum* Agassiz, 1863, 2 m depth, among coral rubble, coll. I. Marin, A. Anker, and J. Jara, 23.iii. 2007.

The specimen was found attached to the spines of a black sea urchin, *Diadema mexicanum*, its only known host in the eastern Pacific (Wicksten & Hernández, 2000). Other reported hosts in the Indo-western Pacific are the sea urchins, *Astropyga radiata* (Leske, 1778), *Echinothrix diadema* (Linnaeus, 1758), *Stomopneustes variolaris* (Lamarck, 1816), and *Echinometra mathaei* (De Blainville, 1825) (see Bruce, 1982).

At present, the genus *Tuleariocaris* Hipeau-Jacquotte, 1965 includes four species, all associated with sea urchins: *Tuleariocaris holthuisi*; *Tuleariocaris neglecta* Chace, 1969; *Tuleariocaris sarec* Berggren, 1995; and *Tuleariocaris zanzibaricus* Bruce, 1967. *Tuleariocaris sarec* is known only from Moçambique in association with the sea urchin, *Echinometra mathaei* (cf. Berggren, 1994). *Tuleariocaris zanzibaricus* is a widely distributed Indo-west Pacific species known from East Africa to Japan in association with *Astropyga radiata*, *Diadema savignyi* Michelin, 1845, *D. setosum* (Leske, 1778), *Echinothrix calamaris* (Pallas, 1774), and *E. diadema* (see Bruce, 1982). *Tuleariocaris neglecta* is the only species in the genus known from the western and eastern Atlantic, from Florida, Dominica, Barbados, Curaçao (Chace, 1969), Puerto Rico (Castro, 1974), Colombia (Criales,

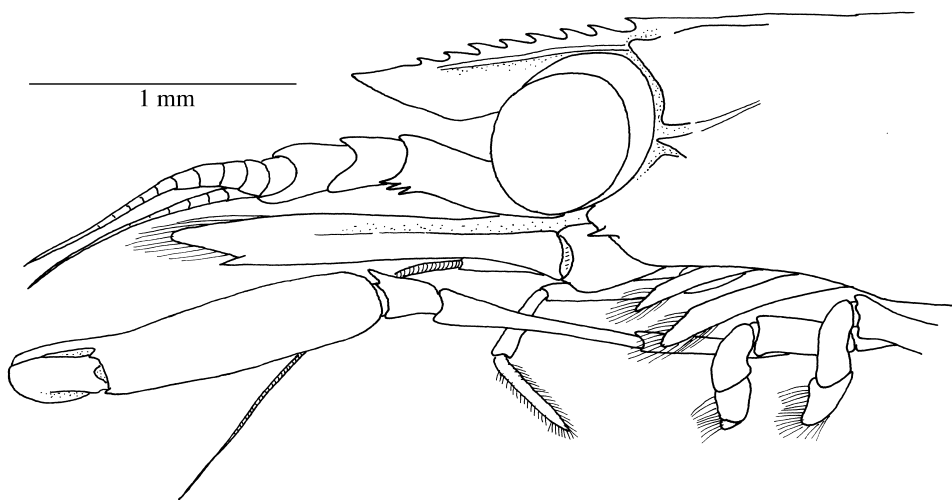


Fig. 1. *Tuleariocaris holthuisi* Hipeau-Jacquotte, 1965 from Isla Isabella, Coiba National Park, Pacific coast of Panama, ovigerous female, anterior part of body.

1984), Madeira (Chace, 1972), São Tomé, Príncipe, and Cape Verde (Wirtz et al., 1988; Wirtz, 2004) in association with the sea urchins, *Diadema antillarum* (Philippi, 1845), and *Astropyga magnifica* Clark, 1934. All species of the genus are usually clinging to the spines of their host echinoid, with their head turned downwards, and exhibit similar colour patterns, with a dark red body and a single white longitudinal band ventrolaterally. A key for the species was given by Berggren (1994).

Biogeographically, the distribution of the genus *Tuleariocaris* is very interesting, as it is one of only six pontoniine genera with an amphitropical distribution; the others being *Rapipontonia* Marin, 2007, *Palaemonella* Dana, 1852, *Periclimenaeus* Borradaile, 1915, *Periclimenes* Costa, 1844, and *Typton* Costa, 1844.

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