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Article



A new species of pontoniine shrimp genus *Philarius* Holthuis, 1952 (Crustacea: Decapoda: Palaemonidae) from the Great Barrier Reef of Australia

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Abstract

A new species of coral-associated pontoniine shrimp, *Philarius condi* **sp. nov.**, is described from Lizard Island, the Great Barrier Reef of Australia. The new species can be clearly separated from the congeners by long fingers of chelipeds, which are equal to the length of palm, and its unique ecological niche—living at the base of branches of stout-branched acroporid corals such as *Acropora monticulosa* and *A. gemmifera* strongly influenced by waves in high energy ecosystems of reef slopes.

Key words: Crustacea, Decapoda, Palaemonidae, Philarius, new species, Acropora, the Great Barrier Reef, Australia

Introduction

The coral-associated pontoniine shrimp genus *Philarius* Holthuis, 1952 presently includes 7 valid species (see Marin & Anker, 2011) associated exclusively with scleractinian corals of the genus *Acropora* (Scleractinia, Acroporidae) (Bruce, 1982; Bruce & Coombes, 1995, Marin & Anker, 2011). During the survey of coral-associated pontoniine shrimps at Lizard Island area several specimens belonging to the genus *Philarius* Holthuis, 1958 were found at the base of branches of acroporid corals inhabiting high energy ecosystems of slopes on outer Yonge and Day reefs. The specimens were found in association with stout conoid branched species of the genus *Acropora*, *A. monticulosa* and *A. gemmifera*, which have never been referred as hosts for shrimps of this genus. Careful examination of collected shrimp specimens showed that they belong to an underscribed species from "*Philarius gerlachei* (Nobili, 1905)" species complex. This complex, including 5 species differing from the congeners by the absence of supraorbital tooth and tooth on carpus of pereiopod II, was recently revised (Marin & Anker, 2010). A description of an additional new species is presented herein. Total length (tl., in mm, the length from the tip of rostrum to the distal part of telson) and postorbital carapace length (pcl, in mm, the dorsal length form orbits to the proximal part of carapace) are used as standard measurements of the size. All examined material is deposited in the Museum of Tropical Queensland (QM), Townsville, Australia.

Systematic part

Family PALAEMONIDAE Rafinesque, 1815

Subfamily PONTONIINAE Kingsley, 1878

Genus Philarius Holthuis, 1952