



## First record of the genus *Goreopagurus* McLaughlin, 1988 (Crustacea: Anomura: Paguroidea) from Brazil, with description of a new species

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### Abstract

The genus *Goreopagurus* McLaughlin, 1988 was erected for *Pagurus piercei* Wass, the description of which was based on a single male. Prior to the present study *Goreopagurus* was represented by three species: *G. piercei* (Wass, 1963); *G. garthi* McLaughlin & Haig, 1995; and *G. poorei* Lemaitre & McLaughlin, 2003. Herein we record the first occurrence of the genus *Goreopagurus* from Brazil, and add the fourth species to the genus.

**Key words:** *Goreopagurus*, Crustacea, Paguroidea, new species, Brazil

### Introduction

Wass (1963) described several new hermit crab species from the western Atlantic, including *Pagurus piercei*, based on a single male specimen. Subsequently, McLaughlin (1988) examined a large sample of *P. piercei* and noted some morphological characteristics that set *P. piercei* apart from the genus *Pagurus*: adult females with paired first pleopods modified as gonopods and mature males with short sexual tube on the coxa of the right fifth pereopod. Therefore, she established the genus *Goreopagurus* for *P. piercei*.

After reexamining several specimens of an uncertain species in the collections of the Allan Hancock Foundation, McLaughlin & Haig (1995) described *G. garthi*, the second species belonging to the genus *Goreopagurus*. This species had the development of the male sexual tube less pronounced than in *G. piercei*, and the dorsal surface of the carpus only slightly expanded mesially.

Recently, Lemaitre & McLaughlin (2003) described *Goreopagurus poorei*, a species that agreed with the generic diagnosis except for the sexual tube, which showed no trace of development in mature males, and for the gills, which are distally quadriserial. Therefore, they emended the generic diagnosis to accommodate *G. poorei*. A new species of *Goreopagurus*, which lacks male sexual tubes, is herein described from Brazil.

The measurements of the specimens correspond to shield length, which was measured in millimeters (mm) from the tip of the rostrum to the midpoint of the posterior margin of the shield. All specimens studied were deposited at the Museu de Zoologia da Universidade de São Paulo (MZUSP), Brazil.

### Taxonomy

#### Family Paguridae Latreille, 1802

#### Genus *Goreopagurus* McLaughlin, 1988

**Type species.** *Pagurus piercei* Wass, 1963, by original designation.