

# A New Genus and New Species of Paguridae (Crustacea: Decapoda: Anomura) from the Bohol Sea, the Philippines

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A new genus and new species of the hermit crab family Paguridae is described and illustrated on the basis of three specimens collected from off Balicasag Island, Bohol Sea, the Philippines. The new genus, *Pliopagurus*, is referred to the “*Pylopagurus-Tomopagurus*” group on account of its having 11 pairs of biserial gills and paired first pleopods in females, and appears closest to *Lophopagurus* McLaughlin, 1981. The possession of short sexual tubes on both coxae of the fifth pereopods in the male and the lack of a median crest or dorsolateral keel of the left chela distinguish *Pliopagurus* from *Lophopagurus*. An emended key to the genera of the “*Pylopagurus-Tomopagurus*” group is presented.

**Key Words:** *Pliopagurus curvimanus*, *Pylopagurus-Tomopagurus* group, *Lophopagurus*, new genus, Philippines.

## Introduction

The marine fauna around Panglao Island in the Bohol Sea, the Philippines, was extensively sampled during expeditions conducted jointly by scientists from the Muséum national d’Histoire naturelle, Paris, National Taiwan Ocean University, the Raffles Museum of Biodiversity Research, National University of Singapore (ZRC), University of San Carlos, Cebu, and the National Museum of the Philippines, Manila (NM), in 2004 and 2005 (PANGLAO 2004 and 2005 Expeditions). Studies of this material have revealed a wealth of hermit crab fauna in local waters (McLaughlin and Rahayu 2005, 2007; McLaughlin 2008; McLaughlin and Lemaitre 2009; Rahayu and Forest 2009; Asakura 2010; Komai and Rahayu 2013a, 2013b; Rahayu and Komai, in press), although a large part of the collection remains unstudied. The present paper serves to describe a new genus and new species of the Paguridae, referred to the “*Pylopagurus-Tomopagurus*” group of genera (cf. McLaughlin 1981a, 1981b, 1982; McLaughlin and Gunn 1994; Lemaitre and McLaughlin 1996, 2003a; McLaughlin and Lemaitre 2001). The new monotypic genus, *Pliopagurus* (type species *P. curvimanus* sp. nov.), appears closest to *Lophopagurus* McLaughlin, 1981, currently represented by 14 species (McLaughlin *et al.* 2010). Differentiating characters between the two genera are discussed.

Material examined in this study is deposited in NM, ZRC, and the Natural History Museum and Institute, Chiba (CBM). General terminology follows McLaughlin *et al.* (2007), except for numbering of thoracomeres. Shield length (sl, in mm), measured from the tip of the rostrum to the midpoint of the posterior margin of the shield, indicates specimen size. Other abbreviations are: coll., collected by; stn, station.

## Family Paguridae

### *Pliopagurus* gen. nov.

**Type species.** *Pliopagurus curvimanus* sp. nov. by present designation.

**Diagnosis.** Gills biserial, 11 pairs. Shield with lateral projections moderately separated from rostrum. Ocular acicles triangular, without submarginal spine; separated basally by more than basal width of 1 acicle. Maxillule with external lobe of endopod well-developed, never recurved, internal lobe with 2 bristle-like setae. Maxilla with posterior lobe of scaphognathite moderately broad. First maxilliped with slender endopod. Third maxilliped with well-developed crista dentata and prominent accessory tooth on ischium; merus and merus unarmed on dorsodistal margin. Right cheliped markedly longer larger than left; chela suboperculiform, with dorsomesial margin delimited by row of small spines; angle of articulation of chela and carpus about 30°. Left cheliped with chela not particularly compressed dorsoventrally, fingers not particularly excavated ventrally; angle of articulation of chela and carpus about 45°. Ambulatory legs with dorsodistal spine on each carpus. Fourth pereopods with well-developed dactyli, without preungual process; propodal rasp consisting of single row of corneous scales. Third thoracic sternite with trace of median notch, unarmed; sixth thoracic sternite with subtrapezoidal anterior lobe; no capsulate setae on posterior sternites. Males with coxae of fifth pereopods symmetrical, each having very short, strongly tapering sexual tube; 3 (third to fifth) unpaired, unequally biramous left pleopods. Females with paired gonopores on coxae of third pereopods; pleon with paired first pleopods incompletely 2-segmented and modified as gonopods, and with 4 unpaired (second to fifth) left pleopods, second to fourth with both rami well-developed,