



The Polydectinae Dana, 1851, of the Philippines, with description of a new genus for *Lybia hatagumoana* Sakai, 1961 (Crustacea: Decapoda: Brachyura: Xanthidae)

JOSE CHRISTOPHER E. MENDOZA^{1,3} & PETER K. L. NG^{1,2}

¹Department of Biological Sciences, Faculty of Science, National University of Singapore, 14 Science Drive 4, 117543 Singapore

²Tropical Marine Science Institute, National University of Singapore, Blk. S2S, 18 Kent Ridge Road, 119227 Singapore

³Corresponding author. E-mail: dbsjose@nus.edu.sg

Abstract

The xanthid subfamily Polydectinae Dana, 1851, is recorded for the first time in the Philippines, being represented by four species: *Polydectus cupulifer* (Latreille, in Milbert, 1812), *Lybia tessellata* (Latreille, in Milbert, 1812), *L. leptochelis* (Zehntner, 1894), and *L. hatagumoana* Sakai, 1961. The taxonomy of *L. hatagumoana* is discussed at length, and a new genus, *Tunebia* **gen. nov.**, established for it and the allied *L. tutelina* Tan & Ng, 1994, from New Caledonia. The new genus is diagnosed and compared with other polydectine genera.

Key words: Crustacea, Brachyura, Xanthidae, Polydectinae, *Lybia*, *Polydectus*, *Tunebia*, Philippines

Introduction

The Polydectinae Dana, 1851, also known as anemone or boxer crabs, is a unique group of xanthids characterized by symmetrical, slender chelipeds whose long fingers are armed with spiniform teeth on their cutting margins. These are adaptations for holding live sea anemones or sea slugs which can be used in symbiosis for food gathering and/or defense (Guinot 1976; Serène 1984; Baba & Noda 1993; Guinot *et al.* 1995; Davie 2002). This subfamily has been reported widely across the Indo-Pacific region (Guinot 1976), although it has not been known to occur in the Philippines until now. This report is the first record of the subfamily in the archipelago.

The present material consists mainly of specimens collected during the PANGLAO 2004 expedition to the islands of Bohol, Panglao and other adjacent islands in the Bohol Sea, central Philippines (see Bouchet *et al.* 2009). Also included are specimens collected from different parts of the country and deposited in the Crustacean Reference Collection of the National Museum, Manila (NMCR). Material examined is also deposited in the Museum national d'Histoire Naturelle, Paris (MNHN), and the Zoological Reference Collection, Raffles Museum of Biodiversity Research, National University of Singapore (ZRC).

Measurements are expressed as carapace width × carapace length in millimeters. The following abbreviations are used: coll. = collected by; Is. = Island; stn = station; G1 = male first gonopod; G2 = male second gonopod; mxp1–3 = first to third maxillipeds, respectively; P2–P5 = second to fifth pereopods, respectively.

Systematic account

Xanthidae MacLeay, 1838

Polydectinae Dana, 1851