



***Lithodes formosae*, a new species of king crab from Taiwan (Crustacea: Decapoda: Lithodidae)**

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Abstract

A new species of king crab is described from Taiwan, *Lithodes formosae* **sp. nov.** The new species resembles *L. longispina* Sakai, 1971, from Japan, *L. megacantha* Macpherson, 1991, from French Polynesia, and *L. paulayi* Macpherson & Chan, 2008, from Guam, in having long dorsal spines in adults, though it is most similar to *L. paulayi*. *Lithodes formosae* is distinguished from the aforementioned species primarily by differing branchial spine arrangement and proportional spine length. Comparison of partial cytochrome oxidase subunit I (COI) gene sequences from *L. formosae* **sp. nov.**, *L. paulayi* and *L. longispina* supports the specific status of the new species. Six species of Lithodidae are known from Taiwan, of which *L. formosae* **sp. nov.** is the first to be described as new from Taiwan.

Key words: Anomura, Lithodidae, *Lithodes*, king crabs, new species, western Pacific Ocean, COI

Introduction

Macpherson & Chan (2008) recently reported six species of Lithodidae from Taiwan: *Neolithodes nipponensis* Sakai, 1971 [type locality: Japan], *Paralomis arae* Macpherson, 2001 [type locality: Fiji], *P. dofleini* Balss, 1911 [type locality: Japan], *P. truncatispinosa* Takeda & Miyake, 1980 [type locality: East China Sea], *Lithodes turritus* Ortmann, 1892 [type locality: Japan], and *Lithodes* sp. The unnamed species of *Lithodes* is new to science and resembles *L. longispina* Sakai, 1971 [type locality: Japan], *L. megacantha* Macpherson, 1991 [type locality: French Polynesia], and *L. paulayi* Macpherson & Chan, 2008 [type locality: Guam] in having long dorsal spines in adults. The new species is described herein and represents the first species of lithodid to be described as new from Taiwan.

Materials and Methods

Terminology generally follows Ahyong & Dawson (2006) and Macpherson & Chan (2008). Measurements are in millimetres (mm). Carapace length (cl) is measured from the tip of the rostrum to the median posterior margin of the carapace. Postorbital carapace length (pcl) is measured from the posterior margin of the orbit to the median posterior margin of the carapace. Carapace width (cw) is the greatest width excluding spines. The holotype is deposited in the National Taiwan Ocean University, Keelung (NTOU).