



## Some lithodid crabs (Crustacea: Decapoda: Lithodidae) from Taiwan and adjacent waters, with the description of one new species from Guam

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### Abstract

Seven species of Lithodid crabs were collected during cruises off Taiwan and Guam. One new species, *Lithodes paulayi* is described and illustrated. *Neolithodes nipponensis*, *Lithodes* sp., *Paralomis arae*, *P. dofleini* and *P. truncatispinosa* are reported from these islands for the first time, extending the distributional range in each case. *Lithodes paulayi* closely resembles *L. longispina* Sakai, 1971, from off Japan and the central Pacific, but can be differentiated by the branchial region possessing two long dorsal spines and only one long marginal spine, whereas *L. longispina* has only one long dorsal spine, situated at level of cardiac spines, and two long marginal spines. The description of a juvenile of *P. arae* Macpherson, 2001, is also included.

**Key words:** king crab, *Neolithodes*, *Lithodes*, *Paralomis*, new species, Pacific Ocean

### Introduction

The family Lithodidae Samouelle, 1819, in the Western Pacific Ocean, has received some attention during last decades, and it is clear that this area supports a rich fauna, including undescribed species mostly belonging to the genera *Lithodes* Latreille, 1806, *Neolithodes* A. Milne Edwards & Bouvier, 1894 and *Paralomis* White, 1856 (e.g. Dawson 1989; Takeda & Hashimoto 1990; Macpherson 1988b, 1990, 2001, 2003; Ahyong & Dawson 2006; Takeda & Bussarawit 2007).

Only one species, *Lithodes turritus* Ortmann, 1892, has been previously reported from Taiwan, and commercial trawlers collect it infrequently (Wu *et al.* 1998). However, considering that the number of species from the Northern Pacific is relatively high, the occurrence of more species was expected. Recent deep-sea exploratory cruises around Taiwan (the TAIWAN cruises) and ongoing scrutiny of the catches of local deep-sea trawlers has enabled us to obtain numerous specimens of different species of Lithodidae. The present study shows the occurrence of one species of *Neolithodes*, two species of *Lithodes* and three species of *Paralomis* from Taiwan. Another species of *Lithodes* collected recently from Guam, obtained by the second author (TYC) to compare to the Taiwanese species, was itself found to be new to science, and is described here.

The Taiwanese specimens are deposited in the collections of the National Taiwan Ocean University, Keelung (NTOU), while the specimens from Guam are deposited at the University of Florida (UF). The stations (Stn) of the TAIWAN cruises have a prefix which refers to the collecting gear used; otter trawl le Drézén type JUNEUX (CD), 4 m French beam trawl (CP), and 2.5 m French beam trawl (PCP). The measurements given are of carapace length x carapace width, excluding rostrum and lateral spines, respectively. The terminology used follows previous papers, e.g., Macpherson (1988a, 2003) and Ahyong & Dawson (2006).