# Hirsutodynomene spinosa (Rathbun, 1911): a new record for Taiwan (Crustacea, Decapoda, Brachyura, Dynomenidae)

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**Abstract:** A third species of dynomenid crab, *Hirsutodynomene spinosa* (Rathbun, 1911), is reported from Taiwan. It is the largest specimen known thus far for this species, and although its pilosity differs from more typical smaller specimens, it agrees in all major taxonomic characters.

**Key words:** Dynomenidae, *Hirsutodynomene spinosa*, taxonomy, new record, Taiwan.

#### Introduction

The Dynomenidae Ortmann, 1892, is a small family of peculiar podotrematan crabs represented by only five genera and 17 known species (McLay 1999, 2001). Most of the species are Indo-West Pacific in distribution, with only two species currently known from Taiwan, viz. *Dynomene hispida* Guèrin-Mèneville, 1832, and *Metadynomene tanensis* (Yokoya, 1933) (Ng et al., 2001; McLay et al., 2001). We here report on a third species from the island, *Hirsutodynomene spinosa* (Rathbun, 1911).

Measurements provided are of the carapace width and length respectively. A full synonymy for *H. spinosa* can be found in McLay (1999: 505) and McLay (2001: 819). The abbreviation ZRC is used for the Zoological Reference Collection of the Raffles Museum of Biodiversity Research, National University of Singapore.

## **Taxonomy**

## Dynomenidae Ortmann, 1892 Hirsutodynomene spinosa (Rathbun, 1911)

(Fig. 1)

**Material examined**: 1 female (36.1 x 26.9 mm) (ZRC), near Turtle Island, off Tahsi port, Ilan County, northeastern Taiwan, coll. K.-H. Lee, April 2002. For comparative material, see McLay, 1999: 505-506; McLay, 2001: 819).

**Remarks**: The genus *Hirsutodynomene* McLay, 1999, was only recently established for two species, *Hirsutodynomene spinosa* (Rathbun, 1911) (type species by original designation), and *H. ursula* (Stimpson, 1860). The latter is an eastern Pacific taxon while *H. spinosa*, originally described

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from Amirante Island in the Maldives, has been reported from Madagascar, across the Indian Ocean to Western Australia, and in the Pacific, from eastern Indonesia across to eastern Australia, Vietnam, Japan, Marianas and as far east as French Polynesia but not Hawaii (McLay, 1999). Its presence in Taiwan is thus not surprising. Chen (1980) reported this species from the Xisha Islands in the South China Sea but it is not yet known from mainland China (see Dai et al., 1986; Dai & Yang, 1991).

Most of the specimens reported thus far have been relatively small and are probably juveniles or young adults. The holotype is only 24.7 by 19.6 mm, and the largest specimen known previously was 28.7 by 21.3 mm for males and 32.3 by 29.4 mm for females (McLay, 1999: 506, 509). The present Taiwan specimen is interesting in that it is the largest specimen of the species known thus far. Despite its size, it agrees well with the published descriptions and figures of this species (see McLay 1999: 505-510) and we have no reason to doubt its identity. One difference is noteworthy. Most of the specimens (which are smaller) we have examined have the surface of the carapace and pereiopods completely covered with short wool-like pubescence, with scattered clumps of longer stiff setae (see McLay, 1999: Fig. 17e). The wool-like setae on the large Taiwanese specimen is more ragged, sparser and uneven, giving it a more "scruffy" appearance. In addition, the scattered long setae are also relatively longer and more prominent (Fig. 1). This difference, however, is most likely to be variation associated with size.

The present specimen was reportedly collected by trawlers from about 100 m depth (K.-H. Lee, pers. comm.), which is unusual considering that all previous records have been from much shallower waters (intertidal to 15 m) (McLay, 1999). This is, however, not very significant as we already have an immature male specimen (7.5 by 5.8 mm, ZRC, in rubble, Luminao Reef, Guam, coll. B. Henke, April 2001) which was collected at a depth of about 30 m. Most of the specimens known thus far, however, are relatively small and have been collected from shallow reef habitats, and it is possible adults occur in deeper habitats.

The present specimen from Taiwan was kept in the aquarium for some months before it died and subsequently preserved. The coloration shown here (Fig. 1) does not differ substantially from the original.

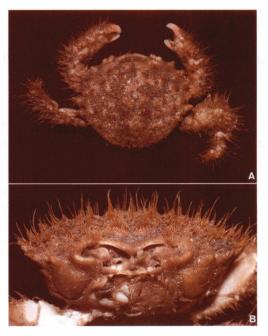


Fig. 1. *Hirsutodynomene spinosa* (Rathbun, 1911). Female (36.1 by 26.9 mm) (ZRC). A. overall view; B. frontal view.

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# 臺灣的一新記錄種螃蟹,突刺毛貝綿蟹(甲殼綱,十足目,短尾類,貝綿蟹科)

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## 摘要

本文報導臺灣的第三種貝綿蟹,突刺毛貝綿蟹(Hirsutodynomene spinosa (Rathbun, 1911))。本臺灣的標本是目前記錄到本種體型最大者。和以往的描述作比較,本標本的多毛性雖和體型較小、較典型的標本不同,但大部份的分類特徵都符合。

**關鍵詞**:貝綿蟹科,突刺毛貝綿蟹, Hirsutodynomene spinosa, 分類學, 新記錄,臺灣。