ON TWO NEW BRACHYURAN RECORDS (DECAPODA, DROMIIDAE AND XANTHIDAE) FROM TAIWAN

BY

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ABSTRACT

Two brachyuran crabs, Cryptodromia tuberculata Stimpson, 1858 (Dromiidae) and Leptodius nigromaculatus Serène, 1962 (Xanthidae) are recorded for the first time from the coasts of the main island of Taiwan. The taxonomy of C. tuberculata and L. nigromaculatus is discussed, and local distribution patterns of other species of Leptodius are compared.

RÉSUMÉ

Deux crabes Brachyures, Cryptodromia tuberculata Stimpson, 1858 (Dromiidae) et Leptodius nigromaculatus Serène, 1962 (Xanthidae) ont été signalés pour la première fois, des côtes de l’île principale de Taiwan. La taxonomie de C. tuberculata et celle de L. nigromaculatus sont discutées, et les modèles de répartition locale d’autres espèces de Leptodius sont comparés.

INTRODUCTION

Ng et al. (2001) assembled a comprehensive checklist of the known species of brachyuran crabs from Taiwan and nearby areas. McLay et al. (2001), in adding more taxa to the Taiwanese fauna, commented that more species of the dromiid genus Cryptodromia should be expected. This report adds one species of Cryptodromia (Dromiidae) and one species of Leptodius (Xanthidae) to the Taiwanese crab fauna. Specimens used in the present study are deposited in the National Museum of Natural Science (NMNS), Taichung, Taiwan, R.O.C.
TAXONOMY

Family DROMIIDAE

Genus Cryptodromia Stimpson, 1858

Cryptodromia tuberculata Stimpson, 1858 (fig. 1A-B)

Cryptodromia tuberculata Stimpson, 1858: 239 [not seen]; 1907: 174, pl. 21 fig. 6; De Man, 1888: 401 [not seen]; Alcock, 1899: 141 [not seen]; Ihle, 1913: 35 [not seen]; Balss, 1935: 115 [not seen]; Sakai, 1936: 17, text-fig. 3, pl. 6 fig. 3; 1976, text-fig. 3a, b; Buitendijk, 1939: 225 [not seen]; Serène, 1968: 35 [list, not seen]; McLay, 1993: 199 (key); 2001a: 87 (key); 2001b: 827 (key), 838-840; McLay & Ng, 2005: 7-9.

Material examined. — One male (CL × CW: 8.3 × 9.8 mm; with sponge cap) (NMNS 4873-01), Green island (22°39′N 121°28′E), Taitung County, coral reef tide pool, coll. H.-T. Hong, 27 April 2005; 1 male (10.4 × 8.3 mm) (NMNS 4873-02), Gi-huei (23°07′N 121°23′E), Taitung County, coral reef tide pool, coll. H.-T. Hong, 25 January 2000.

Remarks. — Of the two previously reported Cryptodromia species from Taiwan (see Ng et al., 2001; McLay et al., 2004), C. tumida Stimpson, 1858 is perhaps the most similar to C. tuberculata (see Sakai, 1976; Ng et al., 2001; McLay, 2001a, b; McLay & Ng, 2005) although both can easily be separated. The present species has a prominent median frontal tooth that projects beyond the tips of the lateral frontal teeth (fig. 1A), whereas the median frontal tooth of C. tumida is shorter than the lateral frontal teeth (see Sakai, 1976; McLay, 2001a, b). Moreover, the ventral surface of the carapace of C. tuberculata has three to five subhepatic tubercles and two or three supra-sutural teeth (fig. 1B), but there is only one subhepatic tubercle and one supra-sutural tooth in C. tumida (see Sakai, 1976). McLay (2001a, b) also noted that the margins of the carpi and propodi of the first two pairs of walking legs of C. tuberculata are sharply verrucose, versus merely lobed in C. tumida.

Cryptodromia tuberculata was first described on the basis of specimens collected from Kikai-shima, Amami group, Japan. It has since been found in southern Honshu (in the vicinity of Kii Peninsula; Mie and Wakayama prefectures) and near (or on) two islands, Kagoshima and Yoron, in Japan, and further in the South China Sea, the Philippines, and Western Australia (Sakai, 1976; McLay, 2001b; Davie, 2002; McLay & Ng, 2005).

Family XANTHIDAE

Genus Leptodius A. Milne-Edwards, 1863

Leptodius nigromaculatus Serène, 1962 (figs. 1C-F, 2C-D)


Material examined. — Two males (12.7 × 19.4, 8.0 × 12.2 mm), 1 female (5.8 × 9.3 mm) (NMNS 4974-01), Shi-men (25°17′N 121°34′E), Taipei County, upper intertidal zone, coll.