



FIRST RECORD OF THE RARE LOBSTER *PALINURELLUS WIENECKII* (DE MAN, 1881) (DECAPODA, ACHELATA, PALINURIDAE) FROM TAIWAN

BY

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ABSTRACT

The furry lobster, *Palinurellus wieneckii* (De Man, 1881), is reported from Taiwan for the first time. A line illustration and colour photographs are provided for the Taiwanese material of this rare lobster.

RÉSUMÉ

La langouste velue, *Palinurellus wieneckii* (De Man, 1881), est signalée de Taiwan pour la première fois. Une illustration au trait ainsi que des photographies en couleur d'exemplaires de Taiwan de cette langouste rare sont présentées.

INTRODUCTION

Although furry lobsters of the genus *Palinurellus* Von Martens, 1878 have been widely recorded from the Indo-West Pacific and the western Atlantic, they are always rare throughout their range. Two species are currently recognized in the genus, one from the western Atlantic and one from the Indo-West Pacific (Chan, 2010). However, the exact differences between these two species are unclear because of the limited number of specimens available for both (see Holthuis, 1991). The Indo-West Pacific species is known as *Palinurellus wieneckii* (De Man, 1881)

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and has been reported from Natal in South Africa, Mauritius, the Red Sea, Sri Lanka, Thailand, Vietnam, Malaysia, Indonesia, Papua New Guinea, the Solomon Islands, the Ryukyu Islands in Japan, the Caroline Islands, Guam, the Marshall Islands, New Caledonia, Hawaii and the Tuamotu Islands in French Polynesia (see Devaney & Bruce, 1987; Holthuis, 1991; Nguyễn & Pham, 1995; Chan, 1998; Debelius, 1999; Paulay et al., 2003). Phyllamphion larvae, supposed to belong to this species, have been recorded from East Africa, the western Indian Ocean, the Philippines, the Ryukyu Islands, the South China Sea, New Caledonia, Vanuatu, and the Tuamotu Islands (see Holthuis, 1991; Sekiguchi & Saisho, 1994). Moreover, if these larvae would later on prove to really belong to *P. wieneckii*, the name of the species may need to be changed (see Holthuis, 1991; Chan, 2010).

The lobster fauna of Taiwan has been extensively surveyed in recent years (see Chan & Yu, 1993, 1995, 1998; Chan & De Saint Laurent, 1999; Ah Yong & Chan, 2004; Yang & Chan, 2010) but to date no *Palinurellus* has been found. Sekiguchi & Saisho (1994) reported the phyllamphion larvae of *P. wieneckii* from waters adjacent to Taiwan, but actually these larvae were collected closer to the Philippines (eastern Luzon) and the Ryukyu Islands of Japan. Nevertheless, the occurrence of *Palinurellus* in Taiwan is not unexpected, as this lobster has been found from localities both to the north and south of the island (e.g., the Ryukyu Islands and Indonesia). In 2009, a moulted carapace of *P. wieneckii* was collected by diving in Kenting in southern Taiwan. In the beginning of 2012, a live specimen of this furry lobster was collected, also from Kenting. The occurrence of *P. wieneckii* in Taiwan helps to fill the gaps in the geographical range of this rarely found and scarcely known species. The availability of more specimens also aids to elucidate the taxonomic status of the two species in the genus.

The specimens examined are deposited in the National Taiwan Ocean University, Keelung (NTOU) and the National Museum of Marine Biology and Aquarium, Pingtung (NMMBA). The measurement given is carapace length (CL) which is measured dorsally from the tip of the rostrum to the posterior part of the telson. The synonymy given is restricted to the original description and important taxonomic works on the species, with the exclusion of larval records as there are still doubts on the exact identity of those phyllamphion larvae identified as *P. wieneckii* (see Holthuis, 1991). *Palinurellus* was generally grouped with another rare lobster genus *Palibythus* Davie, 1990 in a separate family Synaxidae Bate, 1881. However, recent phylogenetic analyses showed that Synaxidae is polyphyletic and should be synonymized with Palinuridae (cf. Palero et al., 2009; Tsang et al., 2009; Chan, 2010).