



Note

Extension in the distributional range of long-legged spiny lobster, *Panulirus longipes longipes* (A.Milne Edwards, 1868) along the southeast coast of India

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Abstract

The long-legged spiny lobster, *Panulirus longipes longipes*, a subspecies of *P.longipes* is reported for the first time off Chennai extending its distributional range to the north of Gulf of Mannar, on the east coast. Morphological features and colour pattern of this specimen is in conformity with the earlier description of the species from Indian waters. This lobster occurs only in stray numbers along the Indian coast.

Spiny lobsters show wide distribution, but more species and in numerical abundance are found in the tropics (Holthuis, 1991). The lobster catch off Chennai is dominated by *Panulirus homarus* followed by *P.ornatus* and *P.versicolor*. The occurrence of *P.penicillatus* was reported by Radhakrishnan *et al.*(1990). A male specimen of *Panulirus* sp. with the presence of conspicuous light white and brown spots on the abdominal segments and banded antennae noticed in the catch was identified as *P.longipes longipes*. A brief description of the species is given for easy field identification.

Material: A single male specimen measuring 203mm in total length, 72mm in carapace length and weighing 314g was landed by trawl at Kasimedu fish landing centre, Chennai on 2 November 2006, by trawl. This partially damaged specimen was devoid of fourth and fifth walking legs on the left side (Fig.1). The uropods of telson on the left side were also damaged.

Description: The antennular plate has a pair of large spines. One large spine just behind the frontal horn, followed by two rows of four spines horizontally. The middle spines present on the ventral side of the last two distal segments of the antennal peduncle were one and two. The 'bow' depression behind the cervical groove was marked with white colour. The transverse groove in the abdominal segments was not interrupted in the middle.

Both inner and outer flagella of antennule showed brown and white bands. The antennal flagellum was uniformly light grey in colour. The area on the carapace just behind the frontal horn was pink in colour. The larger spines on the carapace were black in colour at base and white in the middle and tip. The walking legs possessed

long orange coloured stripes interrupted with white spots. The number of white spots were five each on the first and second, and seven each on the third, fourth and fifth

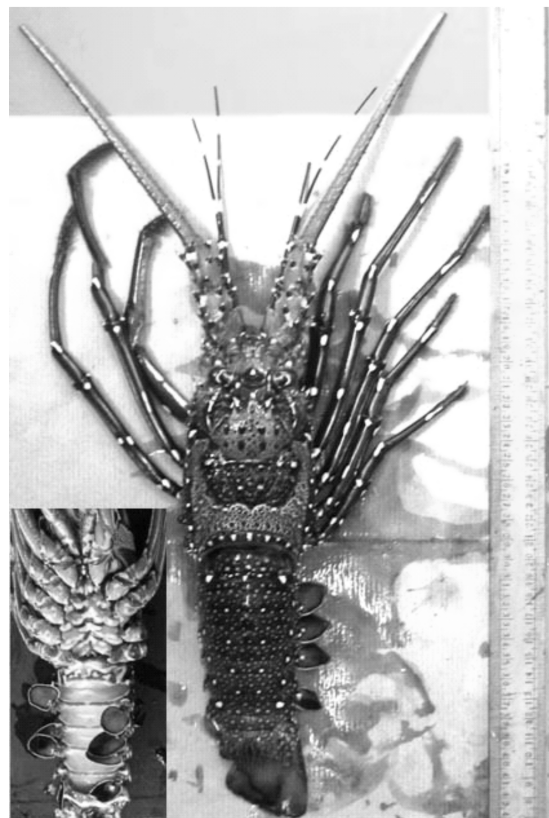


Fig.1. *Panulirus longipes longipes*- dorsal and ventral views

walking legs. There were numerous larger white spots and smaller brown spots on the abdominal segments.

Distribution: This sub species is distributed around Japan, Moluccas, New Guinea, Eastern Australia and Polynesian island. George and Holthuis (1965) reported occurrence of *P.longipes longipes* in the Indian Ocean. This species was reported as *P.longipes* from Muttom in Kanyakumari district by George and Rao (1965) and from Andaman and Nicobar islands by Shanmugam and Kathirvel (1983). However, it was recorded as *P.longipes longipes* from Vedalai in Gulf of Mannar with notes on its fishery by bottom set gillnet by Nair *et al.* (1973).

Remarks: George and Holthuis (1965) reported two subspecies of *P.longipes*, namely, *P.longipes longipes* (A.Milne Edwards, 1868) and *P.longipes femoristriga* (Von Martens, 1872) and opined that the former possessing white blotches on its walking legs was known to occur in the Indian Ocean, while the latter with longitudinal stripes on its walking legs occurred in the Pacific Ocean. From Indian waters, George and Rao (1965) reported *P.longipes* from Muttom which had white blotches on the walking legs, while Nair *et al.* (1973) noticed both white spots and longitudinal orange lines in several specimens of *P.longipes longipes* from Vedalai in Gulf of Mannar. Recently Chan and Ng (2001) proposed the correct names for the two subspecies of *P.longipes*, as *P.longipes longipes* (A.Milne Edwards, 1868) with spotted legs occurring in the Indian Ocean and *P.longipes bispinosus* (Borradaile, 1899) with striped legs occurring in the Pacific Ocean. According to them both *P.longipes longipes* and *P.longipes bispinosus* possessed banded antennular flagella, while *P.femoristriga* (Von Martens, 1872) was with whitish inner antennular flagellum. Further Sekiguchi and George (2005) have provided the colour and morphological features of *P.longipes longipes* and *P.longipes bispinosus*. They observed that both the species possessed banded antennal and antennular flagella and a single pale stripe along the lateral side of the

carapace. In *P.longipes longipes* the broad pale stripe on the walking legs was broken by three white spots, while only a broad pale stripe was present on each leg of *P.longipes bispinosus*. Thus, the present specimen belongs to *P.longipes longipes* (A.Milne Edwards, 1868) and its colour pattern tallies well with those given by Nair *et al.* (1973) for specimens from Gulf of Mannar. The present record is the first from Chennai coast, extending its distribution to the northern part of the southeast coast of India.

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