

Stung by a longspine waspfish

Subject: Longspine waspfish, *Paracentropogon longispinus* (Teleostei: Scorpaeniformes: Tetrarogidae).

Subject identified by: Contributor.

Location, date and time: Singapore Island, Changi beach; 8 June 2016; 0630-0800 hrs.

Habitat: Estuarine inter-tidal zone with sandy-silty substrates covered with mats of the seagrass *Halophila ovalis* (Alismatales: Hydrocharitaceae). In shallow water at low tide (Fig. 1).

Observer: Contributor.

Observation: During low tide, many pen shells (Mollusca: Bivalvia: Pinnidae: genus *Pinna*) and window pane oysters (Mollusca: Bivalvia: Placunidae: genus *Placuna*), partially buried in the substrate, were exposed along the shoreline. Longspine waspfish (Fig. 2) under 10 cm standard length were frequently seen in depressions directly around the shellfish. While the contributor was attempting to pull a pen shell out of the substrate, the middle finger on his right hand was pierced by the dorsal-fin spine of a longspine waspfish that was hiding at the side of the shell. The initial sharp pain caused the contributor to pull his hand away.

The pain persisted at the wound, and after about half a minute, developed into a throbbing pain which was felt to the bone. The pain was localized in the fingertip joint, but it soon extended to the middle joint of the finger. At first, the wound bled continuously. The contributor tried to squeeze as much blood out of the wound as he could in the hope of reducing the spread of the venom injected by the fish. A hard squeeze caused a small spray of blood to eject from the wound, but this slowed to a drip. The bleeding soon stopped, but the intense pain in the finger remained for about an hour, and the whole arm felt rather weak. The wound resembled a bruise. The throbbing pain gradually subsided to a dull ache, which continued to persist for about two weeks. In spite of all this, there was no impairment to the joints or movement of the affected finger.

Remarks: The longspine waspfish is a common benthic carnivorous fish inhabiting reefs, seagrass and sandy areas in Singapore's coastal waters (Lim & Low, 1998: 81). It is widespread in the Indo-west Pacific, ranging from India eastwards to Indonesia and the Philippines, and northwards to Taiwan and southern China (Allen & Erdmann, 2012: 247). Its colour pattern provides good camouflage, and this fish can be difficult to discern from its surroundings. While it is known to be venomous, very little appears to be known of the toxicity of the venom in this fish's dorsal spines. In Hong Kong, stings from this species are said to have resulted in hospitalizations (Sadovy & Cornish, 2000: 63 as *Paracentropogon longispinus*), but no details are provided on the severity. From the present observation, it seems that the toxicity of the venom is relatively low and does not appear to be life-threatening to a healthy human.

References:

- Allen, G. R. & M. V. Erdmann, 2012. *Reef Fishes of the East Indies. Volume I*. Tropical Reef Research, Perth, Australia. xiii + 424 pp.
- Lim, K. K. P. & J. K. Y. Low, 1998. *A Guide to Common Marine Fishes of Singapore*. Singapore Science Centre, 163 pp.
- Sadovy, Y. & A. S. Cornish, 2000. *Reef Fishes of Hong Kong*. Hong Kong University Press. xi + 321 pp.

Contributor: **Tan Heok Hui**

Contact address: nhmthh@nus.edu.sg



Fig. 1. Intertidal area of Changi beach exposed at low tide. The reddish exposed lumps are the exposed portions of pen shells.



Fig. 2. Lateral profile of a longspine waspfish, of 5.6 cm standard length, from Changi beach. Note the row of venomous spines along its back.

Photographs by Tan Heok Hui