Biodiversity Record: Occurrence of the ornate emperor, Lethrinus ornatus, in Singapore

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Subject: Ornate emperor, Lethrinus ornatus (Teleostei: Perciformes: Lethrinidae).

Subjects identified by: Jiayuan Lin.

Locations, dates and time: Singapore Strait, East Coast Park, White Jetty; 14 February 2023; 1552 hrs.

Habitats: Marine. Tape seagrass bed beside concrete jetty at around 2 m depth.

Observer: Jiayuan Lin.

Observation: One example (Fig. 1) of around 11 cm standard length (tip of snout to caudal base), was caught on hook baited with tiger prawn. It has been donated to the Lee Kong Chian Natural History Museum at the National University of Singapore, for preservation as a reference specimen.

Remarks: This record confirms the occurrence of *Lethrinus ornatus* within the port limits of Singapore. The species was first recorded from Singapore by Tweedie (1940) based on material obtained from the fish market, which carries the possibility that it did not originate from Singapore waters.



Fig. 1. Lateral view of the subject freshly landed and alive. Although in stress colouration, the four lateral stripes on the side of the body and reddish posterior edges of the preopercle and opercle are noticeable. (Photograph by: Jiayuan Lin).

Lethrinus ornatus grows to about 40 cm in total length, and is distributed in the eastern Indian Ocean and western Pacific. This distinctive species is distinguished from its congeners in the region by having the following features: Body relatively deep (depth 2.4–2.6 times in standard length); snout relatively short and blunt; outer surface of maxilla usually smooth, without prominent ridge or knob; profile of head around eye convex; four or six orange stripes on each side of the body; posterior edges of the preopercle and opercle red in life; caudal fin reddish (Carpenter & Allen, 1989).

Literature cited:

- Carpenter KE & Allen GR (1989) FAO Species Catalogue. Vol. 9. Emperor fishes and large-eye breams of the world (family Lethrinidae). An annotated and illustrated catalogue of lethrinid species known to date. FAO Fisheries Synopsis. No. 125, Volume 9, 118 pp.
- Tweedie MWF (1940) Additions to the collection of fishes in the Raffles Museum. Bulletin of the Raffles Museum, Singapore, 16: 68-82.