

Biodiversity Record: New Singapore record of the longspine emperor, *Lethrinus genivittatus*

Jiayuan Lin* & Sim Jin Heng

Email: jylin2002@gmail.com (*corresponding author)

Recommended citation. Lin J & Sim JH (2023) Biodiversity Record: New Singapore record of the longspine emperor, *Lethrinus genivittatus*. Nature in Singapore, 16: e2023028. DOI: 10.26107/NIS-2023-0028

Subjects: Longspine emperor, *Lethrinus genivittatus* (Teleostei: Perciformes: Lethrinidae).

Subjects identified by: Jiayuan Lin and Kelvin K. P. Lim.

Locations, dates and time: Two localities in the Singapore Strait —

1) East Coast Park area C (1°17'48.6"N 103°54'12.9"E); 14 January 2023; 1723 hrs.

2) Saint John's Island (1°13'14.1"N 103°51'05.2"E); 20 January 2023; 1218 hrs.

Habitats: Marine. Around breakwaters.

Observers: 1) Jiayuan Lin and 2) Sim Jin Heng.

Observations: Two separate records —

1) One juvenile example (Fig. 1) of 5.2 cm standard length (tip of snout to caudal base), was caught by Jiayuan Lin on hook baited with tiger prawn, from the side of a granite breakwater at East Coast Park. It has been donated to the Lee Kong Chian Natural History Museum at the National University of Singapore, for preservation as a reference specimen (Fig. 2).

2) A larger specimen (Fig. 3) of about 12 cm total length (tip of snout to tip of caudal fin) was obtained from Saint John's Island, off the breakwater before the causeway to Lazarus Island, by Sim Jin Heng on hook and line baited with prawn.

Remarks: This appears to be the first record of *Lethrinus genivittatus* within the port limits of Singapore (see e.g., Fowler, 1938). The species has been obtained from the South China Sea around Horsburgh Lighthouse (Sinoda et al., 1978 as *Lethrinus nematacanthus*). *Lethrinus genivittatus* grows to 15–25 cm in total length, and is distributed in the eastern Indian Ocean and western Pacific (Carpenter & Allen, 1989). Its occurrence in Singapore waters was probably previously overlooked.

The species is distinguished from its congeners in the region by having the following features: second dorsal spine longer than other dorsal spines, canine teeth of lower jaw curved outward, sides with scattered irregular black oblique bars, a square black blotch above the pectoral fin and bordering below the lateral line, lower sides with three brown stripes (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. FAO, Rome, 118 pp.

Fowler HW (1938) A list of the fishes known from Malaya. Fisheries Bulletin, Singapore, 1: 1–268.

Sinoda M, Lim PY & Tan SM (1978) Preliminary study of trash fish landed at Kangkar fish market in Singapore. Bulletin of the Japanese Society of Scientific Fisheries, 44: 595–600.



Fig. 1. Lateral view of the subject from East Coast Park, freshly landed and alive. (Photograph by: Jiayuan Lin).



Fig. 2. Lateral view of the first subject, freshly preserved. (Photograph by: Kelvin K. P. Lim).



Fig. 3. Lateral view of the second subject from Saint John's Island. Note that the first dorsal spine is not erect. (Photograph by: Sim Jin Heng).