

New record of the ringed moray, *Gymnothorax annulatus*, in Singapore

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Subject: Ringed moray, *Gymnothorax annulatus* (Teleostei: Anguilliformes: Muraenidae).

Subject identified by: Kelvin K. P. Lim.

Location and date: Johor Strait off Sembawang Park; 9 June 2019.

Habitat: Estuarine. Exposed shore with sand-silt substrate.

Observers: Dedrick T. W. Yoon and members of his family.

Observation: An example of about 40 cm total length was caught in the intertidal shore (see Fig. 1 & 2).

Remarks: Described from the Visayan Sea in the Philippines (Smith & Böhlke, 1997: 179), *Gymnothorax annulatus* is also found in the Gulf of Thailand (Imamura 2013: 20 as *Gymnothorax minor*; Hibino et al., 2016: 66) and the Andaman Sea (Imamura, 2009: 18). It can be distinguished from other banded morays in the Indonesian region having 13-14 dark brown bars (of about equal width as pale interspaces) that extend onto the dorsal and anal fins, a large brown blotch on top of the head in front of the dorsal fin, and brown spots of various sizes on the head and pale interspaces on the body. The largest known specimen is around 50 cm total length (see Allen & Erdmann, 2012: 78-93).

The present record of this species in an intertidal estuarine habitat is interesting because previous specimens known were either trawled from the seabed at 40-80 m depth, or met with at the fishmarket (Smith & Böhlke, 1997: 179; Imamura, 2009: 18). This is the first record of *Gymnothorax annulatus* from Singapore waters (see Fowler, 1938).

References:

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Fig. 1. Dorsal view of *Gymnothorax annulatus* at the shore, in-situ.



Fig. 2. Side view of head and sections of the body of the eel confined in a perspex box.

Photographs by Dedrick T. W. Yoon