

## Biodiversity Record: An elongate surgeonfish with unusual colour pattern

Heok Hui Tan

Lee Kong Chian Natural History Museum, National University of Singapore, Singapore 117377;

Email: [heokhui@nus.edu.sg](mailto:heokhui@nus.edu.sg)

**Recommended citation.** Tan HH (2023) Biodiversity Record: An elongate surgeonfish with unusual colour pattern. Nature in Singapore, 16: e2023109. DOI: 10.26107/NIS-2023-0109

---

**Subject:** Elongate surgeonfish, *Acanthurus mata* (Teleostei: Acanthuriformes: Acanthuridae).

**Subject identified by:** Heok Hui Tan and Kelvin K. P. Lim.

**Location, date and time:** Singapore Strait, southern islands. Purchased from a wet market on 1 October 2023.

**Habitat:** Marine. In coastal sea among coral reef.

**Observer:** Tan Heok Hui.



Fig. 1. Lateral view of the partially xanthic elongate surgeonfish, freshly thawed and prior to preservation (Photographed by: Tan Heok Hui).

**Observation:** Three examples of elongate surgeonfish were seen for sale as food-fish at a local wet market. One large (31.5 cm standard length) individual with yellow markings (Fig. 1) was purchased. The aberrant example was preserved and accessioned as ZRC 65030 in the Zoological Reference Collection of the Lee Kong Chian Natural History Museum, at the National University of Singapore.

**Remarks:** *Acanthurus mata* is one of two species of the surgeonfish genus *Acanthurus* to be recently recorded in Singapore waters (Low, 2015, 2016; Sam et al., 2023). Even though the featured example was purchased at a market, the fish seller had recently and personally obtained it with a metal bubu (cage fish trap) in the sea south of Singapore Island. It was caught alongside the sweetlips *Diagramma pictum* (family Haemulidae) and a large grouper (family Epinephelidae) which could not be identified as it had already been sold.

What makes the featured individual highly interesting is its colour pattern of irregular patches of bright yellow on its head and fins (Fig. 1). It can be considered to be a partial xanthic morph. While such unusual colouration is known to occur among surgeonfishes (see Kuitert & Debelius, 2001; Randall, 2001), it is not common, and this may be the first such aberrant example to be reported from Singapore.

**Literature cited:**

- Kuitert RH & Debelius H (2001) Surgeonfishes, Rabbitfishes and their Relatives. A Comprehensive Guide to Acanthuroidei. TMC Publishing, Chorleywood, UK, 208 pp.
- Low JKY (2015) Elongate surgeonfish in the Singapore Strait. Singapore Biodiversity Records, 2015: 156–157.
- Low JKY (2016) Elongate surgeonfish off Pulau Satumu. Singapore Biodiversity Records, 2016: 76.
- Randall JE (2001) Surgeonfishes of Hawai'i and the World. Mutual Publishing and Bishop Museum Press, Honolulu, Hawai'i, 123 pp.
- Sam SQ, Kikuzawa YP, Ng CSL & Toh TC (2023) Biodiversity Record: New Singapore record of the surgeonfish, *Acanthurus auranticavus*. Nature in Singapore, 16: e2023098.