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Biodiversity Record: The bluecheek grunt, Pomadasys argyreus, in Singapore

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Subjects: Bluecheek grunt, Pomadasys argyreus (Teleostei: Perciformes: Haemulidae).

Subjects identified by: Aidan Raphael Keh and Jiayuan Lin.

Location, date and time: Singapore Strait, Bedok Jetty off East Coast Park; 18 March 2022 at 1655 hrs; 19 March 2022 at 1517 hrs; 27 November 2022 at 1717 hrs.

Habitat: Marine. Coastal sea at 2–3 m depth, silty substrate with sparse coral rubble.

Observers: Aidan Raphael Keh and Jiayuan Lin.



Figs. 1–3. *Pomadasys argyreus* immediately after capture at Bedok Jetty. Fig. 1. 9 cm example from 18 March 2022. (Photograph by: Aidan Raphael Keh) Fig. 2. 10 cm example from 19 March 2022. (Photograph by: Jiayuan Lin) Fig. 3. 10.2 cm specimen from 27 November 2022. (Photograph by: Jiayuan Lin) Fig. 4. Ventrum of the specimen from 18 March 2022 cut open showing the pale abdominal lining (indicated by arrow). (Photograph by: Aidan Raphael Keh)

Observations: Three individuals landed with hook-and-line at Bedok Jetty on separate occasions —

- 1. On 18 March 2022 at 1655 hrs, an example of around 9 cm total length (Fig. 1) was obtained on a small hook with gape of around 4 mm baited with (an unknown species of) prawn meat. The fish took the bait while it was being dragged across the sea floor.
- 2. On 19 March 2022 at 1517 hrs, another specimen (Fig. 2) of around 10 cm total length was caught with a small hook with gape of about 4 mm, baited with meat of a whiteleg prawn (*Litopenaeus vannamei*). This fish was also hooked on the sea floor and released after photography.
- 3. On 27 November 2022 at 1717 hrs, a third specimen (Fig. 3) of around 10.2 cm total length was caught with an identical set-up as that used on 19 March 2022. The fish was similarly hooked on the sea floor. This specimen was donated to the Lee Kong Chian Natural History Museum at the National University of Singapore where it was preserved for reference.

Remarks: Pomadasys argyreus was first reported from Singapore as Pristipoma argyreum by Bleeker (1861) and then by Károli (1882). The species was apparently not recorded again until the present examples. Kimura et al. (2015) reported the very similar three-lined grunter, Pomadasys trifasciatus, from the north-western Johor Strait. The adults of both species are uniformly silver without conspicuous dark markings on the flanks, and with a distinct dark blotch at the upper edge of the opercle. They differ in Pomadasys argyreus having 18–20 (usually 18 or 19) circum-peduncular scales and pale lining of its abdominal cavity (Fig. 4); and Pomadasys trifasciatus having 19–23 (usually 21–23) circum-peduncular scales and black lining of its abdominal cavity (see McKay, 2001).

Literature cited:

Bleeker P (1861) Mededeeling omtrent vischsoorten, nieuw voor de kennis der fauna van Singapoera. Verslagen en Mededeelingen der Koninklikje Akademie van Wetenschappen, Letterkunde, en Schoone Kunsten te Amsterdam, 12(1): 28–63.

Károli J (1882) Prodromus piscium Asiae Orientalis a domine Joanne Xanthus annis 1868–70 collectorum. Természettudomanyi Füzetek, Budapest, 5: 147–187.

Kimura S, Aziz A, Imamura H & Mazlan AG (eds.) (2015) Fishes of the Northwestern Johor Strait, Peninsular Malaysia. Universiti Putra Malaysia Press and Mie University, Japan, viii + 108 pp.

McKay RJ (2001) Family Haemulidae. Grunts (also sweetlips, rubberlips, hotlips, and velvetchins). In: Carpenter KE & Niem VH (eds.) FAO Species Identification Guide for Fishery Purposes. The Living Marine Resources of the Western Central Pacific. Volume 5. Bony Fishes Part 3 (Menidae to Pomacentridae). FAO, Rome, pp. 2961–2989.