

Blue-spotted pufferfish observed in the Singapore Strait

Toh Chay Hoon & Kelvin K. P. Lim

CHTOH@nus.edu.sg (Toh), nhmlimkp@nus.edu.sg (Lim)

Subject: Blue-spotted pufferfish, *Arothron caeruleopunctatus* (Teleostei: Tetraodontiformes: Tetraodontidae).

Subject identified by: Kelvin K. P. Lim.

Location, date and time: Singapore Strait, off Pulau Hantu; 7 April 2019; 1445 hrs.

Habitat: Marine. Coral reef.

Observer: Toh Chay Hoon.

Observation: One example of about 35 cm total length was observed at a depth of around 8 m (Fig. 1 & 2).

Remarks: This seems to be the first record of a live blue-spotted pufferfish in Singapore waters. The species was first recorded there from a dead individual found at Pasir Ris beach in March 2015 (Yap & Sankar, 2015). The blue-spotted puffer can be distinguished from sympatric congeners with distinct markings by colour pattern. It is yellowish brown on its back and sides, white on the belly, with blue stripes circling around the eyes, and numerous small blue spots all over the head, body and median fins (Fig. 1 & 2). The stars-and-stripes pufferfish (*Arothron hispidus*) is similarly marked but is grey to greenish brown with widely spaced white spots and rings around the eyes and gill openings. The map puffer (*Arothron mappa*) also appears similar, but has dark and pale streaks radiating outwards from the eyes (Fig. 4). The reticulated puffer (*Arothron reticularis*) is greyish brown with whitish stripes on its snout, cheeks and belly. The stellate puffer (*Arothron stellatus*) is pale grey with dense black spots on its head and around the eyes (Fig. 3) (see Allen & Erdmann, 2012: 1086-1090).

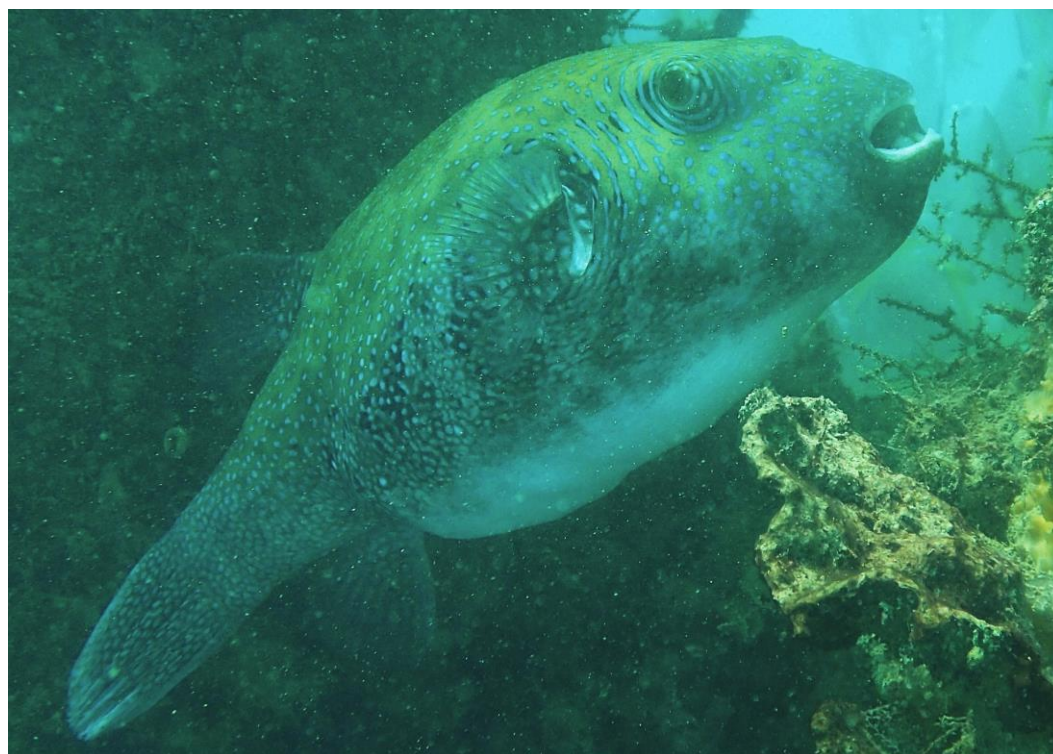


Fig. 1. Side view of *Arothron caeruleopunctatus*. Photograph by Toh Chay Hoon



Fig. 2. Fronto-lateral view of head of *Arothron caeruleopunctatus*.

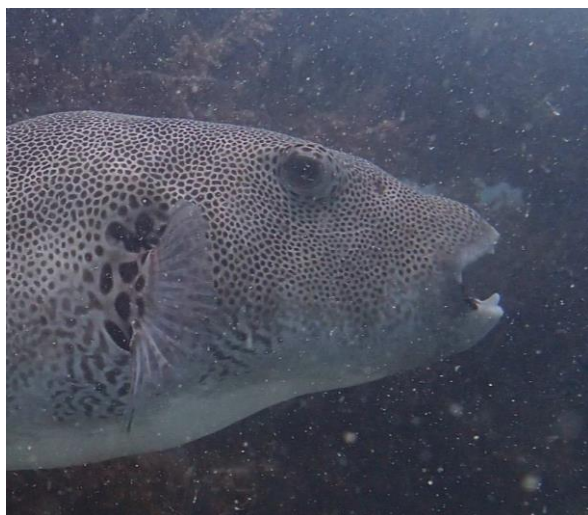


Fig. 3. Lateral view of head of *Arothron stellatus* off Pulau Hantu on 12 April 2015. Note the small black spots densely covering the head.



Fig. 4. Lateral view of head of *Arothron mappa* off Pulau Hantu on 8 July 2018. Note the pale and dark streaks radiating from the eye.

Photographs by Toh Chay Hoon

References:

- Allen, G. R. & M. V. Erdmann, 2012. *Reef Fishes of the East Indies*. Tropical Reef Research, Perth, Australia. xiii + 1-424 (Vol. 1), 425-856 (Vol. 2), 857-1292 (Vol. 3).
- Yap, S. & A. Sankar, 2015. New record of blue-spotted pufferfish in Singapore. *Singapore Biodiversity Records*. 2015: 47.