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Biodiversity Record: Three-spined toadfish, Batrachomoeus trispinosus, caught in Johor Strait

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Subject: Three-spined toadfish, Batrachomoeus trispinosus (Teleostei: Batrachoidiformes: Batrachoididae).

Subject identified by: Daniel Zhi Yi Choong and Mark Boon Pho Chan.

Location, date and time: Johor Strait between Singapore Island and Pulau Tekong; 16 October 2021; around 1200 hrs.

Habitat: Estuarine. Shallow coastal waters with rocky and mud bottoms.

Observers: Daniel Zhi Yi Choong and Mark Boon Pho Chan.

Observation: An example of about 27 cm total length was caught from a depth of around 10 m off a boat on rod and reel, on hook baited with live prawn, during clear weather with receding tide. It was photographed while temporarily landed on the boat before being safely released (Figs. 1, 2).

Remarks: The three-spined toadfish grows to a maximum size of about 30 cm, and seems to be common in the sea around Singapore (Lim & Low, 1998). It occurs in the Indo-Australian Archipelago, from northern Australia through New Guinea and Indonesia to the Gulf of Thailand, and inhabits intertidal areas near mangroves, estuaries and reefs down to a depth of 36 m (Greenfield, 1999). This species is differentiated from the very similar-looking and sympatric Singapore toadfish (*Allenbatrachus reticulatus*) in having a pore on the hind surface of the upper part of the pectoral fin base (see Fig. 2; Greenfield, 1999). This pore, absent on the Singapore toadfish, is not conspicuous unless the pectoral fin is bent forwards.

In general, toadfishes are bottom-dwellers that conceal themselves in sediments or rock crevices (Greenfield, 1999). They have the ability to use their swim bladder to communicate acoustically (Fine et al., 2001; Amorim et al., 2015), producing sounds that are described as "grunts", "hums", "hoots" and even "boatwhistles" (Bass & McKibben, 2003; Rice & Bass, 2009; Mosharo & Lobel, 2012). These sounds are distinctive and have varied purposes, such as defending nests or courting females (Rice & Bass, 2009).

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Fig. 1. Dorsal view of the three-spined toadfish landed on 16 October 2021. (Photograph by: Mark Boon Pho Chan).



Fig. 2. Side view of the toadfish with arrow pointing at the pore behind the pectoral fin. (Photograph by: Mark Boon Pho Chan).