

Biodiversity Record: New record of the pufferfish, *Torquigener gloerfelti*, in Singapore

Kelvin K. P. Lim^{*1}, Adib Adris, Jiayuan Lin & Sim Jinheng

¹Lee Kong Chian Natural History Museum, National University of Singapore, Singapore 117377; Email: nhmlimkp@nus.edu.sg (*corresponding author)

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Subjects: Brown-spotted pufferfish, *Torquigener gloerfelti* (Teleostei: Tetraodontiformes: Tetraodontidae).

Subjects identified by: Keiichi Matsuura.

Locations and dates:

1. Singapore Strait at Cyrene Shoal; 12 August 1954.
2. Johor Strait at Changi Beach; 21 August 2024; around 0620 hrs.

Habitats:

1. Marine. Possibly coral reef.
2. Estuarine shore.

Observers:

1. Unknown, possibly staff of the Singapore Fisheries Research Station.
2. Adib Adris and Sim Jinheng.

Observations:

1. An example of 12.9 cm standard length (measured from snout tip to caudal fin base) was obtained with ‘handline and small hook’ from a depth of around 9.1 m. It was preserved and presently held at the Zoological Reference Collection of the Lee Kong Chian Natural History Museum, at the National University of Singapore, where it is accessioned as ZRC 66628 (Fig. 1).
2. A juvenile example of about 5 cm standard length (Figs. 2 & 3) was caught with a handnet in a shallow tidal pool along a sandbar.

Remarks: Members of *Torquigener* are distinguished from other pufferfish in the region by having a distinct chin, terminal mouth, nasal organ covered by a small sac with two nostrils, a raised skin fold along the lower side of its body and caudal peduncle (Matsuura, 2001).

Torquigener gloerfelti was described by Hardy (1984) based on specimens from Bali, Sumba and south Java in Indonesia. It grows to around 20 cm in standard length, and has an elongated body that is rounded dorsally and flattened ventrally. Spinules are present on its dorsum from level of nasal organ to before dorsal fin origin, 7 to 9 of these spinules are located just behind the mid-dorsal branch of lateral lines. The back and side are marked with irregularly shaped brown circles and spots, the belly is white, and the caudal fin has a dark brown distal margin. This species occurs in shallow water on sandy-muddy substrates (see Matsunuma, 2011).

The featured specimens appear to represent the first records of the genus *Torquigener* in Singapore (see Wang & Lim, 2011; Jaafar et al., 2024). *Torquigener gloerfelti* has been recorded from the South China Sea off Terengganu (Peninsular Malaysia) by Matsunuma et al. (2011). Although its presence in Singapore waters is not unusual, it seems to be locally uncommon.

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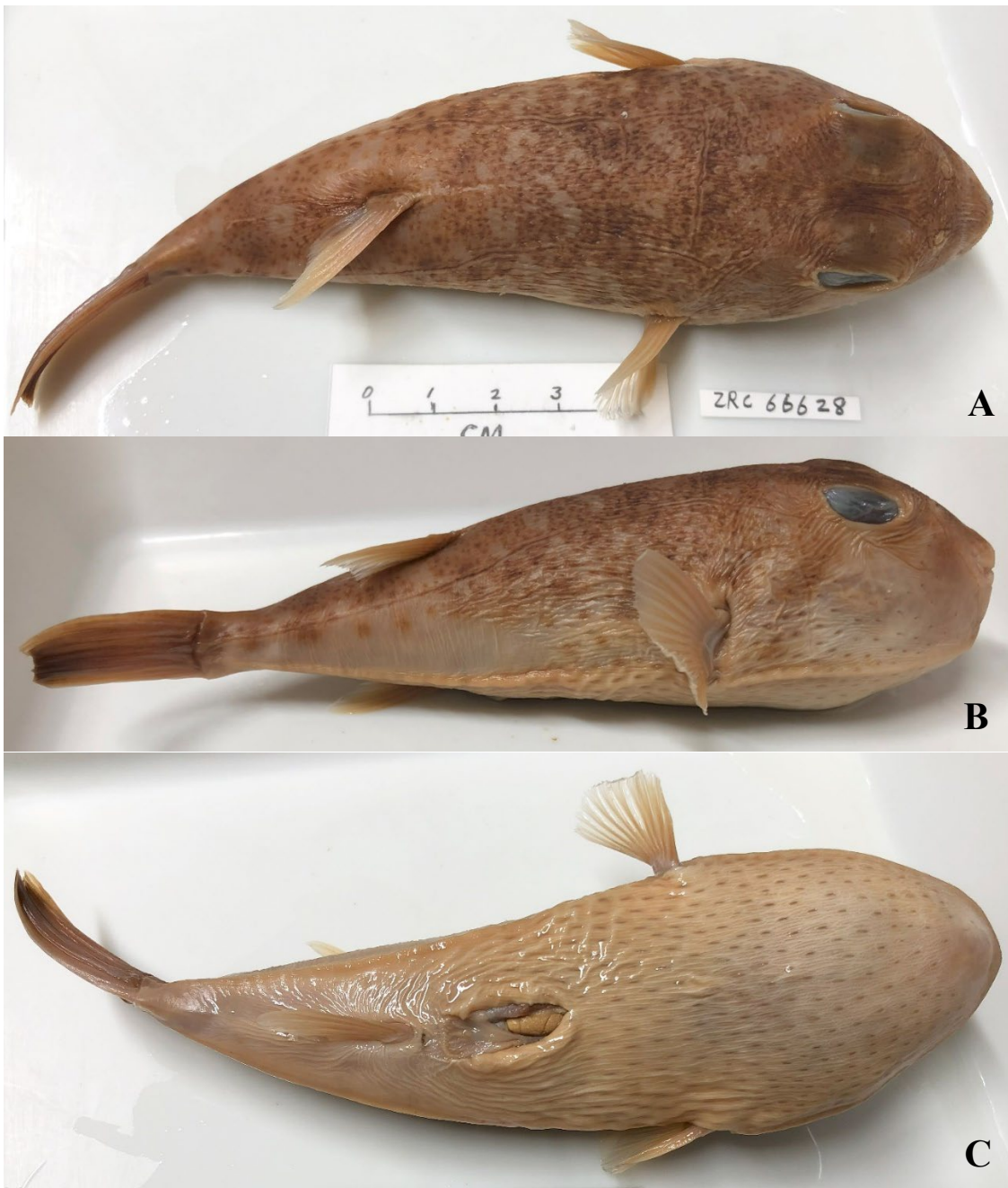


Fig. 1. Preserved *Torquigener gloerfelti* (ZRC 66628) taken from Cyrene Shoal in 1954. Dorsal (A), lateral (B) and ventral (C) views (Photographs by: Kelvin K. P. Lim).

Literature cited:

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Fig. 2. Lateral view of the live *Torquigener gloerfelti* from Changi Beach in inflated state when freshly captured (Photograph by: Sim Jinheng).



Fig. 3. Live *Torquigener gloerfelti* from Changi Beach, 2024, in relaxed state ex-situ. Lateral (A), dorso-lateral (B) and dorsal (C) views (Photographs by: Adib Adris).