

## Snail operculum in the faeces of a motoro stingray

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**Subjects:** Motoro stingray, *Potamotrygon motoro* (Chondrichthyes: Myliobatiformes: Potamotrygonidae);  
Aquatic snail, *Filopaludina sumatrensis peninsularis* (Mollusca: Gastropoda: Viviparidae).

**Subjects identified by:** Tan Heok Hui (fish), Tan Siong Kiat (mollusc).

**Location and date:** Singapore Island, a reservoir in the Central Catchment Nature Reserve; 5 April 2017.

**Habitat:** Freshwater. Artificial lake with clay and soil embankments and rock bunds, largely surrounded by secondary rainforest.

**Observers:** Tan Heok Hui and Tan Siong Kiat.

**Observation:** A wild immature female stingray of 163 mm disc width (Fig. 1) was obtained from the reservoir during a faunal survey conducted by the National University of Singapore under the auspices of the Public Utilities Board. The specimen defaecated into a holding receptacle immediately after capture. The faecal matter was sifted and a mollusc operculum (Fig. 2) of 10 mm diameter was retrieved. This operculum appears to belong to the aquatic snail *Filopaludina sumatrensis peninsularis*.

**Remarks:** Native to South America, *Potamotrygon motoro* is an established alien species in Singapore (Ng et al., 2009) where it has been recorded from the Upper Seletar Reservoir (Ng & Tan, 2010) and Lower Peirce Reservoir (Lai, 2015), as well as in a channel linking Upper Seletar and Lower Seletar Reservoirs (Tan & Zeng, 2015).

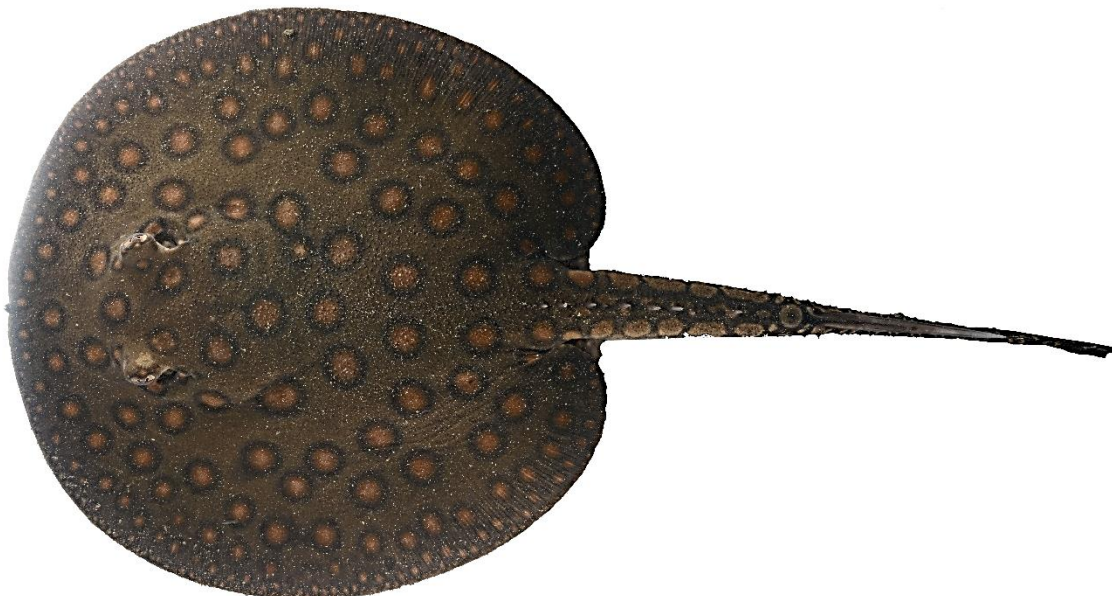


Fig. 1. Dorsal view of female *Potamotrygon motoro* of 163 mm disc width. Photograph by Tan Heok Hui

The diet of the motoro stingray in its native range is known to include aquatic insects, crustaceans, molluscs, worms and fish (Shibuya et al., 2009; Almeida et al., 2010). Although diet and feeding behaviour studies of this species has not been carried out in Singapore, the present observation indicates that part of its diet does include aquatic snails. The operculum is tentatively identified as that of *Filopaludina sumatrensis peninsularis*, one of about four species of the family Viviparidae known to occur in Singapore (Tan et al., 2012).

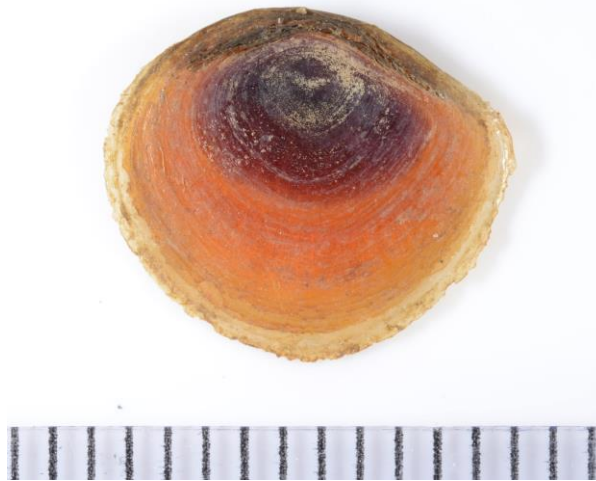


Fig. 2. Operculum of mollusk obtained from the stingray's fecal matter (each division equals to 1 mm).  
Photograph by Tan Heok Hui

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