

Aggregation of *Tythosoceros lizardensis* flatworms at Beting Bronok

Subjects: *Tythosoceros lizardensis* (Platyhelminthes: Polycladida: Cotylea: Pseudocerotidae).

Subjects identified by: Contributor.

Location, date and time: Johor Strait (Singapore), Beting Bronok, off the northern shore of Pulau Tekong; 7 June 2016; 0500-0600 hrs.

Habitat: Estuarine. Intertidal zone of slightly muddy sandbar with numerous colonies of zoanthid, at low (0.1 to 0.2 m) tide.

Observer: Contributor.

Observation: Many examples were encountered during the predawn hours (Figs. 1-4). They were around 5 cm in total length. There were 2 to 5 individuals within every square metre, and possibly more than 50 *Tythosoceros lizardensis* along the entire extent of the sandbar. A number of the flatworms were observed to be injured or disintegrating (Figs. 3 & 4). Other flatworm species sighted in the area included one *Pseudoceros indicus*, one *Pseudoceros laingensis* and an unidentified species of *Acanthozoon*.

Remarks: *Tythosoceros lizardensis* was first recorded in Singapore by Bolaños et al. (2016). This is the second recorded aggregation of this species in Singapore. The first was reported in October 2015 at a seagrass meadow within the Seringat-Kias lagoon (Ong et al., 2015). Mating and abundance of food source are likely reasons for such aggregating behaviour. However, in this present sighting, none of these flatworms displayed mating behaviour. It is not known why some of the flatworms were damaged.

References:

- Bolaños, D. M., B. Q. Gan & R. S. L. Ong, 2016. First records of pseudocerotid flatworms (Platyhelminthes: Polycladida: Cotylea) from Singapore: A taxonomic report with remarks on colour variation. *Raffles Bulletin of Zoology*. Supplement No. 34: 130-169.
- Ong, R., S. Tong & T. S. Tay, 2015. Marine flatworms at Seringat Kias. *Singapore Biodiversity Records*. 2015: 182-184.



Fig. 1. Brown and yellow variant of *Tythosoceros lizardensis*. Photograph by Rene S. L. Ong



Fig 2. Greenish colour variant of *Tythosoceros lizardensis*.



Fig 3. An injured *Tythosoceros lizardensis*.



Fig. 4. Another injured example.

Photographs by Rene S. L. Ong

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