

Biodiversity Record: Moon-headed sidegill slug at Sentosa

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Subject: Moon-headed sidegill slug, *Euselenops luniceps* (Mollusca: Gastropoda: Pleurobranchaeidae).

Subject identified by: Chen Ching Wen Karen.

Location, date and time: Singapore Strait, Sentosa Island; 8 December 2021; 2209 hrs.

Habitat: Marine. Intertidal sandy shore at low tide. A few soft corals of different species were observed in the water.

Observers: Chen Ching Wen Karen and Kamalakannan Raja.

Observation: An example of about 6 cm in diameter was found overturned on the beach more than a metre away from the waterline. The underside of this specimen was a deep purplish blue with a chocolate-brown streak impressed down the middle (Fig. 1). The siphon and some slight movement of villi on the slug's foot were also noted. The animal was then returned to the water right-side-up, revealing the strikingly patterned mantle that is white with regular black and brown spots. Short tentacle-like structures were also observed on the crescent-shaped head of the animal, and a fine fringe-like growth along the anterior edge of the 'veil' (Fig. 2). Once in the water, the slug became more active and started moving about with undulations of its foot and mantle.



Fig. 1. Ventro-frontal view of the moon-headed sidegill slug in situ. Note the purple muscular foot and protruding siphon. (Photograph by: Chen Ching Wen Karen).



Fig. 2. Dorso-frontal view of the moon-headed sidegill slug when it was placed upright in the water. Note the eye-like rhinophores and the fringe of sensory papillae along the anterior edge of the 'veil'. (Photograph by: Chen Ching Wen Karen).

Remarks: The only member of its genus, *Euselenops luniceps* is commonly found in the warm and sandy waters of the Indo-West Pacific (Rudman, 1999). As suggested by its common name "sidegill slug", its gills are located only on the right side of its body (Jameson-Gould, 2013). Despite its striking appearance and wide geographic range, very little is known about the ecology of this species. However, it has been observed that this slug is a predator, and very likely forages for small invertebrates (Tan, 2020). It has also been seen wholly buried in the substrate, except for its sensory rhinophores and breathing siphon. This behaviour would allow the moon-headed sidegill slug to remain hidden from potential predators while monitoring chemical signals in the surrounding water for signs of prey (Rudman, 1999). The finely fringed 'veil' on its crescent-shaped head aids the animal in locating prey, which is then consumed whole (Kurihara, 2002).

While these unique slugs have been seen at Changi and a few islands around Singapore (Tan, 2020), this sighting seems to be a new record for Sentosa.

Literature cited:

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