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## White-spotted slug snakes at Singapore Botanic Gardens and East Coast Park

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Subjects: White-spotted slug snake, Pareas margaritophorus (Reptilia: Squamata: Pareidae).

Subjects identified by: Holly Siow and Alex Figueroa.

Locations, dates and time: Records from two localities on Singapore Island -

- 1) Singapore Botanic Gardens, footpath near Trellis Garden; 13 October 2017; 0922 hrs.
- 2) East Coast Park, footpath between KPE Ventilation Building A and Marina Bay Golf Driving Range; 29 December 2019; 0930 hrs.

**Habitats**: Urban parkland. 1) In a planter in the middle of a footpath adjacent to a grassy field. 2) Footpath adjacent to a grassy field.

**Observers**: Holly Siow and Alex Figueroa.



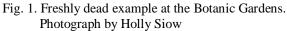




Fig. 2. Decaying dead individual at East Coast Park. Photograph by Holly Siow

**Observations**: Both observations involved dead specimens on footpaths.

- 1) A freshly-dead individual of about 25 cm total length was found next to a tree in the planter (Fig. 1).
- 2) A dead example of about 30 cm total length, in a more decayed state, was encountered in the middle of the footpath (Fig. 2).

**Remarks**: The cause of death of the two snakes is not known. We suspect the first specimen was killed by a maintenance buggy, and the second individual was run over by a bicycle.

The natural distribution of *Pareas margaritophorus* spans from southern Myanmar east to China, and south to northern Peninsular Malaysia (Wallach et al., 2014: 536). This species was first reported from Singapore by Lee and Koh (2005: 340), who found a dead specimen at Khatib Bongsu on 26 December 2004. In the same natural history note, they also discuss an individual that was photographed along Mandai Road in 2003 and another dead specimen found at Sungei Buloh Wetland Reserve on 15 April 2005. However, Baker & Lim (2012: 112) remark that the first record of *Pareas margaritophorus* in Singapore is from 2000. They mention records from Mandai, Khatib Bongsu, Lim Chu Kang, and Sungei Buloh, but do not provide specifics on the record from 2000. Since then, *Pareas margaritophorus* has been reported from Pulau Punggol Barat (Tan and Lim, 2013: 8), Portsdown Road (Chew, 2017: 105), and Hillview Avenue (Iesa, 2018: 41). All of these records are mainly from open and disturbed habitats at the western and northern parts of Singapore Island. The two records featured here reveal that this snake also occurs within the southern and eastern portions of Singapore.

Although *Pareas margaritophorus* is believed to be non-native to Singapore, its pathway of introduction is unknown. Since snakes are not permitted to be kept as pets in Singapore (see Mohan & Mahmud, 2017), and we have not seen *Pareas margaritophorus* featured in herpetoculture publications, the species is likely to have arrived in Singapore as a stowaway, possibly among agricultural or horticultural products. If this is true, we suspect that multiple introductions transpired accounting for its widespread distribution throughout Singapore, rather than the species multiplying and dispersing on its own from a single location. We are not aware of records of this species from forest habitats in the Nature Reserves. Comparing molecular sequences of specimens found in Singapore with sequences throughout its native range may help uncover the source populations and whether there have been multiple invasions into Singapore.

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