

## Rediscovery of the Selangor mud snake, *Raclitia indica*, in Singapore

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**Subject:** Selangor mud snake, *Raclitia indica* (Reptilia: Squamata: Homalopsidae).

**Subject identified by:** Law Ing Sind and Shivaram Rasu.

**Location, date and time:** Singapore Island, Upper Seletar; 19 September 2020, around 2200 hrs.

**Habitat:** Shallow concrete drain in parkland at the edge of freshwater swamp-forest.

**Observers:** Neo Xiaoyun and Dennis Nathaniel Chan.

**Observation:** An example of about 55cm total length was observed swimming fully submerged and slowly among sparse leaf litter in a shallow drain, in water of about 5 cm depth.



Fig. 1. Dorso-lateral view of the *Raclitia indica* from Upper Seletar. Photograph by Dennis N. Chan

**Remarks:** This appears to be the second record of *Raclitia indica* in Singapore. The first record is of a male specimen, collected by a Professor Johnson from a rubber estate at Bukit Sembawang in 1914, and deposited in the National Museum of Ireland in Dublin, Ireland. Although this specimen, which has 175 ventral and 34 subcaudal scales, was cited (as *Enhydris indica*) by Smith (1930), Tweedie (1983) and Murphy (2007), details of its collection had hitherto not been published. Hence, its occurrence in Singapore was treated as indeterminate (Baker & Lim, 2012 as *Enhydris indica*).

The present sighting represents a rediscovery of *Raclitia indica* in Singapore after 106 years, and confirms its occurrence there. The species seems to be endemic to the Malay Peninsula, and Singapore represents the southern-most point of its geographic distribution. In Peninsular Malaysia, it is rare and has been recorded from Taiping and the Sungai Singgor

area in Perak, Bukit Mandol in Selangor, and Lubuk Yu and Lake Chini in Pahang (Quah et al; 2018). As such, this species should be expected to occur in the southern Malaysian states of Negeri Sembilan, Melaka and Johor.

The present specimen shares the general colour pattern of specimens from Pahang, Malaysia (illustrated by Quah et al., 2018 as *Raclitia* cf. *indica*). However, its dorsum is covered with small irregular brown blotches (Fig. 1-4) instead of narrow reddish transverse bands, and the white patches on the flanks extend onto the ventrum to merge with other white patches on the opposite side to form an irregular checkered pattern (Fig. 5 & 7). The specimen exhibits asymmetry in scale counts on each side of its head. There are 7 supralabials (4<sup>th</sup> in contact with eye) on the left, and 6 on right (3<sup>rd</sup> contact with eye) on the right (Fig. 2-4). On the left side, 3 temporals are in contact with the parietal scale, while on the right side, only 2 are in contact with the parietal scale (Fig. 2-4). The specimen has one preocular scale and one postocular scale on each side of the head, and 2 internasal scales (Fig. 2-4). There are 28 pairs of subcaudal scales and anal shield is divided (Fig. 7). The relatively low subcaudal scale count suggests that this individual is likely to be female. For comparison with other specimens of *Raclitia indica*, refer to Table 2 in Quah et al. (2018).

*Raclitia indica* can be distinguished from other aquatic snakes in Singapore by its colour pattern alone, but it does bear a striking superficial resemblance to the red-tailed pipe snake (*Cylindrophis ruffus*). Upon closer examination, the latter is easily distinguished by its stouter appearance and more significantly, its very short and stubby tail which is red on the ventral surface (personal observation; see also Tweedie, 1983).



Fig. 2. Dorsal view of the head and neck showing the configuration of head shields. Note the asymmetry with regards the number of scales on each side.



Fig. 3. Dorso-lateral view of the left side of the head. Note that there are 7 supralabial scales and 3 temporal scales in contact with the parietal scale on this side.



Fig. 4. Dorso-lateral view of the right side of the head with 6 supralabial scales and 2 temporal scales in contact with the parietal scale

Photographs by Dennis N. Chan

There is scant information available on the habits and habitat of *Raclitia indica*. It is known to be aquatic and obtained from small forest streams at night (see Quah et al., 2018). However, both Singapore specimens were found outside the forest proper, with the first one having been collected in a rubber plantation. In the present record, a concrete drain is



unlikely to be the natural habitat. The specimen is believed to have been flushed out of the adjacent Nee Soon swamp-forest following a heavy down pour in the area the previous night. Following the recent discovery of the blackwater mud snake (*Phytolopsis punctata*) and rediscovery of the white-spotted cat snake (*Boiga drapiezii*) at the same general area (see Serin, 2019; Thomas et al., 2016), the featured observation again highlights the high conservation value of the Nee Soon swamp-forest.

**References:**

- Baker N & Lim KKP (2012) Wild Animals of Singapore. A Photographic Guide to Mammals, Reptiles, Amphibians and Freshwater Fishes. Updated edition. Draco Publishing and Distribution Pte. Ltd. and Nature Society (Singapore). 180 pp.
- Murphy JC (2007) Homalopsid Snakes. Evolution in the Mud. Krieger Publishing, Malabar, USA. 260 pp.
- Quah ESH, Wood PL Jr, Grismer LL & Shahrul Anuar MS (2018) On the taxonomy and phylogeny of the rare Selangor mud snake (*Raclitia indica*) Gray (Serpentes, Homalopsidae) from Peninsular Malaysia. *Zootaxa*, 4514 (1): 53-64.
- Smith MA (1930) The reptilia and amphibia of the Malay Peninsula from the Isthmus of Kra to Singapore including the adjacent islands. A supplement to G. A. Boulenger's Reptilia and Batrachia, 1912. *Bulletin of the Raffles Museum*, 3: i-xviii + 1-135.
- Serin S, Law IS, Groenewoud D & Law IT (2019) Blackwater mud snake at Upper Seletar. *Singapore Biodiversity Records*, 2019: 2-3.
- Thomas N, Serin S & Law IS (2016) Second recent record of a white-spotted cat snake in Singapore. *Singapore Biodiversity Records*, 2016: 1-2.
- Tweedie MWF (1983) *The Snakes of Malaya*. 3rd edition. Singapore National Printers, Singapore. 167 pp.

**Note:** The authors extend their deepest gratitude to Dr Amy Geraghty of the National Museum of Ireland for supplying them with the information on the first specimen of *Raclitia indica* reported from Singapore.



Fig. 5. Ventral view of the snake's mid-section showing the irregular checkered colour pattern and wide ventral scales.



Fig. 6. Dorsal view of the tail.



Fig. 7. Ventral view of the tail and cloaca.

Photographs by Dennis N. Chan