

Biodiversity Record: A blue-coloured swamp crab, *Parathelphusa reticulata*

Chen Xuanhe

Email: xuanhezen@gmail.com

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Subject: Reticulated swamp crab, *Parathelphusa reticulata* (Crustacea: Decapoda: Gecarcinucidae).

Subject identified by: Peter K. L. Ng.

Location, date and time: Singapore Island, Upper Seletar; 25 November 2023; 2046 hrs.

Habitat: Freshwater. In concrete drain connecting to a stream flowing out of swamp forest.

Observers: Chen Xuanhe and Ng Hongxun.

Observations: A female reticulated swamp crab of about 5 cm carapace width was spotted hiding among submerged leaf litter. It has an unusual greyish-blue colouration on its cephalothorax and limbs. The reticulated pattern was present on the limbs but appeared to be absent on its cephalothorax. The crab was photographed out of water (Fig. 1) and released back in the leaf litter right after.



Fig. 1. Dorsal view of the swamp crab with unusual blue colouration (Photograph by: Chen Xuanhe).

Remarks: This seems to be the first record of a blue-coloured *Parathelphusa reticulata*. The cause of the unusual colour is unknown, but could be due to a rare genetic mutation that has been seen in other crustaceans (see Malmquist, 2018).

Parathelphusa reticulata is endemic to Singapore, and regarded as a ‘critically endangered’ species at the international level (Esser & Cumberlidge, 2008). Efforts have been made by the National Parks Board of Singapore to establish an ex-situ captive population in order to safeguard the survival of this species (Ng et al., 2023).

Literature cited:

- Esser L & Cumberlidge N (2008) *Parathelphusa reticulata*. The IUCN Red List of Threatened Species. <https://www.iucnredlist.org/species/133989/3885499>. (Accessed 12 April 2024)
- Malmquist D (2018) Once in a blue moon: crabber catches rare all-blue blue crab. William & Mary News Archive. <https://www.wm.edu/news/stories/2018/once-in-a-blue-moon-crabber-catches-rare-all-blue-blue-crab.php> (Accessed 12 April 2024).
- Ng DJJ, Li T, Dian Alisha M, Ong B, Cai Y & Er KBH (2023) Ex-situ conservation of the critically endangered swamp forest crab *Parathelphusa reticulata* Ng, 1990 (Decapoda: Brachyura: Gecarcinidae): observations on its reproduction and biology in captivity. *Raffles Bulletin of Zoology*, 71: 366–376.