

Bi-coloured arboreal ants apparently feeding on eggs of apple snail

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Subjects: Bi-coloured arboreal ant, *Tetraponera rufonigra* (Insecta: Hymenoptera: Formicidae);
Island apple snail, *Pomacea maculata* (Mollusca: Gastropoda: Ampullariidae).

Subjects identified by: Wendy Y. L. Wang and Tan Siong Kiat.

Location, date and time: Singapore Island, Jurong Lake Gardens; 29 November 2018; ca. 1200 hrs.

Habitat: Urban parkland, clay banks of an artificial freshwater lake.

Observer: Tan Heok Hui.

Observation: Two bi-coloured arboreal ants were noted crawling over a cluster of pink eggs (Fig. 1) laid by the island apple snail on a wooden stake used for supporting a small tree next to the lake. One of the ants crawled into an egg mass through a small opening. The ants appeared to be feeding on the eggs. More clusters of apple snail eggs in the vicinity were examined. From one particularly large cluster, up to five ants emerged when it was disturbed. It was noted that only egg masses deposited on wooden poles had these ants on them. Fig. 2 offers magnified images of a specimen of *Tetraponera rufonigra*.

Remarks: The bi-coloured arboreal ant is widely distributed from Asia to Africa, and is considered to be native to Singapore. These active hunters usually prey on small insects. They possess a well-developed sting with venom that has been known to cause allergic reactions in humans (Potiwat & Sitcharungsi, 2015).

In Singapore, two species of apple snails lay bright pink egg masses at the water's edge on emergent structures and plants (Ng et al., 2014, 2017). The egg masses featured here are identified as that of the island apple snail, *Pomacea maculata*, based on the large egg clutches (see Kyle et al., 2013). Previous surveys have yielded only this species in the Jurong Lake area (Ng et al., 2014; see Ng et al., 2017).

The featured observation suggests that the bi-coloured arboreal ants were feeding on the eggs of the island apple snail, and also possibly sheltering in the egg masses. In the Philippines, the introduced South American fire ant (*Solenopsis geminata*) has been documented to feed on apple snail eggs (Yusa, 2001).

References:

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- Yusa, Y., 2001. Predation on eggs of the apple snail *Pomacea canaliculata* (Gastropoda: Ampullariidae) by the fire ant *Solenopsis geminata*. *Journal of Molluscan Studies*. 67 (3): 275-279.



Fig. 1. In-situ image of two *Tetraponera rufonigra* crawling over clusters of apple snail eggs on a wooden pole. Note that a substantial number of eggs have been broken and consumed by the ants. Photograph by Tan Heok Hui



Fig. 2. Close-up images of a specimen of *Tetraponera rufonigra*. Picture on the left shows a frontal view of the head and thorax (scale bar = 0.5 mm), picture on right features a lateral view of the entire animal (scale bar = 1 mm). Photographs by Wendy Y. L. Wang