

## Biodiversity Record: An African rainbow crab at Pasir Ris

Jason Tan Jae Zen

Jalan Sinar Bulan, Singapore 507057; Email: [jasonjaezen@gmail.com](mailto:jasonjaezen@gmail.com)

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**Subject:** African rainbow crab, *Cardisoma armatum* (Crustacea: Brachyura: Gecarcinucidae).

**Subject identified by:** Jason Tan Jae Zen.

**Location, date and time:** Singapore Island, Pasir Ris Park; 24 June 2021 at 1516 hrs and 25 June 2021 at 1605 hrs.

**Habitat:** Small patch of mangrove forest surrounded by urban parkland.

**Observer:** Jason Tan Jae Zen.

**Observation:** One vibrantly coloured example, apparently a male, with carapace width of about 5 cm, was found near a burrow beside a log and some mangrove roots by a boardwalk (Figs. 1, 2). Although there were many tree-climbing crabs (*Episesarma singaporense* and *Episesarma versicolor*) in the vicinity, they were not observed interacting with the subject. The subject appeared skittish compared to the tree-climbing crabs, and was quick to retreat into its burrow whenever a human walked past. On three instances, it remained in the burrow for about 10 to 15 minutes each time. In comparison, the tree-climbing crabs were timed staying in their burrows for two to five minutes. The rainbow crab did not venture beyond 30 cm from the entrance of its burrow. This behaviour was consistent across the two days that it was observed.



Fig. 1. Frontal view of the African rainbow crab near the opening of its burrow on 24 June 2021. (Photograph by: Jason Tan Jae Zen).



Fig. 2. Lateral view of the African rainbow crab near its burrow on 25 June 2021. (Photograph by: Jason Tan Jae Zen).

**Remarks:** *Cardisoma armatum* is a land crab that is native to tropical West Africa. It typically inhabits mangrove drained with brackish water. Although it can be found in freshwater habitats several kilometres inland, it requires access to saline water to reproduce. This species is omnivorous with a recorded preference for insects (Etchian et al., 2016; N’zi & Coulibaly, 2021).

In Singapore, *Cardisoma armatum* has been sold as pets since the mid-1990s (Ng & Ng, 2021). It is very likely that the featured crab was intentionally released as its location was far from residential areas. It is not known if the subject had excavated its burrow or if it moved into a pre-existing one that had been home to one of the *Episesarma* species. As both observations were conducted in the day, it is unknown if the subject ventured further away from its burrow during the night.

**Literature cited:**

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