

Biodiversity Record: Apparent predation of rock crab by purple climber crab

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Subjects: Purple climber crab, *Metopograpsus* sp. (Crustacea: Decapoda: Brachyura: Grapsidae);
Rock crab, *Pilodius* sp. (Crustacea: Decapoda: Brachyura: Xanthidae).

Subjects identified by: Ivan Neo, Su Yan Le and J. C. E. Mendoza.

Location, date and time: Singapore, Sentosa Island, Tanjong Rimau; 24 January 2023; around 2042 hrs.

Habitat: Marine. Intertidal shore with sand substrate and seagrass. During low tide.

Observers: Ivan Neo, Su Yan Le and Ting Wai Kit.

Observation: A purple climber crab of about 3.5 cm carapace width was found beneath a bunch of marine macroalgae, about 10 m away from the rocky breakwaters they are usually seen at. It stayed motionless when approached, and upon closer examination, was noted to be holding a small rock crab of about 1.5 cm carapace width with its right chela (Fig. 1). The rock crab was not moving, and presumed to be dead.



Fig. 1. Frontal view of *Metopograpsus* sp. clutching a *Pilodius* sp. with its right chela (Photograph by: Ivan Neo).

Remarks: In the featured observation, the purple climber crab was not actually seen eating the rock crab. If the former was indeed feeding on the latter, it is not known if the purple climber had captured and killed the rock crab, or if it was scavenging on an individual that was already dead.

Members of the genus *Metopograpsus* are believed to be primarily herbivorous, using their flattened finger tips to scrape algae off surfaces off rocks and other surfaces (Ng et al., 2007). However, as shown in this record, they do opportunistically prey on small invertebrates (Teo et al., 2008). Rock crabs of the genus *Pilodius* are small, no more than 2 cm in carapace width, and common in rocky shores (Tan & Ng, 1995).

Literature cited:

Ng PKL, Lim SSL, Wang LK & Tan LWH (2007) Private Lives. An Exposé of Singapore's Shores. Raffles Museum of Biodiversity Research, National University of Singapore, 212 pp.

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