

Biodiversity Record: New record of the coralgoby, *Paragobiodon lacunicolus*, in Singapore

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Subject: Blackfin coralgoby, *Paragobiodon lacunicolus* (Teleostei: Gobiiformes: Gobiidae).

Subject identified by: Navaraj Rajendran and Zeehan Jaafar.

Location, date and time: Singapore Strait, Sisters' Island Marine Park; 12 July 2023; 0900–1100 hrs.

Habitat: Marine. Fringing coral reef with sand-silt substrate. Among branches of the coral *Pocillopora acuta*.

Observer: Navaraj Rajendran.

Observations: One individual (Fig 1) of approximately 2 cm total length was observed resting on a branch of a colony of *Pocillopora acuta* coral (Fig 2).

Remarks: The coralgoby genus *Paragobiodon* comprises six species (Fricke et al., 2023) that are obligate symbionts to scleractinian coral colonies of the genera *Seriatophora*, *Stylophora* and *Pocillopora* (Taylor, 1971; Lassig, 1976; Suzuki & Randall, 2011). Previously, only *Paragobiodon echinocephalus*, was reported from Singapore (Larson et al., 2008). The present observation represents the first record of *Paragobiodon lacunicolus* in the territorial waters of Singapore.

Paragobiodon lacunicolus can be distinguished from its congeners on the basis of body colouration — white to pale-yellow body, pinkish head and black fins (Allen & Erdmann, 2012). Its occurrence in Singapore is not surprising as the country lies within its known distribution range that stretches from East Africa eastwards through Indonesia and Australia, to the Line and Tuamotu Islands, and north to the Ryukyu and Ogasawara Islands. *Paragobiodon lacunicolus* inhabits the coral *Pocillopora damicornis* (see Allen & Erdmann, 2012). However, *Pocillopora damicornis* is a species complex comprising described and putative new taxa (Poquita-Du et al., 2017). This report also represents the first record of *Paragobiodon lacunicolus* associating with *Pocillopora acuta*.

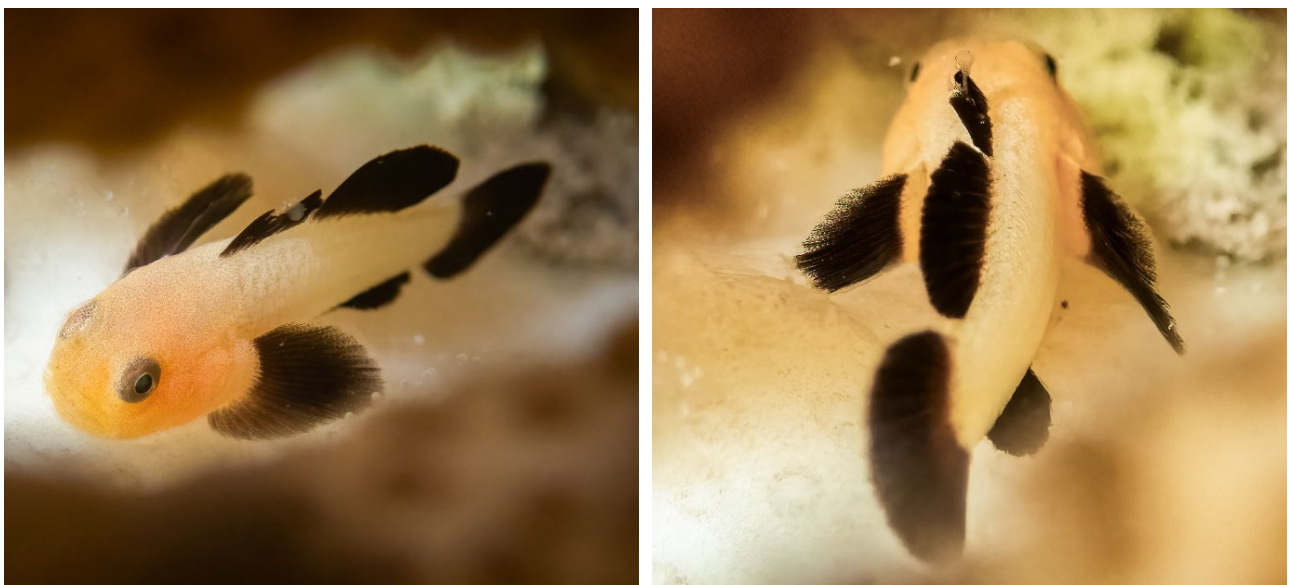


Fig. 1. In-situ dorso-lateral front (left) and dorsal rear (right) views of *Paragobiodon lacunicolus* (Photographs by: Navaraj Rajendran).

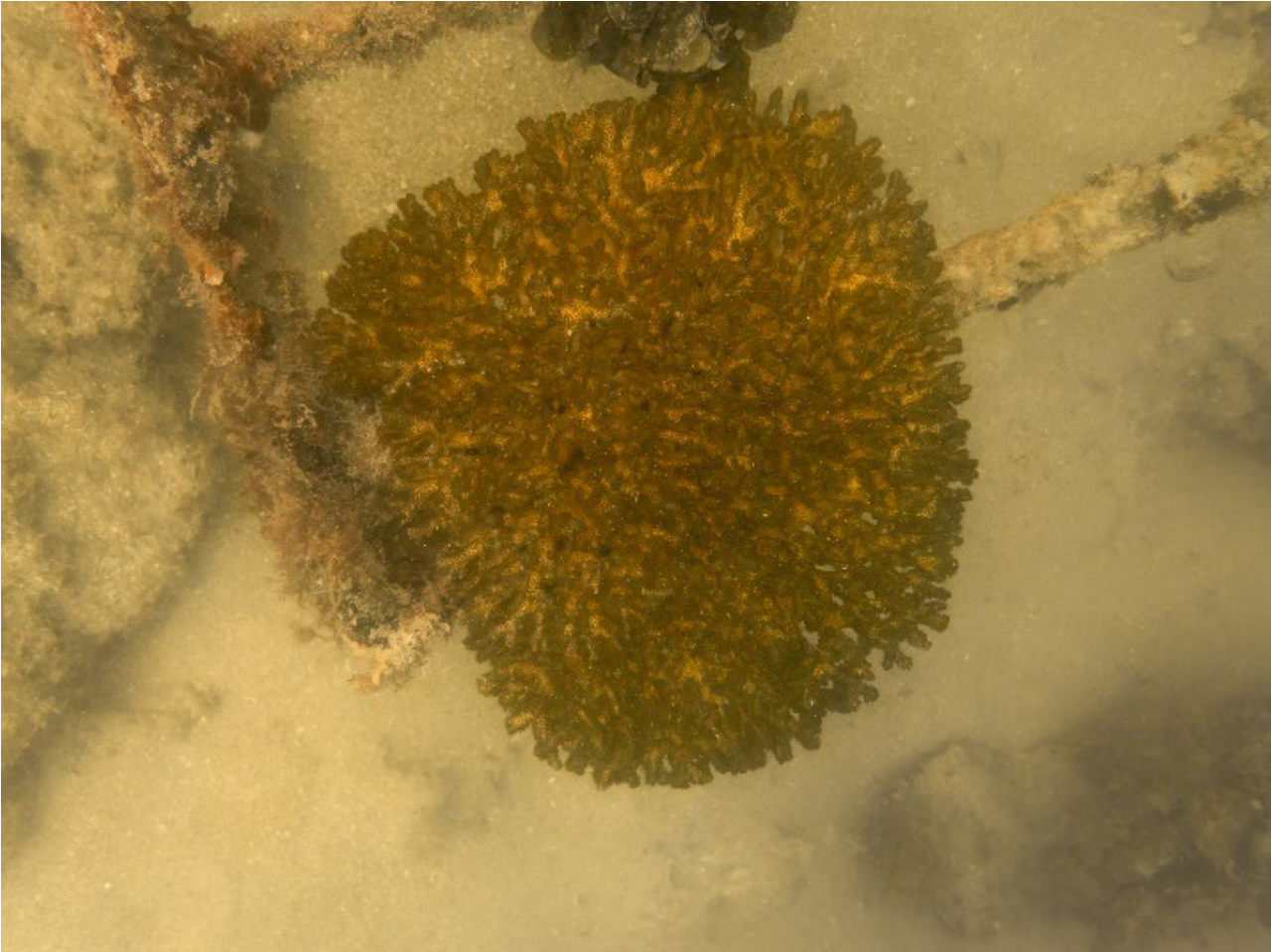


Fig. 2. Top view of the host colony of the coral *Pocillopora acuta* in which the *Paragobiodon lacunicolus* was found (Photograph by: Navaraj Rajendran).

The featured specimen and the host colony in which it was found, were on a metal rack that had been constructed to accommodate coral colonies recovered from marine sites slated for development within Singapore waters. The colony of *Pocillopora acuta* was transplanted in 2019 (National Parks Board, personal communication). However, it is unclear if the goby was already present then or if it had colonized the coral thereafter. The autecology of *Paragobiodon lacunicolus* appears to be unknown.

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