Blennies in mangrove tree stumps exposed at low tide

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Subjects identified by: Kelvin K. P. Lim.

Location, date and time: Johor Strait, Pulau Ubin, Chek Jawa; 16 November 2017; around 1600 hrs.

Habitat: Estuarine. Mangrove shore.

Observers: Iffah Iesa, Tan Siong Kiat, Simon Cragg & Helen Wong.

Observation: Three examples of the whitebar oyster-blenny (largest example 47.5 mm in standard length, Fig. 1) and one zebra oyster-blenny (42.6 mm standard length, Fig. 2) were found hidden in the parts of dead and rotting mangrove tree stumps exposed to air in the muddy intertidal region during low tide. The stumps were submerged during high tide. The fish were collected for identification and registered as voucher specimens in the Zoological Reference Collection (ZRC) of the Lee Kong Chian Natural History Museum, at the National University of Singapore.

Fig. 1. Lateral view of *Omobranchus ferox* of 47.5 mm standard length (ZRC 56646).

Fig. 2. Lateral view of *Omobranchus zebra* of 42.6 mm standard length (ZRC 56647).

Photographs by Kelvin K. P. Lim
Remarks: Apart from the two species featured here, a third species of fish, the crescent oyster blenny (*Omobranchus smithi*) has also been found locally in timber in the mangrove (Lim, 2017). While the whitebar oyster blenny (*Omobranchus ferox*) is known to be common in the mangroves of Singapore (Lim & Low, 2002: 132), the crescent and zebra oyster blennies appear to be rare.

*Omobranchus zebra* was described from Singapore in 1868 (Bleeker, 1868: 279 as *Petroskirtes zebra*). One recent record in the country (Toh et al., 2016: 92) is based on two specimens of 36.4 and 25.5 mm standard length (ZRC 47516) obtained from among fouling organisms under floating pontoons at the Raffles Marina, at Tuas, in 2000. The dark vertical bands on its head readily distinguish *Omobranchus zebra* from its two congeners in Singapore mangroves. *Omobranchus ferox* has a distinct narrow white bar behind its eye, and *Omobranchus smithi* has a black crescent-shaped mark dorsally at the rear edge of its eye (Springer & Gomon, 1975 - *Omobranchus smithi* as *Omobranchus meniscus*).

Oyster blennies of the genus *Omobranchus* are not the only fish known to hide in timber crevices. At the mangroves of the Tukang Besi Archipelago in Sulawesi, Indonesia, the dartfish, *Parioglossus interruptus*, was discovered taking refuge in dead wood riddled with tunnels made by shipworms (a type of boring mollusc of the family Teredinidae) exposed during low tide and at night, apparently to evade predators (Hendy et al. 2013). It is believed that protection from the heat and the retention of sufficient water in the wood help the fish survive in the wood during low tide.

References:

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