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## Bleeker's fringelip tongue-sole at East Coast

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Subject: Bleeker's fringelip tongue-sole, Paraplagusia bleekeri (Teleostei: Pleuronectiformes: Cynoglossidae).

Subject identified by: Kelvin K. P. Lim.

Location, date and time: Singapore Strait, East Coast at Tanah Merah; 27 May 2017; morning.

Habitat: Marine. Intertidal shore, in tide pool with sand substrate, at low tide.

Observers: Tan Heok Hui and others.

**Observation**: The fish, eyed-side shown in Fig. 1, was obtained with hand-net in a pool of water less than 5 cm depth. It was 10.8 cm in standard length (measured from tip of snout to base of caudal fin). The specimen is preserved in the Zoological Reference Collection of the Lee Kong Chian Natural History Museum, at the National University of Singapore, and catalogued as ZRC 56271. It has 80 anal fin rays and 101 dorsal fin rays.



Fig. 1. Lateral view of eyed-side of Paraplagusia bleekeri from Tanah Merah. Photograph by Tan Heok Hui

**Remarks**: The genus *Paraplagusia* is distinguished from other tongue-soles in having two or three lateral lines on the eye-side of the body and branched papillae fringing the lips (see Fig. 2) on the eyed side of the fish (Munroe, 2001: 3891-3892).

Paraplagusia bleekeri Kottelat (2013a) was formerly known as Paraplagusia blochii, which is a synonym of Paraplagusia bilineata (see Kottelat, 2013a: 765; 2013b: 468). It is one of two species of the tongue-sole genus Paraplagusia recorded from Singapore (Fowler, 1938: 88-89 as Paraplagusia blochii). The other species, Paraplagusia bilineata, the double-lined fringelip tongue-sole, is distinguished from Paraplagusia bleekeri, in having pale ocelli of varying sizes on the eyed-side of the body [versus uniformly pale brown without markings], and having more than 105 dorsal fin rays [versus 105 or less] and 81-88 anal fin rays [versus 66-80].(Munroe, 2001: 3894, Paraplagusia bleekeri as Paraplagusia blochii).

The specimen featured here is densely marked on the eyed side with small, irregularly shaped whitish mottles, but no ocelli. It is presumed to be juvenile. Larger examples over 13 cm are a uniform brown on the eyed side. The species is known to attain a maximum length of 22 cm (see Imamura, 2011: 236 as *Paraplagusia blochii*).

The example from Pulau Bintan (Indonesia) illustrated as *Paraplagusia bilineata* in Lim & Low (2002: 148) appears to be *Paraplagusia bleekeri*.

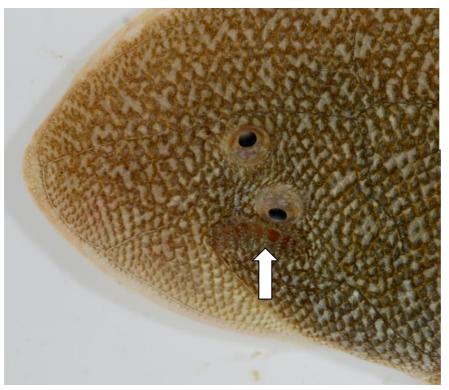


Fig. 2. Lateral view of the head of *Paraplagusia bleekeri* showing the mouth on the eyed-side fringed with branched labial papillae (indicated by arrow). Photograph by Tan Heok Hui

## References:

Fowler, H. W., 1938. A list of the fishes known from Malaya. Fisheries Bulletin, Singapore. 1: 1-268.

Imamura, H., 2011. Cynoglossidae. Tonguesoles. In: Matsunuma, M., H. Motomura, K. Matsuura, N. A. M. Shazili & M. A. Ambak (eds.). Fishes of Terengganu - East Coast of Malay Peninsula, Malaysia. National Museum of Nature and Science, Universiti Malaysia Terengganu and Kagoshima University Museum. p. 235-236

Kottelat, M., 2013a. Nomenclature and identity of the tongue soles *Paraplagusia bilineata*, "Cynoglossus bilineatus" and *Paraplagusia blochii* (Teleostei: Pleuronectiformes). The Raffles Bulletin of Zoology. 61 (2): 763-766

Kottelat, M., 2013b. The fishes of the inland waters of Southeast Asia: a catalogue and core bibliography of the fishes known to occur in freshwaters, mangroves and estuaries. *The Raffles Bulletin of Zoology*. Supplement No. 27. 1-663.

Lim, K. K. P. & J. K. Y. Low, 2002. A Guide to Common Marine Fishes of Singapore. Revised edition. Singapore Science Centre. 163 pp.

Munroe, T. A., 2001. Cynoglossidae. Tonguesoles. In: Carpenter, K. E. & V. H. Niem (eds.). FAO Species Identification Guide for Fishery Purposes. The Living Marine Resources of the Western Central Pacific. Volume 6. Bony fishes Part 4 (Labridae to Latimeriidae), estuarine crocodiles, sea turtles, sea snakes and marine mammals. FAO, Rome. pp. 3890-3901.