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New Singapore record of the fringelip mullet, Crenimugil heterocheilus

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Subjects: Half fringelip mullet, Crenimugil heterocheilus (Teleostei: Mugiliformes: Mugilidae).

Subjects identified by: Ian J. Harrison.

Location, date and time: Johor Strait, east of the Causeway; 2003-2008.

Habitat: Estuarine. Along the shore.

Observers: Tan Heok Hui and others.

Observation: The present record is based on three lots of preserved specimens collected during ichthyofaunal surveys by Tan Heok Hui and party, and catalogued in the Zoological Reference Collection (ZRC) of the Lee Kong Chian Natural History Museum, at the National University of Singapore.

- 1. ZRC 56683 One example of 59.9 mm standard length (see accompanying photograph) collected at the Seletar Wet Gap on 14 January 2008.
- 2. ZRC 56677 One example of 63.9 mm standard length from the east bank of the mouth of the Serangoon River on 16 January 2004.
- 3. ZRC 56676 Four specimens, 36.6-41.0 mm standard length, from Simpang South near Seletar Dam, on 10 October 2003.



Side view of Crenimugil heterocheilus of 59.9 mm standard length (ZRC 56683). Photograph by Kelvin K. P. Lim

Remarks: Despite resembling many other species of grey mullets in Singapore in general appearance, *Crenimugil heterocheilus* is distinguished by having two to five rows of papillae on its thickened upper lip, these rows united into file-like ridges on lateral parts of the lip (see Harrison & Senou, 1999: 2072). This feature is obvious only under close examination, especially for juveniles. The species is distributed in the tropical Indo-Pacific from Indonesia and the Philippines, east to Vanuatu and northwards to southern Japan (Harrison & Senou, 1999: 2084). This seems to be the first record of *Crenimugil heterocheilus* in Singapore (see Fowler, 1938; Ng et al., 2015). However, its occurrence in the area is not unexpected and could have been previously overlooked. Although recorded to grow to 50 cm in standard length, most specimens are known to reach 23 cm standard length (Harrison & Senou, 1999: 2084). All the specimens featured here are juveniles under 6.3 cm standard length.

References:

Fowler HW (1938) A list of the fishes known from Malaya. Fisheries Bulletin, Singapore. 1: 1-268, 296-268 (supplement); index: i-lvi.

Harrison IJ & Senou H (1999) Order Mugiliformes. Mugilidae. Mullets. 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 4. Bony fishes part 2 (Mugilidae to Carangidae). FAO, Rome. pp. 2069-2108.

Ng HH, Tan HH, Lim KKP, Ludt WB & Chakrabarty P (2015) Fishes of the eastern Johor Strait. Raffles Bulletin of Zoology, Supplement No. 31: 303-337.