

Striped panchax at Jurong East

Subjects: Striped panchax, *Aplocheilus lineatus* (Teleostei: Aplocheilidae)

Subjects identified by: Tan Heok Hui & Jeffrey T. B. Kwik.

Location, date and time: Singapore Island, Jurong East, stream at the junction of Jurong Town Hall Road and the Ayer Rajah Expressway; 1 November 2016; around 1030 hrs.

Habitat: Freshwater. Open-country stream system (that drains into the Pandan Canal) with earth banks and riparian vegetation (Fig. 1). Both submerged and emergent macrophytes were present in the shallow, slow-flowing water.

Observers: Contributors.

Observation: Many examples of *Aplocheilus lineatus* of various size were sighted near the water surface. They moved about in pairs, in small groups of between 3 and 6 individuals (Fig. 2), and as solitary individuals (Fig. 3). Some samples were collected by net and deposited as voucher specimens (Fig. 4) in the Lee Kong Chian Natural History Museum at the National University of Singapore.



Fig. 1. Habitat of *Aplocheilus lineatus* at the Jurong East location. Photograph by Tan Heok Hui

Remarks: This is the third population of the non-native *Aplocheilus lineatus* to be reported in Singapore. The other two are at Bukit Batok Nature Park and Singapore Botanic Gardens (Yeo & Lim, 2010); although their presence at the latter sites have not been verified recently. The stream drains into the Pandan Canal, which is land-locked as its estuary has been dammed. *Aplocheilus lineatus* has not yet been recorded from the Pandan Canal, but this could be due to their preference for small streams.

The presence of juveniles of various sizes at the Jurong East location indicates a healthy breeding population there. *Aplocheilus lineatus* was the only species of fish observed in the stream on that day. Disturbances at the water surface indicated the presence of larger air-breathing fish species in the stream, but the fish was not identified. The guppy (*Poecilia reticulata*) was observed on a previous visit to the same location (Kwik, personal observation).

Fish from the present population appear to be more reddish-orange (Fig. 4) when compared to those from Bukit Batok Nature Park. Fecal matter from some of the specimens obtained from Jurong East site shows that they were feeding on terrestrial arthropods (Fig. 5).



Fig. 2. A pair near the water surface (male above), each around 40 mm standard length.



Fig. 3. A juvenile (about 25 mm standard length) attracted to a grasshopper on the water.



Fig. 4. *Aplocheilus lineatus*, top: 47.4 mm adult male, middle: 38.9 mm female, bottom: 20.1 mm juvenile (sizes in standard length).



Fig. 5. Fecal matter from *Aplocheilus lineatus*, with remains of terrestrial arthropods.

Photographs by Tan Heok Hui

Reference: Yeo, D. C. J. & K. K. P. Lim, 2010. *Aplocheilus lineatus*, a non-native killifish (Actinopterygii: Cyprinodontiformes: Aplocheilidae) in Singapore. *Nature in Singapore*. 3: 327-332.

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