

Indo-Pacific tarpon leptocephali from Pasir Panjang

Subjects: Indo-Pacific tarpon, *Megalops cyprinoides* (Teleostei: Elopiformes: Megalopidae).

Subjects identified by: Tan Heok Hui.

Location, date and time: Singapore Island, Pasir Panjang Road next to Pasir Panjang nursery; 13 November 2014; around 1030 hrs.

Habitat: Concretised storm drain with clear flowing freshwater around 10 cm deep over even concrete bottom with algal growth (Fig. 1). Further downstream, the channel is subjected to tidal influence.

Observers: Contributors.

Observation: Tarpon leptocephali of around 3 cm total length were obtained in freshwater. These larvae can be detected by the slight disturbance they made on the surface of the water, and were obtained mainly from sections of the drain with active water movement. They were obtained singly or in small groups up to 6 individuals per scoop of a hand-net. The larvae are slender and transparent, with only the silvery eyes most distinctive (Fig. 2). Other fish observed in the same area were red-tailed rasbora (*Rasbora borapetensis*, Cyprinidae), tilapia (*Oreochromis* sp., Cichlidae) and common snakehead (*Channa striata*, Channidae). The series of tarpon leptocephali is deposited in the Zoological Reference Collection of the Lee Kong Chian Natural History Museum at the National University of Singapore, under the catalogue number ZRC 54731.

Remarks: The Indo-Pacific tarpon occurs throughout the coastal areas of the Indo-West Pacific region (Allen, 1999; Smith, 1999; Kottelat et al., 2003), and is known to inhabit Singapore waters (Lim & Low, 1998). The adult fish (see Fig. 3) grows to a maximum size of around 55 cm in total length, has large eyes, large silvery scales, a distinctive upturned mouth, and the last ray of its dorsal fin is elongated and filamentous (Smith, 1999).

The growth stages of *Megalops cyprinoides* have been documented in detail by Tsukamoto & Okiyama (1997) who had obtained their stock of leptocephali from a harbor with saltwater. In contrast, the series featured here was obtained from freshwater. The leptocephalus larvae of the Indo-Pacific tarpon has been recorded from brackish water in Singapore (Johnson, 1964), and possible examples have been observed in the Tampines River in the late 1980s (Tan Siong Kiat, personal communication).

References:

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Fig. 1. Section of the concretised storm drain where tarpon leptocephali were obtained on 13 November 2015.

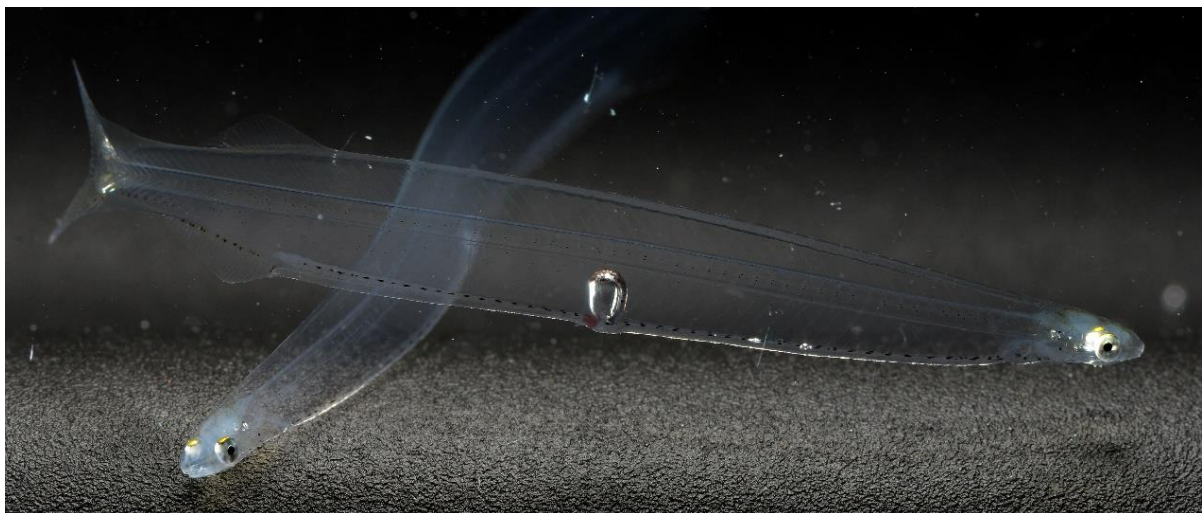


Fig. 2. Lateral view of two live tarpon leptocephali (around 28-30 mm standard length) showing the distinctive large eyes. The shiny bubble at the lower margin of the mid-body is possibly the air bladder.



Fig. 3. Lateral view of an adult Pacific tarpon (around 36 cm standard length) from Pandan Reservoir, Singapore.

Photographs by Tan Heok Hui