

Cardinalfishes of the genus *Taeniamia* off Pulau Hantu

Subjects: Orange-lined cardinalfish, *Taeniamia fucata* (Teleostei: Apogonidae);
Duskytail cardinalfish, *Taeniamia macroptera* (Teleostei: Apogonidae).

Subjects identified by: Kelvin K. P. Lim.

Location, date and time: Singapore Strait, off western Pulau Hantu; 1 May 2015 (Fig. 1) and 30 May 2015 (Fig. 2); daytime.

Habitat: Marine. Boat wreck in an open silty area, near coral reef, at about 12 m depth.

Observers: Koh Kwan Siong (1 May 2015), Heng Pei Yan (30 May 2015).

Observation: From the attached pictures, examples of two species of cardinalfishes of the genus *Archamia* can be identified among aggregations of small fishes swarming around the boat wreck. The largest individuals were around 9 cm in total length. Other fishes observed in the aggregations include other species of cardinalfishes of the genera *Ostorhinchus* and *Cheilodipterus* (family Apogonidae), and demoiselle fishes of the genus *Neopomacentrus* (family Pomacentridae).

Remarks: According to Ng & Lim (2014: 1068), only *Taeniamia fucata*, the orange-lined or painted cardinalfish is the only representative of the genus *Taeniamia* recorded from Singapore. The present observations show that the very similar duskytail cardinalfish, *Taeniamia macroptera*, can also be found, and even occur alongside *Taeniamia fucata*. However, this does not mean that the present observations are the first records of *Taeniamia macroptera* in Singapore waters. The species has already been recorded since the mid-1800s (e.g., Bleeker, 1861: 48 as *Apogon macropterus*), but thought to have been misidentified, and placed in the synonymy of *Archamia bleekeri*, the Bleeker's cardinalfish, by Ng & Lim (2014: 1063).

Taeniamia macroptera is distinguished from *Taeniamia fucata* in being greyish instead of pinkish with a larger black caudal peduncular blotch (see examples in Fig. 2) that may be expanded into a broad blackish band on the tail base (see examples in Fig. 1). Otherwise both species are very similar in body shape, and have narrow oblique orange bars on the sides of the body and a white tip on the anal fin. Both species are widely distributed throughout the East Indian region (Allen & Erdmann, 2012: 373 as *Archamia fucata*, 374 as *Archamia macroptera*). Bleeker's Cardinalfish (*Archamia bleekeri*), which occurs in Singapore waters, appears similar but is silvery and semi-transparent, with a smaller black spot on the caudal fin base. It lacks the narrow orange bars and white-tipped anal fin (Allen & Erdmann, 2012: 373).

References:

- Allen, G. R. & M. V. Erdmann, 2012. *Reef Fishes of the East Indies. Volume I*. Tropical Reef Research, Perth, Australia. xiii + 424 pp.
- Bleeker, P., 1860. Mededeeling omtrent vischsoorten, nieuw voor de kennis der fauna van Singapoera. *Verlagenen Mededeelingen der Koninklijke Akademie van Wetenschappen, Letterkunde, en Schoone kunsten te Amsterdam*. 12 (1): 28-63.
- Ng H. H. & K. K. P. Lim, 2014. A preliminary checklist of the cardinalfishes (Actinopterygii: Gobiiformes: Apogonidae) of Singapore. *Check List*. 10 (5): 1061-1070.

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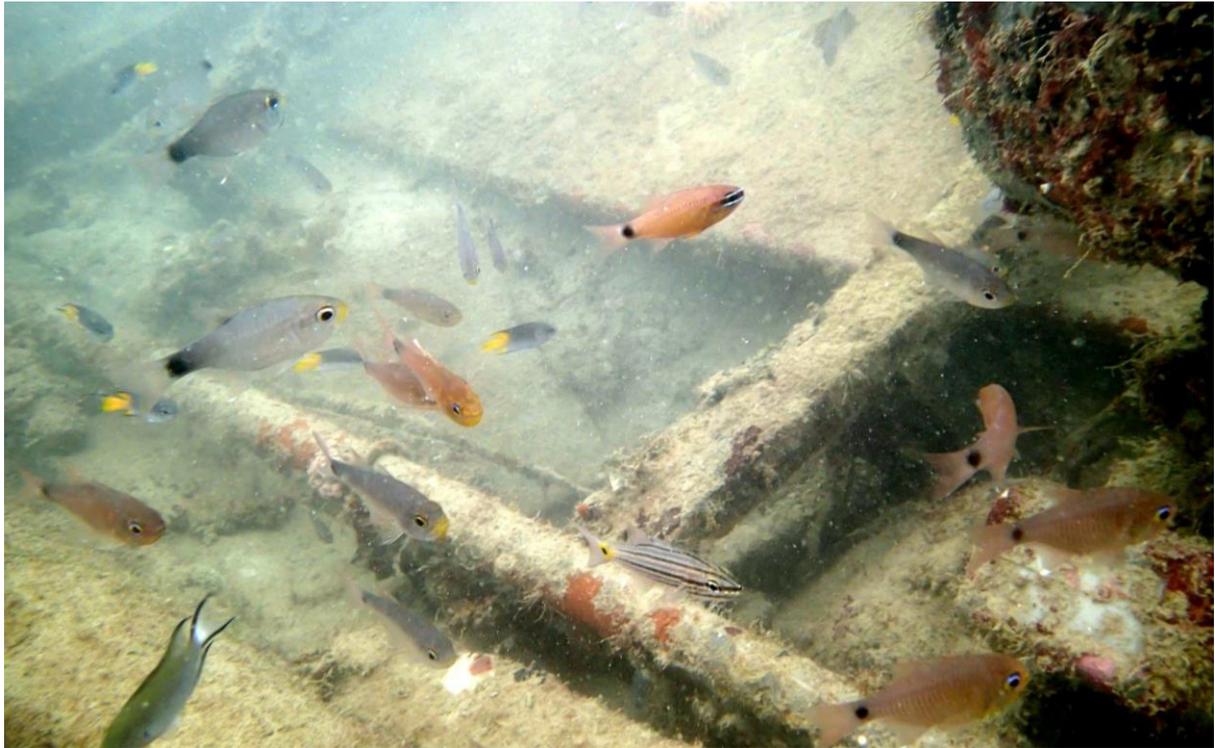


Fig. 1. Examples of *Taeniamia macroptera* (at least 5 examples, grey with blackish band at the tail base, on the left) and *Taeniamia fucata* (3 examples at lower right corner) with other fish species at the boat wreck on 1 May 2015. The similar-looking fish with the blue stripes across the eye in the centre of the picture is a flower cardinalfish (*Ostorhinchus fleurieu*). Photograph by Koh Kwan Siong



Fig. 2. *Taeniamia fucata* (mainly upper left) and *Taeniamia macroptera* (mainly lower right) at the boat wreck on 30 May 2015. Note that the blackish tail base is not present on members of *Taeniamia macroptera* in the lower foreground, but partially evident on two examples in the rear (right side and centre). Photograph by Heng Pei Yan