

New record of Kuiters' dragonet from Singapore

Subjects: Kuiters' dragonet, *Dactylopus kuiteri* (Teleostei: Callionymidae).

Subjects identified by: Kelvin K. P. Lim.

Location, date and time: Singapore Straits, off Pulau Hantu; 2010 to 2014; afternoons.

Habitat: Coral reef, at depths of between 5 and 12 m.

Observers: Neo Mei Lin, Debby Ng & Toh Chay Hoon.

Observations: Four records are featured.

1) An example of about 6 cm total length was photographed on the substrate at 5 m depth by Neo Mei Lin on 26 December 2010 at around 1200 hrs (Fig. 1).

2) An adult of about 8 cm total length was observed by Debby Ng on 1 May 2013. It was moving about on the substrate (Fig. 2, left), and then swam off with fins fully erect (Fig. 2, right).

3) An adult of about 6 cm total length (Fig. 3, left) was found feeding over the coral sand substrate at 5 m depth on 23 March 2014 at 1330 hrs by Neo Mei Lin.

4) A small juvenile of less than 2 cm total length, (Fig. 3, right), was observed on the silty sea bed at 12 m depth on 23 March 2014, at around 1500 hrs, by Neo Mei Lin and Toh Chay Hoon.

Remarks: Kuiters' dragonet attains a maximum total length of 15 cm and inhabits estuaries and coastal reefs down to 20 m depth. It is known from the Philippines, northern Borneo, south to Sulawesi, Bali and the Lesser Sunda Islands. (Allen & Erdmann, 2012: 849). Small juveniles around 2 cm are white with orange bars on the head and nape (see: Fig. 3, right). Kuiters' dragonet is herein recognised for the first time in Singapore waters. Its congener, the fingered dragonet, *Dactylopus dactylopus*, with which it was previously confused, is locally uncommon with confirmed records from Punggol and Siglap (Ng, 2012: 35). Both fingered and Kuiters' dragonets have the first pelvic fin ray separated from the rest of the pelvic fin. The fingered dragonet differs in having long filamentous rays on the first dorsal fin and distinct stripes on the second dorsal fin (Allen & Erdmann, 2012: 849).

Apart from Pulau Hantu, Kuiters' dragonet has also been recorded from the intertidal zone (less than 30 cm depth) of Cyrene Reef on 26 April 2008 by Loh Kok Sheng (pers. comm.), and in deeper water off Pulau Biola on 16 March 2014 by Toh Chay Hoon. There is a preserved specimen of 5.1 cm standard length and 7.2 cm total length at the Zoological Reference Collection of the Lee Kong Chian Natural History Museum, National University of Singapore. Catalogued as ZRC 54162, it was collected at the intertidal zone of Pulau Hantu on 30 May 2013 by Koh Kwan Siong during Phase II of the Comprehensive Marine Biodiversity Survey of Singapore organised by the National University of Singapore's Tropical Marine Science Institute and the National Parks Board. All known local records of the Kuiters' dragonet are from the Singapore Straits.

References:

- Allen, G. R. & M. V. Erdmann, 2012. *Reef Fishes of the East Indies. Volume II*. Tropical Reef Research, Perth, Australia. pp. 425-856.
- Ng H. H., 2012. The dragonets of Singapore (Actinopterygii: Perciformes: Callionymidae). *Nature in Singapore*. 5: 27-38.

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Fig. 1. Example off Pulau Hantu on 26 December 2010. Photograph by Neo Mei Lin



Fig. 2. Example off Pulau Hantu on 1 May 2013. Picture on left shows it creeping on the substrate. Picture on right shows the same fish swimming with all fins erect. Photographs by Debby Ng



Fig. 3. Two examples of Kuiters' dragonet off Pulau Hantu on 23 March 2014. Left picture shows adult at 5 m depth, well-camouflaged against the coral sand substrate with head facing left (Photograph by Neo Mei Lin). Right picture shows a small juvenile at 12 m depth (Photograph by Toh Chay Hoon).