## SINGAPORE BIODIVERSITY RECORDS 2020: 207-208 Date of publication: 30 November 2020. © National University of Singapore

## Tiny cardinalfish, Ostorhinchus nanus, off Kusu Island

Daisuke Taira

d.taira@u.nus.edu

Subjects: Tiny cardinalfish, Ostorhinchus nanus (Teleostei: Apogonidae).

Subjects identified by: Daisuke Taira.

Location, date and time: Singapore Strait off Kusu Island; 17 October 2020; around 1430 hrs.

Habitat: Marine. Coral reef, at around 5 m depth.

**Observer**: Daisuke Taira.

**Observations**: A group of about 10 examples, each around 2 cm in total length, was observed hovering about in the water column around 50 to 100 cm off the substrate (Fig. 1-4). A few of them appeared to have inflated throats (Fig. 2), which suggest that they were oral-brooding.

**Remarks**: Previously an unknown component of the Singapore fauna (see Ng & Lim, 2014), *Ostorhinchus nanus* was first recorded in the country by Liu (2019) based on specimens obtained during the Singapore Marine Fish Expedition in August 2019. This miniature species grows to 3.5 cm total length. It is semi-transparent with a golden-brown mid-lateral stripe that extends onto the caudal fin, and a narrow white stripe immediately above and below the mid-lateral stripe. In addition, the author notes that the tip of the lower jaw is black. This species has been recorded from Indonesia from north-east Sumatra to West Papua, Sabah, the Philippines, Papua New Guinea and the Solomon Islands (Allen & Erdmann, 2012: 399). As Singapore sits in the middle of the geographic range of *Ostorhinchus nanus*, its presence there is not unexpected.

## References

Allen GR & Erdmann MV (2012) Reef Fishes of the East Indies. Tropical Reef Research, Perth, Australia. pp. xiii + 1-424 (Vol. 1), 425-856 (Vol. 2), 857-1292 (Vol. 3).

Liu V (2019) First library of fish DNA from S'pore waters. The Straits Times, Saturday, November 16, 2019: A32.

Ng HH & Lim KKP (2014) A preliminary checklist of the cardinalfishes (Actinopterygii: Gobiiformes: Apogonidae) of Singapore. Check List, 10 (5): 1061-1070.



Fig. 1. Two tiny cardinalfish with a Chinese demoiselle (*Neopomacentrus bankieri*) in the background.



Fig. 2. Lateral view of an example with inflated throat which suggests oral brooding.

Photographs by Daisuke Taira



Fig. 3. Part of the group of *Ostorhinchus nanus* hovering about in the water column. Note that the tip of the lower jaw is black with a white dot.



Fig. 4. Another view of some Ostorhinchus nanus.

Photographs by Daisuke Taira

**Note**: This study was funded by the National Research Foundation, Prime Minister's Office, Singapore under its Marine Science R&D Programme (MSRDP-P05).