

Biodiversity Record: Sea jelly (*Phyllorhiza* sp.) hosting a juvenile scad (*Alepes* sp.)

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Subjects: Scad, *Alepes* sp. (Teleostei: Carangiformes: Carangidae);
Spotted sea jelly, *Phyllorhiza* sp. (Scyphozoa: Rhizostomeae: Mastigiidae).

Subjects identified by: Jiayuan Lin, Ong JunXiang Lumin and Tay Jing Xuan.

Location, date and time: Singapore, Sentosa Boardwalk (bridge linking Singapore Island and Sentosa Island); 17 April 2024; around 1547 hrs.

Habitat: Marine. Sea channel beneath concrete bridge, in open water surrounded by artificial structures populated with sedentary marine life.

Observers: Ong JunXiang Lumin and Tay Jing Xuan.

Observation: A sea jelly with bell estimated at 12–15 cm diameter was observed near the water surface, adjacent to a structure populated with corals and other marine life. A fish of about 10 cm total length, was following the sea jelly closely (Figs. 1, 3 & 4), occasionally darting to the surface seemingly to catch tiny prey (Fig. 2). The pair then descended to depths where they could no longer be observed clearly.



Fig. 1. Dorso-lateral view of the sea jelly and scad (Photograph by: Tay Jing Xuan).

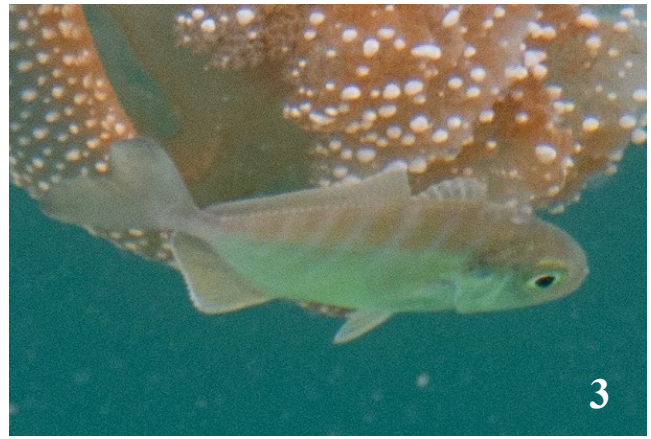


Fig. 2. Dorso-lateral view of scud venturing away from its host. Fig. 3. Postero-lateral view of the scud in close proximity to the jelly's tentacles. Fig. 4. Dorso-anterior view of the scud and latero-ventral view of the sea jelly (Photographs 2 & 3 by: Ong JunXiang Lumin, 4 by: Tay Jing Xuan).

Remarks: Commensal relationships among juvenile carangid fish and sea jellies are known, and it is believed that these fish are afforded protection from their predators by sheltering among their host's venomous tentacles (see Rajkumar et al., 2014). Commensal relationship between the fish and sea jelly genera *Alepes* and *Phyllorhiza* has been recorded. Small fish found nestling among tentacles of a *Phyllorhiza punctata* obtained from the Mediterranean coast of Turkey were identified as juvenile shrimp scuds, *Alepes djedaba* (see Cevik et al., 2011).

Literature cited:

Cevik C, Derici OB, Cevik F & Cavas L (2011). First record of *Phyllorhiza punctata* von Lendenfeld, 1884 (Scyphozoa: Rhizostomeae: Mastigiidae) from Turkey. *Aquatic Invasions*, 6, Supplement 1: S27–S28.
Rajkumar M, Aravind R, Praveen Raj J, Artheeswaran & Pandey AP (2014) Commensalism between jellyfish and juveniles of carangids in coral reef habitats of Palk Bay, India. *Ecology, Environment and Conservation*, 20: 139–141.