

New record of the jellyfish, *Ulmaris snelliusi*, in Singapore

Iffah Iesa¹, Chuan Chee Hoe² & Nicholas Yap Wei Liang³

¹ Lee Kong Chian Natural History Museum, National University of Singapore.

² Borneo Marine Research Institute, Universiti Malaysia Sabah, Kota Kinabalu, Sabah, Malaysia.

³ Reef Ecology Laboratory, Department of Biological Sciences, National University of Singapore.

Contact address: nhmii@nus.edu.sg (Iesa)

Subject: *Ulmaris snelliusi* (Cnidaria: Scyphozoa: Semaestomeae: Ulmaridae).

Subject identified by: Iffah Iesa and Chuan Chee Hoe.

Location and date: Singapore Strait, Saint John's Island; 31 April 2011.

Habitat: Marine. Coastal sea, in open inshore waters.

Observer: Collected by Nicholas Yap Wei Liang.

Observation: The subject (Fig. 1) is a preserved specimen (in 4% formaldehyde solution) deposited in the Zoological Reference Collection (ZRC), of the Lee Kong Chian Natural History Museum, at the National University of Singapore. It was collected nine years ago from the shore of Saint John's Island in April 2011. The specimen has a flat exumbrella; bell diameter of approximately 2 cm, with eight marginal tentacles between 16 rectangular marginal lobes or lappets. Eight rhopalia are present, each nesting evenly between broad lappets. Its exumbrella is speckled with nematocyst warts (Fig. 2). The gradually tapering marginal tentacles are located at the subumbrella, approximately 2 mm from the edge of the umbrella margin (Fig. 2). Its longest tentacles are 9 cm in length, more than 3 times the diameter of its bell. The specimen has been assigned the catalogue number ZRC.CNI.1442.

Remarks: This is believed to be the first record of the genus *Ulmaris* in Singapore waters. Hitherto the 'moon jellyfish', *Aurelia aurita*, was the only member of the family Ulmaridae known in Singapore (see Yap & Ong, 2012).

The morphological characters on the featured specimen appear to match those of *Ulmaris snelliusi* Stiasny (1935). This and *Ulmaris prototypus* Haeckel (1880) are the only two species in the genus *Ulmaris* currently recognized as valid (Collins et al., 2020). They differ in the shape of marginal lappets, exumbrellar texture, shape of mouth arms (Kramp, 1961), and length of tentacles (Stiasny, 1935). *Ulmaris prototypus* has pointed marginal lappets, a smooth exumbrella, relatively broad oral arms and marginal tentacles of similar length to the bell's diameter. *Ulmaris snelliusi* was first described in the report/account of the scyphomedusozoans from the Snellius Expedition (1929–1930) where over 50 examples were collected with a landing net in the shallow waters of Ambon, Indonesia, on a day in April (Stiasny, 1935).

References:

- Collins AG, Jarms G, Morandini AC (2020) World List of Scyphozoa. *Ulmaris* Haeckel, 1880. Accessed through: World Register of Marine Species at: <http://www.marinespecies.org/aphia.php?p=taxdetails&id=267935> on 2020-08-26.
- Haeckel E (1880) Das System der Acraspeden. 2te Hälfte des Systems der Medusen. Acht Nachträge zur Vervollständigung des Systems. Denkschriften der Medicinisch-Naturwissenschaftlichen Gesellschaft zu Jena. 2: 361-672, pl. 21-40.
- Kramp PL (1961) Synopsis of the Medusae of the World. Journal of the Marine Biological Association of the United Kingdom, 40: 7-382. <http://dx.doi.org/10.1017/S0025315400007347>
- Stiasny G (1935) Die Scyphomedusen der Snellius Expedition. Verhandelingen der Koninklijke Akademie van Wetenschappen. Sectie 2, Afdeling natuurkunde. 34: 1-44.
- Yap NWL & Ong JY (2012) A survey of jellyfish (Cnidaria) around St John's Island in the Singapore Straits. Contributions to Marine Science, 2012: 57-74.



Fig. 1. Whole preserved specimen of *Ulmaris snelliusi* with two views of the same individual: exumbrella (left) and subumbrella (right). Scale bar = 1 cm. Photographs by Iffah Iesa

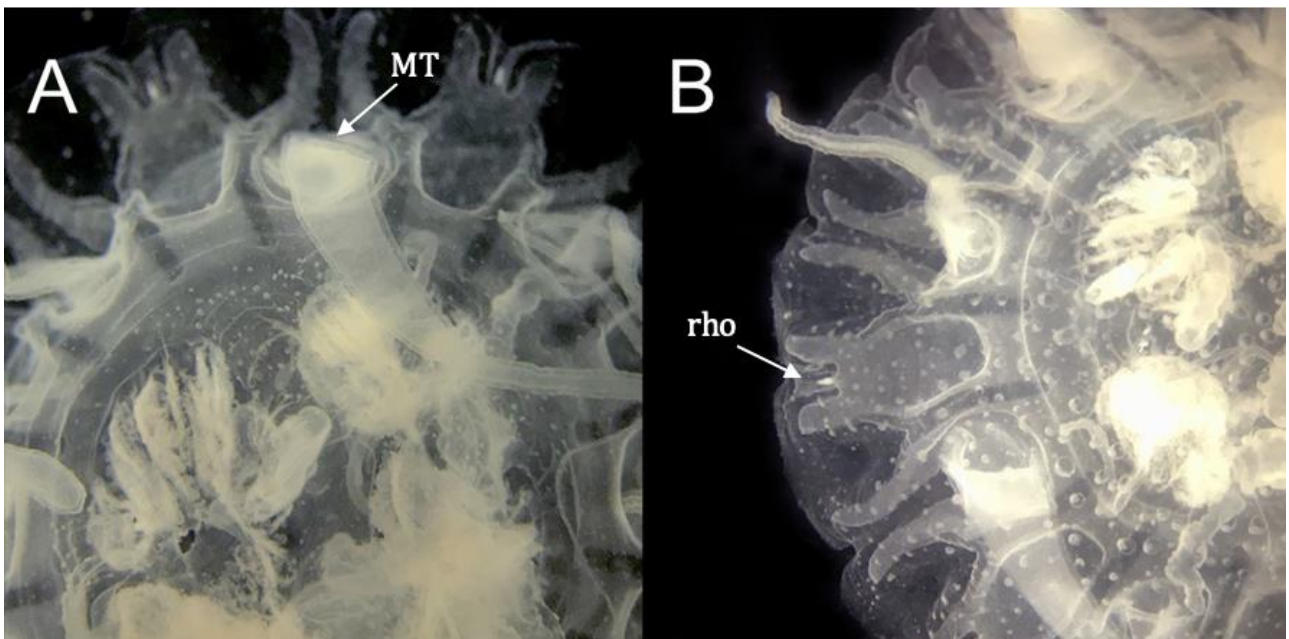


Fig. 2. Close-up views of the bell of *Ulmaris snelliusi*: A. Subumbrella view of marginal tentacle attachment (MT); B. Exumbrella view with rhopalium (rho) and nematocyst warts. Photographs by Iffah Iesa