

Biodiversity Record: The sea anemone, *Actinoporus elongatus*, at Lazarus Island

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Subjects: Very long anemone, *Actinoporus elongatus* (Cnidaria: Hexacorallia: Actiniaria: Capneidae).

Subjects identified by: James Philip De Vera Cabatbat, Raynor Ruibin Fong, Kendra Kah Siew Yap and Nicholas Wei Liang Yap

Location, date and time: Singapore Strait, Lazarus Island (part of the St. John's Island Complex), Eagle's Bay, near Water Sports Facility; 9 May 2024, 0545–0630 hrs.

Habitat: Marine. Artificial lagoon with soft, silty sediment, populated by spoon seagrass (*Halophila ovalis*) and needle seagrass (*Halodule* sp.).

Observers: James Philip De Vera Cabatbat, Raynor Ruibin Fong, Kendra Kah Siew Yap, Liong Leong Low, Theresa Linting Su, Yong Jen Tang and Nicholas Wei Liang Yap,

Observations: Two individuals were found exposed at low spring tide during an intertidal survey. The distal ends of both individuals were extended from the substratum (Figs. 1 & 2) and their orals discs were fully expanded to approximately 5.5 cm in diameter (Fig. 1). Their short tentacles, resembling a circular, creamy-white Velcro patch, were also observed extending from the sediment.

One of the two individuals was carefully extricated intact from a depth of over 1 m in the substrate. After a tissue sample was excised for genetic work, the entire specimen was fixed in 10% formalin and deposited as voucher material at the Zoological Reference Collection of the Lee Kong Chian Natural History Museum, at the National University of Singapore, for future scientific research.

Remarks: *Actinoporus elongatus* was first described from the Quirimbas Islands, Mozambique, by O. Carlgren (1900). It bears a strong anatomical likeness to *Actinoporus elegans*, the type species of the genus *Actinoporus*, from the Caribbean (Carlgren, 1900). The two species occur in geographically different marine realms (see Spalding et al., 2007 for definitions of marine realms), with *Actinoporus elongatus* in the western Indo-Pacific by Fautin et al. (2015), and *Actinoporus elegans* in the tropical Atlantic. Accounts of *Actinoporus elegans* in the Indo-Pacific are likely erroneous and may be misidentification of *Actinoporus elongatus*. As such, Fautin et al. (2015) posited that Menon's (1927) record of *Actinoporus elegans* from south India may have been of *Actinoporus elongatus*.

In Singapore, *Actinoporus elongatus* is rarely seen, and regarded as 'Data Deficient' (Yap et al., 2024). Evidently, more research is required to better understand the biology and ecology of this species. This species was first documented in published literature in 2015 from Marina East, Big Sister's Island, and the Cyrene Reefs (Fautin et al., 2015). However, there is an earlier report from the natural shores of Pulau Semakau in 2011 on a citizen scientist's blog (see Loh, 2011).

Actinoporus elongatus resembles two other sea anemones from the genus *Stichodactyla*, *Stichodactyla tapetum* and *Stichodactyla haddoni*, in having short, exposed tentacles when burrowed in soft sediment. However, members of *Stichodactyla* have unbranched, finger-like tentacles while those of *Actinoporus elongatus* are branched, with multiple projections stemming from each branch. The oral disc of *Actinoporus elongatus* is usually domed, while that of *Stichodactyla* is usually undulating. Additionally, the distal column of *Actinoporus elongatus* is similar in diameter to the

oral disc to which it is attached, while the distal column of *Stichodactyla* is narrower than its oral disc (Fautin et al., 2009, 2015).

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Fig. 1. In-situ dorsal view of the oral disc of the first *Actinoporus elongatus* specimen (Photograph by: Raynor Ruibin Fong).



Fig. 2. Dorsal view of the second *Actinoporus elongatus* specimen on another region of the shore. As its tentacles are contracted, immediate recognition of this animal as a sea anemone may be challenging to some. We indicate the visible actinopharynx (dotted arrow) and verruca (solid arrow), to denote that this blob-like animal is a sea anemone (Photograph by: Liong Leong Low).

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