

Mangrove box jellyfish, *Tripedalia cystophora*, in Singapore

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Subjects: Mangrove box jellyfish, *Tripedalia cystophora* (Cnidaria: Cubozoa: Carybdeida: Tripedaliidae).

Subjects identified by: Iffah Iesa.

Location and date: Pulau Ubin; 6 July 2004.

Habitat: No information available.

Observer/collector: Unknown.

Observations: This record is based on two small specimens preserved in the Zoological Reference Collections of the Lee Kong Chian Natural History Museum at the National University of Singapore. They are 0.8 x 1.0 and 0.5 x 0.5 cm (bell height x bell width) respectively, and catalogued as ZRC.CNI.1329. The attached photograph depicts a lateral view of the larger specimen.



Photograph by Iffah Iesa.

Remarks: Box jellyfishes are known to deliver potent envenomation in the long history of human-box jellyfish contact, particularly those associated with the 'Irukandji syndrome', which is a series of indirect symptoms triggered by the infliction of venom upon contact with a box jellyfish. The encounter with the box jellyfish to trigger an Irukandji syndrome may even be mild or go unnoticed. Symptoms include muscle cramps, back pain, chest and abdominal pain, nausea, vomiting, headache and palpitations (Cegolon *et al.*, 2013). However, not all box jellyfish are equally venomous or cause the Irukandji syndrome. Some symptoms resembling Irukandji syndrome can also result from medusae in the classes Hydrozoa or Scyphozoa (see Fenner *et al.*, 1993). Therefore, identification of the jellyfish present around Singapore is important for appropriate risk management. Historically, there have been collections and sightings of box jellyfish around Singapore, such as *Chiropsalmus quadrigatus* and species from the genus *Carybdea* (Sharma, 1973). It is unknown whether these still occur in Singapore's waters.

Tripedalia cystophora Conant (1897), while classified as a carybdeid box jellyfish, is not known to inflict significant venom on humans. It was recorded from the Caribbean Sea and Central Indo-Pacific (see WoRMS, 2012). This species was observed in abundance, among half-submerged roots, in shallow, muddy waters of mangrove swamps (Conant, 1897). This could be the first record of *Tripedalia cystophora* in Singapore.

References:

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- Sharma, R. E., 1973. Noxious and toxic animals. In: Chuang, S.H. (ed.). *Animal Life and Nature in Singapore*. Singapore University Press. pp. 229-250.
- World Register of Marine Species (WoRMS), 2012. *Tripedalia cystophora* Conant, 1897. In: Collins, A. G. & G. Jarms. *World list of Cubozoa*. <http://www.marinespecies.org/aphia.php?p=taxdetails&id=291241>. Accessed on 23 November 2017.