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Ctenophores (comb jellies) found in Sri Lankan waters

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Ctenophora is a phylum of invertebrates that live in marine waters across the world. They are notable for the presence of cilia, which are used for swimming and are the largest animals to swim with the help of cilia. Commercially, ctenophores are used as ornamental organisms in the marine aquarium industry due to their bioluminescence but they cause negative impacts on fisheries by reducing fish catchability by clogging into nets. However, ctenophores are poorly known and so far only two species, including a new variety (*Beroe flemingii* Eschscholtz, 1829, and *Pleurobrachia globosa* var. *ceylonensis* Browne, 1905) have been reported from Sri Lankan waters. Therefore, a systematic year-round survey was carried out from January 2017 to April 2018 to identify ctenophore species occur in coastal waters of Sri Lanka. Samples were collected using zooplankton-nets and transported to the laboratory in both live and preserved forms (using 5% acid Lugol's solution), for taxonomic identification. This study re-reported *B. flemingii* and *P. globosa* var. *ceylonensis* after 114 years, while four more species, *Bolinopsis indosinensis* Dawydoff, 1946, *Cestum veneris* Lesueur, 1813, *Haeckelia beehleri* Mayer, 1912 and *Hormiphora labialis* Ghigi, 1909 were recorded for the first time in Sri Lankan waters. Of all reported species, *B. flemingii* ($n = 4$) and *C. veneris* ($n = 1$), a very rare species, were recorded from the northwest coast, *H. beehleri* ($n = 13$) was recorded from the southern coast, while *H. labialis* ($n = 7$) was recorded from western coast. *Bolinopsis indosinensis* ($n = 187$) and *P. globosa* var. *ceylonensis* ($n = 245$) were recorded along the entire coastal belt of Sri Lanka. Among the six species, *P. globosa* var. *ceylonensis* was the smallest, having a body length of ~10 mm, and *C. veneris* had the largest body length of ~600 mm. Body lengths of other four species ranged from 20 to 70 mm. None of the reported species was found to be hazardous to humans. Bloom-forming species, such as *B. indosinensis* and *P. globosa* var. *ceylonensis* are the species claimed to be responsible for clogging and damaging fishing nets.

Keywords: Bioluminescence, Cilia, Morphology, Taxonomy, Zooplankton

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