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ZOOLOGICAL SURVEY OF INDIA

Ministry of Environment, Forest & Climate Change

CTENOPHORA

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FAUNA OF INDIA CHECKLIST



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Introduction: Ctenophores are free-living, radially symmetrical diploblastic acoelomates. Comb-jellies, named after swimming plates to refer to the comb rows, are also known as sea gooseberries and sea walnuts. They are the largest ciliated swimming animals. Eight comb rows and ciliary plates known as ctenes distinguish the species. They have specialised adhesive structures called colloblasts that they use to capture prey in an approach similar to

Cnidaria nematocysts, but their morphologies are very different.

Global diversity: The Phylum comprises of 184 described species globally.

Diversity in India: A total of 21 species belonging to 6 genera, 5 families, 5 orders and 2 classes are recorded.

Diversity in States: Presented in table 1

Table 1: Ctenophora of India, State-wise distribution

Sl. No.	State / Union Territory	No. of Species
1.	Gujarat	1
2.	Goa	1
3.	Kerala	5
4.	Odisha	3
5.	Tamil Nadu	14
6.	West Bengal	6
7.	Andaman & Nicobar	3
8.	State Unknown	1
	Total number of species	21

Endemism: No endemism has been recorded from India.

Habitat: Ctenophores are exclusively marine organisms found from polar region to tropical regions, but few species found in brackish waters. They distributed from coastal shallow water environment to deeper waters.

Ecological Significance: Ctenophores play an important role in food chain, prey on smaller zooplanktonic copepods, and serves food source for larger fishes. Some species host for a variety of endoparasites.

Human Significance: No major human significance of ctenophores is reported.



However, some species are being used for public aquarium purpose and research purpose.

Threatened species: No species of ctenophore from India is assessed for IUCN threatened categories.

Protected Species as per WPA (2022): Ctenophores are not listed under any schedules of Indian Wildlife (Protection) Act, 1972.

Species under CITES: There is no species enlisted under the CITES Appendices.

Invasive alien species: One species *Vallicula*

multiformis Rankin, 1956 belonging to the family Coeloplanidae recorded as Invasive alien species from Indian waters.

Gap areas: The taxonomy, ecology, diversity and distribution of ctenophore studies are less from Indian waters in comparison with global context. Hence, the phylum considered as lesser known marine animals in India. These animals are small, transparent, delicate in pelagic waters and very sensitive to collection and preservation. Apart from opportunistic studies, more intensive studies are required to analyse the ctenophore diversity and their role in marine ecosystem of Indian waters.

Systematic list: Species list cited below (Table 2).

Table 2: Ctenophores of India

Sl. No.	Species
1.	<i>Pleurobrachia globosa</i> var. <i>bengalensis</i> Annandale & Kemp, 1915
2.	<i>Pleurobrachia globosa</i> Moser, 1903
3.	<i>Pleurobrachia pileus</i> (O. F. Müller, 1776)
4.	<i>Cestum veneris</i> Lesueur, 1813
5.	<i>Ctenoplana kowalevskii</i> Korotneff, 1886
6.	<i>Ctenoplana bengalensis</i> Gnanamuthu & Nair, 1948
7.	<i>Coeloplana agniae</i> var. <i>striata</i> Dawydoff, 1938
8.	<i>Coeloplana astericola</i> Mortensen, 1927
9.	<i>Coeloplana duboscqui</i> Dawydoff, 1930
10.	<i>Coeloplana gonoctena</i> var. <i>rosea</i> Dawydoff, 1938
11.	<i>Coeloplana indica</i> Devanesen & Varadarajan, 1942
12.	<i>Coeloplana krusadiensis</i> Devanesen & Varadarajan, 1942
13.	<i>Coeloplana mesnili</i> Dawydoff, 1938
14.	<i>Coeloplana (Benthoplana) meteoris</i> Thiel, 1968
15.	<i>Coeloplana sophiae</i> Dawydoff, 1938
16.	<i>Vallicula multiformis</i> Rankin, 1956
17.	<i>Mnemiopsis</i> sp.
18.	<i>Beroe cucumis</i> Fabricius, 1780
19.	<i>Beroe forskalii</i> Milne Edwards, 1841
20.	<i>Beroe gracilis</i> Künne, 1939
21.	<i>Beroe ovata</i> Bruguière, 1789



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