





## JULY 2025

## **ZOOLOGICAL SURVEY OF INDIA**

Ministry of Environment, Forest & Climate Change

### CNIDARIA: ANTHOZOA: HEXACORALLIA: CERIANTHARIA

Tamal Mondal\* and C. Raghunathan

Zoological Survey of India, Prani Vigyan Bhavan, M-Block, New Alipore – 700053, Kolkata, West Bengal \*Correspondence author: t\_genetics@yahoo.com

DOI: https://doi.org/10.26515/Fauna/2/2025/Cnidaria:Anthozoa:Ceriantharia

Key words: Tube anemones, Solitary polyps, Soft-bodied, Burrowers

Citation: Tamal Mondal and Raghunathan, C. (2025). Fauna of India Checklist: Cnidaria: Anthozoa: Hexacorallia: Ceriantharia. Version 2.0. Zoological Survey of India.

DOI: https://doi.org/10.26515/Fauna/2/2025/Cnidaria:Anthozoa:Ceriantharia

### Comments on the checklist:

E-mail your comments and suggestions to improve the checklist to zsifaunachecklists@gmail.com

# FAUNA OF INDIA CHECKLIST

# CNIDARIA: ANTHOZOA: HEXACORALLIA: CERIANTHARIA

### Tamal Mondal\* and C. Raghunathan

Zoological Survey of India, Prani Vigyan Bhavan, M-Block, New Alipore – 700053, Kolkata, West Bengal \*Correspondence author: t\_genetics@yahoo.com

Introduction: Ceriantheia is a subclass under the Class Anthozoa of Phylum Cnidaria. The faunal group is commonly known as tube anemones or tube dwelling anemones. The animals have two whorls of different sized tentacles i.e., marginal tentacles and labial tentacles. The animal has cylindrical worm-like body, resides in tube. The faunal community is protandrous hermaphrodite in nature. The larval development of most of tube anemones is not clear. However, several of the species of the faunal group is having pelagic larvae and they are named after it and their life cycle is

unknown. If the animal is disturbed from outside it can retract itself into the tube and if it is disturbed from the down by burrowing animals it can eject itself and relocate and secrete a new tube

**Global diversity:** A total of 140 species of ceriantheia are recorded across the world's oceans.

**Diversity in India:** Eight species of certiantharians are reported from India representing two orders and two families.

**Diversity in States:** Presented in table 1.

Table 1: Ceriantharia of India, State-wise distribution

Sl. No.	State / Union Territory	No. of Species
1.	Odisha	01
2.	Tamil Nadu	04
3.	Andaman and Nicobar	04
	Total number of species	08

**Endemism:** No endemism has been recorded from India.

**Habitat:** Certiantharians are sessile marine faunal communities found in seagrass meadows, rocky bottoms, coral rubble, coral reefs, sandy patches and mangrove zones. Ceriantharians are found from intertidal region to deep sea.

**Ecological Significance** Tubes anemones are the prey of the giant nudibranchs. Mostly tube

anemones are suspended feeder but they also feeds on small fish and planktons captured by its tentacles. The tubes are also used by other animals as their hiding place. Several marine invertebrates are also displayed commensal relationship with tube anemones.

**Human Significance:** A few Certiantharia are used in the salt-water aquarium to increase aesthetic view.

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

**Protected Species as per WPA (2022):** Four species of Certiantharia are listed under Schedule-I of Indian Wildlife (Protection) Amendment Act, 2022.

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

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

**Invasive alien species:** No certiantharia species is reported from India as an invasive.

Gap areas: Studies on certiantharia is very scanty due to the difficulties in the collections in global as well as Indian context. The tube anemones are not well explored in the Indian territorial waters and required to conduct extensive surveys to explore their diversity, biology and ecology.

Table 2: Certiantharians of India

Sl. No.	Species
1.	Cerianthus filiformis Carlgren, 1924
2.	Cerianthus lloydii Gosse, 1859
3.	Cerianthus punctatus Uchida, 1979
4.	Pachycerianthus maua (Carlgren, 1900)
5.	Arachnactis panikkari Nair, 1949
6.	Arachnactis indica Panikkar, 1947
7.	Anactinia pelagica Annandale, 1909
8.	Anactinia carlgreni Nair, 1949

#### References

Stampar, S.N., Maronna, M.M., Kitahara, M.V., Reimer, J.D., Beneti, J.S. and Morandini, A.C., 2016. Ceriantharia in current systematics: life cycles, morphology and genetics. The Cnidaria, past, present and future: the world of medusa and her sisters, pp. 61-72.

