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ZOOLOGICAL SURVEY OF INDIA

Ministry of Environment, Forest & Climate Change

CNIDARIA: ANTHOZOA: HEXACORALLIA: ZOANTHARIA

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FAUNA OF INDIA CHECKLIST



CNIDARIA: ANTHOZOA: HEXACORALLIA: ZOANTHARIA

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Introduction: The faunal communities under the Order Zoantharia are commonly known as Zoanthidea or Zoanthinaria or zoanthid. These organisms are closely related to Actiniaria (sea anemones). They are sessile, epibenthic marine organisms found all over the world in coral reefs, the deep sea, and a variety of other marine environments. Individual polyps are held together by a fleshy stolon or a mat made of small sediment, sand, and rock fragments. The

majority of zoanthids have different colors due to symbiotic relationships with zooxanthellate algae.

Global diversity: The order encompasses 300 described species worldwide.

Diversity in India: In India, 10 species belonging to 4 genera and 2 families are recorded.

Diversity in States: Presented in table 1.

Table 1: Zoanthids of India, State-wise distribution

Sl. No.	State / Union Territory	No. of Species
1.	Andhra Pradesh	2
2.	Gujarat	7
3.	Goa	1
4.	Maharashtra	1
5.	Tamil Nadu	3
6.	Andaman & Nicobar	5
7.	Lakshadweep	3
	Total number of species	10

Endemism: No endemism reported from Indian waters.

Habitat: They are only found in marine environments. Though they are most commonly found on reefs or growing on rocks in wave-surge areas, they also live in the deep sea, intertidal regions, reef flats, lagoons, and a variety of other marine habitats.

Ecological Significance: Space competitor in marine ecosystem. They symbiosis with zooxanthellate marine algae and also associated with several coral reef dependent organisms.

Human Significance: Because of zooxanthellae microalgae, aquarium hobbyists prefer zoanthids as marine aquarium species. They produce several secondary metabolites,



bioactive compounds which have various pharmaceutical importance.

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

Protected Species as per WPA (2022): All the 10 species are protected under any Schedule-I of Indian Wildlife (Protection) Amendment Act, 2022.

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

Species under CITES: Indian Zoanthids are not listed under any appendices of CITES.

Invasive alien species: No Zoanthids species are reported to be invasive in Indian waters.

Gap areas: Zoanthids are poorly documented from coastal states of India and Island ecosystem. Comprehensive studies are required to explore the faunal group from the coasts of India.

Table 2: Zoanthids of India

Sl. No.	Species
1.	<i>Sphenopus marsupialis</i> (Gmelin, 1791)
2.	<i>Palythoa heliodiscus</i> (Ryland & Lancaster, 2003)
3.	<i>Palythoa tuberculosa</i> (Esper, 1805)
4.	<i>Palythoa mutuki</i> (Haddon & Shackleton, 1891)
5.	<i>Zoanthus pulchellus</i> (Duchassaing & Michelotti, 1860)
6.	<i>Zoanthus gigantus</i> Reimer & Tsukahara in Reimer, Ono, Iwama, Takishita, Tsukahara & Maruyama, 2006
7.	<i>Zoanthus sansibaricus</i> Carlgren, 1900
8.	<i>Zoanthus sociatus</i> (Ellis, 1768)
9.	<i>Zoanthus vietnamensis</i> Pax & Müller, 1957
10.	<i>Isaurus tuberculatus</i> Gray, 1828

References:

- Rocha, C.D., 2013. Bioactive compounds from Zoanthids (Cnidaria: Anthozoa): A brief review with emphasis on alkaloids. *International Research Journal of Biochemistry and Bioinformatics*, **3**(1): 1-6.
- Pérez, C.D., Vila-Nova, D.A. and Santos, A.M., 2005. Associated community with the zoanthid *Palythoa caribaeorum* (Duchassaing & Michelotti, 1860) (Cnidaria, Anthozoa) from littoral of Pernambuco, Brazil. *Hydrobiologia*, **548**:207-215.
- Reimer, J.D., 2010. Key to field identification of shallow water brachynermic zoanthids (Order Zoantharia: Suborder Brachynermina) present in Okinawa. *Galaxea, Journal of Coral Reef Studies*, **12**(1): 23-29.

