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# FAUNA OF INDIA CHECKLIST

**ONLINE VERSION 1.0** 



## **NEMERTEA**

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**ZOOLOGICAL SURVEY OF INDIA** 

Ministry of Environment, Forest & Climate Change

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**Introduction**: Nemerteans also known as ribbon worms or proboscis worms belong to the Phylum Nemertea. They are characterized by unsegmented, coelomate, bilaterally symmetrical as well as dorsoventrally flattened structural organization of slim body, usually only a few millimetres wide, although a few have relatively short but wide bodies. Most of the species are brightly colored with different patterns of pigmentation such as yellow, orange, red and green coloration.

**Global diversity**: The Phylum comprises of 1371 described species under 5 classes.

**Diversity in India**: In India, 10 species belonging to 9 genera and 7 families in four orders are recorded.

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

**Table 1:** Nemertea of India, State-wise distribution

| Sl. No. | State/UT          | No. of<br>Species |
|---------|-------------------|-------------------|
|         | INDIA TOTAL       | 10                |
| 1.      | Gujarat           | 1                 |
| 2.      | Kerala            | 1                 |
| 3.      | Tamil Nadu        | 3                 |
| 4.      | Andaman & Nicobar | 2                 |
| 5.      | Lakshadweep       | 6                 |

Endemism: No endemism has been recorded from India.

**Habitat**: The majority of nemerteans are found in marine benthic habitats, but several species are limnic, terrestrial, or marine pelagic.

**Ecological Significance**: Nemertea plays an important ecological role in the food chain. Most species are carnivores, and few are voracious predators in food chain.

**Human Significance**: No human significance has been reported yet. However, few ribbon worms produce tetrodotoxin which may have some pharmacological significance.

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**Threatened species**: No species of nemertea from India is assessed for IUCN threatened categories. **Protected Species as per WPA:** Nemerteans 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**: No nemertea species is reported to be invasive in Indian waters.

**Gap areas:** Nemertea studies from India were poorly recorded with only 10 species from the coastal areas of states and union territories. The discovery of new species or a lack of knowledge about nemertean species from India may be due to challenges in field collection, preservation, or a lack of literature. Thus, more focus is required to studies on nemertean from Indian waters.

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

Table 2: Nemerteans of India

| Sl. No. | Species   |
|---------|---|
| 1.      | Prosadenoporus buergeri Punnett, 1903                       |
| 2.      | Dinonemertes investigatoris Laidlaw, 1906                   |
| 3.      | Drepanophorella rosea (Punnett, 1903)                       |
| 4.      | Balionemertes australiensis Sundberg, Gibson & Olsson, 2003 |
| 5.      | Gorgonorhynchus repens Dakin & Fordham, 1931                |
| 6.      | Cerebratulus gardineri Punnett, 1903                        |
| 7.      | Evelineus mcintoshii (Langerhans, 1880)                     |
| 8.      | Baseodiscus hemprichii (Ehrenberg, 1831)                    |
| 9.      | Notospermus tricuspidatus (Quoy & Gaimard, 1833)            |
| 10.     | Notospermus albovittatus (Stimpson, 1855)                   |

#### **References:**

Raghunathan, C. and Mondal, T., 2018. Miscellaneous Marine Fauna. In: *Faunal Diversity of Biogeographic Zone: Islands of India*: 103-114. (Published by the Director, Zool. Surv. India, Kolkata)

Sreeraj, C.R., 2020. Nemertea. In: *Faunal Diversity of Biogeographic Zones: Coasts of India*: 603-606. (Published by the Director, Zool. Surv. India, Kolkata)

von Döhren, J., 2015. Nemertea. In: Wanninger, A. (Eds.), *Evolutionary Developmental Biology of Invertebrates 2*. Springer, Vienna. https://doi.org/10.1007/978-3-7091-1871-9\_8

WoRMS 2023. Nemertea. Accessed at: https://www.marinespecies.org/aphia.php?p=taxdetails&id=152391 on 2023-05-11

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