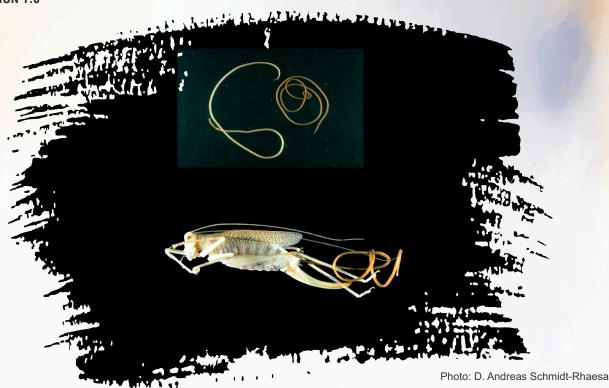
FAUNA OF INDIA CHECKLIST

ONLINE VERSION 1.0



NEMATOMORPHA

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Comments on the checklist: E-mail your comments and suggestions to improve the checklist to zsifaunachecklists@gmail.com and subbuka.zsi@gmail.com



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ZOOLOGICAL SURVEY OF INDIA Ministry of Environment, Forest & Climate Change

PHYLUM: NEMATOMORPHA

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Introduction: They phylum Nematomorpha are commonly known as horsehair worms or Gordian worms. They are freshwater obligate parasites of arthropods such as beetles, mantids, grasshoppers, cockroaches etc. The larvae are parasitic and adults are free living and found in diverse freshwater habitats. They range in size from 50 to 100mm and some species reaching up to 2 meters. Adults are free living freshwater organisms and larvae are parasitic on grasshoppers, crickets, cockroaches, beetles, crabs etc. Adults have external cuticle with non-functional gut and without excretory, respiratory and circulatory systems. When the parasite larvae matures, the infected host actively seek a waterbody, drawn itself and release the free living adults. Phylogenetically, nematomorphs are closely related to nematodes.

Global diversity: Globally 19 Genera and 356 species known.

Diversity in India: In India, 22 species are known.

SI.		No. of	No. of Endemic
No.	State/UT	species	species
	INDIA TOTAL	22	
1.	Andhra Pradesh	0	
2.	Arunachal Pradesh	0	
3.	Assam	4	
4.	Bihar	0	
5.	Chhattisgarh	0	
6.	Gujarat	0	
7.	Goa	0	
8.	Haryana	0	
9.	Himachal Pradesh	0	
10.	Jharkhand	0	
11.	Karnataka	0	
12.	Kerala	0	
13.	Madhaya Pradesh	0	
14.	Maharashtra	0	
15.	Manipur	0	
16.	Meghalaya	6	
17.	Mizoram	3	
18.	Nagaland	4	
19.	Odisha	0	
20.	Punjab	1	
21.	Rajasthan	0	

Table-01. Diversity in States.

Sl.		No. of	No. of Endemic
No.	State/UT	species	species
22.	Sikkim	1	
23.	Tamil Nadu	2	
24.	Telangana	0	
25.	Tripura	0	
26.	Uttarpradesh	0	
27.	Uttarakhand	2	
28.	West Bengal	4	
29.	Andaman & Nicobar	0	
30.	Chandigarh	0	
31.	Dadra Nagar Haveli, Daman & Diu	0	
32.	Delhi	1	
33.	Jammu & Kashmir	0	
34.	Ladakh	0	
35.	Lakshadweep	0	
36.	Puducherry	0	

Endemism: There is inadequate information on nematomorphs to ascertain endemism.

Habitat: The adults are free living in wetlands and larvae are parasitic.

Ecological Significance: They are important parasites of insects and other arthropods.

Human Significance: None.

Threatened species: No species are reported as threatened.

Protected Species as per WPA (2022): Nematomorphs are not included in any schedules of Wildlife Protection Act.

Species under CITES: Nematomorphan species are not listed under the Schedules of CITES.

Invasive alien species: Species reported from India are not reported as invasive.

Gap areas: Nematomorpha fauna of India is poorly known, most of the species are reported from eastern and north-eastern India.

Systematic list CLASS GORDIOIDA ORDER GORDIOIDEA

FAMILY GORDIIDAE

- 1. Acutogordius doriae (Camerano, 1890)
- 2. Acutogordius finni Schmidt-Rhaesa & Schwarz, 2016
- 3. Acutogordius sulawensis Schmidt-Rhaesa & Geraci, 2006
- 4. Gordius fulgur (Baird, 1861)
- 5. Gordius paronae (Camerano, 1903)
- 6. Gordius robustus (Leidy, 1851)
- 7. *Gordius shaerura* (Baird, 1853)
- 8. Gordius zavattarii (Camerano, 1908)

FAMILY CHORDODIDAE

9. Beatogordius nagalandis Yadav, Schmidt-Rhaesa & Limatemjen, 2017

- 10. Chordodes combiareolatus Schmidt-Rhaesa, Limatemjen & Yadav, 2015
- 11. Chordodes cf. furnessi (Montgomery, 1898)
- 12. Chordodes lasuboni Schmidt-Rhaesa & Yadav, 2013
- 13. Chordodes liguligerus (Römer, 1895)
- 14. Chordodes mizoramensis Schmidt-Rhaesa & Lalramliana, 2011
- 15. Chordodes moutoni Camerano, 1895
- 16. Chordodes pollonerae (Camerano, 1912)
- 17. Chordodes siamensis (Camerano, 1903)
- 18. Chordodes tjorvenae Schmidt-Rhaesa & Lalramliana, 2016
- 19. Gordionus kaschgaricus (Camerano, 1897)
- 20. Parachordodes pustulosus (Baird, 1853)
- 21. Parachordodes roccatii (Camerano, 1912)
- 22. Paragordius stylosus (Linstow, 1883)

Reference

- Yadav, A.K., Khynriam, D., Limatemjen and Schmidt-Rhaesa, A. 2021. New Records of Horsehair Worms (Nematomorpha) from India and a Summary of All Known Indian Species. *Taxonomy*, 1: 14–22. https://doi.org/10.3390/taxonomy1010003.
- Zhang, Z.-Q. (2011). "Animal biodiversity: An introduction to higher-level classification and taxonomic richness" (PDF). *Zootaxa*. **3148**: 7–12. doi:10.11646/zootaxa.3148.1.3