

FAUNA OF INDIA CHECKLIST

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ARTHROPODA: ARACHNIDA: SCHIZOMIDA, Petrunkevitch, 1945

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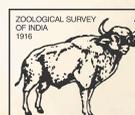
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Comments on the checklist:

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

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Introduction: Schizomida is an arachnid order under Phylum Arthropoda. The term “schizomida” means split or cleaved middle, which refers to the way the prosoma is divided into two separate plates. Schizomids are easily distinguished from other arachnids by the peculiar morphology of the prosoma in which the dorsal surface is divided into a series of platelets (Harvey, 2003). The schizomids are commonly known as short-tailed whip scorpions. They are very tiny in size, usually less than 5mm in length. They are soft-bodied arachnids, somewhat similar in appearance to whip scorpions with a short tail or flagellum like structure. The schizomids use only six legs for walking, while their first two legs become modified to serve as sensory organs. (Humphreys *et al.*, 1989).

Global diversity : A total of 372 schizomid species are distributed under 71 genera and 02 families. However, 14 fossils species under 08 genera have also been described. (World Schizomida Catalog, 2022)

Diversity in India: At present, 07 species belonging to 06 genera under 01 family have been reported from India.

Diversity in states

Sl.No.	State/Union Territory	No. of Species
	INDIA Total	07
1	Andhra Pradesh	0
2	Arunachal Pradesh	1
3	Assam	0
4	Bihar	1
5	Chhattisgarh	0
6	Gujarat	0
7	Goa	0
8	Haryana	0
9	Himachal Pradesh	0
10	Jharkhand	1
11	Karnataka	0
12	Kerala	1
13	Madhya Pradesh	0
14	Maharashtra	1
15	Manipur	0

Sl.No.	State/Union Territory	No. of Species
16	Meghalaya	1
17	Mizoram	0
18	Nagaland	0
19	Odisha	0
20	Punjab	0
21	Rajasthan	0
22	Sikkim	0
23	Tamil Nadu	0
24	Telangana	0
25	Tripura	0
26	Uttar Pradesh	0
27	Uttarakhand	0
28	West Bengal	2
29	Andaman & Nicobar Islands	0
30	Chandigarh	0
31	Dadra Nagar Haveli, Daman & Diu	0
32	Delhi	0
33	Jammu & Kashmir	0
34	Ladakh	0
35	Lakshadweep	0
36	Puducherry	0
37	State Unknown	0

Endemism: 06 schizomid species are endemic to India.

Habitat: Individuals of the arachnid order Schizomida are nocturnal in habit and usually common in tropical and subtropical regions. They are found in variety of habitats, especially in warm and humid conditions to avoid desiccation. They typically live in rainforest leaf litter, particularly in the top layer of organic soil, under rocks, in and beneath rotten logs, and even in caves (Beccaloni, 2009).

Ecological Significance: The short-tailed Whip-Scorpions are active predators and feeding upon wide range of invertebrates. Their prey list includes millipedes, cockroaches, isopods, termites, worms, booklice, springtail etc. (Beccaloni, 2009). Being predatory in nature, the short-tailed Whip-Scorpions help in maintenance of ecological balance by reducing richness of its prey.

Human Significance: The short-tailed whip scorpions are able to secrete an acidic spray from their abdominal tip as a part of its defence mechanism. However, this secretion is not harmful to human, but it sometime causes burning sensation to human body.

Threatened species: None of the species is included in the list of threatened species as per IUCN.

Protected species as per WPA (2022): None of the species is considered as protected species as per WPA (2022).

Species under CITES: None of the species is considered under CITES.

Invasive alien species: None of the species is treated as invasive alien species.

Gap areas: The short-tailed whip scorpions are very tiny in size, nocturnal in habit and live in extreme environments; therefore, they usually remain unnoticed. Extensive surveys need to be conducted to explore their diversity, biology, and ecology.

Systematic list of Schizomida of India (*Endemic species marked with **)

Order Schizomida

Family Hubbardiidae Cook, 1899

1. *Burmezomus chaibassicus* (Bastawade, 2002) *
2. *Gravelyzomus chalakudicus* (Bastawade, 2002) *
3. *Neozomus tikaderi* (Cokendolpher, Sissom and Bastawade, 1988) *
4. *Ovozomus lunatus* (Gravely, 1911)
5. *Schizomus arunachalicus* Bastawade, 2006*
6. *Schizomus kharagpurensis* Gravely, 1912 *
7. *Trithyreus sijuensis* (Gravely, 1924) *

References:

- Beccaloni, J. 2009. Arachnids. University of California Press: 320pp.
- Harvey, M.S. 2003. Catalogue of the Smaller Arachnid Orders of the World: Amblypygi, Uropygi, Schizomida, Palpigradi, Ricinulei and Solifugae. Canberra, AU: CSIRO Publishing: 400pp.
- Humphreys, W.F., Adams, M. and Vine, B. 1989. The biology of *Schizomus vinei* (Chelicerata: Schizomida) in the caves of Cape Range, Western Australia. *J. Zool., London* **217**: 177–201.
- World Schizomida Catalog. 2022. World Schizomida Catalog. Natural History Museum Bern, online at <http://wac.nmbe.ch> (accessed on 25th April, 2023).