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ARTHROPODA: ARACHNIDA: SCHIZOMIDA, Petrunkévitch, 1945

Mrinmoy Kumar Kayal^{1,2} & Souvik Sen^{1,3,*}

¹Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata – 700053, West Bengal, India; ²mrinmoykayal2012@gmail.com; <https://orcid.org/0009-0003-2324-0306>; ³sensouvik07@gmail.com; <https://orcid.org/0000-0002-7149-5376>; *Corresponding author: sensouvik07@gmail.com

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Comments on the checklist:

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FAUNA OF INDIA CHECKLIST



ARTHROPODA: ARACHNIDA: SCHIZOMIDA, Petrunkévitch, 1945

Mrinmoy Kumar Kayal^{1,2} & Souvik Sen^{1,3,*}

¹Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata – 700053, West Bengal, India; ²mrinmoykayal2012@gmail.com; <https://orcid.org/0009-0003-2324-0306>; ³sensouvik07@gmail.com; <https://orcid.org/0000-0002-7149-5376>; *Corresponding author: sensouvik07@gmail.com

Introduction: Schizomida, commonly known as short-tailed whip scorpions, is a small order of arachnids. The term “schizomida” means split or cleaved middle, which refers to the way the prosoma is divided into two separate plates. They are very tiny in size, usually less than 5 mm in length. They have a flattened body, short pedipalps, and a short, whip-like tail (flagellum) at the rear, which is used for communication (Reddell & Cokendolpher, 1995). Unlike true scorpions, they do not have venom. Schizomids are secretive, living in tropical and subtropical soils, leaf litter, and caves (Harvey, 2003). They are fast-moving predators that use their pedipalps to catch small insects and communicate through vibrations (Cowles, 2018). Some species even show maternal care,

guarding eggs until they hatch (Giribet & Moreno-González, 2021). Fossil evidence suggests schizomids have existed since the Upper Carboniferous period, evolving from early arachnids (Clouse *et al.*, 2017). Despite their ancient lineage, they remain poorly studied due to their cryptic lifestyle.

Global diversity: A total of 376 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, 06 species belonging to 06 genera under 01 family have been reported from India.

Diversity in states:

Sl.No.	State/Union Territory	No. of Species	No. of Endemic Species
1	Andhra Pradesh	0	0
2	Arunachal Pradesh	0	0
3	Assam	0	0
4	Bihar	0	0
5	Chhattisgarh	0	0
6	Gujarat	0	0
7	Goa	0	0
8	Haryana	0	0



Sl.No.	State/Union Territory	No. of Species	No. of Endemic Species
9	Himachal Pradesh	0	0
10	Jharkhand	1	1
11	Karnataka	0	0
12	Kerala	1	1
13	Madhya Pradesh	0	0
14	Maharashtra	1	1
15	Manipur	0	0
16	Meghalaya	1	1
17	Mizoram	0	0
18	Nagaland	0	0
19	Odisha	0	0
20	Punjab	0	0
21	Rajasthan	0	0
22	Sikkim	0	0
23	Tamil Nadu	0	0
24	Telangana	0	0
25	Tripura	0	0
26	Uttar Pradesh	0	0
27	Uttarakhand	0	0
28	West Bengal	2	1
29	Andaman & Nicobar Islands	0	0
30	Chandigarh	0	0
31	Dadra Nagar Haveli, Daman & Diu	0	0
32	Delhi	0	0
33	Jammu & Kashmir	0	0
34	Ladakh	0	0
35	Lakshadweep	0	0
36	Puducherry	0	0
37	State Unknown	0	0
	INDIA Total	06	05

Endemism: 05 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 a 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 feed upon a 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 regulating the 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 their defence mechanism. However, this secretion is not harmful to humans, but it may sometimes cause a burning sensation to the 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 Indian schizomids are very poorly characterized (Kulkarni, 2012). 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 Petrunkevitch, 1945

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 kharagpurensis* Gravely, 1912 *
6. *Trithyreus sijuensis* (Gravely, 1924) *

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