

FAUNA OF INDIA CHECKLIST

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ARTHROPODA: INSECTA: RAPHIDOPTERA

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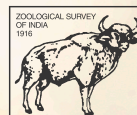
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ZOOLOGICAL SURVEY OF INDIA
Ministry of Environment, Forest & Climate Change

ARTHROPODA : INSECTA : RAPHDIOPTERA

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Introduction: The order Raphidioptera are commonly known as snake flies. The name Raphidioptera is derived from *Raphis* (needle) and *Pteron* (wings). They are holometabolous living fossils, largely restricted to palearctic region. The body is long, slender with elongated prothorax with movable head. They resemble lacewings but can be separated from the lacewings by their long prothorax. The larvae develop under the bark of trees. They are diurnal and adults and larvae feed on soft bodied arthropods such as mites and aphids.

Global diversity: Globally 372 species under 81 genera and 8 families are known. Most of the species are restricted to temperate forests.

Diversity in India: In India 5 species, one subspecies in two genera and two families are known to occur in the Western Himalaya and Eastern Himalaya.

Diversity in States

Table-1. Diversity of Raphidioptera across states.

Sl.No.	State/Union Territory	No. Species	No. 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
9	Himachal Pradesh	0	0
10	Jharkhand	0	0
11	Karnataka	0	0
12	Kerala	0	0
13	Madhya Pradesh	0	0
14	Maharashtra	0	0
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

Sl.No.	State/Union Territory	No. Species	No. Endemic species
23	Tamil Nadu	0	0
24	Telangana	0	0
25	Tripura	0	0
26	Uttarpradesh	0	0
27	Uttarakhand	1	1
28	West Bengal	0	0
29	Andaman & Nicobar	0	0
30	Chandigarh	0	0
31	Dadra Nagar Haveli, Daman & Diu	0	0
32	Delhi	0	0
33	Jammu & Kashmir	4	2
34	Ladakh	0	0
35	Lakshadweep	0	0
36	Puducherry	0	0
37	State Unknown	0	0
	INDIA TOTAL	6	4

Endemism: Four species are endemic to India.

Habitat: They are found in coniferous forests among bark, leaf litter, tree trunk.

Ecological Significance: They are diurnal predators of soft bodied arthropods such as mites, springtails, spiders, aphids, eggs, larvae etc.

Human Significance: They are considered as potential biological control agents.

Threatened species: No species are assessed as threatened in India.

Protected Species as per WPA (2022): Species reported from India are not listed under any Schedules of the Wildlife Protection Act.

Species under CITES: Species reported from India are not listed under CITES.

Invasive alien species: No invasive alien species are reported from this order.

Gap areas: Currently, Raphidioptera is reported only from Jammu & Kashmir and Meghalaya. However, no systematic surveys have been carried out to understand the distribution of this rare insects in other parts of Indian Himalaya. They are expected to be found in Himachal Pradesh, Uttarakhand, Sikkim, Arunachal Pradesh, Nagaland and Mizoram.

Checklist of Raphidioptera of India

Family: Inocelliidae Navás, 1913

1. *Inocellia fulvostigmata fulvostigmata* Aspöck & H. Aspöck, 1968
2. *Inocellia fulvostigmata nigrostigmata* Aspöck *et al.*, 1982
3. *Inocellia indica* Liu & Hajong, 2015

Family: Raphidiidae Latreille, 1810

4. *Mongoloraphidia christophi* Aspöck *et al.*, 1982
5. *Mongoloraphidia indica* Aspöck *et al.*, 1982
6. *Mongoloraphidia kashmirica* Aspöck *et al.*, 1982

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2. Liu, X & Hajong, S.R. (2015) *Inocellia indica* sp. nov. (Raphidioptera: Inocelliidae): a new snakefly species from northeastern India. *Zootaxa* 4040 (3): 393–400.
3. Hajong, S.R. (2013) Record of a rare snakefly (Raphidioptera : Inocelliidae) from Meghalaya. *NeBIO*. Vol.4(4), 50-51.