

# FAUNA OF INDIA CHECKLIST

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## ARTHROPODA: INSECTA: EMBIOPTERA, Lameere, 1900

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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:** The Order Embioptera commonly known as “webspinners” is a small group of insects found throughout the world, mainly in tropical and subtropical regions. They are elongate and cylindrical in shape. They are rarely seen in the nature, as they spend most of their lives within their silken galleries. The characteristic features of the Web spinners are they have short legs, the basal part of their front tarsi is enlarged and contain silk glands, their hind femur, enlarged for running backwards, cerci 1-2 segmented. These insects use the silk to make galleries on tree barks, rock surfaces, in soil and other substrates (Ross, 2000). The members of females are wingless, whereas, males are winged or wingless, but they are weak fliers and attracted to light at night. Embiids, in short form, have chewing mouthparts and two short cerci at the posterior end of the abdomen. The foods of web spinners are decayed plant material, such as leaves, bark, litter, mosses and lichens. They continuously extend their silken galleries to obtain new food source. The adult male web spinners live for a short time, usually they do not feed. The male with wings flies in search of mates. After mating, the female web spinners either lay their eggs in the established gallery or leave the colony to create a new one. Eggs are laid into silk-enclosed chambers made with chewed up bark and leaf fragments. The nymphs begin to spin silken galleries of their own immediately after hatching.

**Global diversity:** The order comprised of approximately 400 species belongs to about 90 genera and 13 families (Miller et.al, 2012).

**Diversity in India:** In India, 31 species under 5 genera and 2 families are recorded (Kapur & Kripalani, 1956; Davis, 1939; Ross, 1950 & Miller, 2012).

## Diversity in States (Table)

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

Sl.No.	State/Union Territory	No. Species	No. Endemic Species
11	Karnataka	8	3
12	Kerala	3	1
13	Madhya Pradesh	2	0
14	Maharashtra	4	1
15	Manipur	0	0
16	Meghalaya	0	0
17	Mizoram	0	0
18	Nagaland	0	0
19	Odisha	3	1
20	Punjab	0	0
21	Rajasthan	0	0
22	Sikkim	0	0
23	Tamil Nadu	10	3
24	Telangana	0	0
25	Tripura	0	0
26	Uttar Pradesh	4	1
27	Uttarakhand	0	0
28	West Bengal	8	4
29	Andaman & Nicobar	1	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
	<b>INDIA TOTAL</b>	<b>31</b>	<b>14</b>

**Endemism:** 14 species are endemic to India. West Bengal with 4 species endemics, followed by Karnataka (3 species).

**Habitat:** Embioptera have a world-wide distribution, except in Antarctica. The maximum diversity found in tropical and subtropical regions. Many species are arboreal, spinning their silk galleries on tree trunks, others are subterranean, can be found under rocks, creeks.

**Ecological Significance:** There is no significant ecological importance.

**Human Significance:** There is no human significance reported.

**Threatened species:** Species from India are not assessed for IUCN threat categories.

**Protected Species as per WPA (2022):** Embiopterans are not listed under any schedules of Wildlife Protection Act (2022).

**Species under CITES:** Any of the species of Embioptera are not listed under any appendices of CITES.

**Invasive alien species:** No species are reported to be invasive in India.



**Gap areas:** The taxonomic study of Embioptera in India is very badly neglected in the recent period. There were some taxonomic studies happened in the past by great workers. There are 23 States and UTs are without reporting any Embioptera species. There is no recent work or report from India, except Kailash and Prosenjit in 2014, published a paper on some new records of Embioptera from Chhattisgarh.

## Checklist of Embioptera

### Family: Embiididae

1. *Embia dobhali* Ross, 1950
2. *Embia major* Imms, 1913
3. *Embia minor* Mukerji, 1927
4. *Embia rabaulti* Navas, 1934
5. *Metembia ferox* Davis., 1939
6. *Metembia fraterna* Ross, 1950
7. *Pseudembia flava* (Ross, 1943)
8. *Pseudembia immsi* (Davis, 1939)
9. *Pseudembia paradoxa* Davis, 1939
10. *Pseudembia setosa* Ross, 1950
11. *Pseudembia simplex* Ross, 1950
12. *Pseudembia truncata* Davis, 1939
13. *Aposthonia himalayensis* (Kapur & Kripalani, 1957)
14. *Aposthonia josephii* (Bradoo, 1971)

### Family: Oligotomidae

15. *Oligotoma annandalei* Kapur & Kripalani, 1957
16. *Oligotoma asymmetrica* Menon & George, 1936
17. *Oligotoma ceylonica ceylonica* Enderlein, 1912
18. *Oligotoma ceylonica indica* Davis, 1940
19. *Oligotoma ceylonica variegata* Mukerji, 1930
20. *Oligotoma dharwariana* Bradoo, 1971
21. *Oligotoma falcis* Ross, 1943
22. *Oligotoma gravelyi* Kapur & Kripalani, 1957
23. *Oligotoma greeniana* Enderlein, 1912
24. *Oligotoma humbertiana* (Saussure, 1896)
25. *Oligotoma michaeli* McLachlan, 1877
26. *Oligotoma miniscula* Enderlein, 1912
27. *Oligotoma minuta* Mukerji, 1935
28. *Oligotoma montana* Kapur & Kripalani, 1957
29. *Oligotoma nigra* (Hagen, 1866)
30. *Oligotoma pruthii* Kapur & Kripalani, 1957
31. *Oligotoma saundersii* (Westwood, 1837)

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