

# FAUNA OF INDIA CHECKLIST

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## ARTHROPODA: ARACHNIDA: OPILIONES, Sundevall, 1833

Arghya Ghosh<sup>1,2</sup> & Souvik Sen<sup>1,3,\*</sup>

<sup>1</sup>Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata – 700053, West Bengal, India; <sup>2</sup>garghya007@gmail.com; <https://orcid.org/0009-0004-4023-7114>; <sup>3</sup>sensouvik07@gmail.com; <https://orcid.org/0000-0002-7149-5376>; \*Corresponding author: [sensouvik07@gmail.com](mailto:sensouvik07@gmail.com)

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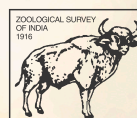
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Comments on the checklist:

E-mail your comments  
and suggestions to improve  
the checklist to

[zsifaunachecklists@gmail.com](mailto:zsifaunachecklists@gmail.com)  
and [sensouvik07@gmail.com](mailto:sensouvik07@gmail.com)



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

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Arghya Ghosh<sup>1,2</sup> and Souvik Sen<sup>1,3</sup>

<sup>1</sup>Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata – 700053, West Bengal, India; E-mail: <sup>2</sup>[garghya007@gmail.com](mailto:garghya007@gmail.com); <https://orcid.org/0009-0004-4023-7114>; <sup>3</sup>[sensouvik07@gmail.com](mailto:sensouvik07@gmail.com); <https://orcid.org/0000-0002-7149-5376>; \*Corresponding author: [sensouvik07@gmail.com](mailto:sensouvik07@gmail.com)

**Introduction:** Opiliones, commonly known as harvestmen or daddy long-legs, are found worldwide except in Antarctica. Opiliones are often misidentified as spiders (order Araneae). The most prominent characters of harvestmen are their long slender legs and segmented abdomen connected with the cephalothorax across the whole breadth unlike spiders. Another spectacular characteristic is harvestmen's stomothea i.e. feeding organ, which can swallow chunks of solid food particles, not only liquid like other arachnids. They also possess a pair of prosomatic scent gland that secretes quinone containing noxious smelling fluid to deter its potential predators. Individuals of this order are also known as "shepherd spiders" due to similarity between their long legs and stilts used by European Shepherds (Joyce, 2003). They are very ancient in origin. One recent molecular study on origin of Opiliones has revealed that the earliest members of this order had emerged at about 473 million years ago (Mya), during the Ordovician Period of Palaeozoic Era (Sharma & Giribet, 2014).

**Global diversity:** Globally, the order Opiliones encompasses 6,676 species of harvestmen under 1,691 genera and placed under 70 families. However, 59 fossil species have also been described (Kury *et al.*, 2023).

**Diversity in India:** 123 species belonging to 51 genera under 07 families have been reported so far from India.

## Diversity in States:

Sl. No.	State/Union Territory	No. of Species
	<b>INDIA Total</b>	<b>123</b>
1	Andhra Pradesh	0
2	Arunachal Pradesh	0
3	Assam	2
4	Bihar	1
5	Chhattisgarh	0
6	Gujarat	0
7	Goa	0
8	Haryana	0
9	Himachal Pradesh	1
10	Jharkhand	0

Sl. No.	State/Union Territory	No. of Species
11	Karnataka	2
12	Kerala	2
13	Madhya Pradesh	0
14	Maharashtra	5
15	Manipur	0
16	Meghalaya	1
17	Mizoram	0
18	Nagaland	0
19	Odisha	1
20	Punjab	0
21	Rajasthan	0
22	Sikkim	1
23	Tamil Nadu	9
24	Telangana	0
25	Tripura	0
26	Uttar Pradesh	1
27	Uttarakhand	0
28	West Bengal	7
29	Andaman & Nicobar Islands	1
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	91

**Endemism:** Among the 123 species known from the country, 115 are endemic to India.

**Habitat:** Daddy long-legs are commonly found near marshy places, under the stones and under the barks of trees. Sometimes they can be seen in leaf litters, even in caves. They are also often located clinging to the walls, tree trunks, crevices of caves etc.

**Ecological Significance:** Harvestmen are omnivorous in nature. Their food ranges from plant materials to small insects. Some daddy long-legs feed upon dead organisms, fecal products and decaying materials. They also serve as a prey to other arachnids like spiders and scorpions.

**Human Significance:** Daddy long-legs are harmless to human. They do not possess any kind of venom gland and their cheliceral claws are very small and unable to pierce human skin.

**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 harvestman fauna of the Indian subcontinent is very poorly studied (Martens *et al.*, 2023). Much study of these arachnids is required to understand their diversity and role in the ecosystem.

### Systematic list of Opiliones of India (*Endemic species marked with \**)

#### Order Opiliones

##### Family Assamiidae Sørensen, 1884

1. *Attakattius spinifrons* Roewer, 1929 \*
2. *Gudalura biseriata* Roewer, 1927\*
3. *Indosidama moila* Turk, 1945\*
4. *Trionychiperna carli* Roewer, 1929\*
5. *Mysorea brevipes* Roewer, 1935

##### Family Biantidae Thorell, 1889

6. *Probiantes croceus* Roewer, 1927\*

##### Family Phalangiidae Latreille, 1802

7. *Egaenus kashmiricus* Caporiacco, 1934
8. *Himachalus pradeshicus* Martens, Julka & Devi, 2023\*

##### Family Podoctidae Roewer, 1912

9. *Bistota horrida* Roewer, 1927\*
10. *Eupodoctis indicus* (Hirst, 1911) \*
11. *Pumbaraius kempfi* Roewer, 1927\*
12. *Pumbaraius malabarensis* Roewer, 1949\*
13. *Tandikudius rugosus* Roewer, 1929\*
14. *Vandaravua carli* Roewer, 1929\*

##### Family Sandokanidae Özdikmen & Kury, 2007

15. *Gnomulus aborensis* (Roewer, 1913) \*

##### Family Sclerosomatidae Simon, 1879

16. *Adungrella punctulata* Roewer, 1955\*
17. *Akalpia oblonga* Roewer, 1915\*
18. *Antigrella orissana* Roewer, 1954\*



19. *Aurivilliola bispinifera* Roewer, 1929\*
20. *Aurivilliola femoralis* Roewer, 1955\*
21. *Aurivilliola nigripalpis* Roewer, 1929\*
22. *Aurivilliola palpalis* Roewer, 1915\*
23. *Bastia lineata* Roewer, 1910\*
24. *Bonthainia graveleyi* Roewer, 1929\*
25. *Carmichaelus maculatus* Roewer, 1929 \*
26. *Ceratobunellus brevipes* (With, 1903) \*
27. *Ceratobunellus calcuttensis* (With, 1903) \*
28. *Cervibunus ornatus* Roewer, 1929\*
29. *Coonoora biceratops* Roewer, 1929\*
30. *Dentobunus bidentatus* (Thorell, 1891)
31. *Dentobunus imperator* (With, 1903) \*
32. *Diangathia bovisfrons* Roewer, 1955\*
33. *Euceratobunus pulcher* (With, 1903) \*
34. *Eugagrella abdominalis* Roewer, 1954\*
35. *Eugagrella barnesi* Roewer, 1929\*
36. *Eugagrella carli* Roewer, 1929\*
37. *Eugagrella malabarica* Roewer, 1954\*
38. *Eugagrella minima* Roewer, 1954\*
39. *Eugagrella palnica* Roewer, 1929\*
40. *Eugagrella stoliczkae* (With, 1903) \*
41. *Eusclera indica* Turk, 1948\*
42. *Euzaleptus minutus* (With, 1903) \*
43. *Euzaleptus muticus* Roewer, 1929 \*
44. *Euzaleptus pilosus* Roewer, 1929\*
45. *Gagrella bella* Roewer, 1954\*
46. *Gagrella bengalica* Roewer, 1954\*
47. *Gagrella brunnea* Roewer, 1954\*
48. *Gagrella cyanatra* Roewer, 1954\*
49. *Gagrella malabarica* Roewer, 1954\*
50. *Gagrella marginata* Roewer, 1954 \*
51. *Gagrella metallica* Roewer, 1929\*
52. *Gagrella minuta* Roewer, 1954 \*
53. *Gagrella nobilis* With, 1903\*
54. *Gagrella palnica* Roewer, 1929 \*
55. *Gagrella rufa* Roewer, 1954\*
56. *Gagrella satarana* Roewer, 1954\*
57. *Gagrella testacea* Roewer, 1954\*
58. *Gagrella turki* Roewer, 1954\*

59. *Gagrella viridalba* Roewer, 1954\*
60. *Gagrella viridula* Roewer, 1929\*
61. *Gagrellenna bipunctata* Roewer, 1929\*
62. *Gagrellula aborana* Roewer, 1954\*
63. *Gagrellula albilineata* Roewer, 1929\*
64. *Gagrellula bicolor* Roewer, 1954\*
65. *Gagrellula crux* (With, 1903) \*
66. *Gagrellula cuneimaculata* Roewer, 1954\*
67. *Gagrellula frontalis* Roewer, 1954
68. *Gagrellula giltayi* Roewer, 1954\*
69. *Gagrellula orissa* Roewer, 1954\*
70. *Gagrellula rufifrons* Roewer, 1954\*
71. *Gagrellula saddlana* Roewer, 1929\*
72. *Gagrellula simla* Roewer, 1954\*
73. *Gagrellula unicolor* Roewer, 1910 \*
74. *Gagrellula virescens* Roewer, 1910\*
75. *Harmanda albipunctata* (Roewer, 1915) \*
76. *Harmanda elegantulus* (Roewer, 1955) \*
77. *Harmanda instructa* Roewer, 1910
78. *Hehoa bunigera* Roewer, 1929\*
79. *Heterogagrella indica* Roewer, 1954 \*
80. *Marthana beharensis* Roewer, 1955\*
81. *Melanopa atrata* (Stoliczka, 1869) \*
82. *Melanopa fragilis* (With, 1903)
83. *Melanopa hansenii* (With, 1903) \*
84. *Melanopa hirta* (With, 1903) \*
85. *Melanopa matherania* Roewer, 1915\*
86. *Melanopa rugosa* Roewer, 1955\*
87. *Melanopa varians* (With, 1903)
88. *Melanopella marginata* Roewer, 1955\*
89. *Melanopula biceps* Roewer, 1929\*
90. *Orissula heterospinulata* Roewer, 1955\*
91. *Palniella virididorsata* Roewer, 1929\*
92. *Paradentobunus aureomaculatus* Roewer, 1915\*
93. *Paragagrella mysorea* Roewer, 1939\*
94. *Pergagrella monticola* Roewer, 1954\*
95. *Sataria maculata* Roewer 1915\*
96. *Sataria unicolor* Roewer 1915\*
97. *Sataria coronata* Roewer, 1929\*
98. *Syleus mysoreus* Roewer, 1955 \*

99. *Syleus niger* (CL Koch, 1839) \*
100. *Syleus rufus* Roewer, 1955\*
101. *Systemocentrus rufus* Roewer, 1955\*
102. *Umbopilio martensi* Klimes, 2006\*
103. *Verpulus gravelyi* (Roewer, 1929) \*
104. *Verpulus monticola* (Roewer, 1955) \*
105. *Zaleptus annulatus* (Thorell, 1889)
106. *Zaleptus assamensis* Roewer, 1955\*
107. *Zaleptus auronitens* (Roewer, 1955) \*
108. *Zaleptus bicorniger* (Roewer, 1911) \*
109. *Zaleptus caeruleus* Roewer, 1910\*
110. *Zaleptus cochinchinensis* Roewer, 1955\*
111. *Zaleptus coronatus* (Roewer, 1955) \*
112. *Zaleptus cupreus* (Roewer, 1912) \*
113. *Zaleptus diadematus* (Thorell, 1891) \*
114. *Zaleptus fuscus* With, 1903\*
115. *Zaleptus indicus* Roewer, 1929\*
116. *Zaleptus occidentalis* Roewer, 1955\*
117. *Zaleptus richteri* (Roewer, 1955) \*
118. *Zaleptus splendens* Roewer, 1911
119. *Zaleptus thorellii* With, 1903\*
120. *Zaleptus validus* Roewer, 1955\*
121. *Zaleptus vigilans* (With, 1903) \*
122. *Zaleptus viridis* Roewer, 1929\*

#### Family Stylocellidae Hansen & Sørensen, 1904

123. *Megahalaya annandalei* Giribet, Sharma & Bastawade, 2007\*

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