

# FAUNA OF INDIA CHECKLIST

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## ARTHROPODA : MYRIAPODA : CHILOPODA

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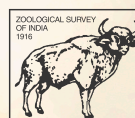
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**ZOOLOGICAL SURVEY OF INDIA**  
Ministry of Environment, Forest & Climate Change

# ARTHROPODA: MYRIAPODA:CHILOPODA

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**Introduction:** Centipedes belong to the class Chilopoda (Arthropoda) are major components of soil biodiversity distributed throughout the temperate and tropical regions of the world. They are economically important group of arthropods which play valuable roles in the terrestrial ecosystems helping to control noxious insect pests. They are often treated as creatures of nuisance owing to their poisonous and painful bite, particularly of the members of the family Scolopendridae (Yadav,1994). Centipedes inhabit wet, moist places and the environs below rotten barks, dry foliage, stones and also in cow dung heap. They are soft-bodied and dorsoventrally flattened having one pair of legs in each trunk segment. The number of body segments vary from 15-200 and body size 1 to 30cm. The first pair of legs on the cranial segment is modified into a pincer-like apparatus, known as forcipules, used to inject venom into prey. The last segment contains a pair of filamentous caudal appendages playing no role in envenomation. The class Chilopoda is divided into five orders; Geophilomorpha (soil centipedes), Lithobiomorpha (rock or garden centipedes), Scolopendromorpha (tropical or giant centipedes), Scutigermorpha (house or feather centipedes) and Craterostigmomorpha ( represented by only two species found in Tasmania and New Zealand).Among the four orders of Chilopoda known from India (Scolopendromorpha, Lithobiomorpha, Scutigermorpha and Geophilomorpha), major studies are undertaken only on Scolopendromorpha. Many tropical species of the order Scolopendromorpha are large, some reach a length of 26 cm, and are brightly coloured: red, black, green or violet (Lewis, 2006). India being a tropical megadiverse country has a rich centipede fauna. Khanna (2008) check listed 90 species of scolopendrid centipedes belonging to two families from India. Due to several changes occurred recently in the centipede taxonomy, the number of Indian species has again reduced to below 80 (Bonato *et al.*, 2016).

**Global diversity:** The class Chilopoda encompasses 3145 described species, 400 genera and 24 families under 5 orders which are distributed globally, though their greatest numbers and diversity are concentrated primarily in the tropics and subtropics (Bonato *et al.*, 2016)

**Diversity in India:** In India, 77 species belonging to 11 genera and 04 families are reported

**Table-01. Diversity in States**

Sl. No.	State/UT	No. of species	No. of Endemic species
	<b>INDIA TOTAL</b>	<b>77</b>	<b>55</b>
1	Andhra Pradesh	09	3
2	Arunachal Pradesh	02	1
3	Assam	5	1
4	Bihar	03	0
5	Chhattisgarh	01	0

Sl. No.	State/UT	No. of species	No. of Endemic species
6	Gujarat	04	0
7	Goa	05	0
8	Haryana	06	1
9	Himachal Pradesh	11	4
10	Jharkhand	01	0
11	Karnataka	11	1
12	Kerala	21	7
13	Madhya Pradesh	04	0
14	Maharashtra	25	10
15	Manipur	02	0
16	Meghalaya	05	1
17	Mizoram	02	0
18	Nagaland	01	0
19	Odisha	05	2
20	Punjab	01	0
21	Rajasthan	07	0
22	Sikkim	01	0
23	Tamil Nadu	16	3
24	Telangana	01	0
25	Tripura	01	0
26	Uttar Pradesh	05	0
27	Uttarakhand	09	1
28	West Bengal	07	1
29	Andaman & Nicobar	08	0
30	Chandigarh	01	0
31	Dadra Nagar Haveli, Daman & Diu	01	0
32	Delhi	07	2
33	Jammu & Kashmir	02	1
34	Ladakh	0	0
35	Lakshadweep	03	0
36	Puducherry	01	0

**Endemism:** Among the 77 species known from the country 70% are endemic to India. High endemism is reported from the Western Ghats region falling in the states of Tamil Nadu, Kerala and Maharashtra and Himalayan region. The endemic status of many of the species will change if extensive field surveys and identification of specimens are undertaken in different ecological regions of the country. .

**Habitat:** Centipedes are found singly under stones, logs, under bark of trees, flower pots, sheath of banana stems, inside termite mounts etc. The most suitable habitat is an area with optimum moisture and temperature conditions near a forest patch, around lakes or rivers or on the hill slope. Centipedes are nocturnal and active during night and rainy days.

**Ecological Significance:** Centipedes are exclusively predatory soil arthropods feeding mainly on other soil arthropods, earthworms, insects etc. thus have important ecological role in the suppression of herbivorous insect populations including agriculture pests. They are also an important link in the terrestrial food chains, prey animals for reptiles, birds, mammals etc

**Human Significance:** Centipede venom has medical importance and used in traditional medicine for hundreds of years in China. Studies on the composition and action of centipede venom are an important area of biological research. Centipedes are also consumed as food in some countries like China.

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

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

**Species under CITES:** Indian centipedes are not listed under any appendices of CITES.

**Invasive alien species:** No centipede species are reported Invasive in the country.

**Gap areas:** Being a tropical country, the centipede fauna of India is very rich. However many parts of the country such as north east India, Andaman and Nicobar Islands, Central India and Desert and semi-arid regions are less explored for centipede collections and taxonomic studies. When compared to the world fauna, the number of Indian centipedes is meagre. Among the four orders of Chilopoda known from the country the order scolopendromorpha is little studied. Many more centipede taxa will be discovered if serious field explorations are undertaken in different parts of the country. Phylogenetic studies on centipedes based on DNA bar-coding is very little attempted in India.

## Systematic list

### PHYLUM: ARTHROPODA

### SUBPHYLUM: MYRIAPODA

### CLASS: CHILOPODA

### ORDER: SCOLOPENDROMORPHA

Family Scolopendridae Leach, 1914

Genus *Ethmostigmus* Pocock, 1898

1. *Ethmostigmus tristis* (Meinert, 1886)
2. *Ethmostigmus agasthyamalaiensis* Joshi & Edgecombe, 2018
3. *Ethmostigmus coonooranus* Chamberlin, 1920.
4. *Ethmostigmus praveeni*, Joshi & Edgecombe, 2018
5. *Ethmostigmus sahyadrensis*, Joshi & Edgecombe, 2018
6. *Ethmostigmus pygomegas* (Kohlrausch, 1881)

Genus *Digitipes*, Attems, 1930

7. *Digitipes barnabasi* Jangi & Dass 1984
8. *Digitipes coonoorensis* Jangi & Dass, 1984
9. *Digitipes jonesii* (Verhoeff, 1938)
10. *Digitipes jangii* Joshi & Edgecombe, 2013
11. *Digitipes periyarensis* Joshi & Edgecombe, 2013
12. *Digitipes chotanii* Jangi & Dass, 1984
13. *Digitipes pruthi* Jangi & Dass, 1984

Genus *Otostigmus* Porat 1876

14. *Otostigmus amballae* Chamberlin, 1913
15. *Otostigmus burnmurdochi* Gravely, 1912

16. *Otostigmus kashmiranus* Lewis, 1992
17. *Otostigmus nudus* Pocock, 1890
18. *Otostigmus oatesi* Kraepelin, 1903
19. *Otostigmus orientalis* Porat, 1876
20. *Otostigmus ruficeps* Pocock, 1890
21. *Otostigmus multidens* Hasse, 1887
22. *Otostigmus gravely* (Jangi & Dass, 1984)
23. *Otostigmus rugulosus* Porat, 1876
24. *Otostigmus scaber* Porat, 1876
25. *Otostigmus sumatranus* Haase, 1887
26. *Otostigmus poonamae* Khanna & Tripathi, 1986

Genus *Rhysida* Wood, 1862

27. *Rhysida aspinosa* Balan & Sureshan, 2017
28. *Rhysida corbetti* Khanna, 1994
29. *Rhysida crassispina* Kraepelin, 1903
30. *Rhysida longipes* (Newport, 1845)
31. *Rhysida pazhuthara* Joshi & Edgecombe, 2019
32. *Rhysida konda* Joshi & Edgecombe, 2019
33. *Rhysida trispinosa* (Jangi & Dass, 1984)
34. *Rhysida sada* Joshi & Edgecombe, 2019
35. *Rhysida ikhalama* Joshi & Edgecombe, 2019
36. *Rhysida lewisi* Joshi & Edgecombe, 2019
37. *Rhysida immarginata* (Porat, 1876)
38. *Rhysida lithobioides* (Newport, 1845)
39. *Rhysida longicarinulata* Khanna & Tripathi, 1986
40. *Rhysida neocrassispina* Jangi & Dass, 1984
41. *Rhysida lateus* Dhanya & Sureshan, 2018
42. *Rhysida shenduruniensis* Dhanya & Sureshan, 2018
43. *Rhysida stuhlmanni* Kraepelin, 1903

Genus *Scolopendra* Linnaeus, 1758

44. *Scolopendra andhrensensis* Jangi & Dass, 1984
45. *Scolopendra ellorensis* Jangi & Dass, 1984
46. *Scolopendra hardwickei* Newport, 1844
47. *Scolopendra indiae* (Chamberlin, 1914)
48. *Scolopendra indica* Meinert, 1886
49. *Scolopendra jangii* Khanna & Yadav, 1997
50. *Scolopendra mazbii* Gravely, 1912
51. *Scolopendra morsitans* Linnaeus, 1758
52. *Scolopendra nuda* (Jangi & Dass, 1980)

53. *Scolopendra paranuda* (Khanna & Tripathi,1987)
54. *Scolopendra punensis* Jangi & Dass, 1984
55. *Scolopendra subspinipes* Leach, 1815
56. *Scolopendra mirabilis* (Porat,1876)

Genus *Cormocephalus* Newport, 1844

57. *Cormocephalus nigrificatus* Verhoeff, 1937
58. *Cormocephalus denticaudus* Jangi & Dass, 1984
59. *Cormocephalus dentipes* Pocock, 1891
60. *Cormocephalus macrosestrus* (Attems,1928)
61. *Cormocephalus nudipes* Jangi & Dass, 1984
62. *Cormocephalus pilosus* Jangi, 1955
63. *Cormocephalus pygmaeus* Pocock, 1892

Genus *Asanada* Meinert,1886

64. *Asanada agharkari* (Gravely,1912)
65. *Asanada brevicornis* Meinert, 1886
66. *Asanada indica* Jangi & Dass, 1984
67. *Asanada maligii* Jangi & Dass, 1984
68. *Asanada sukhensis* Jangi & Dass, 1984

Family Cryptopidae, Kohlrausch,1881

Genus *Cryptops* Leach,1815

69. *Cryptops doriae* Pocock, 1891
70. *Cryptops kempii* Silvestri, 1924
71. *Cryptops setosior* Chamberlin, 1959
72. *Cryptops orientalis* Jangi, 1955
73. *Cryptops malabarensis* Balan ,Sureshan & Khanna, 2012

Genus *Paracryptops* Pocock, 1891

74. *Paracryptops indicus* Silvestri, 1924
75. *Paracryptops spinosus* Jangi & Dass, 1978

## Order SCUTIGEROMORPHA

Family Scutigeridae, Leach, 1814

Genus *Thereuopoda* Verhoeff, 1904

76. *Thereuopoda longicornis* (Fabricius,1793)

## Order GEOPHILOMORPHA

Family: Geophilidae, Leach 1815

Genus *Geophilus* Leach, 1814

77. *Geophilus intermissus* Silvestri, 1935



*Scolopendra morsitans* Linnaeus, 1758



*Rhysida immarginata* (Porat,1876)

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