

FAUNA OF INDIA CHECKLIST

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ARTHROPODA: INSECTA: SIPHONAPTERA

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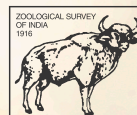
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ZOOLOGICAL SURVEY OF INDIA
Ministry of Environment, Forest & Climate Change

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Introduction: The order Siphonaptera, popularly known as “fleas” are wingless ectoparasites of birds and mammals. They are laterally flattened and hind legs are evolved for jumping. They are highly host specific. The mouth parts are adapted for piercing and sucking the blood of the host. Unlike other insects, they lack compound eyes and instead have eye spots. They are holometabolous insects. Mated female lays eggs on the substrate of host's nest or burrow. The larvae feed on organic matter and pupate. The pupae can remain dormant for a long time till a suitable environmental condition arise.

Global diversity: Globally 2229 species under 259 genera and 8 families are known.

Diversity in India: In India 68 species under 35 genera and 2 families are known.

Diversity of Siphonaptera in states and union territories.

Sl.No.	State/Union Territory	No. Species	No. Endemic species
1	Andhra Pradesh	31	5
2	Arunachal Pradesh	31	5
3	Assam	32	5
4	Bihar	31	5
5	Chhattisgarh	31	5
6	Gujarat	31	5
7	Goa	31	5
8	Haryana	31	5
9	Himachal Pradesh	34	5
10	Jharkhand	31	5
11	Karnataka	35	6
12	Kerala	33	5
13	Madhya Pradesh	31	5
14	Maharashtra	32	5
15	Manipur	32	6
16	Meghalaya	31	5
17	Mizoram	31	5
18	Nagaland	31	5
19	Odisha	31	5
20	Punjab	31	5
21	Rajasthan	31	5
22	Sikkim	35	5
23	Tamil Nadu	35	5
24	Telangana	32	5

Sl.No.	State/Union Territory	No. Species	No. Endemic species
25	Tripura	31	5
26	Uttarpradesh	34	7
27	Uttarakhand	34	5
28	West Bengal	32	5
29	Andaman & Nicobar	31	5
30	Chandigarh	31	5
31	Dadra Nagar Haveli, Daman & Diu	31	5
32	Delhi	31	5
33	Jammu & Kashmir	39	5
34	Ladakh	35	5
35	Lakshadweep	31	5
36	Puducherry	33	5
	State Unknown	13	
	INDIA TOTAL	68	9

Endemism: Nine species are reported to be endemic to India.

Habitat: Adults are ectoparasites of birds and mammals. Larvae are found in the nest and burrows of the host.

Ecological Significance: Fleas are ectoparasites of vertebrates and transmit many diseases.

Human Significance: Fleas are vectors of many bacterial, rickettsial, protozoal and helminthic and viral diseases in humans and animals including bubonic plague.

Threatened species: No species are reported 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: Extensive surveys are required to understand the distribution of fleas among different vertebrate hosts.

Checklist of Siphonoptera of India

Ceratophyllidae Dampf, 1908

1. *Amphalius clarus* (Jordan & Rothschild, 1922)
2. *Callopsylla oreinus* (Jordan, 1937)
3. *Ceratophyllus caliotes* Jordan, 1937
4. *Ceratophyllus hirus* (Curtis, 1832)
5. *Ceratophyllus orites* Jordan, 1937
6. *Macrostylophora fimbriata* (Jordan & Rothchild, 1922)
7. *Macrostylophora hastate sikkimensis* (Jordan & Rothschild, 1922)
8. *Macrostylophora lupata* (Jordan & Rothschild, 1921)
9. *Macrostylophora phillippsi* (Jordan, 1925)
10. *Nosopsyllus alladinis* (Rothchild, 1904)
11. *Nosopsyllus arcotus* (Jordan & Rothschild, 1921)

12. *Nosopsyllus argutus* (Jordan & Rothschild, 1921)
13. *Nosopsyllus fasciatus* (Bosc, 1801)
14. *Nosopsyllus nilgiriensis* (Jordan & Rothschild, 1921)
15. *Nosopsyllus punensis* (Jordan & Rothschild, 1921)
16. *Nosopsyllus punjabensis* (Jordan & Rothschild, 1921)
17. *Nosopsyllus simla* (Jordan & Rothschild, 1921)
18. *Nosopsyllus tamilanus* (Jordan & Rothschild, 1921)
19. *Nosopsyllus vauceli* Kelein, 1962
20. *Paraceras sauteri* (Rothschild, 1914)
21. *Simitipsylla prodigiosa* Smit, 1975
- Ctenophthalmidae Rothschild, 1915**
22. *Ctenophthalmus golovi alpestris* Argyropulo, 1935
23. *Palaeopsylla remota* Jordan, 1929
24. *Xenodaeria telios* Jordan, 1932
- Hystrihopsyllidae Tiraboschi, 1904**
25. *Neopsylla dispar* Jordan, 1932
26. *Neopsylla kasmirensis* Kulkarni & Bhat, 1972
27. *Neopsylla marleanae* Lewis, 1971
28. *Neopsylla securo* Rothschild, 1915
29. *Neopsylla setosa* group (Wagner, 1898)
30. *Neopsylla stevensi* group Rothschild, 1915
31. *Steischia pagiana* Lewis, 1969
- Ischnopsyllidae Wahlgren, 1907**
32. *Ischnopsyllus delectabilis* Smit, 1952
33. *Ischnopsyllus indicus* Jordan, 1931
34. *Ischnopsyllus octactenus* (Kolenati, 1856)
35. *Largaropsylla putilla* Jordan & Rothschild, 1921
36. *Rhinolophopsylla unipectinata indica* Jordan & Rothschild, 1921
37. *Thaumapsylla breviceps* Rothschild, 1907
- Leptopsyllidae Rothschild and Jordan, 1915**
38. *Aconothobius orientalis* (Lewis, Kulkarni and Bhat, 1972)
39. *Acropsylla episema* (Rothschild, 1911)
40. *Acropsylla girshami* Traub, 1950
41. *Amphipsylla gregorii* Brelih, 1976
42. *Amphipsylla montana iskul* Shvarts, 1953
43. *Amphipsylla phaiomydis limonia* Smit 1977
44. *Amphipsylla primaris primaris* Jordan & Rothschild, 1915
45. *Frontopsylla ambigua* Fedina, 1946
46. *Frontopsylla elata vara* Mikulin, 1960
47. *Frontopsylla spadix* (Jordan & Rothschild, 1921)
48. *Leptopsylla segnis* (Schoenherr, 1811)
49. *Ophthalmopsylla celata* Traub, 1965
50. *Paradoxopsyllus custodis* Jordan, 1932
51. *Permystopsylla himalaica* (Rothschild, 1915)
- Pulicidae Billberg, 1820**
52. *Ctenocephalides canis* (Curtis, 1826)
53. *Ctenocephalides felis felis* Bouche, 1835
54. *Ctenocephalides orientis* (Jordan, 1925)
55. *Echidnophaga gallinacean* (Westwood, 1875)
56. *Echidnophaga liopus* Jordan & Rothschild 1906
57. *Pariodontis riggenbachi wernecki* Costa Lima, 1940
58. *Pulex irritans* Linnaeus, 1758
59. *Synosternus pallidus* (Taschenberg, 1880)
60. *Tunga penetrans* (Linnaeus, 1758)
61. *Xenopsylla astia* Rothschild, 1911

62. *Xenopsylla brasiliensis* (Baker, 1904)
 63. *Xenopsylla cheopis* (Rothschild, 1903)
 64. *Xenopsylla hussaini* Sharif, 1930

Stivaliidae Mardon, 1978

65. *Lentistivalius ferinus* (Rothschild, 1908)
 66. *Sivalius aporus* Jordan & Rothschild, 1922
 67. *Stivalius ahalae* (Rothschild, 1904)

Vermipsyllidae Wagner, 1889

68. *Chaetopsylla homoea* Rothschild, 1906

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