

FAUNA OF INDIA CHECKLIST

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ARTHROPODA: INSECTA: PHTHIRAPTERA

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

ARTHROPODA: INSECTA: PHTHIRAPTERA

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Introduction: Phthiraptera is a very diverse group of insects, exclusively adapted to parasitism and commonly called lice. Order phtiraptera are divided into four suborders- Amblycera, Ischnocera, Rhynchophthirina and Anoplura. First three suborders are called the chewing lice. The species of these suborders have mandibulated mouthparts and feed on the feathers and skin debris of birds and mammals. The fourth suborders Anoplura are known as sucking lice, their mouth parts are modified for sucking/piercing in the form of pointed tube (proboscis). Phthirapteran ectoparasites are flattened dorso-ventrally, small (0.5-11 mm in length), wingless, hemimetabolous, obligatory, permanent ectoparasites of warm-blooded vertebrates. The life cycle has incomplete metamorphosis and comprising eggs (known as nits), three nymphal instars and adult.

Global diversity: A total of 5,391 species of the order Phthiraptera belonging to 305 genera and 25 families have been reportedly found all over the world.

Diversity in India: In India, total of 473 species belonging to 14 families and 99 genera of order Phthiraptera are listed.

Diversity in States :

Sl.No.	State/Union Territory	No. Species	No. Endemic Species
1	Andhra Pradesh	30	0
2	Arunachal Pradesh	12	0
3	Assam	37	0
4	Bihar	7	0
5	Chhattisgarh	1	0
6	Gujarat	13	0
7	Goa	0	0
8	Haryana	0	0
9	Himachal Pradesh	52	0
10	Jharkhand	0	0
11	Karnataka	24	0
12	Kerala	8	0
13	Madhaya Pradesh	13	0
14	Maharashtra	47	0
15	Manipur	24	0
16	Meghalaya	55	0
17	Mizoram	0	0
18	Nagaland	1	0
19	Odisha	42	0
20	Punjab	67	0

Sl.No.	State/Union Territory	No. Species	No. Endemic Species
21	Rajasthan	47	0
22	Sikkim	66	0
23	Tamil Nadu	8	0
24	Telangana	0	0
25	Tripura	0	0
26	Uttarpradesh	117	0
27	Uttarakhand	53	0
28	West Bengal	58	0
29	Andaman & Nicobar	9	0
30	Chandigarh	0	0
31	Dadra Nagar Haveli Daman & Diu	0	0
32	Delhi	10	0
33	Jammu & Kashmir	64	0
34	Ladakh	29	0
35	Lakshadweep	0	0
36	Puducherry	0	0
	INDIA TOTAL	473	0

Endemism: Many phthirapteran species that only breed in India but have extensive geographic ranges that extend into neighbouring countries; hence they cannot be considered to be really endemic to India.

Habitat: Phthiraptera are obligate permanent ectoparasites of birds and mammals and whole life cycle occurs on the host. They feed generation after generation on the same host and exhibit many adaptations. Some species are restricted to just one host species and will often spend their entire life on a specific part of the body. They exhibit one of the most intimate biological relationships between a parasite and its host.

Ecological Significance: Phthirapteran ectoparasites serve as a food sources for other organism such as birds and mammals and exhibit considerable diversity with respect to feeding habits, some are feather feeders; others are consume the blood of the their respective host. They have coevolved with their specific host species, and their presence on a particular host can provide important information about the host's ecology and evolution.

Human Significance: Phthirapteran ectoparasites are adversely affects the growth and productivity of their host. Low infestation of the phthirapteran ectoparasites on the host has negligible effect but when high infestation they cause extensive damage to the feathers/hairs and skin of the hosts and also involved in reservoiring and transmitting of various infectious agents. Certain hematophagous amblyceran species deserve special attention, as poultry lice, *Menacanthus stramineus* and *Menopon gallinae*, have been convicted of acting as reservoirs and transmitters of bacterial strains, i.e. *Escherichia coli*, *Ornithosis bedsoniae*, *Pasteurella multocida*, *Salmonella gallinarum* and *Streptococcus equines*. Some amblyceran species i.e., *Actornithophi luslimosae*, *Austromenopon phaeopodis*, *Dennyus hirundinis*, *Pseudomenopon pilosum* and *Trinoton anserinum* act as intermediate hosts for filarial worms, e.g., *Eulimdana baina*, *Eulimdana wongae*, *Filaria cypseli*, *Pelecitus fulicaeatrae* and *Sarconema eurycera* (Clayton *et al.*, 2016). Similarly, the anopluran species are also major pests of mammals. i.e., *Trichodectes canis*, *Linognathus stenopsis*, *Heterodoxus spiniger*, *Haematopinis suis*, and *Pediculus humanus* transmit the various infectious agents, e.g., *Dipylidium caninum*, *Anaplasma sp.*, *Anaplasma platys*, *Pox virus*, and *Rickettsia prowazekii* (Durden and Lloyd,

2009). Needless to say, the poultry, wool, and dairy industries suffer economic losses due to Phthirapteran infestations.

Threatened species: Only one species *Haematopinu soliveri* Mishra and Singh, 1978, parasitized on Pygmy hog, *Porcula salvania* Hodgson, 1847 has found as Critically Endangered as per IUCN.

Protected Species as per WPA (2022): No phthiraptera species are listed as per the Wild Life Protection Act, 2022.

Species under CITES: There are no phthiraptera species on the CITES list.

Invasive alien species: No phthirapteran species are noted as invasive from India.

Gap areas: Very little information is available on Phthiraptera from many states, *i.e.*, Andaman & Nicobar, Bihar, Chhattisgarh, Delhi, Kerala, Nagaland, and Tamil Nadu, and no information is reported from Chandigarh, Dadra Nagar Haveli, Goa, Haryana, Jharkhand, Lakshadweep, Mizoram, Puducherry, Telangana, and Tripura. The molecular studies, economic effects of phthirapteran species on the hosts, and seasonal variation are also some of the challenging aspects to be taken into account in this order.

Systematic list:

Order-Phthiraptera

Suborder-Amblycera

Family Boopidae

1. *Heterodoxus Spiniger* (Enderlein, 1909)
2. *Boopia grandis* Piaget, 1885

Family Laemobothriidae

3. *Laemobothrion (Eulaemobothrion) atrum* (Nitzsch, 1818)
4. *Laemobothrion (Eulaemobothrion) biswasi* Lakshminarayana, 1968
5. *Laemobothrion (Laemobothrion) maximum* Scopoli, 1763
6. *Laemobothrion (Laemobothrion) tinnunculi* (Linnaeus, 1758)
7. *Laemobothrion (Laemobothrion) vulturis* Fabricius, 1775

Family Ricinidae

8. *Ricinus fringillae* De Geer, 1778
9. *Ricinus ivanovi* Blagoveshtchensky, 1951
10. *Ricinus meinertzhageni* Rheinwald, 1968
11. *Ricinus rubeculae* (Schränk, 1776)
12. *Ricinus serratus* (Durrant, 1906)

Family Menoponidae

13. *Actornithophilus grandiceps* (Piaget, 1880)
14. *Actornithophilus himantopi* Blagoveshtchensky, 1951
15. *Actornithophilus hoplopteri* (Mjöberg, 1910)
16. *Actornithophilus limosae* (Kelloogg, 1908)
17. *Actornithophilus lyallpurensis* Ansari, 1955
18. *Actornithophilus ochraceus* (Nitzsch, 1818)
19. *Actornithophilus paludosus* Clay, 1962
20. *Actornithophilus patellatus* (Piaget, 1890)
21. *Actornithophilus pustulosus* (Piaget, 1880)
22. *Actornithophilus spinulosus* (Piaget, 1880)
23. *Actornithophilus totani* (Schränk, 1803)
24. *Actornithophilus umbrinus* (Burmeister, 1838)

25. *Amyrsidea elbeli* Emerson & Stojanovich, 1963
26. *Amyrsidea minuta* Emerson, 1961
27. *Amyrsidea phaeostoma* (Nitzsch, 1866)
28. *Ardeiphilus vittatus* (Rudow, 1866)
29. *Ardeiphilus trochioxus* (Burmeister, 1838)
30. *Austromenopon crocatum* (Nitzsch, 1866)
31. *Austromenopon leucuræ* Timmerman, 1955
32. *Austromenopon limosæ* Timmerman, 1955
33. *Austromenopon durisetosum* Blagovestchensky, 1948
34. *Chapinia acutovulvata* (Piaget, 1881)
35. *Chapinia clayæ* Elbel, 1967
36. *Ciconiphilus decimfasciatus* (Boisduval & Lacordaire, 1835)
37. *Ciconiphilus matosi* (Tendeiro, 1958)
38. *Ciconiphilus quadripustulatus* (Burmeister, 1838)
39. *Ciconiphilus temporalis* (Piaget, 1880)
40. *Colpocephalum aethiopicæ* Price & Beer, 1965
41. *Colpocephalum apivorus* Tendeiro, 1953
42. *Colpocephalum asiatici* Price & Beer, 1965
43. *Colpocephalum cooki* Price & Beer, 1965
44. *Colpocephalum flavescens* (Haan, 1829)
45. *Colpocephalum fregili* Denny, 1842
46. *Colpocephalum heterosoma* Piaget, 1880
47. *Colpocephalum impressum* Rudow, 1866
48. *Colpocephalum indi* Price & Beer, 1963
49. *Colpocephalum leucocephali* Price & Beer, 1965
50. *Colpocephalum longicaudum* Nitzsch, 1866
51. *Colpocephalum melanocephalæ* Price & Beer, 1965
52. *Colpocephalum occipitale* Giebel, 1866
53. *Colpocephalum oscitansi* Price & Beer, 1965
54. *Colpocephalum pectinatum* Osborn, 1902
55. *Colpocephalum percnopteri* Price & Beer, 1963
56. *Colpocephalum plataleæ* Price & Beer, 1965
57. *Colpocephalum polybori* Rudbow, 1869
58. *Colpocephalum rosei* Price & Emerson, 1974
59. *Colpocephalum salimalii* Clay, 1951
60. *Colpocephalum sinensis* Price, 1968
61. *Colpocephalum tausi* (Ansari, 1951)
62. *Colpocephalum tirkhan* (Ansari, 1951)
63. *Colpocephalum turbinatum* Denny, 1842
64. *Colpocephalum uchidi* (Qadri, 1936)
65. *Colpocephalum zeræfæ* Ansari, 1955
66. *Ctenigogus erinaceimorphus* Eichler & Ziatorzycka, 1963
67. *Cuculiphilus (Falcophilus) cathertaepapæ* (Giebel, 1861)
68. *Cuculiphilus (Aegyiphilus) gypsis* (Eichler, 1944)
69. *Cuculiphilus snodgrassi* (Kellog & Kuwana, 1902)
70. *Cuculiphilus upak* Ansari, 1951
71. *Dennyus cypsiurus* Thompson, 1948
72. *Dennyus giganteus* Emerson & price, 1968
73. *Dennyus hirundinis* (Linnaeus, 1761)
74. *Dennyus medwayi* Ledger, 1970
75. *Dennyus vonarxi* Buttikar, 1954
76. *Eidmanniella albescens* (Piaget, 1880)

77. *Eidmanniella eurygaster* Giebel, 1866
78. *Eucolpocephalum femorale* (Piaget, 1880)
79. *Heleonomus elbeli* Price, 1970
80. *Heleonomus laveryi* Price, 1970
81. *Heleonomus macilentus* (Nitsch, 1866)
82. *Heleonomus semiluctus* (Gervais, 1844)
83. *Hohorstiella lata* (Piaget, 1880)
84. *Hohorstiella rampurensis* Bansal, 2010
85. *Hohorstiella tandani* Rai, 1977
86. *Holomenopon leucoxanthum* Burmeister, 1838
87. *Holomenopon tadornae* (Gervais, 1844)
88. *Holomenopon maxbeieri* Eichler, 1954
89. *Kelerimenopon psittaclulae* Price & Emerson, 1966
90. *Kurodaia deignani* Elbel & Emerson, 1960
91. *Kurodaia (Kurodaia) fulvofasciata* (Piaget, 1880)
92. *Kurodaia (Conciella) punjabensis* (Ansari, 1951)
93. *Menopon gallinae* Linnaeus, 1758
94. *Menacanthus abdominalis* (Piaget, 1880)
95. *Menacanthus camelinus* Nitzsch, 1874
96. *Menacanthus cornutus* (Schommer, 1913)
97. *Menacanthus eurysternus* Burmeister, 1838
98. *Menacanthus gonophaeus* (Burm, 1838)
99. *Menacanthus kalatitar* Ansari, 1951
100. *Menacanthus monochromateus* (Kellog & Paine, 1914)
101. *Menacanthus palmai* Bansal, 2013
102. *Menacanthus stramineus* (Nitzsch, 1818)
103. *Menacanthus unicolor* (Piaget, 1880)
104. *Myrsidea agarwali* Khan, 2009
105. *Myrsidea amandavae* Clay, 1970
106. *Myrsidea ananthakrishnani* Rai, 1978
107. *Myrsidea assamensis* Tandan, 1972
108. *Myrsidea baktitar* Ansari, 1951
109. *Myrsidea balati* Machacek, 1977
110. *Myrsidea bharat* Tandon & Clay, 1971
111. *Myrsidea bhutanensis* Tandon, 1972
112. *Myrsidea brunnea* (Nitzsch, 1866)
113. *Myrsidea chilchil* Ansari, 1951
114. *Myrsidea clayae* Klockenhoff, 1969
115. *Myrsidea cornicis* (De Geer, 1778)
116. *Myrsidea cucularis* (Nitzsch, 1818)
117. *Myrsidea cyrtostigma* (Kellog & Chapman, 1902)
118. *Myrsidea dukhunensis* Ansari, 1951
119. *Myrsidea flavirostrata* Ansari, 1951
120. *Myrsidea himalayensis* Klockenhoff, 1969
121. *Myrsidea invadens* (Kellogg & Chapman, 1902)
122. *Myrsidea ishizawai* Uchida, 1926
123. *Myrsidea isostoma* (Nitzsch, 1866)
124. *Myrsidea macraidoia* Tandon, 1972
125. *Myrsidea manipurensis* Tandan, 1972
126. *Myrsidea nigra* (Kellog & Paine, 1911)
127. *Myrsidea orientalis* Tandan, 1972

128. *Myrsidea pycnonoti* Eichler, 1947
 129. *Myrsidea subcoracis* Klockenhoff & Schirmers, 1976
 130. *Myrsidea quadrifasciata* (Piaget, 1880)
 131. *Myrsidea ruficeps* Nitzsch, 1866
 132. *Myrsidea salimalii* Tandon & Clay, 1971
 133. *Myrsidea satbhai* Ansari, 1951
 134. *Myrsidea sehri* Ansari, 1951
 135. *Myrsidea sikkimensis* Tandon, 1972
 136. *Myrsidea singularis* Tandon, 1972
 137. *Myrsidea srivastavai* Clay, 1970
 138. *Myrsidea sultanpurensis* Ansari, 1951
 139. *Myrsidea tibetana* Klockenhoff & Schirmers, 1976
 140. *Myrsidea thoracica* (Giebel, 1874)
 141. *Nosopon chanabense* Ansari, 1951
 142. *Nosopon clayae* Price & Beer, 1963
 143. *Piagetiella titan* (Piaget), 1880
 144. *Plegadiphilus threskiornis* Bedford, 1939
 145. *Pseudomenopon concretum* (Piaget, 1880)
 146. *Pseudomenopon dolium* (Rudow, 1869)
 147. *Pseudomenopon lanceolatum* (Tendeiro, 1965)
 148. *Pseudomenopon phoenicuri* Price, 1974
 149. *Pseudomenopon pilosum* (Scopoli, 1763)
 150. *Trinoton emersoni* Clay, 1963
 151. *Trinoton querquedulae* (Linne), 1758
- Suborder-Anoplura
 Family Enderleinellidae
 152. *Enderleinellus nishimarui* Kaneko, 1963
 153. *Phthirunculus sumatranus* Kuhn and Ludwig, 1965
- Family Haematopinidae
 154. *Haematopinus channabasavannai* Krishna, Khuddus & Kuppuswamy, 1977
 155. *Haematopinus eurysternus* Nitzsch, 1818
 156. *Haematopinus longus* Neumann, 1912
 157. *Haematopinus oliveri* Mishra and Singh, 1978
 158. *Haematopinus quadripertusus* Fahrenheit, 1916
 159. *Haematopinus tuberculatus* (Burmeister, 1839)
 160. *Haematopinus suis* (Linnaeus, 1758)
- Family Hoplopleuridae
 161. *Ancistroplax crocidurae* Waterston, 1929
 162. *Hoplopleura acanthopus* (Burmeister, 1839)
 163. *Hoplopleura alticola* Mishra and Bhat, 1972
 164. *Hoplopleura blanfordi* Mishra and Dhanda, 1972
 165. *Hoplopleura captiosa* Johnson, 1960
 166. *Hoplopleura cutchicus* Mishra and Kaul, 1973
 167. *Hoplopleura erismata* Ferris, 1921
 168. *Hoplopleura himalayana* Mishra, Kulkarni and Bhat, 1973
 169. *Hoplopleura khandala* Mishra, 1981
 170. *Hoplopleura kondana* Mishra, 1981
 171. *Hoplopleura malabarica* Werneck, 1954
 172. *Hoplopleura maniculata* (Neumann, 1909)
 173. *Hoplopleura pacifica* Ewing, 1924
 174. *Hoplopleura pahari* Johnson, 1972
 175. *Hoplopleura phaiomydis* Ferris, 1921

176. *Hoplopleura ramgarh* Mishra, Bhat and Kulkarni, 1972
 177. *Hoplopleura sahydri* Mishra, 1981
 178. *Hoplopleura sicata* Johnson, 1964
 179. *Hoplopleura silvula* Johnson, 1972
 180. *Hoplopleura sinhgarh* Mishra, Bhat and Kulkarni, 1972

Family Linognathidae

181. *Linognathus africanus* Kellogg and Paine, 1911
 182. *Linognathus bhatti* Dutta, 1988
 183. *Linognathus cervicaprae* (Lucas, 1847)
 184. *Linognathus ovillus* (Neumann, 1907)
 185. *Linognathus pedalis* (Osborn, 1896)
 186. *Linognathus pithodes* Cumming, 1916
 187. *Linognathus setosus* (von Olfers, 1816)
 188. *Linognathus stenopsis* (Burmeister, 1838)
 189. *Linognathus vituli* (Linnaeus, 1758)
 190. *Solenopotes capillatus* Enderlein, 1904

Family Pedicinidae

191. *Pedicinus ancoratus* Ferris, 1934
 192. *Pedicinus eurygaster* (Burmeister, 1838)
 193. *Pedicinus obtusus* (Rudow, 1869)
 194. *Pediculus humanus* (Linnaeus, 1758)

Family Polyplacidae

195. *Docophthirus acinetus* Waterston, 1923
 196. *Haemodipsus ventricosus* (Denny, 1842)
 197. *Linognathoides palaeartus* (Olsoufieff, 1938)
 198. *Neohaematopinus echinatus* (Neumann, 1909)
 199. *Neohaematopinus petauristae* Ferris, 1923
 200. *Polyplax asiatica* Ferris, 1923
 201. *Polyplax blanfordi* Mishra and Dhanda, 1972
 202. *Polyplax cutchicus* Mishra and Kaul, 1973
 203. *Polyplax hurrianicus* Mishra, 1981
 204. *Polyplax indica* Mishra and Kulkarni, 1974
 205. *Polyplax kondana* Mishra, 1981
 206. *Polyplax reclinata* (Nitzsch, 1864)
 207. *Polyplax serrata* (Burmeister, 1839)
 208. *Polyplax spinulosa* (Burmeister, 1839)
 209. *Polyplax stephensi* (Christophers and Newstead, 1906)

Family Pthiridae

210. *Pthirus pubis* (Linnaeus, 1758)

Suborder-Rhynchopthirina

Family Haematomyzidae

211. *Haematomyzus elephantis* Piaget, 1869

Suborder-Ischnocera

Family Philopteridae

212. *Acidoproctus moschatae* (Linne, 1758)
 213. *Aegypoecus perspicuus* (Kellogg, 1914)
 214. *Alcedoecus annulatus* Ansari, 1955
 215. *Alcedoecus capistratus* Neumann, 1912
 216. *Anaticola anseris* Linnaeus, 1758
 217. *Anaticola crassicornis* (Scopoli, 1763)
 218. *Anaticola mergiserrati* De Geer, 1778
 219. *Anatoecus dentatus* (Scopoli, 1763)

220. *Anatoecus icterodes* (Nitzsch, 1818)
221. *Anatoecus pygaspis* (Giebel, 1866)
222. *Aquanirmus bahli* Tandan, 1951
223. *Ardeicola asiaticus* Kumar and Tandan, 1971
224. *Ardeicola castaneuns* (Piaget, 1885)
225. *Ardeicola denelli* Hajela & Tandan, 1967
226. *Ardeicola expallidus* Blagov, 1940
227. *Ardeicola hardayali* Tandan and Kumar, 1969
228. *Ardeicola indicus* Brelih, 1965
229. *Ardeicola lepidus* (Giebel, 1866)
230. *Ardeicola plataleae* (Linne), 1758
231. *Ardeicola tantali* Fabricius, 1798
232. *Bedfordiella unica* Thompson, 1937
233. *Brueelia amandavae* Rekasi, 2005
234. *Brueelia antennatus* Ansari, 1956
235. *Brueelia avinus* Ansari, 1956
236. *Brueelia biguttata* (Kellog& Pain, 1914)
237. *Brueelia biocellata* (Piaget, 1880)
238. *Brueelia chayanh* Ansari, 1955
239. *Brueelia cyclothorax* (Burm, 1838)
240. *Brueelia dicruri* Ansari, 1955
241. *Brueelia daunae* (Clay, 1936)
242. *Brueelia efronte* Ansari, 1956
243. *Brueelia ginginianus* Ansari, 1956
244. *Brueelia grandalae* (Clay, 1936)
245. *Brueelia guldum* Ansari, 1955
246. *Brueelia husaini* Ansari, 1956
247. *Brueelia impressifrons* Ansari, 1956
248. *Brueelia iliaci* Denny, 1842
249. *Brueelia longisternus* Ansari, 1956
250. *Brueelia maharasthan* Ansari, 1956
251. *Brueelia marginata* (Burmeister, 1838)
252. *Brueelia meinertzhageni* Ansari, 1956
253. *Brueelia multipunctata* (Clay, 1936)
254. *Brueelia myophoneae* (Clay, 1936)
255. *Brueelia nipalensis* Ansari, 1956
256. *Brueelia novafacies* Ansari, 1956
257. *Brueelia olivacea* (Burmeister, 1838)
258. *Brueelia oudhensis* Ansari, 1956
259. *Brueelia plocea* Lakshminarayana, 1968
260. *Brueelia punjabensis* Ansari, 1947
261. *Brueelia saliemii* Ansari, 1957
262. *Brueelia sehri* Ansari, 1955
263. *Brueelia sternotypicus* Ansari, 1956
264. *Brueelia stresemanni* (Clay, 1936)
265. *Brueelia subtilis* (Nitzsch, 1874)
266. *Brueelia uncinosa* (Burmeister, 1838)
267. *Brueelia varia* (Burmeister, 1838)
268. *Brueelia ventratum* Ansari, 1956
269. *Brueelia zootherae* (Clay, 1936)
270. *Buceronirmus albescens* (Piaget, 1890)
271. *Buceronirmus deignani* Elbel, 1977

272. *Campanulotes compar* (Burmiester, 1838)
273. *Campanulotes heteroceros* Tendeiro, 1969
274. *Carduiceps cingulatus* (Denny, 1842)
275. *Caprailla subcuspidata* (Burmiester, 1838)
276. *Chelopistes lervicola* (Clay, 1941)
277. *Coloceras aegyptiacum* (Kellog & Paine, 1911)
278. *Coloceras chinense* Kellogg & Chapman, 1902
279. *Coloceras doreyanus* (Eichler, 1950)
280. *Coloceras indicum* (Tendeiro, 1973)
281. *Coloceras lativentris* (Uchida, 1916)
282. *Coloceras liviea* Tendeiro, 1974
283. *Coloceras orientalis* (Tendeiro, 1969)
284. *Coloceras piageti* (Johnston & Harrison)
285. *Coloceras setosum* (Piaget, 1880)
286. *Coloceras softoticus* Eichler, 1950
287. *Coloceras unchalli* (Tendeiro, 1972)
288. *Coloceras piriformes* (Tendeiro, 1969)
289. *Columbicola bacillus* (Giebel, 1866)
290. *Columbicola cavifrons* Taschenberg, 1882
291. *Columbicola columbae* (Linnaeus, 1758)
292. *Columbicola confussum* Eichler, 1947
293. *Columbicola elbeli* Tendeiro, 1965
294. *Columbicola exilicornis* (Piaget, 1880)
295. *Columbicola fulmeki* Eichler, 1942
296. *Columbicola guimaraesi* Tendeiro, 1965
297. *Columbicola keleri* Tendeiro, 1965
298. *Columbicola phoenicopterae* Tendeiro, 1965
299. *Columbicola theresae* Ansari, 1955
300. *Columbicola turturis* (Uchida, 1917)
301. *Columbicola tschuly schman* Eichler, 1942
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Menopongallinae Linnaeus, 1758
(Male)



Menopongallinae Linnaeus, 1758
(Female)