

# FAUNA OF INDIA CHECKLIST

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## ARTHROPODA: INSECTA: EPHEMEROPTERA

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

## ARTHROPODA: INSECTA: EPHEMEROPTERA

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**Introduction:** The order Ephemeroptera popularly known as mayflies is an ancient order of aquatic insects. They evolved more than 300 million years ago during the Carboniferous. Phylogenetically it is a sister group of Odonata and the Plecoptera lineage of the winged insects. The apomorphic character of the order is the presence of a brief terrestrial stage with cloudy, semi-opaque wings covered with small hairs (microtrichia) known as “subimago”. The larval or nymphal stage spans 3 to 4 weeks in the tropics, with a greatly extended span of 1 to 2 years in colder temperate zones. They exhibit greater diversity in montane littoral waters (fast-flowing rivers and streams) than in stagnant waters like lakes and ponds.

**Global diversity:** The order encompasses more than 3,700 described species in 465 genera and 42 families distributed globally, except for Antarctica and a few small.

**Diversity in India:** In India, 247 species belonging to 63 genera and 15 families in four suborders are recorded.

### Diversity in States (Table)

Sl.No.	State/Union Territory	No. Species	No. Endemic Species
1	Andhra Pradesh	4	2
2	Arunachal Pradesh	46	20
3	Assam	6	1
4	Bihar	5	1
5	Chhattisgarh	0	0
6	Gujarat	0	0
7	Goa	1	1
8	Haryana	0	0
9	Himachal Pradesh	38	28
10	Jharkhand	1	1
11	Karnataka	44	32
12	Kerala	38	31
13	Madhya Pradesh	9	4
14	Maharashtra	26	16
15	Manipur	5	3
16	Meghalaya	14	5
17	Mizoram	0	0
18	Nagaland	2	1
19	Odisha	1	1
20	Punjab	0	0
21	Rajasthan	1	1

22	Sikkim	6	3
23	Tamil Nadu	72	58
24	Telangana	0	0
25	Tripura	0	0
26	Uttar Pradesh	4	3
27	Uttarakhand	6	2
28	West Bengal	29	14
29	Andaman & Nicobar	3	3
30	Chandigarh	0	0
31	Dadra Nagar Haveli, Daman & Diu	0	0
32	Delhi	0	0
33	Jammu & Kashmir	34	26
34	Ladakh	8	6
35	Lakshadweep	0	0
36	Puducherry	0	0
	<b>INDIA TOTAL</b>	<b>247</b>	<b>182</b>

**Endemism:** 182 species are endemic to India. High endemism is reported from the Western Ghats hill streams of Tamil Nadu, Kerala, Karnataka and hill streams of Himachal Pradesh and Arunachal Pradesh.

**Habitat:** The larval stages are found in streams, rivers, lakes, ponds and other freshwater wetlands.

**Ecological Significance:** They are an important component of freshwater food chain and prey source to freshwater fishes, wetland birds and other aquatic invertebrate predators. They are highly sensitive to water quality and are reliable indicators of freshwater ecosystem health.

**Human Significance:** Mayflies are widely used in biomonitoring wetland ecosystems.

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

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

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

**Invasive alien species:** No mayfly species are reported to be invasive in Indian waters.

**Gap areas:** Mayflies are poorly documented from many states, especially from western Himalaya (Uttarakhand), north-east (Manipur, Nagaland, Tripura etc.). Many species are known only from type collection and not reported for more than last fifty years.



## CHECKLIST OF EPHEMEROPTERA OF INDIA

Order: EPHEMEROPTERA Hyatt &amp; Arms, 1891

Suborder: Carapacea

Superfamily: Prosopistomatoidea

I. Family: PROSOPISTOMATIDAE Lam'eere, 1917

1. Genus: *Prosopistoma* Laterille, 1833

1. *Prosopistoma coorgum* Balachandran & Anbalagan, 2016
2. *Prosopistoma indicum* Peters, 1967
3. *Prosopistoma someshwarensis* Ramya-Roopa, Selvakumar & Subramanian, 2017

Suborder: Rectracheata

II. Family: LEPTOPHLEBIIDAE Banks, 1900

Subfamily: Atalophlebiinae Peters, 1980

2. Genus: *Atalophlebia* Eaton, 1881

4. *Atalophlebia chialhnia* Dubey, 1971

3. Genus: *Choroterpes* Eaton, 1881Subgenus: *Choroterpes* s.str. Eaton, 1881

5. *Choroterpes* (*C.*) *kaegies* Selvakumar, Subramanian & Chandra, 2017
6. *Choroterpes* (*C.*) *petersi* Tong & Dudgeon, 2003
7. *Choroterpes* (*C.*) *girigangaensis* Kubendran & Vasanth, 2022
8. *Choroterpes* (*C.*) *andamanensis* Vasanth, Subramanian & Selvakumar, 2021
9. *Choroterpes* (*C.*) *kumaradhara* Muthukatturaja & Balasubramanian, 2022

Subgenus *Dilatognathus* Kluge, 2012

10. *Choroterpes* (*D.*) *nicobarensis* Selvakumar & Chandra, 2017
11. *Choroterpes* (*D.*) *nigella* (Kang & Yang, 1994)

Subgenus: *Euthraululus* Barnard, 1932

12. *Choroterpes* (*E.*) *alagarensis* Dinakaran, Balachandran & Anbalagan, 2009
13. *Choroterpes* (*E.*) *nambiyarensis* Selvakumar, Arunachalam & Sivaramakrishnan, 2013
14. *Choroterpes* (*E.*) *parvula* (Gillies, 1951)
15. *Choroterpes* (*E.*) *armillatus* Kluge, Srinivasan, Vasanth, Sivaruban, Barathy & Isack, 2022
16. *Choroterpes* (*E.*) *latus* Kluge, Srinivasan, Vasanth, Sivaruban, Barathy & Isack, 2022
17. *Choroterpes* (*E.*) *atelobranchis* Kluge, Srinivasan, Vasanth, Sivaruban, Barathy & Isack, 2022
18. *Choroterpes* (*E.*) *unicolor* Kluge, Srinivasan, Vasanth, Sivaruban, Barathy & Isack, 2022
19. *Choroterpes* (*E.*) *angustifolius* Kluge, Srinivasan, Vasanth, Sivaruban, Barathy & Isack, 2022
20. *Choroterpes* (*E.*) *Mumbai* Kluge, Srinivasan, Vasanth, Sivaruban, Barathy & Isack, 2022
21. *Choroterpes* (*E.*) *nandini* (Selvakumar & Sivaramakrishnan, 2017)

4. Genus: *Edmundsula* Sivaramakrishnan, 1985

22. *Edmundsula lotica* Sivaramakrishnan, 1985
23. *Edmundsula meghamalaiensis* Vasanth, Subramanian & Selvakumar, 2021

5. Genus: *Indialis* Peters & Edmunds, 1970

24. *Indialis badia* Peters & Edmunds, 1970
25. *Indialis rossi* Peters, 1975
26. *Indialis kannani* Balasubramanian & Muthukatturaja, 2022
27. *Indialis kodagi* Balasubramanian & Muthukatturaja, 2022
28. *Indialis thirparapensis* Balasubramanian & Muthukatturaja, 2022
29. *Indialis payaswini* Balasubramanian & Muthukatturaja, 2022

6. Genus: *Isca* Gillies, 1951

30. *Isca* (*Isca*) *purpurea* Gillies, 1951

7. Genus: *Klugephlebia* Selvakumar, Subramanian & Sivaramakrishnan, 2016

31. *Klugephlebia kodai* Selvakumar, Subramanian & Sivaramakrishnan, 2016
8. Genus: *Megaglana* Peters & Edmunds, 1970
32. *Megaglana agasthiya* Vasanth, Subramanian & Selvakumar, 2021
33. *Megaglana sivarubani* Srinivasan & Isak, 2022
9. Genus: *Nathanella* Demoulin, 1955
34. *Nathanella indica* Demoulin, 1955
35. *Nathanella saraswathiae* Sivaramakrishnan, Venkataraman & Balasubramanian, 1996
10. Genus: *Notophlebia* Peters & Edmunds, 1970
36. *Notophlebia ganeshi* Kluge, 2014
37. *Notophlebia hyalina* Peters & Edmunds, 1970
38. *Notophlebia jobi* Sivaramakrishnan & Peters, 1984
11. Genus: *Ghatula* Kluge, Vasanth, Sivaramakrishnan & Balasubramanian, 2022
39. *Ghatula quadrimaculata* Kluge, Vasanth, Sivaramakrishnan & Balasubramanian, 2022
40. *Ghatula rufa* Kluge, Vasanth, Sivaramakrishnan & Balasubramanian, 2022
12. Genus: *Petersula* Sivaramakrishnan, 1984
41. *Petersula courtallensis* Sivaramakrishnan, 1984
42. *Petersula nathani* Sivaramakrishnan & Hubbard, 1984
43. *Petersula heptagenoides* Kluge, Vasanth, Sivaramakrishnan & Balasubramanian, 2022
13. Genus: *Thraulodes* Ulmer, 1920
44. *Thraulodes marhieus* Dubey, 1970
14. Genus: *Thraululus* Eaton, 1881
45. *Thraululus gopalani* Grant & Sivaramakrishnan, 1985
46. *Thraululus mudumalaiensis* Arumuga-Soman, 1991
47. *Thraululus semicastaneus* (Gillies, 1951)
48. *Thraululus thiagarajani* Balasubramanian & Muthukatturaja, 2019
49. *Thraululus jacobusi* Isack, Srinivasan, Sivaruban & Barathy, 2022
50. *Thraululus amravati* Vasanth, Subramanian & Selvakumar, 2022
51. *Thraululus cuspidatus* Vasanth, Subramanian & Selvakumar, 2022
52. *Thraululus malabarensis* Vasanth, Subramanian & Selvakumar, 2022
53. *Thraululus plumeus* Selvakumar, Vasanth & Subramanian, 2022
54. *Thraululus vellimalaiensis* Vasanth, Subramanian & Selvakumar, 2022

**Subfamily: Leptophlebiinae**

15. Genus: *Gilliesia* Peters & Edmunds, 1970
55. *Gilliesia hindustanica* (Gillies, 1951)

**Superfamily: Ephemeroidea**

**III. Family: EPHEMERIDAE Latreille, 1810**

Subfamily: Ephemerinae

16. Genus: *Ephemera* Linnaeus, 1758
- Subgenus: *Aethephemera* McCafferty & Edmunds, 1973
56. *Ephemera* (*A.*) *nadinae* McCafferty & Edmunds, 1973
- Subgenus: *Ephemera* Linnaeus, 1758
57. *Ephemera* (*E.*) *annandalei* Chopra, 1937
58. *Ephemera* (*E.*) *consors* Eaton, 1892
59. *Ephemera* (*E.*) *diffusa* Chopra, 1937
60. *Ephemera* (*E.*) *distincta* Hubbard, 1982
61. *Ephemera* (*E.*) *exspectans* (Walker, 1860)
62. *Ephemera* (*E.*) *fulvata* Navas, 1935
63. *Ephemera* (*E.*) *immaculata* Eaton, 1871
64. *Ephemera* (*E.*) *nathani* Hubbard, 1982
65. *Ephemera* (*E.*) *remensa* Eaton, 1892
66. *Ephemera* (*E.*) *supposita* Eaton, 1883

Subfamily: Hexageniinae

17. Genus: *Eatonigenia* Ulmer, 1939

67. *Eatonigenia indica* (Chopra, 1924)  
 68. *Eatonigenia trirama* McCafferty, 1973

Subfamily: Palingeniinae

18. Genus: *Anagenesia* Eaton, 1883  
 69. *Anagenesia lata* (Walker, 1853)  
 70. *Anagenesia minor* (Eaton, 1892)  
 71. *Anagenesia robusta* (Eaton, 1892)

**IV. Family: POLYMITARCYIDAE Banks, 1900**

Subfamily: Asthenopodinae

19. Genus: *Povilla* Navas, 1912  
 Subgenus: *Povilla* Navas, 1912  
 72. *Povilla* (*P.*) *andamanensis* Hubbard, 1984  
 Subgenus: *Languidipes* Hubbard, 1984  
 73. *Povilla* (*L.*) *taprobanes* Hubbard, 1984

Subfamily: Polymitarcyinae

20. Genus: *Ephoron* Williamson, 1802  
 74. *Ephoron annandalei* (Chopra, 1927)  
 75. *Ephoron indicus* (Pictet, 1843)  
 76. *Ephoron punensis* Dubey, 1970

**V. Family: POTAMANTHIDAE Albarda, 1888**

21. Genus: *Potamanthus* Pictet, 1843  
 77. *Potamanthus subcostalis* Navas, 1931  
 22. Genus: *Rhoenanthus* Eaton, 1881  
 78. *Rhoenanthus tungaiensis* Balasubramanian & Muthukatturaja, 2019  
 79. *Rhoenanthus distafurcus* Bae & McCafferty, 1991

Superfamily: Caenoidea

**VI. Family: CAENIDAE Newman, 1853**

Subfamily: Caeninae

23. Genus: *Caenis* Stephens, 1835  
 80. *Caenis amaricani* Sivaruban *et al.*, 2020  
 81. *Caenis arunachalami* Srinivasan, Sivaruban, Barathy & Isack, 2023  
 82. *Caenis incurva* Malzacher, 2015  
 83. *Caenis kaegies* Srinivasan, Sivaruban, Barathy & Isack, 2023  
 84. *Caenis kimminsis* Ali, 1967  
 85. *Caenis limai* Srinivasan, Sivaruban, Barathy & Isack, 2023  
 86. *Caenis maduraiensis* Muthukatturaja & Balasubramanian, 2021  
 87. *Caenis maratha* Malzacher, 2015  
 88. *Caenis nigropunctatula* Malzacher, 2015  
 89. *Caenis nigrostriata* Navas, 1931  
 90. *Caenis perpusilla* Walker, 1853  
 91. *Caenis picea* Kimmins, 1947  
 92. *Caenis piscina* Kimmins, 1947  
 93. *Caenis srinagari* Traver, 1939  
 94. *Caenis venkataramani* Srinivasan, Sivaruban, Barathy & Isack, 2023  
 24. Genus: *Clypeocaenis* Soldan, 1978  
 95. *Clypeocaenis bisetosa* Soldan, 1978  
 96. *Clypeocaenis gayathri* Balasubramanian & Muthukatturaja, 2020  
 97. *Clypeocaenis kaveri* Balasubramanian & Muthukatturaja, 2021  
 98. *Clypeocaenis multisetosa* Soldan, 1978  
 99. *Clypeocaenis napoklu* Balasubramanian & Muthukatturaja, 2021  
 100. *Clypeocaenis sharadhae* Balasubramanian & Muthukatturaja, 2020  
 101. *Clypeocaenis malzacheri* Srinivasan, Sivaruban, Barathy & Isack, 2022

**VII. Family: NEOEPHEMERIDAE Traver, 1935**

25. Genus: *Potamanthellus* Lestage, 1931  
 102. *Potamanthellus ganges* Bae & McCafferty, 1998  
 103. *Potamanthellus caenoides* Ulmer, 1939

Superfamily: Ephemerelloidea

**VIII. Family: EPHEMERELLIDAE Klapalek, 1909**

Subfamily: Ephemerellinae

26. Genus: *Cincticostella* Allen, 1971

- 104. *Cincticostella bifurcata* Xie, Jia, Chen, Jacobus & Zhou, 2009
- 105. *Cincticostella braaschi* Jacobus & McCafferty, 2008
- 106. *Cincticostella funki* Martynov, Selvakumar, Palatov & Vasanth, 2021
- 107. *Cincticostella gosei* (Allen, 1975)
- 108. *Cincticostella indica* (Kapur & Kripalani, 1961)
- 109. *Cincticostella insolta* (Allen, 1971)
- 110. *Cincticostella ranga* Selvakumar & Subramanian, 2019
- 111. *Cincticostella richardi* Martynov & Palatov, 2019
- 112. *Cincticostella wangi* Selvakumar, Martynov & Subramanian, 2021
- 113. *Cincticostella changfai* Martynov & Palatov, 2021

27. Genus: *Drunella* Needham, 1905

- 114. *Drunella submontana* (Brodsky, 1930)

28. Genus: *Hyrtanella* Allen & Edmunds, 1976

- 115. *Hyrtanella grandipennis* (Zhou, Su & Gui, 2000)

29. Genus: *Serratella* Edmunds, 1959

- 116. *Serratella palatovi* Martynov, Selvakumar & Jacobus, 2021

30. Genus: *Teloganopsis* Ulmer, 1939

- 117. *Teloganopsis jinghongensis* (Xu, You & Hsu, 1984)

31. Genus: *Torleya* Lestage, 1917

- 118. *Torleya coheri* (Allen and Edmunds, 1963)
- 119. *Torleya lacuna* Jacobus, McCafferty & Sites, 2007
- 120. *Torleya nepalica* (Allen & Edmunds, 1963)
- 121. *Torleya simbalbarensis* Selvakumar, Subramanian, Martynov & Jacobus, 2021
- 122. *Torleya dibruensis* Selvakumar, Martynov & Jacobus, 2021

**IX. Family: TELOGANODIDAE Allen, 1965**

32. Genus: *Indoganodes* Selvakumar, Sivaramakrishnan & Jacobus, 2014

- 123. *Indoganodes jobini* Selvakumar, Sivaramakrishnan & Jacobus, 2014

33. Genus: *Teloganella* Ulmer, 1939

- 124. *Teloganella indica* (Selvakumar, Sivaramakrishnan & Jacobus, 2014)
- 125. *Teloganella gurhaensis* Agnihotra, Chandra, Shukla, Singh & Menhotra, 2020

34. Genus: *Teloganodes* Eaton, 1882

Subgenus: *Teloganodes* Eaton, 1882

- 126. *Teloganodes (T.) dentatus* Navas, 1931
- 127. *Teloganodes (T.) kodai* Sartori, 2008
- 128. *Teloganodes (T.) velutinus* Kluge *et al.* 2023

Subgenus: *Dudgeodes* Sartori, 2008

- 129. *Teloganodes (D.) palnius* Selvakumar, Sivaramakrishnan & Jacobus, 2014
- 130. *Teloganodes (D.) selvakumari* Martynov & Palatov, 2022

Subgenus: *Derlethina* Sartori, 2008

- 131. *Teloganodes (D.) tamiraparaniae* (Selvakumar, Sivaramakrishnan & Jacobus, 2014)

**X. Family: TRICORYTHIDAE Lestage, 1942**

35. Genus: *Sparsorythus* Sroka & Soldan, 2008

- 132. *Sparsorythus gracilis* Sroka & Solan, 2008
- 133. *Sparsorythus sivaramakrishnani* Sivaruban *et al.*, 2021
- 134. *Sparsorythus srokai* Srinivasan, Sivaruban, Barathy & Isack, 2021
- 135. *Sparsorythus nanjangudensis* Muthukatturaja & Balasubramanian, 2021
- 136. *Sparsorythus chitturensis* Balasubramanian & Muthukatturaja, 2022

36. Genus: *Tricorythus* Eaton, 1868

- 137. *Tricorythus meenakshi* Srinivasan, Sivaruban, Barathy & Isack, 2022

**XI. Family: VIETNAMELLIDAE Allen, 1984**

37. Genus: *Vietnamella* Tschernova, 1972

- 138. *Vietnamella* sp. A Selvakumar *et al.* 2018

**Suborder: Setisura****XII. Family: HEPTAGENIIDAE Needham, 1901**

Subfamily: Ecdyonurinae

38. Genus: *Afronurus* Lestage, 1924  
 139. *Afronurus assamensis* (Kimmins, 1937)  
 140. *Afronurus curtus* Dubey, 1971  
 141. *Afronurus keralensis* (Braasch & Soldan, 1987)  
 142. *Afronurus kumbakkaraiensis* (Venkataraman & Sivaramakrishnan, 1989)  
 143. *Afronurus solangensis* Dubey, 1971  
 144. *Afronurus meenmutti* Balasubramanian & Muthukatturaja, 2021
39. Genus: *Ecdyonurus* Eaton, 1868  
 145. *Ecdyonurus annulifer* (Walker, 1860)  
 146. *Ecdyonurus bengalensis* Ulmer, 1920  
 147. *Ecdyonurus eatoni* Kimmins 1937  
 148. *Ecdyonurus indicus* Hubbard, 1974  
 149. *Ecdyonurus (Rhithrogeniella) ornatus* Ulmer, 1939
40. Genus: *Notacanthurus* Tshemova, 1974  
 150. *Notacanthurus ladakhensis* Braasch, 1986  
 151. *Notacanthurus edentatus* Braasch, 1986  
 152. *Notacanthurus pange* Vasanth, Selvakumar & Subramanian, 2020
41. Genus: *Thalerosphyrus* Eaton, 1881  
 153. *Thalerosphyrus flowersi* Venkataraman & Sivaramakrishnan, 1987  
 154. *Thalerosphyrus meghalayensis* Selvakumar & Chandra, 2017

Subfamily: Heptageniinae

42. Genus: *Heptagenia* Walsh, 1863  
 155. *Heptagenia nubila* Kimmins, 1937  
 156. *Heptagenia solangensis* Dubey, 1971  
 157. *Heptagenia traversae* Braasch, 1986

Subfamily: Rhithrogeninae

43. Genus: *Cinygmula* McDunnough, 1933  
 158. *Cinygmula hutchinsoni* (Traver, 1939)
44. Genus: *Epeorus* Eaton, 1881  
 Subgenus: *Caucasiron* Kluge, 1997  
 159. *Epeorus (C.) psi* Eaton, 1885  
 160. *Epeorus (C.) kapurkripalanorum* (Braasch, 1983)  
 161. *Epeorus (C.) papillatus* Braasch, 2006  
 162. *Epeorus (C.) suspicatus* Braasch, 2006
- Subgenus: *Epeorus* Eaton, 1881  
 163. *Epeorus (E.) aculeatus* Braasch, 1990  
 164. *Epeorus (E.) bifurcatus* Braasch & Soldan, 1979  
 165. *Epeorus (E.) gilliesi* Braasch, 1981  
 166. *Epeorus (E.?) lahaulensis* Kapur & Kripalani, 1963  
 167. *Epeorus (E.) petersi* Sivaruban, Venkataraman & Sivaramakrishnan, 2013  
 168. *Epeorus (E.) unicornutus* Braasch, 2006  
 169. *Epeorus (E.) unispinosus* Braasch, 1980  
 170. *Epeorus (E.) munnarensis* Balasubramanian & Muthukatturaja, 2021
45. Genus: *Rhithrogena* Eaton, 1881  
 171. *Rhithrogena kashmirensis* (Braasch & Soldan, 1982)  
 172. *Rhithrogena parvus* (Ulmer 1912)  
 173. *Rhithrogena rougemonti* Braasch & Soldan, 1987

**XIII. Family: ISONYCHIIDAE Ulmer, 1914**

46. Genus: *Isonychia* Eaton, 1871  
 174. *Isonychia moyarensis* Vasanth, Selvakumar & Subramanian, 2019  
 175. *Isonychia radhae* Balasubramanian & Muthukatturaja, 2021

**Suborder: Pisciforma****XIV. Family: AMELETIDAE McCafferty, 1991**



47. Genus: *Ameletus* Eaton, 1888  
 176. *Ameletus dodecus* Dubey, 1971  
 177. *Ameletus primitivus* Traver, 1939
- XV. Family: BAETIDAE Leach, 1815**  
 Subfamily: Baetinae
58. Genus: *Acentrella* Bengtsson, 1912  
 Subgenus: *Liebebiella* Waltz & McCafferty, 1987  
 178. *Acentrella* (*Liebebiella*) *vera* Müller-Liebenau, 1982
- Subgenus: *Acentrella* Bengtsson, 1912  
 179. *Acentrella* (*Acentrella*) *isacki* Srinivasan *et al.* 2023
49. Genus: *Baetiella* Ueno, 1931  
 180. *Baetiella armata* Braasch, 1983  
 181. *Baetiella ausobskyi* Braasch, 1983  
 182. *Baetiella imanishii* Braasch 1983  
 183. *Baetiella ladakae* Traver, 1939  
 184. *Baetiella marginata* Braasch, 1983  
 185. *Baetiella subansiri* Vasanth, Selvakumar & Subramanian, 2020  
 186. *Baetiella spathae* Shi & Tong, 2015
50. Genus: *Baetis* Leach, 1815  
 187. *Baetis acuticostalis* Dubey, 1971  
 188. *Baetis bifurcatus* Kapur & Kripalani, 1961  
 189. *Baetis chandra* Kapur & Kripalani, 1961  
 190. *Baetis festivus* Kapur & Kripalani, 1961  
 191. *Baetis fluitans* Gillies, 1949  
 192. *Baetis himalayana* Kapur & Kripalani, 1961  
 193. *Baetis lahaulensis* Kaul & Dubey, 1970  
 194. *Baetis longistylus* Kaul & Dubey, 1970  
 195. *Baetis michaelohubbardi* (Selvakumar, Sundar & Sivaramakrishnan, 2012)  
 196. *Baetis punjabensis* Kapur & Kripalani, 1961  
 197. *Baetis septemmenes* Dubey, 1971  
 198. *Baetis seragrui* Dubey, 1970  
 199. *Baetis simplex* Kapur & Kripalani, 1961  
 200. *Baetis solangensis* Dubey, 1971  
 201. *Baetis solitarius* Gillies, 1949  
 202. *Baetis thurbonis* Gillies 1949  
 203. *Baetis tigroides* Gillies, 1949  
 204. *Baetis venkatramani* Sivaruban *et al.*, 2023
- Subgenus: *Tenuibaetis* Kang & Yang, 1994  
 205. *Baetis* (*Tenuibaetis*) *frequentus* Müller-Liebenau and Hubbard, 1985  
 206. *Baetis* (*Tenuibaetis*) *himani* (Kubendran, Vasanth & Subramanian, 2022)  
 207. *Baetis* (*Tenuibaetis*) *kangi* (Kubendran, Vasanth & Subramanian, 2022)  
 208. *Baetis* (*Tenuibaetis*) *arduus* (Kang & Yang, 1994)  
 209. *Baetis* (*Tenuibaetis*) *inornatus* (Kang & Yang, 1994)  
 210. *Baetis* (*Tenuibaetis*) *kaltenbachi* Kluge, Srinivasan, Sivaruban, Barathy & Isack, 2023  
 211. *Baetis* (*Tenuibaetis*) *bialatus* Kluge, Srinivasan, Sivaruban, Barathy & Isack, 2023
51. Genus: *Centroptella* Harker, 1957  
 Subgenus: *Centroptella* (Braasch and Soldán, 1980)  
 212. *Centroptella* (*Centroptella*) *longisetosa cinerea* Kluge, 2021  
 213. *Centroptella* (*Centroptella*) *ornatipes* Kluge, 2021
- Subgenus: *Chopralla* Waltz & McCafferty, 1987  
 214. *Centroptella* (*Chopralla*) *ceylonensis* Müller-Liebenau, 1983  
 215. *Centroptella* (*Chopralla*) *ghatensis* Kluge, 2021
52. Genus: *Indobaetis* Muller-Liebenau & Morihara, 1982  
 216. *Indobaetis microfolius* Kluge & Novikova, 2014
53. Genus: *Labiobaetis* McCafferty & Waltz, 1995  
 217. *Labiobaetis geminatus* (Müller-Liebenau & Hubbard, 1985)

218. *Labiobaetis jacobusi* Kubendran & Balasubramanian, 2015  
 219. *Labiobaetis ordinatus* (Müller-Liebenau & Hubbard 1985)  
 220. *Labiobaetis soldani* Kubendran, Rathinakumar, Balasubramanian, Selvakumar & Sivaramakrishnan, 2014  
 221. *Labiobaetis davamanii* Sivaruban, Srinivasan, Barathy & Isack, 2022  
 222. *Labiobaetis operosus* Muller-Liebenau, 1984
54. Genus: *Nigrobaetis* Novikova & Kluge, 1987  
 223. *Nigrobaetis paramakalyani* Kubenderan & Balasubramanian, 2015  
 224. *Nigrobaetis klugei* Sivaruban, Srinivasan, Barathy & Isack, 2021
55. Genus: *Platybaetis* Müller-Liebenau, 1984  
 225. *Platybaetis selvai* Kubendran, Vasanth & Subramanian, 2021
- Subfamily: Cloeoninae
57. Genus: *Centroptilum* Eaton, 1869  
 226. *Centroptilum campestre* Gillies, 1949
58. Genus: *Cloeon* Leach, 1815  
 227. *Cloeon bengalense* Kimmins, 1947  
 228. *Cloeon bicolor* Kimmins, 1947  
 229. *Cloeon bimaculatum* (Eaton, 1885)  
 230. *Cloeon harveyi* Kimmins, 1947  
 231. *Cloeon inscriptum* Bengtsson, 1914  
 232. *Cloeon kashmiri* Traver, 1939  
 233. *Cloeon kimminsi* Hubbard, 1974  
 234. *Cloeon marginale* (Hagen, 1858)  
 235. *Cloeon pulchella* Banks, 1913  
 236. *Cloeon siccum* Gillies, 1949  
 237. *Cloeon taeniatum* Navas, 1931  
 238. *Cloeon variegatum* Chopra, 1924
59. Genus: *Cheleocloeon* Wuillot & Gillies, 1993  
 239. *Cheleocloeon vaigaiensis* Sivaruban, Srinivasan, Barathy, Isack & Kluge, 2022
60. Genus: *Procloeon* Bengtsson, 1914  
 240. *Procloeon debilis* (Walker, 1860)  
 241. *Procloeon kottakudiensis* Muthukatturaja & Balasubramanian, 2022
61. Genus: *Pseudocloeon* Klapalek, 1905  
 242. *Pseudocloeon dipsicus* (Gillies, 1949)  
 243. *Pseudocloeon inopinum* Gillies, 1949  
 244. *Pseudocloeon palmyrae* (Gillies, 1949)  
 245. *Pseudocloeon rubellum* (Navas, 1931)
62. Genus: *Symbiocloeon* Müller-Liebenau & Heard, 1979  
 246. *Symbiocloeon madhyasthai* Subramanian & Sivaramakrishnan, 2009
63. Genus: *Waynokiops* Hill, Pfeiffer & Jacobus, 2010  
 247. *Waynokiops pentacanthus* Kluge, 2022

## References:

- Barber–James, H.M., Gattolliat, J.–L., Sartori, M. and Hubbard, M.D. (2008). Global diversity of mayflies (Ephemeroptera, Insecta) in freshwater. *Hydrobiologia*, 595: 339–350.
- Bauernfeind, E. and Soldán, T. (2012). *The Mayflies of Europe (Ephemeroptera)*. Apollo Books, Ollerup, 781 pp.
- Jacobus, L.M., Macadam, C.R. and Sartori, M. (2019). Mayflies (Ephemeroptera) and Their Contributions to Ecosystem Services. *Insects*, 10 (170): 1–26.
- Simon, S., Blanke, A. and Meusemann, K. (2018). Reanalyzing the Palaeoptera problem—The origin of insect flight remains obscure. *Arthropod Structure and Development*, 47: 328–338.