

A Checklist of Odonata (Insecta) of India



**K.A.Subramanian
Western Regional Centre
Zoological Survey of India
Pune**

December, 2009

A Checklist of Odonata (Insecta) of India

K.A. Subramanian

**Zoological Survey of India
Western Regional Station,
Pune-411 044
Maharashtra, India**

E-mail:*subbuka.zsi@gmail.com*

Table of Contents

1. Introduction-----	04
2. Diversity of Odonata-----	04
3. List of suborders-----	06
4. List of families-----	06
5. List of genera-----	06
6. List of species-----	09
7. Notes and comments-----	30
8. Species described after 1995-----	32
9. New reports to India after 1995-----	32
10. Species synonymised after 1995-----	32
11. Species removed-----	33
12. Nomen nudum-----	34

Acknowledgements

References

1. Introduction

The order Odonata is one of the ancient groups of insects. Fossil evidences suggest that origin of this group dates back to Permian (250 million years BP). The adults are terrestrial and the larvae aquatic. Species are highly specific to particular aquatic habitat. This habitat specificity makes them an ideal candidate for monitoring health of freshwater ecosystems. The odonate fauna of India is well studied since Linnaeus times. During pre independence, scientists such as Selys-Longchamps, Laidlaw and Fraser have contributed significantly to the knowledge on Indian Odonata. After independence, most of the work on diversity and distribution of Indian Odonata was done by scientists of Zoological Survey of India. The scientists such as Drs. Lahiri, T.R. Mitra, Chhotani, Mahabir Prasad, Joseph, Arun kumar, Srivastava, Raja Ram Sinha, Kulkarni, Radhakrishnan, Emiliyamma, Gaurav Sharma, Jaffer and Talmale have published fauna of many states and conservation areas. This has significantly contributed to the growth of knowledge on Indian Odonata diversity.

The last comprehensive checklist of Odonata of India was published by Prasad and Varshney (1995). Since then, new species have been discovered from India and some synonymised. Globally, taxonomic consensus on higher level relationships of the families has been achieved using methods of molecular systematics and cladistics. The present checklist incorporates these recent changes in the taxonomy of the group and provides updated information on Odonata diversity of India. The suborders, families, genera and species are arranged alphabetically and serially numbered in this checklist. Non-nominate subspecies names are also provided under each species name. Prasad and Varshney (1995) publication is considered as a bench mark for this revised checklist.

2. Diversity of Odonata

Globally 5,740 species of odonates are known of this 470 species in 139 genera and 19 families exist in India. Extant Odonata is broadly divided into three suborders the Zygoptera or damselflies, Anisozygoptera and the Anisoptera or dragonflies. The Anisozygoptera with two relict species was earlier recognized as a third suborder of Odonata. However, recent studies groups Anisozygoptera with Anisoptera or some authors brings them together under a new name Epirocta (Anisoptera + Anisozygoptera) (Trueman, 1996; Lohmann, 1996; Rehn, 2003; Kalkaman *et al.*, 2008). However, in the present checklist, following world Odonata checklist (Schorr, Lindeboom and Paulson, 2009) the family Epiophlebiidae is dealt under Anisozygoptera. An over view of extant global, Oriental and Indian Odonata diversity is provided in table-1.

Table-1: Global, Oriental and Indian diversity of Odonata.

Sl No.	Suborder	Family	No. Genera			No. Speices		
			World	Oriental	India	World	Oriental	India
	Anisoptera							
1		Aeshnidae	52	18	13	436	138	45
2		Austropetaliidae#	4	0	0	11	0	0
3		Chlorogomphidae	4	1	1	45	40	10
4		Cordulegastridae	4	5	3	51	27	9
5		Corduliidae	39	7	4	249	57	16
6		Gomphidae	95	43	25	958	358	85
7		Libellulidae	142	56	39	972	190	85
8		Macromiidae	4	2	2	123	50	17
9		Neopetaliidae#	1	0	0	1	0	0
10		Petaluridae#	5	0	0	11	0	0
11		Synthemistidae#	7	0	0	43	0	0
	Anisozygoptera							
12		Epiophlebiidae	1	1	1	2	1	1
	Zygoptera							
13		Amphipterygidae#	4	1	0	10	5	0
14		Calopterygidae	21	10	6	176	60	7
15		Chlorocyphidae	16	14	4	149	80	21
16		Coenagrionidae	94	23	14	1092	185	58
17		Dicteriadidae#	2	0	0	2	0	0
18		Euphaeidae	9	12	6	69	65	18
19		Hemiphlebiidae#	1	0	0	1	0	0
20		Isostictidae#	12	0	0	45	0	0
21		Lestidae	9	5	4	152	39	23
22		Lestoideidae#	1	0	0	4	0	0
23		Megapodagrionidae	43	10	1	303	28	1
24		Perilestidae#	3	0	0	19	0	0
25		Philogangidae*	2	1	1	9	4	1
26		Platycnemididae	26	8	5	224	130	27
27		Platystictidae	6	5	3	210	119	13
28		Polythoridae#	7	0	0	59	0	0
29		Protoneuridae	25	8	7	258	57	22
30		Pseudolestidae#	1	3	0	1	15	0
31		Pseudostigmatidae#	6	0	0	19	0	0
32		Synlestidae	7	2	1	35	17	4
		Total	654	236	140	5740	1669	463

Note: Families in ‘#’ are not represented in India.

World and Oriental Odonata data after Schorr *et al.*, 2009 and Kalkaman *et al.*, 2008.

3. List of suborders

1. Anisoptera
2. Anisozygoptera
3. Zygoptera

4. List of families

- | | |
|---------------------|-----------------------|
| 1. Aeshnidae | 11. Lestidae |
| 2. Calopterygidae | 12. Libellulidae |
| 3. Chlorocyphidae | 13. Macromiidae |
| 4. Chlorogomphidae | 14. Megapodagrionidae |
| 5. Coenagrionidae | 15. Philogangidae* |
| 6. Cordulegastridae | 16. Platycnemididae |
| 7. Corduliidae | 17. Platystictidae |
| 8. Epiophlebiae | 18. Protoneuridae |
| 9. Euphaeidae | 19. Synlestidae |
| 10. Gomphidae | |

Note: Families and species with ‘*’ are discussed at the end of the checklist.

5. List of genera

- | | |
|-------------------------|--------------------------|
| 1. <i>Aciagrion</i> | 12. <i>Anisopleura</i> |
| 2. <i>Acisoma</i> | 13. <i>Anormogomphus</i> |
| 3. <i>Acrogomphus</i> | 14. <i>Anotogaster</i> |
| 4. <i>Aeshna</i> | 15. <i>Archibasis</i> |
| 5. <i>Aethriamanta</i> | 16. <i>Argiocnemis</i> |
| 6. <i>Argiocnemis</i> | 17. <i>Asiagomphus</i> |
| 7. <i>Agrionoptera</i> | 18. <i>Bayadera</i> |
| 8. <i>Amphithemis</i> | 19. <i>Brachydiplax</i> |
| 9. <i>Anaciaeschna</i> | 20. <i>Brachythemis</i> |
| 10. <i>Anax</i> | 21. <i>Bradinopyga</i> |
| 11. <i>Anisogomphus</i> | 22. <i>Burmagomphus</i> |

- | | |
|-----------------------------|--------------------------|
| 23. <i>Burmargiolestes</i> | 59. <i>Hemianax</i> |
| 24. <i>Caconeura</i> | 60. <i>Hemicordulia</i> |
| 25. <i>Calicnemia</i> | 61. <i>Himalagrion</i> |
| 26. <i>Caliphaea</i> | 62. <i>Hydrobasileus</i> |
| 27. <i>Calocypha</i> | 63. <i>Hylaeothemis</i> |
| 28. <i>Camacinia</i> | 64. <i>Ictinogomphus</i> |
| 29. <i>Cephalaeschna</i> | 65. <i>Idionyx</i> |
| 30. <i>Ceriagrion</i> | 66. <i>Indocnemis</i> |
| 31. <i>Chlorogomphus</i> | 67. <i>Indocypha</i> |
| 32. <i>Coeliccia</i> | 68. <i>Indolestes</i> |
| 33. <i>Coenagrion</i> | 69. <i>Indothemis</i> |
| 34. <i>Copera</i> | 70. <i>Ischnura</i> |
| 35. <i>Cordulegaster</i> | 71. <i>Lathrecista</i> |
| 36. <i>Cratilia</i> | 72. <i>Lestes</i> |
| 37. <i>Crocothemis</i> | 73. <i>Libellago</i> |
| 38. <i>Cyclogomphus</i> | 74. <i>Libellula</i> |
| 39. <i>Davidioides</i> | 75. <i>Lyriothemis</i> |
| 40. <i>Davidius</i> | 76. <i>Macrodiplax</i> |
| 41. <i>Diplacodes</i> | 77. <i>Macrogomphus</i> |
| 42. <i>Disparoneura</i> | 78. <i>Macromia</i> |
| 43. <i>Drepanosticta</i> | 79. <i>Macromidia</i> |
| 44. <i>Dubitogomphus</i> | 80. <i>Matrona</i> |
| 45. <i>Dysphaea</i> | 81. <i>Megalestes</i> |
| 46. <i>Echo</i> | 82. <i>Megalogomphus</i> |
| 47. <i>Elattoneura</i> | 83. <i>Melanoneura</i> |
| 48. <i>Enallagma</i> | 84. <i>Merogomphus</i> |
| 49. <i>Epallage</i> | 85. <i>Microgomphus</i> |
| 50. <i>Epiophlebia</i> | 86. <i>Mortonagrion</i> |
| 51. <i>Epithemis</i> | 87. <i>Nannophya</i> |
| 52. <i>Epophthalmia</i> | 88. <i>Neallogaster</i> |
| 53. <i>Esme</i> | 89. <i>Nepogomphus</i> |
| 54. <i>Euphaea</i> | 90. <i>Nesoxenia</i> |
| 55. <i>Gomphidia</i> | 91. <i>Neurobasis</i> |
| 56. <i>Gynacantha</i> | 92. <i>Neurothemis</i> |
| 57. <i>Gynacanthaeschna</i> | 93. <i>Nihonogomphus</i> |
| 58. <i>Heliogomphus</i> | 94. <i>Oligoaeschna</i> |

- | | |
|-------------------------------|-----------------------------|
| 95. <i>Onychargia</i> | 118. <i>Protosticta</i> |
| 96. <i>Onychogomphus</i> | 119. <i>Pseudagrion</i> |
| 97. <i>Onychothemis</i> | 120. <i>Pseudotranea</i> |
| 98. <i>Ophiogomphus</i> | 121. <i>Rhinocypha</i> |
| 99. <i>Orolestes</i> | 122. <i>Rhodischnura</i> |
| 100. <i>Orthetrum</i> | 123. <i>Rhodothemis</i> |
| 101. <i>Palpopleura</i> | 124. <i>Rhyothemis</i> |
| 102. <i>Pantala</i> | 125. <i>Schmidtia</i> |
| 103. <i>Paracercion</i> | 126. <i>Selysiothemis</i> |
| 104. <i>Paragomphus</i> | 127. <i>Somatochlora</i> |
| 105. <i>Periaeschna</i> | 128. <i>Stylogomphus</i> |
| 106. <i>Perissogomphus</i> | 129. <i>Sympecma</i> |
| 107. <i>Petaliaeschna</i> | 130. <i>Sympetrum</i> |
| 108. <i>Phaenandrogomphus</i> | 131. <i>Tetracanthagyna</i> |
| 109. <i>Philoganga</i> | 132. <i>Tetrathemis</i> |
| 110. <i>Phylloneura</i> | 133. <i>Tholymis</i> |
| 111. <i>Planaeschna</i> | 134. <i>Tranea</i> |
| 112. <i>Platycnemis</i> | 135. <i>Trithemis</i> |
| 113. <i>Platygomphus</i> | 136. <i>Urothemis</i> |
| 114. <i>Platysticta</i> | 137. <i>Vestalaria</i> |
| 115. <i>Polycanthagyna</i> | 138. <i>Vestalis</i> |
| 116. <i>Potamarcha</i> | 139. <i>Zygonyx</i> |
| 117. <i>Prodasineura</i> | 140. <i>Zyxomma</i> |

6. Species Checklist

Class: Insecta

Order: Odonata

Suborder: Anisoptera

Family: Aeshnidae

1. *Aeshna* Fabricius, 1775

1. *Aeshna juncea* Bartenef, 1929
 - 1a. *A. juncea mongolica* Bartenef, 1929
2. *Aeshna mixta* Latreille, 1805
3. *Aeshna petalura* Martin, 1906

2. *Anaciaeschna* Selys, 1878

4. *Anaciaeschna donaldi* Fraser, 1922b
5. *Anaciaeschna jaspidea* (Burmeister, 1839)

3. *Anax* Leach, 1815

6. *Anax guttatus* (Burmeister, 1839)
7. *Anax immaculifrons* Rambur, 1842
8. *Anax imperator* Leach, 1815
9. *Anax indicus* Lieftinck, 1942
10. *Anax nigrofasciatus* Fraser, 1935
 - 10a. *A. nigrofasciatus nigrolineatus* Fraser, 1935
11. *Anax parthenope* (Selys, 1839)

4. *Cephalaeschna* Selys, 1883

12. *Cephalaeschna acutifrons* (Martin, 1909)
13. *Cephalaeschna klapperichi* (Schmidt, 1961)
14. *Cephalaeschna masoni* (Martin, 1909)
15. *Cephalaeschna orbifrons* Selys, 1883
16. *Cephalaeschna viridifrons* (Fraser, 1922)

5. *Gynacantha* Rambur, 1842

17. *Gynacantha albistyla* Fraser, 1927
18. *Gynacantha andamanae* Yeh & Veenakumari, 2000
19. *Gynacantha apicalis* Fraser, 1927
20. *Gynacantha arnaudi* Asahina, 1984

21. *Gynacantha bainbriggei* Fraser, 1922
22. *Gynacantha bayadera* Selys, 1891
23. *Gynacantha biharica* Fraser, 1927
24. *Gynacantha dravida* Lieftinck, 1960
25. *Gynacantha khasiaca* MacLachlan, 1896
26. *Gynacantha pallampurica* Lahiri, Sandhu & Walia, 2007
27. *Gynacantha odoneli* Fraser, 1922
28. *Gynacantha rammohani* Mitra & Lahiri, 1975
29. *Gynacantha rotundata* Navas, 1930
- 6. *Gynacanthaeschna* Fraser, 1921**
30. *Gynacanthaeschna sikkima* (Karsch, 1891)
- 7. *Hemianax* Selys, 1883**
31. *Hemianax ephippiger* (Burmeister, 1839)
- 8. *Oligoaeschna* Selys, 1889**
32. *Oligoaeschna andamani* Chhotani, Lahiri & Mitra, 1983
33. *Oligoaeschna khasiana* Lieftinck, 1968
34. *Oligoaeschna martini* (Laidlaw, 1921)
35. *Oligoaeschna speciosa* Karube, 1998
- 9. *Periaeschna* Martin, 1908**
36. *Periaeschna flinti* Asahina, 1978
- P. flinti assamensis* Asahina, 1981
37. *Periaeschna lebasi* Navas, 1930
38. *Periaeschna magdalena* Martin, 1909
39. *Periaeschna nocturnalis* Fraser, 1927
40. *Periaeschna unifasciata* Fraser, 1935
- 10. *Petaliaeschna* Fraser, 1927**
41. *Petaliaeschna fletcheri* Fraser, 1927
- 11. *Planaeschna* McLachlan, 1896**
42. *Planaeschna intersedens* (Martin, 1909)
- 12. *Polycanthagyna* Fraser, 1933**
43. *Polycanthagyna erythromelas* (McLachlan, 1896)
44. *Polycanthagyna ornithocephala* (McLachlan, 1896)

13. *Tetracanthagyna* Selys, 1883

45. *Tetracanthagyna waterhousei* McLachlan, 1898

Family: Chlorogomphidae

14. *Chlorogomphus* Selys, 1854

46. *Chlorogomphus atkinsoni* (Selys, 1878c)
47. *Chlorogomphus brevistigma* Oguma, 1926
47a. *C. brevistigma okinawensis* Ishida, 1964.
48. *Chlorogomphus campioni* (Fraser, 1924)
49. *Chlorogomphus fraseri* St. Quentin, 1936
50. *Chlorogomphus mortoni* Fraser, 1936
51. *Chlorogomphus olympicus* Fraser, 1933
52. *Chlorogomphus preciosus* (Fraser, 1924)
53. *Chlorogomphus schmidtii* Asahina, 1986
54. *Chlorogomphus selysi* Fraser, 1929
55. *Chlorogomphus xanthoptera* (Fraser, 1919)

Family: Cordulegasteridae

15. *Anotogaster* Selys, 1854

56. *Anotogaster basalis* Selys, 1854
56a. *A. basalis palampurensis* Fraser, 1929
57. *Anotogaster nipalensis* Selys, 1854

16. *Cordulegaster* Leach, 1815

58. *Cordulegaster brevistigma* (Selys, 1854)
58a. *C. brevistigma folia* Fraser, 1929
59. *Cordulegaster parvistigma* (Selys, 1873)

17. *Neallogaster* Cowley, 1934

60. *Neallogaster annandalei* (Fraser, 1923)
61. *Neallogaster hermoniae* (Fraser, 1927)
62. *Neallogaster latifrons* (Selys, 1878)
63. *Neallogaster ornata* (Asahina, 1982)
64. *Neallogaster schmidtii* Asahina, 1982

Family: Corduliidae

18. *Hemicordulia* Selys, 1870

65. *Hemicordulia asiatica* Selys, 1878

19. *Idionyx* Hagen, 1867

66. *Idionyx corona* Fraser, 1921

66a. *I. corona burliyarensis* Fraser, 1928

67. *Idionyx galeata* Fraser, 1924

68. *Idionyx imbricata* Fraser, 1926

69. *Idionyx intricata* Fraser, 1926

70. *Idionyx minima* Fraser, 1931

71. *Idionyx nadganiensis* Fraser, 1924

72. *Idionyx nilgiriensis* (Fraser, 1918)

73. *Idionyx optata* Selys, 1878

74. *Idionyx periyashola* Fraser, 1939

75. *Idionyx rhinoceroides* Fraser, 1934

76. *Idionyx saffronata* Fraser, 1924

77. *Idionyx stevensi* Fraser, 1924

78. *Idionyx travancorensis* Fraser, 1931

20. *Macromidia* Martin, 1907

79. *Macromidia donaldi* (Fraser, 1924)

21. *Somatochlora* Selys, 1871

80. *Somatochlora daviesi* Lieftinck, 1977

Family: Gomphidae

22. *Acrogomphus* Laidlaw, 1925

81. *Acrogomphus fraseri* Laidlaw, 1925

82. *Acrogomphus mohani* Sahani, 1964

23. *Anisogomphus* Selys, 1857

83. *Anisogomphus bivittatus* Selys, 1854

84. *Anisogomphus caudalis* Fraser, 1926

85. *Anisogomphus occipitalis* (Selys, 1854)

86. *Anisogomphus orites* Laidlaw, 1922

24. *Anormogomphus* Selys, 1854

- 87. *Anormogomphus heteropterus* Selys, 1854
- 88. *Anormogomphus kiritschenkoi* Bartenev, 1913

25. *Asiagomphus* Asahina, 1984

- 89. *Asiagomphus nilgiricus* (Laidlaw, 1922)
- 90. *Asiagomphus odoneli* (Fraser, 1922)
- 91. *Asiagomphus personatus* (Selys, 1873)

26. *Burmagomphus* Williamson, 1907

- 92. *Burmagomphus cauvericus* Fraser, 1926
- 93. *Burmagomphus hasimaricus* Fraser, 1926
- 94. *Burmagomphus laidlawi* Fraser, 1924
- 95. *Burmagomphus pyramidalis* Laidlaw, 1922
- 96. *Burmagomphus sivalikensis* Laidlaw, 1922

27. *Cyclogomphus* Selys, 1854

- 97. *Cyclogomphus heterostylus* Selys, 1854
- 98. *Cyclogomphus vesiculosus* Selys, 1873
- 99. *Cyclogomphus wilkinsi* Fraser, 1926
- 100. *Cyclogomphus ypsilon* Selys, 1854

28. *Davidioides* Fraser, 1924

- 101. *Davidioides martini* Fraser, 1924

29. *Davidius* Selys, 1878

- 102. *Davidius aberrans* (Selys, 1873)
 - 102a. *D. aberrans senchalensis* Fraser, 1926
- 103. *Davidius davidii* Selys, 1878
 - 103a. *D. davidii assamensis* Laidlaw, 1916
- 104. *Davidius kumaonensis* Fraser, 1926
- 105. *Davidius malloryi* Fraser, 1926
- 106. *Davidius zallorensis* Hagen in Selys, 1878
 - 106a. *D. zallorensis delineates* Fraser, 1926

30. *Dubitogomphus* Fraser, 1940

- 107. *Dubitogomphus bidentatus* Fraser, 1930

31. *Gomphidia* Selys, 1854

- 108. *Gomphidia fletcheri* Fraser, 1923d

109. *Gomphidia ganeshi* Chotani, Lahiri & Mitra, 1983
110. *Gomphidia kodaguensis* Fraser, 1923
111. *Gomphidia leonora* Mitra, 1994 *
112. *Gomphidia platyceps* Fraser, 1953
113. *Gomphidia t-nigrum* Selys, 1854
114. *Gomphidia williamsoni* Fraser, 1923
- 32. *Heliogomphus* Laidlaw, 1922**
115. *Heliogomphus kalarensis* Fraser, 1934
116. *Heliogomphus promelas* (Selys, 1873)
117. *Heliogomphus selysi* Fraser, 1925
118. *Heliogomphus spirillus* (Fraser, 1922)
- 33. *Ictinogomphus* Cowley, 1934**
119. *Ictinogomphus angulosus* (Selys, 1854)
120. *Ictinogomphus atrox* (Selys, 1854)
121. *Ictinogomphus distinctus* Ram, 1985 *
122. *Ictinogomphus kishori* Ram, 1985 *
123. *Ictinogomphus pertinax* (Selys, 1854)
124. *Ictinogomphus rapax* (Rambur, 1842)
- 34. *Macrogomphus* Selys, 1857**
125. *Macrogomphus annulatus* (Selys, 1854)
126. *Macrogomphus montanus* Selys, 1869
127. *Macrogomphus seductus* Fraser, 1926
128. *Macrogomphus wynaadicus* Fraser, 1924
- 35. *Megalogomphus* Campion, 1923**
129. *Megalogomphus bicornutus* Fraser, 1922
130. *Megalogomphus flavicolor* (Fraser, 1923)
131. *Megalogomphus hannynghoni* (Fraser, 1923)
132. *Megalogomphus smithii* (Selys, 1854)
133. *Megalogomphus superbus* Fraser, 1931
- 36. *Merogomphus* Martin, 1904**
134. *Merogomphus longistigma* (Fraser, 1922)
134a. *M. longistigma tamaracherriensis* Laidlaw, 1931
135. *Merogomphus martini* (Fraser, 1922)

37. *Microgomphus* Selys, 1858

- 136. *Microgomphus chelifera* Selys, 1858
- 137. *Microgomphus souteri* Fraser, 1924
- 138. *Microgomphus torquatus* (Selys, 1854)
- 139. *Microgomphus verticalis* (Selys, 1873)

38. *Nepogomphus* Fraser, 1934

- 140. *Nepogomphus modestus* (Selys, 1878)
- 141. *Nepogomphus walli* (Fraser, 1924)

39. *Nihonogomphus* Oguma, 1926

- 142. *Nihonogomphus indicus* Lahiri, 1987

40. *Onychogomphus* Selys, 1854

- 143. *Onychogomphus acinaces* (Laidlaw, 1922)
- 144. *Onychogomphus biforceps* (Selys, 1878)
- 145. *Onychogomphus bistrigatus* (Hagen in Selys, 1854)
- 146. *Onychogomphus cacharicus* Fraser, 1924
- 147. *Onychogomphus duaricus* Fraser, 1924
- 148. *Onychogomphus grammicus* (Rambur, 1842)
- 149. *Onychogomphus malabarensis* (Fraser, 1924)
- 150. *Onychogomphus meghalayanus* Lahiri, 1987
- 151. *Onychogomphus nilgiriensis* (Fraser, 1922)
- 151a. *O. nilgiriensis annaimallaicus* Fraser, 1934
- 152. *Onychogomphus risi* (Fraser, 1922)
- 153. *Onychogomphus saundersii* Selys, 1854
- 154. *Onychogomphus schmidtii* Fraser, 1937
- 155. *Onychogomphus striatus* Fraser, 1924
- 156. *Onychogomphus thienemanni* Schmidt, 1934

41. *Ophiogomphus* Selys, 1854

- 157. *Ophiogomphus cerastis* (Selys, 1854)
- 158. *Ophiogomphus reductus* Calvert, 1898

42. *Paragomphus* Cowley, 1934

- 159. *Paragomphus echinoccipitalis* (Fraser, 1922)
- 160. *Paragomphus lindgreni* (Fraser, 1923)
- 161. *Paragomphus lineatus* (Selys, 1850)

43. *Perissogomphus* Laidlaw, 1922

162. *Perissogomphus stevensi* Laidlaw, 1922

44. *Phaenandrogomphus* Lieftinck, 1964

163. *Phaenandrogomphus aureus* (Laidlaw, 1922)

45. *Platygomphus* Selys, 1854

164. *Platygomphus dolabratus* Selys, 1854

46. *Stylogomphus* Fraser, 1922

165. *Stylogomphus inglisi* Fraser, 1922

Family: Libellulidae

47. *Acisoma* Rambur, 1842

166. *Acisoma panorpoides* Rambur, 1842

48. *Aethriamanta* Kirby, 1889

167. *Aethriamanta brevipennis* (Rambur, 1842)

49. *Agrionoptera* Brauer, 1864

168. *Agrionoptera dorothea* Fraser, 1927

169. *Agrionoptera insignis* (Rambur, 1842)

50. *Amphithemis* Selys, 1891

170. *Amphithemis curvistyla* Selys, 1891

171. *Amphithemis vacillans* Selys, 1891

51. *Brachydiplax* Brauer, 1868

172. *Brachydiplax chalybea* Brauer, 1868

173. *Brachydiplax farinosa* Krüger, 1902

174. *Brachydiplax sobrina* (Rambur, 1842)

52. *Brachythemis* Brauer, 1868

175. *Brachythemis contaminata* (Fabricius, 1793)

53. *Bradinopyga* Kirby, 1893

176. *Bradinopyga geminata* (Rambur, 1842)

54. *Camacinia* Kirby, 1889

177. *Camacinia gigantea* (Brauer, 1867)

55. *Cratilia* Kirby, 1900

178. *Cratilia lineata* Foerster, 1903

56. *Crocothemis* Brauer, 1868

179. *Crocothemis erythraea* (Brullé, 1832)

180. *Crocothemis servilia* (Drury, 1770)

57. *Diplacodes* Kirby, 1889

181. *Diplacodes lefebvrii* (Rambur, 1842)

182. *Diplacodes nebulosa* (Fabricius, 1793)

183. *Diplacodes trivialis* (Rambur, 1842)

58. *Epithemis* Laidlaw, 1955

184. *Epithemis mariae* (Laidlaw, 1915)

59. *Hydrobasileus* Kirby, 1889

185. *Hydrobasileus croceus* (Brauer, 1867)

60. *Hylaeothemis* Ris, 1909

186. *Hylaeothemis gardeneri* Fraser, 1927

187. *Hylaeothemis indica* Fraser, 1946*

61. *Indothemis* Ris, 1909

188. *Indothemis carnatica* (Fabricius, 1798)

189. *Indothemis limbata* (Selys, 1891)

189a. *I. limbata sita* Champion, 1923

62. *Lathrecista* Kirby, 1889

190. *Lathrecista asiatica* (Fabricius, 1798)

63. *Libellula* Linnaeus, 1758

191. *Libellula quadrimaculata* Linnaeus, 1758

191a. *L. quadrimaculata grigorievi* Schmidt, 1961

64. *Lyriothemis* Brauer, 1868

192. *Lyriothemis acigastrea* (Selys, 1878)

193. *Lyriothemis bivittata* (Rambur, 1842)

194. *Lyriothemis cleis* Brauer, 1868*

195. *Lyriothemis tricolor* Ris, 1919

65. *Macrodiplax* Brauer, 1868

196. *Macrodiplax cora* (Brauer, 1867)

66. *Nannophya* Rambur, 1842

197. *Nannophya pygmaea* Rambur, 1842

67. *Nesoxenia* Kirby, 1889

198. *Nesoxenia lineata* (Selys, 1879)

68. *Neurothemis* Brauer, 1867

199. *Neurothemis fluctuans* (Fabricius, 1793)

200. *Neurothemis fulvia* (Drury, 1773)

201. *Neurothemis intermedia* (Rambur, 1842)

201a. *N. intermedia atalanta* Ris, 1919

201b. *N. intermedia degener* Selys, 1879

202. *Neurothemis tullia* (Drury, 1773)

69. *Onychothemis* Brauer, 1868

203. *Onychothemis testacea* Laidlaw, 1902

203a. *O. testacea ceylanica* Ris, 1912

70. *Orthetrum* Newman, 1833

204. *Orthetrum anceps* (Schneider, 1845)

205. *Orthetrum brunneum* (Fonscolombe, 1837)

206. *Orthetrum cancellatum* (Linnaeus, 1758)

207. *Orthetrum chrysis* (Selys, 1891)

208. *Orthetrum glaucum* (Brauer, 1865)

209. *Orthetrum japonicum* (Uhler, 1858)

209a. *O. japonicum internum* McLachlan, 1894

210. *Orthetrum luzonicum* (Brauer, 1868)

211. *Orthetrum martensi* Asahina, 1978a

212. *Orthetrum pruinosum* (Burmeister, 1839)

212a. *O. p. neglectum* (Rambur, 1842)

213. *Orthetrum sabina* (Drury, 1770)

214. *Orthetrum taeniolatum* (Schneider, 1845)

215. *Orthetrum testaceum* Burmeister, 1839

216. *Orthetrum triangulare* (Selys, 1878)

71. *Palpopleura* Rambur, 1842

217. *Palpopleura sexmaculata* (Fabricius, 1787)

217a. *P. sexmaculata octomaculata* Fraser, 1935

72. *Pantala* Hagen, 1861

218. *Pantala flavescens* (Fabricius, 1798)

73. *Potamarcha* Karsch, 1890

219. *Potamarcha congener* (Rambur, 1842)

74. *Pseudotramea* Fraser, 1920

220. *Pseudotramea prateri* Fraser, 1920b

75. *Rhodothemis* Ris, 1909

221. *Rhodothemis rufa* (Rambur, 1842)

76. *Rhyothemis* Hagen 1867

222. *Rhyothemis obsolescens* Kirby, 1889

223. *Rhyothemis plutonia* Selys, 1883

224. *Rhyothemis triangularis* Kirby, 1889

225. *Rhyothemis variegata* (Linnaeus, 1763)

77. *Selysiothemis* Ris, 1897

226. *Selysiothemis nigra* (Vander Linden, 1825)

78. *Sympetrum* Newman, 1833

227. *Sympetrum commixtum* (Selys, 1884)

228. *Sympetrum durum* Bartenef, 1916

229. *Sympetrum fonscolombii* (Selys, 1840)

230. *Sympetrum haematoneura* Fraser, 1924

231. *Sympetrum himalayanum* Navas, 1934

232. *Sympetrum hypomelas* (Selys, 1884)

233. *Sympetrum meridionale* (Selys, 1841)

234. *Sympetrum orientale* (Selys, 1883)

235. *Sympetrum vulgatum* (Linnaeus, 1758)

235a. *S. vulgatum flavum* (Bartenef, 1915)

79. *Tetrathemis* Brauer, 1868

236. *Tetrathemis platyptera* Selys, 1878

80. *Tholymis* Hagen, 1867

237. *Tholymis tillarga* (Fabricius, 1798)

81. *Tramea* Hagen, 1861

238. *Tramea basilaris* (Palisot de Beauvois, 1805)

238a. *T. basilaris burmeisteri* Kirby, 1889

239. *Tramea eurybia* Selys, 1878

240. *Tramea limbata* (Desjardins, 1832)

240a. *T. limbata similata* (Rambur, 1842)

241. *Tramea virginia* (Rambur, 1842)

82. *Trithemis* Brauer, 1868

242. *Trithemis aurora* (Burmeister, 1839)

243. *Trithemis festiva* (Rambur, 1842)

244. *Trithemis kirbyi* Selys, 1891

245. *Trithemis pallidinervis* (Kirby, 1889)

83. *Urothemis* Brauer, 1868

246. *Urothemis signata* (Rambur, 1842)

84. *Zygonyx* Hagen, 1867

247. *Zygonyx iris* Selys, 1869

247a. *Z. iris davina* Fraser, 1926

247b. *Z. iris malabarica* Fraser, 1926

247c. *Z. iris metallica* Fraser, 1931

247d. *Z. iris intermedia* Lahiri, 1987

248. *Zygonyx torrida* (Kirby, 1889)

248a. *Z. torrida isis* Fraser, 1924

85. *Zyxomma* Rambur, 1842

249. *Zyxomma obtusum* Albarda, 1881*

250. *Zyxomma petiolatum* Rambur, 1842

Family: Macromiidae

86. *Epopthalmia* Burmeister, 1839

251. *Epopthalmia frontalis* Selys, 1871

251a. *E. frontalis binocellata* (Fraser, 1924)

252. *Epopthalmia vittata* Burmeister, 1839

253. *Epopthalmia vittigera* (Rambur, 1842)

253a. *E. vittigera bellicosa* Lieftinck, 1948

87. *Macromia* Rambur, 1842

254. *Macromia annaimalaiensis* Fraser, 1931

255. *Macromia bellicosa* Fraser, 1924

256. *Macromia cingulata* Rambur, 1842

257. *Macromia cupricincta* Fraser, 1924
258. *Macromia ellisoni* Fraser, 1924
259. *Macromia flavicincta* Selys, 1874
260. *Macromia flavocolorata* Fraser, 1922
261. *Macromia flavovittata* Fraser, 1935
262. *Macromia ida* Fraser, 1924
263. *Macromia indica* Fraser, 1924
264. *Macromia irata* Fraser, 1924
265. *Macromia moorei* Selys, 1874
266. *Macromia pallida* Fraser, 1924
267. *Macromia whitei* Selys, 1871

Suborder: Anisozygoptera

Family: Epiophlebiae

88. *Epiophlebia* Clavert, 1903

268. *Epiophlebia laidlawi* Tillyard, 1921

Suborder: Zygoptera

Family: Calopterygidae

89. *Caliphaea* Hagen in Selys, 1853

269. *Caliphaea confusa* Hagen in Selys, 1859

90. *Echo* Selys, 1853

270. *Echo margarita* Selys, 1853

270a. *E. margarita tripartita* Selys, 1879

91. *Matrona* Selys, 1853

271. *Matrona basilaris* Selys, 1853

271a. *M. basilaris nigripictus* Selys, 1879

92. *Neurobasis* Selys, 1853

272. *Neurobasis chinensis* (Linnaeus, 1758)

93. *Vestalaria* May, 1935

273. *Vestalaria smaragdina* (Selys, 1879)

94. *Vestalis* Selys, 1853

274. *Vestalis apicalis* Selys, 1873

274a. *V. apicalis submontana* Fraser, 1934

275. *Vestalis gracilis* (Rambur, 1842)

275a. *V. gracilis montana* (Fraser, 1934)

Family: Chlorocyphidae

95. *Calocypha* Fraser, 1928

276. *Calocypha laidlawi* (Fraser, 1924)

96. *Indocypha* Fraser, 1949

277. *Indocypha vittata* (Selys, 1891)

97. *Libellago* Selys, 1840

278. *Libellago andamanensis* (Fraser, 1924)*

279. *Libellago aurantiaca* (Selys, 1959) *

280. *Libellago balus* Hämäläinen, 2002

281. *Libellago blanda* (Hagen in Selys, 1853)*

282. *Libellago lineata* (Burmeister, 1839)

282a. *L. lineata indica* (Fraser, 1928)*

98. *Rhinocypha* Rambur, 1842

283. *Rhinocypha biforata* Selys, 1859

283a. *R. biforata abbreviata* Fraser, 1928

284. *Rhinocypha bisignata* Hagen in Selys, 1853

285. *Rhinocypha cuneata* (Selys, 1853)

286. *Rhinocypha fenestrella* Rambur, 1842

287. *Rhinocypha hiliaryae* Fraser, 1927

287a. *R. hiliaryae miaoa* Lahiri & Sinha, 1991

288. *Rhinocypha ignipennis* Selys, 1879

289. *Rhinocypha immaculata* Selys, 1879

290. *Rhinocypha perforata* Selys, 1879

290a. *R. perforata beatifica* Fraser, 1927

290b. *R. perforata limbata* Selys, 1879

291. *Rhinocypha quadrimaculata* Selys, 1853

292. *Rhinocypha spuria* Selys, 1879

- 293. *Rhinocypha trifasciata* Selys, 1853
- 294. *Rhinocypha trimaculata* Selys, 1853
- 295. *Rhinocypha unimaculata* Selys, 1853
- 296. *Rhinocypha vitrinella* Fraser, 1935

Family: Coenagrionidae

99. Aciagrion Selys, 1891

- 297. *Aciagrion approximans* (Selys, 1876)
- 298. *Aciagrion azureum* Fraser, 1922
- 299. *Aciagrion hisopa* (Selys, 1876)
 - 299a. *A. hisopa krishna* Fraser, 1921
- 300. *Aciagrion occidentale* Laidlaw, 1919
- 301. *Aciagrion olympicum* Laidlaw, 1919
- 302. *Aciagrion pallidum* Selys, 1891
- 303. *Aciagrion tillyardi* Laidlaw, 1919

100. Agriocnemis Selys, 1877

- 304. *Agriocnemis clauseni* Fraser, 1922
- 305. *Agriocnemis corbeti* Kumar & Prasad, 1978
- 306. *Agriocnemis dabreui* Fraser, 1919
- 307. *Agriocnemis femina* (Brauer, 1868)
- 308. *Agriocnemis keralensis* Peters, 1981
- 309. *Agriocnemis lacteola* Selys, 1877
- 310. *Agriocnemis pieris* Laidlaw, 1919
- 311. *Agriocnemis pygmaea* (Rambur, 1842)
- 312. *Agriocnemis splendidissima* Laidlaw, 1919

101. Archibasis Kirby, 1890

- 313. *Archibasis oscillans* (Selys, 1877)

102. Argiocnemis Selys, 1877

- 314. *Argiocnemis rubescens* Selys, 1877
 - 314a. *A. rubescens rubeola* Selys, 1877

103. Ceriagrion Selys, 1876

- 315. *Ceriagrion azureum* (Selys, 1891)

316. *Ceriagrion cerinorubellum* (Brauer, 1865)
317. *Ceriagrion coeruleum* Laidlaw, 1919
318. *Ceriagrion coromandelianum* (Fabricius, 1798)
319. *Ceriagrion fallax* Ris, 1914
 319a. *C. fallax cerinomelas* Lieftinck 1927
 319b. *C. fallax pendleburyi* Laidlaw, 1931
320. *Ceriagrion olivaceum* Laidlaw, 1914
321. *Ceriagrion rubiae* Laidlaw, 1916
- 104. *Coenagrion* Kirby, 1890**
322. *Coenagrion kashmirum* Chowdhary & Das, 1975
- 105. *Enallagma* Charpentier, 1840**
323. *Enallagma cyathigerum* (Charpentier, 1840)
324. *Enallagma immsi* Laidlaw, 1913
325. *Enallagma insula* Fraser, 1920
326. *Enallagma nihari* Mitra, 1995
327. *Enallagma parvum* Selys, 1876
328. *Enallagma risi* Schmidt, 1961
- 106. *Himalagrion* Fraser, 1919**
329. *Himalagrion exclamazione* Fraser, 1919
330. *Himalagrion pithoragarhicum* Sahni, 1964
- 107. *Ischnura* Charpentier, 1840**
331. *Ischnura aurora* (Brauer, 1865)
332. *Ischnura elegans* (Vander Linden, 1823)
333. *Ischnura forcipata* Morton, 1907
334. *Ischnura inarmata* Calvert, 1898
335. *Ischnura rubilio* Selys, 1876
336. *Ischnura rufostigma* Selys, 1876
 336b. *I. rufostigma mildredae* Fraser, 1927*
337. *Ischnura senegalensis* (Rambur, 1842)
- 108. *Mortonagrion* Fraser, 1920**
338. *Mortonagrion aborense* (Laidlaw, 1914)
339. *Mortonagrion varralli* Fraser, 1920

109. *Onychargia* Selys, 1865

- 340. *Onychargia atrocyana* (Selys, 1865)
- 341. *Onychargia indica* Sahni, 1964

110. *Paracercion* Wecker & Dumont, 2004

- 342. *Paracercion calamorum* (Ris, 1916)
- 343. *Paracercion malayanum* (Selys, 1876)

111. *Pseudagrion* Selys, 1876

- 344. *Pseudagrion andamanicum* Fraser, 1924
- 345. *Pseudagrion australasiae* Selys, 1876
- 346. *Pseudagrion bidentatum* Morton, 1907
- 347. *Pseudagrion decorum* (Rambur, 1842)
- 348. *Pseudagrion hypermelas* Selys, 1876
- 349. *Pseudagrion indicum* Fraser, 1924
- 350. *Pseudagrion laidlawi* Fraser, 1922
- 351. *Pseudagrion malabaricum* Fraser, 1924
- 352. *Pseudagrion microcephalum* (Rambur, 1842)
- 353. *Pseudagrion rubriceps* Selys, 1876
- 354. *Pseudagrion spencei* Fraser, 1922

112. *Rhodischnura* Laidlaw, 1919

- 355. *Rhodischnura nursei* (Morton, 1907)

Family: Euphaeidae

113. *Anisopleura* Selys, 1853

- 356. *Anisopleura comes* Hagen, 1880
- 357. *Anisopleura lestoides* Selys, 1853
- 358. *Anisopleura lieftincki* Prasad & Ghosh, 1984
- 359. *Anisopleura subplatystyla* Fraser, 1927
- 360. *Anisopleura vallei* St. Quentin, 1937

114. *Bayadera* Selys, 1853

- 361. *Bayadera hyalina* Selys, 1879
- 362. *Bayadera indica* (Selys, 1853)
- 363. *Bayadera kali* Cowley, 1936

364. *Bayadera longicauda* Fraser, 1928
- 115. *Dysphaea* Selys, 1853**
365. *Dysphaea ethela* Fraser, 1924
366. *Dysphaea walli* Fraser, 1927
- 116. *Epallage* Charpentier, 1840**
367. *Epallage fatime* (Charpentier, 1840)
- 117. *Euphaea* Selys, 1840**
368. *Euphaea cardinalis* (Fraser, 1924)
369. *Euphaea dispar* (Rambur, 1842)
370. *Euphaea fraseri* (Laidlaw, 1920)
371. *Euphaea masoni* Selys, 1879
372. *Euphaea ochracea* Selys, 1859
- 117. *Schmidtphaea* Asahina, 1978**
373. *Schmidtphaea schmidi* Asahina, 1978

Family: Lestidae

- 118. *Indolestes* Fraser, 1922**
374. *Indolestes assamicus* Fraser, 1930
375. *Indolestes cyaneus* (Selys, 1862)
376. *Indolestes gracilis* (Hagen in Selys, 1862)
- 376a. *I. gracilis birmanus* (Selys, 1891)
377. *Indolestes indicus* Fraser, 1922
378. *Indolestes pulcherrimus* Fraser, 1924
379. *Indolestes tenuissimus* Tillyard, 1906
- 119. *Lestes* Leach, 1815**
380. *Lestes barbarus* (Fabricius, 1798)
381. *Lestes concinnus* Hagen in Selys, 1862
382. *Lestes dorothea* Fraser, 1924
383. *Lestes elatus* Hagen in Selys, 1862
384. *Lestes garoensis* Lahiri, 1987
385. *Lestes malabarica* Fraser, 1929
386. *Lestes nigriceps* Fraser, 1924d
387. *Lestes nodalis* Selys, 1891

388. *Lestes patricia* Fraser, 1924
389. *Lestes platystylus* Rambur, 1842
390. *Lestes praemorsus* Hagen in Selys, 1862
 390a. *L. praemorsus sikkima* Fraser, 1929
 390b. *L. praemorsus decipiens* Kirby, 1893
391. *Lestes thoracicus* Laidlaw, 1920
392. *Lestes umbrinus* Selys, 1891
393. *Lestes viridulus* Rambur, 1842
120. *Orolestes* McLachlan, 1895
 394. *Orolestes durga* Lahiri, 1987
 395. *Orolestes selysi* McLachlan, 1895
121. *Sympecma* Burmeister, 1839
 396. *Sympecma paedisca* (Brauer, 1877)

Family: Megapodagrionidae

- 122. *Burmargiolestes* Kennedy, 1925**
 397. *Burmargiolestes laidlawi* Lieftinck, 1960

Family: Philogangidae*

- 123. *Philoganga* Kirby, 1890**
 398. *Philoganga montana* (Hagen in Selys, 1859)

Family: Platycnemididae

- 124. *Calicnemia* Strand, 1928**
 399. *Calicnemia doonensis* Sangal & Tyagi, 1984*
 399a. *C. d. carminea* Lieftinck, 1984
 400. *Calicnemia eximia* (Selys, 1863)
 401. *Calicnemia imitans* Lieftinck, 1948
 402. *Calicnemia miles* (Laidlaw, 1917)
 403. *Calicnemia miniata* (Selys, 1886)
 404. *Calicnemia mortoni* (Laidlaw, 1917)
 405. *Calicnemia mukherjeei* Lahiri, 1976

406. *Calicnemia pulverulans* (Selys, 1886)
407. *Calicnemia pyrrhosoma* Lieftinck, 1984
408. *Calicnemia sudhaae* Mitra, 1994*

125. *Coeliccia* Kirby, 1890

409. *Coeliccia bimaculata* Laidlaw, 1914
410. *Coeliccia didyma* (Selys, 1863)
410a. *C. didyma loringae* Laidlaw, 1932
411. *Coeliccia dorothea* Fraser, 1933
412. *Coeliccia fraseri* Laidlaw, 1932
413. *Coeliccia prakritiae* Lahiri, 1985 *
414. *Coeliccia renifera* (Selys, 1886)
415. *Coeliccia rossi* Asahina, 1984
416. *Coeliccia sarbottama* Lahiri, 1987
417. *Coeliccia schmidtii* Asahina, 1984
418. *Coeliccia svihleri* Asahina, 1970
419. *Coeliccia vacca* Laidlaw, 1932

126. *Copera* Kirby, 1890

420. *Copera ciliata* (Selys, 1863)
421. *Copera marginipes* (Rambur, 1842)
422. *Copera superplatypes* Fraser, 1927
423. *Copera vittata* Selys, 1863
423a. *C. vittata assamensis* Laidlaw, 1914
423b. *C. vittata deccanensis* Laidlaw, 1917
423c. *C. vittata serapica* (Selys, 1863)

127. *Indocnemis* Laidlaw, 1917

424. *Indocnemis orang* (Förster in Laidlaw, 1907)

128. *Platycnemis* Burmeister, 1839

425. *Platycnemis dealbata* Selys, 1863

Family: Platystictidae

129. *Drepanosticta* Laidlaw, 1917

426. *Drepanosticta annandalei* Fraser, 1924
427. *Drepanosticta carmichaeli* (Laidlaw, 1915)

428. *Drepanosticta polychromatica* Fraser, 1931

130. *Platysticta* Selys, 1860

429. *Platysticta deccanensis* Laidlaw, 1915

131. *Protosticta* Selys, 1885

430. *Protosticta antelopoides* Fraser, 1931

431. *Protosticta davenporti* Fraser, 1931

432. *Protosticta fraseri* Kennedy, 1936

433. *Protosticta gravelyi* Laidlaw, 1915

434. *Protosticta hearseyi* Fraser, 1922

435. *Protosticta himalaica* Laidlaw, 1917

436. *Protosticta mortoni* Fraser, 1924

437. *Protosticta rufostigma* Kimmins, 1958

438. *Protosticta sanguinostigma* Fraser, 1922

Family: Protoneuridae

132. *Caconeura* Kirby, 1890

439. *Caconeura gomphoides* (Rambur, 1842)

440. *Caconeura obscura* (Fraser, 1933)

441. *Caconeura ramburi* (Fraser, 1922)

442. *Caconeura risi* (Fraser, 1931)

443. *Caconeura t-coerulea* (Fraser, 1933)

133. *Disparoneura* Selys, 1860

444. *Disparoneura apicalis* (Fraser, 1924)

445. *Disparoneura quadrimaculata* (Rambur, 1842)

134. *Elattoneura* Cowley, 1935

446. *Elattoneura atkinsoni* (Selys, 1886)

447. *Elattoneura campioni* (Fraser, 1922)

447a. *E. campioni cacharensis* (Fraser, 1933)

448. *Elattoneura coomansi* Lieftinck, 1937

449. *Elattoneura nigerrima* (Laidlaw, 1917)

450. *Elattoneura souteri* (Fraser, 1924)

451. *Elattoneura tetrica* (Laidlaw, 1917)

135. *Esme* Fraser, 1922

452. *Esme cyaneovittata* Fraser, 1922

453. *Esme longistyla* Fraser, 1931

454. *Esme mudiensis* Fraser, 1931

136. *Melanoneura* Fraser, 1922

455. *Melanoneura bilineata* Fraser, 1922

137. *Phylloneura* Fraser, 1922

456. *Phylloneura westermanni* (Selys, 1860)

138. *Prodasineura* Cowley, 1934

457. *Prodasineura autumnalis* (Fraser, 1922)

458. *Prodasineura odoneli* (Fraser, 1922)

459. *Prodasineura verticalis* (Selys, 1860)

459a. *P. verticalis andamanensis* (Fraser, 1924)

459b. *P. verticalis annandalei* (Fraser, 1921)

Family: Synlestidae

139. *Megalestes* Selys, 1862

460. *Megalestes irma* Fraser, 1926

461. *Megalestes lieftincki* Lahiri, 1979

462. *Megalestes major* Selys, 1862

463. *Megalestes raychoudhuriai* Lahiri, 1987

7. Notes and comments

1. *Aeshna flavifrons* Lichtenstein, 1776 : The actual year of publication is 1776 and not 1976 as mentioned in Prasad and Varshney (1995). All Lichtenstein's species (www.odonata.info) are forgotten, unused names for species not identified. According to the present nomenclature rules, these forgotten names are not valid and so the species is removed from Indian list (Inputs from M. Hämäläinen).
2. *Calicnemia doonensis* Sangal & Tyagi, 1984: The synonymy of *C. doonensis* with *Calicnemia carminea pyrrosoma* Lieftinck, 1984 proposed by Mitra (2005) is nomenclatorically incorrect. According to the ICZN rules

- Calicnemia doonensis* Sangal & Tyagi, 1984 (not 1985, since the name appeared first in the published abstract booklet in 1984) is the correct and valid name for this taxon, and *carminea*, *pyrrhosoma* are its synonym. *C. doonensis* is valid, even though the taxon *doonensis* was incorrectly linked to *C. miniata* and the description in the abstract was minimal (Inputs from M. Hämäläinen).
3. *Calicnemia sudhae* Mitra, 1994: Detailed description of the species published in Mitra (2002).
 4. *Coelliccia prakritiae* Lahiri, 1985: Mitra (2002) changed spelling from *C. prakritii* to *C. prakritae*.
 5. *Gomphidia leonora* Mitra, 1994: Detailed description of the species published in Mitra (2002).
 6. *Hylaeothemis indica* Fraser, 1946: Fraser, in his *Fauna of British India* (Vol-3, 1936) had described the Western Ghats *Hylaeothemis* as *H. fruhstorferi*. However, after comparing with type of *H. gardeneri*, he redescribed the Western Ghats *Hylaeothemis* as *H. indica* and provided a new key for *Hylaeothemis* species (Fraser, 1946). Currently, *H. gardeneri*, *H. indica* and *H. fruhstorferi* are restricted to north east India, Western Ghats and Sri Lanka respectively. The correct identity of *Hylaeothemis* of Eastern Ghats (eg. Simlipal National Park, Orissa) is to be ascertained with new material.
 7. *Ictinogomphus distinctus* Ram, 1985: Type material was studied by Mitra (2002) and found to be very close to *I. rapax*. More material is required for confirming the status of the species. Most probably a variation of widespread *I. rapax*.
 8. *Ictinogomphus kishori* Ram, 1985: Type material and detailed description is not available for confirming the status of the species. Most probably a variation of widespread *I. rapax*.
 9. *Libellago andamanensis* (Fraser, 1924): Hämäläinen (2002) revised the status of *L. lineata andamanensis* to *L. andamanensis*.
 10. *Libellago aurantiaca* (Selys, 1959): According to Hämäläinen (2002), the two male specimens of *L. aurantiaca* reported by Mitra (1995) belongs to *Libellago balus* (Hämäläinen, 2002) and since the Fraser's (1934) key works out *L. balus* as *L. aurantiaca* it was not detected earlier. A restudy of Mitra's collection is

required for correct species assignment. Till then the species is provisionally included in this list.

11. ***Libellago blanda*** (Hagen in Selys, 1853): Hämäläinen (2002) revised the status of *L. lineata blanda* to *L. blanda*.
12. ***Libellago lineata indica*** (Fraser, 1928): Some authors consider *indica* as a distinct species (Lieftinck, 1940, 1955, 1971; De Fonseka, 2000).
13. **Philogangidae**: The genera *Diphlebia*, *Lestoidea* and *Philoganga* are included in the Lestoideidae (= correct name for Diphlebiidae) in Kalkman *et al.*, (2008). The relationships between these genera are not clear and some authors consider *Diphlebia* and *Philoganga* as separate family Philogangidae (Schorr *et al.*, 2009) (Inputs from V.Kalkman).

8. Species described after 1995:

1. *Enallagma nihari* Mitra, 1995
2. *Gynacantha pallampurica* Lahri, Sandhu and Walia 2007
3. *Gynacantha andamanae* Yeh & Veenakumari, 2000
4. *Libellago balus* Hämäläinen, 2002
5. *Oligoaeschna speciosa* Karube, 1998

9. New species reports to India after 1995:

1. *Ischnura rufostigma mildredae* Fraser, 1927: Mitra (2002)
2. *Lyriothemis cleis* Brauer, 1868: Mitra (1994, 2002)
3. *Zygomma obtusum* Albarda, 1881: Hämäläinen, *et al.*, (1999)
4. *Orthetrum testaceum* Burmeister, 1839

10. Species synonymised after 1995:

1. *Anaciaeschna kashimirensis* Singh & Baijal, 1954: Synonymised with *Anaciaeschna jaspidea* (Burmeister, 1839). Ref: <www.odonata.info>
2. *Bradinopyga saintjohanni* Baijal & Agarwal, 1956: Synonymised with *Bradinopyga geminata* (Rambur, 1842). Ref: Mitra, 2002.
3. *Crocothemis indica* Sahni, 1964: Synonymised with *C. servilia servilia* (Drury). Ref: Mitra, 2002.
4. *Crocothemis misrai* Baijal & Agarwal, 1956: Synonymised with *Trithemis aurora* (Burmeister, 1839) Ref: Mitra, 2002.

5. *Indolestes davenporti* (Fraser, 1930): Synonymised with *I.gracilis birmanus* (Selys, 1891). Ref: <www.odonata.info>
6. *Nannophya katrainensis* Baijal in Singh, 1955: Synonymised with *Brachythemis contaminata* (Fabricius,1793). Ref: <www.odonata.info>
7. *Orolestus motis* Baijal and Agarwal, 1955: Synonymised with *Lestes umbrinus* Selys, 1892. Ref: Mitra, 1992, but still retained in the world checklist inadvertantly (Schorr *et al.*, 2009).
8. *Orthetrum chandrabali* Mehrotra, 1961: Synonymised with *O.triangularare* (Selys, 1878). Ref: Mitra, 2002.
9. *Orthetrum ganeshii* Mehrotra, 1961: Synonymised with *O.triangularare* (Selys, 1878). Ref: Mitra, 2002.
10. *Orthetrum guptai* Baijal in Singh, 1955: Synonymised with *Orthetrum cancellatum* (Linnaeus, 1758). Ref: <www.odonata.info>
11. *Platylestus orientalis* Baijal and Agarwal, 1955: Synonymised with *Disparoneura quadrimaculata* (Rambur, 1842). Ref: Mitra, 1992, but still retained in the world checklist inadvertantly (Schorr *et al.*, 2009).
12. *Sympecma annulata annulata* (Selys, 1887) and *S.a.kashmirensis* Ander,1944 : Synonymised with *S.paedisca* (Brauer,1877).
13. *Ischnura dorothea* Frasaer, 1924: Synonym of *Lestes dorothea* Fraser, 1924.
14. *Ischnura immsi* Laidlaw, 1913: Synonym of *Enallagma immsi* Laidlaw, 1913.
15. *Ischnura nigriceps* Fraser, 1924: Synonym of *Lestes nigriceps* Fraser, 1924.
16. *Ischnura patricia* Fraser, 1924: Synonym of *Lestes patricia* Fraser, 1924.

11. Species removed:

1. *Chlorogomphus usudai* Ishida, 1996: Distribution in China.
2. *Burmagomphus vermicularis* (Martin, 1904): Distribution in Myanmar.
3. *Macrogomphus abnormis* Selys, 1884: Distribution in Borneo.
4. *Onychogomphus maculivertex* (Selys, 1891): Distribution in Myanmar.
5. *Dysphaea gloriosa* Fraser, 1938: Distribution in Myanmar.
6. *Megalestes kurahashii* Asahina, 1985: Distribution in Thailand.
7. *Megalestes micans* Needham, 1930: Distribution in China.

12. Nomen nudum:

The type materials of following species (18 species) published by Sathe and Shinde (2006a, 2006b, 2008a, 2008b) are not deposited in any recognized national or international repositories. Moreover, the species descriptions do not provide illustrations or photographs of genitalia, anal appendages, wing venation etc. for a critical comparative study. Since the species descriptions does not adhere to the provisions of ICZN Articles-13 & 16 (Edition-4, 2000), the species may be considered *nomen nudum* until the types and illustrations are made available for scientific scrutiny.

1. *Agriocnemis kolhapurensis*^C
2. *Anax mahalaxmi*^B
3. *Bradinopyga satarens*^B
4. *Crocothemis rageshri*^B
5. *Gynacantha satheti*^B
6. *Indothemis indica*^B
7. *Indothemis koyinei*^D
8. *Mesogomphus humani*^B
9. *Mesogomphus indica*^B
10. *Onychothemis patani*^B
11. *Pantala shalaksi*^B
12. *Pantala shivajiensis*^B
13. *Potamarcha humani*^B
14. *Potamarcha koynei*^B
15. *Rhyothemis rangiri*^B
16. *Rhyothemis yashawanti*^A
17. *Trithemis hivei*^B
18. *Trithemis maharashtri*^B

Acknowledgements: I sincerely thank Drs.T.R.Mitra (ZSI, Kolkata), C. Radhakrishnan (ZSI, Kozhikode), S.S.Talmale (ZSI,Pune), K.Dijkstra (NMNH, Leiden, Netherlands), M. Hämäläinen (Helsinki, Finland), Rory Dowe, Vincent Kalkman (NMNH, Leiden, Netherlands), Nancy van der Poorten (Sri Lanka), K.G.Emilyamma (ZSI,Kozhikode), R.Babu (ZSI, Kolkata), Jaffer Palot (ZSI,Kozhikode), Gaurav Sharma (ZSI, Jodhpur), Amit Mitra (Bhutan), Raymond Andrew (Nagpur), V.V.Ramamurthy (IARI, Delhi), K.G. Sivaramakrishanan (PCES, Alwarkuruchi), R.M.Sharma (ZSI, Jabalpur) and Kailash Chandra (ZSI, Jabalpur) for providing valuable inputs and helping me with the literature. I also thank Dr.Ramakrishna, Director, Zoological Survey of India, Kolkata for constant encouragement and support.

Cover Photo: *Echo margarita* Selys, 1853. **Credit:** Krushnamegh Kunte

Last updated: 15^h December, 2009

References:

- Fonseka, T. de, (2000). *The dragonflies of Sri Lanka*. WHT Publications, Colombo.
- Fraser, F. C. (1946). *Hylaeothemis indica*, a new species of oriental libelluline (order Odonata). *Proc. R. ent. Soc. Lond. (B)* **15 (7/8)**: 97-100.
- Hämäläinen, M. (2002). Notes on the *Libellago* damselflies of the Andaman and Nicobar Islands, with description of a new species (Zygoptera: Chlorocyphidae). *Odonatologica*. **31(4)**: 345-358.
- Hämäläinen, M., Mohanraj, P. and Veenakumari, K. (1999). Additions to the Odonata fauna of the Andaman and Nicobar Islands, Indian Ocean. *Notul. Odonatol.* **5(3)**: 27-29.
- Kalkman, V.J., Clausnitzer, V., Dijkstra, K-D.B., Orr, G.A., Paulson, R.D., Tol, J.V (2008). Global diversity of dragonflies (Odonata) in freshwater. *Hydrobiologia*. **595**:351-363.
- Lahri, A.R., Sandhu, S. and Walia, G.K. (2007). *Gynacantha pallampurica* sp.nov. from northern Himachal Pradesh, India (Odonata: Aeshnidae). *Rec. Zool. Surv. India. Vol 107 (Part-3)*: 45-49.
- Lieftinck, M.A., (1940). On some Odonata collected in Ceylon, with descriptions of new species and larvae. *Ceylon J. Sci. (B)* 79-117, pl. 1 excl.
- Lieftinck, M.A., (1955). Synopsis of the dragonflies (Odonata) of Ceylon. *Zool. Meded. Leiden*. **33(5)**: 67-87.
- Lieftinck, M.A., (1971). Odonata from Ceylon. *Ent. scand. (Suppl.)* **1**: 188-207.
- Lohmann, H., (1996). Das phylogenetische System der Anisoptera (Odonata). *Entomologische Zeitschrift* **106**, 209-252.
- Mitra, T. R. (1992). Taxonomic status of *Orolestes motis* Baijal and Agarwal, 1955, *Platylestes orientalis* Baijal and Agarwal, 1955 and *Anax marginope* Baijal and Agarwal, 1955. (Zygoptera: Lestidae) (Anisoptera: Aeshnidae). *Odonatologica*, **21(1)**: 103-104.
- Mitra, T. R. (2002). Geographical distribution of Odonata (Insecta) of Eastern India. *Mem. Zool. Surv. India*, **19 (9)**, pp. XI+ 208.

- Mitra, T. R. (2005). *Calicnemia miniata doonensis* Sagal and Tyagi a synonym of *Calicnemia carminea pyrrhosoma* (Insecta: Odonata: Platycnemididae). **Rec. Zool. Surv. India**, **104**: 161-162.
- Prasad, M and Varshney, R.K. (1995). A check list of the Odoanta of India including data on larval studies. **Oriental Insects**. **29**, 385-428 and references therein.
- Rehn, A.C. (2003). Phylogenetic analysis of higher-level relationships of Odonata. **Systematic Entomology**. **28**,181-239.
- Sathe, T.V. and Shinde, K.P (2006). On a new species of the genus *Rhyothemis* Hagen (Order-Odonata) from India. **J. Natcon**. **18(2)**:421-424. (A)
- Sathe, T.V. and Shinde, K.P (2008). Dragonflies and Pest Management. **Daya Publications House**. New Delhi. 1-180pp. (B)
- Sathe, T.V. and Shinde, K.P (2006). On a new species of the genus *Agriocnemis* Selys (Order-Odonata) from India. **J. Curr.Sci**. **9(2)**:799-802. (C)
- Schorr, M, Lindeboom, M and Paulson, D. (2009). World Odonata List. <http://www.pugetsound.edu/x6140.xml>. Accessed on 01/06/2009.
- Shinde, K.P and Sathe, T.V (2008). On a new species of the genus *Inothemis* Ris [Sic] from Western Ghats, Maharashtra. Proceeding of National level Seminar on “Recent Trends in Life Science”. September, 2008, Belgaum, India.(D)
- Trueman, J.W.H. (1996). A preliminary cladistic analysis of odonate wing venation. **Odonatologica**. **25**, 59-72.
- <www. odonata.info>