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A checklist of the Mayfly (Ephemeroptera: Insecta) in Western Ghats

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Abstract

Research works on aquatic insects never been attracted the south Indian scientists with least exceptions. In order to create awareness and the urge for the need of importance of documenting aquatic insects of Western Ghats, we prepared a checklist on Ephemeroptera. 49 species from Ephemeroptera were recorded. This list will enlighten the future researchers to realize the importance of conservation of Mayfly in Western Ghats.

Key words: mayfly, streams, Western Ghats

Introduction

Western Ghats is one among the hot spots in the world and facing severe threats from human inhabitation and intervention. Several aquatic insect species are facing extinction. The most affected groups of documented insect extinctions are Lepidoptera and aquatic insects (Thakur and Kumari 2008). Documentation on aquatic insects in Western Ghats is poor and scanty. However, exhaustive list on Ephemeroptera was given in various journals which are inaccessible to young researchers in India. In order to fulfill the gap, there is an urgent need to publish a species list on Mayfly (Ephemeroptera: Insecta) of Western Ghats are inevitable.

Kingdom : Animalia
Phylum : Arthropoda
Class : Insecta
Order : EPHEMEROPTERA

BAETIOIDEA

I. Baetidae

1. ***Baetis dipsicus* Gillies (1949)**
Gillies (1949) was reported this species in Mutha river, Pune, Maharashtra.
2. ***Baetis fluitans* Gillies (1949)**
Gillies (1949) was reported this species in Mutha river, Pune, Maharashtra.
3. ***Baetis palmyrae* Gillies (1949)**
Gillies (1949) was reported this species in Mutha river, Pune, Maharashtra.
4. ***Cloeon bicolor* Kimmins (1947)**
Kimmins (1947) was reported this species in Bangalore, Karnataka.
5. ***Cloeon bimaculatum* Eaton (1885)**
Eaton (1885) was reported this species in Bangalore, Karnataka.
6. ***Cloeon kimminsi* Hubbard (1974)**
Hubbard (1974) reported this species in Tamil Nadu, Kerala, Karnataka, Maharashtra and Goa.

7. ***Cloeon marginale* Hagen (1858)**
Hagen (1858) reported this species in Kandala, Maharashtra.
8. ***Cloeon taeniatum*, Navas (1931)**
Navas (1931) reported this species in Kandala, Maharashtra.
9. ***Procloeon harveyi* Kimmins (1947)**
Kimmins (1947) was reported this species in Pune, Maharashtra.

HEXAGENIOIDEA

II. Heptageniidae

10. ***Cinygmia (Afronurus) keralensis* Braasch and Soldan (1987)**
Braasch and Soldan (1987) reported this species in streams of Western Ghats.
11. ***Cinygmia (Afronurus) kumbakkariensis* Venkataraman and Sivaramakrishnan (1989)**
Venkataraman and Sivaramakrishnan (1989) described this species in Kumbakkarai stream, Tamil Nadu and also reported this species in Silver cascade of Kodaikanal, Ramanadhi of Kadayam and Tirumurthy hills, Tamil Nadu.
12. ***Ecdyonurus annulifer* Walker (1980)**
Walker (1980) reported this species in Kandala, Maharashtra.
13. ***Epeorus gilliesi* Braasch (1981)**
Braasch (1981) described this species in Western Ghats.
14. ***Thalerosphyrus flowersi* Venkataraman and Sivaramakrishnan (1987)**
Venkataraman and Sivaramakrishnan (1987) described this species in Kumbakkarai stream and also reported this species in Palni hills, Tirumurthy hills and Courtallam hills streams, Tamil Nadu.

LEPTOPHLEBIOIDEA

III. Leptophlebiidae

15. ***Edmundsula lotica* Sivaramakrishnan (1985)**
Sivaramakrishnan described this species from Chittar river of Courtallam hills, Tamil Nadu.
16. ***Indialis badia* Peters and Edmunds (1970)**
Peters and Edmunds (1970) described this species in Koratty river of Erumeli, Kerala and also reported it from Tampiraparani river, Tamil Nadu.
17. ***Indialis rossi* Peters (1975)**
Peters (1975) reported this species from stream of Kuttikanam near Peermedu, Kerala.
18. ***Isca purpurea* Gillies (1951)**
Gillies (1951) reported this species in various streams of Western Ghats.
19. ***Nathanella indica* Demoulin (1955)**
Demoulin (1955) reported this species from streams of Palni and Anamalai hills, Tamil Nadu.
20. ***Nathanella saraswathii* Sivaramakrishnan, Venkataraman and Balasubramanian (1996)**
Sivaramakrishnan, Venkataraman and Balasubramanian (1996) described this species from Kunjankuzhi stream of Cardamom hills, Bodimettu, Tamil Nadu.
21. ***Notophlebia hyalina* Peters and Edmunds (1970)**

Peters and Edmunds (1970) reported this species from Kunjankuzhi, Tamil Nadu.

22. ***Notophlebia jobi* Sivaramakrishnan and Peters (1984)**

Sivaramakrishnan and Peters (1984) described this species from Tamiraparani river, Tamil Nadu.

23. ***Petersula courtallensis* Sivaramakrishnan (1984)**

Sivaramakrishnan (1984) described this species in streams of Courtallam hills, Tamil Nadu and who also reported it from Kadamparai: Anaimalai Hills, Kunjankuzhi: Bodimettu, Balamore: Kerala and Kallidai river: Aryankavu.

24. ***Petersula nathani* Sivaramakrishnan and Hubbard (1984)**

Sivaramakrishnan and Hubbard (1984) described this species from Kadamparai, Anaimalai hills, Tamilnadu.

25. ***Thraululus gopalani* Grant and Sivaramakrishnan (1985)**

Grant and Sivaramakrishnan (1985) described this species from Kottumthalam, Lower camp of Tamiraparani river, Tamil Nadu.

26. ***Thraululus mudumalaiensis* Soman (1991)**

Soman (1991) reported this species from Mudumalai, Tamil Nadu.

EPHEMEROIDEA

IV. Euthyplociidae

27. ***Euthyplocia punensis* Dubey (1970)**

Dubey (1970) reported this species from stream of Pune, Maharashtra.

V. Potamanthidae

28. ***Potamanthus subcostalis* Navas (1931)**

Navas (1931) reported this species from Kandala stream, Maharashtra.

29. ***Rhoenanthus distafurcus* Bae and McCafferty (1991)**

Bae and McCafferty (1991) reported this species from Nedungayam, Kerala.

VI. Polymitarciidae

30. ***Ephoron indicus* Pictet (1843)**

Pictet (1843) described this species from stream of Pune, Maharashtra.

VII. Ephemeridae

31. ***Eatonigenia trirama* McCafferty (1973)**

McCafferty (1973) reported this species from Bhavani River, Tamil Nadu.

32. ***Ephemera annandalei* Chopra (1927)**

Chopra (1927) reported this species from stream of Mysore, Karnataka.

33. ***Ephemera diffusa* Chopra (1927)**

Chopra (1927) described this species from Bhavani River, Tamil Nadu.

34. ***Ephemera distincta* Hubbard (1982)**

Hubbard (1982) reported this species from Anaimalai hills, Tamil Nadu.

35. ***Ephemera exspectans* Walker (1860)**
Walker (1860) reported this species from stream of Mysore, Karnataka.
36. ***Ephemera fulvata* Navas (1935)**
Navas (1935) described this species Lonavala near Kandala, Maharashtra.
37. ***Ephemera immaculata* Eaton (1871)**
Eaton (1871) reported this species from stream of Karnataka.
38. ***Ephemera (Aethephemera) nadinae* McCafferty and Edmunds (1973)**
McCafferty and Edmunds (1973) described this species from stream of Kodaikanal, Palni hills, Tamil Nadu.
39. ***Ephemera nathani* Hubbard (1982)**
Hubbard (1982) described this species from Cinchona, Anaimalai hills, Tamil Nadu.
40. ***Ephemera supposita* Eaton (1883)**
Eaton (1883) described this species from stream of Palni hills and Taliparamba stream of Kerala.

CAENOIDEA

VIII. Ephemerellidae

41. ***Torleya nepalica* Allen and Edmunds (1963)**
Allen and Edmunds (1963) described this species in Mala village near Sringeri, Karnataka.

IX. Teloganodidae

42. ***Teloganodes dentata* Navas (1931)**
Navas (1931) reported this species in Kandala stream, Maharashtra.
43. ***Maccaffertiella insignis* Wang and McCafferty (1996)**
Wang and McCafferty (1996) described this species in village near Sringeri, Karnataka.

X. Tricorythidae

44. ***Tricorythus jacobsoni* Ulmer (1913)**
Ulmer (1913) reported this species in Moyar River, Tamil Nadu.

XI. Caenidae

45. ***Caenis nigrostriata* Navas (1931)**
Navas (1931) reported this species in stream of Maharashtra.
46. ***Clypeocaenis bisetosa* Soldan (1978)**
Soldan (1978) reported this species in stream of Maharashtra.
47. ***Clypeocaenis multisetosa* Soldan (1978)**
Soldan (1978) reported this species in stream of Maharashtra.

XII. Prosopistomatidae

48. ***Prosopistoma indicum* Peters (1967)**
Peters (1967) reported this species from River Koratty, Erumeli, Kerala.

NEOEPHEMEROIDEA

XIII. Neoephemeridae

49. *Potamanthellus ganges* Bae and McCafferty (1998)

Bae and McCafferty (1998) described this species in Moyar river, Tamil Nadu.

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