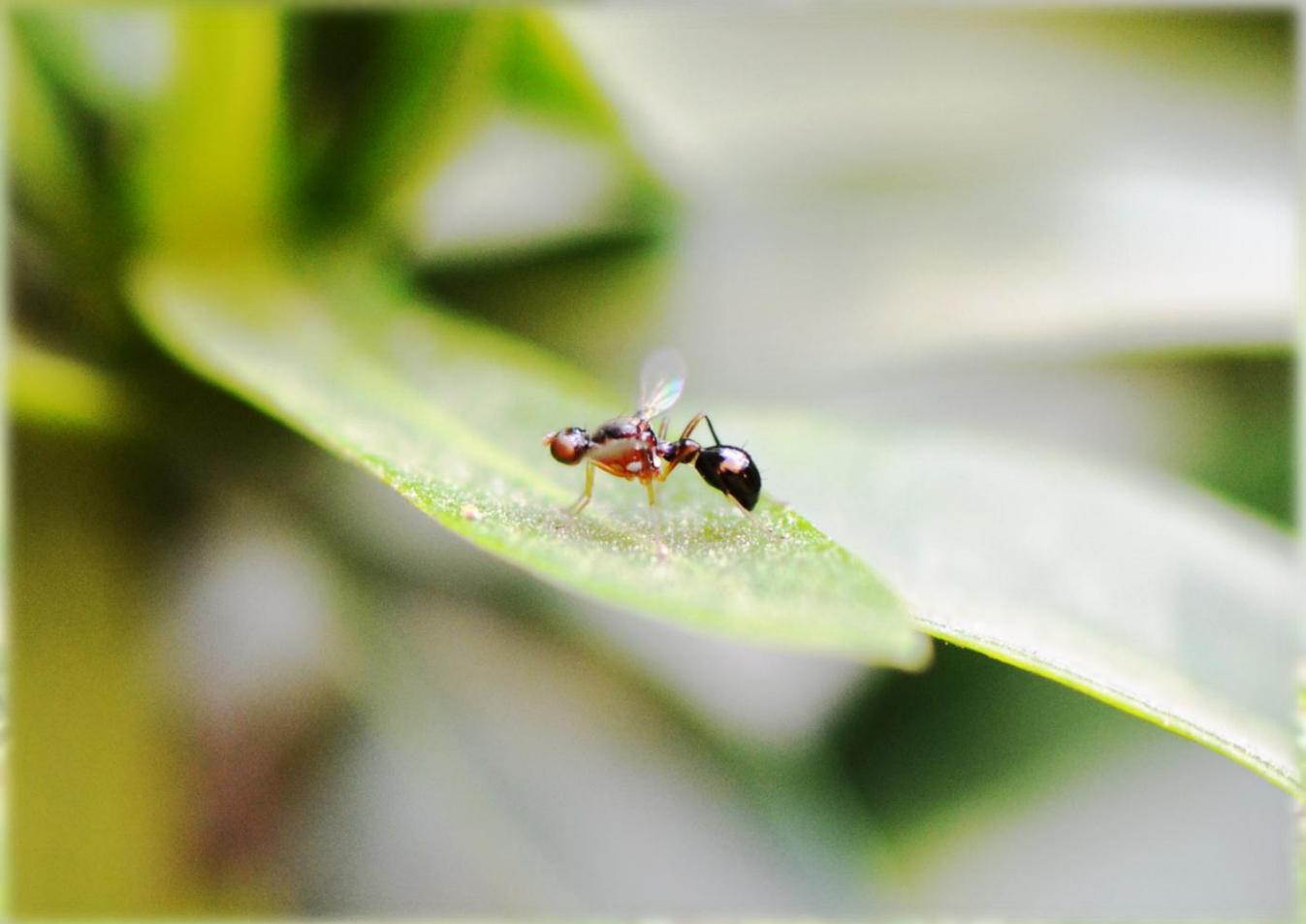


INDIAN BLACK SCAVENGER FLIES (INSECTA: DIPTERA: SEPSIDAE)

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Uploaded on March 2014.

Any errors for correction or suggestions for the improvement of this checklist are welcome. Please contact the corresponding author at dhritibanerjee@gmail.com

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INTRODUCTION

The family Sepsidae, commonly known black scavenger flies, are ant-like medium sized flies, 2-6 mm long, usually dark metallic purplish, sometimes dull black, or brownish to yellowish, showing sexual dimorphism. Wings are hyaline, usually with a dark spot near its tip.

Most species have slender, ant-like profiles, with bead-like heads, petiolate abdomina and relatively few setae. The family is distinguished (with a few exceptions) by the presence of one or more setae on the hind margin of the thoracal posterior spiracle and minute palpi (Steyskal 1987).

Adult sepsids occur in meadows, open woodlands, riversides, pond-margins, pastures farms, and also on the seashores (*Orygma sp.*). They are usually closely associated with their larval breeding sites. Some species of the genus *Saltella* and *Sepsis* are rarely found away from cow dung while some species of *Themira* are found only on water margins abundant with waterfowl droppings or well-trodden cow dung (Pont 1979).

These flies play a crucial role in the ecosystem acting as natural scavengers of decaying organic matter, cadavers and faeces converting them into soil nutrients. Since they are associated with dead carcass and cadavers and are useful as forensic indicators (markers) of crimes scenes.

The family is represented by 339 species, belonging to 38 genera worldwide. Only 45 species under 2 sub-families viz. Sepsinae and Toxopodinae comprising of 11 genera are recorded from India. The sub-family Sepsinae consist of 10 genera and 40 species and Toxopodinae consist of 1 genus and 5 species.

Wiedemann (1824) was first to initiated work on Indian Sepsidae. Later, Brunetti (1910) and Iwasa (1982; 2008) described several new species from the Indian subregion. In the recent past, Ozerov (1992; 2010) has made a considerable contribution on the Indian Sepsidae.

The present list has been updated and compiled, incorporating the data of the different Indian states from the State Fauna Series of Zoological Survey of India and the World Catalog of Sepsidae (Ozerov, 2005) as well as taking into consideration the recent nomenclatural changes in the *Systema Dipterorum* (updated on June, 2013) and Catalog of Life (updated on January 5th, 2014).

Family- Sepsidae

Subfamily- Sepsinae

I. Genus *Australosepsis* Malloch, 1925

1. *Australosepsis frontalis* (Walker,1860)
2. *Australosepsis inusitata* Iwasa, 2008
3. *Australosepsis niveipennis* (Becker,1903)

II. Genus *Decachaetophora* Duda, 1926

4. *Decachaetophora aeneipes* (de Meijere, 1913)

III. Genus *Dicranosepsis* Duda, 1926

5. *Dicranosepsis bicolor* (Wiedemann,1830)
6. *Dicranosepsis crinita* (Duda, 1926)
7. *Dicranosepsis distincta* Iwasa & Tewari, 1991
8. *Dicranosepsis javanica* de Meijere ,1904
9. *Dicranosepsis revocans* (Walker, 1860)
10. *Dicranosepsis tibialis* Iwasa & Tewari, 1991

IV. Genus *Meroplius* Rondani, 1874

11. *Meroplius beckeri* (de Meijere,1906)



12. *Meroplius elephantis* Iwasa, 1994
13. *Meroplius fasciculatus* (Brunetti, 1910)
14. *Meroplius maximus* Iwasa, 1994

V. Genus *Nemopoda* Robineau-Desvoidy, 1830

15. *Nemopoda pectinulata* Loew, 1873

VI. Genus *Perochaeta* Duda, 1926

16. *Perochaeta hennigi* Ozerov, 1992

VII. Genus *Saltella* Robineau-Desvoidy, 1830

17. *Saltella setigera* Brunetti, 1910

VIII. Genus *Sepsis* Fallen, 1810

18. *Sepsis adjuncta* Brunetti, 1910
19. *Sepsis coprophila* (de Meijere, 1906)
20. *Sepsis cynipsea* (Linnaeus, 1758)
21. *Sepsis dilata* Brunetti, 1910
22. *Sepsis dissimilis* Brunetti, 1909
23. *Sepsis erocha* Ozerov, 2000
24. *Sepsis fulvolateralis* Brunetti, 1910
25. *Sepsis humeralis* Brunetti, 1910
26. *Sepsis indica* (Wiedemann, 1824)



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27. *Sepsis lateralis* (Wiedemann,1830)
28. *Sepsis lineatipes* Brunetti, 1910
29. *Sepsis mediana* Iwasa, 1989
30. *Sepsis monostigma* (Thompson,1869)
31. *Sepsis nakanishii* Iwasa, 1984
32. *Sepsis nepalensis* Brunetti, 1910
33. *Sepsis nitens* (Wiedemann, 1824)
34. *Sepsis punctum* (Fabricius, 1794)
35. *Sepsis rufipectus* Brunetti, 1910
36. *Sepsis suwai* Iwasa, 1982
37. *Sepsis testacea* Walker, 1860
38. *Sepsis thoracica* (Robineau-Desvoidy, 1830)

IX. Genus *Themira* Robineau-Desvoidy, 1830

39. *Themira bifida* (Zuska,1974)

X. Genus *Xenosepsis* Malloch, 1925

40. *Xenosepsis sydenyensis* Malloch, 1925

Sub- family-Toxopodinae

XI. Genus *Toxopoda* Macquart, 1851

41. *Toxopoda contracta* (Walker,1853)

42. *Toxopoda elephantina* Iwasa, 2008
43. *Toxopoda freidbergi* Ozerov, 2010
44. *Toxopoda viduata* (Thomson, 1869)
45. *Toxopoda vikhrei* Ozerov & Iwasa, 2008

REFERENCES

1. Evenhuis, N.L. [16 December 2011] Family Sepsidae. In: Evenhuis, N.L. (ed.), Catalog of the Diptera of the Australasian and Oceanian Regions. (Online version). Available at: <http://hbs.bishopmuseum.org/aocat/hybotidae.html> (Last accessed: [5 January 2014]).
2. Ozerov, A.L. (2005). World Catalogue of Family Sepsidae (Insecta: Diptera). *Zoological Museum of Moscow State University*. 8: 14-59.
3. Pont, A. (1986). Provisional Atlas of the Sepsidae (Diptera) of the British Isles. *British Museum (Natural History)*. 9-10.
4. Steyskal, G.C. (1987). Manual of Nearctic Diptera. *Research Branch Agriculture Canada Monograph* 2(28): 945-950.
5. Pape, T. & Thompson, F.C. (eds) (2013). Systema Dipteriorum (Version 2.0, Jan 2011). In: Species 2000 & ITIS Catalogue of Life, 2013 Annual Checklist (Roskov Y., Kunze T., Paglinawan L., Orrell T., Nicolson D., Culham A., Bailly N., Kirk P., Bourgoin T., Baillargeon G., Hernandez F., De Wever A., eds). DVD; Species 2000: Reading, UK.
6. Pape, T. & Evenhuis, N.L. (editors). [June, 2013]. *Systema Dipteriorum*, Version 1.5.67 records. <http://www.diptera.org/>, accessed on 4/01/2014.
7. Mercedes, D.D. and Hardy, D. E. (1977). A Catalog of the Diptera of the Oriental Region, Suborder Cyclorhapha excluding Division Aschiza. The University Press of Hawaii, Honolulu. Vol-III: 174-181.