

## Checklist of Indian fauna

### CHECKLIST OF INDIAN LESSER / SMALL DUNG FLIES (INSECTA: DIPTERA: SPHAEROCERIDAE)

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#### INTRODUCTION

The Sphaeroceridae, commonly known as lesser or small dung flies, are a worldwide family of small (0.7-5.5 mm. long), robust, usually dull-colored flies found in almost all terrestrial habitats, wherever there is decomposing organic material in which larvae develop as microbial grazers. Several species have been reared from a wide array of substrates including millipede dung, dung balls of scarab beetles, beached seaweed, mammal nests, compost, fungi, and cave debris. The members of this family exhibit considerable morphological diversity in all parts of the body, including the wing venation and post abdominal structures.

Despite their ubiquity and abundance, small dung flies have little direct economic impact but most species are beneficial because they speed up the process of decay and nutrient recycling. They are important components of the carrion-insect community and also play an important role as post mortem interval indicators in forensic entomology.

Worldwide, **1344** valid species under **124** genera spread over five subfamilies are recorded (Roháček, *et al*, 2001). So far, Indian sphaerocerid fauna is represented by **63** species belonging to **28** genera under three subfamilies (Roháček, *et al*, 2001; Hayashi & Papp, 2004 & 2007; Papp, 2003 and 2008 a & b).

#### ORDER DIPTERA SUBORDER BRACHYCERA SUPERFAMILY SPHAEROCEROIDEA FAMILY SPHAEROCERIDAE SUBFAMILY COPROMYZINAE

1. Genus *Crumomyia* Macquart, 1835

1. *Crumomyia deemingi* (Hackman, 1965)

2. *Crumomyia topali* Papp, 2003

2. Genus *Lotophila* Lioy, 1864

3. *Lotophila norrbomi* (Papp, 1988)

3. Genus *Norrbomia* Papp, 1988

4. *Norrbomia indica* Papp, 1988

5. *Norrbomia marginatis* (Adams, 1905)

6. *Norrbomia somogyii* (Papp, 1973)

7. *Norrbomia sordidus* (Zetterstedt, 1847)

#### SUBFAMILY SPHAEROCERINAE

4. Genus *Ischiolepta* Lioy, 1864

8. *Ischiolepta baloghi* Papp, 2003

9. *Ischiolepta indica* Papp, 1993

10. *Ischiolepta loebli* Roháček & Papp, 1984

11. *Ischiolepta orientalis* (de Meijere, 1908)

12. *Ischiolepta scabricula* (Haliday, 1836)

5. Genus *Lotobia* Lioy, 1864

13. *Lotobia asiatica* Hayashi & Papp, 2004

14. *Lotobia latipes* Hayashi & Papp, 2004

15. *Lotobia pallidiventris* (Meigen, 1830)

16. *Lotobia supraelegans* Hayashi & Papp, 2004

6. Genus *Sphaerocera* Latreille, 1804

17. *Sphaerocera curvipes* Latreille, 1805

18. *Sphaerocera pseudomonilis asiatica* Papp, 1988

#### SUBFAMILY LIMOSININAE

7. Genus *Aptilotus* Mik, 1898

19. *Aptilotus besucheti* (Papp, 1981)

8. Genus *Archipterogrammoides* Papp, 2008

20. *Archipterogrammoides* sp.

9. Genus *Biconnecta* Papp, 2008

21. *Biconnecta mirabilis* Papp, 2008
10. Genus *Biroina* Richards, 1973
22. *Biroina orientalis* Papp, 1995  
23. *Biroina topali* Papp, 1995
11. Genus *Eulimosina* Roháček, 1983  
24. *Eulimosina dudai* (Papp, 1978)
12. Genus *Eximilimosina* Papp, 2008
25. *Eximilimosina elegantula* (Duda, 1925) (= *Acuminiseta elegantula*)  
26. *Eximilimosina major* Papp, 2008
13. Genus *Chaetopodella* Duda, 1920
27. *Chaetopodella nigrinotum* Hayashi & Papp, 2007  
28. *Chaetopodella orientalis* Hayashi & Papp, 2007
14. Genus *Coproica* Rondani, 1861
29. *Coproica ferruginata* (Stenhammar, 1854)  
30. *Coproica hirtula* (Rondani, 1880)  
31. *Coproica lacteipennis* Hayashi, 2005  
32. *Coproica lugubris* (Haliday, 1835)  
33. *Coproica ruffifrons* Hayashi, 1991  
34. *Coproica saprophaga* Papp, 2008  
35. *Coproica unispinosa* Papp, 2008
15. Genus *Indiosina* Papp, 1981
36. *Indiosina loebli* Papp, 1981
16. Genus *Leptocera* Olivier, 1813
37. *Leptocera nigra* Olivier, 1813  
38. *Leptocera nigrolimbata* (Duda, 1925)  
39. *Leptocera paranigrolimbata* (Duda, 1925)  
40. *Leptocera salati* (de Meijere, 1914)  
41. *Leptocera sterniloba* Roháček, 1983
17. Genus *Monorbiseta* Papp, 2008
42. *Monorbiseta monorbiseta* (Deeming, 1969)
18. Genus *Opacifrons* Duda, 1918
43. *Opacifrons brevisecunda* Papp, 1991

44. *Opacifrons pseudimpudica* (Deeming, 1969)
19. Genus *Paralimosina* Papp, 1973
45. *Paralimosina dimorpha* Roháček & Papp, 1988  
46. *Paralimosina gigantea* Roháček & Papp, 1988  
47. *Paralimosina icaros* Roháček & Papp, 1988  
48. *Paralimosina indica* Roháček & Papp, 1988
20. Genus *Paramera* Papp, 2008
49. *Paramera robusta* Papp, 2008
21. Genus *Paraminilimosina* Papp, 2008
50. *Paraminilimosina nr. elephantis* Papp, 2008
22. Genus *Piliterga* Papp, 2008
51. *Piliterga thaili* Papp, 2008
23. Genus *Poecilosomella* Duda, 1925
52. *Poecilosomella aciculata* (Deeming, 1969)  
53. *Poecilosomella borboroides* (Walker, 1860)  
54. *Poecilosomella brunettii* (Deeming, 1969)  
55. *Poecilosomella multipunctata* (Duda, 1925)  
56. *Poecilosomella nepalensis* (Deeming, 1969)  
57. *Poecilosomella punctipennis* (Wiedemann, 1824)  
58. *Poecilosomella varians* (Duda, 1925)
24. Genus *Pterogrammoides* Papp, 1972
59. *Pterogrammoides indicus* Papp, 1989
25. Genus *Rachispoda* Liroy, 1864
60. *Rachispoda subtinctipennis* (Brunetti, 1913)
26. Genus *Rohacekia* Papp, 2008
61. *Rohacekia baechlii* Papp, 2008
27. Genus *Bifronsina* Roháček, 1983
62. *Bifronsina bifrons* (Stenhammar, 1855)

28. Genus *Terrilimosina* Roháček, 1983

63. *Terrilimosina longipexa* Marshall, 1987

### Generically unplaced species of Limosiniinae

*Limosina coei* Deeming, 1969

### Doubtful species of Limosiniinae

*Limosina magna* Brunetti, 1913

*Limosina notatipennis* Brunetti, 1924

*Limosina tenebrosa* Brunetti, 1924

### REFERENCES

- Hayashi T. and Papp, L. 2004. The genus *Lotobia* Lioy (Diptera: Sphaeroceridae) from the Oriental Region. *Acta Zoologica Academiae Scientiarum Hungaricae*, **50**(3): 211-225.
- Hayashi, T., and Papp, L. 2007. Oriental species of *Chaetopodella* Duda (Diptera: Sphaeroceridae) *Acta Zoologica Academiae Scientiarum Hungaricae*, **53** (2): 117- 130.
- Roháček, J., Marshall, S.A., Norrbom, A.L., Buck, M., Quiros, D.I. and Smith, I. 2001. *World Catalogue of Sphaeroceridae* (Diptera). Slezské zemské museum Opava, 414 pp.
- Papp, L. 2003. New Oriental species and records of Sphaerocerinae and Copromyzinae (Diptera: Sphaeroceridae). *Acta Zoologica Academiae Scientiarum Hungaricae*, **49** (1): 71-85.
- Papp, L. 2008 a. A review of the Old World *Coproica* Rondani, 1861 (Diptera: Sphaeroceridae) *Acta Zoologica Academiae Scientiarum Hungaricae*, **54** (Suppl.-2): 1-45.
- Papp, L. 2008 b. New genera of the Old World Limosiniinae (Diptera: Sphaeroceridae) *Acta Zoologica Academiae Scientiarum Hungaricae*, **54** (Suppl.-2): 47- 209.