

Sphaeroceridae (Diptera) of Hungary

By

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ABSTRACT: A list with 143 species of the Hungarian Sphaeroceridae is given with remarks. Four species are reported as new to the Hungarian fauna.

In 1973 the present author published also the sphaerocerid part in the series "Fauna Hungariae" (Papp 1973). That work had but a few antecedents only. Thalhammer (1899) published 28 species, 12 species of them were from areas other than the present Hungary; in addition, the identity of a number of the names he published is not clear. Aradi (1965) published 30 sphaerocerid species from materials collected on human feces. Almost all his specimens are still extant in the collection of the Hungarian Natural History Museum (below: HNHM), so one can check them: he misidentified three species and at least a part of the specimens of other five species. After all, less than 40 sphaerocerid species were represented by identified specimens in the collection prior to the intensive collecting and identification work for the Fauna Hungariae. Though the identification booklet is still usable, it is far from being free of mistakes and misinterpretations. In the Fauna Hungariae booklet 106 sphaerocerid species were reported from Hungary and 24 species as to be expected to occur here. The true numbers should have been 104 spp. + 26 spp. (e.g. the name *Aptilotus paradoxus* was published without square brackets, i.e. as if it were a species of the Hungarian fauna). Since 1973 it has turned out that "*Limosina glabrescens* Vill." and "*Limosina spinosa* Coll." were included based on misidentified specimens. The survey of the Hungarian sphaerocerid fauna has been intensive also after 1973. Four species from the Hortobágy N. P., 14 species from the Kiskunság N. P. and four species from the Bükk N. P. were reported as new to Hungary (Papp 1983a, 1987, 1990); 11 species incl. new species were published in other papers (see References). Roháček (1990) has recently described several new species in the subgenus *Rachispoda* Lioy and found some others in the collection of the HNHM; he added altogether eight species to the Hungarian list. Four species are reported below as new to the Hungarian fauna.

The list below is based mainly on the collection of the Zoological Department, HNHM, Budapest, where more than 23 000 mounted (pinned) specimens of the sphaerocerid species are preserved (there is some material also in alcohol). All those materials were selected out from several hundreds of thousands of sphaerocerid specimens which have hitherto been collected and identified from Hungary.

*Limosina corrivalis* (Villeneuve, 1918) and *Limosina hungarica* (Villeneuve, 1917) were included in the Fauna Hungariae as valid species (at least formally, since they had been described from Hungary). Actually both are dubious species: *corrivalis* is probably a species of *Spelobia* (? *pseudonivalis*) or *Pteremis* (? *fenestralis* "forma *nivalis*"); *hungarica* may be a senior (!) synonym of *villosa* (Duda, 1918) or conspecific with one of the other *Spelobia* species. The types

of both names are (seem to be) lost. Below they will not be included in our list. Another name in the Fauna Hungariae, "Limosina nitens Stenh." is listed under "Nomina dubia" in the Catalogue of Palaearctic Diptera (Papp 1984) and again under "Species dubiae" in the review by Roháček and Papp (1988).

In our list the names without any notes or marks are identical with the names used in 1973. The generic names are underlined for the species which are in combinations other than in 1973 (mainly in genera described after 1972/73). The specific names are underlined for the species, whose presently used valid names are different from those in 1973 (mainly in case of junior synonyms; the name used in 1973 stands in brackets after the name). An asterisk (\*) is given after the names of the species with remarks. Two asterisks (\*\*) are given for species new to Hungary; their locality data are listed under the remarks. The name of the author with the year of publication is given in brackets (after the name), who and when first published the species from Hungary.

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- Sphaerocera curvipes Latreille, 1805  
 Sphaerocera monilis Haliday, 1836  
 Ischiolepta denticulata (Meigen, 1830) (syn. paracrenata /Duda, 1920//  
 Ischiolepta micropyga (Duda, 1938)  
 5. Ischiolepta nitida (Duda, 1920) ("denticulata Meig.") \*  
 Ischiolepta oedopoda L. Papp, 1972  
 Ischiolepta pusilla (Fallén, 1820)  
 Ischiolepta scabricula (Haliday, 1836) (Papp 1978, 1983a)  
 Ischiolepta vaporariorum (Haliday, 1836)  
 10. Lotobia pallidiventris (Meigen, 1830)  
 Copromyza equina Fallén, 1820  
 12. Copromyza nigrina (Gimmerthal, 1847) (syn. similis /Collin, 1930//) \*  
 Copromyza pseudostercoraria L. Papp, 1976 (Papp 1976)  
 Copromyza stercoraria (Meigen, 1830)  
 Lotophila atra (Meigen, 1830)  
 Borborillus uncinatus (Duda, 1923) (Papp 1987)  
 Borborillus vitripennis (Meigen, 1830)  
 Norrbomia costalis (Zetterstedt, 1847)  
 20. Norrbomia hispanica (Duda, 1923)  
 Norrbomia nitidifrons (Duda, 1923)  
 Norrbomia somogyii (L. Papp, 1973) (Papp 1974b)  
 Norrbomia sordida (Zetterstedt, 1847)  
 Norrbomia szelenyii (L. Papp, 1974) (Papp 1974b)  
 Alloborborus pallifrons (Fallén, 1820)  
 Crumomyia fimetaria (Meigen, 1830)  
 Crumomyia glabrifrons (Meigen, 1830)  
 Crumomyia nigra (Meigen, 1830)  
 Crumomyia nitida (Meigen, 1830)  
 Crumomyia notabilis (Collin, 1902) (Papp 1990)  
 30. Crumomyia pedestris (Meigen, 1830)  
 31. Crumomyia rohaceki Norrbom and Kim, 1985 ("glacialis Meig.") \*  
 Crumomyia roserii (Rondani, 1880) ("Roseri")  
 Coproica acutangula (Zetterstedt, 1847)  
 Coproica dentata L. Papp, 1973  
 Coproica digitata (Duda, 1918)  
 Coproica ferruginata (Stenhammar, 1854)  
 Coproica hirticula Collin, 1956  
 Coproica hirtula (Rondani, 1880)  
 Coproica lugubris (Haliday, 1836)  
 40. Coproica pušio (Zetterstedt, 1847) (syn. pseudolugubris /Duda, 1924//)  
 Coproica vagans (Haliday, 1833)  
 Elachisoma aterrimum (Haliday, 1833)  
 Elachisoma bajzae L. Papp, 1983 (Papp 1983b)  
 Elachisoma kerteszi (Duda, 1924)  
 Elachisoma pilosum (Duda, 1924)  
 Philocoprella italica (Deeming, 1964)  
 Philocoprella quadrispina (Laurence, 1952)  
 Trachyopella (Nudopella) leucoptera (Haliday, 1836)  
 Trachyopella (Minuscula) minuscula Collin, 1956 (Papp 1984)

50. T. (Trachypella) atomus (Rondani, 1880)  
T. (Trachypella) coprina (Duda, 1918) (Roháček and Marshall 1986, Papp 1987)  
T. (Trachypella) kuntzei (Duda, 1918) (Papp 1984, Roháček and Marshall 1986)  
T. (Trachypella) lineafrons (Spuler, 1925) (Roháček and Marshall 1986, Papp 1987)  
T. (Trachypella) melania (Haliday, 1836)  
T. (Trachypella) straminea Roháček and Marshall, 1986 (Roháček and Marshall 1986, Papp 1987)  
Thoracochaeta zosteræ (Haliday, 1833)  
Halidayina spinipennis (Haliday, 1836)  
Puncticorpus cribratum (Villeneuve, 1918)  
Puncticorpus susannæ L. Papp, 1974 (Papp 1974a)
60. Aptilotus paradoxus Mik, 1898\*\*\*  
Chaetopodella scutellaris (Haliday, 1836)  
Limosina silvatica (Meigen, 1830)  
Gigalimosina flaviceps (Zetterstedt, 1847) (Papp 1990)  
Apteromyia claviventris (Strobl, 1909)  
Herniosina bequaerti (Villeneuve, 1917)  
Terrilimosina racovitzai (Bezzi, 1911) ("Rakovitzai Duda")  
Terrilimosina schmitzi (Duda, 1918) (Papp 1990)  
Minilimosina (Svarciella) splendens (Duda, 1928)  
Minilimosina (Svarciella) v-atrum (Villeneuve, 1917)
70. Minilimosina (Svarciella) vitripennis (Zetterstedt, 1847)  
M. (Minilimosina) fungicola (Haliday, 1836)  
M. (Minilimosina) parvula (Stenhammar, 1854) (Papp 1983a)  
Minilimosina (Allolimosina) albinervis (Duda, 1918) (Papp 1975)  
Minilimosina (Allolimosina) alloneura (Richards, 1952) (Papp 1987)  
Minilimosina (Allolimosina) secundaria (Duda, 1918) (Papp 1976)  
Paralimosina fucata (Rondani, 1880)  
Paralimosina macedonica (Roháček, 1977) (Roháček and Papp 1988)  
Paralimosina subcibrata (Roháček, 1977) (Papp 1984, Roháček and Papp 1988)  
Spelobia (Eulimosina) ochripes (Meigen, 1830)
80. Spelobia (Bifronsina) bifrons (Stenhammar, 1854)  
S. (Spelobia) belanica Roháček, 1983 (Papp 1987)  
S. (Spelobia) clunipes (Meigen, 1830) (syn. crassimana Haliday, 1836)  
S. (Spelobia) czizeki (Duda, 1918)  
S. (Spelobia) luteilabris (Rondani, 1880)
85. S. (Spelobia) manicata (Richards, 1927)\*  
S. (Spelobia) nana (Rondani, 1880)  
S. (Spelobia) palmata (Richards, 1927)  
S. (Spelobia) parapusio (Dahl, 1909)
89. S. (Spelobia) pseudonivalis (Dahl, 1909)\*\*
90. S. (Spelobia) pseudosetaria (Duda, 1918) (syn. penetralis Collin, 1925)  
S. (Spelobia) rufilabris (Stenhammar, 1854) (Papp 1987)  
S. (Spelobia) simplicipes (Duda, 1925)  
S. (Spelobia) talparum (Richards, 1927)  
S. (Spelobia) villosa (Duda, 1918)  
Pullimosina antennata (Duda, 1918) (Papp 1987)  
Pullimosina heteroneura (Haliday, 1836)  
Pullimosina mejerei (Duda, 1918)  
Pullimosina moesta (Villeneuve, 1918)  
Pullimosina pullula (Zetterstedt, 1847)
100. Spinilimosina brevicostata (Duda, 1918)  
Kimosina (Collimosina) spinosa (Collin, 1930) (Papp 1983a)  
Kimosina (Alimosina) empirica (Hutton, 1901) (Papp 1987)  
Kimosina (Kimosina) longisetosa (Dahl, 1909)  
Kimosina (Kimosina) plumosula (Rondani, 1880)  
Telomerina eburnea Roháček, 1983 (Papp 1987)  
Telomerina flavipes (Meigen, 1830)  
Telomerina pseudoleucoptera (Duda, 1924) (Papp 1987)  
Opalimosina (Pappiella) liliputana (Rondani, 1880) (syn. appendiculata (Villeneuve, 1918))  
Opalimosina (Hackmanina) czernyi (Duda, 1918)

110. Opalimosina (Dentilimosina) denticulata (Duda, 1924) (Papp 1983a)  
O. (Opalimosina) calcarifera (Roháček, 1975) (Papp, 1984, 1987)  
O. (Opalimosina) collini (Richards, 1929)  
O. (Opalimosina) mirabilis (Collin, 1902)  
O. (Opalimosina) simplex (Richards, 1929) (Papp 1987)  
Pteremis fenestralis (Fallén, 1820)  
Opacifrons coxata (Stenhammar, 1854)  
Opacifrons humida (Haliday, 1836)
118. Opacifrons maculifrons (Becker, 1907) (Papp 1984) \*\*
119. Opacifrons moravica (Roháček, 1975) (Papp 1983a)
120. Opacifrons septentrionalis (Stenhammar, 1854) \*\*  
Leptocera (Leptocera) caenosa (Rondani, 1880)  
Leptocera (Leptocera) fontinalis (Fallén, 1826)  
Leptocera (Leptocera) nigra Olivier, 1813 (syn. curvinervis (Stenhammar, 1854))  
Leptocera (Leptocera) oldenbergi (Duda, 1918)  
Leptocera (Rachispoda) anceps (Stenhammar, 1854)
126. Leptocera (Rachispoda) breviceps (Stenhammar, 1854) \*  
Leptocera (Rachispoda) brevior Roháček, 1990 (Roháček 1990)  
Leptocera (Rachispoda) cilifera (Rondani, 1880)  
Leptocera (Rachispoda) duplex Roháček, 1990 (Roháček 1990)
130. Leptocera (Rachispoda) hostica Villeneuve, 1917  
Leptocera (Rachispoda) intermedia (Duda, 1918) (Roháček 1990; Papp 1973: see under fuscipennis /Haliday, 1833/)  
Leptocera (Rachispoda) limosa (Fallén, 1820)  
Leptocera (Rachispoda) longior Roháček, 1990 (Roháček 1990)  
Leptocera (Rachispoda) lugubrina (Zetterstedt, 1847) (Roháček 1990)  
Leptocera (Rachispoda) lutosa (Stenhammar, 1854)  
Leptocera (Rachispoda) lutosoidea (Duda, 1938)  
Leptocera (Rachispoda) modesta (Duda, 1924)  
Leptocera (Rachispoda) opinata Roháček, 1990 (Roháček 1990)
140. Leptocera (Rachispoda) pseudohostica (Duda, 1924)  
Leptocera (Rachispoda) segem Roháček, 1990 (Roháček 1990)  
Leptocera (Rachispoda) tuberosa (Duda, 1938)  
Leptocera (Rachispoda) varicornis (Strobl, 1900)

#### Remarks

5. Ischiolepta nitida: In 1973 it was supposed that nitida is a junior synonym of denticulata. Contrarily, Prof. K.C. Kim designated a lectotype for denticulata, which is conspecific with Duda's paracrenata and was published as such by Han and Kim (1990) (cf. Papp 1984, Roháček and Papp 1984).
12. Copromyza nigrina: This name was published under "Nomina dubia" in the Catalogue of Palaearctic Diptera (Papp 1984), however, Kuznetzova (1987) found and revised Gimmerthal's type and its synonymy with similis (Coll.) has been established.
31. Crumomyia rohaceki: Norrbom and Kim (1985) pointed out that Meigen's glacialis has been misinterpreted ever since its description; the biological species defined in the Fauna Hungariae (and in Duda's, Roháček's, etc. works) is the one they described as rohaceki (the true glacialis known from the Alps only).
60. Aptilotus paradoxus: new to Hungary. Locality: 53 ♂/♀: Bozsok, Vas m., Irott-kő, 883 m, rőzsekőtegekben kopogtatva, 1981. VII.16., leg. Adám L.
85. Spelobia manicata: Pitkin (1988) has proposed its synonymy with clunipes (Meig.), however, I concur with Roháček's (1983) opinion for this issue: they may be "ecomorphs" or they may have been reproductively isolated sibling species; this is a question to be answered by results of studies other than morphological ones.

89. *Spelobia pseudonivalis*: In the Catalogue of Palaearctic Diptera (Papp 1984) it has been recorded also from Hungary but has not been formally published as new to Hungary by locality data: 4 ♀: Hungaria, Dencsháza - Szalay-Marzsó, Halmágyi, 1975, No. 1215 (collected in soil traps in a forest).
118. *Opacifrons maculifrons*: the same as for *pseudonivalis*. Its locality data are as follows: 1 ♀: Szúnyogprogram, B[alaton]-szabadi, 1977. VIII. 9., lámpára [on lamp], leg. Vojnits; 1 ♀: Balatonboglár, 1979. VIII. 13., lámpára, leg. Vojnits.
120. *Opacifrons septentrionalis*: new to Hungary. Locality: 1 ♀: Mecsek-hegys., Zobák - 1964. VII. 23., Dr. Wéber (in the coll. HHNM through the courtesy of Dr. Mihály Wéber, Pécs).
126. *Leptocera* (Rachispoda) *breviceps*: Roháček (1990) has revised the *anceps-breviceps* species-complex and pointed out that some of the names in the Fauna Hungariae were misinterpreted; the true *cryptochaeta* and *fuscipennis* have not been collected in Hungary but he described five species based on specimens in the collection of the HHNM. As for the Hungarian national parks, the following species were found (cf. Roháček 1990): Hortobágy N. P.: *breviceps*, *brevior*, *cilifera*, *duplex*, *gel*, *intermedia*, *longior*, *lugubrina*, *opinata*, *segem*; Kiskunság N. P.: *breviceps*, *brevior*, *cilifera*, *duplex*, *gel*, *intermedia*, *longior*, *lugubrina*, *opinata*; i.e. the total number of the sphaerocerid fauna of the Hortobágy is raised by five, that of the Kiskunság by four species.

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