

**New records of Diptera species from Hungary, with the
list of the Hungarian Scathophagidae**

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Abstract – First Hungarian record of 16 species of Macroceridae, Mycetophilidae, Acroceridae, Empididae, Lonchopteridae, Lauxaniidae, Chamaemyiidae, Carnidae, Scathophagidae and Tachinidae are reported with additional data for other rare Diptera. *Meoneura sabroskyi* sp. n. (Carnidae) is described from Hungary, the genera *Anthepiscopus* BECKER, 1891 (Empididae), *Delina* ROBI-NEAU-DESVOIDY, 1830, *Scoliaphleps* BECKER, 1894 and *Spathephilus* BECKER, 1894 (Scathophagidae) are reported for the first time. The revised list of the Hungarian Scathophagidae (41 spp.) is given. With four figures.

Key words – Macroceridae, Mycetophilidae, Acroceridae, Empididae, Lonchopteridae, Lauxaniidae, Chamaemyiidae, Carnidae, Scathophagidae, Tachinidae, *Meoneura*, faunistic survey, new species, new record, Hungary.

INTRODUCTION

The critical list of the dipterous insects of our country, “*Checklist of the Diptera of Hungary*” was published five years ago (PAPP 2001a). Our collection programme “Large blank spots in the Diptera fauna of Hungary”, supported by the Hungarian Scientific Research Fund (OTKA), was closed in 2002. However, new opportunities for collecting in Hungary have been established by a project on the faunagenesis in the Carpathian Basin from 2005. A part of new findings based on specimens captured in 2004 and 2005 is given in the present paper. In addition, corrections, omissions, misinterpretations, etc., to/of those, which were published in the Checklist, and we have so far realised in the respective dipterous families, are also published below.

All the specimens below are preserved in the Diptera collection of the Department of Zoology, Hungarian Natural History Museum, Budapest (below: HNHM). The list of the abbreviations and translations of the Hungarian words on labels were published in the former papers for the project "Large blank spots in the Diptera fauna of Hungary" (e.g. PAPP & FÖLDVÁRI 2000, ŠEVČÍK & PAPP 2001).

MACROCERIDAE

Macrocera pilosa LANDROCK, 1917 – 1 male: D.I.N.P.: Szokolya, Szén-p., 2005. április 29., patak felső folyása fölött és mellett, leg. L. PAPP. 1 male: Slovakia, Blyskovica, Jávoros-hg., erdei ér, 2005. 05. 01., leg. D. MURÁNYI. New to Hungary.

MYCETOPHILIDAE

Sytemna nitidula EDWARDS, 1925 – 1 male: D.I.N.P.: Diósjenő, Kemence-p. felső folyása fölött és mellett, 2005. 06. 14., leg. PAPP & FÖLDVÁRI. New to Hungary.

Leptomorphus forcipatus LANDROCK, 1918 – 1 male: Zempléni TK: Regéc, Csaponta-p. oldalága fölött, 2005. 06. 22., leg. PAPP L. & FÖLDVÁRI M.

ACROCERIDAE

Paracrocera borealis (ZETTERSTEDT, 1838) – 1 female: K.N.P.: Fülöpháza, Szappan-szék, Malaise-csapda, 2005. 08. 15–18., leg. PAPP L. & FÖLDVÁRI M. New to Hungary.

EMPIDIDAE

Anthepiscopus ribesii BECKER, 1891 – 1 female: D.I.N.P.: Diósjenő, Kemence-p. felső folyása fölött és mellett, 2005. 04. 29., leg. PAPP L. Both the genus and species are new to Hungary. It was not listed among the species expected to occur in Hungary (WÉBER 1975, FÖLDVÁRI 2001).

Clinocera (Kowarzia) tenella (WAHLBERG, 1844) – 34 specimen: Bükki N.P.: Varbó, Dobrica-kút forrás környéke, patak fölött, 2005. 03. 29., leg. FÖLDVÁRI M. & PAPP L. This species was formerly known from the Mecsek Mts only. The other two species hitherto recorded (*C. (K.) barbatula* MIK, 1880, *C. (K.) bipunctata* (HALIDAY, 1833)) are known from the Kőszeg Mts (the westernmost part of Hungary) (PAPP & FÖLDVÁRI 2000).

LONCHOPTERIDAE

Lonchoptera scutellata STEIN, 1890 – 1 male: Tata, Öreg-tó, 1959. IV. 15., leg. MIHÁLYI; 1 male: Pákozd, Bella völgy, 1959. IV. 29., leg. MIHÁLYI. New to Hungary. A part of the Lonchopteridae collection of the HNHM was revised in 2005 and these two specimens were found. This is the sixth known species from Hungary, but I think that other three species are expected to occur.

LAUXANIIDAE

The family Lauxaniidae was one of the neglected Diptera groups in Europe up to the 1970s. In the last two (or three) decades a number of good revisions of the genera and species groups were published (for their bibliographic data see SHATALKIN 2000). The most recent one, MERZ's (2003) paper on the *Homoneura interstincta* species group cleared up a group of common species. I did not recognise the distinctness of the following two species formerly (PAPP 1979).

Homoneura interstincta (FALLÉN, 1820) – 9 females from the Carpathian Basin: 1 female: Sz.-Fehérvár, Hungaria, THALHAMMER, coll. THALHAMMER; 1 female: Rózsahegy [Ružomberok, Slovak Rep.], Hungaria THALHAMMER, coll. THALHAMMER; 1 female: Pöstyén [Piešťany, Slovak Rep.] KERTÉSZ [on reverse side] “1902. VI. 1.” – “interstincta Fall.” det. KERTÉSZ; 2 females: Kalocsa KERTÉSZ [reverse side] “907. VI. 4.” – “interstincta Fall.” det. KERTÉSZ; 2 females: Szár KERTÉSZ [reverse side] “1902. VI. 15.” – “interstincta Fall.” det. KERTÉSZ; 1 female: Ór Sz. Miklós SAJÓ – [handwriting by KERTÉSZ] “Sapromyza n.sp.”; 1 female: [Romania] R. Vadului, Transsylvania, THALHAMMER, coll. THALHAMMER. This species must be rare in Hungary.

Homoneura mediospinosa MERZ, 2003 – 50 males, 67 females: coll. THALHAMMER: Pécs, Zengő, Sátoraljaújhely, Trencsén [Trenčín, Slovak Rep.], “Szegszárd”, N. Várad; Aggteleki N.P.: Jósavfő, Aggtelek (Almás-kert, Lófej-forrás), Bükki N.P.: Miskolc, Sebes-víz, Odvas-kő, Felsőtárkány, Mária-forrás, Hór-v., Tardi-p.; Hortobágyi N.P.: Hortobágy, Nagyhegyes; Kiskunsági N.P.: Csévharaszt; Duna-Ipoly N.P.: Verőce (Magyarkút), Szokolya (Királyrét), Visegrád; Kőszegi TK: Kőszeg (Hétforrás, Szabó-h., Hármash.), Mecsek-hg.: Lámpás-v., Püspökszentlászló; Nagyszénás, Budapest; Transdanubia: Szár, Kiskomárom, Balatonfüred, Barcs, Bakony-hg. (Farkasgyepű), Noszlop; other localities: Nógrádszakál (Rárósp.), Budapest, Pestszentlőrinc (Péterhalmi-erdő); Pöstyén [Piešťany, Slovak Rep.], Rozsnyó [Rožňava, Slovak Rep.]; Plitvica [Croatia]; Homoródfürdő [Băile Homorud, Romania], Mehádia [Mehadia, Romania]. They are from all parts of our country. Both species are less common in our low mountains than on lowlands, but otherwise no tendency was observed in the locality records.

CHAMAEMYIIDAE

Leucopomyia alticeps (CZERNY, 1936) – 1 female: Budapest KERTÉSZ – [reverse side] “1921. V. 1.”. This is the specimen, on which the Hungarian record was based (PAPP 2001a). No additional specimen has been collected in Hungary since that time. The distinguishing characters can be summarised as follows (I mean, it is not necessary to use characters of genitalia to separate the two species, including females). Body, including head, vivid light silvery grey. Frons bicolourous: orbits light silvery grey, like mesonotum, interfrontalia dark grey. A pair of brown vittae (of even width) just laterally to the *dc* lines continued distally to the *dc* setae, 1 pair of darker grey acrostichal stripes,

not reaching prescutellars. Apices of femora, bases of tibiae, mid and hind metatarsi yellow. Abdominal tergites T1 and T2 darker brownish, T3 with a pair of small brown spots. T4 and T5 each with a small, subtriangular anterior sagittal spot.

Leucopomyia latifrons BESCHOVSKI et MERZ, 1998 – Budapest, Pestszentlőrinc, Péterhalmi-erdő: 2 males 9 females: 2 males 5 females: erdei tisztás, 2001. 04. 29–30.; 1 female: tölgyes, 2002., 05. 18–20.; 2 females: ibid., 04. 18.; 1 female: 1995. IV. 23. Body, including abdomen, evenly darker grey, no more pattern discernible. Frons unicolourous darker grey. This species tends to have 3 pairs of dorsocentrals. All legs black. Costal vein thicker than in *L. alticeps*. Wing darkened below costa in the r1 cell. New to Hungary.

CARNIDAE

Meoneura sabroskyi sp. n.

(Figs 1–4)

Type material – Holotype, male (HNHM): [Hungary] “Kiskunsági N.P.: Kerekegyháza, Kondor-tó, virágokról [on flowers], 2005. 04. 14., leg. Papp & Földvári”. Paratype, male (abdomen with genitalia in a microvial with glycerol): “Kiskunsági N.P., Fülöpháza – homokbuckás, 1977. IV. 21. – leg. Draskovits” (localities 2 to 5 km from each other).

Description – Measurements in mm: body length 1.55 (holotype), 1.46 (paratype), wing length 1.30, 1.22, wing breadth 0.54, 0.52. Frons wholly black (in *M. lamellata* fore 1/3 to 1/2 of frons yellow or reddish-greyish yellow). Genal edge with 3 strong setae, but middle one shorter and thinner than the other two. Frontal triangle reaches only middle of frons. Scutum microtomentose, black. Three pairs of dorsocentrals, but first and second pairs hardly discernible. Legs black. Posteroventral side of fore femur with 2 or 3 long setae. Wing whitish. Intra-crossvein section equals dM-Cu cross-vein. Halteres white. Abdomen convex, without dorsal impression. Male epandrium without a series of thick long setae, with a pair of longer setae, but that is not extremely long. Genitalia with large lamella, which is not fused with surstylus, but only at bases (Figs 1, 3). Lamella – which is in this species obviously a process of subepandrial sclerite (Fig. 3) – large with dense long setae. No setae on caudal edge of lamella, contrasting that of *M. lamellata*. Surstylus rather simple, apex mediocline (Fig. 2). Paramere (Fig. 4) very small, apex sharp and directed laterocaudally (almost caudally).

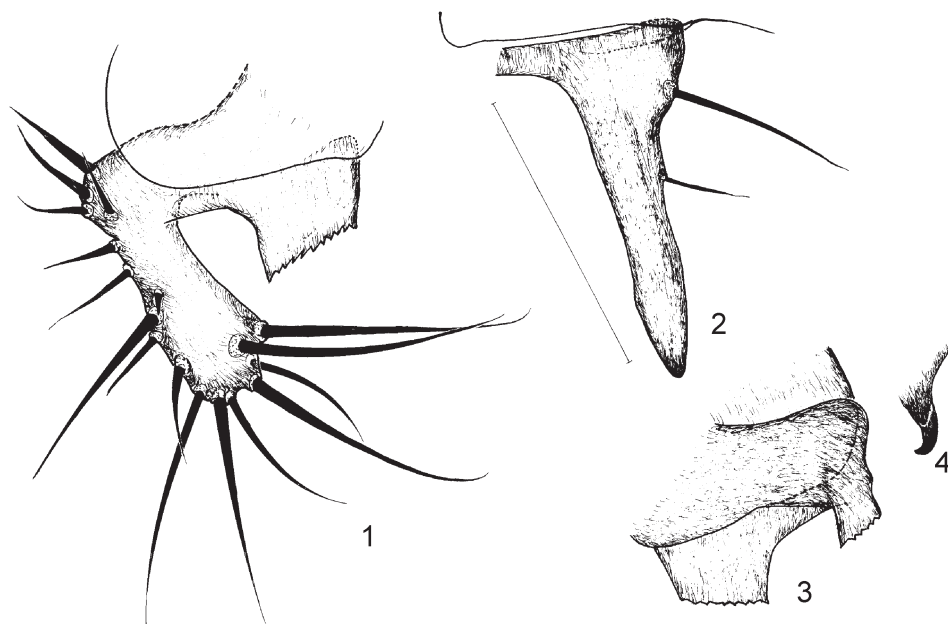
Remarks – The new species is closely related to *M. lamellata* COLLIN, 1930. The male genitalia differ distinctly (cf. SABROSKY 1959: fig. 7). However, there are three body characters, which make the distinction of the two species possible, without preparation of male genitalia (i.e. also in female sex). While frons is completely black in the new species, in *M. lamellata* fore 1/3 to 1/2 of frons yellow or reddish-greyish yellow. *M. lamellata* has 3 pairs of true *dc*-s, *M. sabroskyi*'s anterior two *dc* pairs are hardly discernible, and while its intra-crossvein section is of the same length as dM-Cu cross-vein, that is 1.5 times longer in *M. lamellata*.

Etymology – I name this new species to the honour of the late CURTIS W. SABROSKY, for his great achievements in dipterology, including those in the family Carnidae.

Meoneura lamellata COLLIN, 1930 – 1 female: [Kun]Peszér, KERTÉSZ, 1909. IV. 25. – A widely distributed but uncommon Holarctic species. This is still the only specimen from Hungary. The other specimen, which was published by PAPP (1978) from Fülöpháza (♂) is the paratype of *M. sabroskyi*.

SCATHOPHAGIDAE

DELY-DRASKOVITS (1981) listed and keyed 30 species, including *Hexamitocera loxocerata* (ZETTERSTEDT, 1846). That is misidentified (see PAPP 2001b), and see also below). Of the species listed in the Fauna Hungariae, also *Nanna leucostoma* (ZETTERSTEDT, 1846) is misidentified (see below). *Nanna multisetosa* (HACKMAN, 1956) proved to be a junior synonym of *Nanna flavipes* (FALLÉN, 1819). *N. nigripes* (ZETTERSTEDT, 1846) was put into synonymy with *N. tibiella* (ZETTERSTEDT, 1838), but this does not change the number of species. The remaining 27 species were supplemented by five species in PAPP (2001b), and by



Figs 1–4. *Meoneura sabroskyi* sp. n, paratype, male genitalia: 1 = lamella, broadest (sublateral) view, 2 = surstylus, broadest (other sublateral) view, 3 = connection of epandrium, lamella and surstylus, inner view, 4 = paramere, sublateral view. Scale bar: 0.1 mm for all

other two species recently (PAPP 2003). The present revision of the HNHM collection resulted in seven other species new for the fauna of Hungary. Consequently, the Hungarian fauna is presently composed of 41 species. The scathophagid faunas of the Czech Republic with its 68 species and of the Slovak Republic with 54 species are much richer (ŠIFNER 2003). Of course, several more species are to be expected also in Hungary. Below I list 41 species and give locality data of the seven species, which are recorded for the first time in Hungary.

Cordilura aemula (COLLIN, 1958), *Cordilura atrata* (ZETTERSTEDT, 1846), *Cordilura ciliata* (MEIGEN, 1826), *Cordilura picipes* (MEIGEN, 1826), *Cordilura pubera* (LINNAEUS, 1758), *Cordilura umbrosa* (LOEW, 1873), *Scoliaphleps melanacra* LOEW, 1873, *Phrosia albilabris* (FABRICIUS, 1794), *Parallelomma albipes* (FALLÉN, 1819), *Norellisoma spinimanum* (FALLÉN, 1819), *Norellisoma striolatum* (MEIGEN, 1826), *Norellia spinipes* (MEIGEN, 1826), *Acanthocnema glaucescens* (LOEW, 1864) [PAPP 2001b], *Acanthocnema nigrimana* (ZETTERSTEDT, 1846) [PAPP 2001b], *Trichopalpus fraternus* (MEIGEN, 1826), *Chaetosa punctipes* (MEIGEN, 1826), *Spaziphora hydromyzina* (FALLÉN, 1819), *Hydromyza livens* (FABRICIUS, 1794) [PAPP 2001b], *Acerocnema macrocera* (MEIGEN, 1826), *Cleigastra apicalis* (MEIGEN, 1826), *Hexamitocera loxocerata* (ZETTERSTEDT, 1846) [PAPP 2001b], *Nanna articulata* (BECKER, 1894), *Nanna brevifrons* (ZETTERSTEDT, 1838), *Nanna fasciata* (MEIGEN, 1826), *Nanna flavipes* (FALLÉN, 1819), *Nanna inermis* (BECKER, 1894), *Nanna tibiella* (ZETTERSTEDT, 1838), *Spathephilus breviventris* (LOEW, 1873), *Gonatherus planiceps* (FALLÉN, 1819), *Delina atrata* (SCHINER, 1864), *Americina media* (BECKER, 1894), *Americina vittata* (MEIGEN, 1826) [PAPP 2001b, as *Parallelomma*], *Micropselapha filiformis* (ZETTERSTEDT, 1846), *Coniosternum tinctinerve* BECKER, 1894 [PAPP 2003], *Scathophaga cineraria* (MEIGEN, 1826) [PAPP 2003], *Scathophaga furcata* (SAY, 1823), *Scathophaga inquinata* (MEIGEN, 1826), *Scathophaga lutaria* (FABRICIUS, 1794), *Scathophaga maculipes* ZETTERSTEDT, 1846, *Scathophaga scybalaria* (LINNAEUS, 1758), *Scathophaga stercoraria* (LINNAEUS, 1758).

Cordilura aemula (COLLIN, 1958) – 15 males and 10 females from Lesenceistvánd, Veresegyháza; Kiskunsági N.P.: Ócsa, Ágasegyháza, Bugac; Hejőbába, Tiszatarján, Oszlár, Bátorliget (from 10 April to 7–9 July). It occurs in several parts of the Hungarian lowlands; new for our fauna.

Cordilura atrata (ZETTERSTEDT, 1846) – 1 female: Mátraszentimre, 1979. V. 26., leg. MIHÁLYI. A widespread European species, new to Hungary.

Scoliaphleps melanacra LOEW, 1873 – 1 female: Aranyosgadány, rét, 1978. III. 31., leg. PAPP L. It is one of the rarest scathophagids. Formerly known only from Poland and Finland.

Norellisoma striolatum (MEIGEN, 1826) – Bükki N.P.: 2 males, 2 females: 1 male: Miskolc, Garadna-völgy, 1981. V. 26., leg. PAPP L.; 1 male: [Szilvásvár] Szalajka-völgy, 1983. IV. 24., PODLUSSÁNY; 2 females: [Miskolc] Jávorkút, 1983. IV. 30., leg. ÁDÁM, HÁMORI[né]. New for the Hungarian fauna; it seems to have an endemic population in the Bükk Mts.

Nanna brevifrons (ZETTERSTEDT, 1838) – 1 male: Dobogókő, 1957. IV. 29. – leg. SOÓS Á. – “Hexamitocera loxocerata Fall.” “det. F. Šifner ♂” – “Hexamitocera loxocerata Zett.” det. DELY-DRASKOVITS – *Spathephilus breviventris* (LOEW), H. de JONG 1999. – “Nanna brevifrons Zett.” Det. L. PAPP 2005. This specimen was depicted by J. PÁL in DELY-DRASKOVITS (1981) as *Hexamitocera loxocerata* ŠIFNER (in the meantime head was lost). I cannot find any reasonable cause for the first misidentification, so I am afraid, that was an erroneous change of identification labels. I can well understand a misidentification for *Spathephilus breviventris*, since the two species are closely related (including characters in the male genitalia). Though I do not propose a merging of *Spathephilus* with *Nanna* in this paper, I refuse placing them in two different tribes (ŠIFNER 2003). Other specimens: 3 females: *ibid.*, 1957. V. 14./IV. 29.; 1 male: B.N.P. Bánkút, Nagy-mező, 1981. V.

26.; 1 male: Verőcsemaros, Magyarkút, 1988. IV. 30., leg. PAPP L.; 2 males: Bakonybél, Gerence-v., 1976. V. 11., leg. TÓTH S. A species new for the Hungarian fauna.

Spathophilus breviventris (LOEW, 1873) – 7 males 1 female: Battonya, Tompapuszta, 1998. IV. 15., leg. PODLUSSÁNY A.; 2 males 2 females: *ibid.*, ősgyepes, 1998. IV. 15., leg. ROZNER I.; 1 male: Kunszentmárton, gát, 2001. o4. 12., leg. SZAPPANOS A.; 1 female: Hortobágy N.P., Egyek, Ohati erdő, 1975. V. 6., leg. DRASKOVITS – “Nanna leucostoma Zett.” det. DELY-DRASKOVITS [cf. introductory notes]; 1 female: Aggtelek N.P., Aggtelek, Ménes-völgy, 1988. V. 1., leg. PODLUSSÁNY. New to Hungary.

Delina anthrax (SCHINER, 1864) – 1 male 1 female: Kiskunsági N. P., Tabdi, láperdő, 1979. IV. 10., leg. SZELÉNYI; 1 female: *ibid.*, 1978. IV. 25., leg. UDVARHÁZI [IRÉN] & VÁSÁRHELYI. Both the genus and species are recorded for the first time in the Hungarian fauna.

Nanna inermis (BECKER, 1894) – 1 male: Hung., Mátra hg., Mátraszentimre, 1982. V. 24., leg. MIHÁLYI F. This is the second known locality in Hungary and the first male in the HNHM from Hungary.

Gonatherus planiceps (FALLÉN, 1819) – 1 male: Dobogókő, 1983. IV. 27., leg. DRASKOVITS; 1 female: ANP: Szin, Patkós-völgy, 1987. IV. 28., leg. PAPP L. It is very rare in Hungary.

TACHINIDAE

Elfia abnormis (STEIN, 1924) – 1 male: Vértes-hg., 1957. VI. 28 – Hosszúhegy, Csákvár – leg. MIHÁLYI – “*Elfia abnormis* Stein” B. HERTING det. – “*Phytomyptera abnormis* (Stein) ♂” det. STIG. ANDERSEN – “*Elfia* ♂ *abnormis* Stein” det. MIHÁLYI [empty abdomen glued on a small white card and pinned above the kerria bricklet on the same collection pin, genitalia and sternite 5 in a plastic microvial]. 1 female (without abdomen and wings, as ANDERSEN (1988) noted): Budapest 1958. VIII. 23. – Hármashatár-h., tető sztep – leg. MIHÁLYI – “*Phytomyptera abnormis* (STEIN) ♀” det. STIG ANDERSEN – “*Elfia* ♀ *abnormis* Stein” det. MIHÁLYI. 1 male: Hosszúhegy, Csákvár – Vértes-hg., 1957. VI. 28. – leg. MIHÁLYI – “*Phytomyptera nigrina* Mg.” det. MIHÁLYI – “*Elfia abnormis* (Stein) ♂” det. L. PAPP, 2005. This last specimen has no dM-Cu cross-vein, but otherwise is the same as the *Elfia abnormis* male, which was captured synchronously.

Phytomyptera vaccinii SINTENIS, 1897 – 1 male: Verőce, Magyarkút, Keskenybükki-p. mellett, 2005. 05. 21., leg. PAPP L. – “*Phytomyptera vaccinii* Sintenis ♂” det. L. PAPP, 2005. Its left wing, which was originally curled, was washed in water and alcohol, placed on a small white card and glued above the longer cardboard card bearing the minuten pin with the specimen; abdomen and genitalia in a plastic microvial. Its genitalia are the same as given in figs 7, 14 and 38 of ANDERSEN (1988), particularly so in features distinguishing it from *Ph. nigrina* (MEIGEN, 1924). For the time being *P. nigrina* is to be deleted from the Hungarian list. Actually the above record is the first one for the genus *Phytomyptera* RONDANI, 1845 in Hungary.

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