

Empidoidea (Diptera): genera and species new to Hungary

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Empidoidea (Diptera): genera and species new to Hungary — Four genera of the empidoid flies with two species each of Atelestidae, Hybotidae and Dolichopodidae, and seven species of Empididae are recorded as new for the Hungarian fauna. Six species are proposed to be deleted from the Hungarian list in lack of voucher specimens (or as misidentifications).

Key words: Atelestidae, Hybotidae, Empididae, Dolichopodidae, faunistic survey, new records, Hungary.

INTRODUCTION

The aim of the project “Large blank spots in the Diptera fauna of Hungary” is to collect and to publish species representing dipterous families formerly not recorded from Hungary. Furthermore, species representing not recorded genera are also targets of our activity. Four years of the project (OTKA T30242, 1999–2002) is a reasonable period of time, for which a fair support is provided for true faunistical studies. The results will hopefully be included also in the “*Checklist of the Diptera of Hungary*”. New findings from the preparatory period have already been published (Papp 1999). In 1999, the first year of the project, these collectings resulted in capturing specimens of numerous genera and species new for the fauna of Hungary; a part of them is reported in this paper.

The first significant work on the empidoid flies of Hungary is Thalhammer's (1900) faunistic list. Unfortunately, more than two-thirds of the locality data are out of the borders of the modern Hungary. In addition, a majority of the data was his own data and he was far less good at identifying than collecting dipterous specimens (for instance, knowing some about the life-habits of the species of *Wiedemannia*, we simply cannot imagine an occurrence of *W. zetterstedti* (Fallén) in any places in Budapest). There was very little done on these families in the following decades to the big fire in the HNHM in 1956, which annihilated also the collections of Empidoidea. In the last years of the sixties, Dr Mihály Wéber began to work on the empidoid families, which resulted in the publication of two volumes in the series *Fauna Hungariae*: the family Empididae (incl. Atelestidae and Microphoridae genera) in 1975 and Dolichopodidae in 1989. He published also several scientific papers on them.

Very recently, just after the death of our esteemed fellow-dipterist Dr. M. Wéber the collection of Empidoidea, he had possessed, was returned/given to the Diptera collection of the HNHM, through the courtesy of Prof. Dr. József Majer (Pécs University). All

those materials are slightly affected by damage through *Anthrenus* larvae. The junior author has already begun a revision of all those material and some partial results are also published below.

Several groups of Hybotidae and Empididae, which are represented significantly in the newly collected materials, are not discussed in this paper. More studies are needed as regards the species of *Tachydromia* and *Oedalea* in Hybotidae, as well as the species of the *Chelifera precatória-precabunda* group and of the *Dolichocephala guttata* (Haliday, 1833) and *D. ocellata* (Costa, 1854) species groups in Empididae. As regards the latter, a number of new species was described recently in both the groups and as Dr. R. Wagner says (pers. comm.) former keys with these two names are only proper to know of the species groups. Although no other species but *D. irrorata* has formerly been reported from Hungary and we possess a number of specimens of these two species group, those will be published later, after a careful study of the male genitalia (probably as a separate paper).

All the specimens below are preserved in the Diptera collection of the Department of Zoology, Hungarian Natural History Museum, Budapest (below: HNHM). The specimens were mostly collected by László Papp, so this name is not given below, only if he collected them together with Zsuzsanna Bajza or Albert Szappanos. The year 1999 is also omitted. The months are given as on the collection labels, i.e., May: május, 05., V., June: június, 06., VI., July: július, 07., VII., etc.; since labels are written in Hungarian, months come first. The following Hungarian words are on numerous labels: "patak fölött": over the brook, "patak fölött és mellett": over and along/beside the brook.

Some abbreviations used also on collection labels: NP: Nemzeti Park [National Park], TK: Tájképző Körzet [Landscape Protected Area], TT: Természetvédelmi Terület [Nature Reserve], hg.: hegység [mountains], p.: patak [brook], v.: völgy [valley].

ATELESTIDAE

The genus *Atelestus* (with the two species recorded below) is new for the fauna of Hungary; it was not even included in Wéber's (1975) book.

Atelestus dissonans Collin, 1961 — 1 female: Gánt, Fáni-völgy, 1996. VI. 4.

Atelestus pulcarius (Fallén, 1816) — 1 male: K-Mecsek TK: Óbánya, Óbányai-völgy, patak fölött, május 29.

Meghyperus sudeticus Loew, 1850 — Wéber (1975, 1976) published 2 males and 3 females from the Bükk Mts and the Bakony Mts which are deposited in the HNHM. Newly collected material: 1 female: Zempléni TK, Nagyhuta, Senyő-v., patak fölött és mellett, június 9., Papp L., Szappanos A.

HYBOTIDAE

Symbalophthalmus pictipes (Becker, 1889) — Wéber (1975) published *S. dissimilis* (Fallén, 1815) from Hungary. Chvála (1975) regarded that as a "northern species in distribution"; and indeed, he identified all the 3 males and 6 females in the HNHM from Hungary as *S. pictipes* in 1987. We saw all those specimens here and also the two newly collected females (Bükki NP: Miskolc, Sebes-víz patak fölött és mellett, június 10.; Börzsöny TK, Szokolya, Les-v., patak fölött és mellett, július 3.) were identified as *S.*

pictipes. However, we regard at least *S. fuscitarsis* (Zetterstedt, 1859) as a species to be expected to occur in Hungary.

Tachypeza fuscipennis (Fallén, 1815) — Wéber's (1975) specimen from Budapest and another specimen from Ócsa were identified as *fuscipennis* by M. Chvála in 1987. Newly collected material: 1 male, 2 females: K-Mecsek TK: Óbánya, Óbányai-patak fölött és mellett, július 20., Papp L., Bajza Zs.; 1 female: Zempléni TK: Regéc, Ördög-v., patak fölött és mellett, június 29., Papp L., Bajza Zs.; 3 males, 8 females: Budapest, Pestszentlőrinc, Péterhalmi-erdő, tölgyes, avar/szilfák sebeiről/korhadó nyárfa, 1996. VI. 15–16., VII. 21., 1997. VIII. 3., 10., 16–17.; 1 indiv. without abdomen: Bátorliget, moha, 1988. VI. 20., leg. Mahunka. We saw also the specimens published by Wéber (1987) from the Kiskunsági N. P. Much to our regret, we found that his *Tachydromia calcanea* (Meigen, 1838) male specimen (Lakitelek, Tóserdő) is a male of *Tachypeza fuscipennis*.

Tachypeza nubila (Meigen, 1804) — Wéber (1975) published it from Hungary based on a female from Vérteskozma (also det. M. Chvála 1987). Since that time 18 males and 31 females were collected at Óbánya, Kisújbánya (K-Mecsek TK), Regéc (Zempléni TK), Szilvásvár (Bükki NP), Szokolya (Börzsönyi TK) and Budapest, Pestszentlőrinc (May–August).

***Tachypeza* sp. n.** — 1 male: Melegmányi TT: Pécs, Nagy-mély-v., patak fölött, május 27.; 1 male: K-Mecsek TK: Óbánya, Óbányai-völgy, patak fölött és mellett, május 30. This is obviously a new species with a peculiar dark pattern on medial surface of fore femur, which keys to *T. nubila* by the keys of Chvála (1975), Wéber (1975), etc., since it has no dorsocentrals. However, it is larger and it resembles *T. truncorum* (Fallén, 1815) also in some other respects. Some further study is needed before that will be described as new.

Stilpon nubilus Collin, 1926 — 1 male: Kiskunsági N. P: Orgovány, talajcs.[soil traps], 1976. V. 9–VI. 12., leg. Ádám and Migály. 1 male: Hansági TK: Lébény, Kocsmáros rét, 1995. VIII. 11., leg. Orosz. A widespread European species new to Hungary.

EMPIDIDAE

OREOGETONINAE

Gloma fuscipennis Meigen, 1922 — K-Mecsek TK: 3 males: Óbánya, Óbányai-völgy, patak fölött és mellett, május 26., 28. Zempléni TK: 1 male: Füzér, Alsó-patak fölött és mellett, 1999. június 29., Papp L., Bajza Zs. A genus and species new to Hungary.

HEMERODROMIINAE

Heleodromia immaculata Haliday, 1833 — K-Mecsek TK: 1 male: Óbánya, Óbányai-völgy, patak fölött, május 25. Zempléni TK: 1 female: Nagyhuta [correctly: Regéc], Vajda-völgy, Kemence-patak fölött és mellett, június 28., Papp L., Bajza Zs. A rare species in Hungary, formerly known from four localities only from Hungary (Wéber 1975, 1976).

Hemerodromia baetica Collin, 1927 — 1 female: Mohács sziget [Dunafalva], ártéri erdő, 1963. VIII. 4., Dr. Wéber. A species found hitherto in western Europe, incl. Germany, which is new for the Hungarian fauna.

Hemerodromia oratoria (Fallén, 1816) — K-Mecsek TK: 2 females: Óbánya, Óbányai-völgy, patak fölött és mellett, május 28., július 20., Papp L., Bajza Zs. Formerly known from two localities only from Hungary (Wéber 1975, 1976).

Hemerodromia unilineata Zetterstedt, 1842 — 1 male: Melegmányi TT: Pécs, Nagy-mély-v., patak fölött, május 27. 1 female: Mecsek-hg., szurdok v., 1978. VII. 9. Aggteleki N. P: 1 male: Jósvalfő, leg. Tóth S. 1990. VI. 26.; 2 males: ibid., Tengersizem-tó, 1992. VI.8., VIII.20.; 1 female: Szögliget, Ménes-p. völgye, 1988. VII. 18. Formerly known from the Zemplén Mts only (Wéber 1975, 1976).

Chelifera stigmatica (Schiner, 1862) — 3 males, 1 female: Melegmányi TT: Pécs, Nagy-mély-v., patak fölött, május 27.; 2 males: K-Mecsek TK: Óbánya, Óbányai-völgy, patak fölött és mellett, május 26. The male genitalia of these specimens agree well with the figures of Collin (1961). It has been known from a number of European countries (see Wagner in Chvála and Wagner (1989)), but northwards and southwards of Hungary; new to our fauna.

Chelifera trapezina (Zetterstedt, 1838) — Zempléni TK: 1 female: Nagyhuta [correctly: Regéc], Vajda-völgy, Kemence-patak fölött és mellett, június 28., Papp L., Bajza Zs. Bükki N. P: 1 male, 2 females: Nagyvisnyó, Taró-völgy, 1982. IX. 8., leg. Bessenyi. A widespread European species new to the Hungarian fauna.

Chelipoda vocatoria (Fallén, 1816) — 1 female: Bükki N. P: Miskolc, Garadna-p. part, G.-P. csapda [feces trap], 1990. VIII. 16., leg. Papp L. Hansági TK: 1 female: Lébény, nyíres, 1998. VI. 17., leg Orosz. A genus and species was reported by Wéber (1987) as new to Hungary; those three specimens were also studied now (all but one seriously defected) and this newly collected specimens (also defected) seem conspecific with them.

Wagner in Chvála and Wagner (1989) listed *Ch. albiseta* (Zetterstedt, 1838) from Hungary, but we do not know any specimen(s) which would materialize this record. Wéber (1975) wrote that based on data in literature, it occurs also in the Carpathians but no voucher specimen was available.

Phylodromia melanocephala (Fabricius, 1794) — Zempléni TK: 1 male, 1 female: Regéc, Ördög-v., patak fölött és mellett, június 29., Papp L., Bajza Zs.; 3 females: Nagyhuta, Senyő-v., patak fölött és mellett, június 9., Papp L., Szappanos A.; 2 males, 2 females: ibid., Bózsva [correctly: Nagyhuta]. A genus and species new for the fauna of Hungary.

CLINOCERINAE

Dryodromia testacea Rondani, 1856 — K-Mecsek TK: 1 male: Óbánya, Óbányai-völgy, patak fölött, május 25. Bükki N. P: 1 male: Miskolc, Sebes-víz, korhadt fatörzsek, 1998. május 21. In Hungary formerly known from the Bakony Mts only.

Clinocera (Clinocera) nigra Meigen, 1804 — 1 male: K-Mecsek TK: Óbánya, Óbányai-patak fölött és mellett, július 20., Papp L., Bajza Zs. The male genitalia are quite the same as depicted in Fig. 311a of Collin (1961). A species new for the Hungarian fauna.

Clinocera (Hydrodromia) stagnalis (Haliday, 1833) — Wagner in Chvála and Wagner (1989) listed it from Hungary, but we do not know any specimen(s) which would materialize this record.

Clinocera (Hydrodromia) wesmaeli (Macquart, 1835) — 1 male, 1 female: Melegmányi TT: Pécs, Nagy-mély-v., patak fölött, május 27.; Zempléni TK: 1 male, 5

females: Füzér, Alsó-patak fölött és mellett, 1999. június 29., Papp L., Bajza Zs. Börzsönyi TK: 1 male: Szendehely, Aranyos-kút-f., 1998. II. 7.; 1 female: Szokolya, Szén-patak fölött, július 4. 2 females: Mátraszentimre, 1980. VIII. 21., leg. Mihályi. Formerly only 1 female was reported from Hungary (Kőszegi-hg., Velem) by Wéber (1975, 1976). We must note that although we cannot identify our specimens other than *wesmaeli*, the details of male genitalia show minor differences from those depicted by Collin (1961: fig. 313a), etc.

Clinocera (Kowarzia) barbatula Mik, 1880 — Mik's type specimens are partly from "Hungaria" but that must be a locality outside of the present borders. Wagner in Chvála and Wagner (1989) listed it from Hungary. However, Wéber (1975) listed and keyed it only as a species, which was expected to occur in Hungary; the localities mentioned by Wéber are in Romania (even those specimens are lost).

Clinocera (Kowarzia) plectrum Mik, 1880 — Wagner in Chvála and Wagner (1989) listed it from Hungary, but we do not know the specimen(s) which would materialize this record.

Clinocera (Kowarzia) tenella (Wahlberg, 1844) — K-Mecsek TK: 1 male, 2 females: Komló, Zobápuszta, Hidasi-völgy, patak fölött, május 26.; 1 male: Óbánya, Óbányai-patak fölött és mellett, július 20., Papp L., Bajza Zs. The male genitalia were compared to Fig. 314b of Collin (1961). A species new for the Hungarian fauna. Wagner in Chvála and Wagner (1989) listed it from Sweden, Great Britain, Germany, Austria, Spain and Bulgaria. Wéber (1975) did not include it in his book on the Hungarian Empididae.

Clinocera (Phaeobalia) dimidiata Loew, 1869 — Wagner in Chvála and Wagner (1989) listed it from Hungary, but we do not know the specimen(s) which would materialize this record.

Clinocera (Phaeobalia) inermis Loew, 1861 — Wagner in Chvála and Wagner (1989) listed it from Hungary, but we do not know any specimen(s) which would materialize this record.

DOLICHOPODIDAE

Oncopygius distans (Loew, 1857) — Zempléni TK: 4 males: Regéc, Ördög-v., patakpart, 1997. VI. 5.; 2 males: Nagyhuta, Kemence-patak fölött és mellett, 1999. június 8., Papp L., Szappanos A.; 1 male: ibid., Senyő-v., június 9. Negrobov (1991) listed it from Hungary, but Thalhammer's (1900) records are all from Romania, consequently Wéber (1989) included it only as a species to be expected to occur in Hungary. Negrobov's (1991) record of *O. magnificus* Loew, 1873 cannot be interpreted. Thus we regard these records as new also for this genus in Hungary.

Hypophyllus discipes (Germar, 1817) — K-Mecsek TK: 1 male: Óbánya, Óbányai-patak fölött és mellett, július 20., Papp L., Bajza Zs.; 2 males: Komló, Zobápuszta, Hidasi-völgy, patak fölött és mellett, június 21. Zempléni TK: 2 males: Füzér, Alsó-patak fölött és mellett, június 29., Papp L., Bajza Zs. 2 males: Nagyhuta [correctly: Regéc], Vajda-völgy, Kemence-patak fölött és mellett, június 28., Papp L., Bajza Zs. Negrobov's (1991) record from Hungary lacks material basis; his source is unknown to us. Contrarily, Wéber (1989) listed and keyed it only as a species, which was expected to occur in Hungary.

Hypophyllus sphenopterus Loew, 1859 — 1 male: Zempléni TK: Füzér, Alsó-patak fölött és mellett, június 29., Papp L., Bajza Zs. A rare species, formerly collected only at seven localities in Hungary.

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