

New Mycetophilidae (Diptera) and additions
to the Hungarian checklist*

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Abstract: Seventeen species of Mycetophilidae are recorded as new for the Hungarian fauna, four species as new for Slovakia and one species is new for the Czech Republic. *Neoempheria stubbsi* Chandler et Ribeiro sp. n. (Slovenia, Hungary, Portugal), *Leia hungarica* sp. n. (Hungary), *Leia martinovskyi* sp. n. (Slovakia) and *Allodiopsis gracai* sp. n. (Hungary, Czech Republic) are described. Some corrections to the Checklist are given. With eleven figures.

Key words: Mycetophilidae, taxonomy, faunistic survey, new species, new records, Hungary

INTRODUCTION

In 2001 the book “*Checklist of the Diptera of Hungary*” was published, which established a new situation in furthering the faunistic survey of the dipterous fauna of Hungary. On one hand, that book serves as a reference for all the former publications; but on the other hand the “Checklist...” contains some errors, etc., so some corrections will be necessary, particularly in the next few years. The project “Large blank spots in the Diptera fauna of Hungary” was accomplished by the end of 2002, but our efforts are unaltered, i.e. to collect and to publish species formerly not recorded from Hungary, particularly for those, which represent dipterous families and genera formerly not reported from Hungary. Representatives of species collected during our collection programme and some results from the preparatory period of the project have already been published (see Papp 1999, 2000, Ševčík & Papp 2001, 2002): Numerous genera and more than 140 species new to the Hungarian fauna in Mycetophilidae were reported in those papers (see e.g. Papp & Ševčík 2001). In 2002 more than 50,000 mycetophilid specimens were again captured, of which 2235 specimens in 48 genera were selected and pinned.

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In the course of our latest venture we found seventeen species of Mycetophilidae new to Hungary, mainly in the newly collected material or in the newly sorted material. For abbreviations and translation of the Hungarian texts on collection labels see Papp (1999, 2000). We would also like to take the opportunity to describe one new species from Slovakia.

MYCOMYINI

Neoempheria bimaculata (von Roser, 1840) – 1 male: Zempléni TK: Regéc, Ördög-v. patak fölött és mellett, 2000. július 05; 1 male, 2 females: *ibid.*, 2002.07.04./05. – This species was first recorded from Hungary by Ševčík & Papp (2001). Our publication was based on one male and one female identified as such by Dr L. Matile. Actually those specimens belong to *N. stubbsi*, and are designated below as paratypes. So one may regard our 2001 record as a misidentification, since the above-mentioned four specimens are the first true voucher specimens from Hungary.

Neoempheria stubbsi Chandler et Ribeiro sp. n.

Holotype – Male (BMNH): SLOVENIA, Bohinj, Riocev Laz, 27.vii–6.viii.1973, A. E. Stubbs leg.

Paratypes: 1 male: PORTUGAL, Vilar de Mouros, Malaise trap near a natural spring situated in *Eucalyptus* and *Pinus* woodland, 24.viii–31.viii.2002, M. E. Ribeiro leg. (deposited in Universidade de Lisboa, Portugal). 1 male, 1 female (HNHM): Sátor-hg., Istvánkút, 1957.VIII.8–14, leg. Mihályi, “*Neoempheria bimaculata* (v. Ros.) ♂/♀” L. Matile det. 1972, (see Ševčík & Papp 2001: 218); 1 male (HNHM): Kelet-Mecsek TK, Komló: Zobákpuszta, Hidasi-völgy, patak fölött, mellett [over and along brook], 2000. június 13, leg. Papp L.; 1 male (HNHM): Zempléni TK: Regéc, Ördög-v. patak fölött és mellett [over and along brook], 2000. július 5, leg. Papp L.; 1 female (HNHM): Kelet-Mecsek TK, Óbánya, Óbányai-p. fölött és mellett [over and along brook], 2000. június 14, leg. Papp L.; 1 female (HNHM): Csévharaszt TT, nyíres [birch grove], 2002.06.25, leg. Papp L.

Male. Very similar to *N. bimaculata* (von Roser) except in structure of male genitalia.

Head light brown. Antenna yellowish basally, with at least the last six flagellomeres brown. Palpus brown.

Mesoscutum yellow with dark brown bristling; three well marked brownish stripes, the lateral stripes reaching the scutellum (in *bimaculata* these stripes are broader and darker or mesoscutum may be entirely brown, so similar variation may occur). Strong setae on lateral margins of mesoscutum and strong prescutellars. Scutellum yellow with 2 scutellar setae. Pleura bare, paler yellow including laterotergite (which is contrasted brown in *bimaculata*). Mediotergite brown, bare.

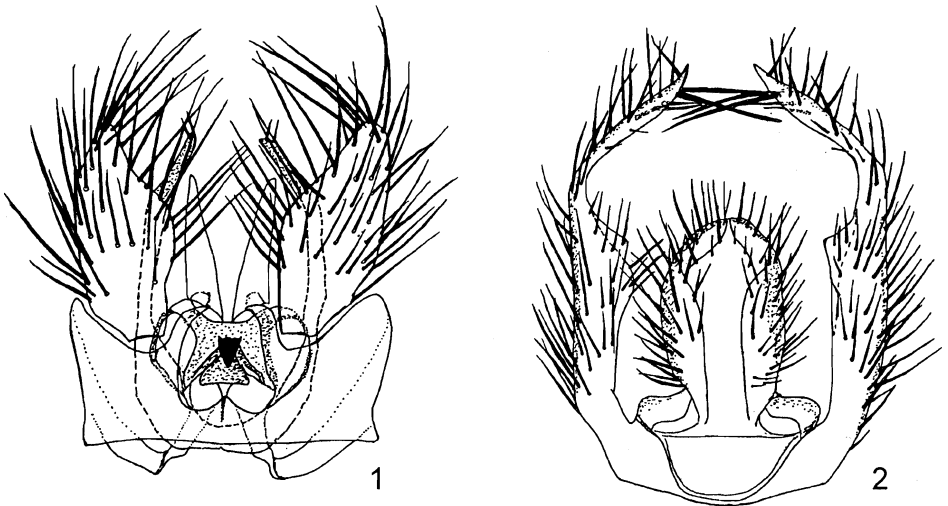
Wing yellowish with similar brown markings to *bimaculata*, the largest occupying almost the apical third of the wing, extending from the costa to the posterior

margin and an irregular band a little beyond the basal third of the wing starting around tip of Sc, covering the radial cell, crossvein R-M and the base of the posterior fork, then almost disappearing towards the posterior margin. Sc ending in costa, which extends slightly beyond apex of R_5 ; R_4 present, forming a radial cell; false vein present between R_5 and M_1 stronger within brown marking except at tip. Haltere yellow or brownish on the base of the knob.

Legs brownish yellow, paler yellow on the coxae, with all bristling dark. Fore coxa with patch of short dense hairs, mid coxa with short hairs in the apical part and hind coxa with sparse short setae posterodorsally. Hind tibia with anterodorsal and posterodorsal rows of conspicuous short setae.

Abdomen with tergites 3, 5 and 6 almost entirely brown (basal margins yellowish); tergites 1–2 and 4 mainly yellow but 2 and 4 brown dorsally (holotype) or 2 with a triangular brown spot dorsally and 4 with a brown median spot (Portuguese specimen) (extent of brown markings on tergites 2 and 4 also vary in *bimaculata*, but usually restricted to apical half on 2 and basal half on 4); sternites entirely yellow or (in holotype) light brown patches basally on 5 and 6.

Genitalia (Figs 1–2; *bimaculata*, Figs 3–4 for comparison) yellow: cercus more elongate than in *bimaculata*; tergal lateral appendage (terminology following Väisänen 1984) more tapered apically and bearing a pair of strong subapical setae on internal face (blunt apically without strong setae in *bimaculata*); gonostylus



Figs 1–2. *Neoempheria stubbsi* sp. n., male genitalia – 1: ventral view; 2: dorsal view

strongly setose on most of its surface and tapered internally on apical half (in *bimaculata* not tapered but rounded externally with strong setae near margin only); paramere slender (broader and externally hooked apically in *bimaculata*).

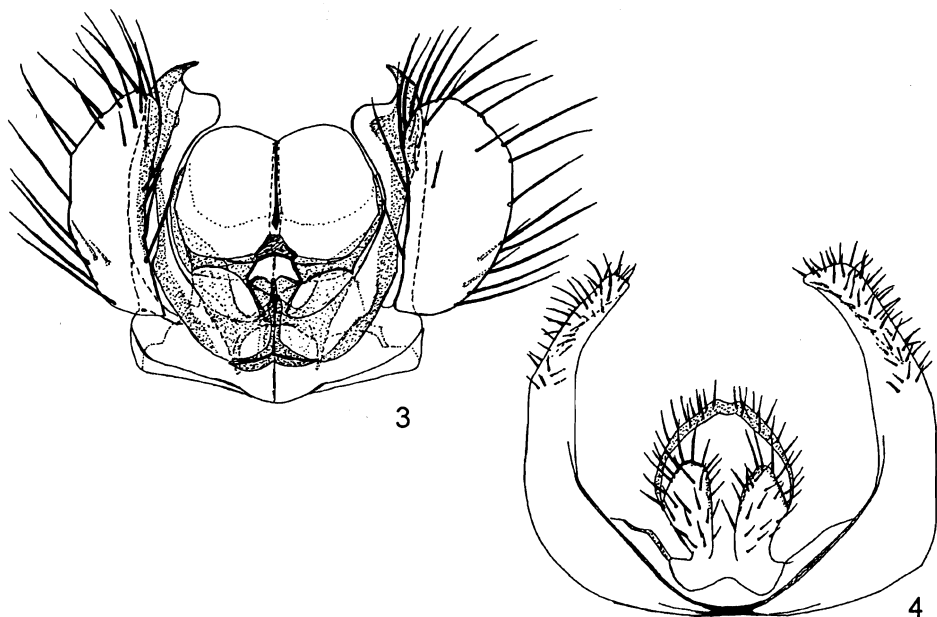
Wing length 3.3–3.5mm.

Female. Same as male except for genitalia.

Etymology – This species is named for Alan Stubbs, to acknowledge his considerable contribution to collecting valuable fungus gnat material in many parts of Europe and other parts of the world.

SCIOPHILINI

Leptomorphus forcipatus Landrock, 1918 – 1 male: Zempléni TK: Regéc, Ördög-v., patak fölött, mellett, 2002.07.05; 1 male: Aggteleki NP: Aggtelek, Lizina-p., patak fölött és mellett, 2002. júl. 06. – This species has recently been reinstated as valid by Zaitzev & Ševčík (2003). These are the first known Hungarian specimens of this species, since they noted correctly that formerly there was no voucher specimen from Hungary. Landrock's "Ungarn" is actually Oravské Podzámok, Slovakia (Árvavárálja in Hungarian) and Matile's (1988: 234) "H" referred to Landrock's record only.



Figs 3–4. *Neoempheria bimaculata* (von Roser), male genitalia – 3: ventral view; 4: dorsal view

LEIINI

Ectrepesthoneura colyeri Chandler, 1980 – Melegmány[i-völgy] TT, Pécs, Melegmányi-v., patak mellett, 2002.05.29. – New to Hungary.

Leia hungarica sp. n.

Holotype – Male (HNHM): Aggteleki NP: Aggtelek, Lizina-patak fölött és mellett, 2002. júl. 06, leg. Papp L. Paratype male: A[ggteleki] N[ational] P[ark], Aggtelek, Ménes-p. völgye, Medvéskert, 1988. VII. 20, leg. Papp L.

Male. Wing length 4.8 mm.

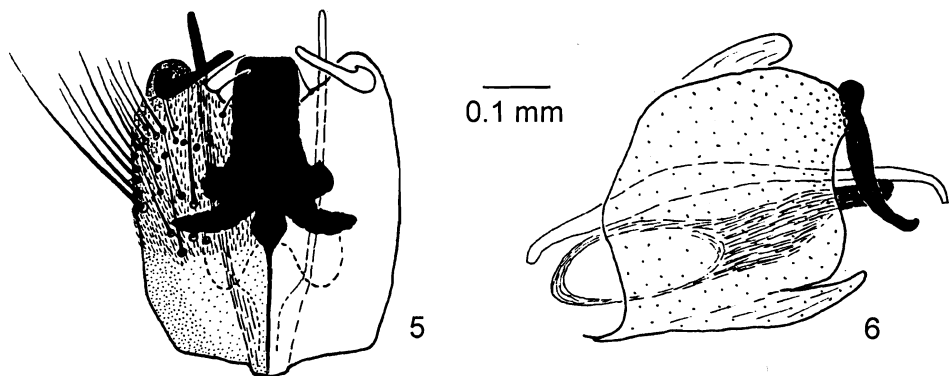
Head dark brown. Mouthparts and palpi yellow. Antennae distally dark brown, scape, pedicel and basal flagellar segments mostly yellow.

Mesoscutum yellowish, with 3 sharply demarcated dark stripes, all pleural sclerites dark brown, including laterotergite and mediotergite. Thoracic setae mostly light. Laterotergite with long setae. Scutellum yellowish, with 4 long apical bristles.

Halteres yellow. Wing with a subapical dark stripe in whole breadth of wing, base of R_5 without a spot. Dark cloud along CuA_2 . Basal part of CuA_1 weak (holotype) or complete (paratype).

Legs yellowish, coxae with tips brown and hind femur with dorsal line and the tip blackish brown.

First abdominal tergite completely dark, tergites 2–4 dark laterally and in the sagittal line but mostly yellow dorsally. Gonostylus simple, slightly curved,



Figs 5–6. *Leia hungarica* sp. n., male genitalia – 5: ventral view; 6: lateral view

digitiform, set rather high on gonocoxite, aedeagal complex dark brown and relatively large (Figs 5–6).

Female. Unknown.

Variability – The two type specimens differ slightly in coloration (the holotype is darker).

Remarks – A conspicuous, brightly coloured species, which differs from the other species mainly in the structure of the gonostylus and the aedeagal complex.

***Leia martinovskyi* sp. n.**

Holotype – Male (coll. Ševčík): Slovakia, Tatra National Park, Roháče Mts., Zuberec, Pálenica, 840 m, 5.8.1990, leg. J. Martinovský.

Male. Wing length 4.2 mm.

Head dark brown. Mouthparts and palpi yellow. Antennae of the holotype missing.

Thorax brownish yellow, mesoscutum with dark setae, especially along margins. Laterotergite with long setae. Scutellum yellowish, with 4 long apical bristles.

Halteres yellow. Wing with a subapical brown stripe and a black basal spot in the axillary area, without any other markings. Basal part of CuA₁ shortly interrupted.

Legs mainly yellowish, coxae with black apical spot, hind femur apically brown.

Abdominal segments 1–4 mostly yellow, tergite 4 caudally darker, segments 5–7 mainly dark, both tergite and sternite 5 basally light. Segment 8 and terminalia yellowish. Gonostylus blackish brown, relatively large and thick, L-shaped (Figs 7–8).

Female. Unknown.

Remarks – A mainly yellowish species, with very characteristic gonostylus. It is somewhat similar to *Leia flavipennis* Laštovka & Matile, 1974, described from Mongolia, which has wings unspotted and dark mesoscutum.

Etymology – This species is dedicated to our late friend, Dr Jaroslav Martinovský (1938–2001), the excellent Czech specialist to several families of Nematocera, mainly Tipulidae, who collected the holotype and who also participated in the project “*Checklist of the Diptera of Hungary*”.

MYCETOPHILIINI

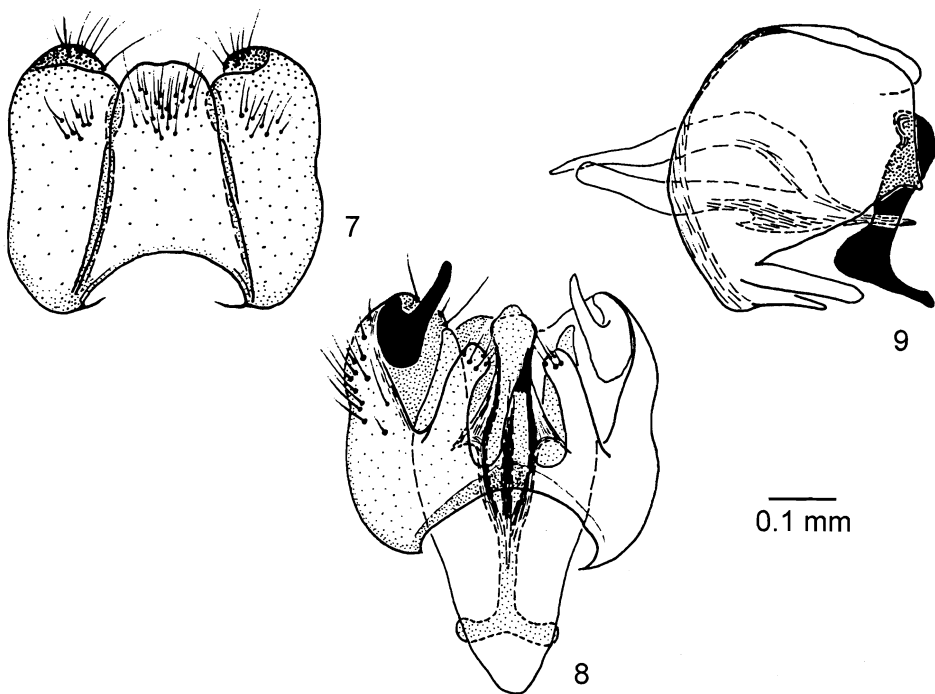
Dynatosoma cochleare Strobl, 1895 – 1 male: Kőszegi TK: Kőszeg, Hármas-patak fölött és mellett, 2002. július 11. – This species is new to Hungary (Papp & Ševčík 2001) but cf. Laštovka (1988) as “H”.

Dynatosoma nigripes Ševčík et Papp, 2001 – 2 males: Bükki NP: Miskolc, Sebes-víz p. fölött és mellett, 2002.06.19./07.07. Described from the Zempléni and the Kőszegi Mts. This new finding may show that although it is rare, it occurs more widely in the low mountains of the Carpathian Basin.

Mycetophila exstincta Loew, 1869 (syn. *M. miki* Dziedzicki, 1884) – 1 male: [Hungary] Zempléni TK, Regéc: Ördög-v. patak fölött, mellett, 2002.07.05, leg. Papp L.; 1 male: Slovakia, Bukovské vrchy Mts, Stužica National Nature Reserve, 09.05. – 03.07.2002, yellow dishes filled with ethylene glycol, leg. J. Ševčík. – A rare Holarctic species, which is new for both Hungary and Slovakia.

Mycetophila formosa Lundström, 1911 – 1 male: [Hungary] Duna-Ipoly NP, Diósjenő, 2002. április 1, Kemence-p. felső folyása fölött és mellett; 1 male: Slovakia, Bukovské vrchy Mts, Nová Sedlica, Stužica National Nature Reserve, 13.10.2001, sweeping along brook, leg. J. Ševčík. – This is the first record from Slovakia and confirmation of recent occurrence of this species in Hungary.

Mycetophila fraterna Winnertz, 1863 – 1 male: [Hungary] Órségi NP, Szakonyfalu, Szakony-p. fölött és mellett, 2002. júl. 15; 1 male: Slovakia, Bukovské vrchy Mts, Nová Sedlica, Stužica National Nature Reserve, 09.05. – 03.07.2002, yellow dishes filled with ethylene glycol, leg. J.



Figs 7–9. *Leia martinovskyi* sp. n., male genitalia – 7: dorsal view; 8: ventral view; 9: lateral view

Ševčík; 2 males: Slovakia, Bukovské vrchy Mts., Uličské Krivé, Rožok National Nature Reserve, 23.08.2001, sweeping along brook, leg. J. Ševčík. – This is the first known male from Hungary (cf. Ševčík & Papp 2001: 224) and a new record for Slovakia.

Mycetophila occultans Lundström, 1913 – 1 male: Zempléni TK, Regéc, Ördög-v., patak fölött, mellett, 2002.07.04; 1 male: Verőce: Magyarkút, Keskenybükki-p. v., patak mellett, 2002. július 24. – New species for Hungary.

Mycetophila sigmoides Loew, 1869 – 1 male: Duna-Ipoly NP, Diósjenő, 2002. április 1, Kemence-p. felső folyása fölött és mellett, leg. Papp L. – A rare Holarctic species new to Hungary, known within Europe only from the Czech Republic (cf. Ševčík & Martinovský 1999).

Mycetophila strigata Staeger, 1840 (syn. *M. fuliginosa* Dziedzicki, 1884) – 1 male: A.[ggteleki] NP: Aggtelek, Lizina-patak fölött és mellett, 2002. júl. 6. – New species for Hungary.

Sceptonia costata (van der Wulp, 1858) – 1 male: Budapest, Pestszenlőrinc, Péterhalmi-erdő, tölgyes, 2002. 03. 08–09, leg. Papp L. – Occurrence in Hungary (Papp 2000: 228) confirmed.

Sceptonia flavipuncta Edwards, 1925 – 2 females: Verőce: Magyarkút, Keskenybükki-p. v., patak mellett, 2002. június 27, 20–22 óra; 2 females: ibid., június 22. – New for Hungary.

Sceptonia membranacea Edwards, 1925 – 1 male: Zempléni TK, Regéc: Ördög-v. patak fölött, mellett, 2002.07.04; 1 male: Duna-Ipoly NP, Diósjenő, 2002. május 4, Kemence-p. felső folyása fölött és mellett; 1 male: Órségi NP, Óriszentpéter, 2002. júl. 16, Keserűszer, patakmeder. – New for Hungary.

Sceptonia nigra (Meigen, 1804) – 1 male: Balatonakali, parti nádas, 2002. aug. 15, leg. Papp L. – Occurrence in Hungary (Papp 1999: 348) confirmed.

Sceptonia pilosa Bukowski, 1934 – 1 male: Bükki NP: Miskolc, Sebes-víz p. fölött és mellett, 2002.06.19, leg. Papp L. – New for Hungary.

Sceptonia tenuis Edwards, 1925 – 1 male: Órségi NP, Óriszentpéter, 2002. júl. 16, Keserűszer, patakmeder; 1 male: Kelet-Mecsek TK, Mecseknádasd, Varasdi-patak fölött és mellett, 2002. 05.28. – New for Hungary.

EXECHIINI

Allodia (B.) czernyi (Landrock, 1912) – 1 male: Órségi NP, Szakonyfalu, Szakony-p. fölött és mellett, 2002. júl. 15. Recorded by Dely-Draskovits (1974), but this is the first voucher specimen in the HNHM collection.

Allodiopsis gracai sp. n.

Holotype – Male (HNHM): [Hungary] Zempléni TK, Regéc, Ördög-v. patak fölött, mellett, 2002.07.04, leg. Papp L.

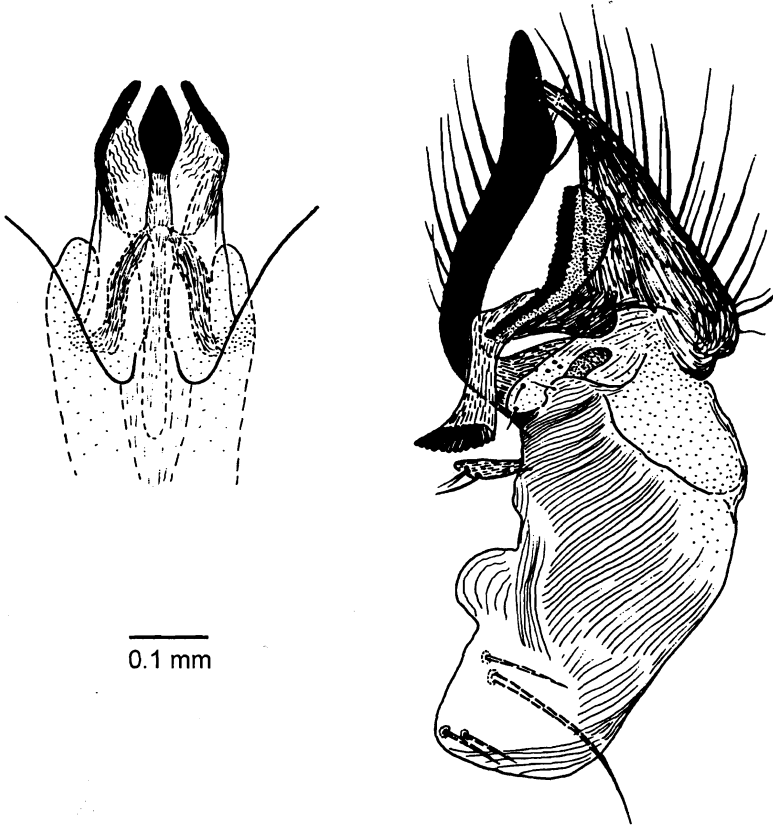
Paratypes: 1 male (HNHM): the same data as for holotype; 1 male, 2 females (coll. Ševčík): Czech Republic, Ostrava – Michálkovice, recultivated mine dump, 09.07.2000, leg. M. Graca and J. Ševčík, reared from larvae (ex *Lycoperdon perlatum* Pers.).

Male. Wing length 4.1 mm.

Head dark brown. Mouthparts and palpi yellow. Antennae distally dark brown, scape and pedicel yellow, basal flagellar segments ventrally yellow. Flagellomeres without macrotrichia.

Mesoscutum dark brown, with yellow humeral area. Mesoscutum covered with fine light setulae and with two rows of thin dark discal bristles. Scutellum dark brown, with yellowish margins, bearing 4 long apical and several shorter subapical dark bristles. Antepronotum with 4–5 long dark bristles, propisternum with three long bristles, both sclerites yellowish. Anepisternum and mediotergite bare. Laterotergite dark brown, with long setae. Halteres yellow.

Wing hyaline, without spots. Sc ending in R. Costa ending at apex of R_5 . Cu-fork well before the M-fork, their branches with dark setulae near apex.



Figs 10–11. *Allodiopsis gracai* sp. n., male genitalia – 10: ventral view; 11: lateral view

Legs yellowish. Hind coxa posterolaterally with a black basal seta and several apical ones. Hind femur in the basal third with a dark cloud ventrally.

First abdominal tergite mostly dark, tergites 2–6 basally dark, apically and laterally yellow. Terminalia large, complex (Figs 10–11). Gonostylus with the black sclerotized lobe narrow, pointed, basally haired, in the apical half bare. The lateral lobe triangular, haired, simple, without any internal lobe. Three small medial lobes, the caudal one largest, the medial one relatively broad, apically widened and darkened, the proximal smallest one bearing three short setae apically. The gonocoxites dorsally sclerotized along inner margins. The medioventral process of gonocoxites as in Fig. 11.

Female. Similar to male. Wing length 3.9 mm.

Remarks – The new species is very similar to *Allodiopsis korolevi* Zaitzev, 1982 and *A. pseudodomestica* (Lackschewitz, 1937), from which it differs by details on the male terminalia, especially on the medioventral process of gonocoxites. The same species is perhaps figured by Ostroverchova (1979) under the name *A. pseudodomestica*.

Etymology – This species is named after the Czech mycologist Michal Graca, who found the larvae of the new species in the fruit body of the fungus *Lycoperdon perlatum*.

Exechia festiva Winnertz, 1863 – 1 male: Kelet-Mecsek TK, Mecseknádasd, Varasdi-patak fölött és mellett, 2002.04.28. A rare species, known from several European countries. Recently recorded by Ševčík (2002) as new for Slovakia. – First record from Hungary.

Exechia macula Chandler, 2001 /syn. *E. maculipennis* (Stannius, 1831) – 1 female: Verőce: Magyarokút, Keskenybükki-p. v., patak mellett, 2002. június 27, 20–22 óra. Recorded by Dely-Draskovits (1974: 33), but this is the first voucher specimen in the HHNM collection.

Rymosia setiger Dziedzicki, 1910 – 1 male: Órségi NP, Felsőszőlnök, Hármashatár, Szőlőki-patak fölött és mellett. 2002. júl. 16. Also this species was recorded already by Dely-Draskovits (1974) without preserving/labelling voucher specimens.

Synplasta dulcia (Dziedzicki, 1910) – 2 males (1 male in coll. Ševčík): Budapest, Pestszentlőrinc, Péterhalmi-erdő, tölgyes, 2002.05.14; 1 male: Csévharaszt TT, nyíres, 2002.06.25. A rare species, hitherto known only from Byelorussia, Germany and the Czech Republic (cf. Ševčík 1999). – New to Hungary.

Synplasta sintenisii (Lackschewitz, 1937) – 5 males: Duna-Ipoly NP: Diósjenő, 2002. júl. 27. Kemence-p. felső folyása fölött és mellett; 1 male: Zempléni TK, Regéc, Ördög-v., patak fölött, mellett, 2002.07.05; 1 male: Kőszegi TK: Kőszeg, Hármashatár fölött és mellett, 2002. júl. 11. – First reported last year by Ševčík & Papp (2002).

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