

Moth flies (Diptera: Psychodidae) of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic)

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JEŽEK J. & OMELKOVÁ M. 2012: Moth flies (Diptera: Psychodidae) of the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic). In: MALENOVSKÝ I., KMENT P. & KONVIČKA O. (eds.): Species inventories of selected insect groups in the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (Czech Republic). *Acta Musei Moraviae, Scientiae biologicae* (Brno) **96(2)** (2011): 763–802. – An account of the family Psychodidae in the Bílé Karpaty Protected Landscape Area (south-eastern Moravia, Czech Republic) is provided. In the course of a survey of 78 localities in 2005–2010 in the Moravian part of the White Carpathian Mts., a total of 39 genera and 108 species of moth flies were recorded, including many species considered threatened or rare in the Czech Republic at national level (13 species are classified as critically endangered, nine as endangered and four as vulnerable in the Red List of threatened invertebrates of the Czech Republic, and 28 additional species are known to occur only sparsely in the country). *Psychomormia vaillantii* (Wagner, 1977) and *Apsycha pusilla* (Tonnoir, 1922) are new for the fauna of Moravia and *Philosepedon perdecorum* Omelková et Ježek, 2012 and *Pneumia kabelaki* Omelková et Ježek, 2012 have been described from Kněždubský háj forest and Sidonie nature reserve respectively as new for science in parallel papers. A brief general account of distribution and ecology is provided for all the taxa recorded.

Key words. Diptera, Psychodidae, faunistics, biogeography, new records, species conservation, White Carpathians, Moravia, Czech Republic

Introduction

The family Psychodidae (moth flies) is taxonomically one of the most difficult groups of nematocerous Diptera, relatively well-represented in the Palaearctic region with almost 500 known species (WAGNER 1990) of which 172 occur in the Czech Republic (JEŽEK 2009a, JEŽEK *et al.* 2012). Adult moth flies (size 2–3 mm) occur in wet, shaded habitats in the neighbourhood of springs, water reservoirs, and especially small bodies of running water. Generally, the adults have not been observed to feed in the wild; however, females of the Sycoracinae are known to suck the blood of certain amphibians. The larvae of Psychodidae often develop in decaying organic matter and leaf packs in peat-forming spring fens and mires (genera *Peripsychoda*, *Clytocerus*, *Pneumia*, and *Ulomyia*) or on gravel and stony fractions of substrate with moss polsters in tufa-forming fens (subtribe Mormiina, and genera *Berdeniella* and *Pericoma*). Some larvae are associated with wet mosses (*Mormia*, *Pericoma*, *Tonnoiriella*), mollusc shells (*Philosepedon*), sandy sediments (*Parajungiella*), fungi (*Chodopsycha*), or are found in the slime film covering stones in streams (*Berdeniella* and *Parabazarella*), rotten parts of

fallen trees (*Trichomyia*), dendrothelmae (*Sciria*), and forest wallows (*Logima*); some Psychodini are coprophilous and urinophilic (OMELKOVÁ *et al.* 2006, 2007, 2008).

The Bílé Karpaty Mts. [White Carpathians], situated in the south-eastern part of the Czech Republic along the borders with Slovakia, form the western edge of the Western Carpathian flysch belt. The area is known for the presence of many calcareous spring mires and other wetland habitats (POULÍČKOVÁ *et al.* 2005, HÁJEK *et al.* 2006) that are generally rich in species of Psychodidae. However, until recently, the psychodid fauna of the White Carpathians as well as of the whole of south-eastern Moravia was largely unknown, except for eight species collected in the vicinity of the town of Uherské Hradiště (JEŽEK 1983, 1985, 1990a, b). To fill this gap, we undertook intensive field sampling in 2005–2010 in the Czech (Moravian) part of the White Carpathians, an area falling largely within the Bílé Karpaty Protected Landscape Area and Biosphere Reserve (abbreviated to Bílé Karpaty PLA hereafter). We present the results of our faunistic investigation in this paper, the first complete list of the Psychodidae of the region. Some partial results relevant to the faunistics and taxonomy of the Psychodidae of the White Carpathians deriving from the same project have already been included in papers by JEŽEK (2006a, 2009b), JEŽEK & OMELKOVÁ (2007), OMELKOVÁ *et al.* (2008), and OMELKOVÁ & JEŽEK (2012a,b).

Material and methods

Many thousands of specimens of moth flies were collected at a total of 78 localities situated mostly in the Bílé Karpaty PLA (as well as in a few adjacent sites outside the administrative borders of the Protected Landscape Area, e.g. in the environs of Horní Lideč). Most of the material was collected in the period 2005–2010 by a variety of methods, mainly by using Malaise traps, frequently by sweep-netting and rarely with yellow pan traps (filled with water with a few drops of detergent added, exposed in the field for five days). The Malaise traps were emptied at about three-week intervals (only the dates of sample removal are given for each record in the list of material examined). Captured moth flies were preserved in 75% ethanol and selected specimens were later mounted on slides in Canada balsam (altogether nearly 1130 specimens were mounted to document each species for the different localities and sampling dates). The material is deposited in the collection of the National Museum, Prague, with some alcohol samples in the private collection of Markéta Omelková, Brno as well. The material was identified by the authors of the paper. Classification and nomenclature follow JEŽEK (2009a). Conservation status for individual species is given according to the Red List of threatened invertebrates of the Czech Republic (JEŽEK 2005). A general natural history of the whole area under study may be found in KUČA *et al.* (1992), MACKOVČIN & JATIOVÁ (2002), JONGEPIEROVÁ (2008), and KONVIČKA *et al.* (2012).

The following abbreviations are used in the paper: NM – Nature Monument, NNR – National Nature Reserve, NR – Nature Reserve, PLA – Protected Landscape Area (all of these are the various categories and terms specified by the Czech system of legally protected natural areas); MT – Malaise trap, YPT – yellow pan traps, SW – sweep-

netting; C – P. Chvojka leg., J – J. Ježek leg. & det., K – P. Komzák leg., M – J. Macek leg., O – M. Omelková leg. & det. (e.g. JCM – J. Ježek, P. Chvojka & J. Macek leg., J. Ježek det.; CM – P. Chvojka & J. Macek leg., J. Ježek det.); CR – critically endangered species, EN – endangered species, VU – vulnerable species (the latter three all categories derived from the Red List of threatened invertebrates of the Czech Republic, *cf.* JEŽEK 2005).

List of collecting sites

Each entry in the list of collecting sites is arranged as follows: number of locality, name of the nearest village or town, local name of the collecting site or name of a small-scale protected area (reserve) if appropriate, code of the field (in parentheses) in the faunistic and floristic grid mapping system of central Europe (EHRENDORFER & HAMANN 1965, ZELENÝ 1972, PRUNER & MÍKA 1996; each basic field divided into 16 subfields, *cf.* KONVIČKA *et al.* 2012), GPS coordinates (specified for the Malaise traps and small, well-defined localities only), altitude, and habitat.

1. Luhačovice, Gáborka brook (6872d3), 420 m a.s.l.; beech forest, pound lock.
2. Luhačovice, Obětová hora hill (6872d3), 511 m a.s.l.; forest road with wet side ditches.
3. Petrůvka, U Petrůvky NM (6872d4), 49°06'35"N 17°48'39"E, 430 m a.s.l.; meadow on a slope above a forest brook.
4. Lipová (near Slavičín) – source 1 km NW of village (6873c1), 472 m a.s.l.; spring, forest margin.
5. Nevšová, Lazy – along Nevšovka brook (6873c1), 406–430 m a.s.l.; meadows.
6. Nevšová, Uhliska hill – 1 km W of the hilltop (6873c1), 459 m a.s.l.; forest margin, swamps.
7. Haluzice – 2 km W of village (6873c2), 490 m a.s.l.; spring area, slough, pine grove, pedestrian path.
8. Lipová (near Slavičín) (6873c4), 49°07'24"N 17°52'38"E, 397–415 m a.s.l.; polluted brook in the SE part of the village.
9. Brumov-Bylnice, Hložec – between Hložec and Brumov-Bylnice (6873d4), 410 m a.s.l.; alluvium, forest brook.
10. Brumov-Bylnice, Kulajka (6873d4), 370 m a.s.l.; erosive furrow in beech forest, rill.
11. Lačnov, Seninka brook – NE of Lačnov (6874a1), 475 m a.s.l.; forest margin, meadows, dried marshes.
12. Horní Lideč, Lačnovské rybníky ponds (6874a4), 475 m a.s.l.; camping ground, dried gutters.
13. Valašské Příkazy (6874a4), 450 m a.s.l.; brook, meadows, fields.
14. Študlov, Požár hill (6874b3), 791 m a.s.l.; forest stream with water splash, spring areas.
15. Valašské Klobouky, Javorůvky NR (6874c1), 49°08'05"N 18°02'05"E, 520–590 m a.s.l.; meadows, small forest brooks, spring areas, slope treeless tufa fens.
16. Valašské Klobouky, Královec hill – NW of the hilltop (6874c1), 655 m a.s.l.; small brook, alluvium, meadows, forest margin, timbered chapel.
17. Valašské Klobouky (6874c1), 430 m a.s.l.; small ponds, swamps and drainages near railway station, forest.
18. Návojná, Hluboké údolí valley (6874c2), 418 m a.s.l.; forest brook with water splash, well, swamps.
19. Poteč, Ploščiny NR (6874c2), 49°08'40"N 18°03'46"E, 630 m a.s.l.; slope spring area, wet meadows.
20. Valašské Klobouky, Bílé potoky NR (6874c3), 49°06'56"N 18°01'38"E, 420 m a.s.l.; slope meadow spring areas, calcareous fens with tufa formation, rills, forest margins.
21. Brumov-Bylnice, Hložec (6874c3), 395 m a.s.l.; forest brook.
22. Návojná – 0.5 km N of village (6874c4), 439 m a.s.l.; brook and swamps.

23. Nedašov, Jalovcová stráň NR (6874d3), 400 m a.s.l.; small brook, pastures with scattered shrubs on slopes.
24. Nedašov, Kaňoury NM (6874d3), 660 m a.s.l.; small brook, spring, slopes with shrubs.
25. Nedašov, Lapač (6874d3), 625 m a.s.l.; meadow spring area, forest edge.
26. Petrůvka, Kladenka brook (6972b2), 49°05'50"N 17°48'53"E, 390 m a.s.l.; alluvium, forest, meadows.
27. Záhorovice, Valy hill (6972d3); 430 m a.s.l.; forest spring fen.
28. Bojkovice, Bažantnice pond – between Bojkovice and Komňa (6972d4), 294 m a.s.l.; small pond and brook with a pound lock.
29. Nevšovka brook, between Slavičín and Rudimov (6973a1), 420–440 m a.s.l.; alluvium, meander (1 km W of Slavičín).
30. Štítná nad Vláří-Popov, Havránkův potok brook (6973b2); 313–470 m a.s.l.; alluvium.
31. Brumov-Bylnice, Bylnička brook – between Dily and Dolní Duboviny (6974a2), 475 m a.s.l.; forest headwaters, beech forest.
32. Brumov-Bylnice, Lazy NR (6974a3), 375 m a.s.l.; small forest rill.
33. Brumov-Bylnice, Bylničky – Heriánův láz (6974a4), 450 m a.s.l.; meadow spring area in beech forest, small well (overshaded by roof), swampy soil, spring fen.
34. Svatý Štěpán, Hluboče NM – Hlubočská stráň slope, Hlubočský potok brook (6974a4), 430–490 m a.s.l.; slope spring area.
35. Sidonie, Sidonie NR (6974a4), 49°03'04"N 18°04'17"E, 450 m a.s.l.; beech forest.
36. Sidonie, Kopanice (6974b3), 49°02'22"N 18°04'11"E, 440 m a.s.l.; beech forest, brook, wet game path.
37. Svatý Štěpán, Chladný vrch NM (6974c1), 49°01'34"N 18°00'32"E, 595 m a.s.l.; forest swamps, crib and small pond.
38. Svatý Štěpán, Pláňava (6974c1), 575 m a.s.l.; beech forest, swamps.
39. Sidonie – near Hostinec u Pekařů Inn (6974c2), 375 m a.s.l.; outflow of small pound lock, cascades, rotten wood.
40. Sidonie, Mlýn (6974c2), 49°02'00"N 18°03'37"E, 350 m a.s.l.; forest margin, seepage water.
41. Sidonie, Vlárský průsmyk pass – junction of Vlárka brook and Vlára river (6974c2), 272 m a.s.l.; alluvium, rotten hay.
42. Horní Němčí, Dubníček (7071d2), 48°55'42"N 17°38'50"E, 478 m a.s.l.; swampy pastures, spring areas, pastoral huts, cowpats.
43. Horní Němčí (7071d2), 350 m a.s.l.; pond, polluted water.
44. Horní Němčí, Luh – Okluky brook valley (7071d4), 350–610 m a.s.l.; deep valley with steep shrubby slopes.
45. Březová, Kalábová NM (7072c2), 518–550 m a.s.l.; forest spring areas, slope treeless calcareous fens with tufa formation, wallow, crib.
46. Lopeník, Hrubý Mechnáč (7072d2), 48°56'27"N 17°48'04"E, 716 m a.s.l.; meadow spring areas, slope treeless calcareous fens with tufa formation, pastures.
47. Žitková, Hutě NR (7073a2), 48°59'24"N 17°54'21"E, 460 m a.s.l.; swampy meadows with scattered reed, slope spring areas, rotten hay, brook.
48. Starý Hrozenkov, Lozky – 1.5 km NW of Starý Hrozenkov (7073a3), 420 m a.s.l.; meadow slope spring area, small brook, pastures.
49. Vyškovec, Chmelínek NM (7073c1), 48°56'26"N 17°51'17"E, 384 m a.s.l.; slope spring fen, wet meadows near a road, brook.
50. Vyškovec, Drietomice brook – SE of Vyškovec (7073c1), 510 m a.s.l.; forest valley, brook, slope spring area.
51. Sudoměřice nad Moravou – Sudoměřický potok brook (7169b3), 202–239 m a.s.l.; alluvium.
52. Radějov, Žerotín NM (7169b4), 48°51'44"N 17°19'42"E, 304 m a.s.l.; dry meadow on a hilltop.
53. Kněždub, Čertoryje NNR – Járkovec brook (7170a4), 48°51'22"N 17°24'29"E, 320 m a.s.l.; shallow swampy valley, shrubs.

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54. Kněždub, Čertoryje NNR (7170a4), 48°51'35"N 17°24'17"E, 340 m a.s.l.; meadows with scattered trees.
55. Kněždub, Kejda pond (7170a4), 340 m a.s.l.; outflow and inflow, swamps.
56. Radějov, Lučina (7170a4), 323 m a.s.l.; stone-block water channel.
57. Kněždub – between Šumárník and Výzkum hills (7170a4); forest swamps, rotten wood.
58. Kněždub, Traviska – along Radějovka brook (7170a4), 323 m a.s.l.; alluvium.
59. Kněždub, Čertoryje NNR – Radějovka brook (7170b3), 48°51'31"N 17°25'50"E, 355–360 m a.s.l.; alluvium of a meandering stream.
60. Radějov, Kútky NR – Mandát brook (7170c2), 48°49'43"N 17°22'47"E, 350 m a.s.l.; small pond, forest margin, wind-thrown tree.
61. Radějov, Kútky NR (7170c2), 48°50'05"N 17°23'05"E, 415 m a.s.l.; wet meadows, pastures of fallow deers.
62. Velká nad Veličkou, Zahrady pod Hájem NNR (7171a1), 48°53'04"N 17°31'59"E and 48°53'09"N 17°32'00"E, 385 m a.s.l.; remnants of species-rich meadows, shrubs.
63. Javorník, Jazevčí NNR (7171a4), 48°52'12"N 17°33'55"E, 360 m a.s.l.; brook (left tributary of Velička stream), forest margin.
64. Javorník, Jazevčí NNR (7171a4), 48°52'09"N 17°33'24"E, 415 m a.s.l.; species-rich meadows on slopes with small woods.
65. Nová Lhota, Hryzlácké Mlýny (7171b1), 48°53'10"N 17°36'08"E, 450 m a.s.l.; meadows and pastures with scattered trees.
66. Suchov, Kazivec brook – E of village (7171b1), 460 m a.s.l.; alluvium, forest.
67. Nová Lhota, Vápenky – left tributary of Velička brook (7171b3), 48°52'16"N 17°36'58"E, 435 m a.s.l.; alluvium with shrubs, country cottage colony.
68. Nová Lhota, Vápenky – Hubertova chata hut (7171b4), 48°51'43"N 17°39'07"E, 563 m a.s.l.; beech forest, slope spring area.
69. Javorník, Machová NR (7171c1), 48°49'37"N 17°31'41"E, 460 m a.s.l.; meadows on slopes.
70. Javorník, Machová NR – Rybnický potok brook (7171c1), 48°49'41"N 17°32'32"E, 400 m a.s.l.; alluvium.
71. Javorník, Filipovské údolí valley – between Liščí bouda hunting lodge and Megovka hostel (7171c2), 379 m a.s.l.; brook, small bridge, swampy area in beech forest.
72. Javorník, Machová NR – Rybnický potok brook (7171c2), 425 m a.s.l., 48°49'59"N 17°32'05"E; alluvium of forest brook, marshes.
73. Javorník, Machová NR (7171c3), 48°49'21"N 17°31'20"E, 445 m a.s.l.; species-rich meadows, forest margin.
74. Strání, Záhumenice NM (7172a1), 48°53'48"N 17°41'12"E, 460 m a.s.l.; forest brook.
75. Březová, Janáčkův pramen spring (7172a2/7072c4), 550 m a.s.l.; forest margin, slope spring areas.
76. Strání, Svinárský potok brook (7172a3), 48°52'00"N 17°40'37"E, 510 m a.s.l.; beech forest, boulder stream bed.
77. Strání, Javorina NNR – peak (7172a3), 48°51'23"N 17°40'09"E, 935 m a.s.l.; mountain meadow.
78. Strání, Javorina NNR – source of Velička brook (7172a3), 48°51'30"N 17°40'16"E, 500–800 m a.s.l.; rapid slope rubble spring area.

Annotated list of species

All material examined for each species is listed; individual records are ordered according to the number of the collecting site. Each record is arranged as follows: name of the collecting site and its number (in parentheses), date(s) of collection(s), number of specimens, collecting method, and collector(s). Published data are cited in a shortened form including the name of the collecting site and its number (in parentheses); additional information may be found in the original papers.

Apsycha pusilla (Tonnoir, 1922)

Material examined. Strání, Záhumenice NM (74), 25.v.2010, 1 ♂, MT, MC.

Comments. A Holarctic species, known from Austria, Great Britain, Italy, Czech Republic (Bohemia), Poland, Lithuania, and many records from the USA (JEŽEK 2007, 2009b). It lives in farms and forest swampy areas, being coprophilous or coprobiontic. Scarce in the Czech Republic, recorded here for the first time for Moravia.

Atrichobrunettia (Mirousiella) graeca Ježek et Goutner, 1993 (VU)

Material examined. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi.2009, 1 ♂, MT, JCM.

Comments. Known only from Greece, Albania, Czech Republic, Great Britain, and Ireland. It occurs in shaded habitats of forests or shrubby alluvium of small streams in hilly terrains. A vulnerable species in the Czech Republic.

Berdeniella kocii Ježek, 2006

Material examined. Lopeník, Hrubý Mechnáč (46), 28.viii.2008, 1 ♂, SW, J. Žitková, Hutě NR (47), 11.vi.2010, 3 ♂♂, SW, O.

Comments. A rare species, described on the basis of 60 males from several localities in the Jeseníky Mts. and subsequently found in the Czech Republic also in the Jizerské hory Mts.; otherwise known in Europe only from Slovakia (JEŽEK 2009c). Generally, it seems to be distributed in hilly and mountain areas and associated with rivers, streams, meadow brooks, pasture drains and forest swamps, as well as wet avalanche scars. Probably a threatened species in the Czech Republic which requires a further monitoring.

Berdeniella matthesi (Jung, 1954)

Material examined. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Vyškovec, Chmelinec NR (49), 5.viii.2007, 1 ♂, MT, K. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. A locally common species in Europe; the knowledge on its distribution is, however, quite poor: so far it has been collected in Austria, Germany, Italy, Czech

Republic, and Slovakia, usually in hilly areas or mountains in shaded swamps with flocculated iron.

***Berdeniella unispinosa* (Tonnoir, 1919)**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 30.vii.2006, 1 ♂, MT, O.

Comments. A European species, widespread from France to Poland and Slovakia, with the southern limit of the distribution in the Apennines and the Balkans. It prefers higher altitudes and is quite common in border mountains of the Czech Republic, associated here with forest spring areas, brooks, streams, and wet avalanche scars.

***Berdeniella vimmeri* Ježek, 1995**

Material examined. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 31.vii.2004, 1 ♂, SW, C. Sidonie, Sidonie NR (35), 5.v.2010, 1 ♂, MT, MC. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. Probably a central European species; known largely from border mountain regions of the Czech Republic (Bohemia, Moravia, and Silesia), locally common. Originally, it was described from the vicinity of Prague; later it was also published from Slovakia (JEŽEK 2009b). It inhabits banks of forest streams, brooks, and spring areas.

***Chodopsycha buxtoni* (Withers, 1988)**

Material examined. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 22.vi.2009, 1 ♂, MT, JCM.

Comments. Known only from Great Britain, Czech Republic, and Slovakia (JEŽEK 2003, ŠEVČÍK 2006). Associated with fungi. Scarce in the Czech Republic.

***Chodopsycha lobata* (Tonnoir, 1940)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (20), 25.vi. and 23.viii.2006, 17.vi.2007, 6 ♂♂, MT, O. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♀, MT, JCM. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♀, MT, MC. Lopeník, Hrubý Mechnáč (46), 22.ix.2006, 1 ♂, MT, O. Žitková, Hutě NR (47), 22.ix.2006, 1 ♂, MT, O. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR (54), 31.vii.2006, 1 ♀, MT, JCM. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 25.vi.2009, 1 ♂ 1 ♀, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 2 ♀♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 22.vi.2009, 1 ♀, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 25.v. and 15.vi.2010, 1 ♂ 1 ♀, MT, MC. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♀, MT, JCM. Strání, Javorina NNR – peak (77), 3.vi.2009, 1 ♂, MT, JCM.

Comments. A common species with a European and Transcaucasian distribution. Present in lowlands as well as in hills and mountains; associated with fungi.

***Clytocerus (Boreoclytocerus) dalii* (Eaton, 1893)**

Material examined. Luhačovice, Gáborka brook (1), 30.vii.2007, 1 ♂, SW, J. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Nedašov, Lapač (25), 14.viii.2007, 1 ♂, SW, J. Sidonie, Sidonie NR (35), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Lopeník, Hrubý Mechnáč (46), 28.viii.2008, 1 ♂, SW, J. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Filipovské údolí valley (71), 1.viii.2007, 1 ♂, SW, J. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. A European species, known from Belgium, Czech Republic, Denmark, Great Britain, Hungary, Ireland, Slovakia, and Slovenia. It occurs quite rarely in outflows of upland peat-bogs, forest spring areas and inundated meadows. Its biology is unknown.

***Clytocerus (Boreoclytocerus) longicorniculatus* Krek, 1987**

Published records. JEŽEK (2009b): Lačnov, Seninka brook (11); Horní Lideč, Lačnovské rybníky ponds (12); Nedašov, Lapač (25); Petrůvka, Kladenka brook (26); Lopeník, Hrubý Mechnáč (46); Javorník, Machová NR – Rybnický potok brook (72). OMELKOVÁ *et al.* (2008): Javorník, Machová NR (72).

Additional material examined. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Nová Lhota, Hryzlácké Mlýny (65), 12.v.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v. and 3.vi.2009, 2 ♂♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. Until recently, this species has been known only from Bosnia and Herzegovina. It seems, however, that it was probably generally overlooked in the course of routine identifications of alcohol samples and mistaken for *C. ocellaris* in the past. Besides the Bílé Karpaty Mts., it has been recently collected in the Czech Republic in southern Bohemia and also in Poland. The larvae are unknown but probably inhabit similar habitats as those of *C. ocellaris*. *Clytocerus longicorniculatus* still awaits a detailed evaluation of its conservation status in the Czech Republic.

***Clytocerus (Boreoclytocerus) ocellaris* (Meigen, 1804)**

Material examined. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Lačnov, Seninka brook (11), 15.viii.2007, 1 ♂, SW, J. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 20.vi.2005, 1 ♂, SW, J. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 25.vi.2006, 12.viii. and 12.ix.2007, 3 ♂♂, MT, O. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Chladný vrch NM (37), 24.v.2010, 1 ♂, MT, MC. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 19.vii., 23.viii., 22.ix.2006 and 12.viii.2007, 4 ♂♂, MT, O; 7.viii. and 28.viii.2008, 2 ♂♂, SW, J. Žitková, Hutě NR (47), 25.vi.2006, 1 ♂, MT, O; 31.vii.2007, 1 ♂, SW, J. Starý Hrozenkov, Lozky (48), 29.vi.2006, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Kněždub, Kejda pond (55), 21.ix.2005, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi. and 15.vii.2009, 3 ♂♂, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Filipovské údolí valley (71), 1.viii.2007, 1 ♂, SW, J. Javorník, Machová NR – Rybnický potok brook (72), 2.viii.2007, 1 ♂, SW, J. Strání, Záhumenice NM (74), 12.viii.2010, 1 ♂, MT, MC.

Comments. A very common species, known largely from central and western Europe (including the British Isles), with limits of distribution in Finland, Lithuania, the Apennines and the Balkan Peninsula. Its larvae inhabit spring areas, alluvium of streams and the littoral zone of water reservoirs.

***Clytocerus (Boreoclytocerus) splendidus* Ježek et Hájek, 2007**

Published records. JEŽEK & HÁJEK (2007): Valašské Klobouky (17), two male paratypes. OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15).

Additional material examined. Lopeník, Hrubý Mechnáč (46), 7.viii.2008, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Radějovka (59), 25.v.2010, 1 ♂, MT, MC.

Comments. So far known only from the Czech Republic (both Bohemia and Moravia; the occurrence in Moravia was erroneously omitted in the check list by JEŽEK 2009a) and Poland. A scarce species of hills and mountains; it inhabits water reservoirs, ponds, forest pools, swamps, muddy wallows with flocculated iron, brooks, rills, and wet meadows. Biology unknown.

***Clytocerus (Boreoclytocerus) tetracorniculatus* Wagner, 1977 (CR)**

Published records. JEŽEK & OMEJKOVÁ (2007), OMEJKOVÁ *et al.* (2008): Žitková, Hutě NR (47).

Comments. A very rare species, known only from Germany, Czech Republic and Finland. The adults were collected in hilly areas in slope treeless tufa-forming fens, marshes and inundated meadows. Critically endangered in the Czech Republic.

***Coprosychoda brevicornis* (Tonnoir, 1940)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (20), 12.viii.2007, 5 ♂♂, MT, O. Sidonie, Sidonie NR (35), 5.v.2010, 1 ♂, MT, MC. Svätý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Březová, Kalábová NM (45), 22.x.2007, 1 ♂ MT, O. Lopeník, Hrubý Mechnáč (46), 22.vii. and 22.x.2007, 8 ♂♂, MT, O. Vyškovec, Chmelínek NR (49), 29.iv., 22.vii. and 21.x.2007, 7 ♂♂, MT, O. Vyškovec, Drietomice brook (50), 12.viii. and 22.x.2007, 7 ♂♂, MT, O. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 5.v., 25.v. and 15.vi.2010, 2 ♂♂ 1 ♀, MT, MC.

Comments. A common saprophagous species with a western Palaearctic distribution; known from the Czech Republic, Denmark, France, Germany, Great Britain, Ireland, the Netherlands, Norway, Russia, Slovakia, Sweden, and Turkey.

***Feuerborniella obscura* (Tonnoir, 1919)**

Material examined. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 25.vi.2006, 1 ♂ MT, O. Návojná (22), 31.v.2007, 1 ♀, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♀, MT, JCM. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♂, MT, MC. Svätý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW,

J. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 22.vi.2009, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♀, MT, MC.

Comments. A common European species, distributed in central Europe, along the Atlantic coast, in the British Isles and reaching the Apennines and the Balkans in the south. It is known from habitats with sprayed moss polsters, spring areas and stream meanders across a wide range of altitudes.

Jungiella (Jungiella) hygrophila Ježek, 1987

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♂, MT, JCM. Nevšová, Lazy (5), 22.vi.2005, 1 ♂, SW, J. Nevšová, Uhliska hill (6), 22.vi.2005, 1 ♂, SW, J. Valašské Příkazy (13), 6.vi.2006, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 23.v.2006, 1 ♂, MT, O. Návojná (22), 31.v.2007, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 25.vi. 2006, 1 ♂, MT, O. Nová Lhota, Vápenky (67), 3.vi.2009, 1 ♂, MT, JCM.

Comments. Probably a central European species, uncommon (with so far only few localities known in the Czech Republic – Bohemia and Moravia – and Poland); collected in shaded spring areas or near brooks, sometimes together with *J. soleata* and *J. valachica*. Biology unknown.

Jungiella (Jungiella) jadarica Krek, 1979

Published record. JEŽEK (2009b): Petrůvka, Kladenka brook (26).

Comments. An extremely rare species, described from two males collected in southern Europe (Bosnia and Herzegovina). The recent material from the Bílé Karpaty PLA published by JEŽEK (2009b) and cited above (5 males) confirms the validity of the species which has not been registered elsewhere so far. Biology unknown.

Jungiella (Jungiella) laetabilis Krek, 1971

Published records. JEŽEK (2009b): Petrůvka, Kladenka brook (26); Radějov, Kútky NR – Mandát brook (60).

Comments. Only the male holotype from montane bogs in the vicinity of Sarajevo in Bosnia and Herzegovina has been available until the recent findings of specimens in the Czech Republic which confirmed the validity of this species (JEŽEK 2009b). Biology unknown. Probably a scarce species in the Czech Republic.

Jungiella (Jungiella) septentrionalis Krek, 1979

Published record. JEŽEK (2009b): Petrůvka, Kladenka brook (26).

Additional material examined. Valašské Klobouky, Bílé potoky NR (20), 3.vi.2007, 1 ♂, MT, O.

Comments. An extremely rare species, previously known only from the original description (based on two males from Bosnia and Herzegovina). One of the specimens recently collected in the Czech Republic (the České Švýcarsko National Park in Bohemia and the Bílé Karpaty PLA) may be suitable for designating a neotype (Krek collection of moth flies, deposited at the University of Sarajevo, was destroyed during the military conflicts in former Yugoslavia). Apparently a species of interest from the nature conservation viewpoint, scarce in the country. Its biology remains largely unknown; the adults were collected near brooks at higher altitudes.

Jungiella (Jungiella) soleata (Walker, 1856)

Material examined. Nevšová, Uhliska hill (6), 22.vi.2005, 1 ♂, SW, J. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Hložec (9), 21.vi.2005, 1 ♂, SW, J. Valašské Příkazy (13), 6.vi.2006, 1 ♂, SW, J. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 28.v.2007, 1 ♂, SW, J. Valašské Klobouky, Královec hill (16), 28.v.2007, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 2 ♂♂, SW, J. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♂, MT, JCM. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J; Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Chladný vrch NM (37), 7.vi.2006 and 16.vi.2010, 2 ♂♂, SW, J and MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. A common species distributed almost throughout Europe, including the British Isles, also known from northern Iran. It was collected from lowlands to mountains in shaded habitats with decaying organic matter.

Jungiella (Jungiella) valachica (Vaillant, 1963)

Material examined. Nevšová, Uhliska hill (6), 22.vi.2005, 1 ♂, SW, J. Valašské Příkazy (13), 6.vi.2006, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 2 ♂♂, SW, J. Návojná (22), 31.v.2007, 1 ♂, SW, J. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♂, MT, JCM. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 2 ♂♂, SW, J. Sidonie, Kopanice (36), 30.v.2007, 1 ♂, SW, J. Svatý Štěpán, Chladný vrch NM (37), 7.vi.2006 and 16.vi.2010, 2 ♂♂, SW, J and MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 3.vii.2006, 2 ♂♂, MT, O. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi., 22.vi. and 15.vii.2009, 3 ♂♂, MT, JCM.

Comments. Quite sporadic, known from Poland, Czech Republic, Austria, Switzerland, and countries in the Balkan Peninsula. It inhabits similar habitats as *J. soleata*.

Jungiella (Psychocha) acuminata (Szabó, 1960)

Material examined. Valašské Klobouky (17), 20.vi.2005, 1 ♂, SW, J. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylnička brook (31), 23.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Lazy NR (32), 22.vi.2005, 1 ♂, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Nová Lhota, Vápenky (67), 15.vii.2009, 1 ♂, MT, JCM.

Comments. A European species, so far known only from the Great Britain, France, Czech Republic, and Hungary. It occurs in habitats with decaying organic matter (ponds, shaded brooks, and wet meadows).

***Jungiella (Psychocha) hassiaca* Wagner, 1993**

Material examined. Javorník, Jazevčí NNR (64), 25.vi.2009, 2 ♂♂, MT, JCM. Nová Lhota, Vápenky (67), 22.vi.2009, 1 ♂, MT, JCM.

Comments. An extremely rare species known only from Germany (Hesse) and the Czech Republic (the Podyjí National Park, České Švýcarsko National Park and Bílé Karpaty PLA). Apparently a scarce and noteworthy species from the nature conservation viewpoint, which needs a more detailed monitoring in future.

***Jungiella (Psychocha) laminata* (Szabó, 1960) (CR)**

Published records. OMELKOVÁ *et al.* (2008): Brumov-Bylnice, Bylničky (33); Horní Němčí (43).

Additional material examined. Nevšová, Lazy (5), 22.vi.2005, 1 ♂, SW, J. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Valašské Klobouky (17), 20.vi.2005, 1 ♂, SW, J. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Nevšovka brook (29), 2.vi.2005, 1 ♂, SW, J. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Lazy NR (32), 23.vi.2005, 1 ♂, SW, J. Nová Lhota, Vápenky (67), 15.vii.2009, 1 ♂, MT, JCM.

Comments. A very rare central European species, known only from the Czech Republic, Germany, Hungary, and Serbia. It occurs in habitats with sandy sediments, especially brook floodplains and ponds. Critically endangered in the Czech Republic.

***Jungiella (Psychocha) procera* Krek, 1971**

Material examined. Nevšová, Uhliska hill (6), 22.vi.2005, 1 ♂, SW, J. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Hložec (9), 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Kulajka (10), 21.vi.2005, 1 ♂, SW, J. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 20.vi.2005 and 28.v.2007, 2 ♂♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 2 ♂♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 5.vi.2006, 1 ♂, SW, J.; same site but 17.vi.2007, 3 ♂♂, MT, O. Brumov-Bylnice, Hložec (21), 21.vi.2005, 1 ♂, SW, J. Návojná (22), 31.v.2007, 1 ♂, SW, J. Petřůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylnička brook (31), 23.vi.2005, 1 ♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 2 ♂♂, SW, J. Sidonie, Kopanice (36), 30.v.2007, 1 ♂, SW, J. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 2 ♂♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 22.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi. and 22.vi.2009, 2 ♂♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (72), 26.vi.2006, 1 ♂, SW, J. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. A quite rare, hardly known species, abundant only locally; it has been collected so far only in Bosnia and Herzegovina, Serbia, and the Czech Republic in floodplains of small brooks, swampy meadows, forest spring areas and slope treeless tufa-forming fens.

***Lepiseodina rothschildi* (Eaton, 1912)**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 23.viii.2006, 1 ♂, MT, O. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♂, MT, MC. Kněždub, Čertoryje NNR – Radějovka brook (59), 25.v.2010, 1 ♂, MT, MC. Nová Lhota, Hryzlácké Mlýny (65), 12.v.2009, 1 ♂, MT, JCM.

Comments. A quite rare European species, known only from the British Isles, countries along the North Sea coast, the Czech Republic, and Italy. Being dendrolimnobioc and apparently of conservation interest (scarce in the country), it needs a more detailed monitoring in the Czech Republic.

***Lepiseodina tristis* (Meigen, 1830)**

(CR)

Material examined. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♂, MT, JCM. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM.

Comments. A rare dendrolimnobioc species, known from the British Isles, countries along the North Sea coast, central Europe, and Lithuania. Critically endangered in the Czech Republic.

***Logima albipennis* (Zetterstedt, 1850)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Študlov, Požár hill (14), 6.vi.2006, 1 ♀, SW, J. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♀, MT, JCM. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♀, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v.2010, 1 ♀, MT, MC. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♀, SW, J. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♀, MT, JCM. Kněždub, Traviska (58), 21.ix.2005, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 2 ♀♀, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 2.vi.2009, 1 ♀, MT, JCM. Javorník, Jazevečí NNR (63), 25.vi. and 15.vii.2009, 2 ♀♀, MT, JCM. Javorník, Jazevečí NNR (64), 25.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 2 ♀♀, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi. and 15.vii.2009, 4 ♀♀, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♀, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 25.v. and 15.vi.2010, 2 ♀♀, MT, MC. Strání, Svinářský potok brook (76), 29.viii.2005, 1 ♀, MT, JCM.

Comments. A cosmopolitan species, eurybionic, very common from lowlands to mountains. The larvae are saprophagous. The adults are occasionally numerous in Malaise and yellow pan traps and are also attracted by blue light traps.

***Logima erminea* (Eaton, 1893)**

Material examined. Petrůvka, Kladenska brook (26), 3.vi.2008, 2 ♂♂, MT, JCM. Kněždub, Traviska (58), 21.ix.2005, 1 ♀, SW, J. Javorník, Jazevečí NNR (63), 25.vi. and 15.vii.2009, 2 ♂♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi. and 15.vii.2009, 3 ♂♂, MT, JCM. Javorník, Machová NR (73), 9.vii.2007, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC. Strání, Svinářský potok brook (76), 29.viii.2005, 1 ♂, MT, JCM.

Comments. A Palaearctic species associated with fungi; it is generally common and known from various altitudes; it also inhabits caves. Its biology is, however, little known.

***Logima satchelli* (Quate, 1955)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♂, MT, JCM. Valašské Klobouky, Bílé potoky NR (20), 25.vi. and 23.viii. 2006, 3 ♂♂, MT, O. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♀, MT, JCM.

Sidonie, Sidonie NR (35), 25.v.2010, 1 ♀, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v. and 16.vi.2010, 2 ♀♀, MT, MC. Sidonie (39), 30.v.2007, 1 ♀, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♀, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♀, SW, J. Vyškovec, Drietomice brook (50), 22.vii.2007, 2 ♂♂, MT, O. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 25.vi.2009, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 2 ♀♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 2 ♂♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi. and 15.vii.2009, 4 ♀♀, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♀, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 25.v. and 15.vi.2010, 1 ♂ 1 ♀, MT, MC.

Comments. A common, eurybiontic species, collected at various altitudes throughout the Holarctic Region.

Logima zetterstedti Ježek, 1983

Material examined. Brumov-Bylnice, Hložec (9), 21.vi.2005, 1 ♀, SW, J. Valašské Příkazy (13), 6.vi.2006, 1 ♀, SW, J. Valašské Klobouky, Javorůvky NR (15), 28.v.2007, 1 ♀, SW, J. Valašské Klobouky, Bílé potoky NR (20), 5.vi.2006 and 16.viii.2007, 2 ♀♀, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♀, SW, J. Kněždub, Čertoryje NNR (54), 31.vii.2006, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♂ 1 ♀, MT, JCM. Javorník, Machová NR (73), 9.vii.2007, 1 ♀, MT, JCM.

Comments. A European and western Siberian species, generally very common and known from a wide range of altitudes. Its larvae are saprobiontic. Adults sometimes become closed in sheaths of the plant *Arum maculatum* which they pollinate.

Mormia revisenda (Eaton, 1893)

Published records. JEŽEK (2006a): Nová Lhota, Vápenky – Hubertova chata hut (68); Strání, Svinárský potok brook (76); Strání, Javorina NNR (78). OMEJKOVÁ *et al.* (2008): Javorník, Machová NR (69, 73).

Additional material examined. Valašské Klobouky, Bílé potoky NR (20), 12.viii.2007, 1 ♂, MT, O. Sidonie, Sidonie NR (35), 5.v. and 25.v.2010, 3 ♂♂, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v.2010, 1 ♂, MT, MC. Lopeník, Hrubý Mechnáč (46), 3.vii.2006, 1 ♂, MT, O. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM.

Comments. A very rare species so far recorded from Belgium, France, Germany, Czech Republic, Austria, Bosnia, and Greece. It inhabits shaded swamps on slopes and spring areas with rills, mainly in beech forests. Scarce in the Czech Republic.

Oomormia andrenipes (Strobl, 1910)

(CR)

Published records. JEŽEK & OMEJKOVÁ (2007): Študlov, Požár hill (14); Valašské Klobouky, Bílé potoky NR (20). OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15).

Additional material examined. Valašské Klobouky, Královec hill (16), 28.v.2007, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 25.vi.2006, 1 ♂, MT, O. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Vyškovec, Drietomice brook (50), 22.x.2007, 1 ♂, MT, O. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 2 ♂♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi.2009, 1 ♂, MT, JCM.

Comments. A quite rare species known from the Great Britain, Czech Republic, Slovakia, Austria, Slovenia, and Bosnia. It inhabits slope forest spring areas and brooks in hills and mountains. Critically endangered in the Czech Republic.

***Panimerus albifacies* (Tonnoir, 1919)**

(EN)

Published record. JEŽEK (2009b): Nedašov, Lapač (25).

Additional material examined. Lopeník, Hrubý Mechnáč (46), 3.vii. and 23.viii.2006, 4 ♂♂, MT, O. Vyškovec, Chmelinec NR (49), 24.vi.2007, 1 ♂, MT, K.

Comments. A relatively widespread species in Europe which inhabits spring areas and brooks with moss polsters. Rare and considered endangered in the Czech Republic.

***Panimerus denticulatus* Krek, 1971**

Material examined. Lipová (4), 22.vi.2005, 1 ♂, SW, J. Nevšová, Lazy (5), 22.vi.2005, 1 ♂, SW, J. Nevšová, Uhliska hill (6), 22.vi.2005, 1 ♂, SW, J. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 20.vi.2005, 1 ♂, SW, J. Valašské Klobouky (17), 20.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Hložec (21), 21.vi.2005, 1 ♂, SW, J. Návojná (22), 31.v.2007, 1 ♂, SW, J. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♂, MT, JCM. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 23.vi.2005 and 17.vi.2008, 3 ♂♂, SW, J. Horní Němčí, Dubníček (42), 28.vi.2006, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 25.vi., 3.vii. and 23.viii.2006, 7 ♂♂, MT, O. Starý Hrozenkov, Lozky (48), 29.vi.2006, 1 ♂, SW, J. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi. and 22.vi.2009, 2 ♂♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (72), 26.vi.2006, 1 ♂, SW, J.

Comments. A locally common species, known from several European countries: Austria, Bosnia and Herzegovina, Czech Republic, Great Britain, Greece, Ireland and Macedonia. It occurs in shaded spring areas, along brooks, around ponds, and in wet meadows and pastures from lowlands to mountains.

***Panimerus notabilis* (Eaton, 1893)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♂, MT, JCM. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 25.vi., 3.vii. and 19.vii. 2006, 4 ♂♂, MT, O. Žitková, Hutě NR (47), 25.vi.2006, 1 ♂, MT, O. Kněždub, Čertoryje NNR – Radějovka brook (59), 25.v.2010, 1 ♂, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 22.vi.2009, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC.

Comments. A common European species recorded from countries along the North Sea coast (including the British Isles), Scandinavia, central Europe, the Balkans and northern Iran. It lives in habitats with decaying organic matter, being (together with some water plants, e.g. *Typha*) one of the first colonizers of early succession stages, e.g. in surface mining areas and spoil dumps.

***Parabazarella subneglecta* (Tonnoir, 1922)**

Material examined. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM. Valašské Klobouky, Bílé potoky NR (20), 23.v.2006, 2 ♂♂, MT, O.

Comments. Known from western and central Europe, Finland, Lithuania, the Balkans, and Turkey. An uncommon species which inhabits hygropetric zones with moss polsters, spring areas, and brooks.

***Parajungiella longicornis* (Tonnoir, 1919)**

Material examined. Nevšová, Lazy (5), 22.vi.2005, 1 ♂, SW, J. Nevšová, Uhliska hill (6), 22.vi.2005, 1 ♂, SW, J. Lačnov, Seninka brook (11), 15.viii.2007, 1 ♂, SW, J. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Radějovka brook (59), 25.v.2010, 1 ♂, MT, MC.

Comments. Widely distributed in Europe and western Siberia. Generally a very common species which inhabits both unshaded and shaded banks of streams (mainly with moss polsters), ponds, and forest seepages.

***Parajungiella prikryli* Ježek, 1999**

(VU)

Material examined. Nevšová, Lazy (5), 22.vi.2005, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J.

Comments. Apparently a rare central European species, so far collected only in the Czech Republic; it is distributed here from lowlands to hilly regions (Sokolov and Frýdlant regions and the Podyjí National Park). It inhabits meanders of brooks, shaded swamps, ponds, and water reservoirs.

***Parajungiella pseudolongicornis* (Wagner, 1975)**

(CR)

Published record. OMELKOVÁ *et al.* (2008): Poteč, Ploščiny NR (19).

Additional material examined. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Valašské Příkazy (13), 6.vi.2006, 1 ♂, SW, J.

Comments. A rare species, recorded only from the Great Britain, Ireland, Austria, Czech Republic, Slovakia, Serbia, and Bosnia and Herzegovina. It occurs in habitats with decaying organic matter (ponds, brooks, meanders of rivers, rills, and swamps). Critically endangered in the Czech Republic.

***Parajungiella serbica* (Krek, 1985)**

(CR)

Published record. OMELKOVÁ *et al.* (2008): Poteč, Ploščiny NR (19).

Additional material examined. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Valašské Příkazy (13), 6.vi.2006, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 2 ♂♂, SW, J. Návojná (22), 31.v.2007, 1 ♂, SW, J. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J.

Comments. Quite a rare species, occurring sporadically in the Czech Republic, Slovakia, Greece, and Serbia in inundated meadows, swampy pastures, small brooks and saline water reservoirs. Critically endangered in the Czech Republic.

Paramormia (Phyllotelmatoscopus) acuta (Krek, 1971)

Published records. JEŽEK & OMELKOVÁ (2007), OMELKOVÁ *et al.* (2008): Brumov-Bylnice, Bylničky (33); Javorník, Machová NR – Rybnický potok brook (72).

Additional material examined. Návojná (22), 31.v.2007, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 3 ♂♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Březová, Kalábová NM (45), 6.viii.2008, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 19.vii.2006, 1 ♂, MT, O; same site but 7.viii.2008, 1 ♂, SW, J. Vyškovec, Drietomice brook (50), 22.vii.2007, 2 ♂♂, MT, O. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM.

Comments. A rare species, known from altogether six European countries (found scarcely also in the Czech Republic). It occurs in spring areas near brooks, swampy pastures, and meadows.

Paramormia (Paramormia) polyascoidea (Krek, 1971)

Material examined. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Lačnov, Seninka brook (11), 15.viii.2007, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Horní Němčí, Dubníček (42), 28.vi.2006, 1 ♂, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 3.vii.2006, 2 ♂♂, MT, O. Starý Hrozenkov, Lozky (48), 29.vi.2006, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 25.v.2010, 1 ♂, MT, MC.

Comments. A European and western Siberian species known from Germany, Czech Republic, Poland, Austria, Bosnia and Herzegovina, Caucasus (Abkhazia), and Russia (Novosibirsk region). It was collected in swampy meadows and pastures, spring areas, along brooks, around ponds, and in alluvium of meandering streams from lowland to mountains.

Pericoma (Pachypericoma) blandula Eaton, 1893

Material examined. Lačnov, Seninka brook (11), 15.viii.2007, 1 ♂, SW, J. Valašské Příkazy (13), 6.vi.2006, 1 ♂, SW, J. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 28.v.2007, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Nedašov, Kaňoury NM (24), 14.viii.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Nevšovka brook (29), 22.vi.2005, 1 ♂, SW, J. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylnička brook (31), 23.vi.2005, 2 ♂♂, SW, J. Sidonie, Sidonie NR (35), 5.v.2010, 1 ♂, MT, MC. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♂, SW, J. Horní Němčí, Dubníček (42), 28.vi.2006, 1 ♂, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Starý Hrozenkov, Lozky (48), 29.vi.2006, 1 ♂, SW, J. Sudoměřice nad Moravou, Sudoměřický potok brook (51), 27.vii.2005, 1 ♂, SW, C. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Radějov, Lučina (56), 21.ix.2005, 1 ♂, SW, J. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi., and 15.vii.2009, 4 ♂♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (72), 2.viii.2007, 1 ♂, SW, J. Strání, Záhumenice NM (74), 25.v., 15.vi. and 12.viii.2010, 3 ♂♂, MT, MC.

Comments. Widespread in Europe (known from altogether 30 countries) and recorded also in Transcaucasia, Tunisia, and Morocco. A moss-dwelling species, common in both shaded and unshaded habitats at various altitudes.

***Pericoma (Pachypericoma) fallax* Eaton, 1893**

Material examined. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Nevšovka brook (29), 22.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♂, MT, MC. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 24.vii.2005, 1 ♂, SW, C. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Sudoměřice nad Moravou, Sudoměřický potok brook (51), 27.vii.2005, 1 ♂, SW, C. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Kněždub, Kejda pond (55), 21.ix.2005, 1 ♂, SW, J. Radějov, Lučina (56), 21.ix.2005, 1 ♂, SW, J. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (63), 15.vii.2009, 1 ♂, MT, JCM. Suchov, Kazivec brook (66), 2.viii.2004, 1 ♂, SW, C. Strání, Záhumenice NM (74), 25.v. and 15.vi.2010, 2 ♂♂, MT, MC.

Comments. A European and western Siberian species recorded from more than 18 countries, known also from the Caucasus (Abkhazia). A moss-dwelling species, generally common and abundant in both shaded and unshaded habitats, e.g. ponds, swampy meadows, alluvium of brooks, and water reservoirs,

***Pericoma (Pachypericoma) formosa* Nielsen, 1964**

Material examined. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Nevšovka brook (29), 22.vi.2005, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 24.vii.2005 and 30.v.2007, 2 ♂♂, SW, C and J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Radějov, Lučina (56), 21.ix.2005, 1 ♂, SW, J. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM.

Comments. A European species so far recorded from France, Czech Republic, Slovakia, Denmark, Norway, and Finland. Recognized as valid only recently, overlooked in the past. Scarce in the Czech Republic; it occurs in similar habitats as the foregoing species.

***Pericoma (Pericoma) exquisita* Eaton, 1893 (EN)**

Published records. JEŽEK & OMELKOVÁ (2007): Bojkovice, Bažantnice pond (28); Sidonie, Vlárský průsmyk pass (41); Horní Němčí (43); Horní Němčí, Luh (44); Sudoměřice nad Moravou, Sudoměřický potok brook (51); Kněždub, Čertoryje NNR – Járkovec brook (53); Kněždub, Kejda pond (55). OMELKOVÁ *et al.* (2008): Horní Němčí (43, 44); Kněždub, Čertoryje NNR (53); Javorník, Machová NR (69, 73).

Additional material examined. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, MT, JCM. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v.2010, 1 ♂, MT, MC. Javorník, Jazevčí NNR (63), 15.vii.2009, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Strání, Záhumenice NM (74), 25.v.2010, 1 ♂, MT, MC.

Comments. Widespread in Europe, North Africa and Transcaucasia. A moss-dwelling species inhabiting forest springs, water wells and brooks. Endangered in the Czech Republic.

***Pericoma (Pericoma) ljubiniensis* Krek, 1969**

Published records. JEŽEK & OMELKOVÁ (2007), OMELKOVÁ *et al.* (2008): Brumov-Bylnice, Bylničky (33).

Additional material examined. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC.

Comments. A scarce species, so far known only from Bosnia and the Czech Republic (Bílé Karpaty PLA).

***Pericoma (Pericoma) pallida* Vaillant, 1978**

Published records. JEŽEK & OMELKOVÁ (2007): Lopeník, Hrubý Mechnáč (46). OMELKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15); Brumov-Bylnice, Bylničky (33); Lopeník, Hrubý Mechnáč (46); Žitková, Hutě NR (47).

Additional material examined. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Svatý Štěpán, Chladný vrch NM (37), 24.v.2010, 1 ♂, MT, MC. Březová, Kalábová NM (45), 6.viii.2008, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 25.vi., 23.viii. and 22.ix.2006, 6 ♂♂, MT, O; 7.viii. and 28.viii.2008, 2 ♂♂, SW, J. Strání, Záhumenice NM (74), 25.v.2010, 1 ♂, MT, MC.

Comments. A rare species, so far known only from Spain (original description; VAILLANT 1978) and recently collected also in the Czech Republic (Český kras PLA in Bohemia and Bílé Karpaty PLA) and Slovakia.

***Pericoma (Pericoma) pannonica* Szabó, 1960**

Published records. JEŽEK & OMELKOVÁ (2007), OMELKOVÁ *et al.* (2008): Horní Němčí, Luh (44).

Additional material examined. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Strání, Záhumenice NM (74), 12.viii.2010, 1 ♂, MT, MC.

Comments. Known from altogether seven European countries including the Czech Republic (WAGNER 2007, JEŽEK & OMELKOVÁ 2007). It inhabits forest brooks and shaded swamps. Scarce in the Czech Republic.

***Pericoma (Pericoma) pingarestica* Vaillant, 1978**

Published records. JEŽEK (2006a): Brumov-Bylnice, Hložec (9); Valašské Klobouky, Javorůvky NR (15). OMELKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15); Valašské Klobouky, Bílé potoky NR (20); Brumov-Bylnice, Bylničky (33); Javorník, Machová NR (69, 73).

Additional material examined. Návojná, Hluboké údolí valley (18), 31.v.2007, 2 ♂♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 25.vi., 23.viii.2006, and 17.vi.2007, 8 ♂♂, MT, O. Návojná (22), 31.v.2007, 1 ♂, SW, J. Záhorovice, Valy hill (27), 27.vi.2006, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 23.vi.2005 and 17.vi.2008, 3 ♂♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Březová, Kalábová NM (45), 29.iv. and 12.ix.2007, 3 ♂♂, MT, O; 6.viii.2008, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 17.vi.2007, 2 ♂♂, MT, O. Výškovec, Drietomice brook (50), 24.vi., 5.viii. and 30.ix.2007, 3 ♂♂, MT, K. Javorník, Filipovské údolí valley (71), 1.viii.2007, 1 ♂, SW, J.

Comments. Recorded from Bulgaria, Romania, Serbia, Czech Republic, and Slovakia. Scarce in the Czech Republic; it occurs in slope spring areas, wet meadows and pastures, forest brooks, and water wells.

***Pericoma (Pericoma) tonnoiri* Vaillant, 1978**

Published record. JEŽEK (2006a): Strání, Svinárský potok brook (78).

Additional material examined. Valašské Klobouky, Bílé potoky NR (20), 23.v.2006, 3.vi. and 22.vii.2007, 8 ♂♂, MT, O. Lopeník, Hrubý Mechnáč (46), 3.vii. and 19.vii.2006, 6 ♂♂, MT, O. Vyškovec, Drietomice brook (50), 5.viii.2007, 1 ♂, MT, K. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. Known only from Austria, Czech Republic, Greece, Slovakia, and former Yugoslavia. In the Czech Republic scarce, collected in similar habitats as the foregoing species.

***Pericoma (Pericoma) trifasciata* (Meigen, 1804)**

Material examined. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 12.viii.2007, 2 ♂♂, MT, O; 16.viii.2007, 1 ♂, SW, J. Záhorovice, Valy hill (27), 27.vi.2006, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 23.vi.2005, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 23.viii.2006, 1 ♂, MT, O. Vyškovec, Drietomice brook (50), 5.viii.2007, 1 ♂, MT, K. Sudoměřice nad Moravou, Sudoměřický potok brook (51), 27.vii.2005, 1 ♂, SW, C. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Březová, Janáčkův pramen spring (75), 20.ix.2005, 1 ♂, SW, J.

Comments. A widespread (but locally occurring) European species, associated with mosses in running water and tufa-forming habitats.

***Pericoma (Pericoma) vestita* Vaillant et Withers, 1993**

Published records. JEŽEK & OMEJKOVÁ (2007): Brumov-Bylnice, Bylnička brook (31); Brumov-Bylnice, Lazy NR (32). OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15); Brumov-Bylnice, Bylničky (33).

Additional material examined. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 3 ♂♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Lopeník, Hrubý Mechnáč (46), 7.viii.2008, 1 ♂, SW, J.

Comments. So far known only from France (VAILLANT & WITHERS 1993), Germany (JEŽEK & SCHACHT 2006), and the Czech Republic. A scarce species of slope spring areas, swampy meadows and pastures, and wells at forest margins.

***Peripsychoda auriculata* (Curtis, 1839)**

Material examined. Lipová (4), 22.vi.2005, 2 ♂♂, SW, J. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Hložec (9), 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Kulajka (10), 21.vi.2005, 1 ♂, SW, J. Valašské Klobouky (17), 20.vi.2005, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Návojná (22), 31.v.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Nevšovka brook (29), 22.vi.2005, 1 ♂, SW, J. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylnička brook (31), 23.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Lazy NR (32), 22.vi.2005, 1 ♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 23.viii.2006, 2 ♂♂, MT, O. Starý Hrozenkov, Lozky (48), 29.vi.2006, 1 ♂, SW, J. Sudoměřice nad Moravou, Sudoměřický potok brook (51), 27.vii.2005, 1 ♂, SW, C. Javorník, Filipovské údolí valley (71), 1.viii.2007, 1 ♂, SW, J. Javorník, Machová NR – Rybnický potok brook (72), 26.vi.2006 and 2.viii.2007, 2 ♂♂, SW, J.

Comments. A well-known and conspicuous European and Transcaucasian species; it occurs from lowlands to hilly regions, being very common in habitats with decaying organic matter, e.g. ponds, alluvium of brooks, forest water reservoirs, wet pastures, and eutrophic spring areas.

***Peripsychoda fusca* (Macquart, 1826) (CR)**

Published records. OMELKOVÁ *et al.* (2008): Valašské Klobouky, Bílé potoky NR (20); Brumov-Bylnice, Bylničky (33); Javorník, Machová NR (69, 73).

Additional material examined. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Kulajka (10), 21.vi.2005, 1 ♂, SW, J. Valašské Klobouky (17), 20.vi.2005, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 2 ♂♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 25.vi.2006, 1 ♂, MT, O. Návojná (22), 31.v.2007, 1 ♂, SW, J. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♂, MT, JCM. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 3 ♂♂, SW, J. Brumov-Bylnice, Hluboče NM (34), 18.vi.2008, 2 ♂♂, SW, J. Svatý Štěpán, Pláňava (38), 7.vi.2006, 1 ♂, SW, J. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 22.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 22.vi.2009, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. A European species, relatively widely distributed from the British Isles and countries along the North Sea coast to Poland and Finland in the north, and the Apennines and the Balkans in the south. However, it is only locally common and considered critically endangered in the Czech Republic. It occurs in habitats with moss polsters and leaf packs which are generally similar as in *P. auriculata*.

***Philosepedon austriacum* Vaillant, 1974**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 23.ix.2006, 1 ♂, MT, O. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Radějov, Lučina (56), 21.ix.2005, 1 ♂, SW, J. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM.

Comments. Distributed in Europe (Austria, Czech Republic, Germany, Greece, Russia, Slovakia, and Slovenia) and western Siberia. It occurs commonly in both shaded and unshaded habitats, e.g. slope spring areas and brooks from lowlands to mountains.

***Philosepedon balkanicum* Krek, 1971 (CR)**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 23.viii.2006 and 22.vii.2007, 2 ♂♂, MT, O. Starý Hrozenkov, Lozky (48), 5.viii.2007, 1 ♂, MT, K. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM.

Comments. Recorded in Bosnia and Herzegovina, Czech Republic, Germany, Slovakia, Slovenia, and Caucasus (Abkhazia) in mountain slope spring areas, avalanche grooves, and near forest wells and brooks. Critically endangered in the Czech Republic.

***Philosepedon humerale* (Meigen, 1818)**

Material examined. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J.

Comments. Generally a very common and widely distributed European species (present also in North Africa) which occurs from lowlands to mountains. It is associated with mollusc shells.

***Philosepedon perdecorum* Omelková et Ježek, 2012**

Published record. OMELKOVÁ & JEŽEK (2012b): Kněždub, Kejda pond (55) [one male paratype].

Comments. A recently described species from the Czech Republic (the environs of Dobruška in north-eastern Bohemia and the Bílé Karpaty PLA) and the Netherlands. Biology unknown.

***Philosepedon pragense* Ježek, 1997**

(VU)

Published records. JEŽEK & OMELKOVÁ (2007): Radějov, Lučina reservoir (56). OMELKOVÁ *et al.* (2008): Kněždub, Čertoryje NNR (54).

Comments. A rare species, known only from the original description (based on material from Prague) and the Bílé Karpaty PLA so far. Its biology remains unknown. Considered a vulnerable species in the Czech Republic.

***Pneumia canescens* (Meigen, 1804)**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 16.viii.2007, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 12.viii.2007, 1 ♂, MT, O; 28.viii.2008, 1 ♂, SW, J. Vyškovec, Chmelinec NR (49), 29.iv.2007, 2 ♂♂, MT, O. Vyškovec, Drietomice brook (50), 22.vii.2010, 23 ♂♂, SW, O.

Comments. A common species, widely distributed in Europe, western Siberia and Afghanistan. It occurs from lowlands to mountains, usually associated with mosses in running water habitats; its larvae are rheobiontic.

***Pneumia compta* (Eaton, 1893)**

Published records. JEŽEK & OMELKOVÁ (2007): Radějov, Lučina reservoir (56); Kněždub, Traviska (58). OMELKOVÁ *et al.* (2008): Žitková, Hutě NR (47); Kněždub, Čertoryje NNR (53, 59).

Additional material examined. Kněždub, Čertoryje NNR – Radějovka brook (59), 22.x.2010, 1 ♂, MT, MC.

Comments. A rare species known from Austria, Belgium, Czech Republic, Denmark, Germany, Great Britain, Ireland, Italy, and the Netherlands. It lives in slope spring areas, forest brooks, and water reservoirs and occurs only scarcely in the Czech Republic.

***Pneumia crispī* (Freeman, 1953)**

(EN)

Published records. OMELKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15); Valašské Klobouky, Bílé potoky NR (20); Žitková, Hutě NR (47).

Additional material examined. Valašské Klobouky, Bílé potoky NR (20), 21.x.2007, 3 ♂♂, MT, O. Březová, Kalábová NM (45), 27.viii.2008, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 22.ix.2006, 1 ♂, MT, O; 28.viii.2008, 1 ♂, SW, J. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♂, MT, JCM.

Comments. So far recorded from Bosnia and Herzegovina, Czech Republic, France, Germany, Great Britain, Greece, Hungary, Macedonia, Romania, and Slovakia. It occurs in habitats with decaying organic matter which is needed for the development of larvae, particularly leaf packs and moss polsters in spring areas and streams. Considered endangered in the Czech Republic.

***Pneumia cubitospinosa* (Jung, 1954)**

(EN)

Published records. JEŽEK (2006a): Nová Lhota, Vápenky – Hubertova chata hut (68); Strání, Javorina NNR – source of Velička brook (78).

Additional material examined. Svatý Štěpán, Chladný vrch NM (37), 24.v.2010, 1 ♂, MT, MC.

Comments. A European species known from Bosnia and Herzegovina, Czech Republic, Denmark, France, Germany, Italy, Poland, Slovakia, and Switzerland. It occurs in habitats with moss polsters and leaf packs in spring areas and near streams in hills and mountains. Endangered in the Czech Republic.

***Pneumia gracilis gracilis* (Eaton, 1893)**

Material examined. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Bílé Potoky NR (20), 16.viii.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Lopeník, Hrubý Mechnáč (46), 28.viii.2008, 1 ♂, SW, J. Žitková, Hutě NR (47), 31.vii.2007, 1 ♂, SW, J. Vyškovec, Chmelínek NR (49), 5.viii.2007, 1 ♂, MT, K. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 25.v.2010, 1 ♂, MT, MC. Nová Lhota, Hryzlácké Mlýny (65), 12.v.2009, 1 ♂, MT, JCM. Suchov, Kazivec brook (66), 2.viii.2004, 1 ♂, SW, C. Nová Lhota, Vápenky (67), 12.v. and 3.vi.2009, 2 ♂♂, MT, JCM.

Comments. The nominotypical subspecies was ascertained in eleven European countries and the Caucasus, the other subspecies, *P. gracilis kandavanica* (Ježek, 1990) was described from Iran. It lives in forest slope spring areas, brooks, and marshes.

***Pneumia kabelaki* Omelková et Ježek, 2012**

Published record. OMELKOVÁ & JEŽEK (2012a): Sidonie, Sidonie NR (35) [holotype and 12 male paratypes].

Comments. Probably an extremely rare species, so far known only from the type locality in the Bílé Karpaty PLA where only the male holotype and several paratypes were collected. Its biology remains unknown.

***Pneumia mutua* (Eaton, 1893)**

Material examined. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. A European species, distributed largely in western and central Europe and Scandinavia. In the Czech Republic, it is common especially in the Hercynicum and

particularly abundant in habitats with moss polsters and leaf packs, e.g. spring areas and in the neighbourhood of forest streams.

***Pneumia nubila* (Meigen, 1818)**

Material examined. Luhačovice, Obětová hora hill (2), 1.x.2007, 1 ♂, SW, J. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Horní Němčí, Dubníček (42), 28.vi.2006, 1 ♂, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Vyškovec, Chmelínek NR (49), 24.vi. and 5.viii.2007, 2 ♂♂, MT, K. Vyškovec, Drietomice brook (50), 22.vii.2010, 12 ♂♂, SW, O. Kněždub, Kejda pond (55), 21.ix.2005, 2 ♂♂, SW, J. Radějov, Lučina (56), 21.ix.2005, 1 ♂, SW, J. Kněždub, Traviska (58), 21.ix.2005, 1 ♂, SW, J. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (72), 26.vi.2006 and 3.x.2007, 2 ♂♂, SW, J. Strání, Záhumenice NM (74), 12.viii.2010, 1 ♂, MT, MC.

Comments. A very common species, recorded from throughout Europe and the Canary Islands. It is abundant especially in shaded habitats with decaying organic matter, e.g. ponds, brooks, spring areas, water reservoirs, and swamps.

***Pneumia palustris* (Meigen, 1804)**

Published record. JEŽEK (2006a): Nová Lhota, Vápenky – Hubertova chata hut (68).

Additional material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♂, MT, JCM. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 28.v.2007, 1 ♂, SW, J. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♂, MT, MC. Svätý Štěpán, Chladný vrch NM (37), 24.v. and 16.vi.2010, 2 ♂♂, MT, MC. Březová, Kalábová NM (45), 29.iv.2007, 2 ♂♂, MT, O. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (72), 2.viii.2007, 1 ♂, SW, J.

Comments. Widespread in Europe, the Canary Islands and Turkey in various shaded habitats with decaying organic matter and leaf packs which are needed for the development of the immature stages (as in *P. nubila*).

***Pneumia pilularia* (Tonnoir, 1940)**

Material examined. Luhačovice, Obětová hora hill (2), 1.x.2007, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 23.ix.2006, 1 ♂, MT, O. Sidonie, Sidonie NR (35), 5.v.2010, 1 ♂, MT, MC. Žitková, Hutě NR (47), 2.x.2007, 1 ♂, SW, J. Vyškovec, Drietomice brook (50), 30.ix.2007, 2 ♂♂, MT, O. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v.2010, 1 ♂, MT, MC. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (72), 3.x.2007, 1 ♂, SW, J. Strání, Záhumenice NM (74), 25.v.2010, 1 ♂, MT, MC. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. Distributed almost throughout Europe including Spain, the British Isles and Scandinavia, collected also in Algeria, Morocco, and Tajikistan, but relatively sporadic. The larvae occur in mosses in running water habitats, e.g. spring areas and brooks from lowlands to mountains.

Pneumia stammeri (Jung, 1956)

(EN)

Material examined. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Sidonie, Sidonie NR (35), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. Quite a rare European species distributed from the British Isles, countries along the North Sea coast and Scandinavia eastwards to Slovakia and the Balkans. It lives in tufa-forming habitats with moss polsters and is treated as an endangered species in the Czech Republic.

Pneumia tjentistensis (Krek, 1969)

Published records. JEZEK & OMEJKOVÁ (2007), OMEJKOVÁ *et al.* (2008): Brumov-Bylnice, Bylničky (33).
Additional material examined. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 3 ♂♂, SW, J.

Comments. So far known only from Bosnia and Herzegovina (KREK 1969) and recent records in two localities in the Bílé Karpaty PLA (both being spring areas). Apparently a scarce species in the Czech Republic. Its biology remains unknown.

Pneumia trivialis (Eaton, 1893)

Material examined. Luhačovice, Obětová hora hill (2), 1.x.2007, 1 ♂, SW, J. Nevšová, Lazy (5), 22.vi.2005, 1 ♂, SW, J. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Hložec (9), 21.vi.2005, 1 ♂, SW, J. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Lačnov, Seninka brook (11), 15.viii.2007, 1 ♂, SW, J. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Nedašov, Lapač (25), 14.viii.2007, 1 ♂, SW, J. Petruvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Záhorovice, Valy hill (27), 27.vi.2006, 1 ♂, SW, J. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♂, SW, J. Štítná nad Vlárí-Popov, Havránkův potok brook, 21.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylnička brook (31), 23.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Lazy NR (32), 23.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 2 ♂♂, SW, J. Horní Němčí, Dubníček (42), 28.vi.2006, 1 ♂, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Březová, Kalábová NM (45), 12.ix.2007, 1 ♂, MT, O; 27.viii.2008, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 28.viii.2008, 1 ♂, SW, J. Žitková, Hutě NR (47), 25.vi.2006, 1 ♂, MT, O; 31.vii.2007, 1 ♂, SW, J. Starý Hrozenkov, Lozky (48), 29.vi.2006, 1 ♂, SW, J. Vyškovec, Chmelínek NR (49), 22.vii.2007, 1 ♂, MT, O; 14.ix.2007, 1 ♂, MT, K. Vyškovec, Drietomice brook (50), 22.vii. and 12.viii.2007, 4 ♂♂, MT, O. Radějov, Lučina (56), 21.ix.2005, 1 ♂, SW, J. Kněždub (57), 21.ix.2005, 1 ♂, SW, J. Nová Lhota, Vápenky (67), 15.vii.2009, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 25.v.2010, 1 ♂, MT, MC.

Comments. A very common European species widely distributed from the Iberian Peninsula and British Isles to Poland, and from Scandinavia to the Balkans. In the Czech Republic so far documented largely from the Hercynicum. The larvae develop in both shaded and unshaded habitats with decaying organic matter (ponds, brooks, spring areas, swamps, and water reservoirs).

Promormia eatoni (Tonnoir, 1940)

(EN)

Published records. OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15); Valašské Klobouky, Bílé potoky NR (20); Kněždub, Čertoryje NNR (54).

Material examined. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 3.vii.2006, 1 ♂, MT, O. Výskovec. Chmelinec NR (49), 21.x.2007, 1 ♂, MT, O. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi.2009, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. Known from Europe (Belgium, Germany, Denmark, Czech Republic, Slovakia, Austria, Bosnia and Herzegovina, and Greece) but it is generally quite rare. The adults were collected in slope spring areas, in wet pastures and in the neighbourhood of forest brooks; sometimes together with *P. silesiensis*. Considered endangered in the Czech Republic.

***Promormia silesiensis* Ježek, 1983**

(CR)

Published records. OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Bílé potoky NR (20); Brumov-Bylnice, Bylničky (33).

Material examined. Valašské Klobouky, Bílé potoky NR (20), 25.vi.2006 and 3.vi.2007, 3 ♂♂, MT, O. Petrůvka, Kladenka brook (26), 3.vi.2008, 2 ♂♂, MT, JCM. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♂, SW, J. Výskovec, Drietomice brook (50), 11.vi.2010, 2 ♂♂, MT, O. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi. and 22.vi.2009, 2 ♂♂, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. So far collected only in the Czech Republic, Greece, Slovenia, and Slovakia. A critically endangered species in the Czech Republic; sometimes collected together with *P. eatoni* in the same habitats.

***Psycha grisescens* (Tonnoir, 1922)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (20), 22.vii.2007, 2 ♂♂, MT, O. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♀, MT, JCM. Štítná nad Vláří-Popov, Havránkův potok brook, 21.vi.2005, 1 ♀, SW, J. Sidonie, Sidonie NR (35), 5.v.2010, 1 ♂, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v. and 16.vi.2010, 1 ♂ 1 ♀, MT, MC. Březová, Kalábová NM (45), 6.viii.2008, 1 ♀, SW, J. Lopeník, Hrubý Mechnáč (46), 22.ix.2006, 1 ♂, MT, O. Žitková, Hutě NR (47), 11.vi.2010, 3 ♂♂, SW, O. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 2 ♀♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v.2009, 1 ♀, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi., and 15.vii.2009, 2 ♂♂ 2 ♀♀, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♀, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 5.v., 15.vi. and 12.viii.2010, 1 ♂ 2 ♀♀, MT, MC. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♀, MT, JCM. Strání, Javorina NNR – peak (77), 13.v.2009, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♀, MT, JCM.

Comments. A European species, distributed from the British Isles and Scandinavia eastwards to Lithuania and central Anatolia, present also in North Africa. The larvae are saprobiontic; adults are sometimes found in sheaths of *Arum maculatum* which they pollinate, together with *Psychoda phalaenoides*.

***Psychoda crassipennis* Tonnoir, 1940**

Published records. JEŽEK (2009b): Petrůvka, U Petrůvky NM (3); Petrůvka, Kladenka brook (26); Horní Němčí, Luh (44); Nová Lhota, Vápenky (67).

Comments. A European species distributed from the British Isles over the Atlantic coast to Scandinavia, scarcely found also in the Czech Republic. It lives in the littoral zone of polluted water reservoirs and swampy areas and in sewage water. Some females were recorded in sheaths of *Arum cylindraceum* as pollinators (in Horní Němčí, Luh – canyon of the Okluky brook).

***Psychoda phalaenoides* (Linné, 1758)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Nevšová, Lazy (5), 22.vi.2005, 1 ♀, SW, J. Valašské Klobouky, Bílé potoky NR (20), 25.vi. and 23.viii.2006, 2 ♂♂, MT, O; 16.viii.2007, 1 ♀, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Bojkovice, Bažantnice pond (28), 27.vi.2006, 1 ♀, SW, J. Brumov-Bylnice, Bylnička brook (31), 23.vi.2005, 2 ♀♀, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♀, SW, J. Brumov-Bylnice, Hluboče NM (34), 18.vi.2008, 1 ♀, SW, J. Sidonie, Sidonie NR (35), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v. and 16.vi.2010, 1 ♂ 1 ♀, MT, MC. Horní Němčí, Dubníček (42), 28.vi.2006, 1 ♀, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♀, SW, J. Březová, Kalábová NM (45), 6.viii.2008, 1 ♀, SW, J. Lopeník, Hrubý Mechnáč (46), 22.vii.2007, 1 ♂, MT, O; 7. and 28.viii.2008, 1 ♂ 1 ♀, SW, J. Vyškovec, Drietomice brook (50), 22.vii.2007, 1 ♂, MT, O. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 1 ♂ 1 ♀, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 25.vi.2009 and 5.v.2010, 2 ♂♂ 1 ♀, MT, JCM and MC. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 2 ♀♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 1 ♂ 1 ♀, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi., and 15.vii.2009, 3 ♂♂ 1 ♀, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (72), 3.x.2007, 1 ♀, SW, J. Javorník, Machová NR (73), 9.vii.2007, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 5.v., 25.v., 15.vi., and 12.viii.2010, 4 ♂♂, MT, MC. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♀, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. A Holarctic polyvoltine species (with several generations per year), very common: known from lowlands to mountains. Adults are sometimes closed in sheaths of *Arum maculatum* together with *Psycha grisescens* and some other pollinator species. The larvae are saprobiontic.

***Psychoda uniformata* Haseman, 1907**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 25.v. and 15.vi.2010, 2 ♀♀, MT, MC.

Comments. A Holarctic species, recorded from Austria, Czech Republic, Italy, Slovenia, Greece, Turkey, Iran, Israel, Mongolia, and the USA. The larvae are saprobiontic, the adults inhabit animal sheds, stables and dog kennels.

***Psychodocha cinerea* (Banks, 1894)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Valašské Klobouky, Bílé potoky NR (20), 23.viii.2006, and 21.x.2007, 2 ♂♂ 1 ♀, MT, O; 16.viii.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Sidonie, Sidonie NR (35), 5. and 25.v.2010, 1 ♂ 1 ♀, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♀, MT, MC. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR (54), 31.vii.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5. and 25.v.2010, 2 ♀♀, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 2.vi. and 25.vi.2009, 5.v.2010, 3 ♀♀, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 1 ♂ 1 ♀, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi. and 15.vii.2009, 3 ♂♂ 1 ♀, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♀, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♀, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♀, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 5.v., 15.vi. and 12.viii.2010, 3 ♀♀, MT, MC. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♀, MT, JCM.

Comments. A cosmopolitan species, very common from lowlands to mountains. The larvae are associated with fungi and saprobiontic, the adults are often found in unclean toilets.

***Psychodocha gemina* (Eaton, 1904)**

Material examined. Luhačovice, Obětová hora hill (2), 1.x.2007, 1 ♀, SW, J. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Lipová (8), 22.vi.2005, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR (15), 20.vi.2005 and 28.v.2007, 2 ♀♀, SW, J. Valašské Klobouky, Bílé potoky NR (20), 25.vi., 19.vii., 23.viii.2006 and 21.x.2007, 16 ♂♂ 1 ♀, MT, O; 5.vi.2006 and 16.viii.2007, 3 ♀♀, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♀, MT, JCM. Sidonie, Sidonie NR (35), 5. and 25.v.2010, 1 ♂ 1 ♀, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v. and 16.vi.2010, 1 ♂ 1 ♀, MT, MC. Sidonie, Mlýn (40), 30.v.2007, 1 ♀, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♀, SW, J. Horní Němčí, Luh (44), 28.vi.2006, 1 ♂, SW, J. Březová, Kalábová NM (45), 6.viii.2008, 1 ♀, SW, J. Lopeník, Hrubý Mechnáč (46), 25.vi., 22.ix.2006 and 17.vi.2007, 3 ♂♂, MT, O. Žitková, Hutě NR (47), 23.viii.2006, 1 ♂, MT, O. Vyškovec, Chmelínek NR (49), 17.v.2007, 1 ♂, MT, O. Vyškovec, Drietomice brook (50), 22.vii., 12.viii. and 22.x.2007, 10 ♂♂ 1 ♀, MT, O. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR (54), 31.vii.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 1 ♂ 1 ♀, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 2.vi., 25.vi.2009 and 5.v.2010, 2 ♂♂ 2 ♀♀, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 2 ♀♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 2 ♂♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi. and 15.vii.2009, 1 ♂ 3 ♀♀, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♀, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♀, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♀, MT, MC. Javorník, Machová NR – Rybnický potok brook (72), 3.x.2007, 1 ♀, SW, J. Javorník, Machová NR (73), 9.vii.2007, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 5.v., 25.v., 15.vi. and 12.viii.2010, 4 ♀♀, MT, MC. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♂, MT, JCM. Strání, Javorina NNR – peak (77), 3.vi.2009, 1 ♀, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♀, MT, JCM.

Comments. A European species known from many countries; it commonly occurs from lowlands to mountains. The larvae are saprobiontic and often develop in nests of water birds.

***Psychodocha itoco* (Tokunaga et Komyo, 1955)**

Material examined. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. Known only from Japan, Czech Republic, and Finland. Its biology is unknown. Further field work is needed to assess its conservation status in the Czech Republic.

***Psychodula minuta* (Banks, 1894)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♂, MT, JCM. Valašské Klobouky, Bílé potoky NR (20), 23.viii.2006 and 12.viii.2007, 4 ♂♂, MT, O. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♀, MT, JCM. Sidonie, Sidonie NR (35), 5.v. and 25.v.2010, 1 ♂ 1 ♀, MT, MC. Svatý Štěpán, Chladný vrch NM(37), 24.v. and 16.vi.2010, 1 ♂ 1 ♀, MT, MC. Vyškovec, Drietomice brook (50), 22.vii.2010, 21 ♂♂, SW, O. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR (54), 31.vii.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 25.vi.2009, 2 ♂♂, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 1 ♂ 1 ♀, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 1 ♂ 1 ♀, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi. and 15.vii.2009, 1 ♂ 3 ♀♀, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♀, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♀, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 5.v., 25.v., 15.vi. and 12.viii.2010, 2 ♂♂ 2 ♀♀, MT, MC. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♀, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♀, MT, JCM.

Comments. A generally common Holarctic species, recorded from many countries. It occurs from lowlands to mountains. The larvae are saprobiontic and may be found on guano in caves as well.

***Psychomora mycophila* (Vaillant, 1988)**

Material examined. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♂, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♂, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 2.vi.2009, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 2 ♂♂, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♂, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 25.v. and 15.vi.2010, 2 ♂♂, MT, MC.

Comments. A rare species, so far known only from France, Czech Republic, Slovakia, Slovenia, and Switzerland. It occurs from lowlands to mountains. Its larvae are associated with fungi.

***Psychomora trinodulosa* (Tonnoir, 1922)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Petrůvka, Kladenska brook (26), 3.vi.2008, 1 ♂, MT, JCM. Sidonie, Sidonie NR (35), 5. and 25.v.2010, 2 ♂♂, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v. and 16.vi.2010, 2 ♀♀, MT, MC. Lopeník, Hrubý Mechnáč (46), 23.viii.2006, 1 ♂, MT, O. Vyškovec, Drietomice brook (50), 22.vii.2010, 17 ♂♂, SW, O. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR – Radějovka brook (59), 5.v. and 25.v.2010, 2 ♂♂, MT, MC. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008,

1 ♀, MT, JC. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 25.vi.2009, 1 ♂ 1 ♀, MT, JCM. Javorník, Jazevčí NNR (63, 64), 25.vi.2009, 2 ♀♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 2 ♂♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 22.vi. and 15.vii.2009, 1 ♂ 2 ♀♀, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JC. Javorník, Machová NR (69), 14.vi.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 5.v., 25.v., 15.vi. and 12.viii.2010, 4 ♂♂, MT, MC. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♀, MT, JCM.

Comments. A Holarctic species, very common, known from various altitudes. It is a vector of larval stages of *Rhabditis* nematodes and Gamasidae mites.

***Psychomormia vaillantii* (Wagner, 1977) (CR)**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 23.viii.2006, 2 ♂♂, MT, O.

Comments. So far known only from Germany (original description) and western Bohemia (open-cast coal mines and spoil dumps in the environs of Sokolov – JEŽEK 1996, 1999a). In the Bílé Karpaty PLA, it was found in a tufa-forming spring fen. A critically endangered species in the Czech Republic, recorded here for the first time for Moravia.

***Sciria advena* (Eaton, 1893) (CR)**

Material examined. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 2 ♂♂, MT, JCM.

Comments. A rare species, known from France, Germany, Great Britain, Ireland, and Czech Republic (considered here critically endangered). The larvae are associated with dendrothelmae, largely in virgin floodplain forests. The adults are collected in swampy inundation areas and in the neighbourhood of brooks.

***Sycorax silacea* Curtis, 1839**

Material examined. Návojná, Hluboké údolí valley (18), 31.v.2007, 1 ♂, SW, J. Svatý Štěpán, Pláňava (38), 7.vi.2006, 1 ♂, SW, J.

Comments. Distributed in western (including the British Isles) and central Europe, Scandinavia, the Apennines and the Balkan Peninsula, locally common. It was collected in spring areas, in mosses in running water habitats, sources, forest rills, and in the neighbourhood of streams.

***Taramormia caspersi* (Wagner, 1977)**

Published records. JEŽEK (2009b): Javorník, Jazevčí NNR (63, 64); Nová Lhota, Hryzlácké Mlýny (65).

Additional material examined. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. Previously known only from the holotype collected in Germany (Bonn am Rhein), recently published also from the Bílé Karpaty PLA by JEŽEK (2009b). It was found in brooks at forest margins and in swampy meadows and pastures.

***Taramormia pulcherrima* (Wagner, 1979) (CR)**

Published records. JEŽEK (2009b): Petrůvka, Kladenska brook (26); Brumov-Bylnice, Bylničky (33); Svatý Štěpán, Hluboče NM (34); Sidonie, Mlýn (40).

Additional material examined. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. A rare species, originally described on the basis of three specimens from Germany (Hessen) and Austria (Lunz am See). Known also from the Czech Republic from the environs of Prague (JEŽEK 1997) and recently also from the Bílé Karpaty PLA. It lives in meadow spring areas, water seepages in beech forests, and brooks. A critically endangered species in the Czech Republic.

***Taramormia tatrica* Ježek, 1984**

Published records. JEŽEK & OMELKOVÁ (2007), OMELKOVÁ *et al.* (2008): Kněždub, Čertoryje NNR – Járkovec brook (53).

Additional material examined. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Javorník, Jazevčí NNR (63), 25.vi. and 15.vii.2009, 2 ♂♂, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 22.vi.2009, 1 ♂, MT, JCM.

Comments. So far only two males from Slovakia (Tatra Mts.; JEŽEK 1984) and one specimen from the Bílé Karpaty PLA (JEŽEK & OMELKOVÁ 2007, OMELKOVÁ *et al.* 2008) have been recorded. The species seems to be scarce in the Czech Republic and inhabits hygropetric habitats, meadow spring areas, and brooks.

***Telmatoscopus britteni* Tonnoir, 1940 (EN)**

Published records. JEŽEK & OMELKOVÁ (2007): Nevšová, Uhliska hill (6); Brumov-Bylnice, Hložec (9); Brumov-Bylnice, Bylnička brook (31); Javorník, Machová NR (70). OMELKOVÁ *et al.* (2008): Valašské Klobouky, Javorůvky NR (15); Brumov-Bylnice, Bylničky (31, 33), Javorník, Machová NR (70).

Additional material examined. Návojná, Hluboké údolí valley (18), 31.v.2007, 2 ♂♂, SW, J. Návojná (22), 31.v.2007, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM.

Comments. Quite a rare species known from the Czech Republic, France, Germany, Great Britain, Hungary, Italy, Serbia, Montenegro, Slovenia, and Switzerland. It is usually found in hygropetric habitats and in mosses in running water, in spring areas and alluvium of brooks. Endangered in the Czech Republic.

***Telmatoscopus carpathicus* Ježek, 1988 (VU)**

Material examined. Nová Lhota – Vápenky (67), 3.vi.2009, 1 ♂, MT, JCM.

Comments. An extremely rare species, so far known only from Slovakia (Vysoké Tatry Mts.) and the Czech Republic (Jeseníky Mts.). It inhabits slope spring areas of mountain forest glades and alluvium of streams. Considered vulnerable in the Czech Republic.

***Telmatoscopus carthusianus* (Vaillant, 1972)**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 5.vi.2006, 1 ♂, SW, J. Sidonie, Mlýn (40), 30.v.2007, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♂, SW, J. Kněždub, Čertoryje NNR – Radějovka brook (59), 25.v.2010, 1 ♂, MT, MC. Javorník, Jazevčí NNR (63), 25.vi.2009, 2 ♂♂, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. Known from Czech Republic, France, Germany, Poland, Slovakia, and Slovenia. It occurs in forest spring areas, swampy meadows, streams, and brooks from lowlands to mountains.

***Telmatoscopus gressicus* (Vaillant, 1972)**

Material examined. Valašské Klobouky, Bílé potoky NR (20), 5.vi.2006, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♂, MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♂, SW, J. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♂, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 2 ♂♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC.

Comments. A European species known from Austria, Czech Republic, France, and Poland. It was found in the same habitats as *T. carthusianus* but is common only locally.

***Threticus balkaneolpinus* Krek, 1972**

Published records. JEŽEK & OMEJKOVÁ (2007), OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Bílé potoky NR (20).

Additional material examined. Valašské Klobouky, Bílé potoky NR (20), 23.v.2006, 1 ♂ MT, O. Návojná (22), 31.v.2007, 1 ♂, SW, J. Nedašov, Lapač (25), 14.viii.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Sidonie, Kopanice (36), 30.v.2007, 1 ♂, SW, J. Vyškovec, Chmelinec NM (49), 17.v. and 21.x.2007, 7 ♂♂, MT, O.

Comments. Known from Austria, Bosnia, Czech Republic, France, Germany, Slovakia, and Transcaucasia. In central Europe, the larvae are probably associated with treeless tufa-forming fens in spring areas; the adults were collected in the neighbourhood of brooks and streams.

***Threticus incurvus* Krek, 1972**

(EN)

Published records. OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Bílé potoky NR (20); Kněždub, Čertoryje NNR (53, 59).

Additional material examined. Valašské Klobouky, Bílé potoky NR (20), 23.v. and 25.vi.2006, 4 ♂♂, MT, O. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v. and 3.vi.2009, 2 ♂♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC.

Comments. A rare species, recorded from Austria, Bosnia, Bulgaria, Czech Republic, Germany, Slovakia, and Switzerland. It was found in various habitats (mountain slope spring areas, wet rocks, sandstones, forest margins, wallows, small brooks, banks of rivers, rills, and swampy meadows).

***Tinearia alternata* (Say, 1824)**

Material examined. Javorník, Machová NR (73), 9.vii.2007, 1 ♀, MT, JCM. Strání, Záhumenice NM (74), 15.vi.2010, 1 ♂, MT, MC.

Comments. A cosmopolitan species, generally very common. The larvae are saprobiontic, psammobiontic, coprobiontic, or associated with fungi; they develop in organic matter in spring areas, brooks, wet meadows, and excrements. In cases of their mass occurrence, the larvae can block the function of older biological filters in gravel sewage works.

***Tinearia lativentris* (Berdén, 1952)**

Material examined. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Javorník, Jazevčí NNR (63), 25.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 22.vi.2009, 1 ♀, MT, JCM. Nová Lhota, Vápenky (67), 15.vii.2009, 1 ♀, MT, JCM.

Comments. A Holarctic species, common in similar habitats as *T. alternata*. The larvae are saprobiontic.

***Tonnoiriella sieberti* Wagner, 1993**

(EN)

Material examined. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 17.vi.2007, 1 ♂, MT, O. Brumov-Bylnice, Bylničky – Heriánův láz (33), 17.vi.2008, 1 ♂, SW, J. Březová, Kalábová NM (45), 6.viii.2008, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 25.vi. and 23.viii.2006, 12.viii.2007, 14 ♂♂, MT, O; 7.viii. and 28.viii.2008, 2 ♂♂, SW, J. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Březová, Janáčkův pramen spring (75), 20.ix.2005, 1 ♂, SW, J.

Comments. Generally a rare species, known from Albania, Macedonia, Greece, Czech Republic, Slovakia, and Syria; considered endangered in the Czech Republic. It may be found in swamps, rills, irrigation furrows in arable land, polluted water of fire reservoirs, slope spring areas in hills and mountains, and brooks with organic matter.

***Trichomyia urbica* Curtis, 1839**

(CR)

Material examined. Valašské Klobouky, Bílé potoky NR (20), 3.vi.2007, 2 ♂♂, MT, O. Svatý Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♂, MT, MC. Vyškovec (50), 22.vii.2010, 1 ♂, SW, O.

Comments. Collected in many European countries (JEŽEK 2003). The larvae are xylophagous and occur in shaded slope spring areas and some other habitats with decaying organic matter. A critically endangered species in the Czech Republic.

***Trichopsychoda hirtella* (Tonnoir, 1919)**

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Valašské Příkazy (13), 6.vi.2006, 1 ♀, SW, J. Valašské Klobouky, Javorůvky NR (15), 31.vii.2004, 1 ♂, SW, C. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♀, SW, J. Valašské Klobouky, Bílé potoky NR (20), 23.viii.2006, 1 ♂, MT, O; 16.viii.2007, 1 ♂, 1 ♀, SW, J. Návojná (22), 31.v.2007, 1 ♀, SW, J. Brumov-Bylnice, Lazy NR (32), 23.vi.2005, 1 ♀, SW, J. Svatý

Štěpán, Chladný vrch NM (37), 16.vi.2010, 1 ♀, MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Sidonie, Vlárský průsmyk pass (41), 30.v.2007, 1 ♂, SW, J. Horní Němčí (43), 28.vi.2006, 1 ♂, SW, J. Žitková, Hutě NR (47), 31.vii.2007, 1 ♂, SW, J; 11.vi.2010, 1 ♂, SW, O. Radějov, Žerotín NM (52), 5.viii.2008, 1 ♂, MT, JCM. Kněždub, Čertoryje NNR – Járkovec brook (53), 29.v.2006, 1 ♀, MT, JCM. Kněždub, Čertoryje NNR (54), 31.vii.2006, 1 ♀, MT, JCM. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Javorník, Jazevěčí NNR (63), 25.vi. and 15.vii.2009, 2 ♀♀, MT, JCM. Javorník, Jazevěčí NNR (64), 25.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 22.vi.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky (67), 3.vi., 22.vi. and 15.vii.2009, 3 ♀♀, MT, JCM. Javorník, Machová NR (69), 14.vi.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR (73), 9.vii.2007, 1 ♂, MT, JCM. Strání, Záhumenice NM (74), 25.v., 15.vi. and 12.viii.2010, 3 ♂♂, MT, MC.

Comments. Generally a common species, distributed from the British Isles to central Europe, the Apennines and the Balkans. The larvae are frequent in the rests of rotten plants and decayed fruits. The adults are often numerous in Malaise and yellow pan traps.

Ulomyia annulata annulata (Tonnoir, 1919)

Material examined. Kněždub, Kejda pond (55), 21.ix.2005, 1 ♂, SW, J. Javorník, Jazevěčí NNR (63), 25.vi.2009, 1 ♂, MT, JCM.

Comments. So far known from Belgium, Germany, Czech Republic, Slovakia, Lithuania, and Russia (western Siberia – Novosibirsk region; another subspecies, *U. a. chimganensis* Ježek, 1997, was described from Uzbekistan). It inhabits shaded but sometimes also unshaded habitats with decaying organic matter, e.g. ponds, water reservoirs, swamps, rills, and wet meadows.

Ulomyia cognata (Eaton, 1893)

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♂, MT, JCM. Študlov, Požár hill (14), 6.vi.2006, 1 ♂, SW, J. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 16.viii.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Sidonie, Sidonie NR (35), 5.v.2010, 1 ♂, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v. and 16.vi.2010, 2 ♂♂, MT, MC. Lopeník, Hrubý Mechnáč (46), 7.viii. and 28.viii.2008, 2 ♂♂, SW, J. Žitková, Hutě NR (47), 31.vii.2007, 1 ♂, SW, J. Vyškovec, Drietomice brook (50), 5.viii., 12.viii., 30.ix.2007, 7 ♂♂, MT, O. K. Nová Lhota, Vápenky (67), 12.v.2009, 1 ♂, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (72), 2.viii.2007, 1 ♂, SW, J. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. Widely distributed in Europe (known from France, Germany, Great Britain, Austria, Czech Republic, Slovakia, Poland, Lithuania, Slovenia, and Italy). Very common from lowlands to mountains in mosses in running water and in hygropetric habitats with decayed leaf packs.

Ulomyia fuliginosa (Meigen, 1804)

Material examined. Luhačovice, Gáborka brook (1), 30.vii.2007, 1 ♂, SW, J. Haluzice (7), 22.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Hložec (9), 21.vi.2005, 1 ♂, SW, J. Lačnov, Seninka brook (11), 15.viii.2007, 1 ♂, SW, J. Horní Lideč, Lačnovské rybníky ponds (12), 15.viii.2007, 1 ♂, SW, J. Valašské Klobouky, Javorůvky NR

Moth flies (Diptera: Psychodidae)

(15), 31.vii.2004 and 28.v.2007, 2 ♂♂, SW, C, J. Poteč, Ploštiny NR (19), 6.vi.2006, 1 ♂, SW, J. Valašské Klobouky, Bílé potoky NR (20), 23.v.2006, 3 ♂♂, MT, O; 5.vi.2006 and 16.viii.2007, 3 ♂♂, SW, J. Brumov-Bylnice, Hložec (21), 21.vi.2005, 1 ♂, SW, J. Návojná (22), 31.v.2007, 1 ♂, SW, J. Nedašov, Jalovcová stráž NR (23), 14.viii.2007, 1 ♂, SW, J. Nedašov, Lapač (25), 14.viii.2007, 1 ♂, SW, J. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂, MT, JCM. Záhorovice, Valy hill (27), 27.vi.2006, 1 ♂, SW, J. Brumov-Bylnice, Bylnička brook (31), 23.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Lazy NR (32), 23.vi.2005, 1 ♂, SW, J. Brumov-Bylnice, Bylničky – Heriánův láz (33), 23.vi.2005, 1 ♂, SW, J. Svatý Štěpán, Hluboče NM (34), 18.vi.2008, 1 ♂, SW, J. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♂, MT, MC. Svatý Štěpán, Chladný vrch NM (37), 24.v.2010, 1 ♂, MT, MC. Sidonie (39), 30.v.2007, 1 ♂, SW, J. Horní Němčí, Dubníček (42), 28.vi.2006, 1 ♂, SW, J. Březová, Kalábová NM (45), 29.iv.2007, 4 ♂♂, MT, O; 27.viii.2008, 1 ♂, SW, J. Lopeník, Hrubý Mechnáč (46), 7.viii. and 28.viii.2008, 2 ♂♂, SW, J. Žitková, Hutě NR (47), 31.vii. and 2.x.2007, 3 ♂♂, SW, J. Výškovec, Chmelínek NR (49), 5.viii.2007, 5 ♂♂, MT, K. Výškovec, Drietomice brook (50), 5.viii. and 30.ix.2007, 6 ♂♂, MT, K, O. Kněždub, Kejda pond (55), 21.ix.2005, 1 ♂, SW, J. Kněždub, Traviska (58), 21.ix.2005, 1 ♂, SW, J. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi., 15.vii.2009, 4 ♂♂, MT, JCM. Nová Lhota, Vápenky – Hubertova chata hut (68), v.2005, 1 ♂, MT, JCM. Javorník, Machová NR – Rybnický potok brook (70), 24.v.2010, 1 ♂, MT, MC. Javorník, Machová NR – Rybnický potok brook (72), 26.vi.2006 and 2.viii.2007, 2 ♂♂, SW, J. Březová, Janáčkův pramen spring (75), 20.ix.2005, 1 ♂, SW, J. Strání, Svinárský potok brook (76), 29.viii.2005, 1 ♂, MT, JCM. Strání, Javorina NNR (78), 4.v.2005, 1 ♂, MT, JCM.

Comments. Generally one of the most common European species, widely distributed, known from throughout nearly whole Europe, although records from eastern Europe have been scarce so far (e.g. Lithuania). It occurs from lowlands to mountains, in mosses in running water habitats with decaying organic matter, slope spring areas, banks of streams and brooks, outflows of ponds, cutoffs of rivers, marshes, swampy meadows, and forest pools.

Yomormia furva (Tonnoir, 1940)

Published records. JEŽEK (2006b): Brumov-Bylnice, Kulajka (10). OMEJKOVÁ *et al.* (2008): Valašské Klobouky, Bílé potoky NR (20).

Comments. So far recorded only from Abkhazia, Belgium, Germany, Great Britain, and Czech Republic where it is scarce. It inhabits erosive furrows in beech forests, rills, and slope spring areas.

Ypsydocha setigera (Tonnoir, 1922)

Material examined. Petrůvka, U Petrůvky NM (3), 3.vi.2008, 1 ♀, MT, JCM. Petrůvka, Kladenka brook (26), 3.vi.2008, 1 ♂ 1 ♀, MT, JCM. Sidonie, Sidonie NR (35), 25.v.2010, 1 ♀, MT, MC. Hrubý Mechnáč (46), 17.vi.2007, 1 ♂, MT, O. Radějov, Kútky NR – Mandát brook (60), 4.vi.2008, 1 ♀, MT, JCM. Radějov, Kútky NR (61), 26.vi.2008, 1 ♀, MT, JCM. Velká nad Veličkou, Zahrady pod Hájem NNR (62), 25.vi.2009, 1 ♂, MT, JCM. Javorník, Jazevčí NNR (64), 25.vi.2009, 2 ♀♀, MT, JCM. Nová Lhota, Hryzlácké Mlýny (65), 12.v. and 22.vi.2009, 1 ♂ 1 ♀, MT, JCM. Nová Lhota, Vápenky (67), 12.v., 3.vi., 22.vi. and 15.vii.2009, 1 ♂ 3 ♀♀, MT, JCM. Strání, Záhumence NM (74), 5.v., 25.v. and 15.vi.2010, 1 ♂ 2 ♀♀, MT, MC.

Comments. A very common Holarctic species. It is a vector of larval stages of *Rhabditis* nematodes and Gamasidae mites. The larvae are saprobiontic and occur e.g. in manure.

Discussion and conclusions

Until recently, the Diptera fauna of the White Carpathians was inadequately known. Our inventory research of Psychodidae in 78 localities, restricted to the Moravian part of the mountains and mostly included in the Bílé Karpaty PLA, produced interesting results. A total of 108 species from 39 genera were recorded, i.e. 63% of the moth fly species recorded in the Czech Republic (172 species) and 72% of the species known from Moravia (151 species, both figures after JEŽEK *et al.* 2012). This is a somewhat higher number of species than has been recorded in similar faunistic surveys of other natural areas in the Czech Republic, i.e. the Jeseníky Mts (78 spp. collected in 226 localities; JEŽEK 2006b), the Orlické hory Mts. (66 spp. from 145 localities; JEŽEK & HÁJEK 2007), the Jizerské hory Mts and Frýdlant region (78 spp. from 79 localities; JEŽEK *et al.* 2008), the subalpine zone of the Krkonoše Mts. (23 spp. from 15 localities; JEŽEK *et al.* 2010), the Kokořínsko PLA (39 spp., recorded only by sweep-netting, from 36 localities; JEŽEK 2006c), the Pálava Biosphere Reserve (51 spp. from 41 localities; JEŽEK 1999b), the Podyjí National Park (64 spp. from 25 localities; JEŽEK *et al.* 2005), and the industry-affected region of Duchcov and the environs of Bílina (47 spp. from 7 localities; JEŽEK & BARTÁK 2000).

From a biogeographical viewpoint, the moth fly fauna of the White Carpathians represents a mix of prevalingly European (76 spp., 70%, of which 13 species [17%] are known to date only from central Europe), European-western Siberian (7 species, 6.5%), sub-Mediterranean (10 spp., 9%), Eurasian (1 sp.; 1%), Palaearctic (3 spp., 2.8%), Holarctic (8 spp., 7.5%), and cosmopolitan elements (3 spp., 2.8%). The general distribution of many Psychodidae species is, however, still incompletely recorded. Some of them have been known from very limited areas (usually comprising only a few countries) to date and are generally very rare, e.g. *Psychomormia vaillanti*, *Taramormia caspersi*, *T. pulcherrima*, *T. tatríca*, *Jungiella (Jungiella) hygrophila*, *J. (J.) jadarica*, *J. (J.) laetabilis*, *J. (J.) septentrionalis*, *J. (Psychocha) hassiaca*, *Telmatoscopus carpathicus*, *Chodopsycha buxtoni*, *Psychodocha itoco*, *Berdeniella vimmeri*, *Clytocerus (Boreoclytocerus) longicorniculatus*, *C. (B.) splendidus*, *C. (B.) tetracorniculatus*, *Pericoma (Pericoma) ljubiniensis*, *P. (P.) pallida*, *P. (P.) vestita*, *Philosepedon perdecorum*, and *Pneumia tjentistensis*. Three species have not yet been found outside the Czech Republic (*Parajungiella prikryli*, *Philosepedon pragense*, *Pneumia kabelaki*, and *Berdeniella kocii*).

Two species from the subfamily Psychodinae, *Psychomormia vaillanti* and *Apsycha pusilla* are reported in this paper for the first time from Moravia (i.e. they were previously known in the Czech Republic only from Bohemia). Two species, *Philosepedon perdecorum* and *Pneumia kabelaki* have recently been described based on material from the Bílé Karpaty PLA as new for science (OMELKOVÁ & JEŽEK 2012a,b).

Ulomyia fuliginosa and *Psychodocha gemina* were the most frequently collected species in the Bílé Karpaty PLA (both found in 35 localities), followed by *Psychoda phalaenoides* (32 localities), *Pneumia trivialis* (29 localities), and *Pericoma (Pachy-pericoma) blandula* (27 localities). In contrast, the following twelve species were collected at only one locality: *Apsycha pusilla*, *Berdeniella unispinosa*, *Clytocerus (Boreoclytocerus) tetracorniculatus*, *Jungiella (Jungiella) jadarica*, *Philosepedon humerale*, *P. perdecorum*, *P. pragense*, *Pneumia kabelaki*, *Psychodocha itoco*, *Psychomormia vaillanti*, *Sciria advena*, and *Telmatoscopus carpathicus*.

The highest numbers of psychodid species were recorded in the following localities: Valašské Klobouky – Bílé potoky NR (42 species), Nová Lhota – Vápenky (40 spp.), Petrůvka – Kladenka brook (38 spp.), Kněždub – Čertoryje NNR (38 spp.), Strání – Záhumenice NM (37 spp.), Javorník – Machová NR (35 spp.), Javorník – Jazevčí NNR (34 spp.), Lopeník – Hrubý Mechnáč (33 spp.), and Strání – Javorina NNR (26 spp.). A single psychodid species was collected at four localities (Březová – Janáčkův pramen spring, Nedašov – Kaňoury NM, Svatý Štěpán – between Okrajky and Pláňavy, and Kněždub – between Šumárník and Výzkum hills).

The fauna of the Psychodidae of the Bílé Karpaty PLA is particularly noteworthy for a high proportion of species considered threatened in the Czech Republic (JEŽEK 2005). Specifically, we recorded 13 species classified as critically endangered in the national Red List of threatened invertebrates (*Clytocyclus (Boreoclytocyclus) tetracorniculatus*, *Jungiella (Psychocha) laminata*, *Lepiseodina tristis*, *Oomormia andrenipes*, *Parajungiella pseudolongicornis*, *P. serbica*, *Peripsychoda fusca*, *Philosepedon balkanicum*, *Promormia silesiensis*, *Psychomormia vaillanti*, *Sciria advena*, *Taramormia pulcherrima*, and *Trichomyia urbica*), nine species classified as endangered (*Panimerus albifacies*, *Pericoma (Pericoma) exquisita*, *Pneumia crispus*, *P. cubitospinosa*, *P. stammeri*, *Promormia eatoni*, *Telmatoscopus brittani*, *Threticus incurvus*, and *Tonnoiriella sieberti*), and four species classified as vulnerable (*Atrichobrunettia (Mirusiella) graeca*, *Parajungiella prikryli*, *Philosepedon pragense*, and *Telmatoscopus carpathicus*). Furthermore, 28 additional species have not been assessed for the Red List by JEŽEK (2005) as they have largely been documented from the Czech Republic only in very recent years. They appear, however, scarce in the country and are considered here as candidate species for the Red List: *Apsycha pusilla*, *Berdeniella kocii*, *Chodopsycha buxtoni*, *Clytocyclus (Boreoclytocyclus) longicorniculatus*, *C. (B.) splendidus*, *Jungiella (Jungiella) jadarica*, *J. (J.) laetabilis*, *J. (J.) septentrionalis*, *J. (Psychocha) hassiaca*, *Lepiseodina rothschildi*, *Mormia revisenda*, *Paramormia (Phyllotelmatoscopus) acuta*, *Pericoma (Pachypericoma) formosa*, *P. (Pericoma) ljubiniensis*, *P. (P.) pallida*, *P. (P.) pannonica*, *P. (P.) pingarestica*, *P. (P.) tonnoiri*, *P. (P.) vestita*, *Philosepedon perdecorum*, *Pneumia compta*, *P. kabelaki*, *P. tjentistensis*, *Psychoda crassipennis*, *Psychodocha itoco*, *Taramormia caspersi*, *T. tatraca*, and *Yomormia furva*. The most valuable localities in the Bílé Karpaty PLA from the viewpoint of the occurrence of threatened and rare species are the Bílé potoky NR near Valašské Klobouky (number 20 in the list of collecting sites), Nová Lhota – Vápenky (site no. 67), Petrůvka – Kladenka brook (site no. 26), Vyškovec (site no. 50), Záhumenice NM near Strání (site no. 74), Jazevčí NNR near Javorník (sites no. 63, 64), Machová NR near Javorník (sites no. 69, 70, 72, 73), Javorina NNR near Strání (sites no. 77, 78), Hrubý Mechnáč near Lopeník (site no. 46), and Čertoryje NNR near Kněždub (sites no. 53, 54, 59).

The species diversity of the family Psychodidae at individual sites generally depends on the presence of a rich mosaic of available microhabitats offering suitable conditions for development to the various species of moth flies. The presence of a mosaic of differing habitats over the whole area at landscape level is also a general basic condition for conservation of diversity, both for the family Psychodidae and other groups of Diptera.

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Souhrn

Koutulovití (Diptera: Psychodidae) Chráněné krajinné oblasti a biosférické rezervace Bílé Karpaty.

Údaje o výskytu čeledi Psychodidae (koutulovití) z řádu dvoukřídlí (Diptera) na území Chráněné krajinné oblasti a Biosférické rezervace Bílé Karpaty (tj. moravské části pohorí Bílé Karpaty) byly v minulosti jen velmi sporadické. Systematický výzkum fauny koutulí v této oblasti proběhl až v letech 2005–2010, kdy bylo na 78 lokalitách zjištěno celkem 108 druhů v 39 rodech (část údajů byla publikována v několika dřívějších dílčích příspěvcích: JEŽEK 2006a, 2009b, JEŽEK & OMELKOVÁ 2007, OMELKOVÁ & JEŽEK (2012a,b), OMELKOVÁ *et al.* 2006, 2007, 2008; všechny, včetně velké většiny dosud nepublikovaných nálezů, jsou pak shrnuty v této práci). Ve srovnání s výsledky faunistických průzkumů v jiných chráněných územích v ČR (JEŽEK 1999b; JEŽEK & BARTÁK 2000; JEŽEK 2006b,c; JEŽEK & HÁJEK 2007; JEŽEK *et al.* 2005, 2008, 2010) je oblast Bílých Karpat jedním z nejbohatších území v druhovém zastoupení koutulovitých v České republice vůbec. Zajímavými nálezy jsou např. dva druhy z podčeledi Psychodinae, *Psychomormia vaillantii* (Wagner, 1977) a *Apsycha pusilla* (Tonnoir, 1922), publikované zde poprvé z území Moravy. *Pneumia kabelaki* byla v paralelní publikaci popsána jako nový druh pro vědu na základě materiálu z PR Sidonie (OMELKOVÁ & JEŽEK 2012a), stejně jako *Philosepedon perdecorum* z okolí rybníka Kejda v Kněždubském háji (OMELKOVÁ & JEŽEK 2012b). Z doposud zjištěných druhů koutulí v CHKO Bílé Karpaty je za ochranářsky významný považován výskyt celkem 26 druhů zařazených do Červeného seznamu ohrožených bezobratlých České republiky v kategoriích „kriticky ohrožený“ (13 druhů), „ohrožený“ (9 druhů) a „zranitelný“ (4 druhy) i dalších 28 druhů, které sice v Červeném seznamu zatím formálně nefiguruje, ale vyznačují se celostátně vzácným výskytem. Největší druhová bohatost koutulí byla zaznamenána v přírodní rezervaci (PR) Bílé potoky v blízkosti Valašských Klobouk (42 druhů), dále na lokalitách Nová Lhota – Vápenky (40 druhů), potok Kladenka u Petrůvky (38 druhů), národní přírodní rezervace (NPR) Čertoryje (38 druhů), přírodní památka Záhumenice (37 druhů), PR Machová (35 druhů), NPR Jazevčí (34 druhů), Hrubý Mechnáč u Lopeníka (33 druhů) a v neposlední řadě NPR Javorina (26 druhů). Druhová bohatost čeledi Psychodidae na jednotlivých lokalitách je závislá na pestré mozaice zastoupených mikrohabitátů, které poskytují koutulím vhodné podmínky pro jejich vývoj. Základním předpokladem pro zachování diverzity nejen samotných koutulí, ale i ostatních dvoukřídlých, je rovněž zachování pestré rozmanitosti lučních, lesních a vodních biotopů v celé oblasti.

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