

**Limoniidae and Pediciidae (Diptera: Tipulomorpha) of the Jizerské hory Mts,  
Frýdlant region, and Liberec environs (northern Bohemia, Czech Republic)**

**Bahnomilkovití a panožnatkovití (Diptera: Tipulomorpha: Limoniidae a Pediciidae)  
Jizerských hor, Frýdlantska a okolí Liberce (severní Čechy)**

Jaroslav STARÝ<sup>1)</sup> & Pavel VONICKA<sup>2)</sup>

<sup>1)</sup>Neklanova 7, CZ-779 00 Olomouc-Nedvězí & Silesian Museum, Nádražní okruh 31,  
CZ-746 01 Opava, Czech Republic; e-mail: stary.cranefly@gmail.com

<sup>2)</sup>North Bohemian Museum, Masarykova 11, CZ-460 01 Liberec, Czech Republic;  
e-mail: pavel.vonicka@muzeumlb.cz

**Abstract.** A total of 177 species of the families Limoniidae and Pediciidae have been recorded from the Jizerské hory Mts, Frýdlant region, and Liberec environs, including 151 species of Limoniidae and 26 of Pediciidae. This is 50.5% and 66.7%, respectively, of all species known from the Czech Republic, and 64.8% and 83.9%, respectively, of those known from Bohemia. Within the present research, one species, *Ula (Ula) succincta* Alexander, 1933 (Pediciidae), was discovered in the Czech Republic for the first time, and seven species represent the first records for Bohemia, viz. *Molophilus (Molophilus) priapoides* Starý, 1971, *M. (M.) savtshenkoi* Starý, 1972, *Ormosia (Ormosia) moravica* Starý, 1969, *Scleroprotoca sororcula* (Zetterstedt, 1851), *Tasiocera (Dasymolophilus) exigua* Savchenko, 1973, *T. (D.) fuscescens* (Lackschewitz, 1940), and *Dicranomyia (Dicranomyia) dicrana* Lackschewitz in Lackschewitz & Pa-gast, 1941 (Limoniidae). Other ecologically significant or rare species include *Paradelphomyia (Oxyrhiza) nigrina* (Lackschewitz, 1940), *Arctoconopa zonata* (Zetterstedt, 1851), *Eriocanopa diuturna* (Walker, 1848), *Gonomyia (Gonomyia) dentata* de Meijere, 1920, *Idiocera (Idiocera) sziladyi* (Lackschewitz, 1940), *Rhabdomastix (Rhab-domastix) crassa* Starý, 2004, *R. (R.) laetoidea* Starý, 2004, *Atypophthalmus (Microlimonia) machidai* (Alexander, 1921), *Dicranomyia (Dicranomyia) luteipennis* Goetghebuer in Goetghebuer & Tonnoir, 1920, *D. (D.) radegasti* Starý, 1993 (Limoniidae), and *Dicranota (Paradicranota) carbo* Starý, 1998 (Pediciidae). Two species, *Hexatoma (Hexatoma) fuscipennis* (Curtis, 1836) and *Paradelphomyia (Oxyrhiza) nigrina* (Limoniidae), are considered endangered in the Red List of the Czech Republic. Biodiversity of the two families in the study area is by far the highest compared to that of other regions in the Czech Republic where these families were investigated in detail.

**Key words:** Diptera, Limoniidae, Pediciidae, Jizerské hory Mts, Frýdlantská pahorkatina Hills, Liberecká kotlina Basin, Ještědský hřbet Ridge, Železnobrodská pahorkatina Highland, Czech Republic, biodiversity, faunistics, threatened species.

## INTRODUCTION

This is another contribution to the knowledge of the Diptera in the Jizerské hory Mts and the adjacent Frýdlant region (in the north) and Liberec environs (in the south). The present paper deals with the families Limoniidae and Pediciidae, originally considered a single family, the Limoniidae, of the infraorder Tipulomorpha. The two families are generally among poorly investigated dipterans. Previous to this study, their representatives were practically unknown in the study area.

There are only two relevant publications that reported on a few species from the study area, mostly representing the first records for Bohemia (Starý 1987, 2008). Of these species,

only *Eloeophila mundata* (Loew, 1871) has not been confirmed by the present research. Quite recently, some other species have been recorded from the study area as new to Bohemia (Starý & Čelechovský 2015). The latter material, originating from the present research, was published in order to get those records in the third electronic version of the Checklist of Diptera of the Czech Republic and Slovakia (Jedlička et al. in litt.), then (and regrettably still) in preparation.

Thus, the faunal survey below is based on the published records mentioned above, the material obtained by P. Vonička and J. Preisler during their field work in 2001–2017 and on specimens collected by J. Starý and some other dipterists during one-week expeditions performed every year from 2011 to 2017. Brief characteristics of the two families are given under their treatments in the systematic part, followed by a list of all recorded species. Altogether 177 species were recorded in the study area, 151 of Limoniidae and 26 of Pediciidae.

As already stated, the study area includes the Jizerské hory Mts (Protected Landscape Area) and two adjacent territories, the Frýdlant region and Liberec environs. The area is composed of the geomorphological complexes of the Jizerské hory Mts, Frýdlantská pahorkatina Hills, Liberecká kotlina Basin, Ještědský hřbet Ridge (a few localities) and Železnobrodská pahorkatina Highland (one locality). A detailed description of the study area was given in all previous papers devoted to this territory, most recently by Roháček et al. (2017).

## MATERIAL AND METHODS

In the List of localities, data are presented in the following order: number (in brackets) and name of the locality (both in bold), grid mapping square code (in parentheses), abbreviation of geomorphological complex, nearest settlement (where appropriate), coordinates, altitude, specified location and habitat type. The localities are listed alphabetically. In the systematic part, species within (sub)families are arranged in alphabetical order. With each species entry, faunal literature reference (if available) is given, followed by concise distributional (occasionally taxonomical) remarks, and, in two cases, conservation category is specified according to the Red List of Threatened Species of the Czech Republic, Invertebrates (Starý & Barták 2005). Data for material examined are arranged in the following order: number (in brackets) and name of the locality (both in bold, repeated from List of localities), date of collection, number of males and females, abbreviation of collecting method, and collector's name (abbreviated or in full, in parentheses).

The male and female terminalia, if necessary, were prepared by boiling in a solution of 10% KOH and, in dry-mounted specimens, preserved in glycerine in a sealed plastic tube pinned with the appropriate specimen. Classification, nomenclature, and distribution for individual species are based on Oosterbroek (2018).

### List of localities

- [1] **Arnoltice** (5056): FP; 50°57'34"N, 15°04'40"E; 300 m; Bulovský potok brook.
- [2] **Bílý Potok** (5157): JH; [2a] 50°52'16"N, 15°12'37"E; 410–420 m; wetlands, damp meadows, and pastures along Bílý potok brook and above swimming pool, S of village. [2b] 50°52'10"N, 15°14'27"E; 500 m; Smědá valley SE of village, banks of river, wetlands, spring areas. [2c] 50°52'49"N, 15°13'03"E; 450 m; small ponds NE of railway station, wetland, spring area. [2d] 50°52'12"N, 15°12'12"E; 460 m; Černá říčka brook, Černý potok brook.
- [3] **Bohuňovsko** (5357): ŽV; Jesenný; 50°39'33"N, 15°19'33"E; 330 m; banks of Kamenice river, riverside vegetation (Fig. 1).
- [4] **Bukovec NR** (5158): JH; [4a] 50°48'48"N, 15°21'31"E; 917 m; deciduous forest, spring areas, quarry. [4b] 50°48'38"N, 15°21'31"E; 900 m; Pralouka, mountain meadow, spring area. [4c] 50°48'57"N, 15°21'25"E; 920 m; forest spring area at SE slope.
- [5] **Černousy-V Poli** (5056): FP; 50°59'46"N, 15°02'48"E; 210 m; ponds, alder groves.
- [6] **Ferdinandov** (5157): JH; 50°51'54"N, 15°10'29"E; 450 m; Černý Štolpich brook.
- [7] **Heřmanice** (5056): FP; 50°53'54"N, 15°00'07"E; 330 m; Kodešův vrch hill, basalt quarry, wetland.
- [8] **Holubnšk Mt.** (5157): JH; Hejnice; 50°49'57"N, 15°10'51"E; 900 m; Bílé Bukoví beech forest.

- [9] Horní Řasnice (5057): FP; 50°58'26"N, 15°12'45"E; 400 m; sandpit.
- [10] Janov nad Nisou (5256): JH; 50°46'41"N, 15°08'48"E; 750 m; peatbog N of Hašlerova chata chalet.
- [11] Jedlový důl NR (5257): JH; Josefův Důl; 50°47'22"N, 15°14'28"E; 700 m; Jedlová brook, mixed forest (Fig. 2).
- [12] Jiřetín pod Bukovou (5257): JH; 50°44'60"N, 15°14'40"E; 650 m; damp meadows above village in direction of Horní Lučany.
- [13] Jizerka (5158): JH; [13a] 50°49'29"N, 15°20'15"E; 868 m; field station of North Bohemian Museum in Liberec, light source installed (Fig. 3, 4). [13b] 50°49'09"N, 15°20'51"E; 850-870 m; spruce forest, damp meadows, Jizerka brook.
- [14] Karlovske bučiny NNR (5255): JE; Karlov pod Ještědem; 50°46'22"N, 14°58'37"E; 450 m; deciduous forest.
- [15] Kořenov (5258): JH; 50°46'17"N, 15°22'49"E; 650 m; banks of Jizera river and adjacent forest, riverside vegetation (Fig. 5).
- [16] Liberec-Horní Hanychov (5256): JE; 50°43'28"N, 15°00'54"E; 570 m; Panský lom NM (quarry) env., brook, mixed forest.
- [17] Liberec-Kateřinky (5256): JH; 50°48'25"N, 15°06'15"E; 750 m; Krabice rock, mixed forest.
- [18] Liberec-Rudolfov (5256): JH; 50°48'17"N, 15°06'34"E; 630–700 m; valley of Černá Nisa stream, mixed forest.
- [19] Liberec-Ruprechtice (5256): JH; 50°46'43"N, 15°05'04"E; 450 m; wetland above forest swimming pool.
- [20] Liberec-Vesec (5256): LK; 50°44'07"N, 15°04'33"E; 380 m; wetlands in Vesecké údolí valley.
- [21] Liberec-Vratislavice nad Nisou (5256): LK; 50°44'58"N, 15°05'11"E; 370 m; grounds of health centre.
- [22] Lučany nad Nisou (5257): JH; 50°45'20"N, 15°13'54"E; 675 m; Křísák pond, wetland.
- [23] Ludvíkov pod Smrkem (5057): FP; [23a] 50°55'18"N, 15°10'53"E; 390 m; banks of Lomnice brook. [23b] 50°55'14"N, 15°11'01"E; 400 m; wetland, alder grove.
- [24] Malá Strana NR (5257): JH; Horní Maxov; 50°45'58"N, 15°12'09"E; 700–720 m; damp meadows, wetlands, brook, small pond.
- [25] Mariánská Hora (5257): JH; Albrechtice v Jizerských horách; 50°46'50"N, 15°16'28"E; 800 m; forest N of settlement.
- [26] Meandry Smědě NR (5056): FP; Černousy, Višňová; [26a] 50°59'54"N, 15°02'21"E; 220 m; small pond NE of Dubák pond, wetland, alder grove (Fig. 6). [26b] 50°59'54"N, 15°02'21"E; 220 m; banks of Smědá river, riverside vegetation (Fig. 7). [26c] 50°58'33"N, 15°02'06"E; 230 m; banks of Smědá river, riverside vegetation.
- [27] Nová louka NR (5156-5157): JH; Bedřichov; 50°48'50"N, 15°09'40"E; 770 m; peatbog, banks of Blatný potok brook.
- [28] Oldřichov v Hájích (5156): JH; [28a] 50°50'46"N, 15°5'22"E; 400 m; Na Pilách, Jeřice brook, meadows, gardens. [28b] 50°50'55"N, 15°04'06"E; 430 m; meadows in northern part of settlement.
- [29] Oldřichovské sedlo (5156): JH; 50°51'51"N, 15°06'19"E; 500 m; Viničná cesta near pass, beech forest.
- [30] Poledník Mt. (part of Jizerskohorské bučiny NNR) (5156): JH; 50°51'18"N, 15°08'48"E; 864 m; beech forest.
- [31] Poustecká obora (5056): FP; Poustka; 50°57'33"N, 15°03'50"E; 270 m; mixed forest in game preserve.
- [32] Raspenava (5156): FP; 50°52'29"N, 15°08'11"E; 380 m; Farská louka (meadow).
- [33] Rašeliniště Jizerky NNR (5158): JH; Jizerka; 50°49'40"N, 15°20'13"E; 870 m; Klugeho louka peatbog (Fig. 8).
- [34] Rašeliniště Jizery NNR (5157-5158): JH; Jizerka; 50°50'59"N, 15°21'10"E; 830 m; peatbogs, spruce forest, banks of Jizera river.
- [35] Rejdice (5258): JH; 50°44'12"N, 15°21'29"E; 650 m; Ješkrabec brook, spring area, wetland.
- [36] Rybí loučky NR (5158): JH; Jizerka; 50°50'46"N, 15°20'32"E; 850 m; peatbog.
- [37] Smědava (5157): JH; [37a] 50°50'43"N, 15°16'06"E; 840 m; banks of Bílá Smědá stream NW of Smědava mountain chalet. [37b] 50°51'12"N, 15°18'37"E; 890 m; Krásný potok brook, wetlands and peatbogs NE of Smědava mountain chalet.
- [38] Šindelový důl (5157): JH; Bílý Potok; 50°51'48"N, 15°16'01"E; 600–860 m; valley of Šindelový potok brook, forest.
- [39] Šolcův rybník (5156): JH; Raspenava; 50°52'49"N, 15°06'52"E; 350 m; Holubí potok brook, wetland, alder grove below pond.
- [40] Špičák Mt. (part of Jizerskohorské bučiny NNR) (5156): JH; Oldřichov v Hájích; 50°51'56"N, 15°04'43"E; 600 m; beech forest, brook.
- [41] Štolpichy valley (part of Jizerskohorské bučiny NNR) (5157): JH; SE of Ferdinandov; [41a] 50°51'28"N, 15°11'11"E; 630 m; brook, beech forest. [41b] 50°51'06"N, 15°11'26"E; 800 m; beech forest near Velký Štolpich waterfall.
- [42] Tichá říčka NM (5257): JH; Hrabětice; 50°47'02"N, 15°11'29"E; 750 m; damp meadow.
- [43] Tišina Mt. (part of Jizerskohorské bučiny NNR) (5157): JH; 50°52'50"N, 15°14'53"E, 800 m; beech forest.

## Collecting methods and material

The material was obtained using the following collecting methods: combined flight traps, emergence traps, Malaise traps, protein traps, unbaited pitfall traps, yellow pan traps (the methods are described in detail e.g. by Vonička 2008), sweeping over vegetation and various substrates or individual netting, or at light (the latter method is largely used by lepidopterists and briefly described in Roháček et al. 2009) (Fig. 4).

The majority of the material examined was collected by J. Preisler and P. Vonička (material preserved in ethanol, except for individual specimens dried from ethanol) and J. Starý (dry-mounted material). Selection of the material from the traps to (super)family was made by J. Preisler. The material was identified by J. Starý. Voucher specimens are deposited in the North Bohemian Museum in Liberec, Czech Republic, and in the private collection of J. Starý, Olomouc, Czech Republic.

## Abbreviations used

Protected areas: NNR – National Nature Reserve; NR – Nature Reserve; NM – Natural Monument.

Geomorphological complexes: FP – Frýdlantská pahorkatina Hills; JE – Ještědský hřbet Ridge; JH – Jizerské hory Mts; LK – Liberecká kotlina Basin; ŽP – Železnobrodská pahorkatina Highland.

Collecting methods: AL – at light; CFT – combined flight trap; ET – emergence trap; MT – Malaise trap; PT – protein trap; PYT – pyramidal trap; SW – sweeping or netting; UPT – unbaited pitfall trap; YPT – yellow pan trap. Collectors: JP – Jiří Preisler; JS – Jaroslav Starý; PV – Pavel Vonička (names of other collectors are given in full).

## RESULTS

### Limoniidae

It is one of the most species-rich families of the Diptera. Like other Tipulomorpha, the adults are slender flies with elongate, rather narrow wings and very long legs. The Limoniidae are highly diverse in many respects, including body size. They may be diagnosed by certain peculiarities in the structure of the thoracic sclerites and the male terminalia. Of 641 species-group taxa known to occur in Europe, 299 species were recorded from the Czech Republic and 233 from Bohemia. In accordance with ecological affinities of their larvae, the adults are predominantly associated with moist environments and are usually found in low vegetation alongside streams, lakes, and other water bodies, in swamps and marshes of various types, in damp forests, and similar habitats. A considerable proportion of the larvae are phytosaprophagous (including saproxylic species). Some larvae are predatory (subfamily Limnophilinae) or mycetophagous (*Metalimnobia* Matsumura, 1911). The larvae of *Dactylolabis* Osten Sacken, 1860 and individual species of other genera live in hygropetric situations and feed on algae. For the study area, 151 species of Limoniidae are listed here.

#### Dactylolabinae

*Dactylolabis (Dactylolabis) sexmaculata* (Macquart, 1826)

Widespread in temperate and South Europe.

[4b] **Bukovec NR:** 20.v.–15.vi.2010, 1 ♂, MT (JP & PV). [15] **Kořenov:** 31.v.2017, 3 ♂♂, SW (JS). [30] **Poledník Mt.:** 15.vi.2011, 1 ♀, SW (JS). [41b] **Štolpichy valley:** 15.vi.2011, 6 ♂♂, SW (JS).

#### Limnophilinae

*Austrolimnophila (Archilimnophila) unica* (Osten Sacken, 1869)

Holarctic, widespread in Europe.

[10] **Janov nad Nisou:** 21.v.2014, 1 ♂, SW (JP). [11] **Jedlový důl NR:** 21.vii.2013, 1 ♀, SW (JS), 29.v.2017, 2 ♂♂, SW (JS). [13a] **Jizerka:** 16.vii.2015, 1 ♀, AL (JS).

*Austrolimnophila (Austrolimnophila) ochracea* (Meigen, 1804)

West Palaearctic, widespread in Europe, especially northern part.

- [2c] **Bílý Potok:** 15.vi.2012, 2 ♂♂, SW (JP). [4b] **Bukovec NR:** 7.vi.2014, 1 ♂, SW (JP). [14] **Karlovské bučiny NNR:** 8.vi.2013, 1 ♂, SW (JP). [19] **Liberec-Ruprechtice:** 3.vii.2014, 1 ♂, 3 ♀♀, SW (JP). [20] **Liberec-Vesec:** 18.v.2015, 4 ♂♂, SW (JP). [26a] **Meandry Smědé NR:** 30.v.2014, 2 ♀♀, SW (JP). [28a] **Oldřichov v Hájích:** 19.vi.2003, 2 ♂♂, SW (JP). [30] **Poledník Mt.:** 15.vi.2011, 1 ♂, SW (JS). [38] **Šindelový důl:** 28.vi.2003, 1 ♂, SW (JP). [39] **Šolcův rybník:** 26.v.–13.vi.2011, 1 ♂, MT (PV). [41a] **Štolpichy valley:** 22.vii.2013, 1 ♂, SW (JS).

*Dicranophragma (Brachylimnophila) nemorale* (Meigen, 1818)

Palaearctic, widespread in Europe.

- [1] **Arnoltice:** 11.viii.2003, 1 ♂, SW (JP). [20] **Liberec-Vesec:** 25.v.2012, 1 ♂, SW (JP). [39] **Šolcův rybník:** 1.vii.–3.viii.2011, 4 ♂♂, 1 ♀, MT (PV), 3.–24.viii.2011, 1 ♂, MT (PV).

*Dicranophragma (Brachylimnophila) separatum* (Walker, 1848)

Revised recently (Starý & Reusch 2009). Scattered records mostly from temperate Europe.

- [4b] **Bukovec NR:** 20.v.–15.vi.2010, 3 ♂♂, MT (JP & PV), 2.–21.vii.2010, 1 ♀, MT (JP & PV), 16.vii.2015, 1 ♂, SW (JS). [4c] **Bukovec NR:** 18.vi.2005, 1 ♂, SW (JP). [13a] **Jizerka:** 13.vii.2015, 1 ♂, AL (JS). [13b] **Jizerka:** 15.vi.2012, 1 ♂, SW (JS). [35] **Rejdice:** 5.–28.vii.2005, 3 ♂♂, ET (JP & PV), 16.viii.–1.ix.2005, 1 ♂, ET (JP & PV). [36] **Rybí loučky NR:** 29.v.–10.vi.2003, 1 ♂, MT (JP & PV), 9.–23.vii.2003, 2 ♂♂, MT (JP & PV). [38] **Šindelový důl:** 28.vi.2003, 1 ♂, SW (JP). [39] **Šolcův rybník:** 26.v.–13.vi.2011, 7 ♂♂, MT (PV), 13.vi.–1.vii.2011, 5 ♂♂, 1 ♀, MT (PV). [41a] **Štolpichy valley:** 15.vi.2012, 1 ♀, SW (JS), 22.vii.2013, 1 ♂, SW (JS).

*Eloeophila maculata* (Meigen, 1804)

Palaearctic, widespread in Europe.

- [5] **Černousy-V Poli:** 1.vi.2010, 1 ♂, SW (JS). [13a] **Jizerka:** 28.v.2017, 1 ♂, AL (JS). [20] **Liberec-Vesec:** 25.v.2012, 1 ♂, SW (JP), 18.v.2015, 1 ♂, SW (JP). [22] **Lučany nad Nisou:** 23.v.2012, 5 ♂♂, 2 ♀♀, SW (JP). [24] **Malá Strana NR:** 2.viii.2005, 2 ♂♂, SW (JP), 15.vi.2011, 1 ♂, SW (JS). [26a] **Meandry Smědé NR:** 13.vii.2015, 1 ♂, SW (JS). [39] **Šolcův rybník:** 11.–26.v.2011, 1 ♀, MT (PV), 26.v.–13.vi.2011, 1 ♂, 1 ♀, MT (PV), 1.vii.–3.viii.2011, 1 ♂, MT (PV). [41a] **Štolpichy valley:** 15.vi.2012, 1 ♂, SW (JS).

*Eloeophila mundata* (Loew, 1871)

Lit.: Hejnice nr. Frýdlant v Čechách (Starý 2008).

Widespread in Europe. Not confirmed by present research.

*Eloeophila submarmorata* (Verrall, 1887)

West Palaearctic, widespread in Europe.

- [2c] **Bílý Potok:** 1.vi.2017, 2 ♂♂, SW (JS). [4c] **Bukovec NR:** 29.v.–9.vi.2003, 1 ♂, YPT (JP & PV). [5] **Černousy-V Poli:** 1.vi.2010, 1 ♂, SW (JS). [13a] **Jizerka:** 20.vii.2013, 1 ♂, AL (JS). [16] **Liberec-Horní Hanychov:** 11.v.2012, 1 ♂, SW (JP). [35] **Rejdice:** 30.v.–16.vi.2005, 3 ♂♂, ET (JP & PV), 16.vi.–5.vii.2005, 1 ♂, ET (JP & PV).

*Eloeophila trimaculata* (Zetterstedt, 1838)

Widespread in temperate and North Europe.

- [2b] **Bílý Potok:** 3.vi.2010, 1 ♂, SW (JS). [6] **Ferdinandov:** 4.vi.2010, 1 ♀, SW (JS). [13b] **Jizerka:** 13.vi.2012, 1 ♂, SW (JS), 15.vi.2012, 1 ♀, SW (JS).

*Epiphragma (Epiphragma) ocellare* (Linnaeus, 1760)

Holarctic, widespread in Europe.

- [6] **Ferdinandov:** 15.vi.2012, 1 ♂, SW (JP). [11] **Jedlový důl NR:** 21.vii.2013, 1 ♂, SW (JS), 15.vii.2015, 1 ♂, SW (JS). [14] **Karlovské bučiny NNR:** 8.vi.2013, 1 ♂, SW (JP). [19] **Liberec-Ruprechtice:** 3.vii.2014, 1 ♂,

1 ♀, SW (JP). [20] **Liberec-Vesec**: 25.v.2012, 4 ♂♂, SW (JP), 18.v.2015, 1 ♂, SW (JP). [26a] **Meandry Smědé NR**: 30.v.2014, 12 ♂♂, SW (JP). [29] **Oldřichovské sedlo**: 17.v.–3.vi.2003, 1 ♂, YPT (JP & PV). [31] **Poustecká obora**: 12.vi.2012, 1 ♂, SW (JP). [40] **Špičák Mt.**: 17.v.–3.vi.2003, 1 ♂, YPT (JP), 3.–22.vi.2003, 3 ♂♂, YPT (JP).

### *Euphylidorea aperta* (Verrall, 1887)

West Palaearctic, widespread in Europe.

[2c] **Bílý Potok**: 15.vi.2012, 5 ♂♂, SW (JP), 13.ix.2016, 1 ♀, SW (JS), 1.vi.2017, 1 ♂, SW (JS). [5] **Černousy-V Poli**: 1.vi.2010, 1 ♂, SW (JS). [12] **Jiřetín pod Bukovou**: 17.vi.2003, 5 ♂♂, SW (JP). [26a] **Meandry Smědé NR**: 16.vi.2011, 1 ♂, SW (JS). [28a] **Oldřichov v Hájích**: 19.vi.2003, 1 ♂, SW (JP). [41a] **Štolpichy valley**: 15.vi.2012, 1 ♂, SW (JS), 22.vii.2013, 3 ♂♂, 1 ♀, SW (JS).

### *Euphylidorea dispar* (Meigen, 1818)

West Palaearctic, widespread in Europe.

[26a] **Meandry Smědé NR**: 1.vi.2010, 3 ♂♂, 2 ♀♀, SW (JS).

### *Euphylidorea meigenii* (Verrall, 1886)

West Palaearctic, widespread in Europe.

[13b] **Jizerka**: 13.vi.2012, 1 ♂, SW (JS). [33] **Rašelinště Jizerky NNR**: 20.vii.2013, 1 ♂, SW (JS), 12.vii.2015, 3 ♂♂, SW (JS), 28.v.2017, 3 ♂♂, SW (JS). [34] **Rašelinště Jizery NNR**: 17.–29.v.2003, 1 ♂, YPT (JP & PV).

### *Euphylidorea phaeostigma* (Schummel, 1829)

Widespread mostly in temperate and North Europe.

[4b] **Bukovec NR**: 20.v.–16.vi.2010, 1 ♂, MT (JP & PV). [4c] **Bukovec NR**: 31.v.2003, 4 ♂♂, SW (JP). [8] **Holubník Mt.**: 3.viii.–13.ix.2011, 1 ♂, MT (JP & PV). [13a] **Jizerka**: 14.vi.2011, 1 ♀, AL (JS). [24] **Malá Strana NR**: 12.vi.–9.vii.2015, 1 ♂, MT (JP & PV). [33] **Rašelinště Jizerky NNR**: 3.vi.2010, 1 ♂, SW (JS). [34] **Rašelinště Jizery NNR**: 26.vi.–9.vii.2003, 1 ♂, MT (JP & PV). [36] **Rybí loučky NR**: 29.v.–10.vi.2003, 1 ♂, MT (JP & PV). [37b] **Smědava**: 25.vii.2012, 1 ♂, SW (JS).

### *Hexatoma (Coreozelia) cimicoides* (Scopoli, 1763)

Scattered records from temperate and South Europe.

[26a] **Meandry Smědé NR**: 31.v.–22.vi.2005, 1 ♂, MT (JP & PV), 30.v.2014, 1 ♂, SW (JP). [26b] **Meandry Smědé NR**: 1.vi.2010, 1 ♂, 2 ♀♀, SW (JS), 18.vii.2012, 1 ♀, SW (JP), 30.v.2014, 9 ♂♂, 3 ♀♀, SW (JS). [26c] **Meandry Smědé NR**: 30.v.2017, 1 ♂, SW (JS).

### *Hexatoma (Hexatoma) fuscipennis* (Curtis, 1836) (Fig. 9)

West Palaearctic, widespread in Europe. Ecologically significant species, associated with sandy or gravelly banks of larger streams. Classified as endangered in Czech Republic (Starý & Barták 2005).

[26a] **Meandry Smědé NR**: 27.iv.2012, 5 ♂♂, SW (JP), 30.v.2014, 1 ♂, SW (JP). [26b] **Meandry Smědé NR**: 27.iv.2012, 1 ♂, SW (JP), 30.v.2014, 3 ♂♂, 2 ♀♀, SW (JS). [26c] **Meandry Smědé NR**: 30.v.2017, 2 ♂♂, SW (JS).

### *Limnophila (Limnophila) schranki* Oosterbroek, 1992

Palaearctic, widespread in Europe.

[5] **Černousy-V Poli**: 27.iv.–16.v.2012, 3 ♂♂, MT (JP & PV). [16] **Liberec-Horní Hanychov**: 8.v.2012, 1 ♂, SW (JP), 11.v.2012, 1 ♂, SW (JP). [26a] **Meandry Smědé NR**: 4.–19.v.2005, 13 ♂♂, YPT (JP & PV), 4.–19.v.2005, 7 ♂♂, MT (JP & PV), 31.v.–22.vi.2005, 1 ♂, MT (JP & PV), 27.iv.2012, 11 ♂♂, 2 ♀♀, SW (JP). [27] **Nová louka NR**: 26.v.–17.vi.2014, 1 ♂, 1 ♀, MT (PV). [39] **Šolcův rybník**: 6.v.2003, 4 ♂♂, SW (JP), 11.–26.v.2011, 7 ♂♂, 1 ♀, MT (JP).

*Neolimnomyia batava* (Edwards, 1938)

Widespread in Europe.

- [2c] **Bílý Potok:** 15.vi.2012, 1 ♂, SW (JS). [24] **Malá Strana NR:** 15.vi.2011, 1 ♂, SW (JS). [28] **Oldřichov v Hájích:** 19.vi.2003, 1 ♂, SW (JP).

*Neolimnomyia filata* (Walker, 1856)

Widespread in temperate and South Europe.

- [2c] **Bílý Potok:** 15.vi.2012, 1 ♂, SW (JP), 1.vi.2017, 1 ♂, SW (JS). [4c] **Bukovec NR:** 20.vi.–9.vii.2003, 1 ♂, YPT (JP & PV). [24] **Malá Strana NR:** 21.vii.2013, 1 ♀, SW (JS). [26a] **Meandry Smědé NR:** 16.vi.2011, 1 ♂, SW (JS), 12.vi.2012, 1 ♂, SW (JS), 30.v.2014, 1 ♂, SW (JS).

*Paradelphomyia (Oxyrhiza) czizekiana* Starý, 1971

West Palaearctic, scattered records mostly from temperate Europe.

- [26a] **Meandry Smědé NR:** 16.vi.2011, 2 ♂♂, SW (JS).

*Paradelphomyia (Oxyrhiza) fuscula* (Loew, 1873)

West Palaearctic, widespread in Europe.

- [2c] **Bílý Potok:** 13.ix.2016, 1 ♂, SW (JS). [4b] **Bukovec NR:** 6.viii.–2.ix.2010, 1 ♂, MT (JP & PV), 2.ix.–15.x.2010, 2 ♂♂, MT (JP & PV). [11] **Jedlový důl NR:** 1.–22.ix.2005, 1 ♂, YPT (JP & PV). [13a] **Jizerka:** 12.ix.2016, 1 ♀, AL (JS). [17] **Liberec-Kateřinky:** 27.viii.2013, 1 ♂, SW (JP). [24] **Malá Strana NR:** 12.ix.2016, 2 ♂♂, 2 ♀♀, SW (JS), 12.ix.2016, 1 ♂, SW (M. Vála), 12.ix.2016, 1 ♂, SW (J. Roháček). [35] **Rejdice:** 16.viii.–1.ix.2005, 1 ♂, ET (JP & PV), 1.–22.ix.2005, 3 ♂♂, ET (JP & PV), 1.–22.ix.2005, 5 ♂♂, YPT (JP & PV).

*Paradelphomyia (Oxyrhiza) nigrina* (Lackschewitz, 1940)

Scattered records from temperate and North Europe. Hitherto single record from Bohemia: Radostín-Malé Dářko (Starý 1986). Local, ecologically significant species, associated with marshes and muddy places along brooks. Classified as endangered in Czech Republic (Starý & Barták 2005).

- [24] **Malá Strana NR:** 14.vi.2012, 1 ♀, SW (JS). [26a] **Meandry Smědé NR:** 16.vi.2011, 2 ♂♂, SW (JS).

*Paradelphomyia (Oxyrhiza) senilis* (Haliday, 1833)

Palaearctic, widespread in Europe.

- [2b] **Bílý Potok:** 3.vi.2010, 1 ♂, SW (JS). [2c] **Bílý Potok:** 15.vi.2012, 6 ♂♂, SW (JS), 1.vi.2017, 1 ♂, SW (JS). [4c] **Bukovec NR:** 20.vi.–9.vii.2003, 2 ♂♂, YPT (JP & PV). [11] **Jedlový důl NR:** 21.vii.2013, 1 ♂, SW (JS). [26a] **Meandry Smědé NR:** 25.vii.2013, 1 ♂, SW (JS), 15.ix.2016, 1 ♂, 1 ♀, SW (JS). [26c] **Meandry Smědé NR:** 14.vi.2011, 1 ♂, SW (JS). [41a] **Štolpichy valley:** 22.vii.2013, 1 ♂, 1 ♀, SW (JS).

*Phylidorea (Paraphylidorea) fulvonervosa* (Schummel, 1829)

Palaearctic, widespread in Europe.

- [2a] **Bílý Potok:** 22.v.2003, 2 ♂♂, SW (JP). [2b] **Bílý Potok:** 3.vi.2010, 1 ♂, SW (JS). [2c] **Bílý Potok:** 19.viii.–4.ix.2005, 1 ♂, MT (JP & PV), 15.vi.2012, 1 ♂, SW (JP). [4b] **Bukovec NR:** 26.vi.–9.vii.2003, 3 ♂♂, PYT (JP & PV), 9.–23.vii.2003, 2 ♂♂, PYT (JP & PV), 22.vi.2005, 1 ♂, SW (JP), 20.v.–15.vi.2010, 5 ♂♂, MT (JP & PV), 2.–21.vii.2010, 1 ♂, MT (JP & PV), 7.vi.2014, 3 ♂♂, SW (JP), 26.v.2014, 1 ♂, SW (JS). [12] **Jiřetín pod Bukovou:** 17.vi.2003, 8 ♂♂, SW (JP). [13b] **Jizerka:** 13.vii.2015, 5 ♂♂, SW (JP). [20] **Liberec-Vesec:** 25.v.2012, 2 ♂♂, SW (JP). [24] **Malá Strana NR:** 2.viii.2005, 3 ♂♂, SW (JP), 18.vi.–9.vii.2015, 1 ♂, MT (JP & PV), 9.vii.–5.viii.2015, 3 ♂♂, MT (JP & PV), 15.vii.2015, 1 ♂, SW (JS). [26a] **Meandry Smědé NR:** 16.vi.2011, 1 ♂, SW (JS). [27] **Nová louka NR:** 1.–22.viii.2014, 1 ♂, MT (PV). [33] **Rašelinisté Jizerky NNR:** 20.vii.2013, 1 ♂, SW (JS). [34] **Rašelinisté Jizerky NNR:** 26.vi.–9.vii.2003, 1 ♂, CFT (JP & PV). [36] **Rybí loučky NR:** 9.–23.vii.2003, 1 ♂, MT

(JP & PV), 23.vii.–5.viii.2003, 2 ♂♂, MT (JP & PV). [39] Šolcův rybník: 11.–26.v.2011, 3 ♂♂, MT (JP & PV), 26.v.–1.vii.2011, 4 ♂♂, ET (JP & PV), 26.v.–13.vi.2011, 1 ♂, 1 ♀, MT (PV), 13.vi.–1.vii.2011, 2 ♂♂, MT (PV), 3.–24.viii.2011, 1 ♂, MT (JP & PV).

*Phylidorea (Phylidorea) bicolor* (Meigen, 1804)

Palaearctic, widespread in Europe.

[26a] Meandry Smědé NR: 27.iv.2012, 1 ♂, SW (JP). [31] Poustevská obora: 27.iv.–16.v.2012, 5 ♂♂, MT (JP & PV). [39] Šolcův rybník: 6.v.2003, 2 ♀♀, SW (JP).

*Phylidorea (Phylidorea) ferruginea* (Meigen, 1818)

Palaearctic, widespread in Europe.

[7] Hermanice: 14.vi.2011, 2 ♂♂, SW (JS). [39] Šolcův rybník: 11.–26.v.2011, 1 ♂, 1 ♀, MT (PV).

*Phylidorea (Phylidorea) longicornis* (Schummel, 1829)

Palaearctic, widespread in Europe.

[23b] Ludvíkov pod Smrkem: 1.vi.2017, 1 ♂, SW (JS), 1.vi.2017, 1 ♂, SW (M. Vála). [39] Šolcův rybník: 26.v.–1.vii.2011, 1 ♂, ET (JP & PV), 3.viii.–13.ix.2011, 1 ♂, ET (JP & PV).

*Phylidorea (Phylidorea) nervosa* (Schummel, 1829)

Widespread in temperate and North Europe.

[26a] Meandry Smědé NR: 31.v.–22.vi.2005, 1 ♂, MT (JP & PV).

*Phylidorea (Phylidorea) squalens* (Zetterstedt, 1838)

Palaearctic, widespread in temperate and North Europe.

[24] Malá Strana NR: 14.vi.2012, 1 ♂, SW (JS), 7.v.–12.vi.2015 4 ♂♂, 2 ♀♀, MT (JP & PV), 12.vi.–9.vii., 7 ♂♂, 1 ♀, MT (JP & PV). [33] Rašelinisté Jizerky NNR: 28.vii.–17.viii.2005, 1 ♂, PT (JP & PV), 16.vi.2011, 1 ♂, SW (JS). [34] Rašelinisté Jizery NNR: 17.–28.vi.2002, 1 ♂, MT (PV), 13.vi.2011, 2 ♂♂, SW (JS). [36] Rybí loučky NR: 23.vii.–5.viii.2003, 1 ♂, MT (JP & PV). [39] Šolcův rybník: 26.iv.–26.v.2011, 3 ♂♂, ET, (PV). [42] Tichá říčka NM: 20.v.2014, 1 ♂, SW (JP).

*Pilaria discicollis* (Meigen, 1818)

West Palaearctic, widespread in Europe.

[2c] Bílý Potok: 15.vi.2012, 1 ♂, SW (JP). [23b] Ludvíkov pod Smrkem: 1.vi.2017, 1 ♂, SW (JS). [24] Malá Strana NR: 2.viii.2005, 2 ♂♂, SW (JP). [39] Šolcův rybník: 1.vii.–3.viii.2011, 1 ♀, MT (PV).

*Pilaria fuscipennis* (Meigen, 1818)

West Palaearctic, widespread in Europe.

[2c] Bílý Potok: 15.vi.2012, 1 ♂, SW (JP). [41a] Štolpichy valley: 22.vii.2013, 1 ♂, SW (JS).

*Prionolabis hospes* (Egger, 1863) (Fig. 10)

Widespread in Europe.

[4a] Bukovec NR: 11.vi.2012, 2 ♂♂, SW (JS). [16] Liberec-Horní Hanychov: 8.v.2012, 1 ♂, SW (JP). [30] Poledník Mt.: 15.vi.2011, 1 ♂, SW (JS). [34] Rašelinisté Jizerky NNR: 10.–26.vi.2003, 1 ♂, MT (JP & PV), 13.vi.2011, 1 ♂, SW (JS). [40] Špičák Mt.: 4.–17.v.2003, 1 ♂, YPT (JP), 17.v.–3.vi.2003, 4 ♂♂, YPT (JP). [41a] Štolpichy valley: 15.vi.2012, 2 ♂♂, SW (JS).

*Pseudolimnophila (Pseudolimnophila) lucorum* (Meigen, 1818)

Palaearctic, widespread in Europe.

[2c] **Bílý Potok**: 15.vi.2012, 3 ♂♂, SW (JP). [5] **Černousy-V Poli**: 9.–28.viii.2012, 1 ♀, MT (JP & PV). [24] **Malá Strana NR**: 15.vii.2015, 1 ♂, SW (JS). [26a] **Meandry Smědé NR**: 13.vii.2015, 1 ♂, SW (JS). [28a] **Oldřichov v Hájích**: 19.vi.2003, 1 ♂, SW (JP).

*Pseudolimnophila (Pseudolimnophila) sepium* (Verrall, 1886)

Palaearctic, widespread in Europe.

[2c] **Bílý Potok**: 15.vi.2012, 4 ♂♂, SW (JP). [24] **Malá Strana NR**: 15.vii.2015, 1 ♂, SW (JS). [26a] **Meandry Smědé NR**: 30.v.2014, 2 ♂♂, SW (JP), 13.vii.2015, 2 ♂♂, SW (JS). [28a] **Oldřichov v Hájích**: 19.vi.2003, 18 ♂♂, SW (JP). [39] **Solcův rybník**: 1.vii.–3.viii.2011, 1 ♀, MT (PV).

**Chioneinae**

*Arctoconopa zonata* (Zetterstedt, 1851)

Palaearctic, in Europe scattered records from Czech Republic and northern countries. Hitherto single record from Bohemia: Šumava Mts: Pěkná (Starý 2004b). Local, ecologically significant species, associated with sandy or gravelly banks of larger streams.

[26b] **Meandry Smědé NR**: 1.vi.2010, 1 ♂, SW (JS).

*Cheilotrichia (Cheilotrichia) imbuta* (Meigen, 1818)

Palaearctic, widespread in Europe.

[26a] **Meandry Smědé NR**: 16.vi.2011, 1 ♀, SW (JS). [26c] **Meandry Smědé NR**: 14.vi.2011, 1 ♂, SW (JS). [39] **Solcův rybník**: 1.vii.–3.viii.2011, 1 ♂, 1 ♀, MT (PV).

*Cheilotrichia (Empeda) affinis* (Lackschewitz, 1927)

Lit.: Jizerské hory Mts: Jizerka, Bukovec (Starý 1987).

Scattered records, mostly from temperate Europe.

[21] **Liberec-Vratislavice nad Nisou**: 5.–15.x.2005, 1 ♂, SW (JP). [25] **Mariánská Hora**: 15.x.2005, 1 ♂, SW (JP). [35] **Rejdice**: 1.–22.ix.2005, 3 ♂♂, ET (JP & PV). [39] **Solcův rybník**: 6.x.–3.xi.2011, 1 ♂, MT (PV).

*Cheilotrichia (Empeda) cinerascens* (Meigen, 1804)

Lit.: Jizerské hory Mts: Jizerka (Starý 1987).

West Palaearctic, widespread in Europe.

[3] **Bohuňovsko**: 22.vii.2014, 12 ♀♀, AL (PV). [4b] **Bukovec NR**: 5.–16.v.2003, 1 ♀, PYT (JP & PV). [8] **Holubník Mt.**: 3.viii.–13.ix.2011, 1 ♂, MT (JP & PV). [16] **Liberec-Horní Hanychov**: 11.v.2012, 1 ♂, SW (JP). [31] **Poustecká obora**: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV). [39] **Solcův rybník**: 8.iv.–11.v.2011, 1 ♂, MT (JP & PV), 11.–26.v.2011, 1 ♀, MT (PV).

*Cheilotrichia (Empeda) staryi* Mendl, 1973

Lit.: Jizerské hory Mts: Bukovec (Starý 1987).

Scattered records from mountains of temperate Europe.

[35] **Rejdice**: 1.–22.ix.2005, 2 ♂♂, ET (JP & PV).

*Crypteria (Crypteria) limnophiloides* Bergroth, 1913

West Palaearctic, widespread in Europe.

[17] **Liberec-Kateřinky**: 27.viii.2013, 1 ♂, SW (JP). [35] **Rejdice**: 1.–22.ix.2005, 1 ♂, ET (JP & PV).

*Eriocnopa diurna* (Walker, 1848)

West Palaearctic, widespread in Europe. Hitherto single record from Bohemia: Radostín-

Malé Dářko (Starý 1986). Local, ecologically significant species in Central Europe, mostly associated with peatbogs.

[33] Rašelinště Jizerky NNR: 11.ix.2016, 1 ♂, SW (JS), 14.ix.2016, 1 ♂, SW (J. Roháček). [34] Rašelinště Jizery NNR: 7.x.2005, 2 ♂♂, SW (JP).

#### *Erioconopa trivialis* (Meigen, 1818)

West Palaearctic, widespread in Europe.

[2a] Bílý Potok: 22.v.2003, 1 ♀, SW (JP). [13b] Jizerka: 20.vii.2013, 2 ♂♂, SW (M. Vála), 28.v.2014, 1 ♂, SW (JS). [22] Lučany nad Nisou: 23.v.2012, 1 ♂, SW (JP). [23a] Ludvíkov pod Smrkem: 30.v.2017, 1 ♂, SW (M. Vála), 1.vi.2017, 1 ♂, SW (J. Roháček). [23b] Ludvíkov pod Smrkem: 13.ix.2016, 2 ♂♂, SW (JS), 1.vi.2017, 1 ♂, SW (M. Vála). [26a] Meandry Smědě NR: 30.v.2014, 1 ♂, SW (JP), 30.v.2014, 1 ♂, SW (JS). [26b] Meandry Smědě NR: 4.vi.2010, 2 ♂♂, SW (JS). [33] Rašelinště Jizerky NNR: 11.ix.2016, 1 ♂, SW (JS). [34] Rašelinště Jizery NNR: 13.vi.2011, 1 ♂, SW (JS). [39] Šolcův rybník: 11.–26.v.2011, 1 ♂, 1 ♀, MT (PV), 6.x.–3.xi.2011, 4 ♂♂, 1 ♀, MT (PV).

#### *Erioptera (Erioptera) divisa* (Walker, 1848)

West Palaearctic, widespread in Europe.

[4b] Bukovec NR: 20.v.–15.vi.2010, 1 ♂, MT (JP & PV). [13a] Jizerka: 13.vi.2011, 1 ♀, AL (JS), 24.vii.2013, 1 ♀, AL (JS), 12.ix.2016, 1 ♀, AL (JS).

#### *Erioptera (Erioptera) flavata* (Westhoff, 1882)

Palaearctic, widespread in Europe.

[2c] Bílý Potok: 15.vi.2012, 2 ♂♂, SW (JP). [12] Jiřetín pod Bukovou: 17.vi.2003, 1 ♂, SW (JP). [24] Malá Strana NR: 26.vi.–9.vii.2003, 3 ♂♂, YPT (JP & PV), 15.vi.2011, 1 ♂, 1 ♀, SW (JS), 14.vi.2012, 2 ♂♂, 1 ♀, SW (JS), 21.vii.2013, 1 ♂, SW (JS), 12.vi.–9.vii.2015, 1 ♂, MT (JP & PV), 15.vii.2015, 1 ♂, SW (JS). [26a] Meandry Smědě NR: 16.vi.2011, 2 ♂♂, 2 ♀♀, SW (JS), 27.v.2013, 1 ♂, SW (JS), 13.vii.2015, 1 ♂, SW (JS). [26b] Meandry Smědě NR: 12.vi.2012, 1 ♂, SW (JS). [28b] Oldřichov v Hájích: 15.vii.2003, 2 ♂♂, SW (JP). [33] Rašelinště Jizerky NNR: 12.vii.2015, 3 ♂♂, SW (JS).

#### *Erioptera (Erioptera) fuscipennis* Meigen, 1818

West Palaearctic, widespread in Europe.

[2a] Bílý Potok: 22.v.2003, 2 ♂♂, SW (JP). [2c] Bílý Potok: 29.vii.–19.viii.2005, 1 ♂, MT (JP & PV), 19.viii.–4.ix.2005, 2 ♂♂, MT (JP & PV), 15.vi.2012, 1 ♂, SW (JP), 15.vi.2012, 5 ♂♂, 1 ♀, SW (JS). [4b] Bukovec NR: 16.vii.2015, 2 ♂♂, 1 ♀, SW (JS). [17] Liberec-Kateřinky: 25.viii.2013, 3 ♂♂, SW (JP). [23b] Ludvíkov pod Smrkem: 30.v.2017, 1 ♂, SW (JS), 1.vi.2017, 1 ♂, SW (JS). [24] Malá Strana NR: 26.vi.–1.vii.2003, 1 ♂, YPT (JP & PV). [39] Šolcův rybník: 11.–26.v.2011, 5 ♂♂, MT (PV), 26.v.–13.vi.2011, 1 ♂, 1 ♀, MT (PV), 13.vi.–1.vii.2011, 1 ♀, MT (PV), 1.vii.–3.viii.2011, 1 ♂, MT (PV). [41a] Stolpichy valley: 22.vii.2013, 1 ♂, SW (JS).

#### *Erioptera (Erioptera) fusculenta* Edwards, 1938

West Palaearctic, widespread in Europe.

[26a] Meandry Smědě NR: 4.vi.2010, 1 ♂, SW (JS), 16.vi.2011, 1 ♂, SW (JS).

#### *Erioptera (Erioptera) lutea* Meigen, 1804

Palaearctic, widespread in Europe.

[2c] Bílý Potok: 3.–19.v.2005, 1 ♂, YPT (JP & PV), 29.vii.–19.viii.2005, 5 ♂♂, 1 ♀, MT (JP & PV), 19.viii.–4.ix.2005, 11 ♂♂, MT (JP & PV). [3] Bohuňovsko: 22.vii.2014, 2 ♂♂, AL (PV). [4b] Bukovec NR: 5.–16.v.2003, 1 ♂, PYT (JP & PV), 20.v.–15.vi.2010, 13 ♂♂, 1 ♀, MT (JP & PV), 2.–21.vii.2010, 4 ♂♂, MT (JP & PV), 21.vii.–6.viii.2010, 2 ♂♂, MT (JP & PV), 6.viii.–2.ix.2010, 4 ♂♂, MT (JP & PV), 2.ix.–15.x.2010, 1 ♂, MT (JP & PV). [4c] Bukovec NR: 31.v.2003, 4 ♂♂, SW (JP), 20.vi.–9.vii.2003, 1 ♂, YPT (JP & PV). [5] Černousy-V Poli: 9.–28.viii.2012, 1 ♂, MT (JP & PV). [13a] Jizerka: 28.v.2017, 1 ♂, AL (JS). [15] Kořenov: 29.viii.2013, 1 ♂, SW

(JP). [16] **Liberec-Horní Hanychov**: 8.v.2012, 1 ♂, SW (JP), 11.v.2012, 1 ♂, SW (JP). [17] **Liberec-Kateřinky**: 25.viii.2013, 1 ♂, SW (JP). [21] **Liberec-Vratislavice nad Nisou**: 5.–15.x.2005, 1 ♂, SW (JP). [24] **Malá Strana NR**: 16.–29.v.2003, 1 ♂, MT (JP & PV). [35] **Rejdice**: 30.v.–16.vi.2005, 1 ♂, ET (JP & PV), 5.–28.vii.2005, 1 ♂, ET (JP & PV), 28.vii.–16.viii.2005, 2 ♂♂, ET (JP & PV), 16.viii.–1.ix.2005, 1 ♂, ET (JP & PV), 1.–22.ix.2005, 1 ♂, ET (JP & PV). [39] **Šolcův rybník**: 26.iv.–26.v.2011, 3 ♂♂, MT (PV), 11.–26.v.2011, 1 ♀, MT (PV), 3.viii.–13.ix.2011, 1 ♂, ET (PV).

*Erioptera (Erioptera) sordida* Zetterstedt, 1838

Palaearctic, widespread in temperate and North Europe.

[5] **Černousy-V Poli**: 1.vi.2010, 2 ♂♂, 2 ♀♀, SW (JS), 27.iv.–16.v.2012, 7 ♂♂, 1 ♀, MT (JP & PV). [13a] **Jizerka**: 13.vi.2012, 1 ♂, AL (JS). [13b] **Jizerka**: 13.vi.2012, 2 ♂♂, SW (JS), 15.vi.2012, 7 ♂♂, SW (JS). [23b] **Ludvíkov pod Smrkem**: 30.v.2017, 1 ♂, SW (JS), 1.vi.2017, 1 ♂, SW (JS). [24] **Malá Strana NR**: 16.–29.v.2003, 1 ♂, MT (JP & PV), 14.vi.2012, 3 ♂♂, 1 ♀, SW (JS), 7.v.–12.vi.2015, 1 ♂, MT (JP & PV). [34] **Rašelinště Jizery NNR**: 13.vi.2011, 1 ♂, 1 ♀, SW (JS). [39] **Šolcův rybník**: 26.v.–1.vii.2011, 1 ♂, ET (JP & PV).

*Gnophomyia viridipennis* (Gimmerthal, 1847)

Palaearctic, widespread in Europe.

[2c] **Bílý Potok**: 1.vi.2017, 1 ♀, SW (JS).

*Gonomyia (Gonomyia) abscondita* Lackschewitz, 1935

Revised recently (Starý 2011), mostly known from scattered records in temperate Europe.

[13a] **Jizerka**: 12.vi.2012, 1 ♂, AL (JS).

*Gonomyia (Gonomyia) conoviensis* Barnes, 1924

Palaearctic, widespread in Europe.

[13a] **Jizerka**: 29.v.2017, 1 ♂, AL (JS).

*Gonomyia (Gonomyia) dentata* de Meijere, 1920

Palaearctic, widespread in temperate and North Europe. Hitherto single record from Bohemia: Šumava Mts: Strážný (Starý 1999). Local, mountain species with unknown biology.

[13a] **Jizerka**: 16.vi.2011, 2 ♀♀, AL (JS), 25.vii.2013, 1 ♂, AL (JS). [34] **Rašelinště Jizery NNR**: 12.vii.2015, 1 ♂, SW (J. Roháček).

*Gonomyia (Gonomyia) simplex* Tonnoir in Goetghebuer & Tonnoir, 1920

Widespread in Europe.

[4b] **Bukovec NR**: 20.v.–15.vi.2010, 3 ♂♂, 1 ♀, MT (JP & PV), 26.v.2014, 2 ♂♂, SW (JS). [20] **Liberec-Vesec**: 18.v.2015, 1 ♂, SW (JP).

*Gonomyia (Prolipophleps) abbreviata* Loew, 1873

West Palaearctic, scattered records mostly from temperate Europe.

[3] **Bohuňovsko**: 22.vii.2014, 1 ♀, AL (PV).

*Hoplolabis (Parilisia) areolata* (Siebke, 1872)

Widespread in Europe.

[26a] **Meandry Smědé NR**: 27.iv.2012, 1 ♂, SW (JP). [26b] **Meandry Smědé NR**: 26.v.2012, 1 ♂, SW (JP), 12.vi.2012, 2 ♂♂, SW (JS), 18.vii.2012, 1 ♂, SW (JP), 25.vii.2013, 3 ♂♂, SW (JS), 30.v.2014, 3 ♂♂, SW (JS), 30.v.2017, 1 ♂, SW (JS). [26c] **Meandry Smědé NR**: 14.vi.2011, 3 ♂♂, SW (JS).

*Hoplolabis (Parilisia) subalpina* (Bangerter, 1947)

Scattered records from Europe.

[26b] Meandry Smědé NR: 4.vi.2010, 1 ♂, 1 ♀, SW (JS), 12.vi.2012, 1 ♂, 1 ♀, SW (JS), 26.v.2012, 1 ♂, SW (JP), 30.v.2017, 1 ♂, SW (JS). [26c] Meandry Smědé NR: 14.vi.2011, 2 ♂♂, SW (JS).

*Hoplolabis (Parilisia) vicina* (Tonnoir in Goetghebuer & Tonnoir, 1920)

Palaearctic, widespread in Europe.

[26b] Meandry Smědé NR: 25.vii.2013, 1 ♂, SW (JS). [26c] Meandry Smědé NR: 14.vi.2011, 1 ♂, SW (JS). [31] Poustecká obora: 12.vi.2012, 1 ♂, SW (JS).

*Idiocera (Idiocera) sziladyi* (Lackschewitz, 1940)

West Palaearctic, scattered records from Europe. Hitherto single record from Bohemia: Staré Splavy nr. Doksy (Starý 2006). Local, ecologically significant species, associated with sandy or gravelly banks of larger streams.

[26b] Meandry Smědé NR: 30.v.2017, 1 ♂, SW (JS). [26c] Meandry Smědé NR: 30.v.2017, 8 ♂♂, 1 ♀, SW (JS).

*Ilisia maculata* (Meigen, 1804)

West Palaearctic, widespread in Europe.

[5] Černousy-V Poli: 9.–28.viii.2012, 1 ♀, MT (JP & PV). [23b] Ludvíkov pod Smrkem: 30.v.2017, 1 ♂, SW (JS).

[26a] Meandry Smědé NR: 31.v.–22.vi.2005, 1 ♀, MT (JP & PV), 1.vi.2010, 1 ♂, SW (JS), 25.vii.2013, 1 ♂, SW (JS). [39] Šolcův rybník: 11.–26.v.2011, 1 ♀, MT (PV), 13.vi.–1.vii.2011, 1 ♀, MT (PV).

*Molophilus (Molophilus) appendiculatus* (Staeger, 1840)

Palaearctic, widespread in Europe.

[4b] Bukovec NR: 16.vii.2015, 1 ♂, SW (JS), 12.ix.2016, 1 ♂, SW (JS). [4c] Bukovec NR: 20.vi.–9.vii.2003, 2 ♂♂, YPT (JP & PV). [11] Jedlový důl NR: 21.vii.2013, 2 ♂♂, SW (JS), 15.vii.2015, 1 ♂, SW (JS). [26a] Meandry Smědé NR: 13.vii.2015, 1 ♂, SW (JS). [35] Rejdice: 30.v.–16.vi.2005, 1 ♂, ET (JP & PV). [41a] Štolpichy valley: 15.vi.2012, 1 ♂, SW (JS), 22.vii.2013, 2 ♂♂, SW (JS).

*Molophilus (Molophilus) ater* (Meigen, 1804)

Palaearctic, widespread in Europe.

[2a] Bílý Potok: 22.v.2003, 5 ♂♂, SW (JP). [2c] Bílý Potok: 3.–19.v.2005, 6 ♂♂, YPT (JP & PV). [4b] Bukovec NR: 5.v.2003, 11 ♂♂, 1 ♀, SW (JP), 16.–29.v.2003, 1 ♂, PYT (JP & PV), 29.v.–10.vi.2003, 1 ♂, PYT (JP & PV), 20.v.–15.vi.2010, 1 ♂, MT (PV). [20] Liberec-Vesec: 18.v.2015, 2 ♂♂, SW (JP). [24] Malá Strana NR: 7.v.–12.vi.2015, 1 ♀, MT (JP & PV). [26a] Meandry Smědé NR: 4.–19.v.2005, 1 ♂, YPT (JP & PV). [31] Poustecká obora: 27.iv.–16.v.2012, 15 ♂♂, 3 ♀♀, MT (JP & PV). [33] Rašelinště Jizerky NNR: 28.v.2017, 1 ♂, 2 ♀♀, SW (JS). [39] Šolcův rybník: 6.v.2003, 12 ♂♂, 3 ♀♀, SW (JP), 11.–26.v.2011, 5 ♂♂, MT (PV). [42] Tichá říčka NM: 20.v.2014, 1 ♀, SW (JP).

*Molophilus (Molophilus) bifidus* Goetghebuer in Goetghebuer & Tonnoir, 1920

West Palaearctic, widespread in Europe.

[14] Karlovske bučiny NNR: 9.vii.–2.viii.2013, 1 ♂, MT (JP & PV). [39] Šolcův rybník: 11.–26.v.2011, 1 ♂, MT (PV).

*Molophilus (Molophilus) bihamatus* de Meijere, 1918

Widespread in Europe.

[23b] Ludvíkov pod Smrkem: 1.vi.2017, 1 ♂, 2 ♀♀, SW (JS). [26a] Meandry Smědé NR: 31.v.–22.vi.2005, 1 ♂, MT (JP & PV). [39] Šolcův rybník: 26.v.–1.vii.2011, 1 ♂, ET (JP & PV).

*Molophilus (Molophilus) cinereifrons* de Meijere, 1920

Widespread in Europe.

[17] Liberec-Kateřinky: 25.viii.2013, 1 ♂, SW (JP).

*Molophilus (Molophilus) corniger* de Meijere, 1920

Widespread in Europe.

[35] Rejdice: 16.viii.-1.ix.2005, 2 ♂♂, ET (JP & PV).

*Molophilus (Molophilus) crassipygus* de Meijere, 1918

Widespread in Europe.

[2d] Bílý Potok: 22.vii.2013, 1 ♂, SW (JS). [3] Bohuňovsko: 23.vii.2013, 1 ♂, SW (JS). [5] Černousy-V Poli: 9.-28.viii.2012, 1 ♂, 1 ♀, MT (JP & PV). [13a] Jizerka: 13.vi.2011, 1 ♂, AL (JS). [26c] Meandry Smědé NR: 14.vi.2011, 2 ♂♂, SW (JS). [39] Šolcův rybník: 1.vii.-3.viii.2011, 1 ♂, MT (PV).

*Molophilus (Molophilus) flavus* Goetghebuer in Goetghebuer & Tonnoir, 1920

Widespread in temperate and North Europe.

[4b] Bukovec NR: 26.vi.-9.vii.2003, 1 ♂, PYT (JP & PV), 20.v.-15.vi.2010, 2 ♂♂, MT (JP & PV), 6.viii.-2.ix.2010, 1 ♂, MT (JP & PV). [4c] Bukovec NR: 29.v.-9.vi.2003, 1 ♂, YPT (JP & PV), 20.vi.-9.vii.2003, 1 ♂, YPT (JP & PV). [11] Jedlový důl NR: 1.-22.ix.2005, 1 ♂, MT (JP & PV). [12] Jiřetín pod Bukovou: 17.vi.2003, 1 ♂, SW (JP). [13a] Jizerka: 14.vi.2011, 1 ♂, AL (JS), 11.vi.2012, 1 ♂, AL (JS), 27.v.2014, 1 ♂, AL (JS), 28.v.2014, 1 ♂, AL (JS). [13b] Jizerka: 13.vi.2012, 1 ♂, SW (JS). [17] Liberec-Kateřinky: 27.viii.2013, 1 ♂, SW (JP). [24] Malá Strana NR: 16.-29.v.2003, 2 ♂♂, MT (JP & PV), 2.viii.2005, 4 ♂♂, SW (JP), 14.vi.2012, 2 ♂♂, SW (JS), 15.vii.2015, 1 ♂, SW (JS). [27] Nová louka NR: 26.v.-17.vi.2014, 2 ♂♂, 2 ♀♀, MT (PV). [33] Rašelinisté Jizerky NNR: 16.vi.2011, 1 ♂, SW (JS). [35] Rejdice: 30.v.-16.vi.2005, 1 ♂, ET (JP & PV), 28.vii.-16.viii.2005, 5 ♂♂, ET (JP & PV), 1.-22.ix.2005, 1 ♂, ET (JP & PV). [36] Rybí loučky NR: 29.v.-10.vi.2003, 1 ♂, MT (JP & PV), 10.-26.vi.2003, 1 ♂, MT (JP & PV), 10.-26.vi.2003, 1 ♂, YPT (JP & PV), 9.-23.vii.2003, 1 ♂, MT (JP & PV), 23.vii.-5.viii.2003, 1 ♂, MT (JP & PV).

*Molophilus (Molophilus) griseus* (Meigen, 1804)

West Palaearctic, widespread in Europe.

[2c] Bílý Potok: 13.ix.2016, 1 ♂, SW (JS). [26a] Meandry Smědé NR: 4.-23.ix.2005, 1 ♂, MT (JP & PV). [39] Šolcův rybník: 11.-26.v.2011, 2 ♂♂, MT (PV).

*Molophilus (Molophilus) medius* de Meijere, 1918

Widespread in Europe.

[2c] Bílý Potok: 29.vii.-19.viii.2005, 1 ♂, MT (JP & PV), 19.viii.-4.ix.2005, 1 ♂, MT (JP & PV). [4b] Bukovec NR: 16.vii.2015, 1 ♂, SW (JS). [9] Horní Rasnice: 7.viii.2013, 1 ♂, SW (JP). [15] Kořenov: 29.viii.2013, 1 ♂, SW (JP). [17] Liberec-Kateřinky: 25.viii.2013, 3 ♂♂, SW (JP). [24] Malá Strana NR: 14.vi.2012, 1 ♂, SW (JS), 21.vii.2013, 2 ♂♂, SW (JS), 15.vii.2015, 3 ♂♂, SW (JS). [26a] Meandry Smědé NR: 25.vii.2013, 1 ♂, SW (JS). [35] Rejdice: 16.vi.-5.vii.2005, 2 ♂♂, ET (JP & PV), 5.-28.viii.2005, 2 ♂♂, 1 ♀, ET (JP & PV), 28.vii.-16.viii.2005, 6 ♂♂, ET (JP & PV), 16.viii.-1.ix.2005, 5 ♂♂, ET (JP & PV), 1.-22.ix.2005, 1 ♂, ET (JP & PV). [39] Šolcův rybník: 11.-26.v.2011, 1 ♂, MT (PV).

*Molophilus (Molophilus) obscurus* (Meigen, 1818)

West Palaearctic, widespread in Europe.

[5] Černousy-V Poli: 9.-28.viii.2012, 5 ♀♀, MT (JP & PV). [26a] Meandry Smědé NR: 13.vii.2015, 1 ♂, SW (JS).

*Molophilus (Molophilus) occultus* de Meijere, 1918

Widespread mostly in temperate and North Europe.

[13b] **Jizerka**: 9.viii.2003, 2 ♂♂, SW (JP). [18] **Liberec-Rudolfov**: 27.vii.2003, 5 ♂♂, SW (JP). [24] **Malá Strana NR**: 26.vi.–9.vii.2003, 1 ♂, YPT (JP & PV), 2.viii.2005, 2 ♂♂, SW (JP), 14.vi.2012, 3 ♂♂, SW (JS), 21.vii.2013, 3 ♂♂, SW (JS), 12.vi.–9.vii.2015, 4 ♂♂, MT (JP & PV), 9.vii.–5.viii.2015, 16 ♂♂, 2 ♀♀, MT (JP & PV), 15.vii.2015, 2 ♂♂, SW (JS). [27] **Nová louka NR**: 1.–22.viii.2014, 21 ♂♂, 5 ♀♀, MT (PV), 22.viii.–2.x.2014, 18 ♂♂, 2 ♀♀ MT (PV). [33] **Rašelinště Jizerky NNR**: 20.vii.2012, 4 ♂♂, 1 ♀, SW (JS). [34] **Rašelinště Jizery NNR**: 26.vi.–9.vii.2003, 29 ♂♂, MT (JP & PV), 26.vi.–9.vii.2003, 1 ♂, YPT (JP & PV). [36] **Rybí loučky NR**: 10.–26.vi.2003, 6 ♂♂, MT (JP & PV), 9.–23.vii.2003, 33 ♂♂, MT (JP & PV), 23.vii.–5.viii.2003, 22 ♂♂, MT (JP & PV), 12.vi.–11.vii.2015, 2 ♀♀, UPT (JP & PV).

### *Molophilus (Molophilus) ochraceus* (Meigen, 1818)

West Palaearctic, widespread in Europe.

[1] **Arnoltice**: 11.viii.2003, 1 ♂, SW (JP). [2c] **Bílý Potok**: 15.vi.2012, 1 ♂, SW (JS). [26a] **Meandry Smědě NR**: 4.–23.ix.2005, 1 ♂, MT (JP & PV), 1.vi.2010, 1 ♂, SW (JS), 30.v.2014, 1 ♂, SW (JS). [28a] **Oldřichov v Hájích**: 19.vi.2003, 1 ♂, SW (JP). [31] **Poustecká obora**: 16.v.–12.vi.2012, 4 ♂♂, MT (JP & PV), 24.ix.–23.x.2012, 1 ♂, MT (JP & PV). [39] **Šolcův rybník**: 11.–26.v.2011, 7 ♂♂, 1 ♀, MT (PV), 26.v.–13.vi.2011, 10 ♂♂, 1 ♀, MT (PV), 13.vi.–1.vii.2011, 25 ♂♂, 5 ♀♀, MT (PV), 1.vii.–3.viii.2011, 5 ♂♂, 3 ♀♀, MT (PV), 3.–24.viii.2011, 1 ♂, MT (PV), 6.x.–3.xi.2011, 1 ♂, MT (PV).

### *Molophilus (Molophilus) priapoides* Starý, 1971

Lit.: Jizerské hory Mts: Janov nad Nisou, Tichá říčka (Starý & Čelechovský 2015).

Scattered records from mountains of temperate and South Europe. First record for Bohemia (Starý & Čelechovský 2015).

[42] **Tichá říčka NM**: 20.v.2014, 1 ♂, SW (JP).

### *Molophilus (Molophilus) propinquus* (Egger, 1863)

Palaearctic, widespread in Europe.

[5] **Černousy-V Poli**: 9.–28.viii.2012, 4 ♂♂, MT (JP & PV). [13a] **Jizerka**: 16.vi.2011, 1 ♂, AL (JS). [24] **Malá Strana NR**: 15.vi.2011, 1 ♂, SW (JS). [26a] **Meandry Smědě NR**: 16.vi.2011, 1 ♂, SW (JS). [26b] **Meandry Smědě NR**: 16.vi.2011, 1 ♂, SW (JS), 30.v.2014, 1 ♂, SW (JS). [26c] **Meandry Smědě NR**: 14.vi.2011, 1 ♂, SW (JS). [31] **Poustecká obora**: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV). [33] **Rašelinště Jizerky NNR**: 16.vi.2011, 1 ♂, SW (JS). [34] **Rašelinště Jizery NNR**: 13.vi.2011, 3 ♂♂, SW (JS). [39] **Šolcův rybník**: 8.iv.–11.v.2011, 1 ♂, MT (JP & PV), 11.–26.v.2011, 14 ♂♂, 10 ♀♀, MT (PV), 13.vi.–1.vii.2011, 1 ♂, MT (PV).

### *Molophilus (Molophilus) repentinus* Starý, 1971

Scattered records from temperate Europe.

[23a] **Ludvíkov pod Smrkem**: 1.vi.2017, 1 ♂, SW (JS).

### *Molophilus (Molophilus) savtshenkoi* Starý, 1972

Only known from mountains of Czech Republic, Poland, Romania, Slovakia, and Ukraine. First record for Bohemia.

[11] **Jedlový důl NR**: 30.v.–16.vi.2005, 1 ♂, YPT (JP & PV). [29] **Oldřichovské sedlo**: 17.v.–3.vi.2003, 1 ♂, YPT (JP & PV). [40] **Špičák Mt.**: 4.–17.v.2003, 1 ♂, YPT (JP).

### *Molophilus (Molophilus) scutellatus* Goetghebuer, 1929 (Fig. 11)

Scattered records predominantly from mountains of temperate Europe.

[4b] **Bukovec NR**: 6.viii.–2.ix.2010, 1 ♂, MT (JP & PV). [13b] **Jizerka**: 9.viii.2003, 2 ♂♂, SW (JP), 13.vi.2012, 1 ♂, SW (JS). [18] **Liberec-Rudolfov**: 27.vii.2003, 1 ♂, SW (JP). [24] **Malá Strana NR**: 26.vi.–9.vii.2003, 1 ♂, YPT (JP & PV), 15.vi.2011, 3 ♂♂, SW (JS), 14.vi.2012, 2 ♂♂, SW (JS), 21.vii.2013, 2 ♂♂, 1 ♀, SW (JS), 12.vi.–9.

vii.2015, 1 ♂, MT (JP & PV). [27] **Nová louka NR**: 22.viii.–2.x.2014 3 ♀♀, MT (PV). [33] **Rašelinště Jizerky NNR**: 28.vii.–17.viii.2005, 1 ♂, PT (JP & PV), 16.vi.2011, 1 ♂, SW (JS), 11.ix.2016, 1 ♂, SW (JS). [34] **Rašelinště Jizery NNR**: 26.vi.–9.vii.2003, 1 ♀, YPT (JP & PV). [36] **Rybí loučky NR**: 10.–26.vi.2003, 1 ♂, YPT (JP & PV), 9.–23.vii.2003, 3 ♂♂, MT (JP & PV), 23.vii.–5.viii.2003, 2 ♂♂, MT (JP & PV), 12.vi.–11.vii.2015, 1 ♀, UPT (JP & PV). [37b] **Smědava**: 25.vii.2013, 1 ♂, SW (JS).

*Molophilus (Molophilus) serpentiger* Edwards, 1938

Widespread mostly in temperate Europe.

[5] **Černousy-V Poli**: 1.vi.2010, 1 ♂, SW (JS). [20] **Liberec-Vesec**: 25.v.2012, 2 ♂♂, SW (JP). [23b] **Ludvíkov pod Smrkem**: 30.v.2017, 1 ♂, SW (JS). [35] **Rejdice**: 30.v.–16.vi.2005, 7 ♂♂, 1 ♀, ET (JP & PV). [39] **Šolcův rybník**: 13.vi.–1.vii.2011, 1 ♂, MT (PV).

*Neolimnophila carteri* (Tonnoir in Goetghebuer & Tonnoir, 1921)

Widespread in Europe.

[13a] **Jizerka**: 16.vi.2011, 1 ♀, AL (JS), 13.vii.2015, 1 ♂, AL (JS). [30] **Poledník Mt.**: 15.vi.2011, 1 ♂, SW (JS). [37a] **Smědava**: 30.v.2014, 1 ♂, SW (JS).

*Ormosia (Ormosia) albifibia* Edwards, 1921

Widespread mostly in temperate Europe.

[35] **Rejdice**: 28.vii.–16.viii.2005, 1 ♂, ET (JP & PV), 16.viii.–1.ix.2005, 2 ♂♂, ET (JP & PV).

*Ormosia (Ormosia) bifida* (Lackschewitz, 1940)

Scattered records from mountains of temperate Europe.

[4b] **Bukovec NR**: 26.vi.–9.vii.2003, 1 ♂, PYT (JP & PV), 9.–23.vii.2003, 1 ♂, PYT (JP & PV). [37a] **Smědava**: 24.vii.2013, 1 ♂, SW (JS).

*Ormosia (Ormosia) depilata* Edwards, 1938

Widespread in Europe.

[2a] **Bílý Potok**: 22.v.2003, 19 ♂♂, SW (JP). [2c] **Bílý Potok**: 3.–19.v.2005, 1 ♂, YPT (JP & PV). [5] **Černousy-V Poli**: 27.iv.–16.v.2012, 3 ♂♂, MT (JP & PV), 9.–28.viii.2012, 1 ♂, 1 ♀, MT (JP & PV). [16] **Liberec-Horní Hanychov**: 8.v.2012, 1 ♂, SW (JP). [20] **Liberec-Vesec**: 18.v.2015, 1 ♂, 1 ♀, SW (JP). [23b] **Ludvíkov pod Smrkem**: 13.ix.2016, 1 ♂, SW (JS), 30.v.2017, 2 ♂♂, SW (JS). [26a] **Meandry Smědé NR**: 4.–19.v.2005, 1 ♂, MT (JP & PV), 1.vi.2010, 1 ♂, SW (JS). [29] **Oldřichovské sedlo**: 17.v.–3.vi.2003, 1 ♂, YPT (JP & PV). [31] **Poustecká obora**: 27.iv.–16.v.2012, 2 ♂♂, MT (JP & PV), 24.ix.–23.x.2012, 1 ♂, MT (JP & PV). [39] **Šolcův rybník**: 6.v.2003, 4 ♂♂, 1 ♀, SW (JP).

*Ormosia (Ormosia) egena* (Bergroth, 1891)

Scattered records mostly from mountains of temperate Europe.

[4c] **Bukovec NR**: 18.vi.2005, 1 ♂, SW (JP). [13a] **Jizerka**: 27.v.2014, 1 ♂, AL (JS). [13b] **Jizerka**: 4.vi.2010, 1 ♂, SW (JS).

*Ormosia (Ormosia) hederae* (Curtis, 1835)

Palaearctic, widespread in Europe.

[23b] **Ludvíkov pod Smrkem**: 13.ix.2016, 2 ♂♂, SW (JS). [31] **Poustecká obora**: 24.ix.–23.x.2012, 1 ♂, MT (JP & PV).

*Ormosia (Ormosia) lineata* (Meigen, 1804)

Widespread in Europe.

[2c] **Bílý Potok**: 3.–19.v.2005, 1 ♂, YPT (JP & PV). [4b] **Bukovec NR**: 20.v.–15.vi.2010, 2 ♂♂, MT (JP & PV), 26.v.2014, 1 ♂, SW (JS). [4c] **Bukovec NR**: 5.–16.v.2003, 1 ♂, YPT (JP & PV). [13b] **Jizerka**: 26.v.2014, 1 ♂, SW (M. Vála). [16] **Liberec-Horní Hanychov**: 8.v.2012, 1 ♀, SW (JP). [20] **Liberec-Vesec**: 18.v.2015, 3 ♂♂, SW (JP). [23b] **Ludvíkov pod Smrkem**: 30.v.2017, 3 ♂♂, SW (JS). [35] **Rejdice**: 30.v.–16.vi.2005, 4 ♂♂, ET (JP & PV). [39] **Šolcův rybník**: 6.v.2003, 5 ♂♂, SW (JP), 8.iv.–11.v.2011, 1 ♂, MT (JP & PV), 11.–26.v.2011, 1 ♂, MT (PV).

### *Ormosia (Ormosia) moravica* Starý, 1969

Lit.: Jizerské hory Mts: Raspenava, Oldřichovské sedlo (Starý & Čelechovský 2015).

Scattered records from temperate Europe. First records for Bohemia (Starý & Čelechovský 2015).

[16] **Liberec-Horní Hanychov**: 11.v.2012, 1 ♂, SW (JP). [29] **Oldřichovské sedlo**: 17.v.–3.vi.2003, 1 ♂, YPT (JP & PV).

### *Ormosia (Ormosia) nodulosa* (Macquart, 1826)

Widespread in Europe.

[2c] **Bílý Potok**: 15.vi.2012, 1 ♂, SW (JP).

### *Ormosia (Ormosia) pseudosimilis* (Lundström, 1912)

Widespread in temperate and North Europe.

[4b] **Bukovec NR**: 23.vii.–5.viii.2003, 1 ♂, PYT (JP & PV). [24] **Malá Strana NR**: 7.v.–12.vi.2015, 1 ♂, MT (JP & PV). [26a] **Meandry Smědé NR**: 12.vi.2012, 1 ♂, SW (JS), 13.vii.2015, 2 ♂♂, SW (JS). [33] **Rašelinště Jizerky NNR**: 12.vii.2015, 2 ♂♂, SW (JS).

### *Ormosia (Ormosia) ruficauda* (Zetterstedt, 1838)

Widespread in temperate and North Europe.

[4b] **Bukovec NR**: 29.v.–10.vi.2003, 1 ♂, PYT (JP & PV), 26.vi.–9.vii.2003, 1 ♂, PYT (JP & PV), 9.–23.vii.2003, 1 ♂, PYT (JP & PV), 7.vi.2014, 1 ♂, SW (JP), 16.vii.2015, 1 ♂, SW (JS). [13b] **Jizerka**: 9.viii.2003, 2 ♂♂, SW (JP), 15.vi.2011, 1 ♂, SW (JS), 15.vi.2012, 2 ♂♂, SW (JS). [20] **Liberec-Vesec**: 25.v.2012, 1 ♂, SW (JP). [24] **Malá Strana NR**: 12.vi.–9.vii.2015, 1 ♂, MT (JP & PV). [26a] **Meandry Smědé NR**: 1.vi.2010, 1 ♂, SW (JS), 4.vi.2010, 1 ♂, SW (JS), 30.v.2014, 1 ♂, SW (JS). [28b] **Oldřichov v Hájích**: 15.vii.2003, 1 ♂, SW (JP). [31] **Poustecká obora**: 27.iv.–16.v.2012, 6 ♂♂, MT (JP & PV), 16.v.–12.vi.2012, 5 ♂♂, MT (JP & PV). [33] **Rašelinště Jizerky NNR**: 16.vi.2011, 1 ♂, SW (JS), 20.vii.2013, 1 ♂, 1 ♀, SW (JS), 12.vii.2015, 2 ♂♂, SW (JS). [34] **Rašelinště Jizery NNR**: 26.vi.–9.vii.2003, 1 ♂, MT (JP & PV), 13.vi.2011, 2 ♂♂, SW (JS). [37b] **Smědava**: 25.vii.2013, 3 ♂♂, SW (JS). [41b] **Štolpichy valley**: 15.vi.2011, 1 ♂, SW (JS).

### *Ormosia (Ormosia) staegeriana* Alexander, 1953

Widespread in Europe.

[4b] **Bukovec NR**: 9.–23.vii.2003, 1 ♂, PYT (JP & PV), 6.viii.–2.ix.2010, 1 ♂, MT (JP & PV), 2.ix.–15.x.2010, 1 ♂, MT (JP & PV). [8] **Holubník Mt.**: 16.vi.–3.viii.2011, 1 ♀, MT (JP), 3.viii.–13.ix.2011, 1 ♂, MT (JP & PV). [24] **Malá Strana NR**: 7.v.–12.vi.2015, 1 ♂, MT (JP & PV). [40] **Špičák Mt.**: 3.–22.vi.2003, 1 ♂, YPT (JP).

### *Rhabdomastix (Rhabdomastix) crassa* Starý, 2004 (Fig. 12)

Described and only known from Czech Republic, France, and Slovakia (Starý 2004a). Hitherto single record from Bohemia: Malenice nr. Strakonice (Starý 2004b). Local, ecologically significant species, associated with sandy or gravelly banks of larger streams.

[3] **Bohuňovsko**: 23.vii.2013, 1 ♂, 2 ♀♀, SW (JS), 27.v.2014, 1 ♂, SW (JS), 31.v.2017, 3 ♂♂, SW (JS). [15] **Kořenov**: 13.vi.2012, 2 ♂♂, 2 ♀♀, SW (JS).

*Rhabdomastix (Rhabdomastix) laeta* (Loew, 1873)

Revised recently (Starý 2004a). Palaearctic, widespread in Europe.

[26b] Meandry Smědé NR: 14.vi.2011, 1 ♀, SW (JS).

*Rhabdomastix (Rhabdomastix) laetoidea* Starý, 2004 (Fig. 13)

Described and only known from Bulgaria, Czech Republic, Slovakia, and Ukraine (Starý 2004a). Hitherto single record from Bohemia: Malenice nr. Strakonice (Starý 2004a). Ecologically significant species, associated with sandy or gravelly banks of larger streams.

[3] Bohuňovsko: 23.vii.2013, 1 ♂, SW (JS).

*Rhabdomastix (Rhabdomastix) subparva* Starý, 1971

Scattered records from temperate and South Europe.

[2c] Bílý Potok: 1.vi.2017, 2 ♂♂, SW (JS). [3] Bohuňovsko: 31.v.2017, 1 ♂, SW (JS). [23a] Ludvíkov pod Smrkem: 1.vi.2017, 4 ♂♂, 1 ♀, SW (JS). [26a] Meandry Smědé NR: 30.v.2014, 2 ♂♂, SW (JS).

*Rhynolophus haemorrhoinalis* (Zetterstedt, 1838)

Widespread in Europe.

[11] Jedlový důl NR: 1.–22.ix.2005, 1 ♂, MT (JP & PV), 12.ix.2016, 1 ♂, SW (JS). [23b] Ludvíkov pod Smrkem: 13.ix.2016, 1 ♂, SW (JS). [31] Poustecká obora: 24.ix.–23.x.2012, 1 ♂, MT (JP & PV). [35] Rejdice: 16.viii.–1. ix.2005, 2 ♂♂, ET (JP & PV), 1.–22.ix.2005, 8 ♂♂, ET (JP & PV), 1.–22.ix.2005, 1 ♂, YPT (JP & PV). [37a] Smědava: 14.ix.2016, 1 ♂, SW (JS).

*Rhynolophus phryganopterus* Kolenati, 1860

Scattered records from mountains of temperate Europe.

[4b] Bukovec NR: 20.v.–15.vi.2010, 2 ♂♂, 1 ♀, MT (PV). [24] Malá Strana NR: 7.v.–12.vi.2015, 1 ♂, 3 ♀♀, MT (JP & PV).

*Rhynolophus varius* (Meigen, 1818)

Widespread in temperate and North Europe.

[23b] Ludvíkov pod Smrkem: 13.ix.2016, 12 ♂♂, SW (JS). [26a] Meandry Smědé NR: 15.ix.2016, 7 ♂♂, SW (JS). [31] Poustecká obora: 24.ix.–23.x.2012, 6 ♂♂, 1 ♀, MT (JP & PV). [39] Šolečův rybník: 10.ix.–8.x.2002, 1 ♂, MT (PV).

*Scleroproccta pentagonalis* (Loew, 1873)

Palaearctic, widespread in Europe.

[3] Bohuňovsko: 27.v.2014, 2 ♀♀, SW (JS).

*Scleroproccta sororcula* (Zetterstedt, 1851)

Lit.: Jizerské hory Mts: Bukovec, Horní Maxov-Malá Strana, Jizerka, Oldřichov v Hájích, Oldřichovské sedlo, Pralouka, Rejdice, Rybí loučky (Starý & Čelechovský 2015).

Widespread in temperate and North Europe. First records for Bohemia (Starý & Čelechovský 2015).

[4b] Bukovec NR: 20.v.–15.vi.2010, 8 ♂♂, MT (JP & PV), 26.v.2014, 1 ♂, SW (JS). [4c] Bukovec NR: 5.–16.v.2003, 2 ♂♂, YPT (JP & PV), 16.v.–29.v.2003, 2 ♂♂, YPT (JP & PV). [24] Malá Strana NR: 6.–16.v.2003, 2 ♂♂, MT (JP & PV), 16.–29.v.2003, 1 ♂, MT (JP & PV). [35] Rejdice: 30.v.–16.vi.2005, 1 ♂, ET (JP & PV). [36] Rybí loučky NR: 17.–29.v.2003, 1 ♂, MT (JP & PV). [40] Špičák Mt.: 17.v.–3.vi.2003, 1 ♂, YPT (JP).

*Symplecta (Psiloconopa) stictica* (Meigen, 1818)

Holarctic, widespread in Europe.

- [3] Bohuňovsko: 22.vii.2014, 2 ♀♀, AL (PV). [23b] Ludvíkov pod Smrkem: 13.ix.2016, 1 ♀, SW (JS). [26a] Meandry Smědé NR: 30.v.2014, 1 ♀, SW (JS). [26b] Meandry Smědé NR: 16.vi.2011, 1 ♂, SW (JS), 30.v.2014, 1 ♀, SW (JS).

*Symplecta (Symplecta) hybrida* (Meigen, 1804)

Holarctic, ranging to Oriental Region, widespread in Europe.

- [26b] Meandry Smědé NR: 26.v.2012, 2 ♂♂, 1 ♀, SW (JP), 30.v.2014, 1 ♂, SW (JS). [26c] Meandry Smědé NR: 14.vi.2011, 1 ♂, SW (JS). [34] Rašelinšté Jizerky NNR: 13.vi.2011, 1 ♂, SW (JS). [39] Šolcův rybník: 8.–11.v.2011, 1 ♂, MT (JP & PV), 1.–3.viii.2011, 1 ♀, MT (PV).

*Tasiocera (Dasymolophilus) exigua* Savchenko, 1973

Lit.: Jizerské hory Mts: Bílý Potok, Oldřichov v Hájích, Špičák (Starý & Čelechovský 2015).

Scattered records from temperate and North Europe. First records for Bohemia (Starý & Čelechovský 2015).

- [2a] Bílý Potok: 22.v.2003, 1 ♂, SW (JP). [2b] Bílý Potok: 3.vi.2010, 1 ♂, SW (JS). [40] Špičák Mt.: 17.v.–3.vi.2003, 2 ♂♂, YPT (JP), 3.–22.vi.2003, 1 ♂, YPT (JP).

*Tasiocera (Dasymolophilus) fuscescens* (Lackschewitz, 1940)

Lit.: Jizerské hory Mts: Bukovec, Jizerka (Starý & Čelechovský 2015).

Scattered records from Europe. First record for Bohemia (Starý & Čelechovský 2015).

- [4c] Bukovec NR: 9.–23.vii.2003, 1 ♂, YPT (JP & PV).

*Tasiocera (Dasymolophilus) murina* (Meigen, 1818)

West Palaearctic, widespread in Europe.

- [2c] Bílý Potok: 1.vi.2017, 2 ♂♂, SW (JS). [3] Bohuňovsko: 27.v.2014, 1 ♂, SW (JS), 31.v.2017, 3 ♂♂, SW (JS). [15] Kořenov: 13.vi.2012, 12 ♂♂, SW (JS). [26a] Meandry Smědé NR: 4.vi.2010, 1 ♂, SW (JS), 30.v.2014, 1 ♂, SW (JS). [31] Poustecká obora: 12.vi.2012, 6 ♂♂, SW (JS).

Limoniinae

*Achyrolimonia decemmaculata* (Loew, 1873)

West Palaearctic, widespread in Europe.

- [4b] Bukovec NR: 26.v.2014, 2 ♂♂, SW (JS). [30] Poledník Mt.: 15.vi.2011, 1 ♂, SW (JS).

*Antocha (Antocha) vitripennis* (Meigen, 1830)

Palaearctic, widespread in Europe.

- [3] Bohuňovsko: 22.vii.2014, 2 ♂♂, 1 ♀, AL (PV), 23.vii.2013, 1 ♂, SW (JS). [13a] Jizerka: 16.vi.2011, 1 ♂, 1 ♀, AL (JS). [26b] Meandry Smědé NR: 30.v.2014, 1 ♂, SW (JS).

*Atypophthalmus (Atypophthalmus) inustus* (Meigen, 1818)

Palaearctic, widespread in Europe.

- [26a] Meandry Smědé NR: 13.vii.2015, 1 ♀, SW (JS). [39] Šolcův rybník: 13.vi.–1.vii.2011, 1 ♂, MT (JP & PV).

*Atypophthalmus (Microlimonia) machidai* (Alexander, 1921)

Palaearctic, scattered records from temperate Europe. Hitherto two records from Bohemia: Šalmanovice nr. Třeboň (Starý 1993), Vráž nr. Písek (Starý et al. 2013). Local, saproxylic, ecologically significant species, associated with forest habitats.

[11] **Jedlový důl NR:** 21.vii.2013, 1 ♂, 3 ♀♀, SW (JS), 24.vii.2013, 7 ♂♂, 5 ♀♀, SW (JS), 15.vii.2015, 1 ♀, SW (JS).

*Dicranomyia (Dicranomyia) autumnalis* (Staeger, 1840)

Widespread in Europe.

[24] **Malá Strana NR:** 14.vi.2012, 1 ♂, SW (JS).

*Dicranomyia (Dicranomyia) chorea* (Meigen, 1818)

Holarctic, widespread in Europe.

[26a] **Meandry Smědé NR:** 4.vi.2010, 1 ♂, SW (JS). [13a] **Jizerka:** 15.vii.2015, 1 ♂, AL (JS), 28.v.2017, 1 ♂, AL (JS), 29.v.2017, 2 ♂♂, AL (JS). [13b] **Jizerka:** 4.vi.2010, 1 ♂, SW (JS), 11.vi.2012, 1 ♂, SW (JS).

*Dicranomyia (Dicranomyia) didyma* (Meigen, 1804)

West Palaearctic, widespread in Europe.

[3] **Bohuňovsko:** 27.v.2014, 3 ♂♂, 1 ♀, SW (JS), 31.v.2017, 2 ♂♂, SW (JS). [13a] **Jizerka:** 12.vi.2012, 1 ♀, AL (JS), 12.ix.2016, 1 ♂, AL (JS), 29.v.2017, 1 ♂, AL (JS), 30.v.2017, 1 ♂, AL (JS). [37a] **Smědava:** 22.vii.2013, 1 ♂, SW (JS).

*Dicranomyia (Dicranomyia) distendens* Lundström, 1912

Holarctic, widespread in mountains of temperate and North Europe.

[13b] **Jizerka:** 13.vii.2015, 2 ♂♂, SW (JP). [18] **Liberec-Rudolfov:** 27.vii.2003, 1 ♂, SW (JP). [22] **Lučany nad Nisou:** 23.v.2012, 1 ♂, SW (JP). [24] **Malá Strana NR:** 14.vi.2012, 1 ♀, SW (JP), 9.vii.–5.viii.2015, 1 ♂, MT (JP & PV). [33] **Rašelinště Jizerky NNR:** 15.vi.2011, 1 ♀, SW (JS). [34] **Rašelinště Jizery NNR:** 9.–23.vii.2003, 1 ♂, MT (JP & PV), 13.vi.2011, 2 ♂♂, SW (JS). [37a] **Smědava:** 22.vii.2013, 1 ♀, SW (JS). [37b] **Smědava:** 25.vii.2013, 3 ♂♂, SW (JS).

*Dicranomyia (Dicranomyia) frontalis* (Staeger, 1840)

Holarctic, ranging to Oriental Region, widespread in Europe.

[26b] **Meandry Smědé NR:** 30.v.2014, 1 ♂, SW (JS).

*Dicranomyia (Dicranomyia) imbecilla* Lackschewitz in Lackschewitz & Pagast, 1941

Revised recently (Starý & Stubbs 2015). Scattered records mostly from temperate and South Europe. First records for Bohemia.

[13b] **Jizerka:** 15.vi.2011, 1 ♂, SW (JS). [37a] **Smědava:** 24.vii.2013, 1 ♀, SW (JS).

*Dicranomyia (Dicranomyia) longipennis* (Schummel, 1829)

Holarctic, ranging to Oriental Region, widespread in Europe.

[7] **Heřmanice:** 14.vi.2011, 1 ♂, SW (JS).

*Dicranomyia (Dicranomyia) luteipennis* Goetghebuer in Goetghebuer & Tonnoir, 1920

Revised recently and reliably only known from Belgium, Czech Republic, and Slovakia (Starý 2009a). Hitherto single record from Bohemia: Loučovice nr. Český Krumlov (Starý 2009b).

Local, ecologically significant species, associated with mountain streams.

[13a] **Jizerka**: 16.vii.2015, 1 ♂, AL (JS), 11.ix.2016, 1 ♀, AL (JS).

#### *Dicranomyia (Dicranomyia) mitis* (Meigen, 1830)

Revised recently (Starý & Stubbs 2015). Palaearctic, widespread in Europe.

[2c] **Bílý Potok**: 1.vi.2017, 1 ♂, SW (M. Vála). [12] **Jiřetín pod Bukovou**: 17.vi.2003, 1 ♂, SW (JP). [13a] **Jizerka**: 14.vi.2011, 1 ♀, AL (JS), 16.vi.2011, 1 ♀, AL (JS), 27.v.2014, 3 ♀♀, AL (JS). [13b] **Jizerka**: 15.vi.2012, 1 ♂, SW (JS). [33] **Rašelinště Jizerky NNR**: 3.vi.2010, 1 ♀, SW (JS). [35] **Rejdice**: 16.vi.–5. vii.2005, 1 ♂, ET (JP & PV).

#### *Dicranomyia (Dicranomyia) modesta* (Meigen, 1818)

Holarctic, widespread in Europe.

[2c] **Bílý Potok**: 15.vi.2012, 3 ♂♂, SW (JP). [3] **Bohuňovsko**: 23.vii.2013, 2 ♂♂, SW (JS). [4b] **Bukovec NR**: 10.–26.vi.2003, 1 ♂, PYT (JP & PV). [20] **Liberec-Vesec**: 25.v.2012, 2 ♂♂, SW (JP). [21] **Liberec-Vratislavice nad Nisou**: 5.–15.x.2005, 2 ♂♂, SW (JP). [31] **Poustecká obora**: 24.ix.–23.x.2012, 1 ♂, MT (JP & PV). [34] **Rašelinště Jizerý NNR**: 29.v.–10.vi.2003, 1 ♂, MT (JP & PV). [39] **Šolcův rybník**: 26.v.–13.vi.2011, 6 ♂♂, 1 ♀, MT (PV), 13.vi.–1.vii.2011, 1 ♀, MT (PV), 1.vii.–3.viii.2011, 2 ♂♂, 1 ♀, MT (PV), 6.x.–3.xi.2011, 10 ♂♂, 11 ♀♀, MT (PV).

#### *Dicranomyia (Dicranomyia) ornata* (Meigen, 1818) (Fig. 14)

West Palaearctic, widespread in temperate and South Europe.

[3] **Bohuňovsko**: 23.vii.2013, 1 ♂, 1 ♀, SW (JS), 27.v.2014, 2 ♂♂, 1 ♀, SW (JS), 31.v.2017, 1 ♂, SW (JS).

#### *Dicranomyia (Dicranomyia) quadra* (Meigen, 1838)

Revised recently (Starý & Stubbs 2015). West Palaearctic, scattered records mostly from temperate and South Europe.

[13b] **Jizerka**: 11.vi.2012, 1 ♂, SW (JS). [37a] **Smědava**: 22.vii.2013, 1 ♀, SW (JS).

#### *Dicranomyia (Dicranomyia) radegasti* Starý, 1993

Only known from mountains of Czech Republic, Finland, and Slovakia. Hitherto single record from Bohemia: Šumava Mts: Klášterec nr. Vimperk (Starý 2004b). Local, ecologically significant species, associated with rapidly flowing mountain streams.

[4b] **Bukovec NR**: 29.v.–10.vi.2003, 1 ♂, PYT (JP & PV). [13a] **Jizerka**: 13.vii.2015, 2 ♂♂, AL (JS).

#### *Dicranomyia (Glochina) tristis* (Schummel, 1829)

Palaearctic, ranging to Oriental Region, widespread in Europe.

[1] **Arnoltice**: 11.viii.2003, 5 ♂♂, SW (JP). [2c] **Bílý Potok**: 29.vii.–19.viii.2005, 1 ♂, MT (JP & PV), 19.viii.–4. ix.2005, 1 ♂, MT (JP & PV). [15] **Kořenov**: 29.v.2014, 1 ♂, SW (JS). [26a] **Meandry Smědé NR**: 31.v.–22.vi.2005, 1 ♂, MT (JP & PV). [26b] **Meandry Smědé NR**: 30.v.2014, 1 ♂, SW (JS). [35] **Rejdice**: 30.v.–16.vi.2005, 1 ♂, ET (JP & PV).

#### *Dicranomyia (Idiopyga) alpina* Bangerter, 1948

Central Europe only: Austria, Czech Republic, Germany, Poland, Slovakia, Switzerland.

[4b] **Bukovec NR**: 2.ix.–15.x.2010, 1 ♂, MT (JP & PV).

*Dicranomyia (Idiopyga) nigristigma* Nielsen, 1919

Scattered records mostly from temperate Europe.

[4b] **Bukovec NR:** 2.ix.–15.x.2010, 5 ♂♂, MT (JP & PV). [23b] **Ludvíkov pod Smrkem:** 13.ix.2016, 3 ♂♂, SW (JS).

*Dicranomyia (Idiopyga) stigmatica* (Meigen, 1830)

Palaearctic, widespread in Europe.

[4b] **Bukovec NR:** 2.ix.–15.x.2010, 1 ♂, MT (JP & PV), 14.ix.2016, 1 ♂, SW (JS).

*Dicranomyia (Melanolimonia) caledonica* Edwards, 1926

Palaearctic, widespread in Europe.

[4a] **Bukovec NR:** 11.vi.2012, 1 ♂, SW (JS). [4b] **Bukovec NR:** 10.–26.vi.2003, 1 ♂, PYT (JP & PV), 20.v.–15.vi.2010, 2 ♂♂, 1 ♀, MT (JP & PV), 15.vi.–2.vii.2010, 1 ♂, MT (PV). [13b] **Jizerka:** 16.vi.2011, 4 ♂♂, SW (JS).

*Dicranomyia (Numantia) fusca* (Meigen, 1804)

Holarctic, widespread in Europe.

[2c] **Bílý Potok:** 15.vi.2012, 1 ♂, SW (JP). [16] **Liberec-Horní Hanychov:** 11.v.2012, 3 ♂♂, SW (JP). [26a] **Meandry Smědé NR:** 15.ix.2016, 1 ♂, SW (JS). [26c] **Meandry Smědé NR:** 14.vi.2011, 1 ♂, SW (JS). [28b] **Oldřichov v Hájích:** 15.vii.2003, 1 ♂, SW (JP). [38] **Šindelový důl:** 28.vi.2003, 1 ♂, SW (JP). [41a] **Štolpichy valley:** 22.vii.2013, 1 ♂, SW (JS).

*Dicranoptycha livescens* Loew, 1871

West Palaearctic, scattered records from temperate and South Europe.

[26a] **Meandry Smědé NR:** 25.vii.2013, 1 ♂, SW (JS).

*Discobola annulata* (Linnaeus, 1758)

Holarctic, ranging to Oriental Region, widespread in Europe.

[11] **Jedlový důl NR:** 1.–22.ix.2005, 2 ♂♂, MT (JP & PV), 1.–22.ix.2005, 1 ♂, YPT (JP & PV). [24] **Malá Strana NR:** 2.viii.2005, 1 ♂, SW (JP). [41a] **Štolpichy valley:** 22.vii.2013, 1 ♂, SW (JS).

*Discobola caesarea* (Osten Sacken, 1854)

Palaearctic, widespread in temperate and North Europe.

[2d] **Bílý Potok:** 22.vii.2013, 1 ♂, SW (JS). [27] **Nová louka NR:** 22.viii.–2.x.2014, 2 ♀♀, MT (PV). [41a] **Štolpichy valley:** 20.vii.2013, 1 ♀, SW (JS).

*Helius (Helius) flavus* (Walker, 1856)

West Palaearctic, widespread in temperate and North Europe.

[2c] **Bílý Potok:** 15.vi.2012, 1 ♂, SW (JP). [12] **Jiřetín pod Bukovou:** 17.vi.2003, 2 ♂♂, SW (JP). [26a] **Meandry Smědé NR:** 16.vi.2011, 1 ♂, SW (JS). [28a] **Oldřichov v Hájích:** 19.vi.2003, 4 ♂♂, SW (JP). [31] **Poustecká obora:** 12.vi.2012, 3 ♂♂, 1 ♀, SW (JP). [39] **Šolcův rybník:** 13.vi.2011, 2 ♂♂, 3 ♀♀, MT (PV).

*Helius (Helius) longirostris* (Meigen, 1818)

West Palaearctic, widespread in Europe.

[4b] **Bukovec NR:** 20.v.–15.vi.2010, 3 ♂♂, MT (JP & PV), 2.–21.vii.2010, 1 ♂, MT (JP & PV). [12] **Jiřetín pod Bukovou:** 17.vi.2003, 2 ♂♂, SW (JP). [13b] **Jizerka:** 13.vi.2012, 1 ♂, SW (JS). [20] **Liberec-Vesec:** 25.v.2012, 1 ♂, SW (JP). [26a] **Meandry Smědé NR:** 31.v.–22.vi.2005, 1 ♂, MT (JP & PV), 29.vii.–19.viii.2005, 1 ♂, MT (JP & PV), 13.vii.2015, 1 ♂, SW (JS). [28a] **Oldřichov v Hájích:** 19.vi.2003, 3 ♂♂, SW (JP).

*Helius (Helius) pallirostris* Edwards, 1921

Palaearctic, widespread in temperate and South Europe.

[26a] Meandry Smědě NR: 29.vii.–19.viii.2005, 1 ♂, MT (JP & PV).

*Limonia flavipes* (Fabricius, 1787)

West Palaearctic, widespread in Europe.

[5] Černousy-V Poli: 1.vi.2010, 1 ♂, SW (JS). [14] Karlovské bučiny NNR: 8.vi.2013, 1 ♂, SW (JP), 9.vii.–2.viii.2013, 1 ♂, MT (JP & PV). [15] Kořenov: 29.v.2014, 3 ♂♂, SW (JS). [19] Liberec-Ruprechtice: 3.vii.2014, 1 ♀, SW (JP). [20] Liberec-Vesec: 25.v.2012, 1 ♂, SW (JP), 18.v.2015, 1 ♂, SW (JP). [22] Lučany nad Nisou: 23.v.2012, 2 ♂♂, 1 ♀, SW (JP). [24] Malá Strana NR: 12.vi.–9.vii.2015, 1 ♀, MT (JP & PV). [26a] Meandry Smědě NR: 30.v.2014, 2 ♂♂, 1 ♀, SW (JP). [28a] Oldřichov v Hájích: 19.vi.2003, 1 ♂, SW (JP). [31] Poustecká obora: 16.v.–12.vi.2012, 1 ♂, MT (JP & PV). [37a] Smědava: 30.v.2014, 1 ♂, SW (JS). [41b] Štolpichy valley: 15.vi.2011, 1 ♂, SW (JS).

*Limonia hercegovinae* (Strobl, 1898)

West Palaearctic, widespread in temperate and South Europe.

[2c] Bílý Potok: 3.–19.v.2005, 1 ♂, YPT (JP & PV), 3.–16.vi.2005, 1 ♂, YPT (JP & PV), 19.viii.–4.ix.2005, 1 ♂, MT (JP & PV), 15.vi.2012, 1 ♂, SW (JP). [4a] Bukovec NR: 11.vi.2012, 1 ♂, SW (JS). [4b] Bukovec NR: 26.v.2014, 1 ♂, SW (JS). [5] Černousy-V Poli: 1.vi.2010, 1 ♀, SW (JS). [10] Janov nad Nisou: 21.v.2014, 2 ♀♀, SW (JP). [12] Jedlový důl NR: 29.v.2917, 1 ♂, SW (JS). [13a] Jizerka: 12.ix.2016, 1 ♂, AL (JS). [16] Liberec-Horní Hanychov: 8.v.2012, 1 ♂, SW (JP), 11.v.2012, 4 ♂♂, SW (JP). [20] Liberec-Vesec: 25.v.2012, 1 ♂, 1 ♀, SW (JP), 18.v.2015, 8 ♂♂, 3 ♀♀, SW (JP). [31] Poustecká obora: 27.iv.–16.v.2012, 2 ♂♂, 1 ♀, MT (JP & PV). [37a] Smědava: 30.v.2014, 1 ♀, SW (JS).

*Limonia macrostigma* (Schummel, 1829)

Palaearctic, ranging to Oriental Region, widespread in Europe.

[1] Arnoltice: 11.viii.2003, 1 ♂, SW (JP). [2c] Bílý Potok: 3.–19.v.2005, 1 ♂, YPT (JP & PV), 19.viii.–4.ix.2005, 3 ♂♂, 2 ♀♀, MT (JP & PV). [5] Černousy-V Poli: 9.–28.viii.2012, 2 ♂♂, MT (JP & PV). [20] Liberec-Vesec: 18.v.2015, 1 ♂, 1 ♀, SW (JP). [28a] Oldřichov v Hájích: 19.vi.2003, 2 ♂♂, SW (JP). [31] Poustecká obora: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV), 12.vi.2012, 1 ♂, SW (JP). [35] Rejdice: 28.vii.–16.viii.2005, 1 ♂, ET (JP & PV), 1.–22.ix.2005, 2 ♂♂, ET (JP & PV), 1.–22.ix.2005, 1 ♂, YPT (JP & PV).

*Limonia nigropunctata* (Schummel, 1829)

Widespread in Europe.

[14] Karlovské bučiny NNR: 8.v.2013, 1 ♂, SW (JP). [22] Lučany nad Nisou: 23.v.2012, 1 ♀, SW (JP).

*Limonia nubeculosa* Meigen, 1804

Holarctic, widespread in Europe.

[2c] Bílý Potok: 3.–19.v.2005, 1 ♂, YPT (JP & PV), 3.–16.vi.2005, 1 ♂, YPT (JP & PV), 29.vii.–19.viii.2005, 1 ♂, MT (JP & PV), 19.viii.–4.ix.2005, 1 ♂, MT (JP & PV), 15.vi.2012, 2 ♂♂, SW (JP). [4a] Bukovec NR: 18.vi.2005, 2 ♂♂, SW (JP). [4b] Bukovec NR: 20.v.–15.vi.2010, 1 ♂, MT (JP & PV), 2.–21.vii.2010, 2 ♂♂, MT (JP & PV). [11] Jedlový důl NR: 1.–22.ix.2005, 1 ♂, MT (JP & PV). [20] Liberec-Vesec: 18.v.2015, 1 ♀, SW (JP). [21] Liberec-Vratislavice nad Nisou: 5.–15.x.2005, 1 ♂, SW (JP). [27] Nová louka NR: 26.v.–17.vi.2014, 1 ♀, MT (PV). [31] Poustecká obora: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV). [39] Šolcův rybník: 6.x.–3.xi.2011, 1 ♂, 1 ♀, MT (PV).

*Limonia phragmitidis* (Schrank, 1781)

Palaearctic, widespread in Europe.

[2c] Bílý Potok: 3.–16.vi.2005, 1 ♂, YPT (JP & PV). [4b] Bukovec NR: 20.vi.–15.vi.2010, 1 ♂, MT (JP & PV). [11] Jedlový důl NR: 29.v.2017, 1 ♂, SW (JS). [15] Kořenov: 29.v.2014, 2 ♂♂, SW (JS). [20] Liberec-Vesec:

25.v.2012, 2 ♂♂, SW (JP). [24] **Malá Strana NR**: 7.v.–12.vi.2015, 1 ♀, MT (JP & PV). [26a] **Meandry Smědé NR**: 30.v.2014, 3 ♂♂, 5 ♀♀, SW (JP). [31] **Poustecká obora**: 27.iv.–16.v.2012, 1 ♂, 2 ♀♀, MT (JP & PV), 16.v.–12.vi.2012, 4 ♂♂, MT (JP & PV), 12.vi.2012, 7 ♂♂, 2 ♀♀, SW (JP). [39] **Šolcův rybník**: 26.v.–13.vi.2011, 1 ♂, 1 ♀, MT (PV), 13.vi.–1.vii.2011, 2 ♂♂, 2 ♀♀, MT (PV). [42] **Tichá říčka NM**: 20.v.2014, 1 ♂, SW (JP).

### *Limonia stigma* (Meigen, 1818)

Widespread in Europe.

[14] **Karlovské bučiny NNR**: 9.vii.–2.viii.2013, 2 ♂♂, MT (JP & PV).

### *Limonia sylvicola* (Schummel, 1829)

Palaearctic, widespread in Europe.

[2b] **Bílý Potok**: 3.vi.2010, 1 ♂, SW (JS). [2c] **Bílý Potok**: 3.–16.vi.2005, 1 ♂, YPT (JP & PV), 15.vi.2012, 1 ♂, SW (JP). [11] **Jedlový důl NR**: 24.vii.2013, 1 ♂, SW (JS). [28a] **Oldřichov v Hájích**: 19.vi.2003, 26 ♂♂, SW (JP). [31] **Poustecká obora**: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV), 16.v.–12.vi.2012, 4 ♂♂, MT (JP & PV), 12.vi.2012, 4 ♂♂, SW (JP).

### *Limonia trivittata* (Schummel, 1829)

Palaearctic, widespread in Europe.

[2c] **Bílý Potok**: 29.vii.–19.viii.2005, 1 ♂, MT (JP & PV). [15] **Kořenov**: 24.vii.2013, 2 ♂♂, SW (JS). [20] **Liberec-Vesec**: 25.v.2012, 1 ♀, SW (JP). [35] **Rejdice**: 5.–28.vii.2005, 1 ♂, ET (JP & PV), 28.vii.–16.viii.2005, 1 ♂, ET (JP & PV). [39] **Šolcův rybník**: 3.–24.viii.2011, 1 ♂, MT (JP & PV).

### *Lipsothrix ecucullata* Edwards, 1938

Widespread in temperate and North Europe.

[11] **Jedlový důl NR**: 21.vii.2012, 2 ♂♂, SW (JS). [26a] **Meandry Smědé NR**: 16.vi.2011, 2 ♂♂, SW (JS). [41b] **Štolpichy valley**: 15.vi.2011, 1 ♂, SW (JS).

### *Lipsothrix errans* (Walker, 1848)

Widespread in temperate and North Europe.

[35] **Rejdice**: 30.v.–16.vi.2005, 2 ♂♂, ET (JP & PV). [38] **Šindelový důl**: 28.vi.2003, 1 ♂, SW (JP). [41a] **Štolpichy valley**: 15.vi.2012, 1 ♂, SW (JS), 22.vii.2013, 1 ♂, SW (JS).

### *Lipsothrix remota* (Walker, 1848)

Widespread in Europe.

[2b] **Bílý Potok**: 3.vi.2010, 1 ♂, SW (JS). [2c] **Bílý Potok**: 15.vi.2012, 2 ♂♂, SW (JS), 1.vi.2017, 2 ♂♂, SW (JS). [15] **Kořenov**: 24.vii.2013, 1 ♂, SW (JS). [35] **Rejdice**: 16.vi.–5.vii.2005, 1 ♂, ET (JP & PV).

### *Metalimnobia (Metalimnobia) quadrimaculata* (Linnaeus, 1760)

Holarctic, widespread in Europe.

[4b] **Bukovec NR**: 15.vi.–2.vii.2010, 1 ♂, MT (PV), 6.viii.–2.ix.2010, 1 ♂, MT (PV). [13a] **Jizerka**: 16.vii.2015, 1 ♀, AL (JS).

### *Metalimnobia (Metalimnobia) quadrinotata* (Meigen, 1818)

Palaearctic, widespread in Europe.

[11] **Jedlový důl NR**: 21.vii.2013, 1 ♂, SW (JS), 24.vii.2013, 1 ♂, SW (JS). [13b] **Jizerka**: 9.viii.2003, 2 ♂♂, SW (JP). [14] **Karlovské bučiny NNR**: 9.vii.–2.viii.2013, 1 ♂, MT (JP & PV). [15] **Kořenov**: 24.vii.2013, 1 ♂, SW (JP).

(JS), 29.viii.2013, 1 ♂, SW (JP). [24] **Malá Strana NR:** 12.vi.–9.vii.2015, 1 ♀, MT (JP & PV), 9.vii.–5.viii.2015, 1 ♂, MT (JP & PV), 15.vii.2015, 1 ♂, 1 ♀, SW (JS). [27] **Nová louka NR:** 11.vii.–1.viii.2014, 8 ♂♂, MT (PV), 22.viii.–2.x.2014, 2 ♂♂, 3 ♀♀, MT (PV). [31] **Poustecká obora:** 27.iv.–16.v.2012, 1 ♂, MT (JP & PV). [39] **Šolcův rybník:** 26.v.–1.vii.2011, 2 ♀♀, ET (JP&PV), 3.viii.–13.ix.2011, 1 ♂, ET (JP & PV), 3.–24.viii.2011, 1 ♂, MT (PV).

### *Metalimnobia (Metalimnobia) zetterstedti* (Tjeder, 1968)

Palaeartic, widespread in Europe.

[4a] **Bukovec NR:** 26.v.2014, 1 ♂, SW (JP). [4b] **Bukovec NR:** 20.v.–15.vi.2010, 2 ♂♂, MT (PV), 15.vi.–2.vii.2010, 2 ♂♂, MT (PV), 7.vi.2014, 2 ♂♂, SW (JP). [11] **Jedlový důl NR:** 21.vii.2013, 2 ♂♂, SW (JS), 15.vii.2015, 1 ♂, SW (JS). [13b] **Jizerka:** 16.vi.2011, 2 ♂♂, SW (JS), 13.vii.2015, 1 ♂, SW (JP). [18] **Liberec-Rudolfov:** 27.vii.2003, 2 ♂, SW (JP). [24] **Malá Strana NR:** 7.v.–12.vi.2015, 2 ♂♂, 3 ♀♀, MT (JP & PV), 12.vi.–9.vii.2015, 1 ♂, MT (JP & PV), 9.vii.–5.viii.2015, 1 ♂, MT (JP & PV). [27] **Nová louka NR:** 1.–14.viii.2002, 1 ♂, MT (JP & PV), 26.v.–17.vi.2014, 3 ♂♂, MT (PV). [31] **Poustecká obora:** 27.iv.–16.v.2012, 1 ♂, MT (JP & PV). [33] **Rašelinště Jizerky NNR:** 11.ix.2016, 1 ♂, SW (JS). [36] **Rybí loučky NR:** 29.v.–10.vi.2003, 1 ♂, MT (JP & PV), 10.–26.vi.2003, 1 ♂, MT (JP & PV), 23.vii.–5.viii.2003, 2 ♂♂, 1 ♀, MT (JP & PV).

### *Neolimonia dumetorum* (Meigen, 1804)

West Palaeartic, widespread in Europe.

[2c] **Bílý Potok:** 15.vi.2012, 9 ♂♂, SW (JP). [4b] **Bukovec NR:** 10.–26.vi.2003, 1 ♂, PYT (JP & PV), 26.vi.–9.vii.2003, 5 ♂♂, PYT (JP & PV), 9.–23.vii.2003, 4 ♂♂, PYT (JP & PV). [8] **Holubník Mt.:** 16.vi.–3.viii.2011, 3 ♂♂, 1 ♀, MT (JP & PV), 14.vii.–24.viii.2011, 3 ♂♂, ET (JP & PV). [19] **Liberec-Ruprechtice:** 3.vii.2014, 5 ♂♂, 1 ♀, SW (JP). [20] **Liberec-Vesec:** 25.v.2012, 1 ♂, 2 ♀♀, SW (JP). [27] **Nová louka NR:** 26.v.–17.vi.2014, 1 ♀, MT (PV). [28a] **Oldřichov v Hájích:** 19.vi.2003, 1 ♂, SW (JP). [28b] **Oldřichov v Hájích:** 15.vii.2003, 1 ♂, SW (JP). [31] **Poustecká obora:** 12.vi.2012, 2 ♂♂, 1 ♀, SW (JP). [32] **Raspenava:** 30.vii.2003, 1 ♂, SW (JP). [34] **Rašelinště Jizerky NNR:** 9.–23.vii.2003, 1 ♂, MT (JP & PV). [38] **Šindelový důl:** 28.vi.2003, 6 ♂♂, SW (JP). [39] **Šolcův rybník:** 26.v.–13.vi.2011, 1 ♂, MT (PV), 3.–24.viii.2011, 1 ♂, MT (JP & PV). [40] **Špičák Mt.:** 3.–22.vi.2003, 1 ♂, YPT (JP). [43] **Tišina Mt.:** 14.vii.2015, 2 ♂♂, 1 ♀, SW (JS).

### *Rhipidia (Rhipidia) maculata* Meigen, 1818

Holarctic, widespread in Europe.

[2c] **Bílý Potok:** 29.v.–19.viii.2005, 1 ♂, MT (JP & PV), 19.viii.–4.ix.2005, 1 ♂, MT (JP & PV). [4b] **Bukovec NR:** 20.v.–15.vi.2010, 1 ♂, 2 ♀♀, MT (JP & PV), 21.vii.–6.viii.2010, 2 ♂♂, MT (JP & PV), 6.viii.–2.ix.2010, 2 ♂♂, MT (JP & PV), 2.ix.–15.x.2010, 2 ♂♂, MT (JP & PV), 2.ix.–15.x.2010, 1 ♂, PT (JP & PV). [9] **Horní Řasnice:** 7.viii.2013, 3 ♂♂, SW (JP). [13a] **Jizerka:** 28.v.2014, 1 ♀, AL (JS). [15] **Kořenov:** 29.viii.2013, 1 ♂, 1 ♀, SW (JP). [17] **Liberec-Kateřinky:** 27.viii.2013, 2 ♂♂, SW (JP). [20] **Liberec-Vesec:** 25.v.2012, 1 ♂, 1 ♀, SW (JP), 18.v.2015, 2 ♂♂, SW (JP). [21] **Liberec-Vratislavice nad Nisou:** 5.–15.x.2005, 10 ♂♂, SW (JP). [22] **Lučany nad Nisou:** 23.v.2012, 1 ♂, SW (JP). [24] **Malá Strana NR:** 7.v.–12.vi.2015, 1 ♀, MT (JP & PV). [31] **Poustecká obora:** 27.iv.–16.v.2012, 1 ♀, MT (JP & PV), 24.ix.–23.x.2012, 1 ♂, MT (JP & PV). [35] **Rejdice:** 1.–22.ix.2005, 2 ♂♂, ET (JP & PV). [39] **Šolcův rybník:** 11.–26.v.2011, 1 ♂, MT (PV), 6.x.–3.xi.2011, 1 ♀, MT (PV).

### *Thaumastoptera (Thaumastoptera) calceata* Mik, 1866

West Palaeartic, scattered records mostly from temperate Europe.

[26a] **Meandry Smědé NR:** 16.vi.2011, 1 ♂, SW (JS).

## Pediidae

This family comprises mostly medium-sized to large species. The Pediidae may be characterized by pubescent eyes and spurred tibiae in combination with certain venational features. Altogether 70 species-group taxa are known to occur in Europe, 39 species were

recorded from the Czech Republic and 31 from Bohemia. In general, adults occupy similar habitats to Limoniidae, but a considerable proportion of the species are found along rapidly flowing mountain streams. The larvae are predominantly aquatic or semiaquatic, preying on oligochaetes, mites, insect larvae and other invertebrates. However, the larvae of *Ula* Haliday, 1833 are mycetophagous. For the study area, 26 species of Pediciidae are listed here.

*Dicranota (Dicranota) bimaculata* (Schummel, 1829)

Palaearctic, widespread in Europe.

[13b] **Jizerka:** 11.vi.2012, 1 ♂, SW (JS), 28.v.2014, 2 ♂♂, 1 ♀, SW (JS). [23b] **Ludvíkov pod Smrkem:** 1.vi.2017, 1 ♂, SW (JS). [24] **Malá Strana NR:** 6.v.2003, 1 ♂, SW (JP).

*Dicranota (Ludicia) lucidipennis* (Edwards, 1921)

West Palaearctic, widespread in temperate and South Europe.

[4b] **Bukovec NR:** 21.vii.–6.viii.2010, 1 ♂, MT (JP & PV). [11] **Jedlový důl NR:** 30.v.–16.vi.2005, 1 ♂, YPT (JP & PV). [16] **Liberec-Horní Hanychov:** 8.v.2012, 7 ♂♂, SW (JP), 11.v.2012, 1 ♂, SW (JP). [33] **Rašelinště Jizerky NNR:** 28.v.2017, 1 ♂, SW (JS). [35] **Rejdice:** 16.vi–5.vii.2005, 3 ♂♂, ET (JP & PV), 5.–28.vii.2005, 4 ♂♂, ET (JP & PV).

*Dicranota (Paradicranota) brevicornis* Bergroth, 1891

Scattered records from mountains of temperate and South Europe.

[13a] **Jizerka:** 24.vii.2013, 1 ♂, AL (JS). [15] **Kořenov:** 13.vi.2012, 1 ♂, SW (JS). [37a] **Smědava:** 22.vii.2013, 2 ♂♂, SW (JS), 24.vii.2013, 2 ♂♂, SW (JS). [38] **Šindelový důl:** 28.vi.2003, 2 ♂♂, SW (JP).

*Dicranota (Paradicranota) carbo* Starý, 1998

Described and only known from Czech Republic (Starý 1998b). Two more records from Bohemia: Šumava Mts: Antýgl and Borová Lada (Starý 1998b). Local, ecologically significant species, associated with rapidly flowing mountain streams.

[3] **Bohuňovsko:** 31.v.2017, 6 ♂♂, SW (JS). [13a] **Jizerka:** 29.v.2017, 1 ♂, 1 ♀, AL (JS).

*Dicranota (Paradicranota) flammatra* Starý, 1981

Scattered records mostly from mountains of temperate Europe.

[13a] **Jizerka:** 29.v.2017, 3 ♂♂, 1 ♀, AL (JS), 30.v.2017, 1 ♀, AL (JS). [13b] **Jizerka:** 4.vi.2010, 5 ♂♂, 1 ♀, SW (JS). [33] **Rašelinště Jizerky NNR:** 3.vi.2010, 1 ♀, SW (JS).

*Dicranota (Paradicranota) gracilipes* Wahlgren, 1905

Widespread in Europe.

[11] **Jedlový důl NR:** 1.–22.ix.2005, 1 ♂, MT (JP & PV).

*Dicranota (Paradicranota) simulans* Lackschewitz, 1940

West Palaearctic, widespread mostly in temperate Europe.

[13a] **Jizerka:** 12.vi.2012, 1 ♂, 3 ♀♀, AL (JS), 13.vi.2012, 2 ♀♀, AL (JS), 27.v.2014, 1 ♂, AL (JS), 29.v.2017, 4 ♂♂, AL (JS). [13b] **Jizerka:** 4.vi.2010, 10 ♂♂, SW (JS), 26.v.2014, 1 ♂, SW (M. Vála). [33] **Rašelinště Jizerky NNR:** 3.vi.2010, 2 ♂♂, SW (JS), 12.vii.2015, 1 ♂, SW (JS). [34] **Rašelinště Jizerky NNR:** 13.vi.2011, 1 ♂, SW (JS).

*Dicranota (Paradicranota) subflammatra* Starý, 1998

Only known from mountains of Czech Republic, Romania, and Slovakia.

[13a] Jizerka: 16.vi.2011, 1 ♂, AL (JS).

*Dicranota (Paradicranota) subtilis* Loew, 1871

West Palaearctic, widespread in Europe.

[2a] Bílý Potok: 22.v.2003, 1 ♂, SW (JP). [2b] Bílý Potok: 3.vi.2010, 1 ♂, SW (JS). [2c] Bílý Potok: 13.ix.2016, 1 ♂, SW (JS). [4b] Bukovec NR: 12.ix.2016, 1 ♂, SW (JS). [11] Jedlový důl NR: 29.v.2017, 1 ♂, SW (JS). [16] Liberec-Horní Hanychov: 8.v.2012, 3 ♂♂, SW (JP). [26b] Meandry Smědá NR: 30.v.2014, 1 ♂, SW (JS). [41a] Štolpichy valley: 15.vi.2012, 2 ♂♂, SW (JS).

*Dicranota (Rhaphidolabis) exclusa* (Walker, 1848)

Palaearctic, widespread in mountains of temperate and North Europe.

[11] Jedlový důl NR: 21.vii.2013, 2 ♂♂, SW (JS), 24.vii.2013, 3 ♂♂, 1 ♀, SW (JS), 15.vii.2015, 1 ♂, SW (JS). [13a] Jizerka: 12.ix.2016, 1 ♀, AL (JS). [13b] Jizerka: 11.vi.2012, 4 ♂♂, 1 ♀, SW (JS), 13.vi.2012, 4 ♂♂, SW (JS), 28.v.2014, 2 ♂♂, 1 ♀, SW (JS). [33] Rašelinště Jizerky NNR: 3.vi.2010, 2 ♂♂, 1 ♀, SW (JS), 11.ix.2016, 1 ♂, SW (JS), 28.v.2017, 2 ♂♂, SW (JS). [37b] Smědava: 25.vii.2013, 1 ♂, SW (JS). [41b] Štolpichy valley: 15.vi.2011, 1 ♂, SW (JS).

*Pedicia (Amalopis) occulta* (Meigen, 1830)

West Palaearctic, widespread mostly in temperate and South Europe.

[2c] Bílý Potok: 15.vi.2012, 1 ♂, SW (JS), 13.ix.2016, 1 ♂, SW (JS). [11] Jedlový důl NR: 29.v.2017, 1 ♂, SW (JS). [35] Rejdice: 30.v.–16.vi.2005, 1 ♂, ET (JP & PV). [38] Šindelový důl: 28.vi.2003, 2 ♂♂, SW (JP). [41a] Štolpichy valley: 15.vi.2011, 1 ♂, SW (JS). [41b] Štolpichy valley: 22.vii.2013, 1 ♂, SW (JS).

*Pedicia (Crunobia) littoralis* (Meigen, 1804)

West Palaearctic, widespread in Europe.

[2d] Bílý Potok: 22.vii.2013, 1 ♀, SW (JS).

*Pedicia (Crunobia) riedeli* (Lackschewitz, 1940) (Fig. 15)

Scattered records mostly from temperate Europe.

[15] Kořenov: 31.v.2017, 1 ♂, SW (JS). [37a] Smědava: 30.v.2014, 1 ♂, SW (JS).

*Pedicia (Crunobia) straminea* (Meigen, 1838)

Widespread in Europe.

[2b] Bílý Potok: 3.vi.2010, 2 ♂♂, SW (JS). [3] Bohuňovsko: 31.v.2017, 1 ♂, SW (JS). [4b] Bukovec NR: 2.–21.vii.2010, 1 ♂, MT (JP & PV), 6.viii.–2.ix.2010, 1 ♂, MT (JP & PV), 2.ix.–15.x.2010, 1 ♂, 2 ♀♀, MT (JP & PV). [11] Jedlový důl NR: 1.–22.ix.2005, 1 ♂, MT (JP & PV), 1.–22.ix.2005, 1 ♂, YPT (JP & PV), 15.vii.2015, 1 ♂, SW (JS). [12] Jiřetín pod Bukovou: 17.vi.2003, 2 ♂♂, SW (JP). [24] Malá Strana NR: 2.viii.2005, 1 ♂, SW (JP). [35] Rejdice: 28.vii.–16.viii.2005, 1 ♂, ET (JP & PV), 1.–22.ix.2005, 2 ♂♂, YPT (JP & PV). [38] Šindelový důl: 28.vi.2003, 7 ♂♂, SW (JP). [41a] Štolpichy valley: 15.vi.2012, 1 ♂, SW (JS).

*Pedicia (Pedicia) rivosa* (Linnaeus, 1758)

Palaearctic, widespread in Europe.

[2a] Bílý Potok: 2.x.2002, 2 ♂♂, SW (JP), 22.v.2003, 1 ♂, SW (JP). [11] Jedlový důl NR: 29.v.2017, 1 ♂, SW (JS). [16] Liberec-Horní Hanychov: 11.v.2012, 1 ♂, SW (JP). [24] Malá Strana NR: 1.–17.viii.2002,

1 ♂, YPT (JP), 6.–29.ix.2002, 2 ♂♂, YPT (JP), 7.v.–12.vi.2015, 1 ♂, MT (JP & PV), 12.vi.–9.vii.2015, 2 ♂♂, MT (JP & PV). [31] **Poustecká obora**: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV). [34] **Rašelinště Jizery NNR**: 2.viii.2001, 2 ♂♂, SW (JP). [36] **Rybí loučky NR**: 10.–26.vi.2003, 2 ♂♂, MT (JP & PV). [39] **Šolcův rybník**: 6.v.2003, 1 ♂, SW (JP).

### *Tricyphona (Tricyphona) alpigena* (Strobl, 1910)

Scattered records from temperate Europe.

[4a] **Bukovec NR**: 11.vi.2012, 1 ♂, SW (JS). [4b] **Bukovec NR**: 29.v.–10.vi.2003, 2 ♂♂, MT (JP & PV). [4c] **Bukovec NR**: 31.v.2003, 1 ♂, SW (JP). [11] **Jedlový důl NR**: 30.v.–6.vi.2005, 9 ♂♂, YPT (JP & PV), 29.v.2017, 1 ♂, 1 ♀, SW (JS). [13b] **Jizerka**: 4.vi.2010, 1 ♂, SW (JS). [34] **Rašelinště Jizery NNR**: 17.–29.v.2003, 5 ♂♂, YPT (JP & PV). [37a] **Smědava**: 30.v.2014, 1 ♂, SW (JS). [40] **Špičák Mt.**: 4.–17.v.2003, 1 ♂, YPT (JP), 17.v.–3.vi.2003, 10 ♂♂, YPT (JP), 3.–22.vi.2003, 1 ♂, YPT (JP). [42] **Tichá říčka NM**: 20.v.2014, 2 ♂♂, SW (JP).

### *Tricyphona (Tricyphona) contraria* Bergroth, 1888

Scattered records from temperate Europe.

[11] **Jedlový důl NR**: 30.v.–16.vi.2005, 6 ♂♂, YPT (JP & PV).

### *Tricyphona (Tricyphona) immaculata* (Meigen, 1804)

Palaearctic, widespread in Europe.

[2a] **Bílý Potok**: 22.v.2003, 25 ♂♂, 1 ♀, SW (JP). [2c] **Bílý Potok**: 3.–19.v.2005, 2 ♂♂, YPT (JP & PV), 3.–16.vi.2005, 1 ♂, YPT (JP & PV), 13.ix.2016, 1 ♂, SW (JS). [4b] **Bukovec NR**: 20.v.–15.vi.2010, 1 ♂, MT (JP & PV), 2.ix.–15.x.2010, 2 ♂♂, MT (JP & PV), 7.vi.2014, 1 ♀, SW (JP). [4c] **Bukovec NR**: 5.–16.v.2003, 4 ♂♂, YPT (JP & PV), 16.–29.v.2003, 39 ♂♂, YPT (JP & PV), 31.v.2003, 22 ♂♂, SW (JP), 18.vi.2005, 1 ♂, SW (JP). [8] **Holubník Mt.**: 16.vi.–3.viii.2011, 1 ♂, MT (PV). [10] **Janov nad Nisou**: 21.v.2014, 6 ♂♂, 2 ♀♀, SW (JP). [11] **Jedlový důl NR**: 19.–30.v.2005, 4 ♂♂, YPT (JP & PV), 30.v.–16.vi.2005, 9 ♂♂, YPT (JP & PV), 29.v.2017, 1 ♂, SW (JS). [13b] **Jizerka**: 9.viii.2003, 6 ♂♂, SW (JP), 13.vi.2011, 1 ♂, SW (J. Roháček). [16] **Liberec-Horní Hanychov**: 8.v.2012, 7 ♂♂, SW (JP), 11.v.2012, 2 ♂♂, SW (JP). [20] **Liberec-Vesec**: 25.v.2012, 3 ♂♂, SW (JP), 18.v.2015, 1 ♂, SW (JP). [22] **Lučany nad Nisou**: 23.v.2012, 2 ♂♂, SW (JP). [24] **Malá Strana NR**: 16.–29.v.2003, 1 ♂, MT (JP & PV), 7.v.–12.vi.2015, 25 ♂♂, 2 ♀♀, MT (JP & PV), 12.vi.–9.vii.2015, 1 ♂, MT (JP & PV), 12.ix.2016, 1 ♂, SW (JS). [26a] **Meandry Smědavy**: 4.–19.v.2005, 1 ♂, MT (JP & PV), 4.–23.ix.2005, 2 ♂♂, MT (JP & PV). [27] **Nová Louka NR**: 22.viii.–2.x.2014, 1 ♂, MT (PV). [29] **Oldřichovské sedlo**: 17.v.–3.vi.2003, 1 ♂, YPT (JP & PV). [31] **Poustecká obora**: 16.v.–12.vi.2012, 2 ♂♂, MT (JP & PV), 24.ix.–23.x.2012, 2 ♂♂, MT (JP & PV). [33] **Rašelinště Jizerky NNR**: 28.v.2017, 1 ♂, SW (JS). [34] **Rašelinště Jizery NNR**: 1.–14.viii.2002, 1 ♂, MT (JP & PV), 17.–29.v.2003, 8 ♂♂, YPT (JP & PV), 13.vi.2011, 2 ♀♀, SW (JS). [35] **Rejdice**: 30.v.–16.vi.2005, 12 ♂♂, ET (JP & PV), 1.–28.vii.2005, 1 ♂, ET (JP & PV), 1.–22.ix.2005, 1 ♂, YPT (JP & PV). [36] **Rybí loučky NR**: 10.–26.vi.2003, 1 ♂, YPT (JP & PV), 12.vi.–11.vii.2015, 4 ♀♀, UPT (JP & PV). [39] **Šolcův rybník**: 6.v.2003, 3 ♂♂, SW (JP), 11.–26.vi.2011, 3 ♂♂, MT (JP & PV), 11.–26.v.2011, 28 ♂♂, 2 ♀♀, MT (PV), 26.v.–13.vi.2011, 10 ♂♂, 4 ♀♀, MT (PV), 26.v.–1.vii.2011, 1 ♂, ET (JP & PV), 1.vii.–3.viii.2011, 1 ♂, ET (JP & PV). [40] **Špičák Mt.**: 4.–17.v.2003, 2 ♂♂, YPT (JP), 17.v.–3.vi.2003, 8 ♂♂, YPT (JP). [42] **Tichá říčka NM**: 20.v.2014, 4 ♂♂, 1 ♀, SW (JP).

### *Tricyphona (Tricyphona) livida* Madarassy, 1881

West Palaearctic, widespread in Europe.

[24] **Malá Strana NR**: 2.vii.2005, 2 ♂♂, SW (JP). [35] **Rejdice**: 28.vii.–16.viii.2005, 1 ♂, ET (JP & PV). [37a] **Smědava**: 22.vii.2013, 3 ♂♂, SW (JS), 24.vii.2013, 2 ♂♂, SW (JS).

### *Tricyphona (Tricyphona) schummeli* Edwards, 1921

Widespread in Europe.

[13b] **Jizerka**: 9.viii.2003, 3 ♂♂, SW (JP). [27] **Nová louka NR**: 1.–22.viii.2014, 2 ♂♂, MT (PV). [33] **Rašelinště Jizerky NNR**: 20.vii.2013, 14 ♂♂, SW (JS), 12.vii.2015, 2 ♂♂, SW (JS). [34] **Rašelinště Jizery NNR**: 26.vi.–9.

vii.2003, 2 ♂♂, YPT (JP & PV), 26.vi.–9.vii.2003, 4 ♂♂, CFT (JP & PV). [36] **Rybí loučky NR**: 10.–26.vi.2003, 1 ♂, YPT (JP & PV). [39] **Šolcův rybník**: 26.v.–1.vii.2011, 1 ♂, ET (JP & PV). [40] **Špičák Mt.**: 17.v.–3.vi.2003, 9 ♂♂, YPT (JP), 3.–22.vi.2003, 8 ♂♂, YPT (JP).

*Tricyphona (Tricyphona) unicolor* (Schummel, 1829)

Palaearctic, widespread in Europe.

[5] **Černousy-V Poli**: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV). [24] **Malá Strana NR**: 16.–29.v.2003, 1 ♂, MT (JP & PV), 7.v.–12.vi.2015, 15 ♂♂, 2 ♀♀, MT (JP & PV). [39] **Šolcův rybník**: 6.v.2003, 1 ♂, SW (JP), 26.iv.–26.v.2011, 1 ♂, ET (PV), 11.–26.v.2011, 1 ♂, MT (PV).

*Ula (Ula) bolitophila* Loew, 1869

Palaearctic, widespread in Europe.

[15] **Kořenov**: 31.v.2017, 1 ♀, SW (M. Vála).

*Ula (Ula) mixta* Starý, 1983

Scattered records from temperate and North Europe.

[4b] **Bukovec NR**: 2.–21.vii.2010, 1 ♂, 1 ♀, MT (JP & PV). [15] **Kořenov**: 29.v.2011, 2 ♂♂, SW (JS). [31] **Poustecká obora**: 27.iv.–16.v.2012, 1 ♂, MT (JP & PV).

*Ula (Ula) mollissima* Haliday, 1833

West Palaearctic, widespread in Europe.

[2c] **Bílý Potok**: 13.ix.2016, 2 ♂♂, SW (JS). [31] **Poustecká obora**: 24.ix.–23.x.2012, 1 ♂, MT (JP & PV).

*Ula (Ula) succincta* Alexander, 1933

Palaearctic, in Europe only known from Slovakia. First record for Czech Republic.

[11] **Jedlový důl NR**: 29.v.2017, 2 ♂♂, 3 ♀♀, SW (JS).

*Ula (Ula) sylvatica* (Meigen, 1818)

Holarctic, widespread in Europe.

[4a] **Bukovec NR**: 11.vi.2012, 1 ♂, SW (JS). [11] **Jedlový důl NR**: 24.vii.2013, 1 ♂, SW (JS), 29.v.2017, 1 ♂, SW (JS). [15] **Kořenov**: 24.vii.2013, 1 ♂, SW (JS). [31] **Poustecká obora**: 24.ix.–23.x.2012, 1 ♂, MT (JP & PV). [33] **Rašelinisko Jizerky NNR**: 31.v.2010, 1 ♂, SW (JS), 3.vi.2010, 4 ♂♂, SW (JS). [39] **Šolcův rybník**: 3.viii.–13.ix.2011, 1 ♂, ET (JP & PV), 6.x.–3.xi.2011, 1 ♀, MT (PV).

## DISCUSSION AND CONCLUSIONS

A total of 177 species of the families Limoniidae and Pediciidae have been recorded from the Jizerské hory Mts, Frýdlant region and Liberec environs, including 151 species of Limoniidae and 26 of Pediciidae. This represents 50.5% and 66.7%, respectively, of all species known from the Czech Republic, and 64.8% and 83.9%, respectively, of those known from Bohemia. Thus, the species diversity in the study area is by far the highest compared to similar field surveys performed in the Czech Republic previously, viz. in the Pálava Biosphere Reserve (Starý 1998a), with 71 species of Limoniidae and 4 species of Pediciidae, the Bílina and Duchcov environs (Starý & Barták 2000), with 70/4 species, and the Podyjí National

Park (Starý et al. 2005), with 52/8 species. The latter three projects were obviously based on insufficient material, and their respective target areas have remained under-investigated. On the other hand, the present research is unique by (1) an unusual length of field work, from 2001 to 2017, (2) a considerable span of locality altitudes, from 220 m a.s.l. at locality [26a] to 920 m a.s.l. at locality [4c], and (3) a broad spectrum of the habitats sampled, ranging from wetlands and banks of meandering rivers with sandy or gravelly bars in lowlands to rapid streams, spring areas, and peatbogs in the mountains.

As a result, the present study reports on a number of important findings of Limoniidae and Pediciidae, including additions to the fauna of the Czech Republic and Bohemia. One species, *Ula (Ula) succincta* (Pediciidae), is recorded for the first time in the Czech Republic and seven species represent the first records for Bohemia, viz. *Molophilus (Molophilus) priapoides*, *M. (M.) savtshenkoi*, *Ormosia (Ormosia) moravica*, *Scleroprocta sororcula*, *Tasiocera (Dasymolophilus) exigua*, *T. (D.) fuscescens*, and *Dicranomyia (Dicranomyia) imbecilla* (Limoniidae). Some of these were already published as such (Starý & Čelechovský 2015). Other species may be considered significant due to their rarity and/or ecological distinctiveness. These are e.g. *Paradelphomyia (Oxyrhiza) nigrina*, *Arctoconopa zonata*, *Eriocoopa diuturna*, *Gonomyia (Gonomyia) dentata*, *Idiocera (Idiocera) sziladyi*, *Rhabdomastix (Rhabdomastix) crassa*, *R. (R.) laetoidea*, *Atypophthalmus (Microlimonia) machidai*, *Dicranomyia (Dicranomyia) luteipennis*, *D. (D.) radegasti* (Limoniidae), and *Dicranota (Paradicranota) carbo* (Pediciidae). The selection above is haphazard to a certain degree, and a number of further species may be considered uncommon and local. Therefore, an evaluation of the localities based on such species would be considerably subjective. Yet, what is perhaps worthy of mention is a high number of the significant species captured at light at the field station of the North Bohemian Museum, Liberec (locality [13a]). It should be emphasized that the close environs of this place is represented by a comparatively dry mountain meadow (Fig. 3), and, thus, most probably, a distinctive dispersal of the species from their home habitats during (few) warm nights played an important role. *Hexatoma (Hexatoma) fuscipennis* and *Paradelphomyia (Oxyrhiza) nigrina* (Limoniidae) are classified as endangered in the Red List of the Czech Republic (Starý & Barták 2005).

Of the two families, the Pediciidae seems to be the better investigated group in the study area. Since a considerable number of species of this family occur along rapidly flowing mountain streams, a predominantly mountain character of the study area has found expression here, or we, simply, may have preferred the mountain localities unintendedly. In any case, additional species of both families still remain to be discovered in the area under study.

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## SOUHRN

V oblasti Jizerských hor, Frýdlantska a okolí Liberce bylo celkem zaznamenáno 177 druhů čeledí Limoniidae (bahnomilkovití) a Pediciidae (panožnatkovití), 151 druhů první čeledi a 26 druhé. Tyto počty obnášejí 50,5 % resp. 66,7 % všech druhů známých z České republiky a 64,8 % resp. 83,9 % druhů fauny Čech. Druhová diverzita studovaného území je tak podstatně vyšší ve srovnání s podobnými výzkumy provedenými dříve v České republice, jmenovitě v Biosférické rezervaci Pálava (Starý 1998a) s 71 druhem čeledi Limoniidae a čtyřmi druhy čeledi Pediciidae, v okolí Bíliny a Duchcova (Starý & Barták 2000) s 70/4 druhy a v Národním parku Podyjí (Starý et al. 2005) s 52/8 druhy. Tyto dřívější projekty byly zjevně založeny na nedostatečném materiálu a příslušná území zůstala, co se týká daných čeledí, jen povrchně zpracována. Současný výzkum, naopak, je jedinečný (1) neobvyklou délkou terénních prací, od roku 2001 do 2017, (2) značným rozptětem nadmořských výšek studovaných lokalit, od 220 m n. m. na lokalitě [26a] do 920 m n. m. na lokalitě [4c] a (3) širokým spektrem studovaných biotopů od nížinných mokřadů a břehů meandrujících řek s písčitými či štěrkovými lavicemi až po horské bystriny, prameniště a rašeliniště.

Výsledkem současného výzkumu je vysoký počet zajímavých nálezů zahrnující i druhy nové pro Českou republiku a Čechy. Jeden druh, *Ula* (*Ula*) *succincta* (Pediciidae), byl zjištěn poprvé v České republice a sedm druhů představuje prvnálezy pro Čechy: *Molophilus* (*Molophilus*) *priapoides*, *M.* (*M.*) *savtshenkoi*, *Ormosia* (*Ormosia*) *moravica*, *Scleroprocta sororcula*, *Tasiocera* (*Dasymolophilus*) *exigua*, *T.* (*D.*) *fuscescens* a *Dicranomyia* (*Dicranomyia*) *imbecilla* (Limoniidae). Některé z těchto druhů byly již jako prvnálezy publikovány (Starý & Čelechovský 2015). Další druhy mohou být považovány za významné pro svoji vzácnost či ekologickou vyhnaněnost, např. *Paradelphomyia* (*Oxyrhiza*) *nigrina*, *Arctoconopa zonata*, *Erioconopa diurna*, *Gonomyia* (*Gonomyia*) *dentata*, *Idiocera* (*Idiocera*) *sziladyi*, *Rhabdomastix* (*Rhabdomastix*) *crassa*, *R.* (*R.*) *laetoidea*, *Atypophthalmus* (*Microlimonia*) *machidai*, *Dicranomyia* (*Dicranomyia*) *luteipennis*, *D.* (*D.*) *radegasti* (Limoniidae) a *Dicranota* (*Paradicranota*) *carbo* (Pediciidae). Tento výběr je do určité míry namátkový, protože existuje řada dalších druhů, které mohou být považovány za nehojně a lokální. Hodnocení lokalit na základě takových druhů by proto bylo vysoce subjektivní. Za zmínu však snad stojí vysoký počet významných druhů odchycených na světlo na terénní stanici Severočeského muzea v Liberci (lokalita [13a]). Je třeba zdůraznit, že bezprostřední okolí tohoto místa představuje poměrně suchá horská louka (Obr. 3) a že tedy zde pravděpodobně hrál důležitou roli výrazný rozptyl druhů z jejich domovských biotopů během (několika málo) teplých nocí. *Hexatoma* (*Hexatoma*) *fuscipennis* a *Paradelphomyia* (*Oxyrhiza*) *nigrina* (Limoniidae) byly klasifikovány jako ohrožené v Červeném seznamu ohrožených druhů České republiky (Starý & Barták 2005).

Na studovaném území se zdá být lépe prozkoumána čeleď Pediciidae. Skutečnost, že značná část zástupců této čeledi se vyskytuje podél horských bystřin, naznačuje převážně horský charakter studovaného území, anebo jsme prostě neúmyslně preferovali horské biotopy. V každém případě lze zde ještě očekávat objevy dalších druhů obou čeledí.



Fig. 1./Obr. 1. Locality [3] Bohuňovsko: banks of Kamenice river. / Lokalita [3] Bohuňovsko: břehy řeky Kamenice. Significant species / Významné druhy: *Rhabdomastix (Rhabdomastix) crassa* (Fig. 12), *R. (R.) laetoidea* (Fig. 13), *Dicranota (Paradicranota) carbo*. Photo by J. Roháček.



Fig. 2./Obr. 2. Locality [11] Jedlový důl NR: Jedlová brook in mixed forest. / Lokalita [11] PR Jedlový důl: potok Jedlová ve smíšeném lese. Significant species / Významné druhy: *Molophilus (Molophilus) savtshenkoi*, *Atypophthalmus (Microlimonia) machidai*, *Ula (Ula) succincta*. Photo by J. Roháček.



Fig. 3. Locality [13a] Jizerka: field station of North Bohemian Museum in Liberec. The light source was installed on the near wall of the house. Photo by J. Roháček.

Obr. 3. Lokalita [13a] Jizerka: terénní stanice Severočeského muzea v Liberci. Světelný zdroj byl instalován na přivrácené zdi domu.



Fig. 4./Obr. 4. Locality [13a] Jizerka: capturing Diptera at light (J. Starý). / Lokalita [13a] Jizerka: odchyt dvoukřídlých na světlo (J. Starý). Significant species / Významné druhy: *Gonomyia (Gonomyia) dentata*, *Dicranomyia (Dicranomyia) luteipennis*, *D. (D.) radegasti*, *Dicranota (Paradicranota) carbo*. Photo by P. Vonička.



Fig. 5./Obr. 5. Locality [15] Kořenov: banks of Jizera river. / Lokalita [15] Kořenov: břehy řeky Jizery. Significant species / Významný druh: *Rhabdomastix (Rhabdomastix) crassa* (Fig. 12). Photo by J. Roháček.



Fig. 6./Obr. 6. Locality [26a] Meandry Smědé NR: alder grove near Dubák pond. / Lokalita [26a] PR Meandry Smědé: olšina u rybníku Dubák. Significant species / Významné druhy: *Hexatoma (Hexatoma) fuscipennis* (Fig. 9), *Paradelphomyia (Oxarhiza) nigrina*. Photo by J. Roháček.



Fig. 7./Obr. 7. Locality [26b] Meandry Smědé NR: banks of Smědá river. / Lokalita [26b] PR Meandry Smědé: břehy řeky Smědé. Significant species / Významné druhy: *Hexatoma (Hexatoma) fuscipennis* (Fig. 9), *Arctoconopa zonata*, *Idiocera (Idiocera) sziladyi*. Photo by J. Roháček.



Fig. 8./Obr. 8. Locality [33] Rašeliniště Jizerky NNR: Klugeho louka peatbog. / Lokalita [33] NPR Rašeliniště Jizerky: Klugeho louka. Significant species / Významný druh: *Erioconopa diuturna*. Photo by J. Roháček.



Fig. 9./Obr. 9. *Hexatoma* (*Hexatoma*) *fuscipennis* (Curtis, 1836), in copula. Photo by J. Roháček.



Fig. 11./Obr. 11. *Molophilus* (*Molophilus*) *scutellatus* Goetghebuer, 1929. Photo by J. Roháček.



Fig. 10./Obr. 10. *Prionolabis hospes* (Egger, 1863). Photo by J. Starý.



Fig. 12./Obr. 12. *Rhabdomastix (Rhabdomastix) crassa* Starý, 2004. Photo by J. Starý.



Fig. 13./Obr. 13. *Rhabdomastix (Rhabdomastix) laetoidea* Starý, 2004. Photo by J. Starý.



Fig. 14./Obr. 14. *Dicranomyia (Dicranomyia) ornata* (Meigen, 1818). Photo by J. Starý.



Fig. 15./Obr. 15. *Pedicia (Crunobia) riedeli* (Lackschewitz, 1940). Photo by J. Starý.

