

# Faunistic and bibliographical inventory of moth flies from Ukraine (Diptera, Psychodidae)

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## Abstract

All important published records for 11 moth fly species known so far from Ukraine are reviewed (Phlebotominae 10 species, Psychodinae 1 species). Occurrences of two problematic taxa, *Phlebotomus (Adlerius) brevis* Theodor & Mesghali, 1964 and *P. (Larrousius) major major* Annandale, 1910, and some synonymies are discussed. *Threticus negrobovi* Vaillant, 1972 must be deleted for Ukraine (misstatement). First records of 34 species of Psychodinae (tribes Mormiini, Paramormiini, Psychodini, Pericomaini) and one of Sycoracinae from Ukraine are also listed.

## Keywords

Diptera, faunistics, first records, Psychodidae, Phlebotominae, Sycoracinae, Psychodinae, Ukraine

## Introduction

Moth flies (Psychodidae) are represented only by 11 species previously recorded in Ukraine (mainly Perfil'ev 1966; Lewis 1982; Artemiev and Neronov 1984; Vaillant 1972; Wagner 1990, 2013). Most of these species are members of subfamily Phlebotominae: *Phlebotomus (Phlebotomus) papatasi* (Scopoli, 1786),

*P. (Adlerius) balcanicus* Theodor, 1958, *P. (A.) brevis* Theodor & Mesghali, 1964 (doubtful evidence for Ukraine), *P. (A.) longiductus* Parrot, 1928, *P. (Larrousius) neglectus* Tonnoir, 1921, *P. (L.) major major* Annandale, 1910 (doubtful evidence for Ukraine), *P. (L.) perfiliewi perfiliewi* Parrot 1930, *P. (Paraphlebotomus) alexandri* Sinton, 1928, *P. (P.) similis* Perfil'ev, 1963 and *Sergentomyia minuta minuta* (Rondani, 1843); only one species from subfamily Psychodinae has been listed: *Threticus negrobovi* Vaillant, 1972. This is probably due to erroneous distribution data. In the current paper, the fauna of moth flies in Ukraine is enriched with 35 newly recorded species. The number of known species of Psychodidae from Ukraine is elevated to 43.

## Materials and methods

The material presented here comes from two different sampling campaigns (see Table 1). The first part of the material was taken during field work as an implementation of the project “Ephemeroptera, Plecoptera, Diptera biodiversity trip along the Uzh river, Ukraine“ (2015 and 2016). The material was collected in the upper part of the Uzh River basin, in the eastern Ukraine (Transcarpathia) and preserved in 75% ethanol. All samples were collected by sweep netting from vegetation along streams (Uzh River and its tributaries) and lakes by Jozef Oboňa, Peter Manko and Ľuboš Hrivniak. Captured moth flies were mounted on slides in Canada balsam in laboratory – 51 slides. The same collecting method was used by Pavel Chvojka during sampling trip to eastern Carpathians (1996) – 19 slides. All material, determined by the first author, is deposited in the National Museum, Natural History Museum, Department of Entomology, Prague, Czech Republic (NMPC). Slides are numbered by Inv. No. = Inventory Slide Number of the family Psychodidae (Tkoč et al. 2014). Nomenclature utilised is according to Perfil'ev (1966), Lewis (1982) and Artemiev and Neronov (1984) for Phlebotominae; for Psychodinae and Sycoracinae the nomenclature is modified from Vaillant (1972) and Wagner (1990, 2013) using the classifications of Oboňa and Ježek (2014) and Kroča and Ježek (2015).

## The following abbreviations are used in the paper:

<b>C</b>	P. Chvojka leg.,	<b>NMPC</b>	collections of the National Museum Prague, Czech Rep.,
<b>H</b>	Ľ. Hrivniak leg.,	<b>M</b>	male,
<b>J</b>	J. Ježek det.,	<b>F</b>	female.
<b>Ma</b>	P. Manko leg.,		
<b>O</b>	J. Oboňa leg.,		

**Table 1.** List of collecting sites.

Site name	Latitude/N	Longitude/E
Hropynets' Stream	48°11'54.0"	24°16'42.0"
Kamenychky Stream, below Novoselytsya	48°48'36.9"	22°28'33.4"
Kevele Stream, left tributary of Chorna Tysa River	48°11'11.0"	24°18'37.0"
Lubnya River, below Lubnya	49°00'36.9"	22°43'27.8"
Lyuta River, above Chornoholova	48°51'43.1"	22°36'21.4"
Paporotnyi Stream, in Stuzhytsya	49°01'40.0"	22°35'17.1"
Preluchnyi Stream, bridge above the water reservoir	48°46'22.0"	22°52'32.6"
Pylypets' River	48°40'12.0"	23°20'17.0"
Shypot River, below hydroelectric power plant	48°42'58.2"	22°49'20.4"
Shypotyky Stream, tributary of the Shypot River near hydroelectric power plant	48°44'23.7"	22°50'18.4"
Strychavka Stream, below Strychava	48°56'43.6"	22°28'17.0"
Sukchyi Stream, above Kam'yanytsya	48°42'46.2"	22°25'24.9"
Synevir–Polyans'ke Lake	48°37'00.0"	23°40'54.0"
Tereblya River, below Kolochava	48°25'22.0"	23°41'36.0"
Tikhyi Stream, above Stuzhytsya	49°02'09.2"	22°34'43.5"
tributary of the Uzh River, near Zahorb	49°00'41.9"	22°38'39.1"
Turiya River above Simer	48°43'41.5"	22°32'41.9"
Uzh River, at the last building in Stuzhytsya	48°40'49.9"	22°24'09.6"
Uzh River, Nevyts'ke near bridge	48°40'49.9"	22°24'09.6"
Uzh River, above Uzhgorod	48°36'37.5"	22°13'49.6"

## Results

### Faunistic records

#### PSYCHODIDAE

#### PHLEBOTOMINAE

#### *Phlebotomus* Rondani, 1840 (sensu Sabrosky, 1999)

#### *Phlebotomus* s. str.

#### 1. *Phlebotomus (Phlebotomus) papatasi* (Scopoli, 1786)

**Published records.** Perfil'ev (1966): 252, 254; Lewis (1982): 138, 140; Artemiev and Neronov (1984): 39, 40; Wagner (1990, 2013): 13.

**Distribution.** Afghanistan, Albania, Algeria, Azerbaijan, Bulgaria, Crete, Crimea, Croatia, Cyprus, Egypt, Ethiopia, France (southern), Georgia, Greece, Hungary, India, Iran, Iraq, Israel, Italy, Jordan, Kazakhstan (southern), Kuwait, Libya, Malta, Moldavia, Montenegro, Morocco, Oman, Pakistan, Portugal, Romania, Sardinia, Saudi Arabia, Serbia, Spain, Sudan, Syria, Tunisia, Turkey, Ukraine (southern), Yemen (Perfil'ev 1966; Lewis 1982; Artemiev and Neronov 1984; Wagner 1990, 2013).

***Adlerius* Nitzulescu, 1931****2. *Phlebotomus (Adlerius) balcanicus* Theodor, 1958**

**Published records.** Perfil'ev (1966) as *Phlebotomus chinensis balcanicus* Theodor, 1958: 316, 317; Lewis (1982): 165; Artemiev and Neronov (1984): 114; Wagner (1990, 2013): 17.

**Distribution.** Azerbaijan, Bulgaria, Caucasus, Crimea, Greece, Iran (north-western), Romania, Turkey, Ukraine, former Yugoslavia (Perfil'ev 1966; Lewis 1982; Artemiev and Neronov 1984; Wagner 1990, 2013).

***Phlebotomus (Adlerius) brevis* Theodor & Mesghali, 1964**

(doubtful evidence for Ukraine, see quite different views below)

Syn. *Phlebotomus chinensis ismailicus* Perfil'ev, 1966

**Published records.** Perfil'ev (1966) as *Phlebotomus chinensis ismailicus* Perfil'ev, 1966: 314; Lewis (1982): 165; Artemiev and Neronov (1984): 115; Wagner (1990, 2013): 17.

**Comments on distribution.** Artemiev and Neronov (1984): only Iran, Southern Caucasus, Turkey; Perfil'ev's statement Izmail is erroneous (published as *ismailicus*). See the full synonymy in Lewis (1982). Wagner (1990, 2013) lists records from the republic of Moldova and Ukraine; however, these records are **not verified so far**.

**3. *Phlebotomus (Adlerius) longiductus* Parrot, 1928**

Syn. *Phlebotomus (Adlerius) tauriae* Perfil'ev, 1966: 312, 314, Crimea

**Published records.** Perfil'ev (1966): 310, 312; Lewis (1982): 167; Artemiev and Neronov (1984): 121; Wagner (1990, 2013): 18.

**Comments on distribution.** Romania Perfil'ev (1966): as *Phlebotomus chinensis longiductus* Parrot, 1928 – occurrence only in Central Asia. Lewis (1982) and Artemiev and Neronov (1984): Afghanistan (northern and central), Crimea, Kazakhstan, Romania, Ukraine (southern); Caucasus (northern) and Central Asia. Wagner (1990, 2013) lists Afghanistan, Kazakhstan, Moldova, Romania and the Ukraine.

***Larrousius* Nitzulescu, 1931****4. *Phlebotomus (Larrousius) neglectus* Tonnoir, 1921**

Syn. *Phlebotomus (Larrousius) major krimensis* Perfil'ev, 1966

**Published records.** Perfil'ev (1966): 282, 285; Lewis (1982): 156, 157 (as *major krimensis*), 157 (as *major neglectus*); Artemiev and Neronov (1984): 93, 95 (as *neglectus*); Wagner (1990, 2013): 16, (as *major krimensis*), 16 (as *major neglectus*).

**Comments on distribution.** Perfil'ev (1966): southern coast of Crimea; Lewis (1982): *krimensis* – Crimea, *neglectus* – Albania, Dalmatia, Italy; Artemiev and Neronov (1984): *neglectus* – Italy, Balkan Peninsula, Crimea, Turkey, Caucasus (southern), former Palestine, ?Iran (north-western). Wagner (1990, 2013) lists the species (as *major krimensis*) from Crimea, Ukraine, and as *major neglectus* from Albania, Austria, Greece (Crete), Italy (Sicily), Romania, and former Yugoslavia.

### ***Phlebotomus (Larrousius) major major* Annandale, 1910**

(doubtful evidence for Ukraine, see quite different views below)

**Published records.** Perfil'ev (1966): 280; Lewis (1982): 157; Artemiev and Neronov (1984): 92, 93; Wagner (1990, 2013): 16.

**Comments on distribution.** Perfil'ev (1966): India only. Lewis (1982): India, Nepal, Pakistan. Artemiev and Neronov (1984): Afghanistan, India (southern slopes of the Himalayas), Nepal, Pakistan (northern). Wagner (1990) lists Afghanistan, India, Iran, and the Oriental Region. Wagner (2013) lists the species from Albania, Austria, Crete, Romania, Sicily, Ukraine, and former Yugoslavia; however, these records have **not been verified**.

### **5. *Phlebotomus (Larrousius) perfiliewi perfiliewi* Parrot, 1930**

**Published records.** Perfil'ev (1966): 289, 291; Lewis (1982): 160; Artemiev and Neronov (1984): 98; Wagner (1990, 2013): 16.

**Distribution.** Albania, Algeria, Bosnia and Herzegovina, Crete, Crimea, Croatia, Cyprus, France (south-eastern), Georgia, Greece, Hungary, Italy, Libya, Macedonia, Malta, Moldova, Montenegro, Morocco, Portugal, Romania, Sardinia, Serbia, Sicily, Spain, Tunisia, Turkey, and Ukraine (Perfil'ev 1966; Lewis 1982; Artemiev and Neronov 1984; Wagner 1990, 2013).

### ***Paraphlebotomus* Theodor, 1948**

### **6. *Phlebotomus (Paraphlebotomus) alexandri* Sinton, 1928**

**Published records.** Perfil'ev (1966): 264, 267; Lewis (1982): 143; Artemiev and Neronov (1984): 45; Wagner (1990, 2013): 14.

**Distribution.** Afghanistan, Algeria, Armenia, Azerbaijan, China (western), Crimea, Cyprus, Djibouti, Ethiopia, Georgia, Greece, India, Iran, Iraq, Israel, Ka-

zakhstan (southern), Moldova, Mongolia, Morocco, Pakistan, Romania, Saudi Arabia, Spain, Sudan, Tunisia, Turkey, Ukraine, United Arab Emirates, Yemen; northern Sahara, Caucasus (southern), Near and Middle East, Central and Eastern Asia; Afrotropical and Oriental Regions (Perfil'ev 1966; Lewis 1982; Artemiev and Neronov 1984; Wagner 1990, 2013).

### 7. *Phlebotomus (Paraphlebotomus) similis* Perfil'ev, 1963

Sensu Artemiev and Neronov (1984)

Syn: *Phlebotomus (Paraphlebotomus) sergenti similis* Perfil'ev, 1963

**Published records.** Perfil'ev (1966): 276; Lewis (1982): 148 – as *sergenti similis*; Artemiev and Neronov (1984): 58, 59 – as *similis*.

**Comments on distribution.** Perfil'ev (1966): southern coast of Crimea and southern Ukraine, Russia, northern Caucasus. Lewis (1982): same, Azerbaijan, Uzbekistan. Artemiev and Neronov (1984): Crimea, southern Ukraine, ?northern Caucasus, Albania, Romania, and former Yugoslavia.

### *Sergentomyia* França & Parrot, 1920

#### 8. *Sergentomyia minuta minuta* (Rondani, 1843)

**Published records.** Perfil'ev (1966): 323, 327; Wagner (1990): 22.

**Distribution.** Crimea, France, Greece, Italy, Malta, Sardinia, Sicily, Spain, former Yugoslavia (Perfil'ev 1966; Wagner 1990).

## PSYCHODINAE

### MORMIINI

#### MORMIINA

#### *Oomormia* Ježek, 1984

#### 9. *Oomormia andrenipes* (Strobl, 1910)

**Material examined.** Rachiv, tributary of Chorna Tysa (Kvasy), 7.vi.1996, 1M, C leg., slide Inv. No. 12216, NMPC.

**Distribution.** A quite rare species known from Austria, Bosnia, Czech Republic, Great Britain, Slovakia, and Slovenia (Ježek and Omelková 2012; Wagner 2013). **New species for Ukraine.**

PARAMORMIINI

PARAMORMIINA

*Jungiella* Vaillant, 1972

*Jungiella* s. str.

10. *Jungiella (Jungiella) hygrophila* Ježek, 1987

**Material examined.** Lyuta River, above Chornoholova, 27.v.2016, 1M, O Ma H leg., slide Inv. No. 22612, NMPC.

**Distribution.** Probably a central European species, uncommon, known only from the Czech Republic, Poland, and Slovakia (Ježek 1987; Ježek and Omelková 2012; Wagner 2013; Oboňa and Ježek 2014). **New species for Ukraine.**

11. *Jungiella (Jungiella) valachica* (Vaillant, 1963)

**Material examined.** Lyuta River, above Chornoholova, 27.v.2016, 1M, O Ma H leg., slide Inv. No. 22610, NMPC.

**Distribution.** A quite sporadic species, known from Austria, Bosnia and Herzegovina, Croatia, Czech Republic, Poland, Serbia, Slovakia, and Switzerland (Krek 1999; Ježek and Omelková 2012; Kvifite et al. 2013; Wagner 2013; Oboňa and Ježek 2014). **New species for Ukraine.**

*Psychogella* Ježek, 1983

12. *Jungiella (Psychogella) bohemica* Ježek, 1979

**Material examined.** Uzh River, Nevyts'ke near bridge, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22502, NMPC.

**Distribution.** A rare species, known only from Czech Republic, Greece, and Germany (Ježek 1979; Ježek and Goutner 1995; Wagner 2013). **New species for Ukraine.**

*Parajungiella* Vaillant, 1972

13. *Parajungiella longicornis* (Tonnoir, 1919)

**Material examined.** Lyuta River, above Chornoholova, 27.v.2016, 1M, O Ma H leg., slide Inv. No. 22611, NMPC.

**Distribution.** Generally, a very common European and west Siberian species (Ježek 1992). In Europe, known from Austria, Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greece,

Hungary, Ireland, Norway, Poland, Russia, Slovakia, Sweden, and the Netherlands (Ježek 1992; Ježek and Goutner 1995; Krek 1999; Kvitte et al. 2011, 2013). **New species for Ukraine.**

## TRICHOPSYCHODINA

*Philosepedon* Eaton, 1904

*Philothreticus* Krek, 1999

### 14. *Philosepedon (Philothreticus) soljani* Krek, 1971

**Material examined.** Hropynets' Stream, 7.vi.1996, 1M, C leg., slide Inv. No. 12217, NMPC.

**Distribution.** A very rare species, so far known only from Bosnia and Herzegovina, Czech Republic, Finland, and Slovenia (Krek 1999; Salmela et al. 2014; Kroča and Ježek 2015). **New species for Ukraine.**

*Threticus* Eaton, 1904

*Threticus negrobovi* Vaillant, 1972

**Published records.** Vaillant (1972): 104 (Taberda in Russian Caucasus, not Ukraine, compare with Wagner 1990, 2013)

**Distribution.** Very rare mountain species, so far known from Czech Republic, Slovenia, Slovakia, Russia, Ukraine (**error**), Abkhazia and Georgia (Ježek 2004; Kroča and Ježek 2015).

**Note.** *Threticus negrobovi* Vaillant, 1972 was mentioned in the Palaearctic catalogue of moth flies from South European territory (Ukraine) based on a record from Teberda village (Wagner 1990; Taberda 2000 m a.s.l. sensu Vaillant 1972). This village is, however, in the Russian part of the Caucasus and the listing from the Ukraine must be regarded as an error.

## PSYCHODINI

*Chodopsycha* Ježek, 1984

### 15. *Chodopsycha lobata* (Tonnoir, 1940)

**Material examined.** Preluchnyi Stream, bridge above the water reservoir, 10.viii.2015, 1F, O Ma H leg., slide Inv. No. 22513, NMPC.

**Distribution.** A very common European (Transcaucasian) species, present in lowlands as well as in hills and mountains; associated with fungi. In Europe, known from



Belgium, Bulgaria, France, Germany, Great Britain, Hungary, Ireland, Italy, Norway, and Slovenia (Kvifte et al. 2011; Ježek and Omelková 2012; Ježek et al. 2013). **New species for Ukraine.**

*Logima* Eaton, 1904

16. *Logima satchelli* (Quate, 1955)

**Material examined.** Preluchnyi Stream, bridge above the water reservoir, 10.viii.2015, 1F, O Ma H leg., slide Inv. No. 22515; Shypoty Stream, tributary of the Shypot River near hydroelectric power plant, 11.viii.2015, 1F, O Ma H leg., slide Inv. No. 22500, all NMPC.

**Distribution.** A common Holarctic species. In Europe, known from e.g. Austria, Czech Republic, Ireland, Italy, Norway, Russia, Slovakia, Slovenia, Sweden, the Netherlands, and former Yugoslavia; Canada, U.S.A. (Ježek and Goutner 1995; Svensson 2009; Kvifte et al. 2011). **New species for Ukraine.**

*Psycha* Ježek, 1984

17. *Psycha grisescens* (Tonnoir, 1922)

**Material examined.** Synevir – Polyans'ke Lake, 3.vi.1996, 1F, C leg., slide Inv. No. 122241; Hropynets' Stream, 7.vi.1996, 1F, C leg., slide Inv. No. 12221, all NMPC.

**Distribution.** A European and North African species. Recorded from Algeria, Austria, Belgium, Bosnia and Herzegovina, Czech Republic, Denmark, the Faroe Islands, France, Finland, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Mallorca, Morocco, the Netherlands, Norway, Slovakia, Slovenia, Sweden, Tunisia, and Turkey (Andersen 1999; Ježek 2004; Ježek and Yağci 2005; Salmela et al. 2014; Kvifte et al. 2016). **New species for Ukraine.**

*Psychodocha* Ježek, 1984

18. *Psychodocha cinerea* (Banks, 1894)

**Material examined.** Preluchnyi Stream, bridge above the water reservoir, 10.viii.2015, 1F, O Ma H leg., slide Inv. No. 225145, NMPC.

**Distribution.** A very common cosmopolitan species. Known from Austria, Azores, Belgium, Bosnia and Herzegovina, Bulgaria, Canary Islands, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy (incl. Sardinia), Madeira, the Netherlands, Norway, Poland, Romania, Russia, Serbia,

Slovakia, Slovenia, Spain, Sweden, Switzerland, and Turkey; Abkhazia, Afghanistan, Africa mer., Algeria, Argentina, Australia, Azores, Brazil, Canada, Chile, Iran, Israel, Juan Fernández Islands, New Zealand, Puerto Rico Islands, Tunisia, U.S.A. (Krek 1985; Ježek and Goutner 1995; Ježek and Yağci 2005; Kvifte et al. 2011; Wagner 1990, 2013; Salmela et al. 2014). **New species for Ukraine.**

### 19. *Psychodocha gemina* (Eaton, 1904)

**Material examined.** Preluchnyi Stream, bridge above the water reservoir, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22512; Shypot River, below the hydroelectric power plant, 10.viii.2015, 1F, O Ma H leg., slide Inv. No. 22517; Lyuta River, above Chornoholova, 11.viii.2015, 1F, O Ma H leg., slide Inv. No. 22492; Uzh River, at the last building in Stuzhytsya, 12.viii.2015, 1F, O Ma H leg., slide Inv. No. 22507, all NMPC.

**Distribution.** A common European species. Recorded from Austria, Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Great Britain, Denmark, France, Finland, Germany, Greece, Hungary, Ireland, Norway, Romania, Serbia, Slovakia, Slovenia, Spain, Switzerland, and the Netherlands (Ježek and Goutner 1995; Krek 1999; Ježek 2002; Kvifte et al. 2011, 2013; Salmela et al. 2014). **New species for Ukraine.**

### *Psychodula* Ježek, 1984

#### 20. *Psychodula minuta* (Banks, 1894)

**Material examined.** Uzh River, at the last building in Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22510, NMPC.

**Distribution.** A generally common Holarctic species. Recorded from Abkhazia, Austria, Belgium, Britain, Bulgaria, Cyprus, Czech Republic, Denmark, France, Finland, Germany, Greece, Hungary, Ireland, Italy (incl. Sardinia), Madeira, the Netherlands, Norway, Romania, Slovakia, Slovenia, Spain (incl. Balearic Islands), Sweden, and Switzerland; Canada, Syria, U.S.A. (Ježek 1990; Wagner 2013; Salmela et al. 2014). **New species for Ukraine.**

### *Psychomora* Ježek, 1984

#### 21. *Psychomora mycophila* (Vaillant, 1988)

(syn. *vanharai* Ježek, 1995)

**Material examined.** Shypoty Stream, tributary of the Shypot River near hydroelectric power plant, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22497, NMPC.

**Distribution.** A rare species associated with fungi, so far known only from Czech Republic, France, Slovakia, Slovenia, and Switzerland (Ježek and Omelková 2012). **New species for Ukraine.**

## 22. *Psychomora trinodulosa* (Tonnoir, 1922)

**Material examined.** Shypotyky Stream, tributary of Shypot River near hydroelectric power plant, 11.viii.2015, 1F, O Ma H leg., slide Inv. No. 22499, NMPC.

**Distribution.** A very common Holarctic species. Known from Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greek mainland, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Romania, Russia, Sardinia, Slovakia, Slovenia, Spanish mainland, and Sweden; Algeria, U.S.A. (Ježek 1990; Wagner 2013; Salmela et al. 2014). **New species for Ukraine.**

## *Tinearia* Schellenberg, 1803

### 23. *Tinearia alternata* (Say, 1824)

**Material examined.** Uzh River, Nevyts'ke near bridge, 10.viii.2015, 1F, O Ma H leg., slide Inv. No. 22501, NMPC.

**Distribution.** A cosmopolitan species, generally very common. Known from Austria, Balearic Is., Belgium, Bulgaria, Canary Is., Crete, Croatia, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greek mainland, Hungary, Ireland, Italy, Madeira, Norway, Poland, Romania, Sardinia, Slovenia, Spanish mainland, Sweden, Switzerland, the Netherlands, and Norway; Afghanistan, whole Africa, Australia, Bangladesh, Borneo, Canal Zone, Cape Verde Islands, Philippines, Hawaii, India, Jamaica, Japan, Macquarie Islands, Malaysia, Micronesia, Mongolia, New Zealand, North and South America, North Korea, Puerto Rico, Ryukyu Islands, Samoa, Socotra Island, Taiwan, Trinidad (Ježek 1981; Ježek and van Harten 1996; Kvifte et al. 2011; Ježek and Tkoč 2012; Wagner 2013). **New species for Ukraine.**

## PERICOMAINI

### *Berdeniella* Vaillant, 1976

#### 24. *Berdeniella kocii* Ježek, 2006

**Material examined.** Shypot River, below hydroelectric power plant, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22519; Shypotyky Stream, tributary of the Shypot River near hydroelectric power plant, 11.viii.2015, 1M, O Ma H leg., slide Inv. No.

22498; Tikhyi Stream, above Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22523; tributary of the Uzh River, near Zahorb, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22524; Paporotnyi Stream, in Stuzhytsya, 12.vii.2015, 1M, O Ma H leg., slide Inv. No. 22495 – all slides deposited in NMPC.

**Distribution.** A rare mountain species, known only from Czech Republic and Slovakia (Ježek 2006, 2009; Ježek and Omelková 2012). **New species for Ukraine.**

## 25. *Berdeniella matthesi* (Jung, 1954)

**Material examined.** Synevir – Polyans'ke Lake, 3.vi.1996, 1M, C leg., slide Inv. No. 12223, NMPC.

**Distribution.** A locally common species in Europe, the knowledge on its distribution is, however, quite poor: so far, it has been collected in Austria, Czech Republic, Germany, Italy, and Slovakia (Ježek and Omelková 2012; Kroča and Ježek 2015). **New species for Ukraine.**

## 26. *Berdeniella stavniensis* (Krek, 1969)

**Material examined.** Synevir – Polyans'ke Lake, 3.vi.1996, 1M, C leg., slide Inv. No. 12222; Hropynets' Stream, 7.vi.1996, 1M, C leg., slide Inv. No. 12219, all NMPC.

**Distribution.** European species, apparently not quite common, known from Austria, Bosnia and Herzegovina, Czech Republic, France, Germany, Serbia, and Slovakia (Krek 1999; Ježek 2003). **New species for Ukraine.**

## 27. *Berdeniella vimmeri* Ježek, 1997

**Material examined.** Hropynets' Stream, 7.vi.1996, 1M, C leg., slide Inv. No. 12233, NMPC.

**Distribution.** A central European species (knowledge of distribution is poor so far); known from Czech Republic and Slovakia (Ježek 1997, 2009; Ježek and Omelková 2012). **New species for Ukraine.**

## *Clytocerus* Eaton, 1904

## *Boreoclytocerus* Duckhouse, 1978

## 28. *Clytocerus (Boreoclytocerus) longicorniculatus* Krek, 1987

**Material examined.** Sukchyi Stream, above Kam'yanytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22521, NMPC.

**Distribution.** Probably not common European species. Known only from Bosnia and Herzegovina, Czech Republic, and Slovakia (Krek 1999; Ježek 2009; Ježek et al. 2013). **New species for Ukraine.**

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

**Material examined.** Lyuta River, above Chornoholova, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22494, NMPC.

**Distribution.** A very common central and western European species. Known from Austria, Belgium, Great Britain, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Lithuania, the Netherlands, Norway, Poland, Sardinia, Slovenia, and Switzerland (Wagner 2013; Ježek et al. 2014). **New species for Ukraine.**

***Pericoma* Walker, 1856**

***Pachypericoma* Vaillant, 1978**

**30. *Pericoma (Pachypericoma) blandula* Eaton, 1893**

**Material examined.** Tereblya River, below Kolochava, 3.vi.1996, 1M, C leg., slide Inv. No. 12230; Hropynets' Stream, 7.vi.1996, C leg., slide Inv. No. 12234; Uzh river, above Uzhgorod, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22520; Tikhyi Stream, above Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22484; tributary of the Uzh River, near Zahorb, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22525; Paprotnyi Stream, in Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22496; Sukhyi Stream, above Kam'yanytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22522, all slides deposited in NMPC.

**Distribution.** Species widespread in Europe and recorded also in Transcaucasia, Tunisia, and Morocco. In Europe, known from Austria, Belgium, Bosnia and Herzegovina, Croatia, Great Britain, Bulgaria, Czech Republic, Denmark, European Turkey, Finland, France, Germany, Greek mainland, Hungary, Ireland, Italy, Macedonia, Montenegro, the Netherlands, Norway, Poland, Romania, Russia, Sardinia, Serbia, Slovakia, Slovenia, Spanish mainland, Sweden, and Switzerland (Ježek 2004; Kvitte et al. 2011, 2013). **New species for Ukraine.**

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

**Material examined.** Tereblya River, below Kolochava, 3.vi.1996, 1M, C leg., slide Inv. No. 12229; Shypot River, below hydroelectric power plant, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22518; Kamenychky Stream, below Novoselytsya, 11.viii.2015,

1M, O Ma H leg., slide Inv. No. 22485; Tikhyi Stream, above Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22483, all slides deposited in NMPC.

**Distribution.** A European and western Siberian species. In Europe, known from Belgium, Bosnia and Herzegovina, Czech Republic, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Macedonia, Montenegro, the Netherlands, Slovenia, and Spain (Ježek 1992, 2004; Wagner 2013). **New species for Ukraine.**

### 32. *Pericoma (Pachypericoma) nielseni* Kvifte, 2010

Syn: *Pericoma formosa* Nielsen, 1964

**Material examined.** Tereblya River, below Kolochava, 3.vi.1996, 1M, C leg., slide Inv. No. 12232; Uzh River, Nevyts'ke near bridge, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22504, all in NMPC.

**Distribution:** Not common European species, known from Czech Republic, Denmark, Finland, France, Norway, and Slovakia (Ježek 2009; Kvifte 2010; Kvifte et al. 2011). **New species for Ukraine.**

### *Pericoma s. str.*

### 33. *Pericoma (Pericoma) exquisita* Eaton, 1893

**Material examined.** Uzh River, Nevyts'ke near bridge, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22503; Lyuta River, above Chornoholova, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22493; Uzh River, at the last building in Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22509, all in NMPC.

**Distribution.** Species widespread in Europe, North Africa, and Transcaucasia (Armenia). In Europe, known from Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Czech Republic, Crete, Croatia, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Macedonia, Montenegro, Poland, Serbia, Slovakia, Slovenia, and Spain (Ježek 2004, 2009; Kvifte et al. 2013; Wagner 2013; Oboňa and Ježek 2014). **New species for Ukraine.**

### *Pneumia* Enderlein, 1935

### 34. *Pneumia crispi* (Freeman, 1953)

**Material examined.** Lubnya River, below Lubnya, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22505, NMPC.

**Distribution.** A rare European species. So far recorded from Bosnia and Herzegovina, Czech Republic, France, Germany, Great Britain, Greece, Hungary, Macedonia, Romania, and Slovakia (Ježek and Omelková 2012). **New species for Ukraine.**

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

**Material examined.** Strychavka Stream, below Strychava, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22516; Tikhyi Stream, above Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22482, all in NMPC.

**Distribution.** A species published from several countries, not too frequent in Europe: Albania, Belgium, Bosnia and Herzegovina, Czech Republic, France, Germany, Great Britain, Greece, Italy, Serbia, Slovakia, and Slovenia; Transcaucasia: Abkhazia (Ježek 2002, 2004; Ježek et al. 2012). **New species for Ukraine.**

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

**Material examined.** Synevir – Polyans'ke Lake, 3.vi.1996, 1M, C leg., slide Inv. No. 12227; Hropynets' Stream, 7.vi.1996, 1M, C leg., slide Inv. No. 12235, all in NMPC.

**Distribution.** A common species distributed largely in western and central Europe, and Scandinavia; known from Austria, Belgium, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Ireland, Italy, the Netherlands, Norway, Poland, Slovakia, and Slovenia (Kvifte et al. 2011, 2013; Oboňa and Ježek 2014). **New species for Ukraine.**

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

**Material examined.** Lyuta River, above Chornoholova, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22489; 27.v.2016, 1M, O Ma H leg., slide Inv. No. 22609, all in NMPC.

**Distribution.** A very common species, recorded from throughout Europe and the Canary Islands. Known from Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Luxembourg, Macedonia, Montenegro, Poland, Romania, Sardinia, Serbia, Slovakia, Slovenia, Spain, Switzerland, and the Netherlands (Ježek and Goutner 1995; Krek 1999; Ježek 2002; Kvifte et al. 2013). **New species for Ukraine.**

**38. *Pneumia stammeri* (Jung, 1956)**

**Material examined.** Pylypets' River, 2.vi.1996, C leg., 1M, slide Inv. No. 12228; Synevir – Polyans'ke Lake, 3.vi.1996, C leg., 1M, slide Inv. No. 12226, all in NMPC.

**Distribution.** A quite rare European species known from Austria, Belgium, Bosnia, Czech Republic, Denmark, France, Finland, Germany, Great Britain, Hungary, Norway, Slovakia, and Sweden (Ježek 2003; Kvitte et al. 2011; Salmela et al. 2014). **New species for Ukraine.**

#### 39. *Pneumia trivialis* (Eaton, 1893)

**Material examined.** Lyuta River, above Chornoholova, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22491; Tikhyi Stream, above Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22481; tributary of the Uzh River, near Zahorb, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22488, all slides deposited in NMPC.

**Distribution.** A very common European species. Known from Austria, Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Ireland, the Netherlands, Norway, Poland, Serbia, Slovakia, Slovenia, Spain, Sweden, and Switzerland (Krek 1999; Ježek 2002; Kvitte et al. 2011, 2013). **New species for Ukraine.**

#### 40. *Pneumia tjentistensis* (Krek, 1969)

**Material examined.** Hropynets' Stream, 7.vi.1996, 1M, C leg., slide Inv. No. 12218, NMPC.

**Distribution.** So far known only from Bosnia and Herzegovina, and Czech Republic (Krek 1999; Ježek and Omelková 2012). **New species for Ukraine.**

### *Ulomyia* Walker, 1856

#### 41. *Ulomyia cognata* (Eaton, 1893)

**Material examined.** Synevir – Polyans'ke Lake, 3.vi.1996, 1M, C leg., slide Inv. No. 12225; Hropynets' Stream, 7.vi.1996, 1M, C leg., slide Inv. No. 12220; Lubnya River, below Lubnya, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22506; tributary of the Uzh River, near Zahorb, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22487; Uzh River, at the last building in Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22508, all slides deposited in NMPC.

**Distribution.** A common European species known from Austria, Czech Republic, Finland, France, Germany, Great Britain, Italy, Lithuania, Poland, Slovakia, and Slovenia (Ježek and Omelková 2012; Salmela et al. 2014). **New species for Ukraine.**



#### 42. *Ulomyia fuliginosa* (Meigen, 1804)

**Material examined.** Preluchnyi Stream, bridge above the water reservoir, 10.viii.2015, 1M, O Ma H leg., slide Inv. No. 22511; Lyuta River, above Chornoholova, 11.viii.2015, 1M, O Ma H leg., slide Inv. No. 22490; Tikhyi Stream, above Stuzhytsya, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22480; tributary of the Uzh River, near Zahorb; same, 12.viii.2015, 1M, O Ma H leg., slide Inv. No. 22486, all slides deposited in NMPC.

**Distribution.** A very common and often frequently recorded European species, known from Austria, Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Ireland, Italy, Kosovo, Macedonia, the Netherlands, Norway, Poland, Romania, Slovakia, Slovenia, Spain, and Switzerland (Krek 1999; Ježek 2002; Kvitte et al. 2011, 2013; Salmela et al. 2014).

**New species for Ukraine.**

### SYCORACINAE

#### *Sycorax* Haliday in Curtis, 1839

#### 43. *Sycorax silacea* Haliday in Curtis, 1839

**Material examined.** Turiya River above Simer, 27.v.2016, 1M, O Ma H leg., slide Inv. No. 22613, NMPC.

**Distribution.** European species, locally common; known from Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, Finland, France, Germany, Great Britain, Hungary, Ireland, Italy, Norway, Poland, Romania, Slovakia Sweden, and Switzerland (Ježek 1996; Krek 1999; Kvitte et al. 2013; Wagner 2013; Salmela et al. 2014). **New species for Ukraine.**

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