

# A revised checklist of Norwegian moth flies (Diptera, Psychodidae)

GUNNAR MIKALSEN KVIFTE, ØYVIND HÅLAND & TROND ANDERSEN

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A revised checklist with regional records of the Norwegian moth flies is given, listing 36 species. *Clytocerus rivosus* (Tonnoir, 1919), *Ulomyia fuliginosa* (Meigen, 1818), *Pneumia borealis* (Berdén, 1954), *Psychoda (Logima) satchelli* Quate, 1955, *Parajungiella longicornis* (Tonnoir, 1919), *Panimerus albomaculatus* (Wahlgren, 1904) and *Tonnoiriella nigricauda* (Tonnoir, 1919) are recorded in Norway for the first time, while the occurrences of *Psychoda (Tinearia) alternata* Say, 1824 and *Psychoda (Apsycha) pusilla* Tonnoir, 1922 are validated.

Key words: Psychodidae, Norway, new records

Gunnar Mikalsen Kvifte & Trond Andersen, Department of Natural History, University Museum of Bergen, University of Bergen, P.O. Box 7800, NO-5020 Bergen, Norway.

E-mails: [gunnar.kvifte@student.uib.no](mailto:gunnar.kvifte@student.uib.no), [trond.andersen@zmb.uib.no](mailto:trond.andersen@zmb.uib.no)

Øyvind Håland, Kvalvegen 2, NO-2380 Brumunddal, Norway. E-mail: [oeyvindhaa@c2i.net](mailto:oeyvindhaa@c2i.net)

## Introduction

Based on material in Norwegian collections, Andersen & Håland (1995) compiled a list of 26 species of moth flies from Norway. When studying the Siebke collection housed in the Natural History Museum in Oslo (NHMO), Andersen & Amundsen (1997) added *Peripsychoda auriculata* (Curtis, 1839). The first checklist of Norwegian moth flies with regional records was given by Håland & Andersen (1996).

In 2010 the project "Insects inhabiting freshwater and humid habitats in Finnmark", which targets Psychodidae among other groups, was granted by The Norwegian Biodiversity Information Centre (Artsdatabanken). Before starting identifying the material from Finnmark we found it necessary to update the previous checklist. All Psychodidae material in the collections in the natural history museums in Tromsø, Trondheim, Oslo and Bergen have been studied as well as other available material. The list comprises 36 species

and with a few exceptions (see notes), all records are based on material studied by the authors. Six species previously not recorded from Norway and two species previously recorded from Norway without detailed locality information are added. *Parabazarella neglecta* (Eaton, 1893), recorded by Andersen & Håland (1995) based on a single male from northern Oppland, is deleted. New material indicates that these specimens actually belong to a new species, which will be described elsewhere. We also provide additional regional distributional data for several species. However, 57 species have so far been taken in Finland and 59 in Sweden (Bo W. Svensson & Jukka Salmela pers. comm.), so more species are to be expected.

## Material and methods

Most of the material has been collected with hand nets, Malaise traps or light traps and preserved in alcohol. Slide preparations using Canada balsam

or Euparal as mountant have been made of all identified species. Most of the slides are lodged in The Department of Natural History, University Museum of Bergen (ZMBN).

Classification is largely in accordance with Wagner (2010), with the following modifications: The genus *Satchelliella* Vaillant, 1979 is recognised as a junior synonym of *Pneumia* Enderlein, 1935 (see Duckhouse 1987). The genera *Parajungiella* Vaillant, 1972 and *Parabazarella* Vaillant, 1983 are treated as full genera according to Ježek (1984, 2001).

The genus *Psychoda* Latreille, 1796 is a very species rich, cosmopolitan genus with more than 400 described species from all biogeographical regions. *Psychoda s. lat.* has been split repeatedly; the genera of concern for this checklist are *Apsycha* Ježek, 2007, *Chodopsycha* Ježek, 1984, *Copropsychoda* Vaillant, 1971, *Logima* Eaton, 1904, *Psycha* Ježek, 1984, *Psychodocha* Ježek, 1984, *Psychodula* Ježek, 1984, *Psychomora* Ježek, 1984, *Tinearria* Schellenberg, 1803 and *Ypsidocha* Ježek, 1984. In the present checklist we use these genera as subgenera of *Psychoda s. lat.* following Bravo et al. (2006).

## The checklist

An asterisk before the species name indicates that a note is given for the species. Faunistic regions are listed according to Økland (1981).

## SYCORACINAE

### *Sycorax* Haliday in Curtis, 1839

*silacea* Haliday in Curtis, 1839

HOY

## TRICHOMYIINAE

### *Trichomyia* Haliday in Curtis, 1839

*urbica* Haliday in Curtis, 1839

SFI

## PSYCHODINAE

### Pericomaini

#### *Clytocerus* Eaton, 1904

\* *ocellaris* (Meigen, 1804)

Ø, AK, VE, TEY, HES, HOY, NSY

\* *rivosus* (Tonnoir, 1919)

NSY

#### *Berdeniella* Vaillant, 1976

\* *freyi* (Berdén, 1954)

HES, OS, NNØ, NNV

#### *Ulomyia* Walker, 1856

\* *fuliginosa* (Meigen, 1804)

VE, HOY

#### *Pneumia* Enderlein, 1935

\* *borealis* (Berdén, 1954)

HES

\* *mutua* (Eaton, 1893)

VE, HES, ON, HOY, SFI, NSY, NNØ

\* *stammeri* (Jung, 1954)

AK, HES, HEN, NNØ, FI

\* *trivialis* (Eaton, 1893)

Ø, AK, BØ, TEY, RY, HOI, HOY, NNØ

#### *Pericoma* Walker, 1856

\* *rivularis* Berdén, 1954

HES, SFI

\* *blandula* Eaton, 1893

VE, BØ, NSY

\* *nielsenii* Kvifte, 2010

syn. *P. formosa* Nielsen, 1964, nec. Meunier, 1905

Ø, AK, BØ, HES

#### *Parabazarella* Vaillant, 1983

\* *subneglecta* (Tonnoir, 1922)

FV

### Psychodini

#### *Philosepedon* Eaton, 1904

\* *humeralis* (Meigen, 1818)

Ø, AK, BV, HES, HOI, HOY, MRY, NTY, NNØ

**Trichopsychoda Tonnoir, 1922**

*hirtella* (Tonnoir, 1919)

AK

**Psychoda Latreille, 1796**

Subgenus *Apsycha* Ježek, 2007

\* *pusilla* Tonnoir, 1922

NSY

Subgenus *Chodopsycha* Ježek, 1984

\* *lobata* Tonnoir, 1940

TEY, HEN, RI, HOI, HOY

Subgenus *Copropsychoda* Vaillant, 1971

*brevicornis* Tonnoir, 1940

HOI

Subgenus *Logima* Eaton, 1904

\* *albipennis* Zetterstedt, 1850

syn. *P. severini* Tonnoir, 1922

syn. *P. parthenogenetica* Tonnoir, 1940

AK

\* *satchelli* Quate, 1955

syn. *P. albipennis* auct., nec. Zetterstedt, 1850

AK, BV, HOI, HOY, SFI, NSY, NNØ, TRY

*sigma* Kincaid, 1899

syn. *P. surcoufi* Tonnoir, 1922

BV, HOI, SFY

Subgenus *Psycha* Ježek, 1984

*grisescens* Tonnoir, 1922

HEN, HOI, HOY, STI

Subgenus *Psychoda* s. str.

\* *phalaenoides* (L., 1758)

BV, HES, RY, HOI, HOY, SFI, MRY, NSY, NNØ, TRY

Subgenus *Psychodocha* Ježek, 1984

\* *cinerea* Banks, 1894

VE, BØ, HOI, HOY

\* *gemina* (Eaton, 1904)

HOI, NSY

Subgenus *Psychodula* Ježek, 1984

*minuta* Banks, 1894

AK, HOI, HOY, NNØ

Subgenus *Psychomora* Ježek, 1984

*trinodulosa* Tonnoir, 1922

HOI, HOY

Subgenus *Tineararia* Schellenberg, 1803

\* *alternata* Say, 1824

BØ

Subgenus *Ypsydocha* Ježek, 1984

\* *setigera* Tonnoir, 1922

TEY, HOI, HOY, SFI, NSY

Paramormiini

**Parajungiella Vaillant, 1972**

\* *longicornis* (Tonnoir, 1919)

HES

**Panimerus Eaton, 1913**

\* *albomaculatus* (Wahlgren, 1904)

HES

**Telmatoscopus Eaton, 1904**

\* *similis* Tonnoir, 1922

TRI

**Peripsychoda Enderlein, 1935**

\* *auriculata* (Curtis, 1839)

AK, VE

Maruinini

**Lobulosa Szabó, 1960**

\* *pollex* (Berdén, 1954)

TRI

**Tonnoiriella Vaillant, 1971**

\* *nigricauda* (Tonnoir, 1919)

HES

**Notes on the species**

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

**New regional records.** Ø Moss: Mossefossen (EIS 19, UTM WGS84 32V NL 965895) 10 August 1994, 1♂, leg. Ø. Håland, coll. ZMBN; **TEY** Kragerø: Jomfruland, Øytangen (EIS 11, UTM WGS84 32V NL 335427) 28 July–14 August 2009, 1♂, leg. H. Holtung, coll. ZMBN; **HOI** Kvam: Stekka Naturresevat (EIS 32, UTM WGS84 32V LM 436895) 4 July–6 August 2000, 1♂, leg. L. Greve & G. Bakkerud, coll. ZMBN; **HOY** Bergen: Fana, Mildevatnet (EIS 30, UTM WGS84 32V KM 929852) 20–21 May 2009, 7♂♂, leg. field course, coll. ZMBN.

***Clytocerus rivosus* (Tonnoir, 1919)**

**First record for Norway.** NSY Leirfjord: Leirfjord (EIS 118, UTM WGS84 33W VP

068286) 17 June 1988, 1♂, leg. Ø. Håland, coll. ZMBN.

**Remarks.** A rare species previously recorded from Belgium, The Czech Republic, Denmark, Finland, France, Germany, Great Britain, Slovakia and Sweden (Ježek 2003, Salmela 2003).

### *Berdeniella freyi* (Berdén, 1954)

**New regional records.** HES Ringsaker: Sveum, stream (EIS 46, UTM WGS84 32V PN 058527) 31 May 2004, 1♂, leg. Ø. Håland, coll. ZMBN; OS Lillehammer: Fåberg, Rudsbygd bedehus (EIS 54, UTM WGS84 32V NN 709848) 7 June 2002, 2♂♂1♀, leg. Ø. Håland, coll. ZMBN; NNØ Evenes: Snubbakollen (EIS 145, UTM WGS84 33W WS 875025) 6–25 July 2010, 1♂, leg. P. Jordan, coll. ZMBN.

### *Ulomyia fuliginosa* (Meigen, 1818)

**First records for Norway.** VE Tønsberg: Kjelleolla (EIS 19, UTM WGS84 32V NL 799724) 16 May 2004, 1♂, leg. Ø. Håland, coll. ZMBN; Stokke: Melsomvik (EIS 19, UTM WGS84 32V NL 765667) 28 June 2000, 1♂, leg. J. Skartveit, coll. ZMBN; HOY Bergen: Åsane, Haukåsvassdraget (EIS 40, UTM WGS84 32V LN 005114) 16–28 July 2003, 1♂, leg. L. Greve & G. Bakkerud, coll. ZMBN; Storetveitvatnet (EIS 30, UTM WGS84 32V KM 987964) 12 May 2009, 1♂, leg. G. Kvitte, coll. ZMBN; Fana, Mildevatnet (UTM WGS84 32V KM 929852) 21–24 August 2008, 12♂♂, leg. M. Stokkan & G. Kvitte, coll. ZMBN; Os: Osøyri (EIS 31, UTM WGS84 32V LM 043775) 3 August 1980, 12♂♂, leg. A. Fjeldså, coll. ZMBN.

**Remarks.** A widespread European species; for details on the distribution see Ježek (2004). According to Vaillant (1983), *U. fuliginosa* is found in a wide range of lotic habitats, including springs and madicolous environments.

### *Pneumia borealis* Berdén, 1954

**First records for Norway.** HES Ringsaker: Tjernlitjern (EIS 46, UTM WGS84 32V PN 067495) 1 June 2003, 1♂, leg. Ø. Håland, coll. ZMBN; Mesnali Ungdomssenter (EIS 54, UTM WGS84 32V NN 913755) 6 June 1992, 2♂♂, leg. Ø. Håland; 1♂, leg. Ø. Håland & T. Danbolt, coll.

ZMBN.

**Remarks.** The species has apparently only been taken in Finland and Sweden (Wagner 2010).

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

**New regional records.** VE Tønsberg: Kjelleolla (EIS 19, UTM WGS84 32V NL 799724) 16 May 2004, 1♂, leg. Ø. Håland, coll. ZMBN; HES Ringsaker: Svensvea (EIS 46, UTM WGS84 32V PN 017608) 11 June 2004, 1♂, leg. Ø. Håland, coll. ZMBN; ON Nord-Fron: Liadalen Naturreservat (EIS 62, UTM WGS84 32V NP 365270) 1 June 2002, 2♂♂, leg. Ø. Håland, coll. ZMBN.

### *Pneumia stammeri* (Jung, 1954)

**New regional records.** NNØ Evenes: Snubbakollen (EIS 145, UTM WGS84 33W WS 875025) 6–25 July 2010, 1♂, leg. P. Jordan, coll. ZMBN. FI Alta: Gargia Fjellstue (EIS 173, UTM WGS84 34W EC 959464) 29 June 1979, 2♂♂, leg. L. Greve, coll. ZMBN.

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

**New regional records.** TEY Kragerø: Jomfruland, Ormedammen (EIS 11, UTM WGS84 32V NL 335240) 16 August 2009, 4♂♂, leg. G. Kvitte, coll. ZMBN; RY Finnøy: Hauskevatnet (EIS 14, UTM WGS84 32V LL 203642) 28 August – 12 September 1992, 1♂, leg. J. Skartveit, coll. ZMBN. HOY Bergen: Fana, Mildevatnet (EIS 30, UTM WGS84 32V KM 929852) 21–24 August 2008, 11♂♂, leg. M. Stokkan & G. Kvitte, coll. ZMBN.

### *Pericoma rivularis* Berdén, 1954

**New regional record.** HES Ringsaker: Furnes, Sandvold Hamnehage (EIS 46, UTM WGS84 32V PN 099469) 1–30 July 1999, 1♂, leg. J. Bakkerud, coll. ZMBN.

### *Pericoma blandula* Eaton, 1893

**New regional records.** VE Holmestrand: Hillestad skole, small pond (EIS 19, UTM WGS84 32V NL 674979) 12 July 1989, 1♂, leg. Ø. Håland, coll. ZMBN; NSY Alstahaug: Sandnessjøen, SIVA, stream (EIS 117, UTM WGS84 33W UP 926229) 8 July 1988, 2♂♂, leg. Ø. Håland, coll. ZMBN.

***Pericoma nielsenii* Kvifte, 2010**

**New regional records.** **BØ** Lier: Linnestranda (EIS 28, UTM WGS84 32V NM 724243) 16 August 2009, 2♂♂, leg. G. Kvifte & H. Elven, coll. ZMBN; **HES** Ringsaker: Sveum, stream (EIS 46, UTM WGS84 32V PN 058527) 3 July 2005, 1♂, leg. Ø. Håland, coll. ZMBN.

**Remarks.** Recorded from Akershus and Østfold by Andersen & Håland (1995) as *Pericoma formosa* Nielsen, 1964. This name is unavailable as it is a homonym for the species *Pericoma formosa* Meunier, 1905 from Baltic amber; the replacement name used in the present checklist was proposed by Kvifte (2010).

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

**Remarks.** Vaillant (1983) redescribed and figured *Parabazarella subneglecta* (Tonnoir, 1922) partly based on material from Honningsvåg in Finmark. This record was overlooked by Håland & Andersen (1996) and we include the species in the present checklist.

***Philosepedon humeralis* (Meigen, 1818)**

**New regional records.** **BV** Ål: Storeteig (EIS 43, UTM WGS84 32V MN 732199) 21 May–19 June 2000, 1♂, leg. J. Skartveit, coll. ZMBN; **HOY** Bergen: Natlandsfjellet (EIS 30, UTM WGS84 31V 998949) 12 August 2009, 4♂♂, leg. T. Andersen, coll. ZMBN; **MRY** Sykkylven: Gjevenes (EIS 76, UTM WGS84 32V LQ 659169) 15 May–11 June 2001, 1♂, leg. J. Skartveit, coll. ZMBN; **NTY** Nærøy: Kjeksvika (EIS 106, UTM WGS84 32W PS 053815) 20 June–5 July 2002, 1♂, leg. T. Sømme, coll. ZMBN; **NNØ** Evenes: Snubbakollen (EIS 145, UTM WGS84 33W WS 875025) 6–25 July 2010, 1♂, leg. P. Jordan, coll. ZMBN.

***Psychoda (Apsycha) pusilla* Tonnoir, 1922**

**First record for Norway.** **NSY** Alstadhaug: Botn (EIS 117, UTM WGS84 33W UP 912204) 22 July 1989, 1♂, leg. Ø. Håland, coll. ZMBN.

**Remarks.** The species is distributed in Austria, The Czech Republic, Great Britain, Italy, Lithuania, Poland, and U.S.A. (Ježek 2007, 2009). It was recorded from «entre Tromsø et Alta» in northern Norway by Georges (1961), but was not

included in the previous checklist (see Andersen & Håland 1995). However, the present record confirms its presence in Norway.

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

**New regional records.** **TEY** Kragerø: Jomfruland, Øytangen, (EIS 11, UTM WGS84 32V NL 335427) 28 July–14 August 2009, 3♂♂, leg. H. Holtung; 14 August 2009, 1♂, leg. G. Kvifte, coll. ZMBN; **RI** Suldal, Kallhagen, Bjørkenes (EIS 24, UTM WGS84 32V LM 091705) 11–23 July 2009, 1♂, leg. A. K. Andersson, coll. ZMBN.

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

**Remarks.** The record from AK is based on an original syntype of *P. albipennis* from Tøyen, Oslo, housed in the Natural History Museum, Oslo (see discussion).

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

**Records from Norway.** **AK** Nesodden: Fagerstrand (EIS 28, UTM WGS84 32V NM 897246) 17 August 1991, 4♂♂; 9–10 September 2001, 3♂♂, leg. S. Kobro, coll. ZMBN; **BV** Rollag: Rollag (EIS 35, UTM WGS84 32V NM 167501) 22 September 1989, 4♂♂, leg. B. Sagvolden, coll. ZMBN; **Øvre Eiker**: Steinbruelva (EIS 28, UTM WGS84 32V NM 557127) 31 July 1990, 1♂, leg. T. Andersen, coll. ZMBN; **BV** Nore og Uvdal: Nørstebøseter (EIS 34, UTM WGS84 32V MM 718883) 2–5 September 1994, 1♂, leg. Ø. Håland, coll. ZMBN; **HOY** Bergen: Natlandsfjellet (EIS 30, UTM WGS84 31V KM 998949) 10 May 1993, 2♂♂; 12 August 2009, 7♂♂, leg. T. Andersen, coll. ZMBN; **Os**: Raudlia (EIS 31, UTM WGS84 32V LM 054867) 4–26 April 1991, 2♂♂, leg. K. H. Thunes, coll. ZMBN; **Osterøy**: Hannisdalen (EIS 40, UTM WGS84 32V LN 078108) 30 July 2008, 7♂♂, leg. G. Kvifte, coll. ZMBN; **HOI** Kvinherad: Rosendal, Baroniet (EIS 31, UTM WGS84 32V LM 341538) 5–8 September 1990, leg. field course, coll. ZMBN; **Voss**: Møn (EIS 41, UTM WGS84 32V LN 652244) 24 August 1979, 4♂♂, leg. P. Andersen, coll. ZMBN; **Kvam**: Bjørke (EIS 32, UTM WGS84 32V LM 501991) 14–28 May 1982, 1♂, leg. A.-J. Nilsen, coll. ZMBN; **SFY** Høyanger: Bjordal (EIS 49, UTM WGS84 32V LN 293757) 17–19 August 1980, 8♂♂, leg.

H. Bjordal, coll. ZMBN; **SFI** Leikanger: Grinde (EIS 50, UTM WGS84 32V LN 785857) 7–20 August 1991, 1♂, leg. J. Anonby, coll. ZMBN; **NSY** Alstadhaug: Sandnessjøen (EIS 117, UTM WGS84 33W UP 921242) 19 May 1986, 2♂♂, leg. Ø. Håland, coll. ZMBN; **NNØ** Evenes: Snubbakollen (EIS 145, UTM WGS84 33W WS 875025) 6–25 July 2010, 1♂, leg. P. Jordan, coll. ZMBN; **TRY** Karlsøy: Vannøya (EIS 171, UTM WGS84 34W DC 515831) 17 July 1925, 2♂♂, leg. T. Soot-Ryen, coll. Tromsø Museum.

**Remarks.** Following Withers (1988) and others, Andersen & Håland (1995) treated *P. (L.) satchelli* as a junior synonym of *P. (L.) albipennis*. In the present checklist we recognize *P. (L.) satchelli* as a valid species and the records of the males of *P. (L.) albipennis* in Andersen & Håland (1995) are transferred to *P. (L.) satchelli* in the present checklist (see discussion).

According to Ježek & Yağci (2005) *P. (L.) satchelli* has a holarctic distribution, found in Canada, U.S.A., Turkey and several European countries. It was recorded from Finland by Salmela (2005) and is also very common in Sweden (Svensson 2009). It breeds in many different habitats, including stream- and river banks, compost, toilets and silos (Ježek 1990, Svensson 2009).

#### *Psychoda (Psychoda) phalaenoides* (L., 1758)

**New regional records.** **HES** Ringsaker: Furnes, Sandvold Hamnehage (EIS 46, UTM WGS84 32V PN 099469) 1–30 July 1999, 2♂♂, leg. J. Bakkerud, coll. ZMBN; **RY** Tysvær: Sandvik, Kårstø, pond (EIS 14, UTM WGS84 32V LL 010767) 14 July 1981, 2♂♂, leg. L. Greve, coll. ZMBN; **MRY** Sykkylven: Gjevenes (EIS 76, UTM WGS84 32V LQ 659169) 15 May–11 June 2001, 1♂, leg. J. Skartveit, coll. ZMBN; **NSY** Alstadhaug: Botn (EIS 117, UTM WGS84 33W UP 912204) 13 August 1986, 1♂, leg. Ø. Håland, coll. ZMBN; **NNØ** Evenes: Snubbakollen (EIS 145, UTM WGS84 33W WS 875025) 6–25 July 2010, 1♂, leg. P. Jordan, coll. ZMBN; **TRY** Tromsø: Ramfjordnes (EIS 162, UTM WGS84 32W PT 225015) 12 September–2 November 1990, 1♂, leg. I. Greve Jensen, coll. ZMBN.

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

**New regional record.** **HOI** Kvam: Stekka Naturreservat (EIS 31, UTM WGS84 32V LM 436895) 4 July–6 August 2000, 3♂♂, leg. L. Greve & G. Bakkerud, coll. ZMBN.

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

**New regional record.** **NSY** Alstadhaug: Sandnessjøen, Horvnesveien (EIS 117, UTM WGS84 33W UP 945247) 4 June 1988, 2♂♂, leg. Ø. Håland, coll. ZMBN.

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

**First record for Norway.** **BØ** Lier: Linne-stranda (EIS 28, UTM WGS84 32V NM 724243) 16 August 2009, 1♀, leg. G. Kvitte & H. Elven, coll. ZMBN.

**Remarks.** This cosmopolitan species is listed from Norway by Wagner (2010). However to our knowledge this is the first published record from the country.

#### *Psychoda (Ypsydocha) setigera* Tonnoir, 1922

**New regional records.** **TEY** Kragerø: Jomfruland, Øytangen (EIS 11, UTM WGS84 32V NL 335427) 14 August 2009, 1♂, leg. G. Kvitte, coll. ZMBN; **NSY** Alstadhaug: Sandnessjøen, Horvnesveien (EIS 117, UTM WGS84 33W UP 945247) 10 October 1986, 1♂, leg. Ø. Håland, coll. ZMBN.

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

**First records for Norway.** **HES** Ringsaker: Tjernlitjern (EIS 46, UTM WGS84 32V PN 067495) 9 June 2004, 4♂♂; 13 June 2004, 7♂♂, leg. Ø. Håland, coll. ZMBN.

**Remarks.** A widespread European species breeding in muddy swamps (Vaillant 1972); for details on the distribution see Ježek (2004).

#### *Panimerus albomaculatus* (Wahlgren, 1904)

**First records for Norway.** **HES** Ringsaker: Tjernlitjern (EIS 46, UTM WGS84 32V PN 067495) 9 August 2003, 4♂♂; 13 August 2004, 3♂♂; 20 July 2006, 2♂♂, leg. Ø. Håland, coll. ZMBN.

**Remarks.** This species has previously been taken in Denmark, Finland, The Netherlands and

Sweden (Wagner 1990). Autio & Salmela (2010) suggested that the species is halophilous based on its abundance in Åland's saltmarshes. However, our records are all from a freshwater pond far inland.

### ***Telmatoscopus similis* Tonnoir, 1922**

**Remarks.** The record from TRI is based on Nielsen (1965) who listed 2♂♂1♀ and from Gratangen in inner Troms 30 June 1956.

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

**New regional record.** VE Stokke: Melsomvik (EIS 19, UTM WGS84 32V NL 765667) 28 June 2000, 1♂, leg. J. Skartveit, coll. ZMBN.

### ***Lobulosa pollex* (Berdén, 1954)**

**Remarks.** The record from TRI is based on Nielsen (1965) who listed several males and females from Gratangen in inner Troms 30 June 1956 and 2♂♂4♀♀ from Storfjord in inner Troms 2 July 1956.

### ***Tonnoiriella nigricauda* (Tonnoir, 1919)**

**First record for Norway.** HES Ringsaker: Tjernlitjern (EIS 46, UTM WGS84 32V PN 067495) 24 May 2004, 1♂, leg. Ø. Håland, coll. ZMBN.

**Remarks.** The species is widespread in Europe, previously recorded from Belgium, The Czech Republic, Denmark, Finland, Germany, Great Britain, Hungary and Slovakia (Ježek 2006, Wagner 2010).

## **Discussion**

The *Psychoda albipennis* species complex has caused much confusion during the last decades. Several of these species are antropochore and apparently widely distributed. Ježek (1983) examined the original series of syntypes of *P. albipennis* and found that the species is conspecific with, and a senior synonym of *Psychoda parthenogenetica* Tonnoir, 1940 and *Psychoda severini* Tonnoir, 1922. According to this interpretation, which we follow in the present checklist, *P. (L.) albipennis* is a mainly

parthenogenetic species. An earlier, more inclusive concept of *P. (L.) albipennis* also included *Psychoda satchelli* Quate, 1955 and *Psychoda zetterstedti* (Ježek, 1983); two species which more frequently are bisexual. Males of the three species can be separated using Ježek (1983, 1990).

Andersen & Håland (1995) recorded *P. (L.) albipennis* from several regions, based exclusively on male specimens. However, all the Norwegian males we have examined apparently belong to *P. (L.) satchelli*; we have not yet seen any Norwegian males corresponding to the figures of *P. (L.) albipennis* or *P. (L.) severini* in Ježek (1983) or Tonnoir (1922, 1940). The records of *P. (L.) albipennis* given by Andersen & Håland (1995) are accordingly transferred to *P. (L.) satchelli* in the present checklist.

We also have females of the *P. albipennis* complex, but we currently refrain from trying to identify them. When describing *P. (L.) albipennis* Zetterstedt (1850) based the description on a series of 4 syntypes; one male and one female syntype are from Norway, collected "in Tøien prope Christianiam Norwegiae d. 10 Maj. et iterum Julio a D. Siebke". Both syntypes were studied by Ježek, (1983) and he concluded that the female syntype belongs to *P. (L.) albipennis*. *Psychoda (L.) albipennis* is therefore retained in the present checklist based on this specimen.

Wagner (1997, 2010) treats *P. (L.) parthenogenetica* as a valid species and lists it from Norway. In the present checklist we treat *P. parthenogenetica* as a junior synonym of *P. (L.) albipennis* following Ježek (1983).

Ježek (1983) described *Psychoda zetterstedti* based on material from The Czech Republic and recorded it from many different parts of Europe including Norway. The Norwegian record was based on a male syntype of *P. albipennis* Zetterstedt. However, the male is too damaged for accurate identification (J. Ježek pers. comm.) and we therefore refrain from including the species in the present checklist before new material from Norway is available.

The taxonomy of the *P. (L.) albipennis* complex remains controversial and is likely to change in the future. More thorough morphological studies

particularly of the female genitalia combined with DNA-based approaches are necessary to resolve the taxonomy of the group.

Norwegian records of several other species are also mentioned in the literature. Georges (1961) recorded 9 species of moth flies from Norway, most of them without exact locality. Additional records of seven of these species were given by Andersen & Håland (1995), but for *Psychoda crassipennis* Tonnoir, 1940 and *Psychoda pusilla* Tonnoir, 1940 Georges' (1961) records were the only Norwegian records and the species were not included in the checklist (Håland & Andersen 1996). Recently, *P. pusilla* was taken in southern Nordland and the species is thus included in the present checklist. *Psychoda crassipennis* is a rare, but widespread species recorded from The Czech Republic, Denmark, France, Germany, Great Britain, Ireland, The Netherlands and Sweden (Ježek 2001). As there are no new records from Norway, we exclude it from the present list.

Wagner (1997, 2010) lists *Psychoda (Tineria) lativentris* (Berdén, 1952) and *Paramormia ustulata* (Walker, 1856) for Norway. *Psychoda (T.) lativentris* was described from southern Sweden and *P. ustulata* is also taken in our neighboring countries (Berdén 1952, Nielsen 1965). Both species undoubtedly occur in Norway. However, as there seems not to be any Norwegian material of either species readily available (R. Wagner pers. comm.), we do not include them in the present checklist.

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## References

- Andersen, T. & Amundsen, E. 1997. The Siebke Collection of Norwegian Moth flies (Diptera: Psychodidae). *Fauna Norvegica Serie B* 44, 91–93.
- Andersen, T. & Håland, Ø. 1995. Norwegian moth flies (Diptera: Psychodidae). *Fauna Norvegica Serie B*, 42, 125–130.
- Autio, O. & Salmela, J. 2010. The semi-aquatic fly fauna (Diptera) of wetlands of the Åland Islands. *Memoranda Societatis pro Fauna et Flora Fennica* 86, 43–53.
- Berdén, S. 1952. Taxonomical notes on Psychodidae (Dipt. Nem.) 1. *Psychoda lativentris* n. sp., a species hitherto confused with *alternata* Say. *Opuscula entomologica* 17, 110–112.
- Bravo, F., Cordeiro, D. & Chagas, C. 2006. Two new species and new records of *Psychoda* Latreille (Diptera: Psychodidae: Psychodinae) from Brazil, with comments on supraspecific classification of the genus. *Zootaxa* 1298, 1–15.
- Duckhouse, D.A. 1987. A revision of Afrotropical *Setomima*, elucidation of their genealogical relationships and descriptions of other Afrotropical Psychodinae (Diptera: Psychodidae). *Annals of the Natal Museum* 28, 231–282.
- Georges, D. 1961. Diptères Psychodidae paléarctiques recueillis par M. le Dr. J. Clastrier. *Travaux du Laboratoire d'Hydrobiologie et Pisciculture de Université de Grenoble* 53, 101–109.
- Håland, Ø. & Andersen, T. 1996. *Psychodidae – Sommerfuglmygg*. Pp. 191–193 in Aagard, K. & Dolmen, D. (Eds), *Limnofauna Norvegica – Katalog over norsk ferskvannsfåuna*. Tapir Forlag, Trondheim.
- Ježek, J. 1983. Contribution to the taxonomy of the genus *Logima* Eat. (Diptera, Psychodidae). *Acta entomologica Musei Nationalis Pragae* 41, 213–234.
- Ježek, J. 1984. Nomenclatorial changes of some higher taxa of palaeartic Psychodinae (Diptera, Psychodidae). *Acta Faunistica Entomologica Musei Nationalis Pragae* 17, 155–170.
- Ježek, J. 1990. Redescriptions of nine common palaeartic and holarctic species of Psychodini End. (Diptera: Psychodidae). *Acta Entomologica Musei Nationalis Pragae* 43, 33–83.
- Ježek, J. 2001. New Palaeartic taxa of moth flies (Diptera: Psychodidae) from very small accidental spirituous samples of insects. *Acta Universitatis Carolinae Biologica* 45, 53–66.
- Ježek, J. 2003. New faunistic data and checklist of non



- Phlebotomine moth flies (Diptera, Psychodidae) from the Czech and Slovak republics. *Časopis Národního muzea, Řada přírodovědná* 172, 121–132.
- Ježek, J. 2004. New faunistic data of non-phlebotomine moth flies (Diptera: Psychodidae) from the Palearctic Region. *Folia Facultatis Scientiarum Naturalium Universitatis Masarykianae Brunensis, Biologia* 109, 141–151.
- Ježek, J. 2006. New faunistic records of moth flies (Insecta, Diptera, Psychodidae) from Slovakia. *Entomofauna Carpathica* 18, 34–36.
- Ježek, J. 2007. New records of moth flies (Diptera, Psychodidae) from Poland with description of *Apsycha* gen.nov. *Acta Zoologica Universitatis Comenianae* 47, 145–160.
- Ježek, J. 2009. Further new records of moth flies (Insecta, Diptera, Psychodidae) from the Czech Republic and Slovakia. *Folia Faunistica Slovaca* 14, 101–105.
- Ježek, J. & Yağcı, Ş. 2005. Common non-biting moth flies (Insecta, Diptera, Psychodidae) new to the fauna of Turkey. *Türkiye Parazitoloji Dergisi* 29, 188–192.
- Kvifte, G.M. 2010. *Pericoma nielseni* nom. nov., a replacement name for *Pericoma formosa* Nielsen, 1964, preoccupied by *Pericoma formosa* Meunier, 1905 (Diptera: Psychodidae). *Zootaxa* 2726, 68.
- Nielsen, B.O. 1965. Psychodidae from Norway and Sweden. *Opuscula entomologica* 30 (1–2), 143–152.
- Salmela, J. 2003. New records of the families Psychodidae, Dixidae and Thaumaleidae (Diptera, Nematocera) from Finland. *Studia Dipterologica* 10, 143–152.
- Salmela, J. 2005. New moth flies for eastern Fennoscandia (Diptera, Psychodidae). *Sahlbergia* 10, 1–3.
- Svensson, B.W. 2009. Fjärilsmygga-faunan i ett hagmarksområde och en ladugård i östra Blekinges skogsland. Med en översikt av familjen Psychodidae:s morfologi, systematik och utforskande, samt särskilt de svenska *Psychoda* s.l. – arternas biologi. *Entomologisk Tidskrift* 130, 185–206.
- Tonnoir, A.L. 1922. Synopsis des espèces Européennes du genre *Psychoda* (Diptères). *Annales de la Société Entomologique de Belgique* 62, 49–88.
- Tonnoir, A.L. 1940. A synopsis of the British Psychodidae (Dipt.) with descriptions of new species. *Transactions of the Society for British Entomology* 7, 21–64.
- Vaillant, F. 1972. *Psychodidae – Psychodinae*. Pp. 79–108 in Lindner, E. (Ed.), Die Fliegen der Palaearktischen Region. Lief. 292. E. Schweizerart'sche Verlagsbuchhandlung, Stuttgart.
- Vaillant, F. 1983. *Psychodidae – Psychodinae*. Pp. 311–358 in Lindner, E. (Ed.), Die Fliegen der Palaearktischen Region. Lief. 328. E. Schweizerart'sche Verlagsbuchhandlung, Stuttgart.
- Wagner, R. 1990. *Family Psychodidae*. Pp. 11–65 in Soós, Á. & Papp, L. (Eds), Catalogue of Palearctic Diptera. 2. Psychodidae – Chironomidae. Akadémiai Kiadó, Budapest.
- Wagner, R. 1997. *Diptera Psychodidae, Moth flies*. Pp. 133–144 in Nilsson, A. (Ed.), Aquatic Insects of North Europe 2. Apollo Books, Stenstrup.
- Wagner, R. (2010) *Fauna Europaea: Psychodidae*. In Pape, T. & Beuk, P. (Eds), Fauna Europaea: Diptera, Nematocera. Fauna Europaea version 2.4, <http://www.faunaeur.org> [Accessed 05.06 2011].
- Withers, P. 1988. Revisionary notes on British species of *Psychoda* Latreille (Diptera, Psychodidae) including new synonyms and a species new to science. *British Journal of Entomology and Natural History* 1, 69–76.
- Zetterstedt, J.W. 1850. Diptera Scandinaviae disposita et descripta (Psychodidae). *Lundie* 9, 3367–3710.
- Økland, K.A. 1981. Inndeling av Norge til bruk ved biogeografiske oppgaver – et revidert Strandsystem. *Fauna (Oslo)* 34, 167–178.

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