

Fungus gnats (Diptera, Mycetophiloidea) collected by Aleksander Stackelberg in Estonia

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Data on 77 Estonian Mycetophiloid species, collected by Aleksander Stackelberg from central and southeast Estonia, are presented. 28 of them being new to the Estonian list of fauna: *Bolitophila* (C.) *bimaculata* Zett., *B. (C.) fumida* Edw., *B. (C.) glabrata* Loew, *B. (C.) modesta* Lacksch., *Mycomya dziedzicki* Väis., *Boletina rejecta* Edw., *Coclophthinia thoracica* (Winn.), *Dynatosoma cochleare* Strobl, *D. nobile* Loew, *Epicrypta aterrima* (Zett.), *Mycetophila forcipata* Lundst., *M. sordida* Wulp, *M. stolidia* Walk., *Phronia biarcuata* (Beck.), *P. exigua* (Zett.), *P. humeralis* Winn., *P. minuta* Landr., *P. nitidicentris* (Wulp), *P. obtusa* Winn., *P. strenua* Winn., *Sceptonia flavipuncta* Edw., *S. fumipes* Edw., *Trichonta melanura* (Staeg.), *T. subfusca* Lundst., *Zygomya semifusca* (Meig.), *Z. calida* Winn., *Z. pseudohumeralis* Caspers and *Pseudexechia auricernica* Chandler. Additionally, unpublished data on 6 species from the genus *Allodia* Winn., collected by A. Stackelberg from southeast Estonia and identified by A. Zaitzev in 1982, are given, 3 of them being new to the Estonian fauna: *A. (Allodia) anglofennica* Edw., *A. (A.) truncata* Edw. and *A. (Bracycampta) silvatica* (Landr.).

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Introduction

Professor Aleksander Stackelberg (1897—1975) was one of the most famous Russian dipterologists. He has published numerous (altogether 276) papers and monographs (Rihter, Afanasev, 1976) on many families of Diptera, including also Mycetophiloids (e. g. Stackelberg, 1943; 1946; 1969).

On his field excursions in Estonia he has collected fungus gnats in Koeru (central Estonia) in 1948 and in Peedu (southeast Estonia) in 1951. The material collected in Peedu has been partially identified by R. Väisänen (1984) and by A. Zaitzev (1985). The 6 species of genus *Allodia* Winnertz, 1863 were identified by Zaitzev in 1982, but the data have not been published so far. According to Väisänen, the material involves 11 species of genus *Mycomya* Rondani, 1856: *M. affinis* (Staeger, 1840), *M. bicolor* (Dziedzicki, 1885), *M. cinerascens* (Macquart, 1826),

M. circumdata (Staeger, 1840), *M. disa* Väisänen, 1984, *M. maculata* (Meigen, 1804), *M. neohyalinata* Väisänen, 1984, *M. siebecki* (Landrock, 1912), *M. sigma* Johannsen, 1910, *M. tenuis* (Walker, 1856) and *M. trilineata* (Zetterstedt, 1838). Additionally A. Zaitzev has determined 6 species of genus *Allodia* Winn. and one species of genus *Brevicornu* Marshall, 1896 from the same material: **A. (Allodia) anglofennica* Edwards, 1921, **A. (A.) truncata* Edwards, 1921, *A. (A.) lugens* (Wiedemann, 1817), *A. (A.) ornaticollis* (Meigen, 1818), *A. (Bracycampta) pistillata* (Lundström, 1911), **A. (B.) silvatica* (Landrock, 1912) and *B. (Brevicornu) fissicauda* (Lundström, 1911). Asterisks before the names of fungus gnats from the genus *Allodia* mark species, new to Estonia.

The material collected by A. A. Stackelberg from Koeru (8 specimen) and most of the material collected by him from Peedu (317 specimen) has not so far been determined. During identification of the

material I found 7 species of Bolitophilidae, 4 species of Keroplatidae, 1 species of Diadocidiidae, 3 species of Macroceridae and 62 species of Mycetophilidae. 28 of the determined species of fungus gnats are new to Estonia.

2 ♂ from genus *Cordyla* Meigen, 1803 (Mycetophilidae) and 1 ♀ from genus *Trichonta* Winnertz, 1863 (Mycetophilidae) are not identified to the species level and they are not presented in the species list.

The Estonian material collected by A. Stackelberg includes 95 species, taking into account also the identifications of R. Väisänen and A. Zaitzev.

Most species are widely distributed in Europe and they have also been recorded in the neighbouring region. The distribution of them is not given in the species list.

The material is deposited at the Zoological Institute of Russian Academy of Sciences, St. Petersburg.

List of species

Asterisks before the names of Mycetophiloids in the species list indicate new species to Estonian fauna; for the other species the literature data from Estonia are given.

Bolitophilidae

Bolitophila (Bolitophila) cinerea Meigen, 1818

Dampf, 1924: 44; Lackschewitz, 1937: 4.

Material. Peedu, 7 ♂, 04, 09, 11, 12, 14, 20 and 22.VIII.1951.

**Bolitophila (Cliopisa) bimaculata* Zetterstedt, 1838

Lackschewitz (1937) has interpreted the species as a synonym of *B. (C.) maculipennis* Walker, 1836. By Plassmann (1988a) the both species are valid.

Material. Peedu, 8 ♂, 01, 03, 22, 29.VII, 01. and 17.VIII.1951.

**Bolitophila (Cliopisa) fumida* Edwards, 1941 *Material.* Peedu, 2 ♂, 04 and 16.VIII.1951.

**Bolitophila (Cliopisa) glabrata* Loew, 1869 *Material.* Peedu, 1 ♂, 15.VIII.1951.

Bolitophila (Cliopisa) hybrida (Meigen, 1804) Dampf, 1924: 44; Lackschewitz, 1937: 3.

Material. Peedu, 12 ♂, 01, 29, 30.VII, 06, 10, 12, 13, 16 and 22.VIII.1951.

Bolitophila (Cliopisa) maculipennis Walker, 1836

Lackschewitz, 1937: 2.

Material. Peedu, 2 ♂, 01.VII and 14.VIII.1951.

**Bolitophila (Cliopisa) modesta* Lackschewitz, 1937 *Material.* Peedu, 2 ♂, 01 and 03.VII.1951.

Bolitophila (Cliopisa) sp.

Destruction of specimen did not allow exact identification of species. It can be either *B. (C.) bimaculata* Zetterstedt, 1838, *B. (C.) maculipennis* Walker, 1836 or *B. (C.) ingraca* Stackelberg, 1969.

Material. Peedu, 1 specimen, sex ?, 1.VII.1951.

Keroplatidae

Asindulum nigrum Latreille, 1805 Lackschewitz, 1937: 7; Kurina, 1997a.

Material. Peedu, 1 ♀, 06.VIII.1951.

Neoplatyura flava (Macquart, 1826) Lackschewitz, 1937: 7; Kurina, 1997a.

Material. Peedu, 1 ♀, 17.VIII.1951.

Orfelia fasciata (Meigen, 1804) Lackschewitz, 1937: 7; Kurina, 1997a. *Material.* Koeru, 2 ♀, 14.VII.1948.

Pyratula sonata (Zetterstedt, 1855) Kurina, 1997a. *Material.* Peedu, 1 ♀, 02.VII.1951.

Diadocidiidae

Diadocidia (Diadocidia) ferruginosa (Meigen, 1830) Dampf, 1924: 44; Lackschewitz, 1937: 6; Kurina, 1997a. *Material.* Peedu, 1 ♀, 20.VIII.1951.

Macroceridae

Macrocera angulata Meigen, 1818 Lackschewitz, 1937: 6. *Material.* Peedu, 1 ♀, 02.VII.1951.

Macrocera fasciata Meigen, 1804 Lackschewitz, 1937: 5. *Material.* Peedu, 1 ♀, 11.VIII.1951.

Macrocera vittata Meigen, 1830 Lackschewitz, 1937: 5. *Material.* Peedu, 2 ♂, 01 and 06.VII.1951.

Mycetophilidae

**Mycomya dziedzicki* Väisänen, 1981 *Material.* Peedu, 1 ♀, 04.VIII.1951.

- 5
- Neoempheria striata* (Meigen, 1818)
Lackschewitz, 1937: 12.
Material. Peedu, 1 ♀, 30.VII.1951.
- Sciophila* sp.
Material. Peedu, 2 ♀, 27.VII and 08.VIII.1951.
- **Boletina rejecta* Edwards, 1941
Material. Peedu, 1 ♂, 12.VIII.1951.
- Boletina* sp.
Material. Peedu, 4 ♀, 11, 12 and 17.VIII.1951.
- **Coelophthinia thoracica* (Winnertz, 1863)
Material. Peedu, 1 ♀, 11.VIII.1951.
- Leia fascipennis* Meigen, 1818
Lackschewitz, 1937: 19.
Material. Peedu, 2 ♀, 07.VII and 01.VIII.1951.
- Leia picta* Meigen, 1830
Lackschewitz, 1937: 20.
Material. Peedu, 1 ♂, 12.VII.1951.
- Leia winthemi* Lehmann, 1822
Lackschewitz, 1937: 19.
Material. Peedu, 5 ♀, 24.VI, 01.VII, 02, 13 and 14.VIII.1951.
- **Dynatosoma cochleare* Strobl, 1895
Material. Peedu, 1 ♂, 11.VIII.1951.
- **Dynatosoma nobile* Loew, 1873
Material. Peedu, 1 ♀, 11.VIII.1951.
- **Epicypta aterrima* (Zetterstedt, 1852)
Material. Peedu, 4 ♀, 19.VII, 09 and 20.VIII.1951.
- Mycetophila alea* Laffoon, 1965
Lackschewitz, 1937: 45 (*Mycetophila guttata* Dziedzicki, 1884); Kurina, 1991: 86.
Material. Peedu, 1 ♂, 12.VIII.1951.
- Mycetophila blanda* Winnertz, 1863
Dampf, 1924: 43; Lackschewitz, 1937: 46; Kurina, 1991: 86.
Material. Koeru, 1 ♂, 29.VII.1948; Peedu, 1 ♂, 20.VIII.1951.
- Mycetophila caudata* Staeger, 1840
Lackschewitz, 1937: 44.
Material. Peedu, 2 ♂, 20 and 23.VIII.1951.
- Mycetophila confluens* Dziedzicki, 1884
Dampf, 1924: 43; Lackschewitz, 1937: 46; Kurina, 1991: 86.
Material. Peedu, 2 ♂, 11 and 20.VIII.1951.
- Mycetophila estonica* Kurina, 1992
Kurina, 1992: 129.
Material. Peedu, 1 ♂, 14.VIII.1951.
- Mycetophila finlandica* Edwards, 1913
Lackschewitz, 1937: 45; Kurina 1991: 86.
Material. Peedu, 2 ♂, 14.VIII.1951.
- **Mycetophila forcipata* Lundström, 1913
Material. Peedu, 1 ♂, 12.VIII.1951.
- Mycetophila fungorum* (De Geer, 1776)
Dampf, 1924: 43 (*Mycetophila punctata* Meigen, 1804); Lackschewitz, 1937: 42; Kurina 1991: 86.
Material. Peedu, 6 ♂, 4 ♀, 01.VII, 10, 11, 12, 14, 15, 16, 17, 20.VIII.1951; 2 specimen sex ?, 01.VII and 14.VIII.1951.
- Mycetophila ichneumonea* Say, 1823
Kurina, 1991: 87.
Material. Peedu, 1 ♂, 11.VII.1951
- Mycetophila idonea* Laštovka, 1972
Kurina, 1996a: 100.
Material. Peedu, 1 ♂, 14.VIII.1951.
- Mycetophila lunata* Meigen, 1804
Kurina, 1991: 87.
Material. Peedu: 5 ♂, 09, 11, 17, 20.VIII.1951.
- Mycetophila marginata* Winnertz, 1863
Lackschewitz, 1937: 44.
Material. Peedu, 7 ♂, 11, 12, 14, 16 and 20.VIII.1951.
- Mycetophila ocellus* Walker, 1848
Lackschewitz, 1937: 43; Kurina, 1997b.
Material. Peedu, 1 ♂, 16.VIII.1951.
- Mycetophila schnablüi* (Dziedzicki, 1884)
Lackschewitz, 1937: 44.
Material. Peedu, 1 ♂, 23.VIII.1951.
- Mycetophila sigillata* Dziedzicki, 1884
Dampf, 1924: 43; Lackschewitz, 1935: 45; Kurina 1991: 87.
Material. Peedu, 1 ♂, 04.VIII.1951.
- Mycetophila signatoides* Dziedzicki, 1884
Lackschewitz, 1937: 45; Kurina, 1992: 129.
Material. Peedu, 1 ♂, 16.VIII.1951.
- **Mycetophila sordida* van der Wulp, 1874
Material. Peedu: 4 ♂, 12, 14, 17 and 20.VIII.1951.
- **Mycetophila stolidus* Walker, 1856
Material. Peedu, 1 ♂, 20.VIII.1951.
- Mycetophila strobli* Laštovka, 1972
Kurina, 1994: 218.
Material. Peedu, 1 ♂, 15.VIII.1951.
- Mycetophila uninotata* Zetterstedt, 1852
Kurina, 1994: 218.
Material. Peedu, 1 ♂, 14.VIII.1951.

Mycetophila sp.

Material. Koeru, 2 ♀, 14.VII and 06.VIII.1948; Peedu, 29 ♀, 02, 26, 30.VII, 02, 11, 12, 13, 14, 16, 17 and 20.VIII.1951, 2 specimen sex ?, 11 and 12.VIII.1951.

**Phronia biarcuata* (Becker, 1908)

Material. Peedu, 1 ♂, 16.VIII.1951.

**Phronia exigua* (Zetterstedt, 1852)

Material. Peedu, 4 ♂, 01.VII, 16 and 17.VIII.1951.

**Phronia humeralis* Winnertz, 1863

Material. Peedu, 4 ♂, 11, 14, 16 and 17.VIII.1951.

**Phronia minuta* Landrock, 1928

Material. Peedu, 2 ♂, 16.VIII and 1 ♂, 20.VIII.1951.

Phronia nigricornis (Zetterstedt, 1852)

Dampf, 1924: 44 (*Phronia dubia* Dziedzicki, 1889).

Material. Peedu, 8 ♂, 04, 12, 17 and 20.VIII.1951.

**Phronia nitidiventris* (van der Wulp, 1858)

Material. Peedu, 8 ♂, 11, 16, 17 and 20.VIII.1951.

**Phronia obtusa* Winnertz, 1863

Material. Peedu, 5 ♂, 12, 14, 17 and 20.VIII.1951.

**Phronia strenua* Winnertz, 1863

Material. Peedu, 4 ♂, 12, 14 and 20.VIII.1951.

Phronia taczanowskyi Dziedzicki, 1889

Dampf, 1924: 44.

Material. Peedu, 2 ♂, 17 and 20.VIII.1951.

Phronia sp.

Material. Peedu, 19 ♀, 04, 11, 12, 14, 16, 17 and 20.VIII.1951, 1 specimen sex. ?, 17.VIII.1951.

Platurocypta punctum (Stannius, 1831)

Lackschewitz, 1937: 47 (*Epicypta punctum* Stannius, 1831).

Material. Peedu, 1 ♀, 07.VII.1951.

**Sceptonia flavipuncta* Edwards, 1925

Earlier known from Great Britain, France, Germany (Matile, 1977; Laštovka, 1988) and from Spain (Plassman, Schlacht, 1990).

Material. Peedu, 1 ♂, 16.VIII.1951.

**Sceptonia fumipes* Edwards, 1925

Material. Peedu, 1 ♂, 20.VIII.1951.

Sceptonia membranacea Edwards, 1925

Lackschewitz, 1937: 46.

Material. Peedu, 1 ♂, 20.VIII.1951.

Sceptonia sp.

Material. Peedu, 3 ♀, 14, 16 and 20.VIII.1951.

**Trichonta melamura* (Staeger, 1840)

Material. Peedu, 4 ♂, 4 ♀, 30.VII, 11, 12, 17 and 20.VIII.1951.

**Trichonta subfusca* Lundström, 1909

Material. Peedu, 1 ♂, 14.VIII.1951.

Trichonta sp.

Material. Peedu, 2 ♀, 15 and 17.VIII.1951.

Zygomomyia notata (Stannius, 1831)

Lackschewitz, 1937: 46.

Material. Peedu, 1 ♂, 16.VIII.1951.

**Zygomomyia pseudohumeralis* Caspers, 1980

The species has been previously recorded from Germany (e. g. Plassmann, 1986, 1989), Austria (Caspers, 1984), Norway (Søli, 1994), from Mellum and Memmert (Islands of North Sea) (Plassmann, 1988b) and from Caucasus region (Plassmann, Joost, 1992).

Material. Peedu, 2 ♂, 14 and 16.VIII.1951.

**Zygomomyia semifusca* (Meigen, 1818)

Widely distributed in Europe (Laštovka, 1988), but it has been treated within the genus of *Mycetophila* Meigen, 1803. New combination has been presented by Zaitzev (1989).

Material. Peedu, 1 ♀, 22.VIII.1951.

**Zygomomyia valida* Winnertz, 1863

Material. Peedu, 1 ♂, 20.VIII.1951.

Zygomomyia sp.

It can be either *Z. humeralis* (Wiedemann, 1817) or *Z. pseudohumeralis* Caspers, 1980.

Material. Koeru, 1 ♀, 14.VII.1948.

Allodia (Allodia) sp.

Material. Peedu, 14 ♀, 11, 12, 14, 15, 16, 17 and 20.VIII.1951.

Allodia (Brachycampta) sp.

Material. Peedu, 5 ♀, 07, 11, 14 and 15.VIII.1951.

Allodiopsis (Allodiopsis) domestica

(Meigen, 1830)

Lackschewitz, 1937: 29 (*Rhymosia domestica* Meigen, 1830); Kurina, 1994: 219.

Material. Peedu, 4 ♂, 22.VI, 01, 10.VII and 11.VIII.1951.

Allodiopsis (Allodiopsis) rustica

(Edwards, 1941)

Kurina, 1991: 88.

Material. Peedu, 4 ♂, 11 and 16.VIII.1951.

Allodiopsis (Allodiopsis) sp.

Material. Peedu, 2 ♀, 08 and 16.VIII.1951.

Allodiopsis (Notolopha) cristata

(Staeger, 1840)

Lackschewitz, 1937: 29 (*Rhymosia cristata* Staeger, 1840).

Material. Peedu, 17 ♂, 8 ♀, 01, 03.VII, 01, 11, 12, 14, 16 and 17.VIII.1951.

Brevicornu (Brevicornu) griseicolle
(Staeger, 1840)

Kurina, 1996b.

Material. Peedu, 1 ♂, 12.VIII.1951.

Brevicornu (Brevicornu) proximum
(Staeger, 1840)

Lackschewitz, 1937: 35; Kurina, 1996b.

Material. Peedu, 1 ♂, 20.VIII.1951.

Brevicornu (Brevicornu) sp.

Material. Koeru, 1 ♀, 25.VII.1948; Peedu, 1 ♀, 02.VII, 1 ♀, 10.VIII, 1 ♀, 15 and 17.VIII.1951.

Exechia nigroscutellata Landrock, 1912

Dampf, 1924: 43; Kurina, 1991: 88.

Material. Peedu, 1 ♂, 01.VII.1951.

Exechia pseudocincta Strobl, 1910

Kurina, 1991: 89.

Material. Peedu, 1 ♂, 11.VIII.1951.

Exechia repanda Johannsen, 1912

Kurina, 1997c.

Material. Peedu, 2 ♂, 19 and 31.VII.1951.

Exechia spinuligera Lundström, 1912

Dampf, 1924: 43; Kurina, 1991: 89; Kurina, 1996a: 97.

Material. Peedu, 1 ♂, 14.VIII.1951.

Exechia sp.

Material. Peedu, 7 ♀, 7, 15 and 19.VIII.1951.

Exechiopsis (Exechiopsis) sp.

Material. Koeru, 1 ♀, 6.VIII.1948; Peedu, 1 ♀, 15.VIII.1951.

**Pseudexechia aurivernica* Chandler, 1978

Previously recorded from Great Britain, Ireland (Hackman, 1988), Germany (Plassmann, Joost, 1986; Plassmann, 1989), Austria (Plassmann, 1984) and also from Russia: Moscow District (Krivosheina et al., 1986), environs of Rybinsk Reservoir (Zaitzev, 1987).

Material. Peedu, 1 ♂, 17.VIII.1951.

Pseudexechia sp.

Material. Peedu, 2 ♀, 05.VII and 15.VIII.1951.

Rymosia fasciata (Meigen, 1804)

Kurina, 1996a: 99

Material. Peedu, 1 ♂, 16.VIII.1951.

Rymosia sp.

Material. Peedu, 1 ♀, 01.VII.1951.

Tarnania fenestralis (Meigen, 1818)

Kurina, 1994: 219.

Material. Peedu, 2 ♂, 22.VI and 01.VII.1951.

Tarnania tarnanii (Dziedzicki, 1910)

Dampf, 1924: 43 (*Rhymosia tarnanii* Dziedzicki, 1910); Lackschewitz, 1937: 31 (*Rhymosia tarnanii* Dziedzicki, 1910); Kurina, 1991: 89.

Material. Peedu, 4 ♂, 01.VII, 04 and 14.VIII.1951.

Tarnania sp.

Material. Peedu, 2 ♀, 14 and 17.VIII. 1951, 1 specimen sex ?, 11.VIII.1951.

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