Mycetophilids (Diptera, Sciaroidea) from southeastern Norway

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The present article gives a survey of mycetophilid species trapped during the research programme «Forest Ecology and Multiple Use». The material contains altogether 320 species of mycetophilids, of which 162 species are assumed to be new records for the Norwegian fauna, and five species have been described as new species for science in separate publications. Also species numbers of mycetophilids from Norway in previous publications are reviewed. Including the present material, the total number of mycetophilid species in Norway based on publications is at least 430.

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INTRODUCTION

The mycetophilids are small to medium-sized dipterous insects. Most of the species are associated with forest environments; however, some species occur above tree-line or in other tree-less environments (Hutson et al. 1980, Väisänen 1984). According to existing rearing records, the larvae of most species develop in fungal microhabitats, while only a few species feed on algae, mosses and liverworts or are saprophagous in bird nests (Hackman et al. 1988, Yakovlev 1994).

A comprehensive material of mycetophilids was collected during the research programme «Forest Ecology and Multiple Use» (1990-94; Solbraa 1996), including altogether 43353 identified specimens. The main purpose was to achieve new information about how the diversity of this insect group is related to ecological factors in the forest landscape. Many mycetophilids appear to be favoured by shady habitats of oldgrowth forests. In the analyses, this group was most strongly influenced by the percent of oldgrowth forest in a wide surrounding landscape (100 km^2), and by dead-wood continuity indicated by the presence of a high number of certain species of wood-inhabiting fungi and lichens (Økland 1995a, Økland 1996a). Clearcutting was found to induce a long-lasting reduction in species richness of mycetophilids (Økland 1994).

Knowledge of what species to be found is basic in many kinds of studies. In neighbouring countries, a check list of Diptera is found in England (Kloet & Hincks 1975) and Finland (Hackman 1980), while Norway has no modern check list of Diptera species. The number of mycetophilid species in Norway has been estimated to 497 (G.E.E.Söli, in Ottesen 1993); however, far less species are published records.

This paper is meant to be a contribution to a future check list of Norwegian Diptera. It presents a list of mycetophilid species found during the the research programme «Forest Ecology and Multiple Use», and gives a short survey of species numbers of mycetophilids found in previous publications.

METHODS

The present material was collected in three ecological studies:

i) in 1991, mycetophilids were collected with one malaise trap (Townes 1962) in each of 15 sites. The material was identified by Bjørn Økland. Site descriptions are given in Table 1 (site 1-15), and additional information about study area and sampling design is found in Økland (1994).

ii) in 1992, mycetophilids were collected with 30 trunk-window traps (Økland 1996b) in each of 4 sites (sites 16-19 in Table 1). The material was identified by Alexander I. Zaitzev.

iii) in 1993, mycetophilids were collected with one malaise trap in each of 19 sites, and were identified by Alexander I. Zaitzev. Site informations are found Table 1 (sites 20-38), and additional information about study area and sampling design is found in Økland (1995a, 1996a).

Table 1. Information about the sampling sites. reg. = region code given by Økland (1981). trunk-w. = trunk-window traps.

no.	site	municipality	reg.	UTM code	forest type	traps	period
1	Høgkollen	Rælingen	AK	32VPM144356	spruce-dominated	malaise	22/4-1/6-91
2	Tappenberg I	Rælingen	AK	32VPM144358	spruce-dominated	malaise	22/4-1/6-91
3	Tappenberg II	Rælingen	AK	32VPM143362	spruce-dominated	malaise	22/4-1/6-91
4	Krokvannskalven	Rælingen	AK	32VPM136368	spruce-dominated	malaise	22/4-1/6-91
5	Styggvann	Lørenskog	AK	32VPM119424	spruce-dominated	malaise	22/4-1/6-91
6	Børtervann I	Enebakk	AK	32VPM150297	spruce-dominated	malaise	22/4-1/6-91
7	Børtervann II	Enebakk	AK	32VPM154297	spruce-dominated	malaise	22/4-1/6-91
8	Støa	Enebakk	AK	32VPM170278	spruce-dominated	malaise	22/4-1/6-91
9	Nygard	Enebakk	AK	32VPM174278	spruce-dominated	malaise	22/4-1/6-91
10	Kongsvika vest	Enebakk	AK	32VPM159288	spruce-dominated	malaise	22/4-1/6-91
11	Bysætermosan	Enebakk	AK	32VPM120315	spruce, clearcut	malaise	22/4-1/6-91
12	Skjelbreia	Enebakk	AK	32VPM110330	spruce, clearcut	malaise	22/4-1/6-91
13	Ravnåsen	Enebakk	AK	32VPM185273	spruce, clearcut	malaise	22/4-1/6-91
14	Trangene	Enebakk	AK	32VPM157289	spruce, clearcut	malaise	22/4-1/6-91
15	Kongsvika sør	Enebakk	AK	32VPM161283	spruce, clearcut	malaise	22/4-1/6-91
16	Østby	Lørenskog	AK	32VPM1243	spruce-dominated	trunk-w.	28/4-6/9-92
17	Styggvann	Lørenskog	AK	32VPM119424	spruce-dominated	trunk-w.	28/4-6/9-92
18	Tappenberg	Rælingen	AK	32VPM1436	spruce-dominated	trunk-w.	28/4-6/9-92
19	Løkebrudalen	Lørenskog	AK	32VPM0836	spruce, regrowth	trunk-w.	28/4-6/9-92
20	Hirkjølen	Ringebu	OS	32VNP843450	spruce-dominated	malaise	15/6-17/8-93
21	Skvaldra	Ringsaker	HES	32VPN013903	spruce-dominated	malaise	15/6-17/8-93
22	Tronkeberget	Stor-Elvdal	HEN	32VPP124132	mixed coniferous	malaise	15/6-17/8-93
23	Helvete	Gausdal	OS	32VNP364034	spruce-dominated	malaise	15/6-17/8-93
24	Imsdalen	Ringebu	OS	32VNP867260	spruce-dominated	malaise	15/6-17/8-93
25	Elferdalen	Notodden	TEI	32VNM177124	mixed coniferous	malaise	15/6-17/8-93
26	Håkåseter	Sør-Fron	OS	32VNP399099	spruce-dominated	malaise	15/6-17/8-93
27	Tjuruverket	Gausdal	OS	32VNN416873	spruce-dominated	malaise	15/6-17/8-93
28	Tappenberg I	Rælingen	AK	32VPM144358	spruce-dominated	malaise	15/6-17/8-93
29	Tjøstøl	Aremark	Ø	32VPL572786	spruce-dominated	malaise	15/6-17/8-93
30	Finntjern	Jevnaker	OS	32VNM848718	spruce-dominated	malaise	15/6-17/8-93
31	Totenåsen	Østre Toten	OS	32VPN133163	spruce-dominated	malaise	15/6-17/8-93
32	Hesteskotjern	Jevnaker	OS	32VNM854737	spruce-dominated	malaise	15/6-17/8-93
33	Skotjernfjell	Lunner	OS	32VNM996797	spruce-dominated	malaise	15/6-17/8-93
34	Matholhøgda	Aremark	Ø	32VPL593695	spruce-dominated	malaise	15/6-17/8-93
35	Lortholkollen	Ringerike	BØ	32VNM846679	spruce-dominated	malaise	15/6-17/8-93
36	Ormetjernkampen	Gausdal	OS	32VNN454841	spruce-dominated	malaise	15/6-17/8-93
37	Fjellsjøkampen	Hurdal	AK	32VPN062049	spruce-dominated	malaise	15/6-17/8-93
38	Rundkollen	Nittedal	AK	32VNM988711	spruce-dominated	malaise	15/6-17/8-93

The taxonomy followed the nomenclature of the Catalogue of Palaearctic Diptera (Soós & Papp 1988), with additions from Väisänen (1984), Matile (1990) and Zaitzev (1994). The material is preserved in 70% alcohole at Norwegian Forest Reserach Institute, Ås.

RESULTS

The material contained altogether 320 species of mycetophilids (Sciaroidea), including 43353 specimens. Most species belonged to the family Mycetophilidae (289), while a smaller number of species belonged to Bolitophilidae (14), Keroplatidae (14) and Diadocidiidae (3) (Table 2). The material includes five species described as new species for science in previous publications (Zaitzev & Økland 1994, Økland 1995b).

Table 2. The mycetophilid species (Sciaroidea) captured in southeastern Norway in the period 1991-93 within the research programme «Forest Ecology and Multiple Use». For each species, the table gives the total number of individuals, the percent of the sites from which the species was trapped, and trapping sites (given as numbers with reference to Table 1). Species assumed to be new records for the Norwegian fauna are denoted by asterisks. Species described as new for science are denoted by double asterisks.

Family Bolitophilidae

**Bolitophila (Bolitophila) austriaca* (Mayer, 1950); 4 ind.; 5,3 % of sites; site no.: 20, 27.

Bolitophila (Bolitophila) cinerea Meigen, 1818; 7 ind.; 13,2 % of sites; site no.: 18, 23, 25, 27, 36.

**Bolitophila (Bolitophila) saundersi* (Curtis, 1836); 1 ind.; 2,6 % of sites; site no.: 21.

**Bolitophila (Cliopisa) aperta* Lundström, 1914; 8 ind.; 10,5 % of sites; site no.: 16, 23, 27, 30.

Bolitophila (Cliopisa) bimaculata Zetterstedt, 1838; 2 ind.; 5,3 % of sites; site no.: 23, 26.

Bolitophila (Cliopisa) dubia Siebke, 1863; 1 ind.; 2,6 % of sites; site no.: 30.

**Bolitophila (Cliopisa) edwardsiana* Stackelberg, 1969; 1 ind.; 2,6 % of sites; site no.: 21.

**Bolitophila (Cliopisa) fumida* Edwards, 1941; 2 ind.; 2,6 % of sites; site no.: 23.

Bolitophila (Cliopisa) hybrida (Meigen, 1804); 10 ind.; 13,2 % of sites; site no.: 16, 23, 24, 32, 36.

**Bolitophila (Cliopisa) nigrolineata* Landrock, 1912; 39 ind.; 15,8 % of sites; site no.: 23, 30, 32, 33, 36, 37.

**Bolitophila (Cliopisa) obscurior* Stackelber, 1969; 4 ind.; 5,3 % of sites; site no.: 23, 27.

**Bolitophila (Cliopisa) occlusa* Edwards, 1913; 1 ind.; 2,6 % of sites; site no.: 33.

**Bolitophila (Cliopisa) pseudohybrida* Landrock, 1912; 1 ind.; 2,6 % of sites; site no.: 36.

**Bolitophila (Cliopisa) rossica* Landrock, 1912; 2 ind.; 2,6 % of sites; site no.: 27.

Family Keroplatidae

Subfamily Macrocerinae

**Macrocera grandis* Lundström, 1912; 2 ind.; 5,3 % of sites; site no.: 27, 30.

**Macrocera parva* Lundström, 1914; 197 ind.; 34,2 % of sites; site no.: 20, 21, 22, 23, 24, 26, 27, 31, 32, 33, 36, 37, 38.

Macrocera pumilio Loew, 1869; 1 ind.; 2,6 % of sites; site no.: 21.

Macrocera stigma Curtis, 1837; 2 ind.; 2,6 % of sites; site no.: 38.

**Macrocera stigmoides* Edwards, 1925; 3 ind.; 7,9 % of sites; site no.: 21, 27, 29.

**Macrocera zetterstedti* Lundström, 1914; 57 ind.; 18,4 % of sites; site no.: 23, 24, 26, 27, 29, 36, 38.

Subfamily Keroplatinae

Keroplatus testaceus (Dalman, 1818); 1 ind.; 2,6 % of sites; site no.: 34.

**Neoplatyura flava* (Macquart, 1826); 1 ind.; 2,6 % of sites; site no.: 28.

**Orfelia discoloria* (Meigen, 1818); 2 ind.; 5,3 % of sites; site no.: 22, 33.

**Orfelia falcata* A.Zaitzev, 1994; 2 ind.; 5,3 % of sites; site no.: 30, 33.

**Orfelia unicolor* (Staeger, 1840); 3 ind.; 2,6 % of sites; site no.: 29.

**Pyratula perpusilla* (Edwards, 1913); 2 ind.; 5,3 % of sites; site no.: 27, 36.

**Pyratula zonata* (Zetterstedt, 1852); 7 ind.; 5,3 % of sites; site no.: 25, 29.

Urytalpa ochracea (Meigen, 1818); 1 ind.; 2,6 % of sites; site no.: 32.

Family Diadocidiidae

**Diadocidia* (Adidocidia) *borealis* Coquillett, 1900; 30 ind.; 28,9 % of sites; site no.: 21, 22, 23, 26, 27, 31, 32, 33, 35, 36, 37.

Diadocidia (Diadocidia) ferruginosa (Meigen, 1830); 22 ind.; 23,7 % of sites; site no.: 21, 22, 24, 25, 29, 31, 32, 33, 35.

Diadocidia (Diadocidia) spinosula Tollett, 1948; 14 ind.; 26,3 % of sites; site no.: 17, 25, 26, 28, 29, 31, 33, 35, 36, 37.

Family Mycetophilidae
Subfamily Mycomyinae

**Mycomya (Calcomycomya) pulchella* (Dziedzicki, 1885); 5 ind.; 10,5 % of sites; site no.: 30, 32, 33, 36.

Mycomya (Mycomya) annulata (Meigen, 1818); 242 ind.; 31,6 % of sites; site no.: 22, 25, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38.

Mycomya (Mycomya) bicolor (Dziedzicki, 1885); 3 ind.; 5,3 % of sites; site no.: 27, 31.

**Mycomya (Mycomya) brunnea* (Dziedzicki, 1885); 2 ind.; 5,3 % of sites; site no.: 31, 34.

Mycomya (Mycomya) cinerascens (Macquart, 1826); 2 ind.; 5,3 % of sites; site no.: 36, 38.

**Mycomya (Mycomya) dziedzickii* Väisänen, 1981; 1 ind.; 2,6 % of sites; site no.: 21.

Mycomya (Mycomya) egregia (Dziedzicki, 1885); 3 ind.; 7,9 % of sites; site no.: 22, 27, 35.

Mycomya (Mycomya) fasciata (Zetterstedt, 1838); 9 ind.; 10,5 % of sites; site no.: 21, 27, 31, 36.

**Mycomya (Mycomya) festivalis* Väisänen, 1984; 2 ind.; 2,6 % of sites; site no.: 30.

Mycomya (Mycomya) hackmani Väisänen, 1984; 4 ind.; 2,6 % of sites; site no.: 27.

**Mycomya (Mycomya) humida* Garrett, 1924; 20 ind.; 7,9 % of sites; site no.: 21, 27, 36.

Mycomya (Mycomya) maculata (Meigen, 1804); 5 ind.; 5,3 % of sites; site no.: 21, 36.

Mycomya (Mycomya) marginata (Meigen, 1818); 2 ind.; 2,6 % of sites; site no.: 31.

**Mycomya (Mycomya) mituda* Väisänen, 1980; 1 ind.; 2,6 % of sites; site no.: 26.

Mycomya (Mycomya) nigricornis (Zetterstedt, 1852); 4 ind.; 2,6 % of sites; site no.: 21.

Mycomya (Mycomya) nitida (Zetterstedt, 1852); 98 ind.; 28,9 % of sites; site no.: 19, 21, 23, 24, 25, 27, 33, 34, 35, 36, 38.

**Mycomya (Mycomya) norna* Väisänen, 1984; 14 ind.; 13,2 % of sites; site no.: 22, 23, 27, 30, 32.

**Mycomya (Mycomya) prominens* (Lundström, 1913); 3 ind.; 7,9 % of sites; site no.: 9, 14, 22.

**Mycomya (Mycomya) pseudoapicalis* (Landrock, 1925); 1 ind.; 2,6 % of sites; site no.: 36.

Mycomya (Mycomya) ruficollis (Zetterstedt, 1852); 1330 ind.; 42,1 % of sites; site no.: 20, 21, 22, 23, 24, 26, 27, 30, 31, 32, 33, 34, 35, 36, 37, 38.

Mycomya (Mycomya) shermani Garrett, 1924; 780 ind.; 34,2 % of sites; site no.: 21, 22, 24, 26, 27, 28, 30, 31, 32, 33, 35, 36, 38.

**Mycomya (Mycomya) sigma* Johannsen, 1910; 2 ind.; 5,3 % of sites; site no.: 27, 37.

**Mycomya (Mycomya) tenuis* (Walker, 1856); 1 ind.; 2,6 % of sites; site no.: 6.

Mycomya (Mycomya) trivittata (Zetterstedt, 1838); 19 ind.; 18,4 % of sites; site no.: 22, 24, 25, 30, 33, 36, 38.

Mycomya (Mycomya) tumida (Winnertz, 1863); 8 ind.; 13,2 % of sites; site no.: 20, 21, 32, 33, 36.

Mycomya (Mycomya) vittiventris (Zetterstedt, 1852); 86 ind.; 31,6 % of sites; site no.: 21, 22, 24, 26, 27, 30, 31, 32, 33, 35, 36, 38.

**Mycomya (Mycomyopsis) confusa* Väisänen, 1979; 1 ind.; 2,6 % of sites; site no.: 35.

**Mycomya (Mycomyopsis) penicillata* (Dziedzicki, 1885); 76 ind.; 7,9 % of sites; site no.: 22, 25, 38.

**Mycomya (Neomycomya) fimbriata* (Meigen, 1818); 77 ind.; 26,3 % of sites; site no.: 25, 27, 28, 29, 30, 31, 32, 33, 35, 38.

Neoempheria pictipennis (Halliday, 1833); 1 ind.; 2,6 % of sites; site no.: 34.

Subfamily Sciophilinae

Acnemia falcata Zaitzev, 1982; 46 ind.; 28,9 % of sites; site no.: 21, 23, 24, 27, 30, 31, 32, 33, 35, 36, 38.

Acnemia nitidicollis (Meigen, 1818); 207 ind.; 65,8 % of sites; site no.: 1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13, 14, 15, 21, 22, 23, 25, 26, 27, 28, 29, 33, 34, 36, 38.

**Acomoptera difficilis* (Dziedzicki, 1885); 11 ind.; 18,4 % of sites; site no.: 21, 22, 23, 25, 26, 27, 35.

Allocotocera pulchella (Curtis, 1837); 1070 ind.; 39,5 % of sites; site no.: 21, 22, 23, 24, 25, 28, 29, 30, 31, 32, 33, 34, 35, 37, 38.

**Anaclileia dispar* (Winnertz, 1863); 52 ind.; 23,7 % of sites; site no.: 21, 23, 24, 26, 27, 30, 35, 36, 37.

Azana anomala (Staeger, 1840); 74 ind.; 23,7 % of sites; site no.: 4, 21, 23, 24, 26, 27, 31, 36, 38.

**Leptomorphus (Leptomorphus) quadrimaculatus* (Matsumura, 1916); 5 ind.; 10,5 % of sites; site no.: 30, 32, 33, 37.

**Megalopelma nigroclavatus* (Strobl, 1909); 1 ind.; 2,6 % of sites; site no.: 22.

**Monoclona furcata* Johannsen, 1910; 7 ind.; 15,8 % of sites; site no.: 21, 22, 25, 27, 33, 35.

Monoclona rufilatera (Walker, 1837); 3 ind.; 7,9 % of sites; site no.: 25, 29, 32.

Neuratelia nemoralis (Meigen, 1818); 27 ind.; 18,4 % of sites; site no.: 19, 20, 22, 23, 26, 27, 36.

Paratinia sciarina Mik, 1874; 1 ind.; 2,6 % of sites; site no.: 35.

**Phthinia humilis* Winnertz, 1863; 4 ind.; 10,5 % of sites; site no.: 21, 23, 26, 32.

**Phthinia mira* Ostroverkhova, 1979; 3 ind.; 7,9 % of sites;

site no.: 24, 25, 36.

**Phthinia setosa* Zaitzev, 1994; 5 ind.; 7,9 % of sites; site no.: 22, 33, 36.

Polylepta borealis Lundström, 1912; 17 ind.; 10,5 % of sites; site no.: 21, 24, 30, 33.

Polylepta guttiventris (Zetterstedt, 1852); 46 ind.; 26,3 % of sites; site no.: 21, 23, 24, 26, 27, 31, 33, 35, 36, 37.

**Sciophila adamsi* Edwards, 1925; 7 ind.; 7,9 % of sites; site no.: 24, 27, 36.

***Sciophila balderi* Zaitzev et Økland, 1994; 5 ind.; 5,3 % of the sites; site no.: 3, 16

**Sciophila bicuspidata* Zaitzev, 1982; 14 ind.; 5,3 % of sites; site no.: 20, 26.

**Sciophila buxtoni* Freeman, 1956; 1 ind.; 2,6 % of sites; site no.: 18.

**Sciophila distincta* Garrett, 1925; 3 ind.; 5,3 % of sites; site no.: 4, 12.

**Sciophila exserta* Zaitzev, 1982; 3 ind.; 2,6 % of sites; site no.: 29.

Sciophila fenestella Curtis, 1837; 2 ind.; 5,3 % of sites; site no.: 33, 34.

Sciophila geniculata Zetterstedt, 1838; 10 ind.; 10,5 % of sites; site no.: 27, 30, 31, 33.

Sciophila hirta Meigen, 1818; 28 ind.; 10,5 % of sites; site no.: 4, 21, 33, 35.

**Sciophila lutea* Macquart, 1826; 1 ind.; 2,6 % of sites; site no.: 29.

**Sciophila nonnisilva* Hutson, 1979; 3 ind.; 5,3 % of sites; site no.: 27, 36.

**Sciophila rufa* Meigen, 1830; 14 ind.; 2,6 % of sites; site no.: 19.

**Sciophila salassea* Matile, 1983; 3 ind.; 7,9 % of sites; site no.: 23, 24, 36.

**Sciophila spinifera* Zaitzev, 1982; 4 ind.; 10,5 % of sites; site no.: 20, 21, 24, 36.

***Sciophila subbiscupidata* Zaitzev et Økland, 1994; 4 ind.; 5,3 % of sites; site no.: 1, 8

***Syntemna haagvari* Økland, 1995; 4 ind.; 7,9 % of sites; site no.: 22, 27, 36.

Syntemna hungarica (Lundström, 1912); 709 ind.; 47,4 % of sites; site no.: 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38.

**Syntemna nitidula* Edwards, 1925; 6 ind.; 15,8 % of sites; site no.: 21, 25, 30, 36, 37, 38.

**Syntemna penicilla* Hutson, 1979; 14 ind.; 13,2 % of sites; site no.: 23, 27, 31, 35, 36.

Syntemna relicta (Lundström, 1912); 16 ind.; 13,2 % of sites; site no.: 21, 29, 30, 31, 36.

**Syntemna setigera* (Lundström, 1914); 212 ind.; 36,8 % of sites; site no.: 21, 22, 23, 24, 26, 27, 30, 31, 32, 33, 34, 35, 36, 38.

**Syntemna stylata* Hutson, 1979; 117 ind.; 39,5 % of sites; site no.: 21, 22, 23, 24, 25, 27, 29, 30, 31, 32, 33, 34, 35, 36, 37.

Subfamily Gnoristinae

Apolephthisa subincana (Curtis, 1837); 878 ind.; 76,3 % of sites; site no.: 1, 2, 3, 4, 5, 6, 8, 9, 12, 13, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38.

Boletina basalis (Meigen, 1818); 514 ind.; 60,5 % of sites; site no.: 1, 4, 5, 6, 8, 9, 12, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 35, 36, 37.

Boletina borealis Zetterstedt, 1852; 21 ind.; 7,9 % of sites; site no.: 24, 33, 36.

Boletina brevicornis Zetterstedt, 1852; 35 ind.; 23,7 % of sites; site no.: 20, 22, 24, 26, 27, 30, 32, 35, 36.

Boletina cincticornis (Walker, 1848); 23 ind.; 7,9 % of sites; site no.: 24, 27, 36.

**Boletina cornuta* A.Zaitzev, 1994; 1 ind.; 2,6 % of sites; site no.: 24.

**Boletina dispecta* Dziedzicki, 1885; 1 ind.; 2,6 % of sites; site no.: 3.

**Boletina erythropyga* Holmgren, 1883; 31 ind.; 23,7 % of sites; site no.: 2, 5, 20, 22, 24, 27, 32, 33, 36.

Boletina gripha Dziedzicki, 1885; 14918 ind.; 94,7 % of sites; site no.: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38.

**Boletina griphoides* Edwards, 1925; 8 ind.; 2,6 % of sites; site no.: 24.

Boletina groenlandica Staeger, 1845; 320 ind.; 23,7 % of sites; site no.: 20, 21, 23, 24, 26, 27, 33, 36, 37.

**Boletina jamalensis* A.Zaitzev, 1994; 7 ind.; 7,9 % of sites; site no.: 20, 21, 24.

**Boletina lundbecki* Lundström, 1912; 321 ind.; 23,7 % of sites; site no.: 1, 5, 20, 23, 24, 26, 27, 35, 36.

Boletina lundstromi Landrock, 1912; 31 ind.; 18,4 % of sites; site no.: 5, 20, 23, 24, 26, 27, 31.

Boletina maculata Holmgren, 1870; 29 ind.; 23,7 % of sites; site no.: 3, 5, 14, 20, 21, 23, 24, 27, 36.

Boletina nigricans Dziedzicki, 1885; 1613 ind.; 44,7 % of sites; site no.: 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 34, 35, 36, 37.

Boletina nigrofusca Dziedzicki, 1885; 4075 ind.; 23,7 % of sites; site no.: 1, 2, 20, 21, 23, 24, 26, 27, 36.

Boletina pectinunguis Edwards, 1932; 1 ind.; 2,6 % of sites; site no.: 21.

Boletina plana (Walker, 1856); 305 ind.; 42,1 % of sites; site no.: 2, 20, 21, 22, 23, 24, 26, 27, 30, 31, 32, 33, 35, 36, 37, 38.

**Boletina polaris* Lundström, 1915; 1 ind.; 2,6 % of sites; site no.: 5.

Boletina sciarina Staeger, 1840; 638 ind.; 39,5 % of sites; site no.: 20, 21, 22, 23, 24, 25, 26, 27, 30, 32, 33, 34, 35,

36, 38.

**Boletina silvatica* Dziedzicki, 1885; 18 ind.; 5,3 % of sites; site no.: 22, 31.

Boletina trivittata (Meigen, 1818); 133 ind.; 50,0 % of sites; site no.: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 21, 23, 24, 27, 36.

**Boletina villosa* Landrock, 1912; 3 ind.; 7,9 % of sites; site no.: 27, 33, 35.

**Coelophthinia thoracica* (Winnertz, 1863; 4 ind.; 7,9 % of sites; site no.: 26, 31, 32.

Coelosia flava (Staeger, 1840); 23 ind.; 18,4 % of sites; site no.: 23, 27, 32, 33, 36, 37, 38.

Coelosia silvatica Landrock, 1918; 7 ind.; 15,8 % of sites; site no.: 13, 16, 20, 22, 24, 36.

Coelosia tenella (Zetterstedt, 1852); 18 ind.; 26,3 % of sites; site no.: 20, 25, 27, 28, 29, 30, 31, 33, 35, 36.

Coelosia truncata Lundström, 1909; 26 ind.; 28,9 % of sites; site no.: 20, 21, 23, 24, 27, 30, 31, 32, 35, 36, 38.

Drepanocercus spinistylus Söli, 1993; 80 ind.; 36,8 % of sites; site no.: 20, 21, 22, 23, 24, 25, 26, 27, 30, 31, 32, 33, 36, 37.

Dziedzickia marginata (Dziedzicki, 1885); 144 ind.; 34,2 % of sites; site no.: 21, 22, 23, 24, 25, 27, 28, 30, 32, 33, 35, 36, 38.

Gnoriste bilineata Zetterstedt, 1852; 11 ind.; 7,9 % of sites; site no.: 20, 23, 26.

Gnoriste longirostris Siebke, 1863; 1 ind.; 2,6 % of sites; site no.: 31.

Grzegorzekia collaris (Meigen, 1818); 1 ind.; 2,6 % of sites; site no.: 38.

**Hadroneura palmeni* Lundström, 1906; 1 ind.; 2,6 % of sites; site no.: 7.

Palaeodocosia janickii (Dziedzicki, 1923); 109 ind.; 44,7 % of sites; site no.: 20, 21, 22, 23, 24, 25, 26, 27, 29, 30, 31, 32, 33, 34, 35, 36, 38.

**Saigusaia flaviventris* (Strobl, 1894); 3 ind.; 2,6 % of sites; site no.: 28.

Speolepta leptogaster (Winnertz, 1863); 2 ind.; 5,3 % of sites; site no.: 30, 36.

Synapha vitripennis (Meigen, 1818); 173 ind.; 28,9 % of sites; site no.: 22, 24, 25, 28, 29, 31, 32, 33, 34, 35, 37.

Subfamily Leiinae

**Docosia fumosa* Edwards, 1925; 3 ind.; 7,9 % of sites; site no.: 3, 5, 8.

**Docosia gilvipes* (Walker, 1856); 2 ind.; 5,3 % of sites; site no.: 11, 22.

**Ectrepesthoneura* bucera Plassmann, 1980; 287 ind.; 31,6 % of sites; site no.: 20, 21, 22, 23, 24, 26, 27, 30, 32, 33, 36, 37.

**Ectrepesthoneura colyeri* Chandler, 1980; 48 ind.; 7,9 % of sites; site no.: 25, 29, 34.

Ectrepesthoneura hirta (Winnertz, 1846); 756 ind.; 63,2 % of sites; site no.: 2, 4, 13, 14, 15, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38.

**Ectrepesthoneura nigra* Zaitzev, 1984; 5 ind.; 5,3 % of sites; site no.: 21, 24.

**Ectrepesthoneura pubescens* (Zetterstedt, 1860); 30 ind.; 18,4 % of sites; site no.: 11, 20, 22, 23, 35, 36, 37.

**Ectrepesthoneura referta* Plassmann, 1976; 513 ind.; 34,2 % of sites; site no.: 20, 21, 22, 23, 24, 27, 30, 31, 32, 33, 35, 36, 37.

***Ectrepesthoneura tori* Zaitzev et Økland, 1994; 10 ind.; 5,3 % of sites; site no.: 3, 16.

**Leia bimaculata* (Meigen, 1804); 1 ind.; 2,6 % of sites; site no.: 22.

Leia subfasciata (Meigen, 1818); 103 ind.; 18,4 % of sites; site no.: 20, 21, 22, 25, 30, 35, 36.

Leia winthemi Lehmann, 1822; 29 ind.; 23,7 % of sites; site no.: 21, 22, 24, 25, 27, 29, 33, 34, 36.

Rondaniella dimidiata (Meigen, 1804); 63 ind.; 23,7 % of sites; site no.: 21, 22, 25, 28, 32, 33, 36, 37, 38.

Tetragoneura sylvatica (Curtis, 1837); 66 ind.; 7,9 % of sites; site no.: 28, 33, 34.

Subfamily Mycetophilinae

Tribe Mycetophilini

**Dynatosoma cochleare* Strobl, 1895; 3 ind.; 7,9 % of sites; site no.: 5, 6, 17.

Dynatosoma fuscicorne (Meigen, 1818); 49 ind.; 26,3 % of sites; site no.: 21, 22, 24, 26, 27, 29, 30, 31, 33, 36.

**Dynatosoma nigromaculatum* Lundström, 1913; 6 ind.; 7,9 % of sites; site no.: 17, 18, 28.

***Dynatosoma norwegiense* Zaitzev et Økland, 1994; 3 ind.; 7,9 % of sites; site no.: 4, 6, 19

Dynatosoma reciprocum (Walker, 1848); 24 ind.; 47,4 % of sites; site no.: 3, 4, 5, 6, 9, 10, 11, 12, 13, 14, 16, 17, 18, 22, 24, 27, 30, 32.

Dynatosoma rufescens (Zetterstedt, 1838); 23 ind.; 10,5 % of sites; site no.: 22, 27, 30, 36.

Dynatosoma thoracicum (Zetterstedt, 1838); 12 ind.; 13,2 % of sites; site no.: 4, 18, 22, 25, 36.

Epicypta aterrima (Zetterstedt, 1852); 2 ind.; 5,3 % of sites; site no.: 4, 6.

**Mycetophila abiecta* (Lastovka, 1963); 1 ind.; 2,6 % of sites; site no.: 22.

**Mycetophila adumbrata* Mik, 1884; 6 ind.; 5,3 % of sites; site no.: 22, 25.

**Mycetophila assimilis* Matile, 1967; 16 ind.; 13,2 % of sites; site no.: 16, 17, 22, 25, 36.

**Mycetophila attonsa* (Laffoon, 1957); 125 ind.; 31,6 % of sites; site no.: 16, 17, 18, 19, 23, 25, 28, 30, 32, 33, 35, 37.

**Mycetophila autumnalis* Lundström, 1909; 9 ind.; 7,9 % of sites; site no.: 16, 17, 18.

Mycetophila bohemica (Lastovka, 1963); 10 ind.; 13,2 % of sites; site no.: 18, 25, 27, 32, 36.

**Mycetophila brevitarsata* (Lastovka, 1963); 263 ind.; 39,5 % of sites; site no.: 20, 21, 22, 23, 24, 25, 27, 28, 30, 31, 32, 33, 35, 36, 38.

**Mycetophila caudata* Staeger, 1840; 1 ind.; 2,6 % of sites; site no.: 30.

Mycetophila confluens Dziedzicki, 1884; 28 ind.; 18,4 % of sites; site no.: 17, 18, 21, 25, 26, 27, 36.

Mycetophila curviseta Lundström, 1911; 3 ind.; 7,9 % of sites; site no.: 21, 25, 29.

**Mycetophila dentata* Lundström, 1913; 17 ind.; 21,1 % of sites; site no.: 21, 22, 26, 27, 29, 30, 32, 33.

*Mycetophila dziedzickii Chandler, 1977; 12 ind.; 5,3 % of sites; site no.: 22, 27.

**Mycetophila finlandica* Edwards, 1913; 8 ind.; 13,2 % of sites; site no.: 27, 28, 32, 37, 38.

Mycetophila fungorum (De Geer, 1776); 345 ind.; 57,9 % of sites; site no.: 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38.

**Mycetophila hetschkoi* Landrock, 1918; 163 ind.; 34,2 % of sites; site no.: 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35, 36.

**Mycetophila ichneumonea* Say, 1823; 112 ind.; 39,5 % of sites; site no.: 16, 21, 22, 23, 24, 25, 27, 28, 30, 31, 32, 33, 36, 37, 38.

**Mycetophila immaculata* (Dziedzicki, 1884); 1 ind.; 2,6 % of sites; site no.: 36.

**Mycetophila laeta* Walker, 1848; 197 ind.; 44,7 % of sites; site no.: 16, 17, 18, 19, 20, 21, 22, 25, 27, 28, 29, 30, 32, 33, 35, 36, 38.

**Mycetophila lapponica* Lundström, 1906; 1 ind.; 2,6 % of sites; site no.: 21.

**Mycetophila lubomirskii* Dziedzicki, 1884; 21 ind.; 10,5 % of sites; site no.: 22, 33, 34, 36.

Mycetophila luctuosa Meigen, 1830; 16 ind.; 15,8 % of sites; site no.: 16, 18, 19, 24, 25, 31.

Mycetophila marginata Winnertz, 1863; 9 ind.; 10,5 % of sites; site no.: 18, 19, 27, 36.

Mycetophila ocellus Walker, 1848; 2 ind.; 5,3 % of sites; site no.: 26, 30.

Mycetophila schnablii (Dziedzicki, 1884); 8 ind.; 10,5 % of sites; site no.: 20, 21, 27, 36.

Mycetophila sordida van der Wulp, 1874; 2 ind.; 5,3 % of sites; site no.: 22, 25.

Mycetophila strigatoides (Landrock, 1927); 2 ind.; 5,3 % of sites; site no.: 27, 30.

**Mycetophila stylata* (Dziedzicki, 1884); 28 ind.; 10,5 % of sites; site no.: 22, 25, 27, 38.

**Mycetophila unguiculata* Lundström, 1913; 1 ind.; 2,6 % of sites; site no.: 33.

**Mycetophila xanthopyga* Winnertz, 1863; 7 ind.; 10,5 % of sites; site no.: 18, 20, 22, 31.

Phronia biarcuata (Becker, 1908); 2 ind.; 5,3 % of sites; site no.: 21, 36.

**Phronia bicolor* Dziedzicki, 1889; 1 ind.; 2,6 % of sites; site no.: 5.

Phronia braueri Dziedzicki, 1889; 205 ind.; 39,5 % of sites; site no.: 20, 21, 22, 24, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 38.

Phronia caliginosa Dziedzicki, 1889; 657 ind.; 89,5 % of sites; site no.: 1, 2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 14, 15, 16, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38.

Phronia cinerascens Winnertz, 1863; 167 ind.; 57,9 % of sites; site no.: 1, 2, 3, 14, 16, 17, 18, 20, 21, 22, 23, 24, 25, 26, 27, 28, 31, 32, 33, 35, 36, 38.

**Phronia cordata* Lundström, 1914; 56 ind.; 7,9 % of sites; site no.: 24, 27, 36.

**Phronia digitata* Hackman, 1970; 4 ind.; 5,3 % of sites; site no.: 21, 36.

**Phronia disgrega* Dziedzicki, 1889; 5 ind.; 13,2 % of sites; site no.: 21, 22, 27, 29, 35.

**Phronia dziedzickii* Lundström, 1906; 1 ind.; 2,6 % of sites; site no.: 36.

**Phronia elegans* Dziedzicki, 1889; 1 ind.; 2,6 % of sites; site no.: 31.

Phronia flavicollis Winnertz, 1863; 119 ind.; 50,0 % of sites; site no.: 4, 5, 14, 20, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 32, 33, 35, 36, 38.

Phronia forcipata Winnertz, 1863; 98 ind.; 23,7 % of sites; site no.: 21, 22, 23, 25, 26, 32, 35, 36, 38.

Phronia fusciventris Van duzee, 1928; 7 ind.; 7,9 % of sites; site no.: 21, 24, 27.

**Phronia jocosa* Gagné, 1975; 3 ind.; 7,9 % of sites; site no.: 1, 5, 18.

**Phronia mutabilis* Dziedzicki, 1889; 1 ind.; 2,6 % of sites; site no.: 5.

Phronia nigricornis (Zetterstedt, 1852); 15 ind.; 15,8 % of sites; site no.: 21, 22, 27, 29, 32, 36.

**Phronia nigripalpis* Lundström, 1909; 5206 ind.; 50,0 % of sites; site no.: 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38.

**Phronia obtusa* Winnertz, 1863; 2 ind.; 2,6 % of sites; site no.: 11.

**Phronia peculiaris* Dziedzicki, 1889; 3 ind.; 5,3 % of sites; site no.: 21, 36.

Phronia persimilis Hackman, 1970; 2 ind.; 5,3 % of sites; site no.: 13, 20.

**Phronia petulans* Dziedzicki, 1889; 3 ind.; 7,9 % of sites; site no.: 1, 11, 36.

**Phronia siebeckii* Dziedzicki, 1889; 1 ind.; 2,6 % of sites; site no.: 25.

**Phronia tenuis* Winnertz, 1863; 4 ind.; 7,9 % of sites; site

no.: 20, 27, 36.

**Phronia willistoni* Dziedzicki, 1889; 4 ind.; 10,5 % of sites; site no.: 1, 5, 8, 36.

**Platurocypta testata* (Edwards, 1925); 1 ind.; 2,6 % of sites; site no.: 3.

**Sceptonia concolor* Winnertz, 1863; 7 ind.; 15,8 % of sites; site no.: 20, 22, 24, 25, 35, 38.

Sceptonia fumipes Edwards, 1925; 205 ind.; 39,5 % of sites; site no.: 16, 20, 21, 22, 23, 24, 25, 26, 27, 30, 32, 33, 34, 35, 36.

Sceptonia fuscipalpis Edwards, 1925; 33 ind.; 26,3 % of sites; site no.: 9, 22, 24, 25, 27, 30, 33, 34, 35, 36.

Sceptonia nigra (Meigen, 1804); 12 ind.; 21,1 % of sites; site no.: 3, 4, 5, 7, 10, 11, 13, 18.

**Sceptonia regni* Chandler, 1991; 10 ind.; 15,8 % of sites; site no.: 25, 26, 29, 30, 32, 35.

**Sceptonia tenuis* Edwards, 1925; 19 ind.; 18,4 % of sites; site no.: 4, 6, 13, 15, 21, 22, 24.

**Trichonta aberrans* Lundström, 1911; 1 ind.; 2,6 % of sites; site no.: 2.

Trichonta atricauda (Zetterstedt, 1852); 37 ind.; 15,8 % of sites; site no.: 21, 22, 24, 27, 31, 36.

**Trichonta comica* Gagné, 1981; 2 ind.; 5,3 % of sites; site no.: 27, 36.

**Trichonta comis* Gagné, 1981; 4 ind.; 7,9 % of sites; site no.: 4, 5, 11.

**Trichonta delicata* Gagné, 1981; 4 ind.; 7,9 % of sites; site no.: 21, 27, 36.

Trichonta facilis Gagné, 1981; 1 ind.; 2,6 % of sites; site no.: 27.

Trichonta fissicauda (Zetterstedt, 1852); 31 ind.; 21,1 % of sites; site no.: 20, 21, 22, 23, 27, 33, 35, 36.

**Trichonta flavicauda* Lundström, 1914; 16 ind.; 13,2 % of sites; site no.: 21, 24, 26, 27, 36.

**Trichonta fragilis* Gagné, 1981; 1 ind.; 2,6 % of sites; site no.: 14.

**Trichonta generosa* Gagné, 1981; 2 ind.; 2,6 % of sites; site no.: 36.

Trichonta hamata Mik, 1880; 92 ind.; 34,2 % of sites; site no.: 20, 21, 22, 23, 24, 26, 27, 30, 31, 32, 33, 36, 38.

Trichonta melanura (Staeger, 1840); 139 ind.; 63,2 % of sites; site no.: 3, 4, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15, 17, 20, 21, 22, 23, 24, 25, 27, 30, 31, 32, 36.

Trichonta subfusca Lundström, 1909; 273 ind.; 34,2 % of sites; site no.: 21, 22, 23, 24, 25, 27, 29, 30, 32, 33, 35, 36, 38.

Trichonta submaculata (Staeger, 1840); 3 ind.; 2,6 % of sites; site no.: 36.

Trichonta terminalis (Walker, 1856); 2 ind.; 5,3 % of sites; site no.: 33, 36.

**Trichonta venosa* (Staeger, 1840); 16 ind.; 15,8 % of sites; site no.: 22, 25, 30, 31, 35, 36.

**Trichonta vitta* (Meigen, 1830); 111 ind.; 44,7 % of sites; site no.: 4, 7, 8, 14, 20, 21, 22, 23, 24, 26, 27, 28, 32, 35, 36, 37, 38.

**Trichonta vulgaris* Loew, 1869; 2 ind.; 5,3 % of sites; site no.: 20, 31.

**Zygomyia humeralis* (Wiedemann, 1817); 17 ind.; 13,2 % of sites; site no.: 1, 5, 14, 25, 28.

**Zygomyia kiddi* Chandler, 1991; 32 ind.; 18,4 % of sites; site no.: 21, 25, 27, 28, 30, 32, 35.

Zygomyia notata (Stannius, 1831); 10 ind.; 10,5 % of sites; site no.: 4, 5, 9, 10.

**Zygomyia pictipennis* (Staeger, 1840); 2 ind.; 2,6 % of sites; site no.: 24.

Zygomyia pseudohumeralis Caspers, 1980; 86 ind.; 39,5 % of sites; site no.: 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 34, 35, 36, 38.

**Zygomyia semifusca* (Meigen, 1818); 75 ind.; 28,9 % of sites; site no.: 16, 22, 25, 28, 29, 30, 32, 34, 35, 36, 38.

**Zygomyia valida* Winnertz, 1863; 2 ind.; 2,6 % of sites; site no.: 26.

Zygomyia vara (Staeger, 1840); 6 ind.; 7,9 % of sites; site no.: 20, 27, 36.

**Zygomyia zaitzevi* Chandler, 1991; 5 ind.; 2,6 % of sites; site no.: 22.

Tribe Exechiini

Allodia (Allodia) anglofennica Edwards, 1921; 14 ind.; 13,2 % of sites; site no.: 16, 17, 18, 19, 23.

Allodia (Allodia) lugens (Wiedemann, 1817); 127 ind.; 21,1 % of sites; site no.: 9, 13, 16, 17, 18, 19, 20, 23.

Allodia (Allodia) lundstroemi Edwards, 1921; 3 ind.; 5,3 % of sites; site no.: 17, 20.

Allodia (Allodia) pixydiiformis Zaitzev, 1982; 88 ind.; 21,1 % of sites; site no.: 1, 8, 11, 15, 16, 17, 18, 19.

Allodia (Allodia) septentrionalis Hackman, 1971; 8 ind.; 10,5 % of sites; site no.: 16, 17, 18, 27.

**Allodia (Allodia) simplex* Zaitzev, 1982; 2 ind.; 5,3 % of sites; site no.: 1, 3.

Allodia (Allodia) truncata Edwards, 1921; 10 ind.; 13,2 % of sites; site no.: 9, 16, 17, 18, 19.

Allodia (Allodia) tuomikoskii Hackman, 1971; 8 ind.; 10,5 % of sites; site no.: 21, 23, 27, 36.

**Allodia (Brachycampta) czernyi* (Landrock, 1912); 6 ind.; 7,9 % of sites; site no.: 5, 16, 18.

Allodiopsis (Notolopha) cristata (Staeger, 1840); 2 ind.; 5,3 % of sites; site no.: 23, 27.

Anatella ciliata Winnertz, 1863; 8 ind.; 18,4 % of sites; site no.: 17, 18, 25, 27, 31, 36, 38.

Anatella flavomaculata Edwards, 1925; 1 ind.; 2,6 % of sites; site no.: 5.

**Anatella gibba* Winnertz, 1863; 1 ind.; 2,6 % of sites; site no.: 11.

Anatella lenis Dziedzicki, 1923; 3 ind.; 7,9 % of sites; site no.: 16, 17, 27.

**Brachypeza (Brachypeza) bisignata* Winnertz, 1863; 5 ind.; 10,5 % of sites; site no.: 5, 27, 29, 36.

**Brevicornu (Brevicornu) arcticum* (Lundström in Lundström & Frey, 1913); 2 ind.; 2,6 % of sites; site no.: 20.

Brevicornu (Brevicornu) bipartitum Lastovka et Matile, 1974; 158 ind.; 18,4 % of sites; site no.: 4, 20, 21, 22, 24, 27, 36.

Brevicornu (Brevicornu) boreale (Lundström, 1914); 1 ind.; 2,6 % of sites; site no.: 27.

**Brevicornu (Brevicornu) disjunctum* Zaitzev, 1988; 2 ind.; 2,6 % of sites; site no.: 12.

**Brevicornu (Brevicornu) fennicum* (Landrock, 1927); 4 ind.; 5,3 % of sites; site no.: 4, 5.

Brevicornu (Brevicornu) foliatum (Edwards, 1925); 39 ind.; 26,3 % of sites; site no.: 20, 21, 22, 23, 24, 26, 27, 32, 33, 36.

**Brevicornu (Brevicornu) fuscipenne* (Staeger, 1840); 31 ind.; 36,8 % of sites; site no.: 1, 2, 3, 4, 5, 6, 7, 10, 12, 13, 15, 27, 31, 36.

Brevicornu (Brevicornu) griseicolle (Staeger, 1840); 5 ind.; 5,3 % of sites; site no.: 23, 26.

Brevicornu (Brevicornu) griseolum (Zetterstedt, 1852); 26 ind.; 15,8 % of sites; site no.: 7, 20, 22, 24, 27, 36.

Brevicornu (Brevicornu) kingi (Edwards, 1925); 35 ind.; 28,9 % of sites; site no.: 1, 2, 4, 6, 8, 9, 11, 12, 14, 27, 36.

**Brevicornu (Brevicornu) occidentale* Zaitzev, 1988; 2 ind.; 2,6 % of sites; site no.: 36.

Brevicornu (Brevicornu) ruficorne (Meigen, 1838); 132 ind.; 31,6 % of sites; site no.: 4, 16, 17, 18, 19, 21, 24, 26, 27, 31, 35, 36.

Brevicornu (Brevicornu) sericoma (Meigen, 1830); 66 ind.; 42,1 % of sites; site no.: 1, 2, 3, 4, 5, 6, 10, 13, 16, 17, 19, 21, 22, 24, 27, 36.

**Brevicornu (Stigmatomeria) crassicorne* (Stannius, 1831); 2 ind.; 5,3 % of sites; site no.: 5, 14.

Cordyla brevicornis (Staeger, 1840); 124 ind.; 60,5 % of sites; site no.: 2, 4, 5, 12, 14, 16, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 32, 33, 34, 35, 36, 37, 38.

**Cordyla crassicornis* Meigen, 1818; 16 ind.; 26,3 % of sites; site no.: 3, 5, 7, 11, 25, 28, 31, 35, 36, 38.

Cordyla fissa Edwards, 1925; 3 ind.; 7,9 % of sites; site no.: 1, 5, 14.

**Cordyla flaviceps* (Staeger, 1840); 11 ind.; 10,5 % of sites; site no.: 22, 27, 29, 34.

Cordyla fusca Meigen, 1804; 114 ind.; 71,1 % of sites; site no.: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 21, 22, 23, 25, 26, 27, 30, 31, 32, 33, 37, 38.

**Cordyla murina* Winnertz, 1863; 262 ind.; 52,6 % of sites; site no.: 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 38.

**Cordyla nitens* Winnertz, 1863; 3 ind.; 2,6 % of sites; site no.: 30.

**Cordyla parvipalpis* Edwards, 1925; 75 ind.; 34,2 % of sites; site no.: 1, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, 29.

Cordyla pusilla Edwards, 1925; 2 ind.; 5,3 % of sites; site no.: 4, 25.

Cordyla semiflava (Staeger, 1840); 3 ind.; 7,9 % of sites; site no.: 1, 3, 21.

**Cordyla sixi* (Barendrecht, 1938); 14 ind.; 23,7 % of sites; site no.: 20, 21, 22, 23, 24, 26, 27, 35, 36.

Exechia confinis Winnertz, 1863; 11 ind.; 10,5 % of sites; site no.: 8, 16, 17, 18.

Exechia contaminata Winnertz, 1863; 4 ind.; 7,9 % of sites; site no.: 10, 16, 17.

Exechia dizona Edwards, 1924; 2 ind.; 5,3 % of sites; site no.: 17, 21.

Exechia dorsalis (Staeger, 1840); 19 ind.; 18,4 % of sites; site no.: 1, 9, 13, 14, 16, 17, 18.

Exechia exigua Lundström, 1909; 4 ind.; 5,3 % of sites; site no.: 17, 23.

Exechia frigida (Boheman, 1865); 5 ind.; 10,5 % of sites; site no.: 22, 23, 27, 36.

Exechia fusca (Meigen, 1804); 21 ind.; 10,5 % of sites; site no.: 16, 17, 18, 36.

**Exechia lundstroemi* Landrock, 1923; 7 ind.; 10,5 % of sites; site no.: 16, 17, 18, 24.

**Exechia lucidula* (Zetterstedt, 1838); 1 ind.; 2,6 % of sites; site no.: 3.

Exechia nigra Edwards, 1925; 1 ind.; 2,6 % of sites; site no.: 24.

**Exechia nigroscutellata* Landrock, 1912; 2 ind.; 2,6 % of sites; site no.: 17.

**Exechia parva* Lundström, 1909; 8 ind.; 10,5 % of sites; site no.: 16, 17, 18, 19.

Exechia parvula (Zetterstedt, 1852); 4 ind.; 5,3 % of sites; site no.: 16, 17.

Exechia pseudocincta Strobl, 1910; 1 ind.; 2,6 % of sites; site no.: 16.

**Exechia repanda* Johannsen, 1912; 4 ind.; 10,5 % of sites; site no.: 3, 11, 17, 19.

**Exechia separata* Lundström, 1912; 5 ind.; 7,9 % of sites; site no.: 16, 18, 27.

Exechia unimaculata (Zetterstedt, 1860); 1 ind.; 2,6 % of sites; site no.: 5.

Exechiopsis (Exechiopsis) clypeata (Lundström, 1911); 2 ind.; 5,3 % of sites; site no.: 22, 27.

**Exechiopsis (Exechiopsis) forcipata* (Lackschewitz, 1937); 3 ind.; 2,6 % of sites; site no.: 17.

Exechiopsis (Exechiopsis) indecisa (Walker, 1856); 3 ind.; 7,9 % of sites; site no.: 5, 22, 27.

Exechiopsis (Exechiopsis) intersecta (Meigen, 1818); 1 ind.; 2,6 % of sites; site no.: 11.

Exechiopsis (Exechiopsis) lackschewitziana (Stackelberg, 1948); 1 ind.; 2,6 % of sites; site no.: 18.
Exechiopsis (Exechiopsis) pseudindecisa Lastovka et Matile, 1974; 1 ind.; 2,6 % of sites; site no.: 22.
Exechiopsis (Exechiopsis) pseudopulchella (Lundström, 1912); 1 ind.; 2,6 % of sites; site no.: 11.
Exechiopsis (Exechiopsis) pulchella (Winnertz, 1863); 12 ind.; 18,4 % of sites; site no.: 1, 14, 16, 19, 22, 25, 33.
Exechiopsis (Exechiopsis) sagittata Lastovka et Matile, 1974; 1 ind.; 2,6 % of sites; site no.: 22.
Exechiopsis (Exechiopsis) subulata (Winnertz, 1863); 2 ind.; 5,3 % of sites; site no.: 22, 33.
Exechiopsis (Xenexechia) leptura (Meigen, 1830); 1 ind.; 2,6 % of sites; site no.: 4.
Rymosia fasciata (Meigen, 1804); 3 ind.; 7,9 % of sites; site no.: 5, 6, 28.
Rymosia placida Winnertz, 1863; 2 ind.; 2,6 % of sites; site no.: 16.
Rymosia signatipes (van der Wulp, 1859); 1 ind.; 2,6 % of sites; site no.: 8.
Tarnania tarnanii (Dziedzicki, 1910); 5 ind.; 5,3 % of sites; site no.: 22, 30.

DISCUSSION

The taxonomic tools have been considerably developed since the earliest records of mycetophilids from Norway. Several of the old-record taxa still exist, but many of them are found under new genera or species names due to revisionary works. It might be that new identifications according to modern taxonomy would prove that some of the old records were placed in wrong taxa.

In the catalogue of Siebke (1877), 62 species names are recognized as still-existing mycetophilid taxa. In addition, this work contains some unknown species names and species considered doubtful in modern literature (Soós & Papp 1988). Soot-Ryen (1942) summarized the published records of mycetophilids up to the beginning World War II, and included also some old records which were not mentioned in the catalogue of Siebke. This publication added another 12 mycetophilid species of still existing taxa (though, some of them under new names today), and raised the total number to 74. The inventory of Krogerus (1960) contained 2 species records of mycetophilids from Norway; however, none of them were new to the Norwegian fauna. If the old records were put in correct taxa according to modern taxonomy, all of the abovementioned publications and the Catalogue of Palaearctic Diptera (Soós & Papp 1988) included altogether 96 mycetophilid species from Norway.

The number of mycetophilid records has accelerated in the ninties. Two new species were added by Økland & Söli (1992), 41 species by Kjærandsen (1992, 1993), and 129 species by Söli (1994a, 1994b), giving altogether 268 species from Norway. Apparently, the present material adds another 162 new species. With the abovementioned assumptions, at least 430 mycetophilid species are documented by Norwegian records in the literature, 15 species of Bolitphilidae, 22 species of Keroplatidae (incl. Macrocerinae), 4 species of Diadocidiidae and 389 species of Mycetophilidae. Thus, we are getting closer to the estimate of 497 mycetophilid species in Norway given in Ottesen (1993).

The present review of the Norwegian species numbers of mycetophilids is not exhaustive. Previous publications of Norwegian mycetophilids may have been overlooked, and there are several records of mycetophilids which have not been published, and they may contain new species for the Norwegian fauna. The rapid progress of new Norwegian records in recent years may indicate that there are still many species to be found. It is assumed that many new records may be done in deciduous forest of the lowlands, since modern studies of such forests are under-represented. Furthermore, revisionary works may change species names and rearrange the classification at higher levels. Despite this, the present review of species records may hopefully be a useful contribution to a future check list of Diptera in Norway.

SAMMENDRAG

Soppmygg (Diptera, Sciaroidea) fra Østlandet (Norge)

Denne artikkelen gir en oversikt over soppmyggarter fanget i løpet av forskningsprogrammet "Skogøkologi og flersidig skogbruk". Matrialet omfatter i alt 320 soppmyggarter, hvorav 162 arter antas å være nye for den den norske faunaen, og 5 er nybeskrevne arter som er gjengitt i egne publikasjoner. Det gis også en oversikt over artsantall av soppmygg fra Norge i tidligere

publikasjoner. Inkludert dette matrialet er antallet av publiserte soppmyggarter fra Norge minst 430.

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