

Contributions to the knowledge of Norwegian Tachinidae (Diptera, Oestroidea) – Part 1, including an updated checklist

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Records are given for 215 specimens representing 34 genera and 41 species of tachinid flies from western Norway. *Gymnocheta magna* Zimin, 1958, *Prooppia nigripalpis* (Robineau-Desvoidy, 1847) and *Tachina ursina* Meigen, 1824 are recorded in Norway for the first time, notes on their identification, biology and distribution are given. An updated checklist of Norwegian Tachinidae with references to sources of records succeeding Rognes (1986) is also given.

Key words: Diptera, Tachinidae, *Gymnocheta magna*, *Prooppia nigripalpis*, *Tachina ursina*, new records, checklist, Norway.

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Introduction

Tachinidae is a speciose and morphologically diverse family of flies with members ranging in size from 20 (*Tachina grossa* (Linnaeus, 1758) (Figure 1)) to only a couple of millimetres.

More than 1600 species are known from the Palaearctic Region (Tschorsnig & Richter 1998). Fauna Europaea (Tschorsnig et al. 2004) lists 875 species for Europe and 382 for Scandinavia, 358 and 279 species for Sweden and Finland, respectively. Only 200 species are listed for Norway. In the updated checklist below the total number of species is 220. Undoubtedly many species still await discovery in Norway.

The typical tachinid fly is medium sized, black, greyish dusted and very bristly, usually easily recognized, even in the field. Almost all tachinids share the exclusive character of an enlarged subscutellum.

All tachinids are obligate parasitoids of arthropods, most species attack lepidopteran larvae, but other groups are also parasitized (Coleoptera, Heteroptera, Hymenoptera and Dermoptera to mention the most important).

Tschorsnig & Richter (1998) explains the morphology, biology and behaviour, classification and distribution of Tachinidae in the Palaearctic Region.

Material and methods

In this first in a series of papers on Norwegian Tachinidae I aim to contribute to the knowledge of Tachinidae in Norway by presenting an updated checklist and 215 records from Norway (Figure 2) representing 41 species in 34 genera, including three new species for Norway; *Gymnocheta magna* Zimin, 1958, *Prooppia nigripalpis* (Robineau-Desvoidy, 1847) and *Tachina ursina* Meigen, 1824.

The checklist is based on the previous list by Rognes (1986) and succeeding papers reporting tachinid species new to Norway. Additions since Rognes (1986) are marked with a number which refers to the relevant publication.

Generic and specific synonyms and emendations are only included where the source-records do not agree with the classification

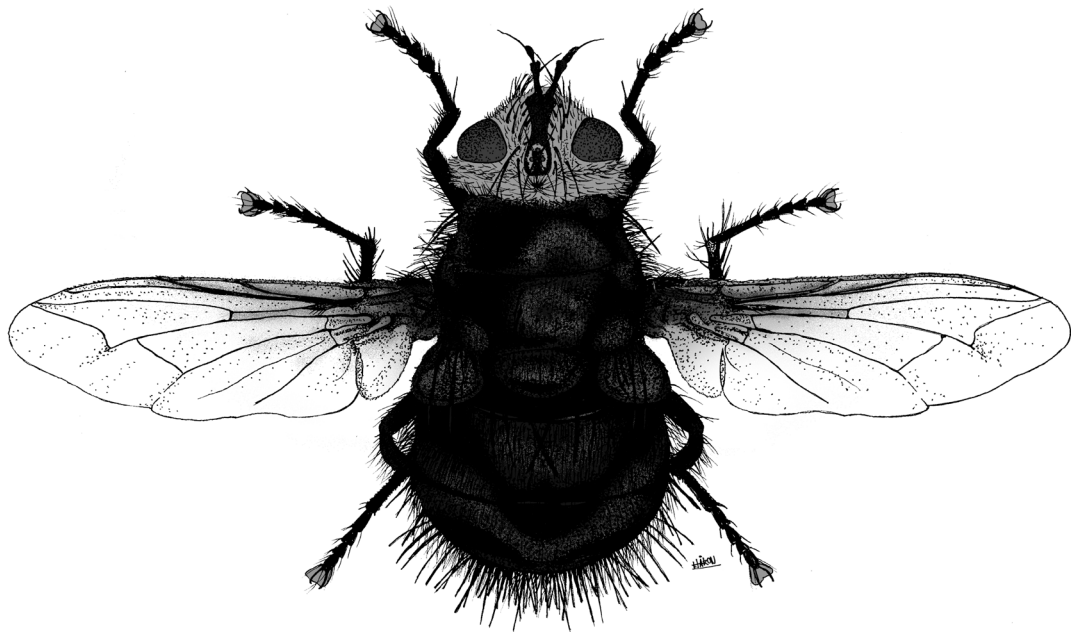


FIGURE 1. *Tachina grossa* (Linnaeus, 1758) female. Drawing: Håkon Haraldseide.

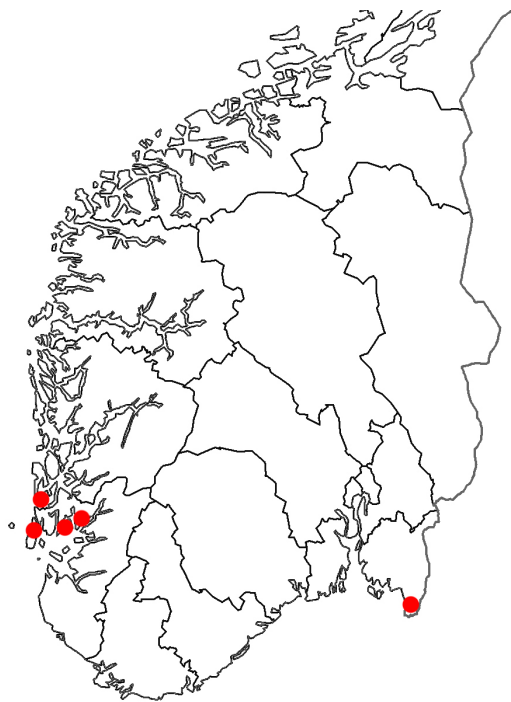


FIGURE 2. Collecting sites. Map source: Statens Kartverk

followed here. For earlier names used in Scandinavian literature refer to Rognes (1986). Species are presented alphabetically by subfamily, genus, subgenus (where applicable) and species, tribes are omitted.

Records are presented by: 'Faunistic Region (Økland 1981), Municipality, Location and European Invertebrate Survey grid-number (Endrestøl 2005).

Remarks on ecology represent general observations as seen in location(s) listed under 'Material:'. Additional remarks are given when seen useful, including previous records of rare species or species just recently published new to Norway. Extensive notes are only given for species new to Norway.

Identifications follow Tschorsnig & Herting (1994) and Andersen (1996) (except in the case of *Siphona geniculata* (De Geer, 1776) see Herting et al. (1999)). The identities of several specimens have been confirmed by Theo Zeegers (Soest, The Netherlands).

A somewhat conservative approach to tachinid systematics have been chosen, which, for the

most part, agrees with current European authors (e.g. Andersen 1996, Tschorsnig et al. 2004).

All specimens have been collected by the author and are kept in the author's private collection unless otherwise noted.

The checklist

Codes: * = new to Norway, 1 = Ødegaard et al. (2009), 2 = Bergström (2008), 3 = Haraldseide (2011), 4 = Ødegaard et al. (2011), 5 = Rognes (2006), 6 = Gammelmo & Sagvolden (2007), 7 = Rognes & Hansen (1996), 8 = Ziegler & Menzel (2000), 9 = Andersen (1996), 10 = Bergström (2007), 11 = Rognes (1995),

Annotations: **A1:** Christer Bergström (Uppsala, Sweden) has seen material from Norway that belongs to a species that differs from the typical *T. nigripes*. **A2:** *Gymnosoma rotundatum* (Linnaeus, 1758) was published from Norway in Ødegaard et al. (2009) but closer inspection of the genitals has shown that the specimens represent *Gymnosoma nudifrons* Herting, 1966 (pers. comm. Frode Ødegaard (Trondheim, Norway)).

DEXIINAE

Athrycia Robineau-Desvoidy, 1830

curvinervis (Zetterstedt, 1844)
impressa (van der Wulp, 1869)
trepida (Meigen, 1824)

Billaea Robineau-Desvoidy, 1830

triangulifera (Zetterstedt, 1844)

Blepharomyia Brauer & Bergenstamm, 1889

pagana (Meigen, 1824)
piliceps (Zetterstedt, 1859)

Campylocheta Rondani, 1859

inepta (Meigen, 1824)
praecox (Meigen, 1824)

Chaetovoria Villeneuve, 1920

antennata (Villeneuve, 1920)

Cyrtophloebe Rondani, 1856

Cyrtophleba, unjust. emendation
ruricola (Meigen, 1824)

Dexia Meigen, 1826

vacua (Fallén, 1817)

Dinera Robineau-Desvoidy, 1830

carinifrons (Fallén, 1817)
ferina (Fallén, 1817)
grisescens (Fallén, 1817)

Dufouria Robineau-Desvoidy, 1830

chalybeata (Meigen, 1824)
nigrita (Fallén, 1810)¹

Eriothrix Meigen, 1803

prolixa (Meigen, 1824)
rufomaculata (De Geer, 1776)

Estheria Robineau-Desvoidy, 1830

bohemani (Rondani, 1862)

Freraea Robineau-Desvoidy, 1830

gagatea Robineau-Desvoidy, 1830

Klugia Robineau-Desvoidy, 1863

marginata (Meigen, 1824)

Periscepsia Gistel, 1848

carbonaria (Panzer, 1798)¹

Peteina Meigen, 1838

erinaceus (Fabricius, 1794)

Phyllomya Robineau-Desvoidy, 1830

volvulus (Fabricius, 1794)

Prosenia Le Peletier & Serville, 1828

siberita (Fabricius, 1775)

Ramonda Robineau-Desvoidy, 1863

latifrons (Zetterstedt, 1844)
prunaria (Rondani, 1861)
ringdahli (Villeneuve, 1922)
spatulata (Fallén, 1820)

Rondania Robineau-Desvoidy, 1850

dimidiata (Meigen, 1824)
fasciata (Macquart, 1834)

***Thelaira* Robineau-Desvoidy, 1830**

?*nigripes* (Fabricius, 1794)^{A1}
solivaga (Harris, 1780)

***Trafoia* Brauer & Bergenstamm, 1893**

monticola Brauer & Bergenstamm, 1893¹

***Trixa* Meigen, 1824**

Murana Meigen, 1824 (syn.)

alpina Meigen, 1824
caerulescens Meigen, 1824 (syn.)
conspersa (Harris, 1776)
variegata Meigen, 1824 (syn.)

***Voria* Robineau-Desvoidy, 1830**

ruralis (Fallén, 1810)

***Wagneria* Robineau-Desvoidy, 1830**

alpina Villeneuve, 1910
costata (Fallén, 1815)

EXORISTINAE

***Admontia* Brauer & Bergenstamm, 1889**

Trichopareia Brauer & Bergenstamm, 1889 (syn.)

blanda (Fallén, 1820)
grandicornis (Zetterstedt, 1849)

***Allophorocera* Hendel, 1901**

ferruginea (Meigen, 1824)

***Aplomya* Robineau-Desvoidy, 1830**

confinis (Fallén, 1820)

***Belida* Robineau-Desvoidy, 1863**

angelicae (Meigen, 1824)

***Blondelia* Robineau-Desvoidy, 1830**

nigripes (Fallén, 1810)

***Botria* Rondani, 1856**

Bothria, unjust. emendation

frontosa (Meigen, 1824)
subalpina Villeneuve, 1910

***Brachicheta* Rondani, 1861**

strigata (Meigen, 1824)

***Cadurciella* Villeneuve, 1927**

tritaeniata (Rondani, 1859)

***Carcelia* Robineau-Desvoidy, 1830**

atricosta Herting, 1961
lucorum (Meigen, 1824)

***Chetogena* Rondani, 1856**

obliquata (Fallén, 1810)

***Cyzenis* Robineau-Desvoidy, 1863**

albicans (Fallén, 1810)

***Drino* Robineau-Desvoidy, 1863**

galii (Brauer & Bergenstamm, 1891)¹
inconspicua (Meigen, 1830)¹
lota (Meigen, 1824)
vicina (Zetterstedt, 1849)

***Elodia* Robineau-Desvoidy, 1863**

ambulatoria (Meigen, 1824)
morio (Fallén, 1820)

***Epicamocera* Macquart, 1849**

succincta (Meigen, 1824)

***Erynnia* Robineau-Desvoidy, 1830**

ocypterata (Fallén, 1810)

***Eumea* Robineau-Desvoidy, 1863**

linearicornis (Zetterstedt, 1844)
mitis (Meigen, 1824)¹

***Exorista* Meigen, 1803**

Subgenus *Adenia* Robineau-Desvoidy, 1863

mimula (Meigen, 1824)
rustica (Fallén, 1810)

Subgenus *Exorista* Meigen, 1803

fasciata (Fallén, 1820)

***Frontina* Meigen, 1838**

laeta (Meigen, 1824)

***Gastrolepta* Rondani, 1862**

anthracina (Meigen, 1826)¹

***Gonia* Meigen, 1803**

capitata (De Geer, 1776)
ornata Meigen, 1826
picea (Robineau-Desvoidy, 1830)
sicula Robineau-Desvoidy, 1830 (syn.)

Hubneria Robineau-Desvoidy, 1847

Huebneria, unjust. emendation

affinis (Fallén, 1810)

Istocheta Rondani, 1859

longicornis (Fallén, 1810)

Leiophora Robineau-Desvoidy, 1863

innoxia (Meigen, 1824)

Lydella Robineau-Desvoidy, 1830

ripae (Brischke, 1885)

stabulans (Meigen, 1824)

Madremyia Townsend, 1916

clausa (Villeneuve, 1937)

Medina Robineau-Desvoidy, 1830

collaris (Fallén, 1820)

luctuosa (Meigen, 1824)

separata (Meigen, 1824)

Meigenia Robineau-Desvoidy, 1830

dorsalis (Meigen, 1824)

mutabilis (Fallén, 1810)

Myxeristops Townsend, 1911

arctica (Zetterstedt, 1838)²

blondeli authors, not Robineau-Desvoidy, 1830 Misidentification (see Bergström 2008)

stolida (Stein, 1924)

Nemorilla Rondani, 1856

maculosa (Meigen, 1824)

Nilea Robineau-Desvoidy, 1863

hortulana (Meigen, 1824)

innoxia Robineau-Desvoidy, 1863

rufiscutellaris (Zetterstedt, 1859)

Ocytata Gistel, 1848

pallipes (Fallén, 1820)

Onychogonia Brauer & Bergenstamm, 1889

cervini (Bigot, 1881)

flaviceps (Zetterstedt, 1838)

Oswaldia Robineau-Desvoidy, 1863

muscaria (Fallén, 1810)

spectabilis (Meigen, 1824)

Pales Robineau-Desvoidy, 1830

pavida (Meigen, 1824)³

Paracraspedothrix Villeneuve, 1919

montivaga Villeneuve, 1919¹

Periarchiclops Villeneuve, 1924

scutellaris (Fallén, 1820)

Phebellia Robineau-Desvoidy, 1846

glauca (Meigen, 1824)

glaucoides Herting, 1961

stulta (Zetterstedt, 1844)

villica (Zetterstedt, 1838)

Phorocera Robineau-Desvoidy, 1830

obscura (Fallén, 1810)

Phryxe Robineau-Desvoidy, 1830

magnicornis (Zetterstedt, 1838)

nemea (Meigen, 1824)¹

vulgaris (Fallén, 1810)

Platymya Robineau-Desvoidy, 1830

fimbriata (Meigen, 1824)

Policheta Rondani, 1856

unicolor (Fallén, 1820)

Prooppia Townsend, 1926

* *nigripalpis* (Robineau-Desvoidy, 1847)

strigifrons (Zetterstedt, 1838)

Pseudoperichaeta Brauer & Bergenstamm, 1889

palesioidea (Robineau-Desvoidy, 1830)

Rhaphiochaeta Brauer & Bergenstamm, 1889

brevisetata (Zetterstedt, 1838)

Senometopia Macquart, 1834

pollinosa (Mesnil, 1941)

separata (Rondani, 1859)

bombycivora Robineau-Desvoidy, 1830 (syn.)

Smidtia Robineau-Desvoidy, 1830

Timavia Robineau-Desvoidy, 1863 (syn.)

amoena (Meigen, 1824)

conspersa (Meigen, 1824)⁴

Staurochaeta Brauer & Bergenstamm, 1889

albocingulata (Fallén, 1820)

Tlephusa Robineau-Desvoidy, 1863

cincinna (Rondani, 1859)

Winthemia Robineau-Desvoidy, 1830

bohemanni (Zetterstedt, 1844)

erythrura (Meigen, 1838)

quadripustulata (Fabricius, 1794)

Xylotachina Brauer & Bergenstamm, 1891

diluta (Meigen, 1824)

Zaira Robineau-Desvoidy, 1830

cinerea (Fallén, 1810)

Zenillia Robineau-Desvoidy, 1830

libatrix (Panzer, 1798)

PHASIINAE

Catharosia Rondani, 1868

pygmaea (Fallén, 1815)

Cinochira Zetterstedt, 1845

atra Zetterstedt, 1845

Cistogaster Latreille 1829

globosa (Fabricius, 1775)

Cylindromyia Meigen, 1803

Subgenus *Cylindromyia* Meigen, 1803

brassicaria (Fabricius, 1775)

Subgenus *Neocyptera* Townsend, 1916

interrupta (Meigen, 1824)

Subgenus *Ocypterula* Rondani 1856

pusilla (Meigen, 1824)

Gymnosoma Meigen, 1803

clavatum (Rohdendorf, 1947)

nudifrons Herting, 1966

Lophosia Meigen, 1824

fasciata Meigen, 1824

Phania Meigen, 1824

curvicauda (Fallén, 1820)⁴

thoracica Meigen, 1824

Phasia Latreille, 1804

Alophora Robineau-Desvoidy, 1830 (syn.)

aurulans Meigen, 1824⁵

hemiptera (Fabricius, 1794)⁶

obesa (Fabricius, 1798)

pusilla Meigen, 1824

Subclytia Pandellé, 1894

rotundiventris (Fallén, 1820)

TACHININAE

Actia Robineau-Desvoidy, 1830

crassicornis (Meigen, 1824)

dubitata Herting, 1971 (syn.)

lamia (Meigen, 1838)

maksymovi Mesnil, 1952

nigroscutellata Lundbeck, 1927

pilipennis (Fallén, 1810)

resinellae (Schrank, 1781)

nudibasis Stein 1924 (syn.)

Anthomyiopsis Townsend, 1916

nigrisquamata (Zetterstedt, 1838)

Aphantorhaphopsis Townsend, 1926

Asiphona Mesnil, 1954 (syn.)

verralli (Wainwright, 1928)

Aphria Robineau-Desvoidy, 1830

longilingua Rondani, 1861

longirostris (Meigen, 1824)

Appendicia Stein, 1924

truncata (Zetterstedt, 1838)

Ceranthia Robineau-Desvoidy, 1830

abdominalis (Robineau-Desvoidy, 1863)¹

lichtwardtiana (Villeneuve, 1931)⁹

tristella (Herting, 1966)⁹

verneri (Andersen, 1996)⁹

Ceromya Robineau-Desvoidy, 1830

bicolor (Meigen, 1824)

silacea (Meigen, 1824)⁷

Cleonice Robineau-Desvoidy, 1863

callida (Meigen, 1824)
nitidiuscula (Zetterstedt, 1859)⁸

Demoticus Macquart, 1854

plebejus (Fallén, 1810)

Dexiosoma Rondani, 1856

caninum (Fabricius, 1781)

Eloceria Robineau-Desvoidy, 1863

delecta (Meigen, 1824)¹

Entomophaga Lioy, 1864

nigrohalterata (Villeneuve, 1921)⁹

Eurithia Robineau-Desvoidy, 1844

anthophila (Robineau-Desvoidy, 1830)
caesia (Fallén, 1810)
connivens (Zetterstedt, 1844)
consobrina (Meigen, 1824)
intermedia (Zetterstedt, 1844)¹
vivida (Zetterstedt, 1838)

Germaria Robineau-Desvoidy, 1830

ruficeps (Fallén, 1820)

Gymnocheta Robineau-Desvoidy, 1830

* *magna* Zimin, 1958
viridis (Fallén, 1810)

Hyalurgus Brauer & Bergenstamm, 1893

crucigera (Zetterstedt, 1838)
lucidus (Meigen, 1824)

Leskia Robineau-Desvoidy, 1830

aurea (Fallén, 1820)

Linnaemya Robineau-Desvoidy, 1830

Subgenus *Linnaemya* Robineau-Desvoidy, 1830

vulpina (Fallén, 1810)

Subgenus *Ophina* Robineau-Desvoidy, 1863

perinealis Pandellé, 1895

Loewia Egger, 1856

erecta Bergström, 2007¹⁰
phaeoptera authors, not Meigen, 1824. Misidentification
(see Bergström 2007)

foeda (Meigen, 1824)

Lydina Robineau-Desvoidy, 1830

arena (Meigen, 1824)

Lypha Robineau-Desvoidy, 1830

dubia (Fallén, 1810)
ruficauda (Zetterstedt, 1838)

Macquartia Robineau-Desvoidy, 1830

nudigena Mesnil, 1972
tenebricosa (Meigen, 1824)

Nemoraea Robineau-Desvoidy, 1830

pellucida (Meigen, 1824)

Nowickia Wachtl, 1894

alpina (Zetterstedt, 1849)
marklini (Zetterstedt, 1838)

Panzeria Robineau-Desvoidy, 1830

Ernestia Robineau-Desvoidy, 1830 (syn.)
rudis (Fallén, 1810)

Pelatachina Meade, 1894

tibialis (Fallén, 1810)

Peleteria Robineau-Desvoidy, 1830

rubescens (Robineau-Desvoidy, 1830)

Peribaea Robineau-Desvoidy, 1863

hertingi Andersen, 1996⁹
setinervis (Thomson, 1869)
fissicornis Strobl, 1909 (syn.)

Phytomyptera Rondani, 1845

Elfia Robineau-Desvoidy, 1850 (syn.)
cingulata (Robineau-Desvoidy, 1830)
minutissima (Zetterstedt, 1844)
nigrina (Meigen, 1824)
zonella (Zetterstedt, 1844)¹

Pseudopachystylum Mik, 1891

goniaeoides (Zetterstedt, 1838)

Siphona Meigen, 1803

boreata Mesnil, 1960
collini Mesnil, 1960
confusa Mesnil, 1961

cristata (Fabricius, 1805)
flavifrons Stæger, 1849
geniculata (De Geer, 1776)
grandistylum Pandellé, 1894
hokkaidensis Mesnil, 1957
nigricans authors, not Villeneuve, 1930
ingeræ Andersen, 1982¹¹
maculata Stæger, 1849
mesnili Andersen 1982
paludosa Mesnil, 1960
pauciseta Rondani, 1865
rossica Mesnil, 1961
setosa Mesnil, 1960
subarctica Andersen, 1996⁹
variata Andersen, 1982⁹

Solieria Robineau-Desvoidy, 1848

pacifica (Meigen, 1824)

Tachina Meigen, 1803

Subgenus *Eudoromyia* Bezzi, 1906

fera (Linnaeus, 1761)

”*Tachina* sp.”

magnicornis authors, not Zetterstedt, 1844. Misidentification (see Novotná et al. 2009)

Subgenus *Servillia* Robineau-Desvoidy, 1830

**ursina* Meigen,

Subgenus *Tachina* Meigen, 1803

grossa (Linnaeus, 1758)

Triarthria Stephens, 1829

setipennis (Fallén, 1810)

spinipennis Meigen, 1824 (syn.)

Trichactia Stein, 1924

pictiventris (Zetterstedt, 1855)⁷

Zophomyia Macquart, 1835

temula (Scopoli, 1763)

Species added to the Norwegian list

****Gymnocheta magna* Zimin, 1958**

(Figures 4B & 5D).

The genus *Gymnocheta* Robineau-Desvoidy, 1830 is represented in the Oriental, Nearctic and Palaearctic regions (O’Hara 2011), in the latter by eight species (Tschorsnig & Richter 1998). Only

two species are known from Europe; *Gymnocheta viridis* (Fallén, 1810) and *Gymnocheta magna* Zimin, 1958, both found in Sweden and Finland but until now only *G. viridis* has been published for Norway (Rognes 1981, 1986, Tschorsnig et al. 2004).

Like most members of the subfamily Tachininae, *Gymnocheta* does not lay eggs directly on the host, but in its vicinity and the larvae actively searches for hosts (Tschorsnig & Richter 1998). No hosts for *G. magna* are known. *G. magna* is associated with moorland and peatbogs; it flies early May to end of June in Central Europe, later than *G. viridis* but the flight-period overlaps (Tschorsnig & Herting 1994, Zeegers et al. 2001).

Identification. The most striking feature of the genus *Gymnocheta* is the shiny metallic colour, a character it shares only with *Chrysosomopsis* Townsend, 1916 in European tachinids. Usually green but sometimes blue, bronze red or violet. *Gymnocheta* can be recognized by combining the following features:

Head. Arista bare, cheeks bare, eyes hairy, palps black or dark brown (yellow in *Chrysosomopsis*).

Thorax. 3+4 dc (3+3 dc in *Chrysosomopsis*).

Wing. Vein m angled before wing margin, R5 open, deflection of m with an appendix about as long as r-m (without or only with a tiny appendix in *Chrysosomopsis*).

G. magna can be separated from *G. viridis* by combining the following features: Mouth-edge protruding beyond the base of the vibrissae and palps not dilated (Figure 4), femora metallic green in their basal two thirds, abdomen with prone hairs. Males: Parafrontalia in a stripe along the row of the frontal bristles metallic-green, notch of sternite 5 only about as long as its greatest width.

Material. RY, Karmøy: Bygnes (EIS 13) 7 July 2011, 1♀; 15 July 2011, 1♀.

Remarks. Specimens were collected on a small stretch of *Anthriscus* flowers growing on a hilltop bordering a lake to the west and quarry to the east.

****Prooppia nigripalpis* (Robineau-Desvoidy, 1847)**

(Figures 3 & 5G).

Phebellia sensu lato (Herting & Dely-Draskovits 1993: 184) was split by Herting (1960: 68) and Wood (1987: 1207) into two genera based on substantial differences in the reproductive mode of the females: species assigned to *Phebellia* Robineau-Desvoidy, 1846 have ovolarviparous females and species assigned to *Prooppia* Townsend, 1926 have oviparous females. The external similarities between *Phebellia* and *Prooppia* appear to be the result of convergence (Cerretti 2010: 182). This distinction between *Phebellia* and *Prooppia* has been adopted by some recent authors for Palearctic species (e.g., Richter & Wood 1995, Richter 2010, Tachi & Shima 2010, Cerretti 2010) and is followed here.

Prooppia is known from the Palearctic and Nearctic Regions (O'Hara 2011), there are two species known from Europe; *Prooppia nigripalpis* (Robineau-Desvoidy, 1847) and

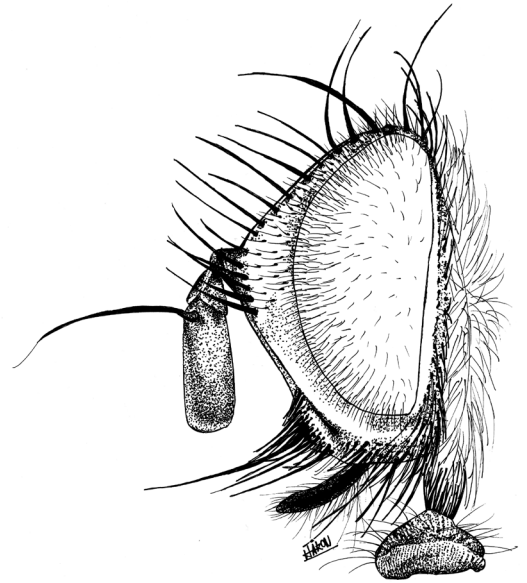


FIGURE 3. *Prooppia nigripalpis* (Robineau-Desvoidy, 1847) male.

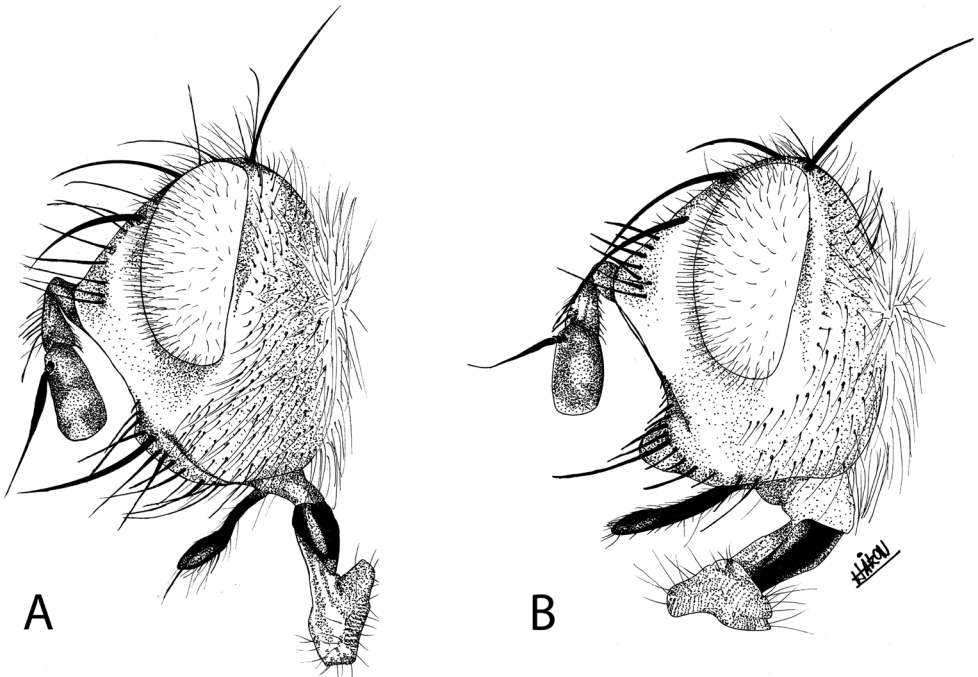


FIGURE 4A–B. A. *Gymnocheta viridis* (Fallen, 1810) female. B. *Gymnocheta magna* Zimin, 1958 female.

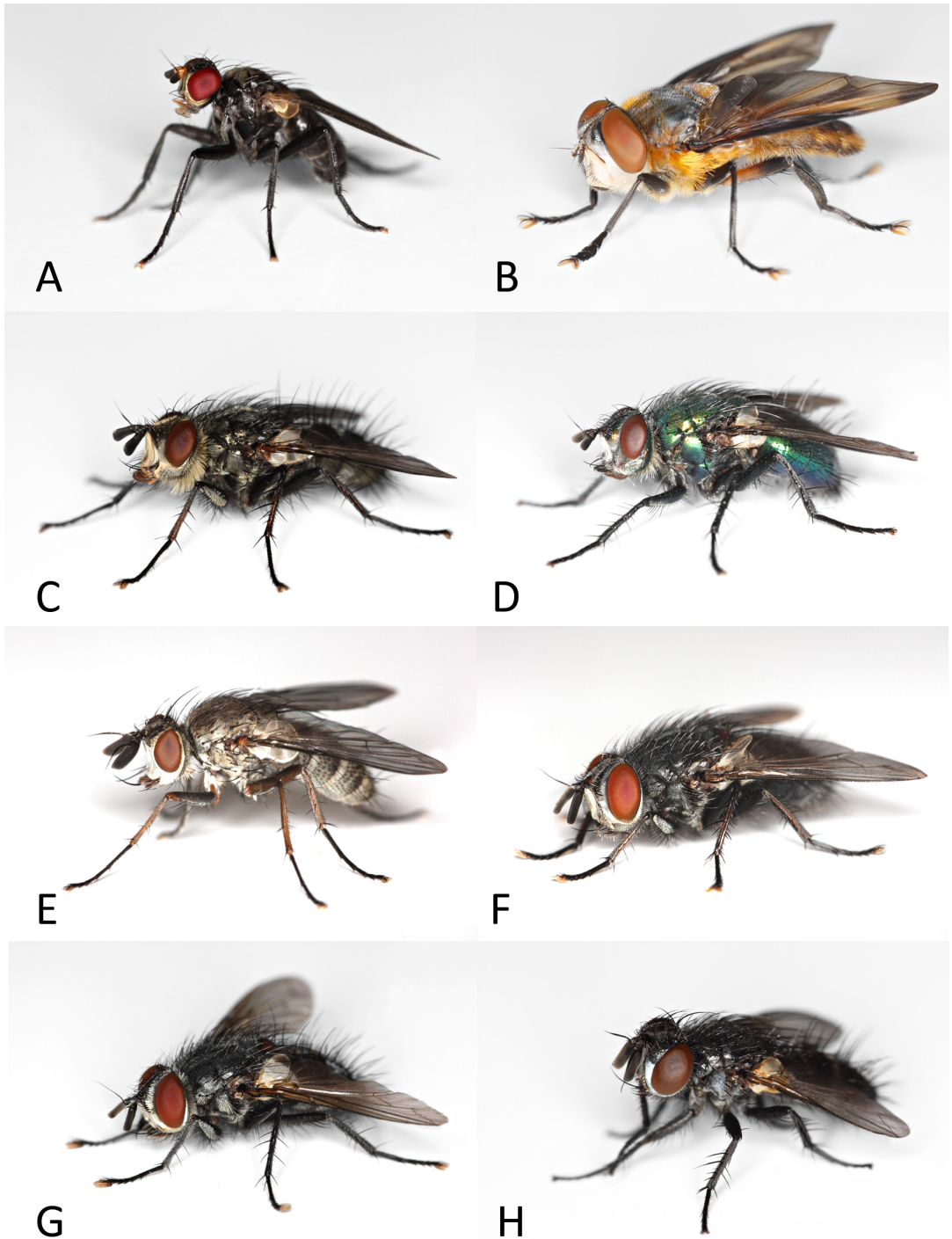


FIGURE 5A–H. **A.** *Cinochira atra* Zetterstedt, 1845 male. **B.** *Phasia hemiptera* (Fabricius, 1794) male. **C.** *Trafoia monticola* Brauer & Bergenstamm, 1893 male. **D.** *Gymnocheta magna* Zimin, 1958 female. **E.** *Siphona ingerae* Andersen, 1982 male. **F.** *Pales pavida* (Meigen, 1824) male. **G.** *Prooppia nigripalpis* (Robineau-Desvoidy, 1847) male. **H.** *Staurochaeta albocingulata* (Fallen, 1820) male.

Prooppia strigifrons (Zetterstedt, 1838), both are known from Sweden and Finland, but until now only *Prooppia strigifrons* have been recorded from Norway (Tschorsnig et al. 2004).

No hosts for *P. nigripalpis* are known (Herting 1960, Tschorsnig & Herting 1994).

Identification. *Prooppia* are blackish-grey medium sized flies. The genus can be identified by combining the following characters:

Head. Arista bare and thickened at most 2/5 of its length, cheeks bare, eyes haired, gena wider than the cheeks at the level of the antennal base, cheeks narrower than the 3rd antennal segment, palps black.

Thorax. Subapical scutellar bristles reach at least as far behind as do the apicals, lateral scutellar bristles 0.9–1.1x the length of the basal bristles. Pre-alar bristle longer and stronger than the notopleural bristles. Humeral bristles stand in the shape of a triangle with at most 1–2 much weaker additional bristles.

Abdomen. tergite 2 hollowed to the posterior edge, tergites 3 and 4 with discal bristles.

Wings. Vein m angled before wing margin but no appendix, cell R5 open.

Legs. Middle tibia with 2–3 anterodorsals, hind tibia with 2 dorsal apical spurs.

P. nigripalpis can be separated from *P. strigifrons* by combining the following: mouthedge not protruding (Figure 3) and tergites dusted $\frac{1}{2}$ – $\frac{3}{4}$ of their length.

Material. RY, Karmøy: Slettavatnet (EIS 13) 11 August 2011, 1♂.

Remarks. Sheltered meadow surrounded by tall conifers and deciduous forest, low vegetation.

**Tachina ursina* Meigen, 1824

The genus *Tachina* Meigen, 1803 is known from the Oriental, Nearctic, Neotropical and Palaearctic regions (O'Hara 2011). In Europe the genus is represented by 13 species (Novotná et al. 2009). *Tachina ursina* Meigen, 1824 belongs to the subgenus *Servillia* Robineau-Desvoidy, 1830 of which there are two additional species known from Europe: *Tachina lurida* (Fabricius 1781) and *Tachina nigrohirta* (Stein 1924), only *T. ursina* is known from Sweden and Finland.

T. ursina is associated with warm and dry

areas, especially forest edges. It flies from end of March to mid-May in in Central Europe.

No hosts for *T. ursina* are known (Tschorsnig & Herting 1994).

Identification. *Tachina* species are large flies (9–20 mm) that can be recognized by combining the following:

Head. Arista bare, cheeks hairy, eyes bare, ocellar bristles present, palps thin, few hairs or bristles above the vibrissa, 3rd antennal not longer than the narrow 2nd.

Thorax. Prosternum bare, propleuron hairy.

Abdomen. Often partly red or yellow.

Wings. Vein m angled before wing margin, R5 without a petiole.

Legs. Hind coxae posterodorsally haired.

European species of the subgenus *Servillia* all have a similar habitus to that of a bee; thorax with long hairs as opposed to the typical bristles only.

Tachina ursina can be separated from *T. lurida* and *T. nigrohirta* by combining the following: Thorax: Dorsal hairs pale yellow or whitish (predominantly black in *T. nigrohirta*). Crossed apical scutellar bristles missing or hair-like (Crossed apicals usually strong in *T. lurida*). 2 or 3 sternopleural bristles (1 (seldom 0 or 2) in *T. lurida*). Abdomen: Tergite 5 at the anterior edge almost always with a narrow band of dusting (missing in *T. lurida*). Marginal bristles of tergite 4 as a rule shorter than the segment (longer in *T. nigrohirta*).

Material. Ø, Halden: Endetjern (EIS 12) 1 May 2012, 1♂ (leg. Magne Pettersen)

Additional records

DEXIINAE

Campylocheta praecox (Meigen, 1824)

Material. RY, Karmøy: Skår (EIS 13) 25 March 2011, 1♂; 9 April 2011, 1♀; 25 April 2011, 1♀.

Remarks. Deciduous woodland, tree trunks.

Eriothrix rufomaculata (De Geer, 1776)

Material. RY, Karmøy: Grodvatnet (EIS 13) 6 July 2011, 2♂♂; Kopervik 26 August 2011, 1♀;

Skår: 28 June 2011, 1♀; Slettavatnet: 8 September 2011, 1♀; Visnes: 19 August 2005, 2♀♀ (leg./coll. Magne-Henrik Velde); Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 1♀.

Remarks. Meadows and gardens, flowers and low vegetation.

***Trafoia monticola* Brauer & Bergenstamm, 1893**

(Figure 5C)

Material. RY, Karmøy: Slettavatnet (EIS 13) 10 August 2011, 1♂; 18 August 2011, 2♀♀; 20 August 2011, 1♀ (coll. Theo Zeegers); 23 August 2011, 1♀ (coll. Theo Zeegers).

Remarks. A rare species, just recently recorded in Norway for the first time (Ødegaard et al. 2009). Meadow surrounded by conifers and deciduous forest, bare ground and stones.

***Voria ruralis* (Fallen, 1810)**

Material. RY, Karmøy: Bygnes (EIS 13) 8 September 2011, 1♀; Slettavatnet 10 August 2011, 1♂; 17 August 2011, 1♀; 20 August 2011, 2♀♀; 21 August 2010, 1♂2♀♀; 23 August 2011, 2♀♀; 30 August 2011, 3♀♀.

Remarks. Meadows and marshes, low vegetation.

EXORISTINAE

***Admontia blanda* (Fallen, 1820)**

Material. RY, Karmøy: Skår (EIS 13) 1 August 2011, 1♀.

Remarks. Rural garden.

***Allophorocera ferruginea* (Meigen, 1824)**

Material. RY, Karmøy: Bygnes (EIS 13) 7 July 2011, 1♂; 9 July 2011, 1♂; Fotvatnet 25 July 2011, 1♀; Grodvatnet 16 August 2011, 1♂; 5 September 2011, 1♂1♀ (in copula); 24 September 2011, 1♀; Husemyra 23 July 2011, 1♂1♀; Skår 28 June 2011, 1♂; 1 July 2011, 1♂; Slettavatnet 10 August 2011, 1♂; 18 August 2011, 2♀♀; 30 August 2011, 1♀; Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 1♂.

Remarks. Meadows, heathland and gardens, low vegetation and flowers.

***Belida angelicae* (Meigen, 1824)**

Material. RY, Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 2♂♂.

***Cyzenis albicans* (Fallen, 1810)**

Material. HOY, Sveio: Møstre (EIS 22) 15 May 2011, 1♀; RY, Karmøy: Skår (EIS 13) 13 April 2011, 1♀; 14 April 2011, 1♂; 17 May 2011, 1♂; 22 May 2011, 1♀.

Remarks. Gardens, bare ground and low vegetation.

***Gonia picea* (Robineau-Desvoidy, 1830)**

Material. RY, Karmøy: Borgaredalen (EIS 13) 22 April 2011, 1♀; Bygnes 24 April 2011, 1♀; Grodvatnet 21 April 2011, 1♂.

Remarks. Heathland and roadsides, bare ground and low vegetation.

***Hubneria affinis* (Fallen, 1810)**

Material. RY, Karmøy: Bygnes (EIS 13) 9 July 2011, 1♀.

Remarks. Meadow, low vegetation.

***Medina collaris* (Fallen, 1820)**

Material. RY, Karmøy: Bygnes (EIS 13) 03 August 2011, 2♂♂; Grodvatnet 18 June 2011, 1♂; 28 July 2011, 1♀; 13 August 2011, 1♀; 29 August 2011, 1♀; Husemyra 23 July 2011, 1♂; Kopervik 26 August 2011, 1♀; Skår 4 June 2011, 1♂; Slettavatnet 8 August 2011, 1♂.

Remarks. Meadows and shrubby areas, *Anthriscus* flowers and foliage.

***Meigenia mutabilis* (Fallen, 1810)**

Material. RY, Karmøy: Skår (EIS 13) 6 June 2011, 1♂; 2 August 2011, 1♂; 15 August 2011, 1♂; Slettvatnet 11 August 2011, 1♂.

Remarks. Meadows and marshland, foliage.

***Oswaldia muscaria* (Fallen, 1810)**

Material. HOY, Sveio: Møstre (EIS 22) 15 May 2011, 1♂2♀♀; RY, Karmøy: Skår (EIS 13) 4 May 2011, 1♂; 13 May 2011, 1♂; 17 May 2011, 1♂; 19 May 2011, 1♂; 25 May 2011, 1♂; 1 June 2011, 1♀; 8 June 2011, 1♀; 10 June 2011, 1♀; 18 June 2011, 1♀; 28 June 2011, 1♂; Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 1♀.

Remarks. Meadows and gardens, shrubs and low vegetation.

***Pales pavida* (Meigen, 1824)**

(Figure 5F)

Material. RY, Karmøy: Grodvatnet (EIS 13) 16 June 2011, 1♀.

Remarks. Just recently recorded in Norway for the first time (Haraldseide 2011). Roadside (mixed woodland), foliage.

***Phebellia glauca* (Meigen, 1824)**

Material. RY, Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 2♂♂.

***Platymya fimbriata* (Meigen, 1824)**

Material. RY, Karmøy: Grodvatnet (EIS 13) 16 September 2011, 1♀; Husemyra 24 June 2011, 1♂; Slettavatnet 29 July 2011, 1♂; 2 August 2011, 1♂1♀ (in copula); 1♂; 11 August 2011, 1♂; 21 August 2011, 1♂.

Remarks. Coniferous forest-edges and meadows, bare ground and low vegetation.

***Senometopia pollinosa* (Mesnil, 1941)**

Material. RY, Karmøy: Husemyra (EIS 13) 23 July 2011, 1♂.

Remarks. Abandoned pasture, grass.

***Staurochaeta albocingulata* (Fallen, 1820)**

(Figure 5H)

Material. RY, Karmøy: Grodvatnet (EIS 13) 28 July 2011, 1♂.

Remarks. Heathland with scattered *Juniperus*, foliage.

PHASIINAE

***Cinochira atra* Zetterstedt, 1845**

(Figure 5A)

Material. RY, Karmøy: Skår (EIS 13) 1 July 2011, 1♂.

Remarks. Deciduous woodland, low vegetation and tree trunks.

***Gymnosoma nudifrons* Herting, 1966**

Material. RY, Karmøy: Fotvatnet (EIS 13) 25 July 2011, 2♀♀; Skår 21 July 2010, 1♀.

Slettavatnet 30 July 2011, 1♂1♀; 11 August 2011, 1♀.

Remarks. Meadows and roadsides, *Anthriscus* flowers.

***Phasia hemiptera* (Fabricius, 1794)**

(Figure 5B)

Material. RY, Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 4♂♂2♀♀.

Remarks. Just recently recorded in Norway for the first time (Gammelmo & Sagvolden 2007). Garden, foraging on *Persicaria affinis*.

TACHININAE

***Actia crassicornis* (Meigen, 1824)**

Material. RY, Karmøy: Grodvatnet (EIS 13) 11 September 2011, 1♀; Husemyra 2 July 2011, 1♀; 23 July 2011, 2♀♀; Slettavatnet 10 August 2011, 1♀; 11 August 2011, 1♂.

Remarks. Meadows and heathland, low vegetation and *Anthriscus* flowers.

***Actia nigroscutellata* Lundbeck, 1927**

Material. RY, Karmøy: Skår (EIS 13) 15 August 2011, 1♀.

Remarks. Marsh, *Anthriscus* flower.

***Actia pilipennis* (Fallen, 1810)**

Material. RY, Karmøy: Slettavatnet (EIS 13) 10 August 2011, 1♀.

Remarks. Meadow, *Anthriscus* flower.

***Dexiosoma caninum* (Fabricius, 1781)**

Material. RY, Tysvær: Nedstrand (EIS 14) 1 August 2009, 1♂ (leg./coll. Magne-Henrik Velde); 6 August 2011, 1♂ (leg. Leiv Tommas Haugen).

***Hyalurgus lucidus* (Meigen, 1824)**

Material. RY, Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 2♂♂.

Remarks. Roadside, *Anthriscus* flowers.

***Linnaemya vulpina* (Fallen, 1810)**

Material. RY, Karmøy: Grodvatnet (EIS 13) 6 July 2011, 1♂; 16 September 2011, 1♀; Husemyra 23 July 2011, 1♀; 22 July 2010, 1♂; Slettavatnet 29 July 2011, 1♂; 20 August 2011, 1♀.

Remarks. Heathland and meadows, low vegetation, tree trunks and *Anthriscus* flowers.

***Loewia foeda* (Meigen, 1824)**

Material. RY, Karmøy: Bygnes (EIS 13) 7 July 2011, 1♂; 25 July 2011, 1♂; Grodvatnet 29 August 2011, 1♀; 29 September 2011, 1♀; Slettavatnet 11 August 2011, 1♂.

Remarks. Meadows, *Anthriscus* flowers and low vegetation.

***Lydina aenea* (Meigen, 1824)**

Material. RY, Karmøy: Bygnes (EIS 13) 25 July 2011, 1♂; Skår 11 August 2011, 1♀; 8 September 2011, 1♀; Slettavatnet 29 July 2011, 1♀.

Remarks. Marshes, meadows and heathland, shrubs and low vegetation.

***Lypha dubia* (Fallen, 1810)**

Material. RY, Karmøy: Husmyra (EIS 13) 19 June 2011, 1♀; 30 June 2011, 1♀; Skår 8 April, 2011, 1♂; 9 April 2011, 2♂♂; 11 April 2011, 1♂; 25 April 2011, 1♂1♀; 12 May 2011, 1♂; 17 May 2011, 1♂; 24 June 2011, 1♀.

Remarks. Woodland and gardens, tree trunks, low vegetation and bare ground.

***Eurithia connivens* (Zetterstedt, 1844)**

Material. RY, Karmøy: Skår (EIS 13) 13 August 2010, 1♀; 6 July 2011, 2♂♂; 13 July 2011, 5♂♂; Slettavatnet July 2011, 1♂; 11 August 2011, 1♀; Suldal: Ropeid, Finnvik (EIS 14) 11 July 2011, 2♀♀.

Remarks. Meadows and gardens, *Anthriscus* flowers and low vegetation.

***Siphona confusa* Mesnil, 1961**

Material. RY, Karmøy: Skår (EIS 13) 28 April 2011, 1♂1♂ (coll. Theo Zeegers); 4 May 2011, 3♂♂; 5 May 2011, 1♂1♀ (in copula); 13 May 2011, 1♀; 14 May 2011, 1♀; 27 May 2011, 1♀.

Remarks. Garden, bare ground and low vegetation, flowers.

***Siphona geniculata* (De Geer, 1776)**

Material. RY, Karmøy: Grodvatnet (EIS 13)

5 September 2011, 3♀♀; 16 September 2011, 1♀; 29 September 2011, 2♀♀; 30 September 2011, 1♀; Skår 6 June 2011, 1♀; 1 August 2011, 1♀; Slettavatnet 18 June 2011, 1♀; 1 August 2011, 1♂; 8 September 2011, 1♀.

Remarks. Meadows and heathland, low vegetation and flowers.

***Siphona ingerae* Andersen, 1982**

(Figure 5E)

Material. RY, Karmøy: Skår (EIS 13) 10 April 2011, 1♂.

Remarks. A rare species (Rognes 1995, Andersen 1996). Rural garden/deciduous forest-edge, bare ground.

***Siphona setosa* Mesnil, 1960**

Material. RY, Karmøy: Grodvatnet (EIS 13) 29 August 2011, 1♀; 18 September 2011, 1♀.

Remarks. Heathland.

***Tachina fera* (Linnaeus, 1761)**

Material. RY, Karmøy: Bygnes (EIS 13) 25 July 2011, 1♂; Grodvatnet 16 June 2011, 1♀; Melstokkevatnet 6 July 2010, 1♂ (leg./coll. Magne-Henrik Velde); Slettavatnet 11 July 2010, 1♂; 22 July 2010, 1♂; 29 July 2011, 3♀♀.

Remarks. Meadows, *Anthriscus* flowers.

***Tachina grossa* (Linnaeus, 1758)**

(Figure 1)

Material. RY, Karmøy: Blikshavn (EIS 13) 23 July 2001, 1♂ (leg./coll. Magne-Henrik Velde); Husemyra 14 July 2011, 1♀; 23 July 2011, 1♂; Slettavatnet 23 July 2010, 2♀♀; Tysvær: Yrkje (EIS 14) 8 August 2005, 1♀ (leg./coll. Magne-Henrik Velde).

Remarks. Meadows, *Anthriscus* flowers.

***Triarthria setipennis* (Fallen, 1810)**

Material. HOY, Sveio: Møstre (EIS 22) 15 May 2011, 1♀; RY, Karmøy: Skår (EIS 13) 11–19 March 2011, 7♂♂2♀♀ Ex Puparia indoors; 17 May 2011, 1♀.

Remarks. Specimens Ex Puparia were collected during the winter. Pupae were found inside the hollow stems of *Anthriscus* plants, often together with the dead Dermapteran host.

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