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Checklist of the Diptera families Acartophthalmidae, Canacidae (including Tethinidae), Carnidae and Milichiidae of Finland (Insecta)

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Abstract

A checklist of 29 species in the smaller carnoid families Acartophthalmidae, Canacidae, Carnidae and Milichiidae (Diptera) recorded from Finland is presented. Tethinidae are also included as a subfamily of Canacidae. *Phyllomyza tetragona* Hendel is removed from the list as no reliable records of this species within the post-1944 borders of Finland could be found.

Keywords

Checklist, Finland, Diptera, biodiversity, faunistics

Introduction

The superfamily Carnoidea (*sensu* Buck 2006 but excluding Cryptochetidae, see Wiegmann et al. 2011) includes seven families. The largest by far is Chloropidae, treated in a separate article in this issue. Four of the remaining six are found in Finland: Acar-

Table 1. Number of species by family.

Family	Number of species in			Level of knowledge
	World (Pape et al. 2011)	Europe	Finland	
Acartophthalmidae	5	3	3	average
Canacidae	322	38	1	average
Carnidae	93 (Brake 2011)	39	13	poor
Milichiidae	278	43	12–13	average

tophthalmidae, Canacidae, Carnidae and Milichiidae. The remaining two families, Inbiomyiidae and Australimyziidae, are respectively restricted to the Neotropical and Australasian Regions.

All four families are rather poorly studied in Finland. The presence of additional, even undescribed, species is very likely in Carnidae and Milichiidae. The identification of all species of *Meoneura* was verified from male genitalia during the preparation of this checklist with one exception: the male of *Meoneura elongella* (Zetterstedt, 1838) remains undescribed. It is the only North European *Meoneura* with black halteres and as such easily recognised.

World catalogues have recently been published for Canacidae (Munari and Mathis 2010), Carnidae (Brake 2011), and Milichiidae (Brake 2000). The Finnish species of these families were last listed in Hackman (1980).

Checklist

suborder Brachycera Macquart, 1834
 clade Eremoneura Lameere, 1906
 clade Cyclorrhapha Brauer, 1863
 infraorder Schizophora Becher, 1882
 clade Muscaria Enderlein, 1936
 parvorder Acalyptratae Macquart, 1835
 superfamily Carnoidea Newman, 1834

ACARTOPHTHALMIDAE Czerny, 1928
ACARTOPHTHALMUS Czerny, 1902
Acartophthalmus bicolor Oldenberg, 1910
Acartophthalmus nigrinus (Zetterstedt, 1848)
Acartophthalmus pusio Frey, 1947

CANACIDAE Jones, 1906
 PELOMYIINAE Foster, 1976
PELOMYIELLA Hendel, 1934
Pelomyiella cinerella (Haliday, 1837)

CARNIDAE Newman, 1834

CARNUS Nitzsch, 1818

Carnus hemapterus Nitzsch, 1818

MEONEURA Rondani, 1856

Meoneura anceps Frey, 1935

Meoneura elongella (Zetterstedt, 1838)

Meoneura flavifacies Collin, 1930

Meoneura glaberrima Becker, 1907

= *neglecta* Collin, 1930

Meoneura lacteipennis (Fallén, 1823)

Meoneura lamellata Collin, 1930

Meoneura minutissima (Zetterstedt, 1860)

Meoneura neottiophila Collin, 1930

Meoneura obscurella (Fallén, 1823)

Meoneura prima (Becker, 1903)

= *seducta* Collin, 1937

Meoneura triangularis Collin, 1930

Meoneura vagans (Fallén, 1823)

MILICHIIDAE Schiner, 1862

MADIZINAE Czerny, 1909

DESMOMETOPA Loew, 1866

Desmometopa m-nigrum (Zetterstedt, 1848)

Desmometopa sordida (Fallén, 1820)

Desmometopa varipalpis Malloch, 1927

LEPTOMETOPA Becker, 1903

Leptommetopa latipes (Meigen, 1830)

MADIZA Fallén, 1810

Madiza glabra Fallén, 1820

MILICHIINAE Schiner, 1862

MILICHA Meigen, 1830

Milichia ludens (Wahlberg, 1847)

PHYLLOMYZINAE Curran, 1934

NEOPHYLLOMYZA Melander, 1913

Neophyllomyza acyglossa (Villeneuve, 1920)

PHYLLOMYZA Fallén, 1810

? *Phyllomyza equitans* (Hendel, 1919)

Phyllomyza formicae Schmitz, 1923

Phyllomyza longipalpis (Schmitz, 1924)

Phyllomyza rubricornis Schmitz, 1923

Phyllomyza securicornis Fallén, 1823

Phyllomyza silesiaca (Duda, 1935)

Excluded species

Phyllomyza tetragona Hendel, 1924 not found within present borders
Tethina grisea (Fallén, 1823) misidentification?
Tethina illota (Haliday, 1838)

Notes

Meoneura. At least two additional, possibly undescribed species occur in Finland.
Phyllomyza equitans (Hendel, 1919). Only females have been found in Finland.
Tethina grisea (Fallén, 1823) and *T. illota* (Haliday, 1838). Munari and Mathis (2010) list two *Tethina* species from Finland. Krogerus (1932) is mentioned as the source for the *T. grisea* record; there is no listed source for the record of *T. illota*. An older version of the world catalogue (Mathis and Munari 1996) mentions only *T. grisea* from Finland. No Finnish specimens of these species could be found in the Finnish Museum of Natural History (MZH) where most of the material collected by Krogerus is kept, or in any other Finnish insect collection. Unfortunately the identifications in Krogerus (1932) are rather unreliable. It is possible that *Tethina* species occur in Finland, but none are included in this checklist because the evidence for their presence is, in my opinion, insufficient.

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