

Checklist of the fly families Chyromyidae and Heleomyzidae (Diptera) of Finland

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Abstract

A Finnish checklist of the sphaeroceroid fly families Chyromyidae and Heleomyzidae is provided.

Keywords

Species list, Finland, Diptera, biodiversity, faunistics

Introduction

The superfamily Sphaeroceroidea is a medium-sized one, with two families of moderate diversity, Sphaeroceridae (1550 species) and Heleomyzidae (~720 species), and the small family Chyromyidae. The enigmatic afrotropical *Mormotomyia hirsuta* Austen, 1936 was once placed near Sphaeroceridae but it is now seen as an ephydroid fly (Kirk-Spriggs et al. 2011). McAlpine (2007) has proposed an alternative concept for Sphaeroceroidea with Sphaeroceridae and Heleomyzidae united as a single family called Heteromyzidae. This proposal has not gained significant support and for the purposes of this checklist the traditional concept of family Sphaeroceridae is retained.

Table 1. Number of species by family.

Family	Number of species in			Level of knowledge
	World (Pape et al. 2011)	Europe	Finland	
Chyromyidae	138	59	4	poor–average
Heleomyzidae	727	175	61	average

There is no general agreement on the relationships of various heleomyzid tribes. Several different schemes for subfamilies have been proposed (see McAlpine 2007, McAlpine and Woodley 2010). Some taxa treated here as heleomyzids (primarily Trixoscelidinae, Chiropteromyzinae, Heteromyzinae and Borboropsini) may deserve full family status. As a conservative approach this checklist follows Marshall (2012) and keeps them as subfamilies and tribes. The heleomyzid subfamilies and tribes are listed alphabetically.

The Finnish chyromyids are small yellow flies with (at least while alive) iridescent blue or green eyes. Chyromyids are rarely collected and little is known about their ecology or the proper place of the family within Sphaeroceroidea. They may actually be a specialized lineage arising from within Heleomyzidae *sensu lato*.

Two of the three sphaeroceroid families are treated in this paper. The largest, Sphaeroceridae, is covered in a separate paper in this issue of ZooKeys. The Finnish species of Heleomyzidae and Chyromyidae were last listed by 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 Sphaeroceroidea Macquart, 1835

CHYROMYIDAE Hendel, 1916
CHYROMYINAE Hendel, 1916
CHYROMYA Robineau-Desvoidy, 1830
Chyromya flava (Linnaeus, 1758)
Chyromya oppidana (Scopoli, 1763)
GYMNOCHIROMYIA Hendel, 1933
Gymnochiromyia flavella (Zetterstedt, 1848)
 = *minima* (Becker, 1904)
Gymnochiromyia inermis (Collin, 1933)

HELEOMYZIDAE Westwood, 1840
BORBOROPSINAE Griffiths, 1972

BORBOROPSIS Czerny, 1902*Borboropsis puberula* (Zetterstedt, 1838)= *fulviceps* (Strobl, 1898)**CHIROPTEROMYZINAE** Frey, 1952**CHIROPTEROMYZA** Frey, 1952*Chiropteromyza broerseii* (de Meijere, 1946)= *wegeli* Frey, 1952**NEOSSOS** Malloch, 1927= *Ornitholeria* Frey, 1930*Neossos nidicola* (Frey, 1930)**HETEROMYZINAE** Fallén, 1820**HETEROMYZA** Fallén, 1820*Heteromyza atricornis* Meigen, 1830*Heteromyza oculata* Fallén, 1820*Heteromyza rotundicornis* (Zetterstedt, 1846)**TEPHROCHLAMYS** Loew, 1862*Tephrochlamys flavipes* (Zetterstedt, 1838)*Tephrochlamys rufiventris* (Meigen, 1830)= *lapponica* (Czerny, 1924)*Tephrochlamys steniusi* Frey, 1930*Tephrochlamys tarsalis* (Zetterstedt, 1847)**HELEOMYZINAE** Westwood, 1840

tribe Heleomyzini Westwood, 1840

GYMNOMUS Loew, 1863*Gymnomus amplicornis* (Czerny, 1924)**HELEOMYZA** Fallén, 1810= *Helomyza* Fallén, 1820 emend.= *Leria* Robineau-Desvoidy, 1830**sg. *Heleomyza*** Fallén, 1810*Heleomyza borealis* Boheman, 1865= *czernyi* Collart, 1933= *modesta* misid.*Heleomyza hackmani* Frey, 1950*Heleomyza pleuralis* (Becker, 1907)*Heleomyza serrata* (Linnaeus, 1758)**MORPHOLERIA** Garrett, 1921**sg. *Spanoparea*** Czerny, 1924*Morpholeria dudai* (Czerny, 1924)*Morpholeria kerteszi* Czerny, 1924*Morpholeria obscuriventris* (Zetterstedt, 1847)*Morpholeria ruficornis* (Meigen, 1830)**NEOLERIA** Malloch, 1919*Neoleria inscripta* (Meigen, 1830)

- = *minuta* (Zetterstedt, 1838)
Neoleria prominens (Becker, 1897)
 = *tibialis* misid.
Neoleria ruficauda (Zetterstedt, 1847)
Neoleria ruficeps (Zetterstedt, 1838)
SCOLIOCENTRA Loew, 1862
sg. *Chaetomus* Czerny, 1924
Scoliocentra confusa (Wahlgren, 1918)
Scoliocentra flavotestacea (Zetterstedt, 1838)
sg. *Leriola* Gorodkov, 1962
Scoliocentra brachypterna (Loew, 1873)
Scoliocentra nigrinervis (Wahlgren, 1918)
sg. *Scoliocentra* Loew, 1862
Scoliocentra dupliciseta (Strobl, 1894)
Scoliocentra scutellaris (Zetterstedt, 1838)
Scoliocentra villosa (Meigen, 1830)
 tribe Oecotheini Gorodkov, 1972
ECCOPTOMERA Loew, 1862
Eccoptomera infuscata Wahlgren, 1918
Eccoptomera longiseta (Meigen, 1830)
Eccoptomera marginicornis Czerny, 1924
Eccoptomera microps (Meigen, 1830)
Eccoptomera obscura (Meigen, 1830)
Eccoptomera ornata Loew, 1862
Eccoptomera pallescens (Meigen, 1830)
OECOTHEA Haliday, 1837
Oecothea fenestralis (Fallén, 1820)
 tribe Orbelliini Gorodkov, 1972
ORBELLIA Robineau-Desvoidy, 1830
Orbellia nivicola Frey, 1913
 SUILLIINAE Wahlgren, 1917
SUILLIA Robineau-Desvoidy, 1830
 = ***Allophyla*** Loew, 1862
Suillia affinis (Meigen, 1830)
Suillia apicalis (Loew, 1862)
Suillia atricornis (Meigen, 1830)
Suillia bicolor (Zetterstedt, 1838)
Suillia femoralis (Loew, 1862)
Suillia flava (Meigen, 1830)
Suillia flavifrons (Zetterstedt, 1838)
 = *nudipes* (Czerny, 1932)
Suillia fuscicornis (Zetterstedt, 1847)
Suillia humilis (Meigen, 1830)

- = *inornata* (Loew, 1862)
Suillia laevifrons (Loew, 1862)
Suillia lineitergum (Pandellé, 1901)
 = *strobltii* (Czerny, 1904)
Suillia lurida (Meigen, 1830)
Suillia mikii (Pokorny, 1886)
Suillia nemorum (Meigen, 1830)
Suillia pallida (Fallén, 1820)
Suillia parva (Loew, 1862)
 = *collini* Hackman, 1972
 = *flavifrons* auct. nec (Zetterstedt, 1838)
Suillia quadrilineata Czerny, 1924
Suillia vaginata (Loew, 1862)
 TRIXOSCELIDINAE Hendel, 1916
TRIXOSCELIS Rondani, 1856
Trixoscelis frontalis (Fallén, 1823)
 ? = *canescens* misid. (see Notes)
Trixoscelis marginella (Fallén, 1823)
Trixoscelis obscurella (Fallén, 1823)
Trixoscelis similis Hackman, 1970

Notes

***Chyromya oppidana* (Scopoli, 1763).** Found only inside houses and farm buildings in Finland.

***Orbellia nivicola* Frey, 1913.** This species was synonymized with *O. myiopiiformis* R.-D. by Storå (1958), but Frey (1958) defended its validity. The status of *O. nivicola* as a species needs verification.

***Trixoscelis canescens* (Loew, 1865).** This species was originally described on the basis of a single female. Soós (1979) examined the type and revived the name from synonymy with *T. frontalis*. Woźnica (2008) provided an illustrated diagnosis for *T. canescens* and synonymized *T. gigans* Carles-Tolrá, 2001 and *T. fumipennis* Papp, 2005 with it. The species was recently recorded from Finland by Flinck and Kahanpää (2013). Specimens with darkened costal veins and dorsal abdominal surfaces, both proposed diagnostic characters of *T. canescens*, are common among Finnish *T. frontalis* material (see Fig. 8 in Flinck and Kahanpää 2013). Finnish males with these features have genitalia identical with those illustrated for *T. frontalis* by Hackman (1970) and quite unlike the genitalia of *T. gigans* (= *fumipennis* Papp). The male specimen mentioned in Flinck and Kahanpää (2013) was later dissected and it belongs to *T. frontalis*. The external characters (darkened costa and dorsum of abdomen) can not be used to reliably separate *T. canescens* from *T. frontalis*. The Finnish records of *T. canescens* are probably all misidentifications of *T. frontalis*.

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