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Checklist of the fly families Chamaemyiidae and Lauxaniidae of Finland (Insecta, Diptera)

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Abstract

A revised checklist of the Chamaemyiidae and Lauxaniidae (Diptera) recorded from Finland is presented.

Keywords

Checklist, Finland, Diptera, biodiversity, faunistics

Introduction

Three families are currently recognized in Lauxanoidea, two of which are present in Finland. The exception is the beetle flies (Celyphidae), which are restricted to the Oriental and Afrotropical Regions.

The silvery white flies of the family Chamaemyiidae are poorly studied in Finland. Reliable identification of most species is, at least for now, only possible by the examination of male genitalia. Unfortunately many species have not been adequately (re)described which has resulted in much confusion about the proper use of species names. It is likely that several additional chamaemyiid species will be found in Finland. Of the

two subfamilies of chamaemyiids, Cremifaniinae is absent from Finland. Chamaemyiinae is split into two tribes, Chamaemyiini and Leucopini, although the monophyly of the former has not yet been demonstrated (Gaimari 2010).

The lauxaniids are better known both in Finland and worldwide. Additional species are still likely to be found in the country, especially among *Homoneura* and *Sapromyza*. Of the three subfamilies, the Eurychoromyiinae, a strictly Neotropical group (Gaimari and Silva 2010a), is absent from the Palaearctic. The other two subfamilies, Homoneurinae and Lauxaniinae, are both present in Finland The subfamily Lauxaniinae is probably paraphyletic as currently defined (Gaimari and Silva 2010b).

The Finnish species of these families were last listed by Hackman (1980). Kahanpää (2013) reviewed the changes in the Finnish lauxaniid fauna since 1980.

Number of species (Chamaemyiidae, Lauxaniidae):
World: 336 (S. Gaimari, pers. comm. March 18, 2014), 1895 species (Pape et al. 2011)
Europe: 107, 157 species (Fauna Europaea)
Finland: 27–28, 45 species
Faunistic knowledge level in Finland: poor, average

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 Lauxanoidea Macquart, 1835

CHAMAEMYIIDAE Hendel, 1910
CHAMAEMYIINAE Hendel, 1910
tribe Chamaemyiini Hendel, 1910
ACROMETOPIA Schiner, 1862
Acrometopia wahlbergi (Zetterstedt, 1846)
CHAMAEMYIA Meigen, 1803
Chamaemyia aestiva Tanasijtshuk, 1970
Chamaemyia aridella (Fallén, 1823)
Chamaemyia elegans (Panzer, 1809)
Chamaemyia emiliae Tanasijtshuk, 1970
Chamaemyia flavipalpis (Haliday, 1838)
Chamaemyia geniculata (Zetterstedt, 1838)
? *Chamaemyia herbarum* (Robineau-Desvoidy, 1830) *sensu* Coe, 1943
Chamaemyia juncorum (Fallén, 1823)
Chamaemyia paludosa Collin, 1966

Chamaemyia polystigma (Meigen, 1830)
Chamaemyia sylvatica Collin, 1966
PAROCHTHIPHILA Czerny, 1904
sg. *Euestelia* Enderlein, 1927
Parochthiphila coronata (Loew, 1858)
sg. *Parochthiphila* Czerny, 1904
Parochthiphila spectabilis (Loew, 1858)
tribe Lecopini Hendel, 1928
ANCHIOLEUCOPIS Tanasijtshuk 1997
Anchioleucopis geniculata (Zetterstedt, 1855)
LEUCOPIS Meigen, 1830
Leucopis annulipes Zetterstedt, 1848
Leucopis argentata Heeger, 1848
= *conciliata* McAlpine & Tanasijtshuk, 1972
= *argenticollis* auct. nec Zetterstedt, 1848
Leucopis atritarsis Tanasijtshuk, 1958
Leucopis glyphinivora Tanasijtshuk, 1958
Leucopis griseola (Fallén, 1823)
Leucopis sorbi Tanasijtshuk, 1986
Leucopis sp. cf. *szepligetii* Aczel, 1937
NEOLEUCOPIS Malloch, 1921
Neoleucopis atratula (Ratzeburg, 1844)
Neoleucopis freyi (McAlpine, 1971)
Neoleucopis obscura (Haliday, 1833)
Neoleucopis orbiseta (McAlpine, 1971)
LEUCOPOMYIA Malloch, 1921
Leucopomyia silesiaca (Egger, 1862)
= *alticeps* misid.
LIPOLEUCOPIS de Meijere, 1928
Lipoleucopis praecox de Meijere, 1928

LAUXANIIDAE Macquart, 1835
HOMONEURINAE Stuckenberg, 1971
HOMONEURA van der Wulp, 1891
Homoneura biumbrata (Loew, 1873)
= *tesquae* misid.
Homoneura lamellata (Becker, 1895)
Homoneura mediospinosa Merz, 2003
= *interstincta* auct. nec (Fallén, 1820)
Homoneura tenera (Loew, 1846)
LAUXANIINAE Macquart, 1835
AULOGASTROMYIA Hendel, 1925
Aulogastromyia anisodactyla (Loew, 1845)
CALLIOPUM Strand, 1928

Calliopum aeneum (Fallén, 1820)
Calliopum elisae (Meigen, 1826)
= *nitens* auct. nec (Loew, 1858)
CNEMACANTHA Macquart, 1835
Cnemacantha muscaria (Fallén, 1823)
LAUXANIA Latreille, 1804
sg. *Czernushka* Shatalkin, 2000
Lauxania albomaculata Strobl, 1909
sg. *Lauxania* Latreille, 1804
Lauxania cylindricornis (Fabricius, 1794)
MEIOSIMYZA Hendel, 1925
= ***Lycia*** Robineau-Desvoidy, 1830 preocc.
= ***Lyciella*** Collin, 1948
Meiosimyza affinis (Zetterstedt, 1847)
Meiosimyza decempunctata (Fallén, 1820)
Meiosimyza decipiens (Loew, 1847)
Meiosimyza illota (Loew, 1847)
Meiosimyza laeta (Zetterstedt, 1838)
Meiosimyza platycephala (Loew, 1847)
Meiosimyza rorida (Fallén, 1820)
Meiosimyza subfasciata (Zetterstedt, 1838)
MINETTIA Robineau-Desvoidy, 1830
sg. *Frendelia* Collin, 1948
Minettia longipennis (Fabricius, 1794)
sg. *Minettia* Robineau-Desvoidy, 1830
Minettia desmometopa (de Meijere, 1907)
Minettia lupulina (Fabricius, 1787)
sg. *Plesiominettia* Shatalkin, 2000
Minettia helvola (Becker, 1895)
Minettia loewi (Schiner, 1864)
Minettia filia (Becker, 1895)
sg. unplaced in ?*Minettia* (see Notes)
Minettia styriaca (Strobl, 1892)
PACHYCERINA Macquart, 1835
Pachycerina pulchra (Loew, 1850)
Pachycerina seticornis (Fallén, 1820)
PEPLOMYZA Haliday, 1837
Peplomyza discoidea (Meigen, 1830)
POECILOLYCIA Shewell, 1986
Poecilolycia vittata (Walker, 1849)
= *quadrivittata* (Loew, 1861)
PSEUDOLYCIELLA Shatalkin, 2000
Pseudolyciella pallidiventris (Fallén, 1820)

Pseudolyciella stylata (Papp, 1978)
SAPROMYZA Fallén, 1810
sg. *Nannomyza* Frey, 1941
Sapromyza basalis Zetterstedt, 1847
sg. *Sapromyza* Fallén, 1810
Sapromyza albiceps (Fallén, 1820)
Sapromyza amabilis Frey, 1930
Sapromyza apicalis Loew, 1847
= *obsoleta* misid.
Sapromyza opaca Becker, 1895
= *imitatrix* Czerny, 1932
= *leningradensis* misid.
Sapromyza schnabli Papp, 1987
Sapromyza setiventris Zetterstedt, 1847
Sapromyza sexpunctata Meigen, 1826
= *atechna* Becker, 1895
= *pellucida* Becker, 1895
Sapromyza simplicior Hendel, 1908
Sapromyza zetterstedti Hendel, 1908
sg. *Schumannimyia* Papp, 1978
Sapromyza hyalinata (Meigen, 1826)
SAPROMYZOSOMA Lioy, 1864
Sapromyzosoma quadripunctata (Linnaeus, 1767)
TRICHOLAUXANIA Hendel, 1925
Tricholauxania praeusta (Fallén, 1820)
TRIGONOMETOPUS Macquart, 1835
Trigonometopus frontalis (Meigen, 1830)

Excluded species

Homoneura dilecta (Rondani, 1868) misidentification
Leucopis impunctata von Roser, 1840 nomen dubium
Leucopis puncticornis Meigen, 1830 nomen dubium
Sapromyza thoracica Becker, 1895 nomen dubium
Neoparoecus signatipes (Loew, 1856) not found within present borders
Sapromyza leningradensis Czerny, 1932 nomen dubium ?

Notes

Several chamaemyiid species mentioned in this checklist have not been previously recorded from Finland. A paper detailing the new records is in preparation.

***Chamaemyia herbarum* (Robineau-Desvoidy, 1830)**. A poorly known species. The name has been widely used for various *Chamaemyia* species in the past. Coe (1943) and Collin (1966) applied this name (without seeing types) to a species which may be *C. subjuncorum* Tanasijtshuk, 1980 (*sensu* Beschovski, 1995). Czerny (1936) and Tanasijtshuk (1986) listed this species as a junior synonym of *Chamaemyia juncorum* (Fallén). Most Finnish specimens under this name are either unidentifiable females or belong to other species, most frequently *C. aestiva* Tanasijtshuk, 1970, but some specimens probably belonging to *C. herbarum* R.-D. *sensu* Coe have been found in Finland.

***Minettia*(?) *styriaca* (Strobl, 1892)**. This species, originally described in *Sapromyza*, has traditionally been placed in *Minettia*. Unfortunately Strobl's description, which was based on a single female, is rather short and unillustrated. The holotype is lost according to Chvála (2008). The Finnish and Russian material in the Finnish Museum of Natural History (MZH) identified as *Minettia styriaca* (see Kahanpää 2013 for data and a photograph) matches Strobl's description, but these specimens lack the postsutural supra-alar setae found in *Minettia* (and many other genera).

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References

Beschovski VL (1995) Contribution to the knowledge of the taxonomy and distribution of the *Chamaemyia* species established in Bulgaria (Insecta, Diptera, Chamaemyiidae). Acta Zoologica Bulgarica 48: 34–46.

Chvála M (2008) The Types of Diptera (Insecta) Described by Pater Gabriel Strobl. Studia dipterologica Supplement 17: 1–281.

Coe RL (1943) *Chamaemyia juncorum* Fall. and *C. herbarum* R.-D. (Dipt., Chamaemyiidae): a correction to my recent paper on the British species of the genus. Entomologist's Monthly Magazine 79(6): 128–129.

Collin JE (1966) The British species of *Chamaemyia* Mg. (*Ochthiphila* Fln.) (Diptera). Transactions of the Society for British Entomology 17(4): 121–128.

Czerny L (1936) 51. Chamaemyiidae (Ochthiphilidae). In: Lindner E (Ed) Die Fliegen der Palaearktischen Region. Volume 5. E. Schweizerbart, Stuttgart, 25 pp.

Gaimari SD (2010) Chamaemyiidae (chamaemyiid flies). In: Brown BV, Borkent A, Cumming JM, Wood DM, Woodley NE, Zumbado MA (Eds) Manual of Central American Diptera, Volume 2. NRC Research Press, Ottawa, 997–1007.

Gaimari SD, Silva VC (2010a) Revision of the Neotropical subfamily Eurychoromyiinae (Diptera: Lauxaniidae). Zootaxa 2342: 1–64.

Gaimari SD, Silva VC (2010b) Lauxaniidae (lauxaniid flies). In: Brown BV, Borkent A, Cumming JM, Wood DM, Woodley NE, Zumbado MA (Eds) Manual of Central American Diptera, Volume 2. NRC Research Press, Ottawa, 971–995.

Hackman W (1980) A check list of the Finnish Diptera. Notulae entomologicae 60: 17–48, 117–162.

Kahanpää J (2013) Muutoksia Suomen kärpästen luetteloon: heimo Lauxaniidae (Diptera). Sahlbergia 19(1–2): 72–78.

Pape T, Blagoderov V, Mostovski MB (2011) Order Diptera Linnaeus, 1758. In: Zhang Z-Q (Ed) Animal biodiversity: An outline of higher-level classification and survey of taxonomic richness. Zootaxa 3148: 222–229. http://www.mapress.com/zootaxa/2011/f/zt03148p229.pdf

Tanasijtshuk VN (1986) Chamaemyiidae. In: Fauna of the USSR n.s., 134: Diptera 14(7). Nauka, Leningrad, 335 pp. + 16 pls. [in Russian]