

Checklist of the Braulidae, Camillidae, Diastatidae and Drosophilidae of Finland (Diptera, Ephydroidea)

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Abstract

A checklist of the Braulidae (1 species), Camillidae (3 spp.), Diastatidae (10 spp.) and Drosophilidae (67 spp.) of Finland is presented. Campichoetinae is included as a subfamily of Diastatidae.

Keywords

Checklist, Finland, Diptera, biodiversity, faunistics

Introduction

The Ephydroidea is now recognized as a well-supported, probably monophyletic clade of acalyptrate flies (Wiegmann et al. 2011), although the correct placement of some of the included families – especially the very unusual bee louses of family Braulidae – is still being discussed. The relationships of the families within the superfamily are less understood and the families are listed alphabetically in the checklist below. Seven or eight families are currently included in Ephydroidea. Five of them are found in Finland. Four families are covered in this paper; the fifth (Ephydridae itself) has its own treatment in this volume of ZooKeys. The families missing from Finland are the Curtonotidae, Cryptochetidae, and Nannodastiidae with uncertain affinities (Papp

Table 1. Number of species by family.

Family	Number of species in			Level of knowledge
	World (Pape et al. 2011)	Europe	Finland	
Braulidae	7	3	1	poor
Camillidae	40	8	3	average
Diastatidae	49 (Mathis and Barraclough 2011)	16	10	good
Drosophilidae	4003	121	67	good

and Mathis 2001). Griffiths (1972) proposed a new family, Campichoetidae, for *Campichoeta* Macquart, 1835. We follow the world catalogue of Diastatidae (Mathis and Barraclough 2011) and keep Campichoetinae as a subfamily of Diastatidae.

World catalogues have been recently published for Diastatidae (Mathis and Barraclough 2011) and Drosophilidae (Brake and Bächli 2008). The North European Drosophilidae were treated in detail by Bächli et al. (2004) and the review of Finnish *Drosophila* by Hackman (1954) is now obsolete. The Finnish species of Braulidae and Camillidae were last listed by Hackman (1980); the diastatids were treated by Chandler (1987).

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 Ephydroidea Zetterstedt, 1837

BRAULIDAE Egger, 1853

BRAULA Nitzsch, 1818

Braula coeca Nitzsch, 1818

CAMILLIDAE Frey, 1921

CAMILLA Haliday, 1838

Camilla atrimana Strobl, 1910

= *atripes* Duda, 1934

= *acutipennis* misid.

Camilla flavicauda Duda, 1922

= *glabrata* Collin, 1956

Camilla glabra (Fallén, 1823)

= *subfuscipes* Collin, 1933

DIASTATIDAE Hendel, 1917

CAMPICHOETINAE Griffiths, 1972

CAMPICHOETA Macquart, 1835*Campichoeta griseola* (Zetterstedt, 1855)*Campichoeta obscuripennis* (Meigen, 1830)

DIASTATINAE Hendel, 1917

DIASTATA Meigen, 1830*Diastata adusta* Meigen, 1830= *unipunctata* Zetterstedt, 1847*Diastata boreonigra* Chandler, 1987*Diastata costata* Meigen, 1830*Diastata flavicosta* Chandler, 1987*Diastata fuscula* (Fallén, 1820)*Diastata nebulosa* (Fallén, 1823)*Diastata ornata* Meigen, 1830*Diastata vagans* Loew, 1864**DROSOPHILIDAE** Rondani, 1856

STEGANINAE Hendel, 1917

AMIOTA Loew, 1862**sg. *Amiota*** Loew, 1862*Amiota albilabris* (Roth in Zetterstedt, 1860)*Amiota alboguttata* (Wahlberg, 1839)*Amiota rufescens* (Oldenberg, 1914)*Amiota subtusradiata* Duda, 1934**CACOXENUS** Loew, 1858**sg. *Paracacoxenus*** Hardy & Wheeler, 1960*Cacoxenus argyreator* Frey, 1932**LEUCOPHENGA** Mik, 1886**sg. *Neoleucophenga*** Oldenberg, 1915*Leucophenga quinquemaculata* Strobl, 1893**PHORTICA** Schiner, 1862**sg. *Phortica*** Schiner, 1862*Phortica variegata* Fallén, 1823**STEGANA** Meigen, 1830**sg. *Stegana*** Meigen, 1830*Stegana furta* (Linnaeus, 1766)= *curvipennis* (Fallén, 1823)**sg. *Steganina*** Wheeler, 1960*Stegana baechlii* Laštovka & Máca, 1982*Stegana coleoprata* (Scopoli, 1763)*Stegana hypoleuca* Meigen, 1830*Stegana longifibula* Takada, 1968

Stegana mehadiae Duda, 1924

Stegana nigrithorax Strobl, 1898

Stegana similis Laštovka & Máca, 1982

DROSOPHILINAE Rondani, 1856

CHYMOMYZA Czerny, 1903

Chymomyza amoena (Loew, 1862)

Chymomyza caudatula Oldenberg, 1914

Chymomyza costata (Zetterstedt, 1838)

Chymomyza distincta (Egger, 1862)

Chymomyza fuscimana (Zetterstedt, 1838)

DROSOPHILA Fallén, 1823

sg. Dorsilopha Sturtevant, 1942

Drosophila busckii Coquillett, 1901

sg. Drosophila Fallén, 1823

Drosophila ezoana Takada & Okada, 1957

Drosophila funebris (Fabricius, 1787)

Drosophila histrio Meigen, 1830

Drosophila hydei Sturtevant, 1921

= *repleta* misid.

Drosophila immigrans Sturtevant, 1921

= *tripunctata* Becker, 1908 preocc.

Drosophila limbata von Roser, 1840

Drosophila littoralis Meigen, 1830

Drosophila lummei Hackman, 1972

Drosophila montana Stone, Griffen & Patterson, 1941

= *ovivororum* Lakovaara & Hackman, 1973

Drosophila phalerata Meigen, 1830

Drosophila picta Zetterstedt, 1847

Drosophila repleta Wollaston, 1858

Drosophila subarctica Hackman, 1969

Drosophila testacea von Roser, 1840

Drosophila transversa Fallén, 1823

Drosophila vireni Bächli, Vilela & Haring, 2002

sg. Sophophora Sturtevant, 1942

Drosophila alpina Burla, 1948

Drosophila ambigua Pomini, 1940

Drosophila bifasciata Pomini, 1940

Drosophila eskoi Lakovaara & Lankinen, 1974

Drosophila ingrca Hackman, 1957

Drosophila melanogaster Meigen, 1830

Drosophila obscura Fallén, 1823

Drosophila simulans Sturtevant, 1919

Drosophila subobscura Collin, 1936

Drosophila subsilvestris Hardy & Kaneshiro, 1968

= *silvestris* Basden, 1954 preocc.

Drosophila tristis Fallén, 1823

HIRTODROSOPHILA Duda, 1924

Hirtodrosophila cameraria (Haliday, 1833)

Hirtodrosophila confusa (Staeger, 1844)

Hirtodrosophila lundstroemi (Duda, 1935)

Hirtodrosophila oldenbergi (Duda, 1924)

Hirtodrosophila trivittata (Strobl, 1893)

LORDIPHOSA Basden, 1961

Lordiphosa fenestrarum (Fallén, 1823)

Lordiphosa nigricolor (Strobl, 1898)

MICRODROSOPHILA Malloch, 1921

sg. *Microdrosophila* Malloch, 1921

Microdrosophila congesta (Zetterstedt, 1847)

sg. *Oxystyloptera* Duda, 1924

Microdrosophila zetterstedti Wheeler, 1959

= *nigriventris* (Zetterstedt, 1847) preocc.

SCAPTODROSOPHILA Duda, 1923

Scaptodrosophila deflexa (Duda, 1924)

= *guyenoti* (Burla, 1948)

SCAPTOMYZA Hardy, 1849

sg. *Hemiscaptomyza* Hackman, 1959

Scaptomyza trochanterata Collin, 1953

Scaptomyza unipunctum (Zetterstedt, 1847)

sg. *Parascaptomyza* Duda, 1924

Scaptomyza pallida (Zetterstedt, 1847)

= *disticha* (Duda, 1921)

sg. *Scaptomyza* Hardy, 1849

Scaptomyza consimilis Hackman, 1955

Scaptomyza flava (Fallén, 1823)

= *flaveola* (Meigen, 1830)

= *apicalis* Hardy, 1849

Scaptomyza graminum (Fallén, 1823)

Scaptomyza griseola (Zetterstedt, 1847)

Scaptomyza montana Wheeler, 1949

Scaptomyza teinoptera Hackman, 1955

Excluded species

Stegana strobli Mik, 1898 misidentification

Lordiphosa hexasticha (Papp, 1971) not found within present borders

References

- Brake I, Bächli G (2008) World catalogue of insects. Vol. 9: Drosophilidae (Diptera). Apollo Books, Stenstrup, 412 pp.
- Bächli G, Vilela C, Escher SA, Saura A (2004) The Drosophilidae (Diptera) of Fennoscandia and Denmark. Fauna Entomologica Scandinavica 39, Brill NV, Leiden & Boston, 362 pp.
- Chandler PJ (1987) The families Diastatidae and Campichoetidae (Diptera, Drosophiloidea) with a revision of Palaearctic and Nepalese species of *Diastata* Meigen. Entomologica Scandinavica 18(1): 1–50. doi: 10.1163/187631287X00016
- Griffiths GCD (1972) The phylogenetic classification of Diptera Cyclorrhapha, with special references to the structure of the male postabdomen. Series entomologica 8. W. Junk, N.V., Haag, 340 pp.
- Hackman W (1954) Die *Drosophila*-Arten Finnlands. Notulae entomologicae 34: 130–139.
- Hackman W (1980) A check list of the Finnish Diptera. Notulae entomologicae 60: 17–48, 117–162.
- Mathis WN, Barraclough DA (2011) World catalog and conspectus on the family Diastatidae (Diptera: Schizophora). In: Brake I, Thompson FC (Eds) Contributions to the Systema Dipterorum (Insecta: Diptera). Myia vol. 12. Pensoft Publishers & North America Dipterists Society, Sofia, Moscow & Washington D.C., 235–266. <http://hdl.handle.net/10088/18925>
- 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/flzt03148p229.pdf>
- Papp L, Mathis WN (2001) A review of the family Nannodastiidae (Diptera). Proceedings of the Entomological Society of Washington 103: 337–348. <http://biodiversitylibrary.org/page/16279583>
- Wiegmann BM, Trautwein MD, Winkler IS, Barr NB, Kim J-W, Lambkin C, Bertone MA, Cassel BK, Bayless KM, Heimberg AM, Wheeler BM, Peterson KJ, Pape T, Sinclair BJ, Skevington JH, Blagoderov V, Caravas J, Kutty SN, Schmidt-Ott U, Kampmeier GE, Thompson FC, Grimaldi DA, Beckenbach AT, Courtney GW, Friedrich M, Meier R, Yeates DK (2011) Episodic radiations in the fly tree of life. Proceedings of the National Academy of Sciences of the United States of America 108(14): 5690–5695. doi: 10.1073/pnas.1012675108