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NOMENCLATURAL NOTES IV

Neal L. Evenhuis & Thomas Pape, Editors



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# Steps toward conserving the family-group name Psilidae (Insecta: Diptera): Reversal of precedence for Psilidae Walker, 1853 (*nomen protectum*) and Psilomyiidae Macquart, 1835 (*nomen oblitum*) and invoking Article 35.5 for the precedence of Psilidae Walker, 1853 over Loxoceridae Macquart, 1835

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Abstract. The family-group name Psilidae (based on the nominal genus *Psila* Meigen, 1803) is found to date from Walker, 1853 and is a junior synonym of Psilomydae Macquart, 1835 [corrected spelling as "Psilomyiidae"] (based on the nominal genus *Psilomyia* Macquart, 1835). Psilomyiidae has not been used as valid since 1899 and Psilidae is in current use in a vast number of publications, which allows for reversal of precedence (ICZN *Code* Article 23.9) with Psilidae Walker, 1853 qualifying as *nomen protectum* and Psilomyiidae Macquart, 1835 as *nomen oblitum*. Psilidae Walker, 1853 is also younger than Loxoceridae Macquart, 1835, but Article 35.5 mandates that Psilidae Walker, 1853, which is in prevailing usage, is not to be displaced by the older family-group name Loxoceridae Macquart, 1835, currently in use at the tribal level (a lower rank).

The family Psilidae is a well-known Diptera family-group name for what are commonly known as rust flies, whose larvae live in stems, tubers or roots. Several species are economically important in that they are pests in agriculture and horticulture. One species especially, *Psila rosae* (Fabricius, 1794), the carrot rust fly, causes damage to carrots and other crops such as parsnip, celery and parsley. The family is widespread in temperate climates around the world and currently comprises 415 species in 11 genera (Evenhuis & Pape 2024).

In his catalog of family-group names of Diptera, Sabrosky (1999: 261) treated the name Psilidae as valid, but he also listed "Psilomydae" Macquart, 1835 [corrected spelling as Psilomyidae] and Loxoceridae Macquart, 1835 as older names for the family. Latreille (1829: 525) proposed the new replacement name *Psilomyia* for the nominal genus *Psila* Meigen, 1803, because he considered Meigen's name to "*diffère trop peu de celle déjà donné à un genre d'hémiptères*", perhaps *Psylla* Geoffroy, 1762. Macquart (1835: 416) followed Latreille's use of the name *Psilomyia* and proposed the family-group name "Psilomydae" [corrected spelling as "Psilomyidae"], basing the name on the nominal genus *Psilomyia*. Macquart (1835: 372) also proposed the family-group name Loxoceridae, based on *Loxocera* Meigen, 1803. Both nominal genus-group taxa *Psilomyia* and *Loxocera* are currently treated within the family Psilidae (e.g., Evenhuis & Pape 2024).

#### Step One

Apparently, no one has as yet commented on Sabrosky (1999) giving the valid name for rust flies as Psilidae, and at the same time indicating that the oldest name for the family was not based on the genus *Psila*, but on its unjustified replacement name *Psilomyia* Latreille, 1829. Similarly, the priority of Loxoceridae Macquart, 1835 over Psilidae Walker, 1853 is unambiguously apparent from Sabrosky (1999), but it has so far not been picked up in the literature.

The oldest family-group name based on the genus *Psila* Meigen, 1803 is "Psilides" Walker (1853: 148) [corrected spelling as "Psilidae"]. Following priority and accepting Psilomyiidae Macquart, 1835 over Psilidae Walker, 1853 would threaten stability in nomenclature. Psilidae is in current use and has appeared in a large number of works (over 1,900 hits on Google Scholar for the last 50 years); while Psilomyiidae (or any of its alternative spellings) has not been used as a valid name since 1899; last usage found for this paper was by Acloque (1897, as "Psilomyini"). [The mention of "Psilomydes" in Sabrosky (1941: 737) was not a use as a valid name but merely mentioned in a history of the family Chloropidae.] I therefore establish Psilidae Walker, 1853 to have precedence over Psilomyidae Macquart, 1835 by reversal of precedence in accordance with Article 23.9.2 (I.C.Z.N. 1999), which requires "at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years" using Psilidae as a valid name (see Appendix). The family-group name Psilidae Walker, 1835 a *nomen oblitum*.

#### Step Two

Step One fixes only a part of the problem with regard to the family-group name Psilidae. There are two further steps needed to resolve the problem and conserve the family-group name Psilidae. Macquart (1835: 372) proposed the family-group name Loxoceridae (based on *Loxocera* Meigen, 1803. Step Two resolves this by invoking Article 35.5 (I.C.Z.N. 1999): "If after 1999 a name in use for a family-group name taxon [...] is found to be older than a name in prevailing usage for a taxon at higher rank in the same family-group taxon [...] the older name is not to displace the younger name." Psilidae Walker, 1853 (the younger name and at a higher rank) is in prevailing usage as to my knowledge no other scientific name is currently used for the rust flies, and this name is therefore not to be replaced by Loxoceridae Macquart, 1835 (the older name currently in use at a lower rank, as Loxocerini).

#### Step Three

One more step is needed to fully resolve the situation and conserve Psilidae Walker, 1853. This study discovered that the earliest use of a family-group name with the root "Psil-" is by Fallén (1812), who proposed the name "Psilotes" [corrected spelling as "Psilidae"] for a group of Hymenoptera based on the genus *Psilus* Panzer, 1801. It is currently used at the tribal level (as Psilini) in the family Diapriidae (e.g., Masner & Garcia 2002). Although Psilidae Fallén, 1812 is older than the family-group name Diapriidae Haliday, 1833, in which the tribe Psilini currently resides, Diapriidae is retained through prevailing usage under ICZN *Code* Art. 35.5 (see Notton 2014). The fact that Psilidae Fallén, 1812 is older than Psilidae Walker, 1853 means that either the oldest available family-group name in Psilidae Walker, 1853; or an application be made to the ICZN Commission to remedy the situation (in my opinion the better option). To alleviate the problem, an application is being

prepared for submission to the ICZN Commission to request resolution of the homonymy of the two family-group names based on the root "*Psil-*" by asking that a different spelling be used for Psilini Fallén, 1812, and be based on the root "*Psilus-*", thus giving Psilusini Fallén, 1812, thereby conserving the spelling of Psilidae Walker, 1853.

#### ACKNOWLEDGMENTS

Thomas Pape is thanked for discussion of this problem, and he, Verner Michelsen and Francisco Welter-Schultes are thanked for review of the manuscript.

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#### APPENDIX

List of 31 works by 23 different first authors (more than 30 authors in total) using the family-group name Psilidae as valid in the last 50 years (since 1974).

- Angell, C. 2023. Replacement names for two Asian species of *Psila* Meigen, 1803, sensu lato (Diptera, Psilidae). *Bionomina* 34: 45–49.
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- Iwasa, M. 1989. The Japanese species of the genus *Chyliza* (Diptera, Psilidae). *Kontyû* 57(1): 148–162.

- Iwasa, M., Hanada, T. & Kajino, Y. 1987. A new psilid species from Japan injurious to the root of carrot: Diptera: Psilidae. *Applied Entomology and Zoology* 22: 310–315.
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## The type species of *Heteromyiella* Hendel, 1910 (Diptera: Heleomyzidae)

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**Abstract**. *Heteromyiella* Hendel, 1910 was proposed as a 'new name' for *Heteromyza* "of authors." Hendel did not designate a type species and did not explicitly include any species in the genus, only referencing Becker's (1905) concept of *Heteromyza* in the *Katalog der paläarktischen Dipteren*. In this note, I demonstrate that the type species of *Heteromyiella* is *Heteromyza atricornis* Meigen, 1830, by subsequent monotypy.

#### THE RISE AND FALL OF HETEROMYIELLA

Fallén (1820) described *Heteromyza* with two originally included nominal species: *Heteromyza oculata* Fallén, 1820 and *Heteromyza buccata* Fallén, 1820 (the latter now included in *Heterocheila* Rondani, 1857 (Diptera: Heterocheilidae) (Mathis 2011)). In the *Katalog der paläarktischen Dipteren*, Becker (1905) placed *Heteromyza oculata* as the only species in the genus *Thelida* Robineau-Desvoidy, 1830, with *Thelida filiformis* Robineau-Desvoidy, 1830, the type species of *Thelida*, listed as a synonym. He placed *H. buccata* in *Oedoparea* Loew, 1862, and included eight other species in *Heteromyza*, none of which were originally included in the genus by Fallén (1820).

Hendel (1910) published a list of nomenclatural corrections to Becker's (1905) catalog, in which he proposed the name *Heteromyiella* for *Heteromyza sensu* Becker (1905). His proposal was very brief, stating only, "**Heteromyiella** nom. nov. für *Heteromyza*-Arten der Autoren, von denen Fallén keine einzige kannte." [*Heteromyiella* nom. nov. for *Heteromyza* species of authors, none of which Fallén knew.] He did not designate a type from among the species included in "*Heteromyza* of authors," nor did he list any species he considered to belong to *Heteromyiella*. Presumably, he believed his concept of *Heteromyiella* would be obvious by reference to Becker (1905).

Czerny (1924) later synonymized *Thelida filiformis* not with *H. oculata*, but with *Heteromyza atricornis* Meigen, 1830. Accordingly, Czerny (1924) used the name *Heteromyza* for the genus containing *H. oculata* and used *Thelida* for a second genus containing *H. atricornis*, with *Heteromyiella* listed as a synonym of *Thelida*. Subsequent workers have followed Czerny in treating *T. filiformis* as a junior synonym of *H. atricornis* and *Heteromyiella* as a junior synonym of *Thelida* (Gill, 1962) or *Heteromyza sensu lato* (including *Thelida*) (Collin, 1943; Gorodkov 1984). However, a type species for *Heteromyiella* has not been recognized (Gorodkov 1984). Determination of the type of *Heteromyiella* is important for any future revisions to the taxonomy of *Heteromyza*.

#### DETERMINATION OF THE TYPE SPECIES

In this section, I reference a number of Articles of the *International Code of Zoological Nomenclature* (ICZN 1999), using the form "*Code* Art. X.X" for brevity.

In general, only originally included nominal species are eligible to be the type species of a genus (*Code* Art. 67.2). However, when establishing *Heteromyiella*, Hendel (1910) did not explicitly name any nominal species. His concept of the genus was based on *Heteromyza sensu* Becker (1905), but *Code* Art. 67.2.3 is explicit that "[m]ere reference in the original publication to a publication containing the name of a species" does not make the species count as originally included. Therefore, *Heteromyiella* has no originally included nominal species. In such cases, *Code* Art. 67.2.2 applies, which states: "If a nominal genus or subgenus was established before 1931 (in the case of an ichnotaxon, before 2000 [Art. 66.1]) without included nominal species [Art. 12], the nominal species that were first subsequently and expressly included in it are deemed to be the only originally included nominal species."

In my research, the earliest subsequent usage of *Heteromyiella* that I have found was by Bezzi (1911), who mentioned only a single member of this genus: *Heteromyiella atricornis* (Meigen, 1830). Therefore, *Heteromyza atricornis* Meigen, 1830 is the type species of *Heteromyiella*, by subsequent monotypy (*Code* Art. 69.3). With this type fixation, there is no change to the nomenclature of the genus *Heteromyiella*, which remains a subjective junior synonym of *Heteromyza* (Gorodkov 1984).

#### Order DIPTERA Linnaeus, 1758 Family HELEOMYZIDAE Westwood, 1840 Genus *Heteromyza* Fallén, 1820

Heteromyza Fallén, 1820: 1. Type species: Heteromyza oculata Fallén, 1820, by subsequent designation (Westwood 1840: 145).

*Thelida* Robineau-Desvoidy, 1830: 655. Type species: *Thelida filiformis* Robineau-Desvoidy, 1830 (= *Heteromyza atricornis* Meigen, 1830 *teste* Gorodkov 1984: 42), by original monotypy.

*Lentiphora* Robineau-Desvoidy, 1830: 656. Type species: *Lentiphora flaveola* Robineau-Desvoidy, 1830 (= *Heteromyza oculata* Fallén, 1820 *teste* Gorodkov 1984: 43), by original monotypy.

*Heteromyiella* Hendel, 1910: 309. Type species: *Heteromyza atricornis* Meigen, 1830, by subsequent monotypy (Bezzi 1911: 72).

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# Cordyligasterini Townsend, 1914 recognized as the valid tribal name for the former Sophiini Townsend, 1936 (Diptera, Tachinidae)

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Abstract. The family-group name Cordyligasterini Townsend 1914, has gone unnoticed as the older name for the tribe Sophiini Townsend, 1936 (Dexiinae, Tachinidae). The name Cordyligasterini is herein recognized as the valid tribal name for all genera of the former Sophiini with the exception of the type genus of Sophina. Sophia Robineau-Desvoidy, 1830. Sophia and its type species Sophia filipes Robineau-Desvoidy, 1830 are unrecognized names and are moved to nomina dubia of Tachinidae. The Cordyligasterini as here circumscribed comprise the other eight genera formerly assigned to the Sophiini, namely Cordyligaster Macquart, 1844, Cryptosophia Santis, 2018, Euantha Wulp, 1885, Euanthoides Townsend, 1931, Leptidosophia Townsend, 1931, Neosophia Guimarães, 1982, and Sophiella Guimarães, 1982. Additionally, acting as First Reviser, the spelling Cordyligaster capellii Fleming & Wood, 2014 is selected as the correct original spelling, and the spelling "capelli" is thus an incorrect original spelling, under Article 24.2.3 of the International Code of Zoological Nomenclature.

Key words: Nomenclature, taxonomy, Tachinidae

#### NOMENCLATURAL AND TAXONOMIC HISTORY OF THE SOPHIINI

The genus *Sophia* was described by Robineau-Desvoidy (1830: 317) with four included nominal species, all new and from Brazil. One species, *Sophia filipes* Robineau-Desvoidy (1830: 318), was later designated as the type species of the genus by Townsend (1916: 9). The tribal name Sophiini was first used in a paper entitled *Notes on American Oestromuscoid Types* by Townsend (1931: 95), but its appearance in that work did not satisfy later rules on the availability of family-group names and it was treated as a *nomen nudum* by Sabrosky (1999: 285; see also pp. 12–13 for a discussion of "*Nomina nuda* in family-group names").

The name Sophiini became nomenclaturally available in a key to the tribes of "Exoristidae" in Part III of Townsend's *Manual of Myiology* (Townsend 1936a: 28, 29; see Sabrosky 1999: 285). Later that same year, in Part IV of the *Manual*, Townsend (1936b: 50–54) gave a detailed description of Sophiini and included a key to the ten genera assigned to it. The genus *Cordyligaster* of Macquart (1844a, 1844b) was one of the genera included in Sophiini even though its own tribal name, Cordyligasterini (dating from Townsend 1914a) is older (Sabrosky 1999: 97).

The Sophiini of Townsend (1936b) were worldwide in distribution with seven genera in North and South America, two genera in the Oriental Region (*Prosophia* Townsend, 1927 and *Torocca* Walker, 1859), and one genus in the Afrotropical Region (*Tipulidomima* Townsend, 1933, from Equatorial Guinea). The Oriental genera were synonymized under the older name *Torocca* by Malloch (1935) even before Townsend's (1936b) treatment of the tribe in Part IV of the *Manual*, and this synonymy has been followed by other authors to the present day. The genera *Torocca* and *Tipulidomima* were assigned to other tribes in the Oriental and Afrotropical catalogs of Crosskey (1976, 1980), thereby effectively restricting the Sophiini to the Americas.

The name-bearing type of *Sophia filipes*, the type species of *Sophia*, was already missing from the Muséum National d'Histoire Naturelle in Paris when Townsend visited the Muséum in 1928. He wrote:

"Ht [holotype], from Brazil, not in Paris. I have so far not been able to identify this species with any certainty but I am elsewhere describing as new two species of *Sophia*, RD., one on a female from Panama and the other on a male from Espirito Santo [Brazil]; both of which apparently come very close to *filipes* RD. The genus is close to *Euantha* Wlp." [Townsend 1931: 95.]

Townsend (1939) redescribed *Sophia* and noted that his concept of the genus was based on the two undescribed species mentioned in Townsend (1931), both of which had since been described:

"The genotype is still unidentified and the above characters are taken from *S. desvoidyi* TT (1931, Rev. Ent., I, 338; Ht male from Espirito Santo, in Berlin DEI) and *S. nigra* TT (1931, l. c.; Ht female from Chiriqui, Panama, in Berlin DEI). *Euantha interrupta* Ald (1927), from Costa Rica, belongs here but is distinct from both the above species." [Townsend 1939: 170–171.]

The Sophiini later appeared in three regional catalogs of the Americas, *A catalog of the Diptera of America north of Mexico* (Sabrosky & Arnaud 1965; two genera), *A catalogue of the Diptera of the Americas south of the United States* (Guimarães 1971b; six genera), and *Catalogue of the Tachinidae (Diptera) of America north of Mexico* (O'Hara & Wood 2004; two genera). Two new genera of Sophiini were described by Guimarães (1982) and one new genus by Santis (2018), resulting in the following nine genera (and 23 species) being listed in the world checklist of O'Hara *et al.* (2020):

Cordyligaster Macquart, 1844 [including Eucordyligaster Townsend, 1917, treated as valid in Sabrosky & Arnaud (1965), Guimarães (1971a,b) and Sabrosky (1973); and one additional species described in Fleming et al. 2014], nine species.
Cryptosophia Santis, 2018, one species
Euantha Wulp, 1885, three species
Euanthoides Townsend, 1931, one species
Leptidosophia Townsend, 1931, two species
Neosophia Guimarães, 1982, three species
Sophia Robineau-Desvoidy, 1830, one species
Sophiella Guimarães, 1982, one species

#### **REVIVAL OF TRIBAL NAME CORDYLIGASTERINI**

The priority of tribal name Cordyligasterini over Sophini, when both *Cordyligaster* and *Sophia* are assigned to the same tribe, has gone unnoticed to the present day. This error would have become increasingly more difficult to discover over time if not for the publi-

cation of Curtis Sabrosky's decades-long project to record all the family-group names in Diptera (Sabrosky 1999). This masterful work permits the existence, availability, and precedence of available family-group names to be quickly determined. A recent check of genus names in the Sophiini by the present author led to the rediscovery of the oldest available name for the tribe, the Cordyligasterini.

The tribal name Sophiini caught my attention when I realized it has no firm basis in taxonomy, let alone nomenclature. Stated simply, the type species of the type genus of the tribe, *Sophia filipes* Robineau-Desvoidy, 1830, cannot be recognized. It is a *nomen dubium*, as first noted by Townsend (1931: 95) in his remark: "I have so far not been able to identify this species with any certainty". Guimarães (1971b: 112) formally listed *Sophia filipes* in his catalog as "Unrecognized" but maintained the genus *Sophia* in its traditional sense and included in it a second species, *Sophia desvoidyi* Townsend, 1931. This second species was one of two upon which Townsend based his concept of *Sophia* (Townsend 1939: 170, quoted above), the other being *Sophia nigra* Townsend, 1931. This latter species was synonymized with *Euantha interrupta* Aldrich, 1927 in the catalog of Guimarães (1971b: 111).

The Catalogue of the Diptera of the Americas south of the United States listed Sophia as a genus comprising an unrecognized type species (S. filipes) and an enigmatic second species (S. desvoidyi). This second species was the *de facto* basis for both the genus Sophia and tribe Sophiini. Guimarães (1982) revisited the Sophiini in a partial revision of its South American genera and included a key to the genera and the description of two new genera. Notably absent from the key was the type genus Sophia. As the author explained:

"The genus *Sophia* Robineau-Desvoidy cannot be recognized from its descriptions. The type-species, *Sophia filipes* R. D. is probably lost. Townsend (1931) described *Sophia desvoidyi* based on a male from Espírito Santo, Brazil. Townsend (1939: 170) states that *Sophia* R. -D, has a low broad facial carina, but he did not mentioned [sic] this character in the diagnosis of his *Sophia desvoidyi*. Specimens fitting the description of *S. desvoidyi* do not present facial carina. The type specimens of *S. desvoidyi* deposited in Berlin was [sic] probably lost during the Second World War and this discrepancy cannot be cleared up. Studying specimens in the collection of Museu de Zoologia from different localities, we are convinced that *Sophia desvoidyi* Town. is the male of *Neoeuantha aucta* (Wied.) and both sexes were collected in Terezópolis, RJ, in the same spot." [Guimarães 1982: 166–167.]

In hindsight, the tribal name Sophiini became untenable from Guimarães (1982) onward. The only species remaining in *Sophia* was the type species *S. filipes*, a *nomen dubium*. The genus name *Sophia* was therefore also a *nomen dubium*, and the tribe needed another name. Guimarães (1982) did not draw attention to the implications of his taxonomic assessment of *Sophia*, and subsequent authors continued to use Sophiini as the valid name for the members of the tribe. O'Hara & Wood (2004: 46) recognized the Sophiini for two genera in North America, Fleming *et al.* (2014) mentioned the tribe in a paper on *Cordyligaster*, Santos (2018) described a new genus of Sophiini from Brazil and presented a new key to the genera (sans *Sophia*), and O'Hara *et al.* (2020) listed all the genera (see above) and species of the tribe. The latter authors missed the classification of *S. filipes* as unrecognized in Guimarães (1971b) and this assessment of the species in Santos (2018: 440): "From the original description, it is impossible to state even if *S. filipes* belongs to Sophiini".

*Sophia* Robineau-Desvoidy, 1830 and its type species *Sophia filipes* Robineau-Desvoidy, 1830 will be recognized as *nomina dubia* in a forthcoming catalogue of world Tachinidae (O'Hara & Henderson, in prep.). The name Sophiini is no longer valid and Cordyligasterini becomes the valid name for the tribe and its eight genera, listed above. The family-group name Cordyligasterini is recognized for the first time as older than Sophiini – dating from 1914 vs. 1936 – as determined by the dating of the names in Sabrosky (1999).

#### NOTES ON THE GENUS CORDYLIGASTER MACQUART, 1844

The genus *Cordyligaster* Macquart, 1844, type genus of the Cordyligasterini, was treated as two genera, *Cordyligaster* and *Eucordyligaster* Townsend, 1917, by Guimarães (1971a,b) and Sabrosky (1973). Wood (1987: 1249) synonymized *Eucordyligaster* with *Cordyligaster* and this was followed by subsequent authors (O'Hara & Wood 2004: 46, Fleming *et al.* 2014: 5, O'Hara *et al.* 2020: 116). The list of species and their synonyms in Fleming *et al.* (2014) were improperly typeset and gave the impression that all of the names were valid. O'Hara *et al.* (2020) listed only the nine valid names, leaving some doubt as to the proper assignment of the synonyms. For the sake of clarity, and also to act as First Reviser of a name with two original spellings, the valid species names and synonyms of *Cordyligaster* are listed here from an upcoming world catalogue of Tachinidae (O'Hara & Henderson, in prep.):

analis (Macquart, 1851).- Neotropical: South America, Brazil.

Megistogaster analis Macquart, 1851a: 187 [also 1851b: 214].

capellii Fleming & Wood, 2014.- Neotropical: Middle America (Costa Rica).

Cordyligaster capellii Fleming & Wood in Fleming et al., 2014: 6.

**Note**: There are two original spellings for *Cordyligaster capellii* in Fleming *et al.* (2014): *capellii* (pp. 1, 6, etc.) and *capelli* (pp. 6–9). As **First Reviser**, I select *capellii* as the correct original spelling (Article 24.2.3 of the *International Code of Zoological Nomenclature*, ICZN 1999).

*fuscipennis* (Macquart, 1851).– Neotropical: Middle America (Costa Rica, Guatemala, Panama), South America (Bolivia, Brazil, Ecuador, Guyana, Peru), ?Argentina (Sabrosky 1973: 222).

Megistogaster fuscipennis Macquart, 1851a: 186 [also 1851b: 213].

Eucordylidexia ategulata Townsend, 1915: 41.

*minuscula* Wulp, 1891.– Neotropical: Middle America (Mexico). *Cordyligaster minuscula* Wulp, 1891: 252.

nyomula Townsend, 1914.- Neotropical: South America (Peru).

Cordyligaster nyomula Townsend, 1914: 93.

*petiolata* (Wiedemann, 1830).– Neotropical: Middle America (Panama), South America (Brazil, Venezuela).

Dexia petiolata Wiedemann, 1830: 374.

Cordyligaster fuscifacies Bigot, 1888: 101.

*septentrionalis* Townsend, 1909.– Nearctic: USA (Florida, Great Plains, Northeast, Southeast; "Montana" in O'Hara & Wood (2004: 46) was an error for Missouri).

Cordyligaster septentrionalis Townsend, 1909: 250.

tipuliformis Walker, 1858.– Neotropical: South America (Brazil). Cordyligaster tipuliformis Walker, 1858: 205.
townsendi Guimarães, 1971.– Neotropical: Middle America (Guatemala), South America (Brazil).

Cordyligaster townsendi Guimarães, 1971: 101.

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# *Nepalomyia arborea* nom. nov., a new replacement name for *Nepalomyia hastata* Bickel, 2023 (Diptera: Dolichopodidae)

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Abstract. *Nepalomyia arborea* nom. nov. is here proposed as a new replacement name for *Nepalomyia hastata* Bickel, 2023, which is preoccupied by *Nepalomyia hastata* Wang, Yang & Grootaert, 2009.

Bickel (2023: 204) described the species *Nepalomyia hastata* from specimens collected in Australia (Queensland), Papua New Guinea, and Indonesia (Maluku). He was unaware that the name is preoccupied by *Nepalomyia hastata* Wang, Yang & Grootaert (2009: 42) from China.

*Nepalomyia arborea* **nom**. **nov**. is here proposed as a new replacement name for *Nepalomyia hastata* Bickel, 2023. The name *arborea* is from Latin meaning "of trees", and refers to the series of specimens collected with sticky traps on tree trunks in northern Queensland.

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lsid:zoobank.org:pub:35DF367A-D817-4654-BA7F-7265EF944141

# Description of *Anopheles fontenillei* n.sp. (Diptera: Culicidae) from La Lopé National Park, Gabon

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#### INTRODUCTION

A new mosquito species, *Anopheles fontenillei* n.sp., was described by Barrón *et al.* (2019), but the work was not registered in the Official Register of Zoological Nomenclature (ZooBank) as required by Art. 8.5.3 of the Code for a work issued and distributed electronically to be published for the purposes of zoological nomenclature (ICZN 1999). In order to render this name available, and to correct omissions made in the morphological description, we propose here an updated description of *Anopheles fontenillei* n.sp. For more details, especially on genomic analyses, see Barron *et al.* (2019).

> Anopheles (Cellia) fontenillei Rahola, Paupy & Ayala, new species lsid:zoobank.org:act:AC6215C5-A138-4A63-A97A-B047D9CBB267

**Differential diagnosis** : This species belongs to the Gambiae Complex and therefore cannot be morphologically differentiated from other members of this species complex. The species falls in Section IV, paragraph 3 of the key from Coetzee (2020): abdominal segments without laterally projecting tufts of scales; hind tarsomeres 4 and 5 not entirely pale; legs speckled, sometimes sparsely; maxillary palpus with 3 pale bands with apical dark spot about equal to or longer than apical pale band; 2nd main dark area on wing vein 1 with 1 pale interruption; 3rd main dark area of wing vein 1 with a pale interruption, sometimes fused with preceding pale spot; scaling on abdomen very scanty, confined to tergum VIII or rarely VII.

This species can be separated from other members of the Gambiae Complex by exclusively genomic analyses. See Barron *et al.* (2019) for genomic details and a complete morphological description.

**Etymology**: We dedicate this species to our dear colleague Didier Fontenille, who is contributing greatly to the study of mosquitoes and medical entomology in Africa.

**Type material**: Holotype: "*An. fontenillei* n.sp. N°3, female: Gabon, Lopé National Park, SEGC Bosquet buffle proche station" (S0.19773°; E11.60041°, 264 m) 12/06/2015, human landing capture, one slide with the mounting of the wing and one slide with the hind leg are associated and recorded as "*An. fontenillei* n.sp. N°3 wing" and "*An. fontenillei* n.sp. N°3 hind\_leg" respectively. Deposited in the Institut de Recherche pour le Développement, Montpellier, France. Paratypes deposited in the same institution with the labels as follows: "*An. fontenillei* n.sp. N°1, female, LOP40, 02/02/2016, larval rearing, La Lopé National Park, Gabon" and a slide of the wing recorded as "*An. fontenillei* n.sp. N°1 wing"; "*An. fontenillei* n.sp. N°2, female, LOP40, 02/02/2016, larval rearing, La Lopé National Park, Gabon" and a slide of the wing recorded as "*An. fontenillei* n.sp. N°2 wing"; "*An. fontenillei* n.sp. N°2, female, LOP40, 02/02/2016, larval rearing, La Lopé National Park, Gabon" and a slide of the wing recorded as "*An. fontenillei* n.sp. N°2 wing"; "*An. fontenillei* n.sp. N°2, female, LOP40, 02/02/2016, larval rearing, La Lopé National Park, Gabon" and a slide of the wing recorded as "*An. fontenillei* n.sp. N°2 wing"; "*An. font* 

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*tenillei* n.sp. N°473, female, LOP40 (S0.20336°; E11.60197°), 02/02/2016, larval rearing, La Lopé National Park, Gabon"; "*An. fontenillei* n.sp. N°781, female, LOP51 (S0.20356°; E11.60281°), 09/02/2016, larval rearing, La Lopé National Park, Gabon."

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# Review and re-proposal of family-group names used for tribes of Scathophagidae (Diptera)

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Abstract. In 2003, František Šifner proposed to divide the Scathophagidae (Diptera) into eight tribes. The names for three of these tribes—Amaurosomini, Gimnomerini, and Microprosopini—were used for the first time but were not explicitly stated to be new, and thus are not available under the *International Code of Zoological Nomenclature*. In this note, we make the names of those tribes available by proposing them as new. In addition, we call attention to the need for a ruling by the International Commission on Zoological Nomenclature on the status of the family-group names Norelliinae and Clidogastrinae proposed by Theodor Becker based on misidentified type genera.

The suprageneric classification of Scathophagidae has been volatile, with some authors recognizing two subfamilies (e.g., Šifner 2008), some none (e.g., Ozerov & Krivosheina 2023), and others treating the entirety of Scathophagidae as a subfamily of Anthomyiidae (e.g., Vockeroth 1965). Šifner (2003) proposed a taxonomic system of eight tribes of Scathophagidae, which was further refined by Šifner (2008). Five of Šifner's tribal names were subsequent usages of family-group names previously used at other ranks, whereas three were used for the first time, but not explicitly indicated to be new, as required for names published after 1999 by Article 16.1 of the *International Code of Zoological Nomenclature* (hereafter, "the *Code*") (ICZN 1999).

As noted above, there is no consensus on the arrangement of genera into subfamilies or tribes. In fact, recent molecular phylogenetic analyses have suggested that that this family should be included within Anthomyiidae (Kutty *et al.* 2010, 2019; but see Gomes *et al.*, 2021), an arrangement that will likely lead to the synonymization of some of the tribal names recognized in this work. Nevertheless, we believe it is prudent to ensure *Code* compliance for the names that were originally introduced by Šifner (2003), as they have repeatedly been treated as available and valid in subsequent works (Šifner 2008, 2018; Engelmark & Haarto 2019; Bernasconi & Šifner 2021; Ivković *et al.* 2021).

In this note, we review the nomenclatural and taxonomic status of the tribes of Scathophagidae introduced by Šifner (2003) and, when necessary, propose their names as new. The diagnosis for each tribe is adapted from Šifner (2003), and the composition of each tribe follows Šifner (2003, 2008) and Bernasconi & Šifner (2021). A key to the tribes of Scathophagidae was published in Šifner (2003).

#### Amaurosomini Angell & Šifner, tribus nov.

**Diagnosis**: Palpi narrow and with short bristles; propleural and prostigmal bristles well developed; pregonite of male narrow, slightly arched and mostly with short bristles; surstyli of male narrow and long.

Type genus: Amaurosoma Becker, 1894.

**Included genera**: *Amaurosoma* Becker, 1894; *Gabreta* Šifner, 2015; *Gonatherus* Rondani, 1856; *Julienomyia* Šifner, 2015; *Miroslava* Šifner, 1999; *Neorthacheta* Vockeroth, 1995; *Orthacheta* Becker, 1894.

#### Cleigastrini Becker, 1894

**Diagnosis**: Palpi narrow or slightly enlarged and always without long apical bristle; propleural and prostigmal bristles present (may be hairlike in *Acerocnema*); lobes of 5th abdominal sternite of male bilobate; pregonite distinctly narrow, straight or forked with one to four bristles.

Type genus: Cleigastra Macquart, 1835.

Included genera: Acerocnema Becker, 1894; Cleigastra Macquart, 1835; Dromogaster Vockeroth, 1995; Gonarcticus Becker, 1894; Hajekiana Šifner, 2016; Hexamitocera Becker, 1894; Huckettia Vockeroth, 1995; Megaphthalma Becker, 1894; Peratomyia Vockeroth, 1995; Spathephilus Becker, 1894; Synchysa Vockeroth, 1995.

Remarks: This family-group name was previously used in a sense equivalent to Delinini, based on a misidentification of the type genus. Becker (1894) proposed Clidogastrinae as the name for a 'stirps' of 'Scatomyzidae' based on Clidogastra Agassiz, 1846, an unjustified emendation of Cleigastra Macquart, 1835. However, Clidogastra sensu Becker (1894) was a misidentification (Sabrosky 1999): he stated that the type species of Clidogastra was Clidogastra nigrita (Fallén, 1819), following Rondani (1856) and overlooking a previous type fixation for *Cleigastra* of *Cordylura apicalis* Meigen, 1826 by Westwood (1840). Instead, Becker (1894) placed Cordylura apicalis as the type species of Cnemopogon Rondani, 1856. Becker's (1894) concept of Clidogastra is equivalent to Delina Robineau-Desvoidy, 1830 (type species Delina dejeani Robineau-Desvoidy, 1830 [= Cordylura nigrita Fallén, 1819], designated by Séguy (1952)). Williston (1896) later used the spelling Cleigastrinae in the same sense as Becker. If the type genus of Clidogastrinae is taken to be Cleigastra, then the tribe Cleigastrini is to be attributed to Becker, 1894. On the other hand, if the type of Clidogastrinae is taken to be *Delina*, it is a junior synonym of Delinini Robineau-Desvoidy, 1830, and a new name may be required for this tribe. According to Articles 41 and 65.2 of the Code, when a family-group name is based on a misidentified type genus and this is likely to threaten stability or cause confusion, a case must be submitted to the International Commission on Zoological Nomenclature for a ruling. The name Cleigastrini was attributed in error to Šifner, 2003 by Šifner (2008, 2018) and Bernasconi & Šifner (2021).

#### Cordilurini Macquart, 1835

**Diagnosis**: Palpi narrow with one or two apical or subapical bristles; propleural and prostigmal bristles always distinct; katepisternum always with only one bristle; pregonite of male distinct and wide, with varying number of bristles; 7th abdominal sternite of female almost always divided into two to three partially or totally separate sclerites.

#### Type genus: Cordilura Fallén, 1810.

Included genera: Achaetella Malloch, 1923; Acicephala Coquillett, 1898; Bucephalina Malloch, 1919; Cordilura Fallén, 1810; Milania Šifner, 2010; Mixocordylura Hendel, 1909; Norellisoma Walhlgren, 1917; Parallelomma Becker, 1894; Paratidia Malloch, 1931; Phrosia Robineau-Desvoidy, 1830; Pseudacicephala Malloch, 1931; Scoliaphleps Becker, 1894; Snyderia James, 1955; Suwaia Šifner, 2009.

**Remarks**: Originally published by Macquart (1835) as Cordylurides (Sabrosky 1999). The name Cordilurini was attributed in error to Šifner, 2003 by Šifner (2008, 2018) and Bernasconi & Šifner (2021).

#### Delinini Robineau-Desvoidy, 1830

**Diagnosis**: Palpi very short with one to two bristles or only haired; propleural and prostigmal bristles distinct; lobes of 5th abdominal sternite of male short; pregonite wide and short, with short or medium bristles.

Type genus: Delina Robineau-Desvoidy, 1830.

Included genera: Americina Malloch, 1923; Delina Robineau-Desvoidy, 1830; Leptopa Zetterstedt, 1838; Micropselapha Becker, 1894; Mirekiana Šifner, 2012; Neochirosia Malloch, 1917; Plethochaeta Coquillett, 1901.

#### Gimnomerini Angell & Šifner, tribus nov.

**Diagnosis**: Palpi narrow and at most with a very small apical bristle; propleural and prostigmal bristles may be distinct, hairlike, or absent; pregonite of male with distinct and sometimes very long bristles; 8th abdominal sternite of female fused with 8th tergite or both very close together.

Type genus: Gimnomera Rondani, 1867.

Included genera: Gimnomera Rondani, 1867; Norellia Robineau-Desvoidy, 1830.

**Remarks**: The name Norelliini Becker, 1894 may have priority over Gimnomerini. Becker (1894) proposed "Norellinae" [*sic*] as a 'stirps' of 'Scatomyzidae' based on *Norellia* Robineau-Desvoidy, 1830. However, *Norellia sensu* Becker (1894) was a misidentification: he stated that the type species of *Norellia was Norellia nervosa* (Meigen, 1826), and placed its actual type species, *Norellia pseudonarcissi* Robineau-Desvoidy, 1830 (by monotypy), in the genus *Achantholena* Rondani, 1856 as a synonym of *Achantholena spinipes* (Meigen, 1826). Becker's *Norellia* is instead equivalent to *Norellisoma* Hendel, 1910 (type species *Cordilura nervosa* Meigen, 1826, designated by Vockeroth (1965)). If the type genus of Norellinae is taken to be *Norellia* (as stated by Sabrosky 1999), then Norellinae (corrected spelling Norelliini) is a senior synonym of Gimnomerini. On the other hand, if the type of Norellinae is taken to be *Norellisoma*, it is a junior synonym of Cordilurini Macquart, 1835. As with Clidogastrinae Becker, 1894, a case must be submitted to the International Commission on Zoological Nomenclature for a ruling.

#### Hydromyzini Fallén, 1813

**Diagnosis**: Palpi wide to flattened; propleural and prostigmal bristles hairlike or lacking; lobes of 5th abdominal sternite of male sometimes with modified secondary lobes; pregonite short, enlarged and at most with one short bristle.

Type genus: Hydromyza Fallén, 1813.

**Included genera**: *Bostrichopyga* Becker, 1894; *Chaetosa* Coquillett, 1898; *Cosmetopus* Becker, 1894; *Ernoneura* Becker, 1894; *Hydromyza* Fallén, 1813; *Lasioscelus* Becker, 1894; *Paracosmetopus* Hackman, 1956; *Pleurochaetella* Vockeroth, 1965; *Pogonota* Zetterstedt, 1860; *Spaziphora* Rondani, 1856; *Staegeria* Rondani, 1856.

**Remarks**: Originally proposed by Fallén as Hydromyzides in 1810, but the genus *Hydromyza* had not yet been published, so the family-group name was not made available in that work (Sabrosky 1999). *Hydromyza* was proposed and Hydromyzides made available by Fallén (1813). The name Hydromyzini was attributed in error to Šifner, 2003 by Šifner (2008, 2018) and Bernasconi & Šifner (2021).

#### Microprosopini Angell & Šifner, tribus nov.

**Diagnosis**: Palpi slightly enlarged, never flattened, only with small bristles or haired; propleural and prostigmal bristles hairlike; fore tibia ventrally with short spine-like bristles sometimes arranged totally or partially into two rows; lobes of 5th abdominal sternite of male short; pregonite of male short and sometimes apically arched with or without short bristles.

Type genus: Microprosopa Becker, 1894.

Included genera: Acanthocnema Becker, 1894; Allomyella Malloch, 1923; Brooksiella Vockeroth, 1995; Megaphthalmoides Ringdahl, 1936; Microprosopa Becker, 1894; Paramicroprosopa Ringdahl, 1936; Trichopalpus Rondani, 1856.

#### Scathophagini Robineau-Desvoidy, 1830 (1810)

**Diagnosis**: Palpi narrow and always without long apical or subapical bristles; propleural and prostigmal bristles hairlike and poorly differentiated from the adjacent hairlike bristles; katepisternum always with only one bristle; male pregonite diverse in shape but always with bristles; 8th abdominal sternite of female always distinct and paired.

Type genus: Scathophaga Meigen, 1803

Included genera: Ceratinostoma Meade, 1885; Coniosternum Becker, 1894; Scathophaga Meigen, 1803; Scatomyza Fallén, 1810.

**Remarks**: Scathophagidae and coordinate names at other ranks take their date of priority from Scatomyzidae Fallén, 1810, under Article 40.2 of the *Code*, as Scatomyzidae was replaced by Scathophagidae before 1961 because of synonymy of the type genera and Scathophagidae is in prevailing usage (Sabrosky 1999).

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## *Rhynchotaenia* Brèthes, 1910 (preoccupied): transfer of its species to *Pseudotaeniorhynchus* Theobald, 1911 (Diptera: Culicidae)

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Abstract. Due to the genus-group name *Rhynchotaenia* Brèthes, 1910 (currently a subgenus of *Coquillettidia* Dyar, 1904) being preoccupied by *Rhynchotaenia* Diesing, 1850, the next available name, its synonym *Pseudotaeniorhynchus* Theobald, 1911, is treated here as the valid name for species previously allocated to *Rhynchotaenia*. As a result, the following 16 species-group names are transferred in this work to the subgenus *Pseudotaeniorhynchus* Theobald: *Coquillettidia* (*Pseudotaeniorhynchus*) albicosta (Chagas, 1908); *Cq.* (*Pst.*) albifera (Prado, 1931); *Cq.* (*Pst.*) araozi (Shannon & Del Pont, 1928); *Cq.* (*Pst.*) arribalzagae (Theobald, 1903); *Cq.* (*Pst.*) chrysonotum (Peryassú, 1922); *Cq.* (*Pst.*) coticula (Dyar & Knab, 1907); *Cq.* (*Pst.*) fasciolata (Lynch Arribálzaga, 1891); *Cq.* (*Pst.*) hermanoi (Lane & Coutinho, 1940); *Cq.* (*Pst.*) juxtamansonia (Chagas, 1907); *Cq.* (*Pst.*) lynchi (Shannon, 1931); *Cq.* (*Pst.*) neivai (Lane & Coutinho, 1940); *Cq.* (*Pst.*) nigricans (Coquillett, 1904); *Cq.* (*Pst.*) nitens (Cerqueira, 1943; *Cq.* (*Pst.*) persephassa (Dyar & Knab, 1909); *Cq.* (*Pst.*) shannoni (Lane & Antunes, 1937); *Cq.* (*Pst.*) venezuelensis (Theobald, 1912).

*Rhynchotaenia* Brèthes, 1910 was originally introduced as a distinct genus, with *Taeniorhynchus fasciolatus* Lynch Arribálzaga, 1891 subsequently designated as the type species by Edwards (1932). *Pseudotaeniorhynchus* Theobald, 1911 was also originally established as a genus, ironically also with *Taeniorhynchus fasciolatus* Lynch Arribálzaga subsequently designated as the type species by Brunetti (1914). *Rhynchotaenia* and *Pseudotaeniorhynchus* were both treated as synonyms of *Mansonia* Blanchard, 1901 by Howard *et al.* (1915), and the former was established as a subgenus of *Mansonia* by Dyar (1925), with *Pseudotaeniorhynchus* apparently retained as a synonym of *Mansonia*, as indicated by Dyar (1928), apparently until Edwards (1932) listed it as a synonym of *Rhynchotaenia*. *Rhynchotaenia* remained a subgenus of *Mansonia* until *Coquillettidia* was treated as a separate genus by Ronderos & Bachmann (1963), with *Rhynchotaenia* recognized as one of its subgenera and *Pseudotaeniorhynchus* listed as a synonym of *Rhynchotaenia*.

The culicid genus-group name *Rhynchotaenia* Brèthes (1910: 470), is found to be preoccupied by the cestode genus-group name *Rhynchotaenia* Diesing (1850: 497, 521). As such, a replacement name is required. According to Ronderos & Bachmann (1963) and the more recent catalogs of Harbach (2018) and Wilkerson *et al.* (2021), the next available name is its synonym *Pseudotaeniorhynchus* Theobald (1911: 18). *Pseudotaeniorhynchus* is thus here treated as the valid name in place of *Rhynchotaenia* Brèthes, 1910. The following is a checklist of valid names in the subgenus *Coquillettidia* (*Pseudotaeniorhynchus*), which currently includes 13 valid species and three junior synonyms. The three-letter abbreviation *Pst*. is recommended for the subgenus.

Coquillettidia (Pseudotaeniorhynchus) albicosta (Chagas in Peryassú, 1908). albifera (Prado, 1931). arribalzagae (Theobald, 1903). coticula (Dyar & Knab, 1907). chrysonotum (Peryassú, 1922). fasciolata (Lynch Arribálzaga, 1891). hermanoi (Lane & Coutinho, 1940). juxtamansonia (Chagas, 1907). lynchi (Shannon, 1931). neivai (Lane & Coutinho, 1940). nigricans (Coquillett, 1904). persephassa (Dyar & Knab, 1909). nitens (Cerqueira, 1943). shannoni (Lane & Antunes, 1937). venezuelensis (Theobald in Surcouf, 1912). araozi (Shannon & Del Pont in Dyar, 1928).

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# A new replacement name for a junior primary homonym (Diptera: Asilidae)

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**Abstract**. A new replacement name is herein proposed: *Atomosia chaineyi*, **nom**. **nov**. for *Dasypogon parvus* Bigot, 1857 (preoccupied by *Dasypogon parvus* Rondani, 1851).

In our recent treatment of Bigot Diptera types (Pont *et al.*, 2024), we proposed new replacement names for four species-group names that are junior primary homonyms. Only after its publication did we realize that one of our new replacement names (*Atomosia bigoti* Pont & Evenhuis, 2024) was itself a junior homonym. To resolve this, we here propose a new replacement name. The synonymical history for it is given below.

#### Asilidae

Dasypogon parvus Bigot, 1857a: 330 [1857b: 789]; plate 20, figs 2, 2a (preoccupied by Dasypogon parvus Rondani, 1851 [as "Dasipogon"]).

Atomosia bigoti Pont & Evenhuis, 2024: 394, new replacement name for Dasypogon parvus Bigot, 1857 (preoccupied by Atomosia bigoti Bellardi, 1861), stat. nov.

Atomosia chaineyi Pont & Evenhuis, nom. nov. for Dasypogon parvus Bigot, 1857.

**Remarks**. Meigen (1803) proposed the generic name *Dasypogon*. O'Hara *et al.* (2011) incorrectly considered Dufour (1833) to have made an unjustified emendation "*Dasipogon*" by applying the same spelling change (y to i) for to two scientific names (Art. 33.2.1). However, as Dufour (1833) used both the original spelling "*Dasypogon*" as well as the spelling "*Dasipogon*" for nominal species he considered valid, "*Dasipogon*" should be considered an incorrect subsequent spelling "*Dasipogon*" has not been proposed as an emendation, and Rondani's (1851) use of the spelling "*Dasipogon parvus*" is therefore deemed to be a proposal under the correct original spelling as *Dasypogon parvus* Rondani, 1851, which enters into primary homonymy with *Dasypogon parvus* Bigot, 1857.

#### ACKNOWLEDGMENTS

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Systema Dipterorum Nomenclatural Notes. IV. Edited by Neal L. Evenhuis & Thomas Pape. Bishop Museum Occasional Papers 35–40 (2024).

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# New replacement names for junior primary and secondary homonyms in Muscidae (Diptera)

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Abstract. Twenty-six new replacement names are proposed for junior primary and secondary homonyms in the family Muscidae (Diptera).

## INTRODUCTION

During preparation of "A Catalogue of the Muscidae of the World (Diptera)", a number of junior homonyms without synonyms to use in their place have come to light, both primary and secondary. As there may be some delay in publishing the "Catalogue", new replacement names are proposed for these.

Twenty-seven junior primary and secondary homonyms are listed here, of which 26 have been given new replacement names. One junior primary homonym denotes an unrecognized European species, and as the name will undoubtedly prove to be a junior synonym of a known species, no new replacement name has been proposed.

Current genera are listed alphabetically, and homonymous names are arranged alphabetically within each genus.

# RESULTS

## Genus ATHERIGONA Rondani, 1856

Atherigona ponti Xue & Yang, 1998: 329 [Chinese] & 342 [English] (junior primary homonym of Atherigona ponti Deeming, 1971).

Atherigona xuei Pont, nom. nov. for Atherigona ponti Xue & Yang, 1998.

### Genus COENOSIA Meigen, 1826

- Coenosia (Coenosia) bivittata Schnabl, 1911: 67 (junior primary homonym of Coenosia bivittata Stein, 1908).
- Although this name is a junior primary homonym, it is not given a new replacement name here as the taxonomic species it denotes is unrecognised. It was described from Corsica, and the name is most likely a junior synonym of an already described species, but unfortunately, the syntype series of seven females was destroyed, together with the rest of Schnabl's collection, in 1945 (Pont & Werner, 2006: 29).

Coenosia (Hoplogaster) fumipennis Huckett, 1934: 89 (key), & 104 (junior primary homonym of Coenosia fumipennis Lamb, 1909).

Coenosia hugonis Pont, nom. nov. for Coenosia fumipennis Huckett, 1934.

Coenosia guizhouensis Wei, 2006b: 507 [Chinese] & 522 [English] (junior secondary homonym in Coenosia of Dexiopsis guizhouensis Wei, 2006a).

Coenosia lianmengi Pont, nom. nov. for Coenosia guizhouensis Wei, 2006b.

Coenosia (Hoplogaster) laeta Huckett, 1934: 88 & 90 (key), & 98 (junior primary homonym of Coenosia laeta Wiedemann, 1830).

Coenosia laetabilis Pont, nom. nov. for Coenosia laeta Huckett, 1934.

- *Coenosia nigra* Wei, 2006a: 276 [Chinese] & 285 [English] (junior primary homonym of *Coenosia nigra* Meigen, 1826).
- Coenosia tenebrosa Pont, nom. nov. for Coenosia nigra Wei, 2006a.
- Coenosia punctipes Thomson, 1869: 557 (junior primary homonym of Coenosia punctipes Meigen, 1826).

Coenosia thomsoni Pont, nom. nov. for Coenosia punctipes Thomson, 1869.

*Coenosia (Limosia) tarsata* Huckett, 1965: 158 & 161 (key), & 164 (junior secondary homonym in *Coenosia* of *Limosia tarsata* Snyder, 1957).

Coenosia hucketti Pont, nom. nov. for Coenosia tarsata Huckett, 1965.

Anthomyia tenuior Walker, 1853: 365 (junior secondary homonym in Coenosia of Cordylura tenuior Walker, 1849).

Coenosia tenuis Pont, nom. nov. for Anthomyia tenuior Walker, 1853.

#### Genus DICHAETOMYIA Malloch, 1921

Dichaetomyia fuscitibia Shinonaga, 2014: 130 (key), & 131 (junior secondary homonym in Dichaetomyia of Spilogaster fuscitibia Stein, 1906).

Dichaetomyia shinonagai Pont, nom. nov. for Dichaetomyia fuscitibia Shinonaga, 2014.

- Dichaetomyia nigridorsata Shinonaga in Shinonaga & Thinh, 2000: 38 (key), & 44 (junior primary homonym of Dichaetomyia nigridorsata Emden, 1965).
- Dichaetomyia dorsonigra Pont, **nom. nov**. for Dichaetomyia nigridorsata Shinonaga in Shinonaga & Thinh, 2000.

#### Genus LIMNOPHORA Robineau-Desvoidy, 12830

Limnophora caesia Shinonaga, 2005: 75 (key), & 100 (junior secondary homonym in Limnophora of Melanochelia caesia Villeneuve, 1936).

Limnophora shinonagai Pont, nom. nov. for Limnophora caesia Shinonaga, 2005.

Limnophora caesia Shinonaga, 2010: 298 (key), & 336 (junior secondary homonym in Limnophora of Melanochelia caesia Villeneuve, 1936).

- Limnophora latifrons Zhang & Xue, 1996: 198 (key), & 201 (junior primary homonym of Limnophora latifrons Stein, 1916).
- Limnophora xuei Pont, nom. nov. for Limnophora latifrons Zhang & Xue, 1996.
- Limnophora latifrons Shinonaga, 2005: 75 (key), & 101 (junior primary homonym of Limnophora latifrons Stein, 1916).
- Limnophora frontata Pont, nom. nov. for Limnophora latifrons Shinonaga, 2005.
- Limnophora malaisei Emden, 1965: 560 (key), & 593 (junior primary homonym of Limnophora malaisei Ringdahl, 1920).
- Limnophora burmana Pont, nom. nov. for Limnophora malaisei Emden, 1965.
- Limnophora malaisei Shinonaga, 2005: 77 (key), & 125 (junior primary homonym of Limnophora malaisei Ringdahl, 1920).
- Limnophora edita Pont, nom. nov. for Limnophora malaisei Shinonaga, 2005.
- Limnophora montana Shinonaga, 2005: 78 (key), & 148 (junior primary homonym of Limnophora montana Stein, 1916).
- Limnophora ampla Pont, nom. nov. for Limnophora montana Shinonaga, 2005.
- Limnophora montana Shinonaga, 2009: 447 (key), & 451 (junior primary homonym of Limnophora montana Stein, 1916).
- Limnophora bumiensis Pont, nom. nov. for Limnophora montana Shinonaga, 2009.
- Limnophora nigridorsata Shinonaga, 2005: 74 (key), & 84 (junior primary homonym of Limnophora nigridorsata Malloch, 1929).
- Limnophora dorsonigra Pont, nom. nov. for Limnophora nigridorsata Shinonaga, 2005.
- Limnophora nigripennis Shinonaga, 2005: 76 (key), & 113 (junior primary homonym of Limnophora nigripennis Stein, 1904).
- Limnophora nigripennata Pont, nom. nov. for Limnophora nigripennis Shinonaga, 2005.

#### Genus MYDAEA Robineau-Desvoidy, 1830

- Mydaea montana Shinonaga, 2003: 207 (key), & 211 (junior primary homonym of Mydaea montana Lobanov, 1983).
- Mydaea shinonagai Pont, nom. nov. for Mydaea montana Shinonaga, 2003.

Limnophora satoshii Pont, nom. nov. for Limnophora caesia Shinonaga, 2010.

# Genus MYOSPILA Rondani, 1856

Myospila latifrons Wei, 1991: 12 [Chinese] & 15 [English] (junior secondary homonym in Myospila of Oramydaea latifrons Snyder, 1949).

Myospila lianmengi Pont, nom. nov. for Myospila latifrons Wei, 1991.

#### Genus PHAONIA Robineau-Desvoidy, 1830

Phaonia flavicornis Feng, 1995: 54 [Chinese] & 55 [English] (junior primary homonym of Phaonia flavicornis Stein, 1913).

Phaonia fengi Pont, nom. nov. for Phaonia flavicornis Feng, 1995.

- Phaonia subaureola Feng & Ma in Ma, Xue & Feng, 2002: 326 (key, in Chinese), 398 (key, in English), 331 [Chinese] & 399 [English] (junior primary homonym of Phaonia subaureola Xue & Zhang, 1989).
- *Phaonia siniaureola* Pont, **nom. nov**. for *Phaonia subaureola* Feng & Ma *in* Ma, Xue & Feng, 2002.

#### Genus SPILOGONA Schnabl, 1911

- Lonchaea aucklandica Hutton, 1902: 173 (junior secondary homonym in Spilogona of Limnophora aucklandica Hutton, 1902).
- Spilogona huttoni Pont, nom. nov. for Lonchaea aucklandica Hutton, 1902.
- Homalomyia fuliginosa Hutton, 1901: 74 (junior secondary homonym in Spilogona of Aricia fuliginosa Holmgren, 1869).

Spilogona harrisoni Pont, nom. nov. for Homalomyia fuliginosa Hutton, 1901.

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# An assessment of the Diptera species-group names appearing for the first time in the two 1829 works of James Francis Stephens

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Abstract. Of the more than 410 Diptera species-group names appearing for the first time in J.F. Stephens's two 1829 works (The Nomenclature of British Insects and A Systematic Catalogue of British insects), most are nomina nuda, but 25 have been found in this study to be available. These are reviewed with taxonomic and/or nomenclatural implications discussed where relevant. New synonymies are as follows: Chironomus assimilis Stephens, 1829 under *Tipula macrocephala* Linnaeus, 1758 [Tipulidae], n. syn.; Chironomus plumipes Stephens, 1829 under Microtendipes obscurus (Meigen, 1804) [Chironomidae], n. syn.; Lasioptera berberina (Schrank, 1781) [Cecidomyiidae], n. syn.; Cecidomyia oxycanthae Stephens, 1829 under Planetella grandis (Meigen, 1804) [Ceratopogonidae], n. syn.; Cecidomyia melanocephala Stephens, 1829 under Tipula minutissima Stewart, 1802 [Cecidomyiidae], n. syn.; Psychoda nigrofusca Stephens, 1829 under Psychoda obscura Boitard, 1828 [Cecidomyiidae], n. syn.; Psychoda concinna Stephens, 12829 under Clytocerus ocellaris (Meigen, 1804) [Psychodidae], n. syn.; Leptorhina bicolor Stephens, 1829 under Helius longirostris (Meigen, 1818) [Limoniidae], n. syn.; Limnobia xanthura Stephens, 1829 under Tipula lentus Harris, 1776 [Ptychopteridae], n. syn.; Tipula bimaculosa Stephens, 1829 under Tipula (Lunatipula) selenitica Wiedemann, 1818 [Tipulidae], n. syn.; Empis certus Stephens, 1829 under Empis oertus Harris, 1776 [Empididae], n. syn.; Callomyia aterrima Stephens, 1829 under Agathomyia antennata Zetterstedt, 1819 [Platypezidae], n. syn.; Pipunculus dubrensis Stephens, 1829 under Cephalops aeneus Fallén, 1810 [Pipunculidae], n. syn.; Porphyrops splendidus Stephens, 1829 under Argyra auricollis (Meigen, 1824) [Dolichopodidae], n. syn.; Dolichopus nigritarsis Stephens, 1829 under Dolichopus acuticornis Wiedemann, 1817 [Dolichopodidae], n. syn.; Syrphus caliginosus Stephens, 1829 under Syrphus fastuosus (Stewart, 1802) [Syrphidae], n. syn.; Musca nigromarginata Stephens, 1829 under Musca ausus Harris, 1780 [Tachinidae], n. syn.; Tephritis basalis Stephens, 1829 under Musca purmundus Harris, 1779 [Tephritidae], n. syn.; Tetanocera testacea Stephens, 1829 under Musca varicus Harris, 1780 [Sciomyzidae], n. syn.; Tetanocera bimaculata Stephens, 1829 and Musca vagus Harris, 1780 under Loxocera aristata (Panzer, 1801) [Psilidae], n. syn. One name, Geomyza pallipes Stephens, 1829 is found to be a valid name (a senior synonym of Geomyza hackmani Nartshuk, 1984) [Opomyzidae], n. syn. Also, Dolichopus angulatus Stephens, 1829 is treated as available and as a nomen dubium in Dolichopus Latreille, 1797, and Musca carnarida Stephens, 1829 is considered available and treated as Exoristinae sp. [Tachinidae] and Musca trilineata Stephens, 1829 is considered an incorrect spelling of Musca trelineata Harris, 1780 and treated under Helophilus pendulus (Linnaeus, 1758) [Syrphidae].



Figure 1. James Francis Stephens, from a daguerreotype, date unknown. Source: MacKechnie-Jarvis (1976).

# INTRODUCTION

James Francis Stephens (1792–1852) (Fig. 1) was a British entomologist best known for his *Illustrations of British Entomology* (henceforth *Illustrations*). Stainton (1853) gave probably the best account of Stephens's life, based on an autobiographical sketch by Stephens and correspondence between the two.

Stephens was interested in entomology from an early age, but in 1825, after having initially concentrated on electricity, conchology, and ornithology, began to spend more time on insects. Although he professionally worked in the Admiralty (placed there in 1807 by his Admiral uncle when he was just 15 and worked there until 1845), he devoted pretty much all of his spare time to entomology. He was keen early on to provide a list of all known British insects, having made a manuscript list of all British animals as a child, and continued to add to it over the years. Eventually seeing the work as too large, he concentrated on completing just the insects. An advertisement of his intentions to that end appeared in Stephens's (1826) volume 13, part II on Aves for Shaw's *General Zoology*, where he stated that two further works were soon to appear: "A systematic catalogue of nearly ten thousand indigenous insects" and a "Synopsis of British Insects" (the latter to be renamed as his *Illustrations of British Entomology*).

Two works dealing with all the British insects were published by Stephens in 1829: *A Systematic Catalogue of British Insects* (henceforth *Catalogue*) in two parts ([I.] Mandibulata and [II.] Haustella [with Diptera in Part II])<sup>1</sup> (Fig. 2); and his *Nomenclature of British Insects* (henceforth *Nomenclature*), a condensed checklist of the names in the two volumes of his *Catalogue* (Fig. 3), but not including synonyms. Stephens's longer and more descriptive work, the *Illustrations*, did not deal with any Diptera until his *Supplement* (Stephens, 1846), thus many of the Diptera species-group names first appearing in the *Catalogue* and *Nomenclature* without any descriptive matter have been considered *nomina nuda* by virtually all workers. However, this is not always the case. An examination of the *Catalogue* in this study shows that there are species-group names made available by one of the two following methods: (1) a new replacement name for a previously published name (Fig. 4a); or (2) an emendation in spelling of a previously published name (Fig. 4b). It was thus decided to assess all the names in both 1829 works for nomenclatural purposes and the result of that analysis is provided below.

## MATERIAL AND METHODS

Stephens (1829a) and Stephens (1829b) were examined from copies on the Biodiversity Heritage Library website. Dating of each is based on Evenhuis (1997), where the *Nomenclature* was shown to have been published just 6 weeks prior to the *Catalogue*, although the title of the *Nomenclature* makes it seem as though it was intended to come out after the *Catalogue* and act as a supplementary summary. The status of each nominal species was checked against *Systema Dipterorum* (SD) (Evenhuis & Pape 2024) as well as published sources given in SD and listed here for each name and/or updated as necessary.

*New Synonymies*: It is understood that all new replacement names and emendations at the time of their proposal will automatically be synonyms of the names they intend to

<sup>1.</sup> Reference to Roman-numeraled pages in the current study refers to the introduction in Part I; all Arabic-numeraled pages refer to the Diptera treated in Part II.

mithsonian Insur 482 F7583 2 onal Muse A SYSTEMATIC CATALOGUE OF BRITISH INSECTS:/ BEING AN ATTEMPT TO ARRANGE ALL THE HITHERTO DISCOVERED INDIGENOUS INSECTS IN ACCORD-ANCE WITH THEIR NATURAL AFFINITIES. CONTAINING ALSO THE REFERENCES TO EVERY ENGLISH WRITER ON ENTOMOLOGY, AND TO THE PRINCIPAL FOREIGN AUTHORS. WITH ALL THE PUBLISHED BRITISH GENERA TO THE PRESENT TIME. BY JAMES FRANCIS STEPHENS, F.L.&Z.S. &c. "..... Ten thousand different tribes People the blaze." Thomson. LONDON: PUBLISHED FOR THE AUTHOR, BY BALDWIN AND CRADOCK, PATERNOSTER-ROW. 1829.

Figure 2. Title page of the Catalogue. Image: Biodiversity Heritage Library.

## THE

# NOMENCLATURE

OF

# **BRITISH INSECTS;**

BEING A

COMPENDIOUS LIST OF SUCH SPECIES AS ARE CONTAINED IN THE

# SYSTEMATIC CATALOGUE

OF

# BRITISH INSECTS,

AND FORMING

A GUIDE TO THEIR CLASSIFICATION,

&c. &c.

BY JAMES FRANCIS STEPHENS, F. L. & Z. S. &c.

LONDON: PUBLISHED, FOR THE AUTHOR, BY BALDWIN AND CRADOCK.

MUS, COMP. ZOBLOGY.

1829.



replace, so as synonyms they cannot be "new". It is preferrable instead to list each newly discovered unjustified new replacement name and emendation as a "new synonymy", following the ICZN *Code* Glossary (I.C.Z.N. 1999) definition (2) of synonymy as "A list of synonyms". I use "new synonymy" as a tag to notify our readers and relevant abstracting services of those instances where an available name that has not previously been documented as such is newly recognized as being part of such a list.

# **BACKGROUND ON THE TWO WORKS**

Stephens (1829b: iii–xx) gave an excellent introduction to the purpose and philosophy of his *Catalogue*. It was initially designed as a precursor to his *Illustrations*, but before he had even begun his *magnum opus*, he realized that the *Illustrations* would take some years to complete and wanted to provide a checklist of all known species [the *Illustrations* was actually never fully completed in the same format he envisioned, and after 11 volumes appeared (the last part in 1838), there was a significant pause in any further work until the *Supplement* was published in 1846].

In order to provide as complete a list as possible, Stephens gathered all the literature on British entomology [see Stainton (1853) for a list of Stephen's library] and, examining the specimens at his disposal, provided the *Catalogue*. He also provided a condensed summary of all the names in those two volumes, which was published in his *Nomenclature*. A second edition of the *Nomenclature* was attempted (Stephens 1833), but only the Mandibulata appeared before the work was made target for an accusation of plagiarism by John Curtis of the style Stephens used for his second edition, which appeared very similar to that of Curtis (1829). Court appearances and rather acidic attacks by both parties as well as colleagues taking sides appeared in local periodicals for the next few years and put a temporary halt to Stephens's work on the *Illustrations* in 1838. It was not until 1846 that he finished the series by putting out the *Supplement* (Stephens 1846), but it was much less detailed than his other volumes, no doubt because of him wanting to be done with the project and put it and the ramifications of his efforts behind him.

## The Consequences of Introducing Manuscript Names

The unfortunate result of deciding to provide a complete checklist of all names before the descriptive matter could be published was that many manuscript and cabinet names to be dealt with later would have to be listed. Stephens (1829b) said he had received requests from many colleagues to provide them with a full list quickly, so as to be able to label and classify their own collections. That purpose to assist his colleagues was seen as more important than whatever impact manuscript names in the list would have. He stated (Stephens, 1829b: v):

"... I have also introduced such MS. names as are in general use in the more extensive collections, so far as circumstances will permit; and also those which I have applied to the apparently undescribed species in my own cabinet, by way of showing the present extent of the various groups."

By listing all the names others had used in a synonymical list, Stephens believed that users could then find the name they were using in their collections and replace it with the name Stephens said should be preferred. In further defense of his publishing these manuscript names, Stephens (1829b: v) wrote:

Systema Dipterorum Nomenclatural Notes IV



**Figure 4**. Methods found in the *Catalogue* of names being made available. **A**. New replacement name (right arrow). **B**. Emendation (left arrow). Images: Biodiversity Heritage Library.

"With regard to the MS. names in the following pages, it is of little consequence whether those which I have proposed be adopted or not; as they will ultimately appear in my "Illustrations," unless the species to which they are applied should be described by others in the interim. It is sufficient for my purpose to have pointed out the new species, and the divisions (by whatever names caprice or convenience may please to term them), and to have retained all such as could satisfactorily be identified, which have been imposed by others; not only in justice to their authors, but as I do not choose wilfully to create additional inconvenience by applying new ones for the mere purpose of securing the paltry fame dependent upon mere priority of nomenclature".

Manuscript names, by themselves, are simply *nomina nuda* and do not cause any nomenclatural or taxonomic problems. This is the case with Stephens's (1829a) manuscript species-group names. However, Stephens, in his more detailed *Catalogue* (Stephens 1829b), in numerous instances places his and others' manuscript names in association with previously described species. By doing so, it becomes a nomenclatural statement. If placed subordinate to ('below') the name of a previously described species, these manuscript names are simply *nomina nuda*, but if placed above the name of a previously described species, it indicates that Stephens had chosen those names to be used, e.g., in labeling collections, and they are therefore made available as new replacement names for the names of those previously described species. In other words, the relative position of names is here considered as sufficient evidence for fulfilling the requirement for new replacement names to be "established expressly to replace an already established name" (I.C.Z.N. 1999, Glossary).

Stephens indicated in his introduction (Stephens, 1829b: iii-xx) that he gathered in his *Catalogue* all of the names he found that had been used by others to label their specimens, and he created a complete synonymy list, giving for each species the name he believed was the proper name to use in collections. Many (66) of these cabinet and manuscript names derive from the large collection of Thomas Marsham, which Stephens acquired at an auction a few months before Marsham's death [details of sale in Chalmers-Hunt (1976: 78), who stated 466 "lots" of Coleoptera, Orthoptera, Hemiptera, Neuroptera, Lepidoptera, Hymenoptera, Diptera, Arachnida and "Acera"]. Thomas Marsham (1747-1819) was for many years the Secretary for the West Indian Dock Society and for the the Office of Commercial Commissioners. In his spare time he was a devoted entomologist (and one of the founders of the Linnean Society), having over the years amassed a very large collection of insects from Britain. Stephens in Stainton (1853: 8) described the Marsham collection that he had obtained in 1819 as being in 50 cabinets and comprising almost 5,000 specimens. Marsham too had desires to publish a full account of the British insects, but he got only as far as the Coleoptera in his Entomologica Britannica (Marsham 1802). Marsham apparently put the Diptera off to the last as he did not update his labels before he died, and the generic attribution of Marsham's species-group names listed in Stephens (1829b) indicates a very early concept of genera (i.e., all seem to be Linnean genera such as Asilus, Musca and Empis and not much evidence of later classifications). Thus, it is most likely that Marsham's naming of the Diptera in his collection did not take into account anything after Meigen (1804) or Fabricius (1805). Knowing this has a direct bearing on whether Marsham's names were his own (a novel name) or using those of other entomologists (subsequent usage), even if they were misidentified.

Other manuscript names used by Stephens are those of Leach and Meigen. Regarding the latter, apparently Stephens had access to Meigen specimens with names attached in order to be able to place them taxonomically in his *Catalogue*. Meigen did exchange specimens with colleagues, and apparently some of his named specimens made their way to Stephens. Whether or not these specimens included type material is not known, but it is possible<sup>2</sup>. Stephens's library (Stainton 1853) shows that by 1852 he had a full set of Meigen's works, but by the time of his *Catalogue* in 1829, the last work Meigen had published was Meigen (1826), which Stephens (1829b: vii) mistakenly dated as 1828.

#### A Reader's Guide to the Symbols and Type Faces Used by Stephens in his Catalogue

To the uninitiated eye, Stephens's (1829b) *Catalogue* is a puzzling mix of names and references. The lists of names and their synonyms seem fairly straightforward at first glance, but there are subtle things Stephens added to aid the reader. Symbols, type face usage, and even punctuation were meant to convey the veracity of his claims to these names being all British and verified by him. After all, as he said in his introduction (Stephens 1829b: v), before he started, there were about 5,000 known British insect species and his *Catalogue* would double that number; no doubt he thought there would be those detractors who might not believe the large numbers of additional species, thus he felt he had to defend their listing in his *Catalogue*. Listed below are the various contrivances Stephens employed to give additional information about each name (see Fig. 5 to see a few examples of some of these).

The Stephens Collection in the Natural History Museum, London, should be consulted to ascertain if such Meigen type material is included.

TIPULIDÆ. 241 7840. 22; lutea\*. Meig. Kl. i. 40. pl. 2. f. 10, 11 - (Samon. I. 9.)-(Curtis l. c. supra.) 7841. 23, flava \*. Meig. Zw. i. 99 .- (Curtis I. c. supra.) 7842. 24; maculipennis \* mihi. Α 7843. 25; fuscipennis\*. Meig. Zw. i. 98. 7844. 26; cucullata \*. Meig. 2w. i. 96. Genus 16: (1140). CAMPYLOMYZA, Wiedemann. 7845. 1; atra\*. Meig. Zw. i. 102. Cecid. atra. Meig. Kl. i. 40. 7816. 2; Aceris\*. Meig. Zw. i. 102. В 7847. 3; bicolor \*. Wied .- Meig. Zw. i. 102 7848. 4; flavipes \*. Meig. Zw. i. 102. pl. 3. f. 6. 9. Genus 17: (1141). PSYCHODA, Latreille, Samou. BIBIO, Geoffroy .- TINEARIA, Schellenburg .- TRICHOPTERA, Meig. Kl. 7849. 1; nigrofusca\* mihi. Ps. obscura. Macquart?-Boir. M. ii. 360? 7850. 2; aterrima\* mihi. 7851. 3; palustris\*. Meig. Zw. i. 105. pl. 2. f. 18. 7852. 4; ocellaris\*. Meig. Zw. i. 105. pl. 2. f. 14, 17 Tip. hirta. Stew. ii. 253?-Turt. iii. 595? 7853. 5; concinna \* mihi. Ps. variegata. Macquart ?- Boir. M. ii. 360 ? 7854. 6; trifasciata \*. Meig. Zw. i. 105.
 Trich. trifasciata. Meig. Kl. i. 44. pl. 2. f. 20. 7855. 7; nubila\*. Meg .- Meig. Zw. i. 107. 7856. 3; fuliginosa \*. Meig. Zw. i. 107. 7857. 9; humeralis\*. Hoffm.-Meig. Zw. i. 106. 7858. 10; phalænoides \*. Latr. Gen. iv. 251. Tipula phalænoides. Linn. ii. 977.—DeGeer. vi. 158. pl. 27. f. 6-9 .- Berk. S. i. 162 .- Stew. ii. 253 .- Turt. iii. 595 .--(Samou. I. 35.) Ps. muraria. Latr. H. xiv. 293. 7859. 11; canescens\*. Meig. Zw. i. 106. 7860. 12; nervosa\*. Meig. Zw. i. 106. Tipula nervosa. Schr. B. iii. sp. 2350. 7861. 13, nana \* mihi. С PART II. R

**Figure 5**. Page 241 of Part II of the *Catalogue* showing some of the contrivances used by Stephen to describe the status of the species listed. **A.** asterisk after name (e.g., fuscipennis\*) = those found within 25 miles of St. Paul's cathedral **B.** number followed by a semi-colon (e.g., 3; bicolor) = species captured by Stephens; **C.** number followed by a comma (13, nana) = species name seen in collections but not possessed. Image: Biodiversity Heritage Library.

- $\ddagger$  = foreign species only, but had been recorded from Britain.
- \* = species captured within 25 miles of St. Paul's [cathedral].
- <sup>†</sup> = not possessed and uncertain British origin.
- author's name in *italics* = Stephens had verified by seeing the species.
- author's name not in italics = Stephens had not seen the species.

species in *italics* = extra-European.

species in *italics* with an ! = source claims it was found in Britain.

source (author or work) in parentheses () = name has been published but not described. number after Stephens total number (7840. 1) = species number in a genus.

that number followed by comma (1,) = species name seen in collections but not possessed. that number followed by a semi-colon (1;) = species captured by Stephens.

that number followed by a colon (1:) = species seen alive [but not collected].

# NOMENCLATURAL STUDY OF THE NOVEL DIPTERA NAMES APPEARING IN STEPHENS (1829A, 1829B)

The species-group names dealt with below are those made available in Stephens (1829b). All the species-group names appearing in Stephens (1829a) are *nomina nuda*, but they are listed in the synonymy lists below for cross-reference purposes. In some cases, the spelling of a species-group name differs slightly from one work to the other or does not exist in one or the other work. Names are listed in order of appearance in the *Catalogue*. The number preceding the name in the header refers to the species number given by Stephens to each of his names including those he treated as synonyms.

# 7692. Chironomus assimilis Stephens, 1829

Chironomus assimilis Stephens, 1829a: 52. Nomen nudum.

- *Chironomus assimilis* Stephens, 1829b: 234 (unjustified new replacement name name for *Tipula macrocephala* Linnaeus, 1758 [as "Turt."]).
- CURRENT STATUS: Junior synonym of *Tipula macrocephala* Linnaeus, 1758, new synonymy.

FAMILY: TIPULIDAE.

REMARKS: *Chironomus assimilis* Stephens, 1829 is automatically a junior synonym of *Tipula macrocephala* Linnaeus, 1758, which is currently treated as unplaced in Tipulidae (but is not *Tipula* Linnaeus, 1758) [*teste* Oosterbroek & Theowald (1992: 174)].

Recognizing *Chironomus assimilis* Stephens, 1829 as available means that *Chironomus assimilis* Zetterstedt, 1838 (currently valid as *Stictochironomus rosenschoeldi* Zetterstedt, 1838 [*teste* Paasivirta (2014: 85)] is a junior primary homonym.

## 7720. Chironomus plumipes Stephens, 1829

Chironomus plumipes Stephens, 1829a: 52. Nomen nudum.

*Chironomus plumipes* Stephens, 1829b: 235 (unjustified new replacement name for *Chironomus obscurus* Meigen, 1804 [as "Fabr."]).

CURRENT STATUS: Junior synonym of *Microtendipes obscurus* (Meigen, 1804), new synonymy.

#### FAMILY: CHIRONOMIDAE.

REMARKS: Chironomus obscurus Meigen, 1804 is currently treated as a nomen dubium in the genus Microtendipes Kieffer, 1915 [teste Ashe & Cranston (1991: 291)], thus, Chironomus plumipes Stephens, 1829 is automatically a junior synonym of Microtendipes obscurus (Meigen, 1804).

# 7817. Diomyza rubra Stephens, 1829

Diomyza rubra Stephens, 1829a: 53. Nomen nudum.

- *Diomyza rubra* Stephens, 1829b: 240 (unjustified new replacement name for *Tipula berberina* Schrank, 1781).
- CURRENT STATUS: Junior synonym of *Lasioptera berberina* (Schrank, 1781), new synonymy.

# FAMILY: CECIDOMYIIDAE.

REMARKS: *Tipula berberina* Schrank, 1781 is currently treated as a valid species in the genus *Lasioptera* Meigen, 1818 [*teste* Gagné & Jaschhof (2021: 397)], thus, *Diomyza rubra* Stephens, 1829 is automatically a junior synonym of *Lasioptera berberina* (Schrank, 1781).

# 7819. Cecidomyia oxycanthae Stephens, 1829

Cecidomyia oxycanthae Stephens, 1829a: 53. Nomen nudum.

- *Cecidomyia oxycanthae* Stephens, 1829b: 240 (unjustified new replacement name for *Cecidomyia grandis* Meigen, 1804).
- CURRENT STATUS: Junior synonym of *Planatella grandis* (Meigen, 1804), **new syn-onymy**.

# FAMILY: CERATOPOGONIDAE.

REMARKS: Cecidomyia grandis Meigen, 1804 is currently treated as a valid species in the genus *Planetella* Westwood, 1840 [*teste* Chandler (2024: 85)], thus, *Cecidomyia oxycanthae* Stephens, 1829 is automatically a junior synonym of *Planetella grandis* (Meigen, 1804).

### 7838. Cecidomyia melanocephala Stephens, 1829

Cecidomyia melanocephala Stephens, 1829a: 53. Nomen nudum.

- *Cecidomyia melanocephala* Stephens, 1829b: 240 (unjustified new replacement name for *Tipula minutissima* Stewart, 1802 [as "*Stew. ii.* 254?"]).
- CURRENT STATUS: Junior (but valid) synonym of *Tipula minutissima* Stewart, 1802, **new synonymy**.

# FAMILY: CECIDOMYIIDAE.

REMARKS: Stewart (1802: 254) listed a *Tipula minutissima* without authorship. Most, but not all, of the names listed by Stewart (1802) are previously described species, so it is impossible to tell if a name listed by Stewart is his own or if he is following others. However, *Tipula minutissima* Stewart, 1802 is currently treated as an available name with Stewart as author and as a *nomen dubium* in Cecidomyiidae [*teste* Chandler (2024: 106)], thus, following Chandler (2024), *Cecidomyia melanocephala* Stephens, 1829 is automatically a junior synonym of *Tipula minutissima* Stewart, 1802. As *Tipula minutissima* Stewart, 1802 is a junior primary homonym of *Tipula minutissima* Linnaeus, 1767, *Tipula melanocephala* (Stephens, 1829) becomes the next available name for the species. *Tipula melanocephala* Stewart, 1802 is a junior primary homonym of *Tipula melanocephala* Fabricius, 1787 (currently in *Teucholabis* Osten Sacken, 1860; Limoniidae), but no new replacement name is proposed here as Stewart's name is a *nomen dubium*, and since the names have not been applied to taxa considered congeneric after 1899, we consider it unlikely that a new replacement name will be needed for the younger name.

## 7849. Psychoda nigrofusca Stephens, 1829

Psychoda nigrofusca Stephens, 1829a: 53. Nomen nudum.

- *Psychoda nigrofusca* Stephens, 1829b: 241 (unjustified new replacement name for *Psychoda obscura* Boitard, 1828).
- CURRENT STATUS: Junior synonym of *Psychoda obscura* Boitard, 1828, new synonymy.

# FAMILY: **PSYCHODIDAE**.

REMARKS: *Psychoda obscura* Boitard, 1828 has not been recorded in any regional catalogue or faunal list. In giving characters for the species, Boitard (1828) attributed the name to Macquart, but Macquart never described the name. Until its taxonomic placement can be ascertained, it is retained here as unplaced in Psychodidae.

#### 7853. Psychoda concinna Stephens, 1829

Psychoda concinna Stephens, 1829a: 53. Nomen nudum.

- *Psychoda concinna* Stephens, 1829b: 241 (unjustified new replacement name for *Psychoda variegata* Macquart, 1826).
- CURRENT STATUS: Junior synonym of *Clytocerus ocellaris* (Meigen, 1804), **new syn-onymy**.

## FAMILY: **PSYCHODIDAE**.

REMARKS: *Psychoda variegata* Macquart, 1826 is currently considered a junior synonym of *Clytocerus ocellaris* (Meigen, 1804) [*teste* Evenhuis (2022: 13)], thus *Psychoda concinna* Stephens, 1829 is automatically a junior synonym of *Clytocerus ocellaris* (Meigen, 1804).

Considering *Psychoda concinna* Stephens, 1829 as an available name makes it a senior primary homonym of *Psychoda concinna* Quate & Quate, 1967. Since the criteria to be fulfilled for making *Psychoda concinna* Quate & Quate, 1967 a *nomen protectum* are not fulfilled (not enough works or authors using the name as valid in the last 50 years), a new replacement name is needed for the younger name to resolve the homonymy, but this is not proposed here pending research into the situation by a specialist.

## 7892. Leptorhina bicolor Stephens, 1829

Leptorhina bicolor Stephens, 1829a: 53. Nomen nudum.

Leptorhina bicolor Stephens, 1829b: 243 (unjustified new replacement name for Limnobia longirostris Meigen, 1818 [as "Wied.—Meig. Zw. i. 144, pl. 4 f. 8]"). CURRENT STATUS: Junior synonym of *Helius longirostris* (Meigen, 1818), **new syn-onymy**.

# FAMILY: LIMONIIDAE.

REMARKS. Limnobia longirostris Meigen, 1818 is currently considered a valid species in Helius Le Peletier & Audinet-Serville, 1828) [teste Chandler (2024: 32)], thus Leptorhina bicolor Stephens, 1829 is automatically a junior synonym of Helius longirostris (Meigen, 1818).

Leptorhina Stephens, 1829 is recorded as having its type species, Leptorhina longirostris Meigen, 1818, fixed by monotypy (e.g., Evenhuis & Pape 2024). Even with two included nominal species (*bicolor* and *longirostris*), there is only one included taxonomic species as *bicolor* was proposed in synonymy with *longirostris*, so the type fixation by monotypy still stands.

With it being an available name *Leptorhina bicolor* Stephens, 1829, is now a senior secondary homonym in *Helius of Helius bicolor* Edwards, 1933. Since the criteria for making *Helius bicolor* Edwards, 1933 a *nomen protectum* are not fulfilled (not enough works or authors using the name as valid in the last 50 years), a new replacement name is needed for the younger name to resolve the secondary homonymy, but this is not proposed here pending research into the situation by a specialist.

#### 7910. Limnobia xanthura Stephens, 1829

Limnobia xanthura Stephens, 1829a: 53. Nomen nudum.

*Limnobia xanthura* Stephens, 1829b: 244 (unjustified new replacement name for *Tipula lentus* Harris, 1776).

CURRENT STATUS: Junior synonym of *Tipula lentus* Harris, 1776, **new synonymy**. FAMILY: **PTYCHOPTERIDAE**.

REMARKS: *Tipula lentus* Harris, 1776 is currently treated as a *nomen dubium* in Ptychopteridae [*teste* Chandler (2024: 126)], thus, *Limnobia xanthura* Stephens, 1829 is automatically a junior synonym of *Tipula lentus* (Harris, 1776).

# 7987. Tipula bimaculosa Stephens, 1829

Tipula bimaculosa Stephens, 1829a: 54. Nomen nudum.

- *Tipula bimaculosa* Stephens, 1829b: 248 (unjustified new replacement name for *Tipula selenitica* Wiedemann *in* Meigen, 1818 [as "*Hoffm.* ?—*Meig. Zw.* i. 187"]).
- CURRENT STATUS: Junior synonym of *Tipula (Lunatipula) selenitica* Wiedemann, 1818, **new synonymy**.

FAMILY: TIPULIDAE.

REMARKS: *Tipula selenitica* Wiedemann *in* Meigen, 1818 is currently treated as a valid species in the subgenus *Lunatipula* Edwards, 1931 (of *Tipula* Linnaeus, 1758) [*teste* Oosterbroek & Theowald (1992: 119)], thus, *Tipula bimaculosa* Stephens, 1829 is automatically a junior synonym of *Tipula (Lunatipula) selenitica* Wiedemann, 1818.

## 8235. Empis certus Stephens, 1829

- *Empis certus* Stephens, 1829b: 263 (unjustified emendation of *Empis oertus* Harris, 1776).
- CURRENT STATUS: Junior synonym of *Empis oertus* Harris, 1776, **new synonymy**. FAMILY: **EMPIDIDAE**.
- REMARKS. Stephens (1829b: 263) treated *Empis certus* Harris, 1776 as a junior synonym of *Empis lutea* Meigen, 1804. However, the latest treatment of the Harris name is by Yang *et al.* (2007: 461), followed here, where it is treated as a *nomen dubium* in *Empis* Linnaeus, 1758.

# 8260. Enicopteryx hyalipennis Stephens, 1829

Enicopteryx hyalipennis Stephens, 1829a: 56. Nomen nudum.

- *Enicopteryx hyalipennis* Stephens, 1829b: 264 (unjustified new replacement name for *Rhamphomyia anomalipennis* Meigen, 1822).
- CURRENT STATUS: Junior synonym of *Rhamphomyia* (*Megacyttarus*) anomalipennis Meigen, 1822.

# FAMILY: EMPIDIDAE.

REMARKS: *Enicopteryx hyalipennis* Stephens, 1829 is currently treated as a junior synonym of *Rhamphomyia anomalipennis* [*teste* Chandler (2024: 200)].

# 8299. Callomyia aterrima Stephens, 1829

Callomyia aterrima Stephens, 1829a: 56. Nomen nudum.

- *Callomyia aterrima* Stephens, 1829b: 266 (unjustified new replacement name for *Callomyia antennata* Zetterstedt, 1819 [as "*Fall.—Meig. Zw.* iv. 15?"]).
- CURRENT STATUS: Junior synonym of *Agathomyia antennata* Zetterstedt, 1819, **new** synonymy.

# FAMILY: **PLATYPEZIDAE**.

REMARKS: *Agathomyia antennata* Zetterstedt, 1819 is currently treated as a valid species [*teste* Chandler (2024: 229)], thus, *Callomyia aterrima* Stephens, 1829 is automatically a junior synonym of *Agathomyia antennata* Zetterstedt, 1819.

# 8303. Pipunculus dubrensis Stephens, 1829

Pipunculus dubrensis Stephens, 1829a: 56. Nomen nudum.

- *Pipunculus dubrensis* Stephens, 1829b: 266 (unjustified new replacement name for *Pipunculus flavipes* Meigen, 1824).
- CURRENT STATUS: Junior synonym of *Cephalops aeneus* Fallén, 1810, new synonymy.

# FAMILY: **PIPUNCULIDAE**.

REMARKS: *Pipunculus flavipes* Meigen, 1824 is currently treated as a junior synonym of *Cephalops aeneus* Fallén, 1810 [*teste* Chandler (2024: 269)], thus, *Pipunculus dubrensis* Stephens, 1829 is automatically a junior synonym of *Cephalops aeneus* Fallén, 1810.

# 8318. Porphyrops splendidus Stephens, 1829

Porphyrops splendidus Stephens, 1829a: 56. Nomen nudum.

- Porphyrops splendidus Stephens, 1829b: 267 (unjustified new replacement name for Porphyrops auricollis Meigen, 1824).
- CURRENT STATUS: Junior synonym of *Argyra auricollis* (Meigen, 1824), new synonymy.

#### FAMILY: DOLICHOPODIDAE.

REMARKS: Porphyrops auricollis Meigen, 1824 is currently treated as a valid species in the genus Argyra Macquart, 1834 [teste Chandler (2024: 213)], thus, Porphyrops splendidus Stephens, 1829 is automatically a junior synonym of Argyra auricollis (Meigen, 1824).

# 8359. Dolichopus angulatus Stephens, 1829

Dolichopus angulatus Stephens, 1829a: 56. Nomen nudum.

Dolichopus angulatus Stephens, 1829b: 268 (unjustified new replacement name for Dolichopus nitidus sensu Meigen, 1824).

CURRENT STATUS: *Nomen dubium* in *Dolichopus* Latreille, 1797 (*teste* this work). FAMILY: **DOLICHOPODIDAE**.

REMARKS: Stephens (1829b: 267) listed angulus as a valid name (no. 8359) and underneath listed "Do. nitidus. Meig. Zw. iv. 80. (!)". The next valid species (no. 8360) is Dolichopus nitidus annotated with "Fall. D.S. (Dolich.) 12. 9". Stephens (1829b) treated Dolichopus nitidus Fallén, 1823 as valid, thus his Dolichopus angulatus was a name for a new species Stephens believed was misidentified as nitidus by Meigen (1824: 80). Pending a revision of Stephens's type material, Dolichopus angulatus Stephens, 1829 is treated here as a nomen dubium in Dolichopus Latreille, 1797.

# 8363. Dolichopus nigritarsis Stephens, 1829

Dolichopus nigritarsis Stephens, 1829a: 56. Nomen nudum.

- Dolichopus nigritarsis Stephens, 1829b: 269 (unjustified new replacement name for Dolichopus ruralis Meigen, 1824).
- CURRENT STATUS: Junior synonym of *Dolichopus acuticornis* Wiedemann, 1817, **new synonymy**.

# FAMILY: DOLICHOPODIDAE.

REMARKS. *Dolichopus ruralis* Meigen, 1824 is currently treated as a junior synonym of *Dolichopus acuticornis* Wiedemann, 1817 [*teste* Chandler (2024: 215)], thus, *Dolichopus nigritarsis* Stephens, 1829 is automatically a junior synonym of *Dolichopus acuticornis* Wiedemann, 1817.

# 8466. Odontomyia trimaculata Stephens, 1829

- *Odontomyia trimaculata* Stephens, 1829b: 263 (unjustified new replacement name for *Stratiomys hydrodromia* Meigen, 1822).
- CURRENT STATUS: Junior synonym of *Odontomyia annulata* (Meigen, 1822) [teste Woodley (2001: 270)].

# FAMILY: STRATIOMYIDAE.

REMARKS. *Odontomyia trimaculata* Stephens, 1829 is currently treated as a *nomen nudum* and listed as junior synonym of *Odontomyia annulata* (Meigen, 1822) [*teste* Woodley (2001: 270).

# 8638. Syrphus caliginosus Stephens, 1829

- Syrphus caliginosus Stephens, 1829b: 287 (unjustified new replacement name for *Musca fastuosa* Stewart, 1802).
- CURRENT STATUS: Junior synonym of *Syrphus fastuosus* (Stewart, 1802), new synonymy.

# FAMILY: SYRPHIDAE.

REMARKS. Musca fastuosa Stewart, 1802 has not been found in any previous catalog. Stephens (1829b: 287) treated it in the genus Syrphus. It is treated here as a nomen dubium in Syrphus Fabricius, 1775.

## 8851. Musca carnarida Stephens, 1829

Musca carnarida Stephens, 1829a: 60. Nomen nudum.

- *Musca carnarida* Stephens, 1829b: 304 (unavailable as a new replacement name for *Musca ventito* Harris, 1780), but available as a new species (see below).
- CURRENT STATUS: Unplaced in Exoristinae [Tachinidae] (P. Cerretti, pers. comm.) (*teste* this work).

# FAMILY: TACHINIDAE.

REMARKS. *Musca ventito* Harris, 1780 was treated as an unavailable name in Calliphoridae [*teste* Thompson & Pont (1994: 132); now identified here as a tachinid] due to it being a verb, so, *Musca carnarida* Stephens, 1829 cannot be a new replacement name for it. However, it is available as a new name proposed with its description provided by indication from a reference to *Musca ventito* Harris, 1780. NB: Thompson & Pont (1994: 59) listed *Musca carnarida* Stephens, 1829 but only cited the work where it is a *nomen nudum* (Stephens 1829a: 60). In error, this *nomen nudum* was treated by them in *Protocalliphora* (Calliphoridae) under the name *Protocalliphora rognesi* Thompson & Pont, 1994, which they had proposed elsewhere in their work as a new replacement name for *Musca chrysor-rhoea* Meigen, 1826.

# 8853. Musca nigromarginata Stephens, 1829

Musca nigromarginata Stephens, 1829a: 60. Nomen nudum.

*Musca nigromarginata* Stephens, 1829b: 304 (unjustified new replacement name for *Musca ausus* Harris, 1779).

CURRENT STATUS: Junior synonym of *Musca ausus* Harris, 1780, **new synonymy**. FAMILY: **TACHINIDAE**.

REMARKS. Musca ausus Harris, 1779 is currently treated as a nomen dubium in Tachinidae [teste Thompson & Pont (1994: 54)], thus, Musca nigromarginata Stephens, 1829 is automatically a junior synonym of Musca ausus Harris, 1779.

# 9088. Tephritis basalis Stephens, 1829

Tephritis basalis Stephens, 1829a: 61. Nomen nudum.

- Tephritis basalis Stephens, 1829b: 316 (unjustified new replacement name for Musca purmundus Harris, 1779 [as "permundus").
- CURRENT STATUS: Junior synonym of *Anomoia purmunda* (Harris, 1779), **new syn-onymy**.

# FAMILY: **TEPHRITIDAE**.

REMARKS. *Musca purmundus* Harris, 1779 is currently treated as a valid species in the genus *Anomoia* Walker, 1835 [*teste* Chandler (2024: 291)], thus, *Tephritis basalis* Stephens, 1829 is automatically a junior synonym of *Anomoia purmunda* (Harris, 1779).

## 9171. Tetanocera testacea Stephens, 1829

*Tetanocera testacea* Stephens, 1829b: 321 (unjustified new replacement name for *Musca varicus* Harris, 1779).

CURRENT STATUS: Junior synonym of *Musca varicus* (Harris, 1779), **new synonymy**. FAMILY: **SCIOMYZIDAE**.

REMARKS. *Musca varicus* Harris, 1779 is treated as a *nomen dubium* in Sciomyzidae [*teste* Chandler (2024: 307)], thus, *Tetanocera testacea* Stephens, 1829 is automatically a junior synonym of *Musca varicus* (Harris, 1779).

# 9177. Tetanocera bimaculata Stephens, 1829

Tetanocera bimaculata Stephens, 1829a: 62. Nomen nudum.

- *Tetanocera bimaculata* Stephens, 1829b: 321 (unjustified new replacement name for *Musca vagus* Harris, 1780).
- CURRENT STATUS: Junior synonym of *Loxocera aristata* (Panzer, 1801), **new synonymy**.

# FAMILY: **PSILIDAE**.

REMARKS. According to Chandler (2024), the only known species of *Loxocera* in the British Isles is *Loxocera aristata* (Panzer, 1801) making *Musca vagus* Harris, 1780 a senior synonym of *Loxocera aristata* (Panzer, 1801), **new synonymy**. Thus, *Tetanocera bimaculata* Stephens, 1829 is automatically a junior synonym of *Loxocera aristata* (Panzer, 1801). To promote stability of nomenclature, i.e., to maintain usage of the younger name *Loxocera aristata* (Panzer, 1801) over the older name *Musca vagus* Harris, 1780, an application to the ICZN seems warranted.

## 9188. Geomyza pallipes Stephens, 1829

Geomyza pallipes Stephens, 1829a: 62. Nomen nudum.

- Geomyza pallipes Stephens, 1829b: 322 (unjustified new replacement name for *Tephritis maculata* Germar, 1817 [as "Ahr. F. iii. f. 22?"].
- CURRENT STATUS: Valid name (senior synonym of *Geomyza hackmani* Nartshuk, 1984), **new synonymy** (see below).

# FAMILY: **Opomyzidae**.

REMARKS. *Tephritis maculata* Germar, 1817 is missing from all the recent regional Diptera catalogues. It was treated as junior synonym of *Geomyza combinata* (Linnaeus, 1767) [*teste* Schiner (1862: 287)], thus, *Geomyza pallipes* Stephens, 1829 is automatically a junior synonym of *Geomyza combinata* (Linnaeus, 1767). However, in the UK, this latter name has been found to be a misidentification for *Geomyza hackmani* Nartshuk, 1984 (Chandler 2024: 327). Accepting this identification results in *Geomyza pallipes* Stephens, 1829 having priority over *Geomyza hackmani* Nartshuk, 1984. Since the criteria for making *Geomyza hackmani* Nartshuk, 1984. Since the criteria for making *Geomyza hackmani* Nartshuk, 1984 a *nomen protectum* are not be fulfilled (not enough works or authors using the name as valid in the last 50 years), *Geomyza hackmani* Nartshuk, 1984.

# UNAVAILABLE NAME ACTED UPON BY STEPHENS

# 8662. Musca trilineata Stephens, 1829

- *Musca trilineata* Stephens, 1829b: 263 (incorrect spelling of *Musca trelineata* Harris, 1780).
- CURRENT STATUS: Treated under *Helophilus pendulus* (Linnaeus, 1758) (*teste* this work)

# FAMILY: SYRPHIDAE.

REMARKS. Musca trilenva Harris, 1780 is currently treated as a junior synonym of Helophilus pendulus (Linnaeus, 1758) [teste Chandler (2024: 252)]; however, the correct original spelling is trelineata Harris by First Reviser action of Harris (1782) [ICZN Code Art. 24.2 (I.C.Z.N. 1999)]. Since it is equivocal as to whether or not Stephens (1829b) was emending trelineata to trilineata, I follow ICZN Code Art. 33.5 (I.C.Z.N. 1999) and consider trilineata of Stephens (1829b) to be an incorrect subsequent spelling of trelineata Harris, 1780. It is treated here (following Chandler 2024 for trilineata Harris, 1780 [treated there as an "error"]) under Helophilus pendulus (Linnaeus, 1758).

# SUMMARY OF TAXA BY FAMILY

Names listed here [all from Stephens (1829b)] are given in their original combination, which is how they are categorized in this work.

**CECIDOMYIIDAE**: Cecidomyia melanocephala; Cecidomyia oxycanthae; Diomyza rubra **CERATOPOGONIDAE: CHIRONOMIDAE**: *Chironomus plumipes* **DOLICHOPODIDAE**: Dolichopus angulatus; Dolichopus nigritarsis; Porphyrops splendidus **EMPIDIDAE**: *Empis certus; Enicopteryx hyalipennis* LIMONIIDAE: Leptorhina bicolor **OPOMYZIDAE:** Geomyza pallipes **PIPUNCULIDAE**: *Pipunculus dubrensis* **PLATYPEZIDAE**: Callomyia aterrima **PSILIDAE**: Tetanocera bimaculata **PSYCHODIDAE**: Psychoda concinna; Psychoda nigrofusca **PTYCHOPTERIDAE**: Limnobia xanthura SCIOMYZIDAE: Tetanocera testacea **STRATIOMYIDAE:** Odontomyia trimaculata SYRPHIDAE: Musca trilineata; Syrphus caliginosus TACHINIDAE: Musca carnarida; Musca nigromarginata **TEPHRITIDAE**: Tephritis basalis TIPULIDAE: Chironomus assimilis; Tipula bimaculosa

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[This is a revised edition of the original, published 1776–1780.]

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# Further notes on junior primary and secondary homonyms in Muscidae (Diptera)

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Abstract. Six new replacement names are proposed for junior primary and secondary homonyms in the family Muscidae (Diptera).

# INTRODUCTION

In a recent paper (Pont, 2024), a number of new replacement names were proposed for junior primary and secondary homonyms in the Muscidae (Diptera). Since then, some further homonyms or apparent homonyms were found by Neal Evenhuis whilst updating the *Systema Dipterorum* (Evenhuis & Pape, 2024). The opportunity is taken here to discuss these names, to propose some new replacement names, and to correct two errors in the previous paper. Eight species-group names are discussed, and six new replacement names are proposed.

Current genera are listed alphabetically, and homonymous names are arranged alphabetically within each genus.

#### RESULTS

## Genus DASYPHORA Robineau-Desvoidy, 1830

Rypellia himalayensis Shinonaga in Shinonaga & Singh, 1994: 120 (in Dasyphora according to Nihei & Carvalho [2007: 501]; junior secondary homonym in Dasyphora of Dasyphora himalayensis Pont, 1972).

Dasyphora shinonagai Pont, nom. nov. for Rypellia himalayensis Shinonaga, 1994.

The genus-group taxa *Dasyphora* Robineau-Desvoidy, *Eudasyphora* Townsend, 1911 and *Rypellia* Malloch, 1931 were treated as valid genera until the recent analysis by Nihei & Carvalho (2007: 501). These authors concluded that *Dasyphora* is nested within *Eudasyphora*, which is therefore not monophyletic, and they treated *Eudasyphora* and *Rypellia* as subgenera within *Dasyphora*. The transfer of *Rypellia himalayensis* to the combination *Dasyphora* (*Rypellia*) *himalayensis* renders this species-group name a junior secondary homonym.

#### Genus DICHAETOMYIA Malloch

Dichaetomyia shinonagai Pont, 2024: 46 (junior primary homonym of Dichaetomyia shinonagai Couri, Pont & Daugeron, 2010).

Dichaetomyia turbida Pont, nom. nov. for Dichaetomyia shinonagai Pont, 2024.

### Genus HELINA Robineau-Desvoidy 1830

*Helina concolor* (Czerny, 1900), erroneously considered a junior secondary homonym in *Helina* of *Musca concolor* Walker, 1853.

The name *Musca concolor* Walker, 1853 has sometimes been associated with the genus *Helina*, which has given rise to a possible homonymy in the genus *Helina*. It was described, most probably from a single specimen, from "South America".

In his catalogue of non-European Muscidae, Stein (1919: 102) assigned it with a query to the genus *Stomoxys* Geoffroy, a conclusion which he probably based on Walker's description of "mouth black, shining".

In the first catalogue of Neotropical Muscidae, Pont (1972a: 60) incorrectly stated that *Musca concolor* was not actually from South America but was an Australian species of *Helina*. Consequently, it was omitted from the later catalogues of Neotropical Muscidae (Carvalho *et al.*, 1993, 2005) even though it was listed in the Australasian/Oceanian catalogue (Pont, 1989: 685) as a non-Australasian/Oceanian species of *Helina*.

Walker (1853: 333) described his new species *concolor* in the genus *Musca* Linnaeus, from which it can be concluded that wing-vein  $M_1$  is curved forward towards vein  $R_{4+5}$  as in his other *Musca* subgroups (*Calliphora* Robineau-Desvoidy, *Graphomya* Robineau-Desvoidy, *Lucilia* Robineau-Desvoidy, *Stomoxys* Geoffroy, *Pyrellia* Robineau-Desvoidy, *Chrysomya* Robineau-Desvoidy). This character excludes all *Helina* species from any consideration of the identity of the Walker name, and indeed excludes most of the Muscidae. The holotype, originally in the Saunders Collection, is not now in the Natural History Museum, London and most likely no longer exists. The description contains few significant details, but the features given by Walker suggest that this is most likely to be a sarcophagid or perhaps even a calliphorid. He wrote that the fly is "cinerea"; the antennae are dark, yellow at base; head with white hairs below; palpus "tawny" (yellow); scutum with four black vittae; legs black; abdomen black and tessellated.

In the Natural History Museum, London, there is a male also from the Saunders Collection and labelled as "concolor" by Walker, and this has been the source of the confusion over the geographic origin and taxonomic identity of the name *concolor*. This male is from Tasmania (as "Van Diemen's Land") and does not agree with Walker's description: dusting bluish, not cinereous, abdomen shining blue, palpus black, calypters with black margins. This specimen is most probably a species of *Helina*, and it is clearly not the type of Walker's *Musca concolor*.

*Helina concolor* (Czerny) is a well-known European species (e.g. Hennig,1957: 170; Pont, 1986: 139; Gregor *et al.*, 2016: 101), and the name is not a junior secondary homonym of *Musca concolor* Walker, 1853.

Helina latifrons Shinonaga, 2003: 190 (junior secondary homonym of Spilogaster latifrons Adams, 1905, now in Helina [teste Pont, 1980: 735]).

Helina conspurcata Pont, nom. nov. for Helina latifrons Shinonaga, 2003.

Helina nitens Macquart, 1855a: 118 (also 1855b: 138) (junior secondary homonym of Mydina nitens Robineau-Desvoidy, 1830, now in Helina [teste Pont, 1986: 141]).
Helina macquarti Pont, nom. nov. for Helina nitens (Macquart, 1855).

Helina uniseta Wang & Li, 2011: 123 (junior secondary homonym of *Spilogaster uniseta* Stein, 1898, now in *Helina* [teste Huckett, 1965: 888]).

Helina singularis Pont, nom. nov. for Helina uniseta Wang & Li, 2011.

#### Genus LIMNOPHORA Robineau-Desvoidy

Limnophora shinonagai Pont, 2024: 157: 36 (junior primary homonym of Limnophora shinonagai Couri & Pont, 2021).

Limnophora stolida Pont, nom. nov. for Limnophora shinonagai Pont, 2024.

## Genus PHAONIA Robineau-Desvoidy

Dialyta alpina Pokorny, 1889: 565 (junior secondary homonym of Yetodesia alpina Rondani, 1871, now in Phaonia [teste Pont, 1986: 117]).

Although *Dialyta alpina* Pokorny is an invalid, homonymous name, no replacement name is proposed here as its actual identity cannot be determined. Having been assigned by Pokorny to *Dialyta* Meigen, it is clearly a species of *Phaonia* but it cannot be identified with any of the species of *Phaonia* known from the European Alps. It was listed as an unrecognised species of *Phaonia* by Hennig (1963: 895) and Pont (1986: 134).

Pokorny (1889) described this species from two males, from the Stilfser Joch (Stelvio Pass) in Italy and Arlberg in Austria, respectively. These two syntypes, originally deposited in the Hungarian Natural History, Budapest, were destroyed in 1956 together with much of Pokorny's collection. A recent long-term survey of the Diptera of the Stelvio Pass recorded a number of *Phaonia* species (Pont, 2009, 2016), but none of these matches Pokorny's description of his *alpina*. The taxonomic characters of *P. alpina* were discussed by Pont (2009: 193).

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# *Gonomyiella* Meunier, 1899 replaces *Oreophila* Lackschewitz, 1935, with list of species (Diptera, Limoniidae)

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Abstract. For many years *Gonomyiella* Meunier, 1899 has been considered a junior synonym of *Ormosia* (*Ormosia*) Rondani, 1856. However, recently, the type-species of *Gonomyiella*, *Ormosia electrella* Alexander, 1931, was placed in the subgenus *Ormosia* (*Oreophila*) Lackschewitz, 1935. As a result of this, *Gonomyiella* has become a subjective senior synonym of *Oreophila*, **syn. nov**. A list of species belonging to *Ormosia* (*Gonomyiella*) is provided.

While working on Baltic amber fossils, Meunier (1899), described the genus *Gonomyiella*, including a figure of the wing, as a genus close to *Gonomyia*, but without included species. Later, in a footnote (Meunier 1906) he mentioned that *Gonomyiella* is most likely intermediate between *Gonomyia* and *Empeda*. In his revision of Baltic amber craneflies, Alexander (1931) presented *Gonomyiella* as a junior synonym of *Ormosia* Rondani, 1856, but also as a *nomen nudum* and "because of an unfortunate tangle of names" he proposed to entirely abandon the name *Gonomyiella*, by this tangle of names referring to the limoniid genera *Gonomyiella* Alexander, 1916, and *Gonomyiella* Kuntze, 1919.

Without going into too much detail, it can be stated that according to the ICZN *Code* (I.C.Z.N. 1999), names of genera proposed before 1930 without included species are available, not *nomina nuda* as some workers may think. The first species of *Gonomyiella* is *Ormosia electrella* Alexander, 1931, which was included and also designated as type species by Evenhuis (1994), with *Gonomyiella* treated as a junior synonym of *Ormosia*.

*Ormosia* is a predominantly Holarctic-Oriental genus including some 240 species divided over four subgenera, *Ormosia* (s. str., 184 species), *Neserioptera* Alexander, 1956 (two species, Afrotropical), *Parormosia* Alexander, 1965 (24 species), and *Oreophila* Lackschewitz, 1935 (29 species) (Oosterbroek 2024).

Our interest is with the subgenus *Oreophila*, type species *Rhypholophus bergrothi* Strobl, 1895, with seven species in the Nearctic, 13 in the Westpalaearctic, eight in the Eastpalaearctic and three in the Oriental region, as listed below. The Westpalaearctic is special because 11 out of the 13 species are described from Baltic amber, as revised in Podenas (1999). The only other fossil species in *Ormosia* is *Ormosia* (s. str.) *innata* Podenas, 1999,

also from Baltic amber. Podenas (1999) presented descriptions, figures and a key for all 11 amber species, seven of which were described as new to science, the four remaining species being described by Alexander (1931): *beurleni*, *electrella*, *skwarrae* and *tornquisti*.

These four species were described in *Ormosia*, without reference to a subgenus (Alexander 1931, Evenhuis 1994). In Podenas (1999), they are placed in the subgenus *Oreophila*, based on characters of the wing and the male genitalia, which separate *Ormosia* (s. str.) from *Ormosia* (*Oreophila*). With *Ormosia electrella* Alexander, 1931 being the type species of *Gonomyiella* Meunier, 1899, the latter name takes priority over *Oreophila* Lackschewitz, 1935, **syn. nov**.

Accordingly, Ormosia (Gonomyiella) is comprised of the following species:

abava Podėnas, 1999	Eocene	Westpalaearctic
absaroka Alexander, 1943	Recent	Nearctic
bergrothi (Strobl, 1895)	Recent	West- and Eastpalaearctic
beurleni Alexander, 1931	Eocene	Westpalaearctic
bucera Alexander, 1954	Recent	Nearctic
confluenta Alexander, 1922	Recent	Eastpalaearctic
divina Podenas, 1999	Eocene	Westpalaearctic
divulgata Podėnas, 1999	Eocene	Westpalaearctic
electrella Alexander, 1931	Eocene	Westpalaearctic
flaveola (Coquillett, 1900)	Recent	Nearctic
hutchinsonae Alexander, 1935	Recent	Oriental
ilibata Podėnas, 1999	Eocene	Westpalaearctic
indago Podėnas, 1999	Eocene	Westpalaearctic
jurate Podėnas, 1999	Eocene	Westpalaearctic
komazawai Kato & Kolcsár, 2022	Recent	Eastpalaearctic
leptorhabda Alexander, 1943	Recent	Nearctic
licina Alexander, 1966	Recent	Oriental
longicornis Savchenko, 1980	Recent	Eastpalaearctic
longipalpa Podėnas, 1999	Eocene	Westpalaearctic
parviala Petersen & Gelhaus, 2004	Recent	Nearctic
sequoiarum Alexander, 1945	Recent	Nearctic
skwarrae Alexander, 1931	Eocene	Westpalaearctic
sootryeni (Lackschewitz, 1935)	Recent	West- and Eastpalaearctic
stenostyla Alexander, 1965	Recent	Oriental
subducalis Alexander, 1940	Recent	Eastpalaearctic
tornquisti Alexander, 1931	Eocene	Westpalaearctic
triangularis Alexander, 1949	Recent	Nearctic
weymarni Alexander, 1950	Recent	Eastpalaearctic
yankovskyi Alexander, 1940	Recent	Eastpalaearctic

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