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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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