

Nomenclatural reassessment of *Ulidia* Meigen, 1826 (Diptera: Ulidiidae)

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Abstract. The type species of *Ulidia* Meigen, 1826 has long been assumed to be *Ulidia erythrophthalma* Meigen, 1826, designated by Hennig in 1940. However, an earlier designation was made by Marchi in 1829 of *Musca demandata* Fabricius, 1794, which is currently treated in *Physiphora* Fallén, 1823 (as a junior synonym of *Musca alceae* Preyssler, 1791). Acceptance of the Marchi designation makes *Ulidia* Meigen, 1826 a junior synonym of *Physiphora* Fallén, 1823, **n. syn.**; thus requiring species previously treated in *Ulidia* to be placed in another genus. Based on phylogenetic analyses that have found *Ulidia* paraphyletic with regard to *Timia* Wiedemann, 1824 in the same clade, we here resolve the paraphyly and treat all species previously in *Ulidia* under *Timia* Wiedemann, 1824 and give a list of the resulting new combinations.

INTRODUCTION

Meigen (1826: 385) proposed the generic name *Ulidia* with three originally included species: *Musca demandata* Fabricius, 1794 (with *Chrysomyza splendida* Fallén, 1817 in synonymy), *Ulidia erythrophthalma* Meigen, 1826 (as “*Ulid. erythrophthalma*. Meg.”), and *Ulidia nitida* Meigen, 1826. A type species was not designated. Hendel (1910) interpreted Meigen’s (1826) treatment as a proposal of a new nominal genus. However, Coquillett (1910) believed *Ulidia* was a replacement name for *Chrysomyza* Fallén (1817). The key to the status of the nominal genus *Ulidia* lies in the meaning of Meigen’s (1826: 386) statement about *Chrysomyza* concerning his proposal of the genus-group name *Ulidia*: “*Fallén bringt diese Gattung zu der Familie Scenopinii, womit sie doch nur eine sehr entfernte Aehnlichkeit hat, und heißt sie Chrysomyza weil er nur die erste Art kannte. Da dieser Name aber auf die andern nicht paßt, so heiße ich sie Ulidia von dem Griechischen Ule, Narbe, weil sie eine narbige Stirne haben.* [Fallén brings this species to the family Scenopinii, with which it has but a very distant resemblance, and named it *Chrysomyza* because he knew only the first species [*demandata*]. As this name does not fit with the others, I name them *Ulidia* from the Greek *Ule*, scar, for they have a scarred forehead.]” The difference of opinion between Hendel (1910) and Coquillett (1910) lies in what is referred to by Meigen as “*sie* [them]” in “*so heiße ich sie Ulidia*”. In interpreting *Ulidia* as a separate proposal of a new genus, Hendel (1910) believed it referred to all but the first species being treated by Meigen (1826) [thus, excluding *demandata*]. Whereas, in treating the name as a replacement name of *Chrysomyza*,

Coquillett (1910) believed it referred to all the species treated by Meigen (1826) [thus, including *demandata*]. Furthermore, a new replacement name is defined as “A name established expressly to replace an already established name” (ICZN 1999), and such specific intent is not expressed by Meigen. As discussed in Evenhuis & Pape (2019), who followed Sabrosky (1999) [= the same interpretation as Hendel (1910)], we believe Meigen’s (1826) statement was of a new genus proposal and not a replacement name, which has a direct bearing on the nomenclatural status of the name *Ulidia* Meigen, 1826. Since *Ulidia* was proposed without a type species, a subsequent designation was needed.

Our research has found that Marchi (1829: 737) designated *Musca demandata* Fabricius, 1794 (as “*Tephritis demandata* di Fabricio”) as the type species of *Ulidia* and is the earliest valid subsequent designation from an originally included species. Guérin (1830: 456), Westwood (1840: 149), Zetterstedt (1847: 2369), and Desmarest in Orbigny (1849: 753), also gave the same type-species designation. Hennig (1940: 13), possibly unaware of the earlier designations, and also treating *Ulidia* as a separate proposal of a new genus, designated *Ulidia erythrophthalma* Meigen, 1826 as the type species of *Ulidia* Meigen, 1826. Although followed by most recent workers (e.g., Zaitzev 1984; Kameneva 2008; Chen & Kameneva 2009; Morgulis & Freidberg 2014; Kameneva & Korneyev 2019; Kameneva & Barraclough 2021), Hennig’s (1940) designation was much later and is thus invalid.

Because *Musca demandata* is currently treated in *Physiphora* Fallén (as a junior synonym of *Musca alceae* Preyssler, 1791) (Chen & Kameneva 2007; Kameneva & Korneyev 2016), acceptance of the designation by Marchi (1829) of *Musca demandata* Fabricius, 1794 as the type species of *Ulidia* results in the synonymy of *Physiphora* Fallén, 1823 and *Ulidia* Meigen, 1826, **n. syn.**

Species previously assigned to *Ulidia* Meigen and *Timia* Wiedemann are notoriously difficult to separate morphologically, and the analysis by Galinskaya *et al.* (2014) and that referred to in Kameneva & Korneyev (2019) have shown that under the current concept of *Ulidia*, it is paraphyletic within the same clade as *Timia* Wiedemann, 1824. Thus, we here resolve that paraphyly by treating species previously placed in *Ulidia* under *Timia* Wiedemann, 1824. Because the change is of so few taxonomically valid species (24), we do not feel our action will cause any insurmountable nomenclatural instability; but rather the scientific community will eventually get used to the change as it does with other generic synonymies*. A list of the new combinations resulting from this new synonymy is given in Table 1.

*NB: This new synonymy does not affect the nomenclatural status of the family-group names Ulidiidae, Ulidiinae, or Ulidiini. According to Article 40.1 of the Code (ICZN 1999), “when the name of a type genus of a nominal family-group taxon is considered to be a junior synonym of the name of another nominal genus, the family-group name is not to be replaced on that account alone”.

Table 1. List of taxonomic and nomenclatural changes resulting from the synonymy proposed in this paper.

Physiphora Fallén, 1810: 11. Type species: *Chrysomyza splendida* Fallén, 1817, by subsequent monotypy.

Ulidia Meigen, 1826: 385. Type species: *Musca demandata* Fabricius, 1794, by subsequent designation (Marchi 1829: 737). **New synonymy.**

Timia Wiedemann, 1824: 15. Type species: *Timia erythrocephala* Pallas in Wiedemann, 1824, by subsequent designation (Steyskal 1980: 577).

albidipennis Loew, 1845: 32 (*Ulidia*), **new combination**;

atrovirens Loew, 1845: 32 (*Ulidia*), **new combination**;

ammoni Kameneva & Korneyev, 2019: 249 (*Ulidia*), **new combination**;

apicalis Wiedemann, 1824: 16 (*Timia*), revived combination;

apicalis Meigen, 1826: 388 (*Timia*), revived combination;

atrata Loew, 1868: 11 (*Ulidia*), **new combination**;

aurata Morgulis & Freidberg, 2014: 226 (*Ulidia*), **new combination**;

bartaki Kameneva & Korneyev, 2019: 253 (*Ulidia*), **new combination**;

erythrophthalma Meigen, 1826: 387 (*Ulidia*), **new combination**;

nitida Meigen, 1826: 387 (*Ulidia*), **new combination**;

nitens Loew, 1845: 32 (*Ulidia*), **new combination**;

semiopaca Loew, 1868: 10 (*Ulidia*), **new combination**;

facialis Hendel, 1931: 60 (*Ulidia*), **new combination**;

salonikiensis Hennig, 1940: 45 (*Ulidia*), **new combination**;

persica Hennig, 1965: 5 (*Timia*), revived combination;

omani Steyskal, 1970: 227 (*Ulidia*), **new combination**

gongjuensis Chen & Kameneva, 2009: 44 (*Ulidia*), **new combination**;

hirsuta Morgulis & Freidberg, 2014: 227 (*Ulidia*), **new combination**;

kandybinae Zaitzev, 1982: 425 (*Ulidia*), **new combination**;

megacephala Loew, 1845: 33 (*Ulidia*), **new combination**;

melampodia Loew, 1873: 287 (*Ulidia*), **new combination**;

metope Kameneva, 2010: 33 (*Ulidia*), **new combination**;

nigricubitalis Zaitzev, 1982: 427 (*Ulidia*), **new combination**;

nigripennis Loew, 1845: 29 (*Ulidia*), **new combination**;

parallela Loew, 1845: 30 (*Ulidia*), **new combination**;

ruficeps Becker, 1913: 640 (*Ulidia*), **new combination**;

skrylniki Kameneva & Korneyev, 2019: 258 (*Ulidia*), **new combination**;

splendida Zaitzev, 1982: 429 (*Ulidia*), **new combination**;

transaspica Galinskaya, 2011: 154 (*Ulidia*), **new combination**;

wadicola Steyskal, 1968: 125 (*Ulidia*), **new combination**;

wasimi Morgulis & Freidberg, 2014: 233 (*Ulidia*), **new combination**;

xizangensis Chen & Kameneva, 2009: 46 (*Ulidia*), **new combination**.

ACKNOWLEDGMENTS

The authors thank Curtis W. Sabrosky for bringing the issue of the designation of type species within the genus *Ulidia* to their attention. This work was supported in part by a grant from the Philipp Schwartz Initiative of the Alexander von Humboldt Foundation for

EPK in 2023–2025. EPK and VAK thank Rudolf Meier, Christoph Häuser, Anja Blessing, Maria Liedtke, Bernhard Schurian, Eran Wolff, Sven Marotzke, and Jenny Pohl for providing them with refuge from the war and for their invaluable assistance during their time at the Museum für Naturkunde in Berlin. Thomas Pape kindly reviewed the manuscript and made a number of improvements.

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Systema Dipterorum Nomenclatural Notes. IV. Edited by Neal L. Evenhuis & Thomas Pape. *Bishop Museum Occasional Papers* 33–34 (2024).

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Systema Dipterorum Nomenclatural Notes. IV. Edited by Neal L. Evenhuis & Thomas Pape. *Bishop Museum Occasional Papers* 157: 41–61 (2024).





















Systema Dipterorum Nomenclatural Notes. IV. Edited by Neal L. Evenhuis & Thomas Pape. *Bishop Museum Occasional Papers* 157: 63–67 (2024).





Systema Dipterorum Nomenclatural Notes. IV. Edited by Neal L. Evenhuis & Thomas Pape. *Bishop Museum Occasional Papers* 157: 69–71 (2024).
