

**Comments on the proposed conservation of the usage of the generic name of
Drosophila Fallén, 1823 (Insecta, Diptera)**

(Case 3407; see BZN 64: 238–242)

Corrigendum

Please note that the correct date for Fallén's establishment of the name *Drosophila* is 1823, rather than 1832, as stated in the title and the abstract of the application published in BZN 64: 238–242.

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The case to conserve the usage of the name *Drosophila* Fallén, 1832 over *Sophophora* Sturtevant, 1939, for *Drosophila melanogaster*, is probably the most important ever to have been submitted for a ruling by the Commission in its 113-year history. *Drosophila melanogaster*, commonly referred to (especially by non-taxonomists) as simply 'Drosophila', is the most widely studied animal, apart, possibly, from *Homo sapiens*, in human history. At the time of writing, 'Google' searches result in the following numbers of 'hits': *Drosophila*: 6,700,000; *Drosophila melanogaster*: 3,640,000; *Sophophora*: 19,000. Thus the number of hits for *Drosophila* exceeds that for *Sophophora* by more than 350 times. This comparison illustrates, very simply, the current global comparative usage of the two names.

It seems likely that were the Commission not to vote in support of the conservation of *Drosophila*, such action would lead not only to unprecedented nomenclatural instability, but also to a widespread lack of confidence in both the actions and the purpose of the Commission itself. While being far from perfect, the present code continues to provide stability, and is adhered to by almost the entire community of zoological taxonomists, while providing opportunities for dealing effectively with exceptional cases. *Drosophila* is just such an exception, and possibly the greatest test of the Commission's role and effectiveness since its formation in 1895.

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The authors showed the invalidity of the early type designation of *Drosophila*: *Musca cellaris* Linnaeus, 1758 (p. 597) by Curtis, 1833 (p. 473) of which the systematic status has never been clarified (and thus invalid); and *Musca funebris* Fabricius, 1787 (p. 345) by Macquart, 1835 (p. 549) at the same time placed in synonymy with *M. cellaris* Linnaeus, 1758 (thus equally invalid). However, Zetterstedt's (1847, p. 2542) designation of *M. funebris* Fabricius, 1787 has been accepted by most subsequent taxonomists according to the Principle of the First Reviser (Article 24.2 of the Code – Determination by the First Reviser). Furthermore, *M. funebris* Fabricius, 1787 was transferred to *Drosophila* by the

author of the genus *Drosophila* Fallén, 1823 (p. 5), whereas *Drosophila melanogaster* Meigen, 1830 (p. 85) was described later. This can be taken as an additional taxonomic argument in favor of the preservation of *Musca funebris* Fabricius, 1787 as the type of the genus *Drosophila* Fallén than for *D. melanogaster* Meigen, 1830 (Article 23.1 of the Code—Statement of the Principle of Priority).

Drosophila is the nominotypical genus of the family DROSOPHILIDAE, and any change of the type designation of the genus would inevitably entail dramatic nomenclatural changes in the whole family (Article 36.2 of the Code – Type Genus). Although authors have attempted to make such changes on the basis of molecular phylogenetic studies, it is hard to think that a single application can resolve all nomenclatural problems in a group as large as the genus *Drosophila* (~1,500 spp.) of which molecular phylogenies are scarcely congruent (Ashburner et al., 2005). If the authors' propositions of the new generic names formed after the splitting of the current paraphyletic genus *Drosophila* were accepted, three out of the twelve model species with complete genome sequence of *Drosophila* would no longer carry the generic name *Drosophila*: namely, *D. virilis* Sturtevant, 1916 (p. 330), *D. mojavensis* Patterson in Patterson & Crow, 1940 (p. 251), and *D. grimshawi* (Oldenberg, 1914, p. 23). Regarding the popularity of *Drosophila* as a model to biology grant agencies, biologists working on these species and on other related taxa (including *D. funebris*) would feel considerable injustice in comparison to biologists working on *Drosophila melanogaster*-related taxa. Although I totally agree with the authors that the current paraphyletic status of the genus *Drosophila* violates modern systematic practice, I urge that if a taxonomic change has to be made, it has to follow conventional taxonomic rules with an upgrading of the monophyletic subgenus *Sophophora*, of which *Drosophila melanogaster* is the type by original designation (Sturtevant, 1939, p. 140) to the rank of genus.

In conclusion, I hope that the Commission will maintain *Drosophila funebris* (Fabricius, 1787) as the type of the nominotypical genus *Drosophila* Fallén, 1823 following both the Principles of Priority and of First Reviser.

References

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In my opinion, if the Commission decides to support this application that would be against the rules of the Code and would create bad precedent.

Comment on the proposed suppression of *Gobius lagocephalus* Pallas, 1770 (Osteichthyes, Teleostei, GOBIIDAE)
(Case 3383; see BZN 64: 103–107)

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We are writing to register our objection to the proposed suppression of the specific name *Gobius lagocephalus*. As will be pointed out, the proposal by Smith & Sparks (2007) omits facts that make the application pointless; the described problem does not exist and has been solved elsewhere; suppressing the name *G. lagocephalus* would negatively affect the name of a well known and widely distributed species without creating any benefit (the effect would be the reverse) to the nomenclature of this group of fishes.

In their proposal Smith & Sparks (2007) present as Option 2: ‘designating a neotype that is most consistent with current usage (as a species of *Sicyopterus*)’—this has already been done (Kottelat 2007). The preservation of the status quo with regard to the name *Gobius lagocephalus*, presently known widely as *Sicyopterus lagocephalus*, is desired for stability of nomenclature.

In their application, Smith & Sparks (2007) mention as holotype the specimen on which Pallas (1770) based his description and figure. They mention that this specimen is lost and refer to ‘Kottelat, in press’ as a source for this information. This