

**Comment on the proposed precedence of *Bagauda* Bergroth, 1903 (Insecta, Heteroptera, REDUVIIDAE) over *Pleias* Kirkaldy, 1901**  
(Case 3435; see BZN 65: 93–96)

Dimitri Forero

*Division of Invertebrate Zoology (Entomology), American Museum of Natural History, New York, NY 10024–5192; and Department of Entomology, Comstock Hall, Cornell University, Ithaca, NY 14853–2601, U.S.A. (e-mail: idf2@cornell.edu)*

I support the proposed conservation of the name *Bagauda* Bergroth, 1903 over *Pleias* Kirkaldy, 1901. I agree with Rédei (BZN 65: 94) that adherence to the principle of priority in this case would require many new combinations for species currently contained in *Bagauda* and such an action would not help the stability of nomenclature in EMESINAE. Furthermore, as Rédei documented, the name *Bagauda* has been extensively used in recent literature, unlike its senior synonym *Pleias*.

**Comment on the proposed conservation of usage of *Drosophila* Fallén, 1823 (Insecta, Diptera)**  
(Case 3407; see BZN 64: 238–242, 65: 55–56; 137–149)

Kim van der Linde

*Department of Biological Science, Florida State University, Tallahassee, Florida 32306–4295, U.S.A. (e-mail: kim@kimvdlinde.com)*

Gerhard Bächli

*Zoological Museum, Winterthurerstraße 190, 8057 Zürich, Switzerland (e-mail: baechli@zm.uzh.ch)*

Masanori J. Toda

*Institute of Low Temperature Science, Hokkaido University, N19 W8, Kita-ku, Sapporo 060–0819, Japan*

Wen-Xia Zhang

*College of Life Sciences, Peking University, Beijing, 100871, China*

Toru Katoh

*COE for Neo-Science of Natural History, Hokkaido University, N10 W8, Kita-ku, Sapporo 060–0810, Japan*

Yao-Guang Hu

*Institute of Low Temperature Science, Hokkaido University, N19 W8, Kita-ku, Sapporo 060–0819, Japan*

Greg S. Spicer

*Department of Biology, San Francisco State University, 1600 Holloway Avenue, San Francisco, California 94132–1722, U.S.A.*

Our application regarding designation of *Drosophila melanogaster* as the type species of the genus *Drosophila* (van der Linde et al., 2007) was expected to raise controversy even before it was published, and the variety of comments received in the first two issues of this bulletin in 2008 bears this expectation out (see Comments in BZN 65(1–3)). Seven out of nine comments oppose our application, each for its own unique set of reasons, whereas several of them agree with other parts of our proposal.

The mission of the ICZN is ‘achieving stability and sense in the scientific naming of animals’ ([http://www.iczn.org/Mission\\_vision.htm](http://www.iczn.org/Mission_vision.htm)). If stability is intended in a narrow sense, focused solely on taxonomy (cf. Thomson et al., 2008) our application should be rejected at once, as changes in genus names are normal occurrences for taxonomists, and such changes will not lead to instability in the strict taxonomic sense (cf. McEvey et al., 2008; BZN 65: 147–150), but even though taxonomy and nomenclature are separate and unique fields, they are not isolated on their own islands, separated from biology at large ([http://www.iczn.org/What\\_we\\_do.htm](http://www.iczn.org/What_we_do.htm)). Our proposed change of the type species to *Drosophila melanogaster* is intended to avoid large-scale confusion in the field at large about this, the most important model species in all of biology (cf. Polaszek, 2008; BZN 65: 55). Our application therefore raises the crucial underlying question of whether stability should be preserved in its narrow sense (the field of taxonomy) or in a wider sense (the field of biology).

Unfortunately, several authors indicate that they feel we ask for an endorsement of a particular classification and classification paradigm (Gaimari, 2008; BZN 65: 146–147; McEvey et al., 2008; BZN 65: 147–150; O’Grady et al., 2008; BZN 65: 141–144; Štys, 2008; BZN 65: 144–145; Thomson et al., 2008; BZN 65: 140–141). We wish to dispel that notion explicitly here. In our application, we presented our taxonomic and phylogenetic thought merely as one hypothesis for taxonomic revision of the large genus *Drosophila*, in order to illustrate the nomenclatural problem related to *Drosophila melanogaster*. The name *Drosophila melanogaster* can only be retained if the current paraphyletic situation remains unchanged or if the genera included in the lineage of the genus *Drosophila* are downgraded to subgenera. All other proposals, including ours, must address the desirability of the name change of *Drosophila melanogaster* to *Sophophora melanogaster*.

Although our wording led several readers to believe that we believed our treatment to be the definitive and only way to solve the problem, this was not at all our intention. McEvey et al. (2008) correctly understood what we meant to say: ‘We acknowledge that there is a range of views about how to deal with the various groups of species in *Drosophila* but we feel that there is still much work to be done before the numerous species can be correctly reassigned. We feel that this can proceed more freely, with less constraint, if *melanogaster* is the type of *Drosophila*.’ We agree completely with the argument that taxonomic thoughts and actions should be free from nomenclature (O’Grady et al., 2008; Štys, 2008; Thomson et al., 2008). In the case of the genus *Drosophila*, however, the problem of ‘*Sophophora melanogaster*’ will constrain taxonomic thought (the classification system) to a greater or lesser extent. Our application, if accepted, will release taxonomists from this constraint.

Thompson et al. (2008) refer to *Stegomyia aegypti* as an example for why the application should be rejected, arguing that it is an identical situation in which a new name for a widely studied species did not cause nomenclatural instability. That is true in the narrow sense for the field of taxonomy but not for the field of biology at large.

The new name has not been accepted by the community at large and most recent (2007–2008) publications found in ISI's Web of Knowledge or Google Scholar, although they sometimes use *Aedes (Stegomyia) aegypti*, most frequently use just *Aedes aegypti*, the old name. After the proposed revision by Reinert and coworkers (2004), the editorial boards of the Journal of Medical Entomology, Annals of Tropical Medicine and Parasitology, Emerging Infectious Diseases, Journal of the American Mosquito Control Association, Journal of Vector Ecology, Medical and Veterinary Entomology, Transactions of the Royal Society of Tropical Medicine and Hygiene, Vector Borne and Zoonotic Diseases, and PROMED (Anonymous, 2005; Higgs, 2005; Weaver, 2005) rejected the proposed revision.

In the case of *Drosophila melanogaster*, if the biology community at large accepts the change of its generic name from *Drosophila* to *Sophophora*, as Prigent (2008; BZN 65: 137–140) and Thompson et al. (2008) argue that it will, we would have no need to ask for the plenary power of the Commission to designate *D. melanogaster* as the type species of *Drosophila*, but extensive discussions with many *Drosophila* researchers indicate that a name change is likely to be ignored by many researchers not involved in the taxonomy of this genus. If it is, the result will be a discrepancy between drosophilid taxonomists and the other *Drosophila* researchers, leading to confusion and instability similar to that surrounding *Stegomyia aegypti* within the wider range of the biological sciences. With regard to this point, several others (McEvey et al., 2008; O'Grady et al., 2008; Polaszek, 2008; Štys, 2008) agree with us that the binomen *Drosophila melanogaster* should be preserved to prevent this large-scale confusion.

If the Commission rules in support of our application, the only taxonomic action that will automatically take place is synonymizing of *Sophophora* Sturtevant with *Drosophila* Fallén. This action produces a large, paraphyletic subgenus *Drosophila* revised, which includes the species presently belonging to the subgenera *Drosophila* and *Sophophora*, while the generic name of the species, *Drosophila*, remains unchanged. In this situation, taxonomists are free to propose any hypotheses (classification systems) they choose, but if the Commission rules against our application, taxonomic revision of the genus *Drosophila* is effectively prevented unless the community at large accepts *Sophophora melanogaster*, as suggested by Yassin (2008; BZN 65: 55–56), Prigent (2008; BZN 65: 137–140), and Thompson et al. (2008). Proposed hypotheses should be left to evaluation by the community of biology at large, and more acceptable ones will gradually be selected on the basis of their scientific evidence.

In summary, this case is unique in many ways, because the subject of the application is the most frequently used model system in science (aside from humans), to the point that the name *Drosophila* has become synonymous for many with *Drosophila melanogaster*. The legacy of this species is documented in over 40,000 scientific articles (*Web of Science* search) and used in many more places (Polaszek, 2008). To avoid large-scale instability for biology at large, we have proposed that *Drosophila melanogaster* be designated as the new type species for the genus before any revision of the genus is carried out. The need to revise the genus is something most drosophilid taxonomy and phylogeny researchers agree on (van der Linde et al., 2007; McEvey et al., 2008; O'Grady et al., 2008; Prigent, 2008; Yassin, 2008), but they disagree about when and how such a revision should be carried out. The

discussion of how to revise the genus is outside the scope of the Commission, however. We therefore request that the Commission accepts our application to preserve the name *Drosophila melanogaster* in order to avoid large-scale confusion in the biology community at large.

#### Additional references

- Anonymous** 2005. Journal policy on names of aedine mosquito genera and subgenera. *Journal of Medical Entomology*, **42**(4): 511.
- Higgs, S.** 2005. Journal policy on names of Aedine mosquito genera and subgenera. *Vector-Borne and Zoonotic Diseases*, **5**(2): 93–94.
- Reinert, J.F., Harbach, R.E. & Kitching, I.J.** 2004. Phylogeny and classification of Aedini (Diptera: Culicidae), based on morphological characters of all life stages. *Zoological Journal of the Linnean Society*, **142**(3): 289–368.
- Weaver, S.** 2005. Journal policy on names of Aedine mosquito genera and subgenera. *American Journal of Tropical Medicine and Hygiene*, **73**(3): 481.

#### Comment on the proposed precedence of the generic name *Ataenius* Harold, 1867 over *Aphodinus* Motschulsky, 1862 (Insecta, Coleoptera)

(Case 3377; see BZN **64**: 39–42)

Tristão Branco

*Rua de Camões, 788, 2° Dto, P-4000–142 Porto, Portugal*

(e-mail: tristao.branco@gmail.com)

Marco Dellacasa

*Centro Interdipartimentale, Museo di Storia Naturale e del Territorio, Università di Pisa, Via Roma 79, I-56011 Calci (Pisa), Italy* (e-mail: dellacasa@museo.unipi.it)

We are writing in support of the application by Howden & Smetana to give precedence to the generic name *Ataenius* Harold, 1867 over *Aphodinus* Motschulsky, 1862, whenever they are considered synonyms.

We have to point out, however, that the name *Ataenius* Harold, 1867 (type species *Ataenius scutellaris* Harold, 1867 by subsequent designation by Chapin, 1940, p. 12 and not Cartwright, 1974 as incorrectly indicated in the application) is also threatened by *Auperia* Jacquelin du Val, 1857 (type species *Scarabaeus stercorator* Fabricius, 1775 by subsequent designation by Dellacasa, 1988). The lectotype of *Scarabaeus stercorator*, designated by Landin, 1956, is in the Banks collection, at the Natural History Museum, London.

Jacquelin du Val (1857, p. 51) proposed *Auperia* as a replacement name for *Euparia* Erichson, 1847. He wrote: ‘Este género fué creado por Erickson á expensas de los Aphodius. Como Lepelletier y Serville han empleado el nombre de Euparia para un género de Lamellicornes, y Schonherr él de Euparius para un género de curculionites, he creído oportuno cambiar el nombre de Euparia dado por Erickson en él de Auperia, su anagrama.’ [This genus was created by Erickson as a replacement for *Aphodius*. As Lepelletier & Serville have used the name *Euparia* for a genus of Lamellicornes and Schonherr has used *Euparius* for a genus of curculionids, I thought it appropriate to replace Erickson’s name *Euparia* with its anagram, *Auperia*]. Here ‘Erickson’ is clearly a *lapsus* for ‘Erichson’. Erichson (1847) had