

## Change of authorship of *Aphodius* and *Oryctes* to Hellwig, 1798 (Insecta: Coleoptera: Scarabaeidae)

MIGUEL ANGEL ALONSO-ZARAZAGA<sup>1</sup> & FRANK-THORSTEN KRELL<sup>2</sup>

<sup>1</sup>Depto. de Biodiversidad y Biología Evolutiva, Museo Nacional de Ciencias Naturales, José Gutiérrez Abascal, 2, E-28006 Madrid, Spain. Email: zarazaga@mncn.csic.es

<sup>2</sup>Department of Zoology, Denver Museum of Nature & Science, 2001 Colorado Boulevard, Denver, Colorado 80228-5798, U.S.A.  
Email: frank.krell@dmns.org

The dung beetle genus *Aphodius* and the rhinoceros beetle genus *Oryctes* rank among the more widely used scientific insect names. Both have been attributed to Johann Karl Wilhelm Illiger who had introduced those names in his "Verzeichniss der Käfer Preussens" in 1798. The names are undisputed and stable. The discovery of a preview of Illiger's book, published eight months earlier, prompts a change of authorship to Hellwig (1798) for both of these generic names.

### An earlier publication

We recently discovered a preview of Illiger's book, published by his tutor and father-in-law Johann Christian Ludwig Hellwig on 24 January 1798 (Hellwig 1798). Illiger's book was scheduled to be published for the "Ostermesse" (= book fair in Leipzig at Easter, beginning of April) (Weidmannische Buchhandlung 1798), but the publication obviously was delayed as the book contains a preface by Hellwig dated beginning of September 1798 ("im Anfang des Septembers 1798"). It was finally announced as being published on 19 September 1798 (Anonymous 1798) indicating a publication date between 1–18 September 1798, i.e. almost eight months after Hellwig's preview. Hellwig mentioned Illiger's new genera, *Aphodius* and *Oryctes*, without any evidence that Illiger was involved in writing the preview or publishing the names. According to Article 50.1. (ICZN 1999), Hellwig is the sole author of the preview and all nomenclatural acts therein. According to Article 12.2.5. (ICZN 1999), Hellwig made *Aphodius* and *Oryctes* available by including the available specific names "Scarab. Hercules, Actaeon, Oromedon, Rhinoceros, nasicornis, Monodon, Juvencus, piceus etc." in *Oryctes* and "Fosser, rufipes, fimetarius bis zu asper, porcatus und ähnlichen" in *Aphodius*. Consequently Hellwig validly published *Aphodius* and *Oryctes* and has to be considered as the author of these names.

### New authorship, same names, year, and concepts

Is the concept of these genera affected by the change of authorship and original description? Illiger (1798) himself did not fix type species for his genera. It was Latreille (1810: 428) who selected "*Aphodius fimetarius*, Fab." (= *Scarabaeus fimetarius* Linnaeus, 1758) as type species for *Aphodius* and "*Geotrupes nasicornis*, Fab." (= *Scarabaeus nasicornis* Linnaeus, 1758) for *Oryctes*. Both type species are included in the list of species Hellwig provided. Therefore, the established concept for both genera remains unchanged.

Since the author does not form part of a scientific name (Art. 51.1, ICZN 1999), the change of authorship has minimal implications and is unlikely to cause any confusion. However, increasing the age of established names is advantageous for reasons of priority.

Both names should be cited as follows

*Aphodius* Hellwig, 1798 (p. 101; 24 January)

Type species by subsequent designation by Latreille (1810): *Scarabaeus fimetarius* Linnaeus, 1758

*Oryctes* Hellwig, 1798 (p. 100; 24 January)

Type species by subsequent designation by Latreille (1810): *Scarabaeus nasicornis* Linnaeus, 1758

## References cited

- Anonymous (1798) [without title, "In der Gebauerschen Buchhandlung zu Halle sind folgende neue Bücher erschienen"; under: Ankündigungen neuer Bücher, announcements of new books]. *Intelligenzblatt der Allgemeinen Literatur-Zeitung* 1798 (Numero 134, 19.ix.1798) [supplement to: *Allgemeine Literatur-Zeitung vom Jahre 1798*, Dritter Band], 1115–1118.  
URL: [http://books.google.com/books?id=qNFAAAAcAAJ&pg=PT323&dq=intelligenzblatt+der+allgemeinen+literaturzeitung+vom+jahre+1798&hl=en&ei=W4k9To7EDoeEsgKror08&sa=X&oi=book\\_result&ct=result&resnum=1&ved=0CCwQ6AEwAA](http://books.google.com/books?id=qNFAAAAcAAJ&pg=PT323&dq=intelligenzblatt+der+allgemeinen+literaturzeitung+vom+jahre+1798&hl=en&ei=W4k9To7EDoeEsgKror08&sa=X&oi=book_result&ct=result&resnum=1&ved=0CCwQ6AEwAA)
- Hellwig, J.C.L. (1798) [without title; under: Ankündigungen neuer Bücher, announcements of new books]. *Intelligenzblatt der Allgemeinen Literatur-Zeitung* 1798 (Numero 13, 24.i.1798) [supplement to: *Allgemeine Literatur-Zeitung vom Jahre 1798*, Erster Band], 100–101. [letter dated xi.1797] URL see above.
- Illiger, J.K.W. (1798) *Verzeichniss der Käfer Preussens. Entworfen von Johann Gottlieb Kugelann Apotheker in Osterode*. Gebauer, Halle. XLII+510 pp. URL: <http://www.archive.org/details/verzeichnissder00illigoog>
- International Commission on Zoological Nomenclature (ICZN) (1999) *International Code of Zoological Nomenclature*. 4<sup>th</sup> ed. International Trust for Zoological Nomenclature, London, XXIX+306 pp. URL: <http://www.nhm.ac.uk/hosted-sites/iczn/code/>
- Latreille, P.A. (1810) *Considérations générales sur l'ordre naturel des animaux composant les classes des crustacés, des arachnides, et des insectes*. Schoell, Paris. 444 pp. URL: <http://www.archive.org/details/considrationsg00latre>
- Linnaeus, C. (1758) *Systema Naturae per Regna Tria Naturae, secundum Classes, Ordines, Genera, Species, cum Characteribus, Differentiis, Synonymis, Locis. Tomus I. Edition Decima, Reformata*. Laurentii Salvii, Holmiae.  
URL: <http://www.biodiversitylibrary.org/bibliography/542#>
- Weidmannische Buchhandlung (1798) [without title; under: Ankündigungen neuer Bücher, announcements of new books]. *Intelligenzblatt der Allgemeinen Literatur-Zeitung* 1798 (Numero 31, 21.ii.1798) [supplement to: *Allgemeine Literatur-Zeitung vom Jahre 1798*, Erster Band], 278–279. [letter dated 12.ii.1798] URL: see above.