











# The Bulletin of Zoological Nomenclature

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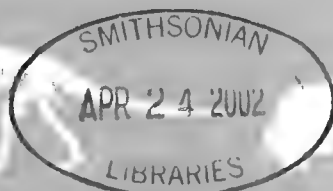
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**BULLETIN OF ZOOLOGICAL NOMENCLATURE**

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**Notices**

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 58, part 4 (published on 19 December 2001). Under Article 82 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

Case 3220. *Ovula gisortiana* Passy, 1859 (currently *Gisortia gisortiana*; Mollusca, Gastropoda): proposed precedence of the specific name over that of *Cypraea coombii* Sowerby in Dixon, 1850. J.-M. Pacaud & L. Dolin.

Case 3221. *Geomyza*, *Opomyza* and *Palloptera* Fallén, 1820 and *Balioptera* Loew, 1864 (Insecta, Diptera): proposed conservation of usage by the designation of *G. hackmani* Nartshuk, 1984 and *O. apicalis* Meigen, 1830 as the type species of *Geomyza* and *Balioptera* respectively, and the designation of a neotype for *Musca germinationis* Linnaeus, 1758 (the type species of *Opomyza*). J.W.A. van Zuijlen, P.L.Th. Beuk & E.P. Nartshuk.

Case 3222. *Papilio eurymedon* Lucas, 1852 (Insecta, Lepidoptera): proposed conservation of the specific name in accordance with Article 23.9 of the Code. J.B. Heppner & T.C. Emmel.

Case 3223. *Unio ochraceus* Say, 1817 (currently *Lampsilis*, *Leptodea* or *Ligumia ochracea*; Mollusca, Bivalvia): proposed conservation of the specific name. J.R. Cordeiro.

Case 3224. *Mycetoporus mulsanti* Ganglbauer, 1895 (Insecta, Coleoptera): proposed conservation of the specific name. M. Schülke.

Case 3225. *Phymaturus* Gravenhorst, 1837 and *P. palluma* (Molina, 1782) (Reptilia, Sauria): proposed conservation of usage of the names by the

designation of a neotype for *Lacerta palluma* Molina, 1782. R. Etheridge & J.M. Savage.

Case 3226. Lacépède, B.G.E. de, 1788, *Histoire Naturelle des Quadrupèdes Ovipares*: proposed rejection as a non-binominal work. J.M. Savage.

Case 3227. *Geophilus brevilabiatu*s Newport, 1845 (currently *Orphnaeus brevilabiatu*s) and *Chomatobius brasilianus* Humbert & Saussure, 1870 (currently *O. brasilianus*) (Chilopoda): proposed conservation of the specific names. D. Foddai, A. Minelli & L.A. Pereira.

(d) *Rulings of the Commission*. Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

## The International Commission on Zoological Nomenclature and its publications

The *International Commission on Zoological Nomenclature* was established in 1895 by the third International Congress of Zoology, and at present consists of 28 zoologists from 20 countries whose interests cover most of the principal divisions (including palaeontology) of the animal kingdom. The Commission is under the auspices of the International Union of Biological Sciences (IUBS), and members are elected by secret ballot of zoologists attending General Assemblies of IUBS or Congresses of its associated bodies. Casual vacancies may be filled between Congresses. Nominations for membership may be sent to the Commission Secretariat at any time.

The *International Code of Zoological Nomenclature* has one fundamental aim, which is to provide 'the maximum universality and continuity in the scientific names of animals compatible with the freedom of scientists to classify animals according to taxonomic judgements'. The Fourth Edition was published in 1999 by the International Trust for Zoological Nomenclature, acting on behalf of the Commission; its provisions came into effect on 1 January 2000 and supersede those of the previous (1985) edition. Official texts are available in English, French, German, Japanese, Russian and Spanish, and other texts are in preparation. Details of how to obtain the Code are given on page 6.

Observance of the rules in the *Code* enables a biologist to arrive at the valid name for any animal taxon between and including the ranks of subspecies and superfamily. Its provisions can be waived or modified in their application to a particular case when strict adherence would cause confusion; however, this must never be done by an individual but only by the Commission, acting on behalf of all zoologists. The Commission takes such action in response to proposals submitted to it; applications should follow the instructions in the *Bulletin of Zoological Nomenclature*, and assistance will be given by the Secretariat.

The *Bulletin* is published four times each year (subscription for volume 59 for 2002 is £120 or \$215). It contains applications for Commission action, as described above; their publication is an invitation for any person to contribute comments or counter-suggestions, which may also be published. Abstracts of applications are also placed on the Commission's website ([www.iczn.org](http://www.iczn.org)). The Commission makes

a ruling (called an Opinion) on a case only after a suitable period for comments; all Opinions are published in the *Bulletin* and their titles are given in the Commission website. The *Bulletin* also contains articles and notes relevant to zoological nomenclature; such contributions are invited and should be sent to the Executive Secretary.

The Commission's rulings are summarized in *The Official Lists and Indexes of Names and Works in Zoology*. A single volume covering the period 1895–1985 was published in 1987, and a Supplement updating the period to 2000 was published in March 2001. Details of how to obtain the 1987 volume and the Supplement are given on page 6.

In addition to dealing with applications and other formal matters, the Commission's Secretariat is willing to help with advice on any question which may have nomenclatural (as distinct from purely taxonomic) implications.

*The International Trust for Zoological Nomenclature* is a charity (not-for-profit company) registered in the U.K. The Secretariat of the Commission is based in London, and the Trust is established there to handle the financial and management affairs of the Commission. Income from the sale of publications covers less than half the costs of the service given to zoology by the Commission. Financial support is given by academies, research councils, institutions and societies from a number of countries, and also by individuals; despite this assistance the level of income remains a severe restraint. Donations to the Trust are gratefully received and attention is drawn to the possible tax advantage of legacies.

For a more detailed discussion of the Commission and its activities and publications see BZN 48: 295–299 (December 1991). A Centenary History of the Commission — *Towards Stability in the Names of Animals* — describes the development of zoological nomenclature and the role of the Commission; it was published in 1995.

The books listed above may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)) or AAZN, MRC-159, National Museum of Natural History, Washington, D.C. 20560–0159, U.S.A. (e-mail: [smith.davidg@nmnh.si.edu](mailto:smith.davidg@nmnh.si.edu)).

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## **Executive Secretary of the International Commission on Zoological Nomenclature**

Dr PHILIP K. TUBBS retired from the post of Executive Secretary of the Commission and Editor of the *Bulletin of Zoological Nomenclature* on 14 January 2002. Dr Tubbs was appointed to the post on 7 September 1985, having previously been a University Lecturer in Biochemistry in the University of Cambridge, England.

During his 16 years work for the Commission Dr Tubbs has served under four Presidents, Prof Ride, Prof Kraus, Prof Minelli and Dr Evenhuis. He was a member of the Editorial Committee for the 4th Edition of the *International Code of Zoological Nomenclature*, and has been involved with translations of the Code into Chinese, Czech, German, Japanese, Russian and Spanish. Dr Tubbs has overseen the preparation of the *Official Lists and Indexes of Names and Works in Zoology* (published in 1987) and its *Supplement* (2001) giving details of all the names and works on which the Commission has ruled since it was set up in 1895, and also the Centenary History of the Commission — *Towards Stability in the Names of Animals* (1995). During his time as Executive Secretary and Editor, 615 Opinions have been published giving rulings of the Commission.

The Commission and the International Trust for Zoological Nomenclature have appointed Dr ANDREW WAKEHAM-DAWSON as Executive Secretary and Editor of the *Bulletin* to succeed Dr Tubbs. Dr Wakeham-Dawson has worked as an ecologist in the U.K. Department for Environment, Food and Rural Affairs (DEFRA), and has published extensively on Lepidoptera including a book on Madeiran butterflies.

## **Official Lists and Indexes of Names and Works in Zoology — Supplement 1986–2000**

The volume entitled *Official Lists and Indexes of Names and Works in Zoology* (ISBN 0 85301 004 8) was published in 1987. It gave details of the names and works on which the Commission had ruled and placed on the Official Lists and Indexes since it was set up in 1895 through to the end of 1985. The volume contained 9917 entries, 9783 being family-group, generic or specific names and 134 relating to works.

In the 15 years between 1986 and the end of 2000 a further 601 Opinions and Directions have been published in the *Bulletin* listing 2371 names and 14 works placed on the Official Lists and Indexes. Details of these 2385 entries are given in a Supplement of 141 pages (ISBN 0 85301 007 2) published early in 2001. Additional sections include (a) a systematic index of names on the Official Lists covering both the 1987 volume and the Supplement; (b) a table correlating the nominal type species of genera listed in the 1987 volume with the valid names of those species when known to be different; and (c) emendments to the 1987 volume.

The cost of the 1987 volume and of the Supplement is £60 or \$110 each, and £100 or \$170 for both volumes ordered together.

Individual buyers of the volumes for their own use are offered a price of £50 or \$85 for each volume, and £90 or \$150 for both.

Individual members of the American or European Association for Zoological Nomenclature are offered a price of £45 or \$70 for each volume, and £80 or \$120 for both.

Prices include postage by surface mail; for Airmail, please add £3 or \$5 for each volume.

Copies may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)), or AAZN, Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: [smith.davidg@nmnh.si.edu](mailto:smith.davidg@nmnh.si.edu)).

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## The International Code of Zoological Nomenclature

The extensively revised 4th Edition of the *International Code of Zoological Nomenclature* (ISBN 0 85301 006 4) was published (in a bilingual volume in English and French) in August 1999. It came into effect on 1 January 2000 and entirely supersedes the 3rd (1985) edition.

The price of the English and French volume of the 4th Edition is £40 or \$65; the following discounts are offered:

**Individual members of a scientific society** are offered a discount of 25% (price £30 or \$48); the name and address of the society should be given.

**Individual members of the American or European Associations for Zoological Nomenclature** are offered a discount of 40% (price £24 or \$39).

**Postgraduate or undergraduate students** are offered a discount of 25% (price £30 or \$48); the name and address of the student's supervisor should be given.

**Institutions or agents** buying 5 or more copies are offered a 25% discount (price £30 or \$48 for each copy).

Prices include surface postage; for Airmail please add £2 or \$3 per copy.

Copies may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)), or AAZN, Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: [smith.davidg@nmnh.si.edu](mailto:smith.davidg@nmnh.si.edu)).

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Individual purchasers of the Code are offered a 50% discount on the following publications for personal use:

*Towards Stability in the Names of Animals — a History of the International Commission on Zoological Nomenclature 1895–1995* (1995) — reduced from £30 to £15 and from \$50 to \$25;

*The Bulletin of Zoological Nomenclature* (the Commission's quarterly journal) — discount valid for up to four years; for 2002 the discounted price would be £60 or \$107.



**Case 3174*****Pardosa* C.L. Koch, 1847 (Arachnida, Araneae): proposed fixation of *Lycosa alacris* C.L. Koch, 1833 as the type species to conserve the usage of *Pardosa* and of *Alopecosa* Simon, 1885**

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**Abstract.** The purpose of this application is to fix *Lycosa alacris* C.L. Koch, 1833 as the type species of the wolf spider genus *Pardosa* C.L. Koch, 1847. In 1898 Simon gave *Lycosa striatipes* C.L. Koch, 1837 as the type, but this taxon has long been classified in *Alopecosa* Simon, 1885 and acceptance of it as the type species of *Pardosa* would cause *Alopecosa* to be replaced by *Pardosa*; a substitute name would be required for the genus now commonly called *Pardosa*. The originally included nominal species *Lycosa alacris* C.L. Koch, 1833 is identifiable from its description and an original specimen exists. *P. alacris* has generally been treated as a junior synonym of *P. lugubris* (Walckenaer, 1802), but the names *alacris* and *lugubris* have recently been shown to refer to distinct though very closely related taxa. *Aranea chelata* O.F. Müller, 1764 was at one time considered to be the oldest synonym of *P. alacris* and *P. lugubris*, but this name is unidentifiable and has been unused for many years; its suppression is proposed.

**Keywords.** Nomenclature; taxonomy; Araneae; LYCOSIDAE; *Pardosa*; *Pardosa alacris*; *Pardosa lugubris*; *Alopecosa*; *Alopecosa striatipes*; *Aranea chelata*; wolf spiders.

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1. *Pardosa* was established by C.L. Koch (1847, p. 100; for the date see Sherborn, 1914) as a subgenus of *Lycosa* Latreille, 1804 containing nine species of European wolf spiders, including *L. striatipes* C.L. Koch, 1837, *L. alacris* C.L. Koch, 1833 and *Aranea monticola* Clerck, 1758; no type species was fixed.

2. Menge (1850, p. 62) treated *Pardosa* as a separate genus containing three species. Ohlert (1851, p. 6) gave *P. monticola* as an 'example' of the genus, but under Article 67.5.1 of the Code this cannot be interpreted as a valid type species designation.

3. The first author who tried to designate a type species for *Pardosa* was Thorell (1870, p. 190). His choice was *Aranea lugubris* Walckenaer, 1802 (p. 239), which he stated to be a senior synonym of *Lycosa alacris* C.L. Koch, 1833 (Heft 120, pl. 17, fig. 18), a nominal species which (unlike *A. lugubris*) was included by Koch when he established *Pardosa*. In normal circumstances this would be a valid designation of *L. alacris* under Article 69.2.2, but Thorell pointed out that Koch had not retained *Lycosa* as a subgeneric name when splitting *Lycosa* into five subgenera and that 'his sub-genus *Pardosa* appears to us [i.e. to Thorell] to embrace the forms in which the type of the Lycosoidae is best developed'. Thorell therefore adopted *Lycosa*, rather than *Pardosa*, as the valid name of the genus for which he selected *L. lugubris* as the type species and in consequence his action is not a type fixation for *Pardosa*. Nor did Thorell validly fix the type species for *Lycosa*, because many years previously Latreille (1810, p. 424) had designated *Aranea tarantula* Linnaeus, 1758 and the genus is currently interpreted in this sense.

4. The first author to give a formally correct type species designation for *Pardosa* was Simon (1898, p. 362) who stated that the type was *Lycosa striatipes* C.L. Koch, 1837 (p. 22), the first species listed by Koch (1847) when establishing *Pardosa*. However, Bösenberg (1903, p. 391) and Dahl (1908, p. 342) included this species in the genus *Alopecosa* Simon, 1885 (under the name *Tarentula* Sundevall, 1832, for which see Dondale & Redner, 1979, pp. 1033–1034), and since those authors the name *Alopecosa* (= *Tarentula* auct.) *striatipes* (C.L. Koch, 1837) has been widely used (e.g. Charitonov, 1932; Roewer, 1954; Bonnet, 1955; Lugetti & Tongiorgi, 1969; Fuhn & Niculescu-Burlacu, 1971; Platnick, 1998), despite the circumstance that the original description was based on a juvenile specimen and its specific identity implicitly doubtful (Simon, 1937, p. 1133). The type specimen of *L. striatipes* C.L. Koch, 1837 is apparently no longer in existence: Dr M. Moritz (pers. comm. 1983) informed us that he was unable to find it in the C.L. Koch collection of the Zoologisches Museum, Humboldt-Universität, Berlin. Tikader & Malhotra (1980), Tanaka (1993) and Yin et al. (1997) mentioned '*Pardosa striatipes* C.L. Koch' as being the type species of *Pardosa*, but if *L. striatipes* were treated as the type species of *Pardosa* then the generic name *Alopecosa* Simon, 1885 (p. 10) would become a junior synonym of *Pardosa* and a substitute name would be required for the genus now called *Pardosa*. Like *Pardosa*, *Alopecosa* (type species *Aranea fabrilis* Clerck, 1758) is in wide use. Rather than accept these consequences, Bonnet (1951, p. 307) proposed that Simon's (1898) designation should be ignored: 'Il vaut mieux dire que le type choisi par Simon était mal choisi et ne pas en tenir compte'.

5. Charitonov (1932, p. 21) erroneously [in terms of modern Codes] considered that Thorell (1870; see para. 3 above) had validly designated *Aranea lugubris* Walckenaer, 1802 as the type species of *Pardosa*. Charitonov considered that *Pardosa lugubris* (Walckenaer) was a junior synonym of both *P. alacris* (but see para. 6 below) and of the older name *Aranea chelata* O.F. Müller, 1764 (p. 94), and he therefore listed *A. chelata* as the type species. However, *A. chelata* was not an originally included nominal species, and under Article 69.2.2 Charitonov's act can be regarded as a designation of the originally included *Lycosa alacris* C.L. Koch, 1833 as the type species for *Pardosa* (see Zyuzin, 1979, p. 434 and 1980, p. 167); however, it had been preceded by Simon's designation in 1898 of *L. striatipes* (see para. 4 above). Bonnet's later (1951, p. 307) selection of *L. hortensis* Thorell, 1872 (which he synonymized with

*Pardosa saccata* sensu C.L. Koch, 1847) is also invalid, but despite this Bonnet (1958), Roewer (1959) and Fuhn & Niculescu-Burlacu (1971) cited *L. hortensis* as the type species.

6. The identification of *Aranea chelata* Müller, 1764 with *A. lugubris* Walckenaer, 1802 is dubious. Müller's name was almost completely neglected (see Bonnet, 1958, p. 3381) until Dahl (1908, p. 449) argued that it was a senior subjective synonym of *A. lugubris*. Following Dahl (1908), a number of 20th-century araneologists (such as Charitonov, 1932) used the name *Pardosa* (or *Lycosa*) *chelata* instead of *lugubris* or *alacris* for the same species. However, Simon (1937) maintained the use of *P. lugubris* because he regarded the synonymy with *A. chelata* as doubtful. Müller's material is lost (Horn et al., 1990) and the original description of *A. chelata* is not sufficient for identification; it would fit not only *P. lugubris* but also other lycosid species occurring in Denmark, the type locality of *A. chelata*. We propose that the name *Aranea chelata* O.F. Müller, 1764 should be suppressed because it has not been used for many years and as a very old nomen dubium it can only be a source of instability.

7. The name *Pardosa lugubris* (Walckenaer, 1802) has been widely accepted in modern major works (e.g. Roewer, 1954; Bonnet, 1958; Tongiorgi, 1966; Fuhn & Niculescu-Burlacu, 1971; Tyshchenko, 1971; Zyuzin, 1979 and 1980; Roberts, 1985; Platnick, 1998); *P. alacris* (C.L. Koch, 1833) has been treated as a junior synonym of *P. lugubris*. However, *P. lugubris* and *P. alacris* have recently been shown on morphological and behavioural grounds to refer to separate but very closely related taxa (Töpfer-Hofmann & von Helversen, 1990; Kronestedt, 1992; Töpfer-Hofmann, Cordes & von Helversen, 2000); the name *P. lugubris* has also been applied in the past to the recently recognised species *P. saltans* Töpfer-Hofmann, 2000. Walckenaer's original material of *Aranea lugubris* does not exist but a male neotype has been designated (Töpfer-Hofmann, Cordes & von Helversen, 2000, p. 265) and is deposited in the Senckenberg Museum, Frankfurt; a male syntype of *Lycosa alacris* C.L. Koch, 1833 is preserved in the Zoologisches Museum of the Humboldt-Universität in Berlin (specimen ZMB 1986).

8. As mentioned in para. 4 above, acceptance of the first valid designation of type species for *Pardosa* (that of *Lycosa striatipes* by Simon, 1898) would upset the universal usage of both *Pardosa* and *Alopecosa*. We propose that the originally included species *Lycosa alacris* C.L. Koch, 1833 should be accepted as the type species, as fixed by Charitonov in 1932 (see para. 5 above), because this taxon is clearly identifiable from its description and an original specimen exists (see preceding para.). An alternative would be the closely related *Aranea lugubris* Walckenaer, 1802, but as mentioned above this nominal species was not originally included, no original specimen exists, and the name has been applied to more than one taxon and only very recently been distinguished from *L. alacris*.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

- (a) to set aside all fixations of type species for the nominal genus *Pardosa* C.L. Koch, 1847 before that of *Lycosa alacris* C.L. Koch, 1833 by Charitonov (1932);
- (b) to suppress the name *chelata* O.F. Müller, 1764, as published in the binomen *Aranea chelata*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Pardosa* C.L. Koch, 1847 (gender: feminine), type species *Lycosa alacris* C.L. Koch, 1833 by the fixation by Charitonov (1932), as ruled in (1) above;
  - (b) *Alopecosa* Simon, 1885 (gender: feminine), type species by monotypy *Aranea fabrilis* Clerck, 1758;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *alacris* C.L. Koch, 1833, as published in the binomen *Lycosa alacris* (specific name of the type species of *Pardosa* C.L. Koch, 1847);
  - (b) *fabrilis* Clerck, 1758, as published in the binomen *Aranea fabrilis* (specific name of the type species of *Alopecosa* Simon, 1885);
- (4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *chelata* O.F. Müller, 1764, as published in the binomen *Aranea chelata* and as suppressed in 1(b) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

**Case 3106*****Remipes pacificus* Dana, 1852 (currently *Hippa pacifica*; Crustacea, Anomura): proposed precedence over *Remipes marmoratus* Jacquinot, 1846**

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**Abstract.** The purpose of this application is to conserve the usage of the specific name of *Hippa pacifica* (Dana, 1852) for an Indo-Pacific sand or mole crab (family HIPPIDAE). The extant syntypes of *R. marmoratus* Jacquinot, 1846 are apparently specimens of *H. pacifica*. It is proposed that *R. pacificus* Dana, 1852 should take precedence over *R. marmoratus*. A lectotype is designated for *R. pacificus*.

**Keywords.** Nomenclature; taxonomy; Crustacea; Anomura; HIPPIDAE; *Hippa*; *Hippa pacifica*; mole crabs; Indo-Pacific.

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1. Jacquinot (1846, pl. 8, figs. 22–26) introduced the name *Remipes marmoratus* for an illustration of a mole crab, based on an unknown number of specimens from an unspecified locality. The date of this publication has been variously given as '1852 or earlier', 1853 or 1855, but Clark & Crosnier (2000, p. 416) have shown that the part containing plate 8 was published in July 1846. Later, Jacquinot & Lucas (1853, p. 97) described the species, citing four specimens from 'Raffles-Baie (côte nord-ouest de la Nouvelle-Zélande)'. However, as originally pointed out by Filhol (1885, p. 408), 'Raffles-Baie' (Raffles Bay) is not in New Zealand, but on the Northern Territory coast of Australia. All four syntypes are in the Muséum national d'Histoire naturelle, Paris (MNHN Hi-84). Jacquinot & Lucas (1853, p. 98, footnote) pointed that there were errors in the drawing of *R. marmoratus* by Jacquinot (1846), remarking that 'la figure 22 de la planche 8, représente ce filet [antenna] hérissé de longs cils; les quatre individus de cette espèce qui ont été déposés dans les collections du Muséum et sur lesquels nous avons fait cette description, ont tous au contraire ce filet interne [antennal flagellum] entièrement glabre'.

2. Dana (1852, p. 407) described *Remipes pacificus* (currently *Hippa pacifica*), based on an unknown number of specimens collected from 'Island of Ovalau, Feejee Group; Sandwich Islands; Samoan Group?'. Dana (1852, p. 408) compared his specimens with Jacquinot's (1846) figure and distinguished the two species by the fact that 'the *Remipes marmoratus* of Hombron and Jacquinot . . . has the outer antennae

[= antennules] very much more slender than in the *pacificus*'. Dana (1855, pl. 25, figs. 7a-g) later figured *R. pacificus*, which does indeed appear specifically different from Jacquinot's (1846) figure of *R. marmoratus*. The only syntype of *R. pacificus* that appears to be extant is an alcohol-preserved female, 13.7 mm carapace length (CL), from the Sandwich Islands (= Hawaii), and deposited in the Museum of Comparative Zoology, Harvard University (MCZ 1406). No types are listed as being in the collections of The Natural History Museum, London (Evans, 1967), nor have we found type specimens in the collections of the United States National Museum. We think the prospect of locating other syntype material is unlikely since these three institutions are the only known repositories of Dana's type material (Evans, 1967). As MCZ 1406 is the only known syntype, and in excellent condition, we herein select it as lectotype for *R. pacificus*.

3. There has been confusion about the identity of *Remipes marmoratus* and its possible synonymy with one or more of the other nominal species of *Remipes*, much of which was caused by the assertion by Miers (1878, pp. 316–317) that most reported species of *Remipes* were based on a single variable taxon which he incorrectly called *R. testudinarius* Latreille, 1806 (= *Hippa adactyla* Fabricius, 1787; see Haig, 1970). This was only two years after he (Miers, 1876, p. 59) mentioned *R. marmoratus* in a list of the New Zealand fauna, although he had seen no specimens. After Miers (1878) authors correctly split the '*R. testudinarius*' group into separate species again, but had difficulty in placing *R. marmoratus*. It has been variously considered as a synonym of *R. testudinarius*, *R. pictus* Heller, 1861 or *H. adactyla*. De Man (1896, p. 462) did not cite *R. marmoratus* Jacquinot, 1846 in his revision of *Remipes* Latreille, 1806 (a junior subjective synonym of *Hippa* Fabricius, 1787), but indicated 'nur *R. marmoratus* White bleibt nun noch unverständlich.' White (1847, p. 58) listed the name '*R. marmoratus* n.s.' without description or figure reference, thus rendering it a nomen nudum.

4. Haig (1974) mentioned *R. marmoratus* as a possible synonym of *Hippa pacifica*. She stated that she had examined the type material of *R. marmoratus*, consisting of four soft-shelled specimens, and observed that '... although I did not compare them critically with material of *Hippa pacifica*, I noted that they agree in the number of setiferous pits near the lateral margin of the carapace and in having a two-segmented flagellum' (Haig, 1974, p. 182). Recognizing that the illustration of *R. marmoratus* was published before the description and probably earlier than 1852 ('18[?]' in her synonymy list), she suggested that 'Should careful comparison of the two species prove them to be synonymous, the unused name *marmoratus* might have to be suppressed to insure the stability of *pacificus*' (Haig, 1974, pp. 182–183). Since Haig (1974), *marmoratus* has been treated as a questionable synonym of *H. pacifica* (Haig, Murugan & Balakrishnan Nair, 1986, p. 290; Boyko & Harvey, 1999, p. 401).

5. During a recent visit to the Muséum national in Paris, one of us (C.B.B.) examined the four syntypes of *Remipes marmoratus*. They are highly decalcified, making determination of sex difficult, but there appear to be two males (9.2–10.3 mm CL) and two females (8.4–10.2 mm CL). Examination of the specimens confirms Haig's (1974) observations, and also shows that Jacquinot's (1846) illustration is incorrect as to the shape of the antennules; they are identical to those found on typical *H. pacifica*, including the lectotype (MCZ 1406). All evidence therefore indicates that *R. marmoratus* and *H. pacifica* are synonymous.

6. The species was listed under the specific name *Hippa pacifica* or *Remipes pacificus* in *Zoological Record* 17 times between 1864 and 1998. This number is undoubtedly an underestimate of the number of times this species was cited in species lists and other papers during this period (e.g. Efford, 1972; Haig, 1974; Bauchau, 1985; Haig, Murugan & Balakrishnan Nair, 1986; Ramos & Rios, 1995). *H. pacifica* is the most widely distributed member of the family HIPPIDAE, and is the most frequently collected and studied member of its genus. Not only has *H. pacifica* been cited numerous times in taxonomic (e.g. Haig, 1974) and regional survey papers (e.g. Ramos & Rios, 1995), but it is also an important experimental animal that is used in studies of intraspecific competition and intertidal zonation (e.g. Haley, 1982), sex reversal (Wenner, 1972), color change (e.g. Bauchau & Passelcq-Gerin, 1987), various aspects of population biology (Wenner, Ricard & Dugan, 1987) and reproductive biology (Matthews, 1956). In contrast, the species was listed under the specific name *marmoratus* in *Zoological Record* only once between 1864 and 1998, and that was more than a century ago as a synonym of *R. testudinarius* (see Miers, 1878). Nomenclatural stability will not be served by replacing the name *Hippa pacifica* by the binomen *H. marmorata*.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the specific name *pacificus* Dana, 1852, as published in the binomen *Remipes pacificus*, precedence over *marmoratus* Jacquinot, 1846, as published in the binomen *Remipes marmoratus*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *pacificus* Dana, 1852, as published in the binomen *Remipes pacificus* and as defined by the lectotype designated in para. 2 above, with the endorsement that it is to be given precedence over the name *marmoratus* Jacquinot, 1846, as published in the binomen *Remipes marmoratus*, whenever the two are considered to be synonyms;
  - (b) *marmoratus* Jacquinot, 1846, as published in the binomen *Remipes marmoratus*, with the endorsement that it is not to be given priority over *pacificus* Dana, 1852, as published in the binomen *Remipes pacificus*, whenever the two are considered to be synonyms.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

**Case 3183*****Pagurus clypeatus* Fabricius, 1787 (currently *Coenobita clypeatus*; Crustacea, Decapoda): proposed replacement of syntypes by a neotype**

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**Abstract.** The purpose of this application is to conserve the accustomed usage of the name of the common West Indian land hermit crab *Coenobita clypeatus* (Fabricius, 1787), the type species of *Coenobita* Latreille, 1829. The two existing syntypes represent two different and equally well known Indo-Pacific species: *Coenobita rugosus* Milne Edwards, 1837 and *C. violascens* Heller, 1862. It is proposed that stability should be maintained by the replacement of the two existing East Indies syntypes of *Pagurus clypeatus* Fabricius, 1787 with a West Indies neotype in the sense of the usage of the name since 1919. This will also conserve the names *C. rugosus* and *C. violascens*. The names of *Coenobita* Latreille, 1829 and of its type species, *Pagurus clypeatus* Fabricius, 1787, were placed on Official Lists in Opinion 1575 (March 1990).

**Keywords.** Nomenclature; taxonomy; Crustacea; Decapoda; COENOBITIDAE; *Coenobita*; *Coenobita clypeatus*; *C. rugosus*; *C. violascens*; hermit crabs; West Indies.

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1. The specific name of *Pagurus clypeatus* Fabricius, 1787 has been misinterpreted for many years and, with one exception, incorrectly applied to a large and common West Indian species of the land hermit crab genus *Coenobita* Latreille, 1829. The nominal genus *Coenobita* was established by Latreille (1829, p. 77) with '*Pagurus clypeatus* Fab., Herbst (1791)' as the only included species.

2. Fabricius (1787, p. 328, figs. 116, 117) established the name *Pagurus clypeatus* citing both of Herbst's (1791, p. 22, pl. 23, figs. 2A, B), at the time unpublished, figures of '*Cancer clypeatus*'. It appears as though he based his description on the larger of the two specimens figured by Herbst. The type locality was cited as 'India orientali'. Two specimens in the Herbst collection in the Naturhistorisches Forschungsinstitut Museum für Naturkunde zu Berlin (personal examination by PMcL) agree with Herbst's figures with the exception that the stridulating ridge, present on the larger specimen, is not shown plainly in Herbst's figure (1791, pl. 23, fig. 2B), nor is it mentioned in his description. Herbst's specimens do not represent a single species. The larger figure represents the common Indo-Pacific species known as *Coenobita rugosus* Milne Edwards, 1837 (p. 241; see para. 4 below); the smaller

figure appears to be another Indo-Pacific species, *C. violascens* Heller, 1862 (p. 524). As with all of Herbst's material, the labels were changed during the 19th century by either W. Peters or E. von Martens (resident curators in the Berlin Museum). The label accompanying Herbst's *Coenobita* specimens presently reads '*C. rugosa*', and that is what Sakai (1999, p. 12) meant when he noted that '*Coenobita rugosa*' was in the Herbst collection. Sakai's figure (1999, pl. 3G) is Herbst's larger specimen of *Cancer clypeatus* (i.e. *Pagurus clypeatus* Fabricius, 1787 in its original sense).

3. From Olivier's (1811, p. 643) description and color notes of '*Pagurus clypeatus*' and the subsequently published illustration (Latreille, 1818, pl. 311, fig. 1), Owen (1839, p. 84) rightly concluded that Olivier's taxon was not conspecific with that of Herbst (1791), to whom he (Owen) attributed authorship of the species. It was Olivier's (1811) '*Pagurus clypeatus*' upon which Jarocki (1825) based his new genus *Carcinion*, an unused name which, as a senior objective synonym of *Coenobita* Latreille, 1829, was suppressed by the Commission in Opinion 1575 (March 1990; BZN 47: 67–68). Owen (1839) described Olivier's species '*Pagurus clypeatus*' as *Coenobita olivieri*, basing his interpretation on Olivier's description and figure, and also a specimen from the 'Sandwich' (Hawaiian) Islands. Although Owen (1839) was the only 19th or 20th century carcinologist to correctly interpret *Pagurus clypeatus* Fabricius (Herbst's *Cancer clypeatus*), he believed, incorrectly, that Herbst's figures represent a single specimen (with fig. 2B as an enlargement of fig. 2A); the syntypes are, however, two distinct species (see para. 2 above).

4. Milne Edwards (1837, p. 238) presented a diagnosis of the genus *Coenobita* (spelled as *Cenobita*) and briefly described several species. The species included, among others, '*Cenobita clypeatus*' with reference to Herbst (1791), Fabricius (1798) and Latreille (1803; 1818; 1829); *C. diogenes*, with reference to Catesby (see para. 7 below) and Latreille (1818), and his own new species *C. rugosa*. Although Milne Edwards gave only a general description of the species he incorrectly identified as *C. clypeatus*, he did note the equally developed coxae of the fifth pereopods (a characteristic of *C. brevipimanus* Dana, 1852). In his description of *C. rugosus* (as *rugosa*, but *Coenobita* is masculine), Milne Edwards specifically mentioned the stridulating tubercles; only the taxon currently known as *C. clypeatus* (see para. 7 below) was illustrated (Milne Edwards, 1837, p. 240, pl. 22, figs. 11–13).

5. Dana (1852, p. 473; 1855, pl. 30, figs. 4a, b) cited and illustrated the general characters Milne Edwards (1837) had attributed to *Coenobita clypeatus* and established the 'variety' *brevimanus* for a specimen from Balabac Passage (Malaysia) with a more circular chela, the outer surface of which was smoother than in the nominotypical 'variety'. As a result of Milne Edwards's misinterpretation of Herbst's (1791) taxon, *Coenobita brevipimanus* Dana, 1852 was commonly reported as *C. clypeatus* for the next 100 years (e.g. Hilgendorf, 1869; De Man, 1902; Borradaile, 1903; Alcock, 1905; Fize & Serène, 1955; 29 additional references have been given to the Commission Secretariat). Rathbun (1910, p. 314) was the first to recognize the distinctiveness of *C. brevipimanus*, and to call attention to the fact that Dana's species was the *Coenobita clypeatus* of Alcock (1905, p. 142, pl. 15, figs. 1, 1a), not the *Cancer clypeatus* of Herbst (1791). Terao (1913, p. 388) proposed the new name *Coenobita hilgendorfi* for the Indo-West Pacific species that Hilgendorf (1869) and Alcock (1905) had incorrectly identified as *Coenobita clypeatus*. After Rathbun (1919) the name *Coenobita clypeatus* was accepted by most subsequent authors dealing with

the West Indian form (see Schmitt, 1935, p. 207; Provenzano, 1959, p. 359; Chace & Hobbs, 1969, p. 123; De Wilde, 1973; Rodriguez, 1980, p. 220). Although it took quite a long time before *brevimanus* was generally accepted for the Indo-West Pacific species this name is now in current use (e.g. Ball & Haig, 1972; Nakasone, 1988; Burggren & McMahon, 1988).

6. Hilgendorf (1869, p. 98) attributed authorship of *Coenobita clypeatus* to Milne Edwards (1837; see para. 4 above), and included only the report by Dana (1852, 1855) in his synonymy. From his description, figures, and the one remaining specimen of his '*C. clypeatus*' (= *C. brevimanus*) still in the Berlin Museum (personal examination by PMcL), it is clear that he accepted Milne Edwards's interpretation of *Coenobita clypeatus* (= *C. brevimanus*). Apparently Hilgendorf, like Owen, believed that Herbst's description and illustrations were based on a single specimen, and that it was no longer extant because the larger of the two Herbst specimens did not agree with his interpretation of *C. clypeatus*. In his identification of the smaller of Herbst's specimens as '*Coenobita diogenes*' it appears that Hilgendorf was also following the remarks and diagnosis of Milne Edwards. Accordingly, Hilgendorf concluded that Herbst had made a mistake in stating the type locality of *Cancer clypeatus* as the East Indies, but not until Schmitt (1935, p. 208) was Hilgendorf's (1869) locality 'correction' noticed.

7. The West Indian species of *Coenobita* was first mentioned and illustrated as 'Cancellus Terrestris Bahamensis The Hermit Crab / Bernard l'hermite' by Catesby (1743, pl. 33, figs. 1, 2) (the 1754 2nd edition is cited in the literature). Catesby's figures were reproduced by Latreille (1818, pl. 284, figs. 2, 3) as *Pagurus diogenes* citing 'L[innaeus], p. 1049, no. 58' (= 1767, not 1758). Milne Edwards (1837) transferred *P. diogenes* to *Coenobita* and in all subsequent reports in the 19th and early 20th centuries the West Indian species was referred to as *Coenobita diogenes*. Rathbun (1897) listed the species as '*Coenobita diogenes* (Linnaeus)' also citing Linnaeus (1767, p. 1049) and Milne Edwards (1837, p. 240, pl. 22, figs. 11–14) in her synonymy. In contrast, Benedict (1901) reported '*Cenobita diogenes* (Latreille)', including in his synonymy Latreille (1818) and Milne Edwards (1837).

8. Subsequently, when Rathbun (1919, p. 329) again reported on the West Indian *Coenobita*, her synonymy included *Cancer diogenes* Linnaeus (Edwards, in Catesby, 1771 [3rd edition], pl. 33, figs. 1, 2) from Florida; Herbst's (1791) description and illustrations of *Cancer clypeatus*, attributed to Latreille (incorrectly cited with the date and reference of Olivier, 1811); and Milne Edwards's (1837) report of *Cenobita diogenes*. It is unclear whether Rathbun (1919) was aware at that time of Hilgendorf's (1869) erroneous 'correction' of Fabricius's (1787) type locality for *Pagurus clypeatus* (Herbst's *Cancer clypeatus*) from East Indies to West Indies. Having earlier (Rathbun, 1910, p. 314) distinguished between Alcock's (1905, p. 142, pl. 15, figs. 1, 1a) '*Coenobita clypeatus* Latreille' (= *C. brevimanus* Dana) and Herbst's (1791) *Cancer clypeatus*, Rathbun (1919) emphatically rejected the specific name *diogenes* for the West Indian species of *Coenobita*, stating correctly that Linnaeus's (1758, p. 631) description of *Cancer diogenes* applied to a species of *Petrochirus*. Following Rathbun's (1919) adoption of '*Coenobita clypeatus* Herbst' for the Atlantic species, many authors discontinued the use of the specific name *diogenes* for this taxon. However, Rathbun's (1919) use of *C. clypeatus* was either not widely known, or perhaps not always accepted, as reports of *Coenobita diogenes* continued to appear in

the literature for another 35 years (e.g. Kinzig, 1921; Kammerer, 1926; Pearse, 1929a, b; Haas, 1950; Fize & Serène, 1955). Rathbun's (1919) application of the name '*Coenobita clypeatus* Herbst' was emphasized by Holthuis (1959), who provided more detailed information on *Cancer diogenes* Linnaeus, 1758.

9. Morgan & Holthuis (1988, BZN 45: 18–20) applied to the Commission for the conservation of the generic name *Coenobita* Latreille, 1829, which was threatened by the senior synonyms *Carcinion* Jarocki, 1825 and *Cenobites* Berthold, 1827, and also possibly by the senior subjective synonym *Eremita* Osbeck, 1765. The names *Coenobita* and its type species *Pagurus clypeatus* Fabricius, 1787 were placed on Official Lists in Opinion 1575 (March 1990). In their proposal, Morgan & Holthuis cited the type species of *Carcinion* Jarocki, 1825 as '*Pagurus clypeatus* Oliv.' (= *Pagurus clypeatus* Fabricius, 1787). However, as mentioned in para. 3 above, *Pagurus clypeatus* sensu Olivier, 1811 is not *Pagurus clypeatus* Fabricius, 1787.

10. Not only has the identity of *Pagurus clypeatus* Fabricius, 1787 been incorrectly interpreted, so has its authorship. As pointed out by Morgan & Holthuis (1989, p. 177), authorship of this nominal taxon has been attributed most frequently to Herbst (1791), but also to Fabricius, 1798 (e.g. Dana, 1852; Henderson, 1888), to Latreille, 1825 (e.g. Alcock, 1905; Fize & Serène, 1955; Yaldwyn & Wodzicki, 1979), and to Milne Edwards, 1837 (Hilgendorf, 1869; Whitelegge, 1897).

11. In view of the misunderstanding and misuse of the specific name *clypeatus* for more than 200 years, the most appropriate action is to request the Commission to designate, in accordance with Article 75.6 of the Code, a West Indies neotype for *Pagurus clypeatus*; the meaning of the specific name would thus be fixed as it has been understood since Rathbun (1919). As neotype we propose the male specimen described and illustrated by Chace & Hobbs (1969, p. 123, figs. 33, 34b, c), United States National Museum, Washington, No. USNM 126773, station 17, Batali River, N. of Savane, Dominican Republic, collected in 1964 by R.L. Zusi, on dry land at an elevation of about 60 m. Setting aside the Herbst syntypes of *P. clypeatus* will conserve the specific names of the two East Indian taxa *Coenobita rugosus* Milne Edwards, 1837 and *C. violascens* Heller, 1862 (see para. 2 above).

12. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Pagurus clypeatus* Fabricius, 1767 and to designate the male specimen USNM 126773, referred to in para. 11 above, as the neotype;
- (2) to add to the entry on the Official List of Specific Names in Zoology for *Pagurus clypeatus* Fabricius, 1787 (specific name of the type species of *Coenobita* Latreille, 1829) an endorsement recording that the species is defined by the neotype designated in (1) above;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *rugosus* Milne Edwards, 1837, as published in the binomen *Cenobita rugosus*;
  - (b) *violascens* Heller, 1862, as published in the binomen *Cenobita violascens*.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

**Case 3176*****Ptinus tectus* Boieldieu, 1856 (Insecta, Coleoptera): proposed conservation of usage of the specific name**

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**Abstract.** The purpose of this application is to conserve the long and universal usage of the name *Ptinus tectus* Boieldieu, 1856 for a well-known spider beetle (family ANOBIIDAE, subfamily PTININAE) of significant economic importance. Boieldieu proposed the name as a replacement for the junior primary homonym *Ptinus pilosus* White, 1846 (a dorcatomine anobiid from New Zealand) with which he had misidentified his new taxon, but it is proposed that, in accord with both taxonomic reality and usage, *P. tectus* should be deemed to be the name of a then new nominal species.

**Keywords.** Nomenclature; taxonomy; Coleoptera; ANOBIIDAE; PTININAE; DORCATOMINAE; *Ptinus tectus*; spider beetles.

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1. The nominal species *Ptinus pilosus* White, 1846 (p. 8) was described from material collected in New Zealand. The name is an invalid junior primary homonym of *Ptinus pilosus* Müller, 1821. Hinton (1941, p. 358) pointed out that White's species belongs to the subfamily DORCATOMINAE, not the PTININAE. The combination *Dorcatoma pilosa* (White, 1846) has been used recently by Kuschel (1990, p. 54), who was apparently unaware that the specific name was a junior primary homonym and therefore invalid.

2. Boieldieu (1856, p. 652) described a species from Van Diemen's Land under the heading '*Pt[inus] tectus*, Mihi'. The species which he actually described is a well-known spider beetle of significant economic importance which has become universally known by that name. Recent major works which have used the name *Ptinus tectus* Boieldieu include Lawrence (1991), Lawrence & Britton (1994), and Lawrence et al. (2000). Lawrence (1991, p. 444) stated 'the best known ptinids are those which have become pests of stored products and have been spread worldwide by human transport. Examples are . . . and *P[tinus] tectus* Boieldieu'. Other authors who have recently used the name include Archibald & Chalmers (1983), Waller (1984), Booth, Cox & Madge (1990), Vavra (1993), Borowski (1996), Klimaszewski & Watt (1997) and Philips (2000); a list of further references is held by the Commission Secretariat. When he established *Ptinus tectus*, Boieldieu (1856, p. 652) listed *Ptinus pilosus* White, 1846 as a synonym and stated 'J'ai été obligé de changer le nom de cette espèce, car celui qui lui a été donné d'abord appartenait déjà à une espèce décrite par Müller'. It is evident that Boieldieu proposed his name *Ptinus tectus* expressly as a replacement (a nomen novum) for *P. pilosus* White, 1846, wrongly believing that White's species was the same as the one described by himself.

This means that the name *Ptinus tectus* Boieldieu, 1856 formally applies to White's dorcatomine species (Article 72.7 of the Code), and not to the taxon for which it has always been used.

3. Hinton (1941, p. 358) pointed out the problem, and attempted to solve it by claiming that Boieldieu (1856) had effectively proposed two homonymous names, one of them, *Ptinus tectus* (a), for the new species that Boieldieu was dealing with (i.e. the well-known ptinine), the other, *Ptinus tectus* (b), a replacement for *Ptinus pilosus* White, 1846. He then claimed that *Ptinus tectus* Boieldieu (a) had place priority, and was therefore the valid name for the ptinine. He stated (p. 359) that 'therefore *P. tectus* (b), over which *P. tectus* (a) has place priority, must be renamed again. I herewith propose the name *Dorcatoma pilosellus*, nom. nov. = *Ptinus pilosellus*'. He evidently intended *D. pilosellus* (recte *pilosella*) to be a replacement name for *Ptinus pilosus* White, 1846, nec Müller, 1821. However, Hinton's proposed solution is not in accordance with the Code. Furthermore, *D. pilosella* Hinton, 1941 is itself a junior primary homonym (of *Dorcatoma pilosella* Reitter, 1901), and, following the subjective synonymy set out in Hudson (1934, p. 198, footnote), the valid name for the dorcatomine species is *oblonga* Broun, 1880, as published in the binomen *Dorcatoma oblonga*.

4. In order to conserve the long and universal usage of *Ptinus tectus* Boieldieu, 1856, I propose that it be treated as the name of a then new nominal taxon and not as a replacement name for the dorcatomine species *P. pilosus* White, 1846.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that *tectus* Boieldieu, 1856, as published in the binomen *Ptinus tectus*, is to be treated as the specific name of a then new nominal species;
- (2) to place on the Official List of Specific Names in Zoology the name *tectus* Boieldieu, 1856, as published in the binomen *Ptinus tectus* and as ruled in (1) above to be treated as the name of a then new nominal species.

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## Case 3201

***Scarabaeus punctatus* Villers, 1789 (currently *Pentodon bidens punctatus*; Insecta, Coleoptera): proposed conservation of the specific name**

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**Abstract.** The purpose of this application is to conserve the specific name of *Scarabaeus punctatus* Villers, 1789 (SCARABAEIDAE, DYNASTINAE), which is a junior primary homonym of *S. punctatus* Linnaeus, 1758 (SCARABAEIDAE, RUTELINAE). Despite the homonymy both specific names have been used since publication and are currently in use; they have never been treated as congeneric and neither has been included in the original genus since 1798. The name *Pentodon bidens punctatus* (Villers) refers to the west and central Mediterranean subspecies of a common Palaearctic rhinoceros beetle; *Pelidnota punctata* (Linnaeus) refers to a common chafer occurring in the eastern part of the U.S.A. and southern Ontario.

**Keywords.** Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; DYNASTINAE; RUTELINAE; *Pentodon bidens punctatus*; *Pelidnota punctata*; rhinoceros beetles; chafers; Mediterranean; eastern North America.

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1. Linnaeus (1758, p. 350) described *Scarabaeus punctatus* from 'India'. In 1775 Fabricius (p. 33) transferred the species ('from America') to his new genus *Melolontha*. Later Latreille (1802, p. 152) placed it in his new genus *Rutela*, and finally MacLeay (1819, p. 158) established the genus *Pelidnota* for the species and this classification has been maintained. The specific name has been continuously treated as valid since its first publication. The identity of the species is unequivocal because Linnaeus (1764, p. 23) subsequently described it in detail and there is a specimen in the collection of the Zoological Museum, Uppsala which has been considered to be an original specimen (see Landin, 1956, p. 11); Wallin (1994, p. 43) incorrectly recorded that Landin (1956) had designated this specimen as the lectotype. The type locality ('India'), given as a locality for the species by Linnaeus in all his publications, was that indicated for other American species (see Landin, 1956). The name *Pelidnota punctata* refers to a well known chafer, called the spotted grape beetle, from the eastern U.S.A. and southern Ontario, Canada, included in the subfamily RUTELINAE (see Hardy, 1975 and Arnett, 2000). It has occasionally been reported to be a pest (Hayes, 1925, p. 90)

2. Villers (1789, p. 40, pl. 1, fig. 3) described *Scarabaeus punctatus* from 'Occitania circa Nemausum' (Nîmes in southern France). In 1798 Fabricius (p. 21) transferred the species to *Geotrupes* Latreille, 1796. Hope (1837, p. 92) designated *S. punctatus* Villers as the type species of his new genus *Pentodon* (SCARABAEIDAE, DYNASTINAE), where it has remained. No type specimens are known. Endrödi (1969, p. 166)

supposed them to be in the Muséum d'Histoire Naturelle in Lyon but there are no *Pentodon* specimens amongst the old collections in this museum; Villers' collection is most probably destroyed (J. Clary and H. Labrique, in litt., 2000). The specific name *punctatus* Villers has been treated as valid since its publication (see the recent works of El-Hariri, 1968; Georgioui, 1977; and Peez & Kahlen, 1977; a list of 12 earlier publications is held by the Commission Secretariat). Since Endrödi's (1967) revision of *Pentodon*, *P. punctatus* has generally been treated as a geographic subspecies of *Pentodon bidens* (Pallas, 1771) (see, for example, Endrödi, 1985; Baraud, 1992; and Carpaneto & Piattella, 1995).

3. The name *Scarabaeus punctatus* Villers, 1789 has unused junior synonyms. *S. punctulatus* Rossius, 1790 (p. 9) has not been used as valid since the early 19th century and is a junior homonym of *S. punctulatus* Gmelin, 1788. The synonym *Pentodon castaneus* Mulsant, 1842 (p. 384), described as a variety of *P. punctatus* Villers, has never been treated as a valid name; the original author himself neglected it in the second edition of his monograph of French scarab beetles (Mulsant & Rey, 1871, p. 242).

4. As noted in paras. 1 and 2 above, the names *Pelidnota punctata* (Linnaeus, 1758) and *Pentodon bidens punctatus* (Villers, 1789) are both currently in use for well-known and common taxa. *Pelidnota punctata* had already been removed (in 1775) from *Scarabaeus* before *S. punctatus* Villers was described. The latter species was removed from *Scarabaeus* in 1798. Thus, the species have never been treated as congeneric and neither has been included in the original genus since 1798. The two species are currently placed in different subfamilies, which are sometimes treated as families. Replacement of the well known name *Pentodon punctatus* (Villers) by the unused junior synonym *Pentodon castaneus* Mulsant, 1842 (see para. 3 above) would cause considerable and unnecessary confusion and the case is referred to the Commission under Article 23.9.5 of the Code.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the specific name *punctatus* Villers, 1789, as published in the binomen *Scarabaeus punctatus*, is not invalid by reason of being a junior primary homonym of *Scarabaeus punctatus* Linnaeus, 1758;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Pelidnota* MacLeay, 1819 (type species by monotypy *Scarabaeus punctatus* Linnaeus, 1758);
  - (b) *Pentodon* Hope, 1837 (type species by original designation by Hope (1837) *Scarabaeus punctatus* Villers, 1789);
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *punctatus* Linnaeus, 1758, as published in the binomen *Scarabaeus punctatus* (specific name of the type species of *Pelidnota* MacLeay, 1819);
  - (b) *punctatus* Villers, 1789, as published in the binomen *Scarabaeus punctatus* (specific name of the type species of *Pentodon* Hope, 1837) (not invalid by the ruling in (1) above).

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**Case 3188*****Nemotois violellus* Herrich-Schaeffer in Stainton, 1851 (currently *Nemophora violella*; Insecta, Lepidoptera): proposed conservation of the specific name**

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**Abstract.** The purpose of this application is to conserve the specific name of *Nemophora violella* (Herrich-Schaeffer in Stainton, 1851) for a common and widely distributed European bisexual fairy moth (family ADELIDAE) which is associated with several *Gentiana* species. The name is threatened by the senior synonym *Tinea cupriacella* Hübner, 1819 which (although originally based on a male specimen of what has long been called *N. violella*) for almost 150 years has been frequently used for another (apparently parthenogenetic) species associated with *Scabiosa*, *Dipsacus*, *Succisa* and *Sedum*. The latter species has at present no valid name. However, there has been no consistency in the use of the specific name *cupriacella* and its suppression is proposed both to conserve *N. violella* and because the name is a source of confusion.

**Keywords.** Nomenclature; taxonomy; Lepidoptera; ADELIDAE; *Nemophora*; *Nemophora violella*; *Nemophora cupriacella*; fairy moths; Europe.

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1. Hübner (1819, pl. 67, fig. 445) illustrated a male moth under the name of *Tinea cupriacella*. The name is available under Article 12.2.7 of the Code. The dates of publication of the parts of Hübner's work were set out by Hemming (1937; see particularly p. 214, para. 240 and p. 301 for the date of pl. 67). Hübner's specimen undoubtedly belongs to a bisexual species whose larvae feed on *Gentiana*, which for almost 150 years has been known as *Nemophora violella* (Herrich-Schaeffer in Stainton, 1851, p. 19, published in the combination *Nemotois violellus*). There was no description of the latter species in Stainton's work but the name was made available by reference to Herrich-Schaeffer's illustrations labelled '*violellus*' (1850, pl. 33, fig. 230, male; fig. 231, female); Herrich-Schaeffer had also illustrated '*cupriacellus*' (1850, pl. 31, fig. 220, female; 1851, pl. 37, fig. 252, male). Herrich-Schaeffer's plates carry only specific, and not binominal, names and hence did not make *violellus* available in 1850; the descriptive text (p. 97) for both *Nemotois violellus* and *N. cupriacellus* did not appear until 1854 (see Hemming, 1937, p. 588 for the publication dates of vol. 5 of Herrich-Schaeffer's work). Since both the specific name and its application to a taxon were due to Herrich-Schaeffer he is the author (Article 50.1.1 of the Code), but it only became available when combined with *Nemotois* in Stainton's publication. The specific name *violella* has lately been spelled as *violellus* when in combination with *Nemophora*, but *violella* is correct under Article 31.2.

2. Examination of more than 130 publications, including revisions, faunistic lists and biological notes, shows that the name *Nemophora cupriacella* has been used



inconsistently. Several authors have applied it to an apparently parthenogenetic (female only) species of European fairy moth associated with *Scabiosa*, *Dipsacus*, *Succisa* and *Sedum*, and this use of the name has resulted in considerable confusion in morphological descriptions and in geographical records of the two distinct species involved. Other authors have provided confusing descriptions of male external characters and figured male genitalia which in fact belong to several species.

3. Zeller (1853) confused the parthenogenetic and bisexual species, as can be seen from his note (p. 60) on the absence of males from several localities, and he later (1878, p. 121) suspected the synonymy of the specific names of *Nemophora cupriacella* and *N. violella*. Frey (1856, p. 44) published the description of a male under the name *cupriacella*, but mentioned that specimens from Switzerland were all females. Several authors have stated that males of *N. cupriacella* were unknown (see Wocke, 1874, p. 47; Sorhagen, 1886, pp. 155–156; Disqué, 1901, p. 201; Höfner, 1918, pp. 218–219; Waters, 1929, p. 66; Suomalainen, 1978, p. 65), despite the fact that the nominal species was based by Hübner on a male. However, description of male external features were published by Heinemann (1877, p. 83), Snellen (1882, p. 498), Meyrick (1895, pp. 796–797), Spuler (1910, p. 468), Jacobs (1949, p. 216, pl. 13, fig. 25) and Heath & Pelham-Clinton (1976, p. 294, pl. 13, fig. 7a, which is an incorrectly identified specimen of *N. cuprella* (Denis & Schiffermüller, 1775)). The male genitalia of '*N. cupriacella*' figured by Pierce & Metcalfe (1935, p. 109, pl. 66) are those of an incorrectly determined specimen of *N. fasciella* (Fabricius, 1775); those figured by Küppers (1980, p. 333), who claimed the existence of intermediate forms linking *N. cupriacella* and *N. violella*, are identical to *N. violella* (figured on p. 337). Especially confusing is the work by Zaguljaev (1978), who published clearly different figures of male genitalia for *N. violella* (p. 100, which corresponds to the current understanding of this species) and *N. cupriacella* (p. 99, which is probably an incorrectly determined specimen of *N. fasciella*). Kovács & Kovács (1999) published a figure of male genitalia for *N. cupriacella*, based most probably on an incorrectly identified male of *N. istrianaella* (Stainton, 1851). Some authors have indicated that they could not confidently discriminate between *N. cupriacella* and *N. violella* (see Zeller, 1878, p. 121 and Sterneck & Zimmermann, 1933, p. 149).

4. The only feature which has been used consistently to distinguish between the bisexual *N. violella* and the parthenogenetic species which has been referred to as *Nemophora cupriacella* is the larval host plants: the first species feeds on *Gentiana* whereas the second feeds on *Scabiosa*, *Dipsacus*, *Succisa* and *Sedum*. However, this consistency has resulted simply from references to earlier works, rather than from the use of reared material, and has not helped authors to correctly identify *N. cupriacella*. For example, none of 56 specimens (including 41 males) which Kovács & Kovács (1999, p. 27) investigated for their revision was reared from a larva; these authors mentioned the host plant of '*N. cupriacella*' (in the sense of the parthenogenetic species) but combined this information with a description of male characters of another species (probably *N. istrianaella*).

5. In contrast to the inconsistent use of the name *Nemophora cupriacella*, there has been long-standing consistency in the use of the younger name *N. violella* for the bisexual species. None of the authors noted in para. 3 above misidentified *N. violella*.

6. I propose that the specific name of *Nemophora cupriacella* (Hübner, 1819), a senior synonym of *N. violella* (Herrich-Schaeffer in Stainton, 1851), be suppressed.

An alternative would be to propose the designation of a neotype for *N. cupriacella* in the sense of the parthenogenetic species, but this would be inappropriate because the name was not only based on a bisexual species but has been applied to several taxa. The parthenogenetic species will require a new name and formal description (M.V. Kozlov, in prep.) because at present no valid name exists for it.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *cupriacella* Hübner, 1819, as published in the binomen *Tinea cupriacella*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *violellus* Herrich-Schaeffer in Stainton, 1851, as published in the binomen *Nemotois violellus*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *cupriacella* Hübner, 1819, as published in the binomen *Tinea cupriacella* and as suppressed in (1) above.

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**Case 3184*****Tetrapedia* Klug, 1810, *T. diversipes* Klug, 1819 and *Exomalopsis* Spinola, 1853 (Insecta, Hymenoptera): proposed conservation of usage of the names by the designation of a neotype for *T. diversipes***

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**Abstract.** The purpose of this application is to conserve the sense in which the anthophorine bee generic names *Tetrapedia* Klug, 1810 and *Exomalopsis* Spinola, 1853 have been used for more than a century; both are the basis of tribal names. The type species of *Tetrapedia* is *T. diversipes* Klug, 1810; a misidentification of this species by Smith (1854) and Friese (1899) was not recognized by any subsequent author until Moure (2000). The only existing type specimen belongs to *Exomalopsis*, but transfer of the name *Tetrapedia* to the genus always called *Exomalopsis* and disappearance of the latter name would cause great confusion. It is proposed that a neotype for *T. diversipes* should be designated in accordance with Article 75.6 of the Code to conserve the universal understanding of this nominal species and of the genera and tribes mentioned above.

**Keywords.** Nomenclature; taxonomy; Hymenoptera; APIDAE; TETRAPEDIINI; EXOMALOPSINI; *Tetrapedia*; *Tetrapedia diversipes*; *Exomalopsis*; bees; Brazil.

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1. The genus *Tetrapedia* and the single nominal species *T. diversipes* were described by Klug (1810) on the basis of specimens from Brazil. The description of the genus (pp. 33–35) is unusually detailed, that of the species (pp. 35–36) is also detailed but limited largely to color of the integument and hair. The illustrations (pl. 1) consist of a colored habitus figure and line drawings of the middle leg, hind leg, labium and maxilla.

2. Smith (1854, pl. 7, fig. 10) illustrated a species purporting to be *Tetrapedia diversipes*. His illustration shows three subequal submarginal cells, but in Klug's (1810) description and illustration (and in the genus *Exomalopsis* Spinola, 1853, p. 89) the first and third submarginal cells are longer than the second. Moreover, in Smith's illustration the hind tibial spur is hidden; presumably there was only one short spur, not two long spurs as in Klug's illustration. Details in the illustration by Smith (1854) make it obvious that he misidentified his specimen(s).

3. Friese's (1899) monograph of *Tetrapedia* characterized '*T. diversipes*' in Smith's sense and clearly described features such as the hind basitarsal tooth of the male. This

concept of *T. diversipes* became accepted by subsequent authors, who evidently failed to examine Klug's (1810) work; examples are Moure (1941), Michener & Moure (1957), Roig-Alsina & Michener (1993), Michener, McGinley & Danforth (1994) and Michener (2000). Others referred to the tibial spurs, male posterior basitarsi, or other structures, showing clearly that they were concerned with *Tetrapedia* or *T. diversipes* in the sense of Smith (1854) and Friese (1899), and not in that of Klug (1810); such authors include Schrottky (1902), Ducke (1910, 1912), Michener (1944, 1954), Ayala (1988) and Moure (1995). The nest structure of *Tetrapedia* auctt. appears to be distinctive (Wille & Daly, 1958). Various faunal works also followed the classification of Michener & Moure (1957) and recognized *Tetrapedia* as characterized by those authors. No work before Moure (2000) recognized that *T. diversipes* as described and illustrated by Klug (1810) and shown by his existing type specimen (see below) has slender paired hind tibial spurs and other features of *Exomalopsis*.

4. Klug's description and figures show that he confused specimens of two genera (and tribes). The single original specimen now in the Museum für Naturkunde, Humboldt-Universität, Berlin (seen by both of us) is a specimen belonging to *Exomalopsis* (tribe EXOMALOPSINI) and has been described in detail by Moure (2000). The genus *Exomalopsis* is in need of revision, but according to Dr. Fernando A. Silveira of the Universidade Federal de Minas Gerais the specimen is probably *E. collaris* Friese, 1899 (of which *E. vernoniae* Schrottky, 1909 is a probable synonym). That Klug's habitus illustration of *T. diversipes* was based on an *Exomalopsis* species (and thus agrees with the existing type specimen) is clearly shown by the long middle basitarsus of the figure, as long as the tibia, a feature not found in the other similar genera. Klug's drawings of detached legs and mouthparts, on the same plate as the habitus, are not based on *Exomalopsis*, and must have been based on material, now lost or not recognized, of a superficially similar large black species of *Paratetrapedia* Moure, 1942 (tribe TAPINOTASPIDINI); perhaps the specimen was dissected and subsequently discarded. In several characters the structure shown by Klug's line drawings agrees with that of *Paratetrapedia*, not *Exomalopsis*.

5. *Tetrapedia diversipes* auctt., currently (and by definition) placed in the tribe TETRAPEDIINI, is an entirely different insect from the existing type specimen (tribe EXOMALOPSINI), in spite of superficial similarity. Some generic or tribal characters of Klug's exomalopsine specimen and habitus illustration are the following (contrasting characters of *T. diversipes* auctt. in parentheses): hind tibial spurs two (not one), hind and middle tibial spurs minutely pectinate or apparently simple (not short and coarsely pectinate), scopa dense and well shaped (not irregular and consisting of coarse, radiating hairs).

6. If steps are not taken to stabilize the name *Tetrapedia diversipes* in the sense understood since Smith (1854), or at least Friese (1899), a series of nomenclatural changes would result. *Exomalopsis* Spinola, 1853 would become replaced by *Tetrapedia* Klug, 1810. As a result of the transfer of the name *Tetrapedia* to the taxon now known as *Exomalopsis*, the genus now called *Tetrapedia* would have to be called *Lagobata* Smith, 1861, the next available synonym. The tribe now called EXOMALOPSINI would be called TETRAPEDIINI, and that now known by the latter name would require a new name. The approximate numbers of species involved, should such changes be made, are (using current terminology) 83 in *Exomalopsis* and 13 in *Tetrapedia*.

7. Moure (2000) proposed the new name *Tetrapedia dentipes* for *T. diversipes* auctt., but since the nominal species *T. diversipes* is (and has always been cited as) the type species of *Tetrapedia* this would not solve the problems mentioned above. We propose that a neotype should be designated in accordance with Article 75.6 of the Code to define the nominal species *T. diversipes* in the sense that it has been known for more than a century. The proposed neotype is a male (because the best specific characters are in that sex) from Nova Teutonia, Santa Catarina, Brazil, collected in October 1951 by L.E. Plaumann; it will be deposited in the Museum für Naturkunde der Humboldt-Universität, Berlin. The specimen agrees with material identified as *T. diversipes* Klug, 1810 in various museums, and specifically with the photograph (under the name *T. dentipes*) in Moure (2000) which shows the large hind basitarsal tooth.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of name-bearing type for the nominal species *Tetrapedia diversipes* Klug, 1810 and to designate the specimen proposed in para. 7 above as the neotype;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Tetrapedia* Klug, 1810 (gender: feminine), type species by monotypy *Tetrapedia diversipes* Klug, 1810;
  - (b) *Exomalopsis* Spinola, 1853 (gender: feminine), type species by subsequent designation by Smith (1854) *Exomalopsis auropilosa* Spinola, 1853;
- (3) to place on the Official List of Specific Names in Zoology the names:
  - (a) *diversipes* Klug, 1810, as published in the binomen *Tetrapedia diversipes* and as defined by the neotype designated in (1) above (specific name of the type species of *Tetrapedia* Klug, 1810);
  - (b) *auropilosa* Spinola, 1853, as published in the binomen *Exomalopsis auropilosa* (specific name of the type species of *Exomalopsis* Spinola, 1853).

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**Comments on the establishment of the new name LIOCHELIDAE Fet & Bechly, 2001 (Arachnida, Scorpiones) as a substitute for ISCHNURIDAE Simon, 1879**  
(Case 3120a; see BZN 58: 280–281)

(1) Wilson R. Lourenço

*Laboratoire de Zoologie, Muséum National d'Histoire Naturelle, 61 rue de Buffon, 75005 Paris, France*

I should like to express my support for the establishment by Fet & Bechly of the new scorpion family name LIOCHELIDAE as a substitute for ISCHNURIDAE Simon, 1879. This avoids any need for the undesirable emendment of the very widely used damselfly name ISCHNURINAE Fraser, 1957 (Odonata) to avoid homonymy.

(2) Frantisek Kovarik

*P.O. Box 27, CZ-145 01 Praha 45, Czech Republic*

I fully agree with the revised proposal of Fet & Bechly, that is the introduction of the scorpion name LIOCHELIDAE, which is based on the valid generic name *Liocheles*, as a substitute for ISCHNURIDAE Simon, 1879.

**Comment on the proposed conservation of the specific name of *Hydroporus discretus* Fairmaire & Brisout in Fairmaire, 1859 (Insecta, Coleoptera)**  
(Case 3147; see BZN 58: 105–107, 305)

G.N. Foster

*The Balfour-Browne Club, 3 Eglinton Terrace, Ayr KA7 1JJ, Scotland*

I write in support of Hans Fery's proposal that the name *Hydroporus discretus* Fairmaire & Brisout, 1859 be conserved by the suppression of *H. neuter* Fairmaire & Laboulbène, 1854. Dr Fery is correct in stating that the name *discretus* has been in continuous use for over a century, and that *neuter* has not been used except by Ádám (1996).

One purpose of the Code is to achieve stability, and I believe that coleopterists have travelled a long way in the last decade in achieving an agreed and Code-compliant European checklist. This is essential if we are to accomplish some ecological and wildlife objectives without bewildering policy makers and would-be coleopterists by introducing a plethora of name changes. Changes are, indeed, taking place on the basis of improved knowledge of the evolution of the group, as revealed by DNA markers. The danger is that these important changes, which are potentially confusing in themselves, will be brought into disrepute by being associated with some rather mischievous changes created by a worker not in touch with the overriding needs for nomenclatural stability and systematic rigour.

**Comments on the proposed precedence of NYMPHULINAE Duponchel, 1845 over ACENTROPINAE Stephens, 1835 (Insecta, Lepidoptera)**  
(Case 3048; see BZN 56: 31–33; 57: 46–48; 58: 305–306)

(1) David L. Wagner

*Ecology and Evolutionary Biology, U-Box 43, University of Connecticut, Storrs, Connecticut 06269-3043, U.S.A.*



I am writing in support of Dr Alma Solis's application for the conservation of the subfamily name NYMPHULINAE. The subfamily is a well known group of microlepidoptera and the name has universal meaning among New World lepidopterists. I have not heard mention of the name ACENTROPINAE in my 20 years as a professional lepidopterist.

The name NYMPHULINAE has been in universal use on the American continent, and every collection in North America has been curated using it. Obviously there is much literature, many databases and collection inventories that would be affected by a change of name. Given the greater emphasis on stability in the new Code (4th Edition) there is ample justification to conserve the junior name.

(2) K. Maes

*Department of Invertebrate Zoology, National Museums of Kenya, Box 40658, Nairobi, Kenya*

Although the name ACENTROPINAE is older than NYMPHULINAE, the latter has been widely in use. David Agassiz has already stated (BZN 58: 306) that the name NYMPHULINAE has been widely used in the Americas, Asia and Australasia. At present I am finalizing a checklist of the CRAMBIDAE of the Afrotropical region. There is no publication dealing with the Afrotropical fauna in which the name ACENTROPINAE is used and I am sure that a change to this name would cause confusion among non-taxonomists, an argument that is correctly put forward by Prof D. Janzen (comment (4) below).

As a taxonomist I feel that we should provide stability in nomenclature, something that can easily be maintained in this case by a simple ruling. I therefore support Dr Solis's application for the conservation of the family-group name NYMPHULINAE by giving it precedence over ACENTROPINAE.

(3) John B. Heppner

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I completely agree with the proposal to conserve the family-group name NYMPHULINAE. Comments by other supporters, noting that only Drs Speidel and Mey have recently used the name ACENTROPINAE, clearly point out that general usage throughout the world and over many years is with the name NYMPHULINAE. The new Code (1999) clearly specifies that long-used family-group names should not be overturned for older names that have not been in prevailing use.

There is a fashion, particularly among specialists in Europe, to find long unused names and to adopt them because they have 'priority'. The name NYMPHULINAE has been in use since before 1900 and all our recent literature (except for papers by Speidel and Mey) uses this name. Thus, the Commission should ratify usage and conserve the name NYMPHULINAE.

(4) Daniel H. Janzen

*Department of Biology, University of Pennsylvania, Philadelphia, Pennsylvania 19104, U.S.A.*

A decision to abandon the name NYMPHULINAE in favor of ACENTROPINAE, no matter how 'correct' in terms of date priority, would be tragic for the user community, of which I am one. I am an ecologist, conservationist and biodiversity biologist who works primarily in Costa Rica. The nymphulines are common, prominent and well known moths. I can name more than 75 biologists in Costa Rica who can identify the group by sight and know them as nymphulines, people who have called them that ever since I began to teach them that name in the late 1970s. This was then reinforced by the efforts made by Alma Solis and Jenny Phillips in the 1990s to sort out the taxonomy of the group in Costa Rica to species level and to produce an inventory.

Entomologists and entomologically-related people in Brazil, Venezuela, Panama, Guatemala and Mexico are also fully aware of the group. I feel sure that, even if a name change were adopted, a whole generation of people involved with the moths as living animals will go on calling them nymphulines, both in conversation and in literature.

(5) Bernard Landry

*Muséum d'histoire naturelle de Genève, C.P. 6434, CH-1211 Genève 6, Switzerland*

I support the proposal to give precedence to the name NYMPHULINAE over ACENTROPINAE. The reason of priority given by Speidel and Mey in their comment (BZN 57: 46–48) opposing this application is valid. However, in view of the strong discrepancy in numbers of genera and species in the NYMPHULINAE before they were synonymized with the ACENTROPINAE (by inclusion of the single species *Acentria ephemerella* Denis & Schiffermüller, 1775), I believe that the name NYMPHULINAE should take precedence.

Now that we are faced with a choice of names, that which is least damaging with regard to the published works relating to this group, especially in fields outside taxonomy, should prevail. By making the application Dr. Solis has taken a legitimate step to enhance the stability and ease of use of the classification.

**Comments on the proposed conservation of the specific names of *Dianulites petropolitana* Dybowski, 1877 and *Diplotrypa petropolitana* Nicholson, 1879 (Bryozoa)**

(Case 3160; see BZN 58: 215–219)

(1) Nils Spjeldnaes

*Department of Geology, University of Oslo, P.O. Box 1047, Blindern, N-0316 Oslo, Norway*

I have discussed at length with the authors the nomenclatural problems involved in this submission about *Diplotrypa* Nicholson, 1879, but we do not agree; I therefore submit my differing views on the subject.

1. The genus *Diplotrypa* was established (as a subgenus of *Monticulipora*) by Nicholson (1879). He gave a more detailed description in (1881). He made *Favosites petropolitana* Pander (1830) the type species; his description is not based on topotype material, but on material from the Upper Ordovician of Sweden, given to him by Professor G. Lindstrom. As indicated by the name, the original type material (which

is now lost) of *petropolitana* came from the St Petersburg area in Russia. Dybowski (1877) redescribed *petropolitana* Pander based on topotype material. His version of the species is entirely different from that of Nicholson. In modern terminology, they do not even belong in the same suborder.

2. Nicholson in his 1881 book refused to accept the validity of Dybowski's redescription of *Favosites petropolitana*, even though he knew about both Steinmann's criticism (1881, p. 22) and the Rules (then of palaeontological nomenclature).

3. Nicholson's books (1879, 1881) had represented a great progress in the methodology in describing Early Palaeozoic bryozoans, and the result was that the dominating American scientists in the field (Ulrich and Bassler) accepted not only his methods but also his questionable nomenclature.

4. In Europe Dybowski's solution was partly accepted, and a species called *petropolitana* was referred to *Diplotrypa* (following Nicholson) and *Dianulites* (as suggested by Dybowski).

5. The issue is complicated by the fact that Nicholson earlier (1876, p. 86, pl. V, fig. 6) and in the second edition of his *Manual of Palaeontology* (1879, vol. 1, p. 202, fig. 90) described and illustrated (from thin sections) '*Chaetetes petropolitanus* Pander'. In both cases the bryozoan is widely different from his Swedish material (in Nicholson 1879 and 1881), but evidently belonging to the genus *Prasopora* Nicholson & Etheridge (1877). None of these descriptions (and others where *petropolitanus* is mixed up with *whiteavesi* Nicholson 1881), are from topotype material.

6. The suggestion (first put forward by Bassler in 1911; see para. 6 of the application) to accept two *petropolitana* species — *Diplotrypa petropolitana* Nicholson, 1879 and *Dianulites petropolitana* Dybowski, 1877 — is, in my opinion not appropriate since it would accept Nicholson's breach of the Rules, and would follow not the first, but the second (or third) of his versions of *petropolitana*.

7. Dybowski referred his taxon to the genus *Dianulites* Eichwald. The type species of this genus, *D. fastigiatus*, has recently been redescribed by Taylor & Wilson (1999). It is rather different from the widespread group of hemispherical bryozoans with the same microstructure as Dybowski's version of *petropolitana*, which will lack a generic name if Nicholson's version is accepted.

8. It should be noted that Dybowski's methods were as advanced as Nicholson's. They both used thin sections but Nicholson's morphological terminology was later generally accepted. Dybowski's opinion on *petropolitana* was probably the accepted one in the Baltic Region.

9. Lonsdale (in Murchison, 1845) described and figured *Chaetetes petropolitanus* from the St Petersburg Region. The figured thin section, preserved in The Natural History Museum, London, belongs to the same group, or perhaps even the same species, as that described by Dybowski.

10. If *Diplotrypa* is accepted with Nicholson's 1879 and 1881 definition, based on the Swedish material, this will raise another nomenclatural problem. I have studied Nicholson's original thin sections, together with extensive material of similar hemispherical bryozoans from the Balto-Scandic Region, and the types definitively belong in the family HALLOPORIDAE. Hall (1851) named a genus *Calopora* but, because of homonymy, it was renamed *Hallopora* by Bassler (1911). *Diplotrypa*, if defined according to Nicholson (1879 and 1881), will have priority over both *Hallopora* and

a number of genera of Ordovician halloporids. Since Nicholson's types — like many hemispherical bryozoans — lack most of the distinctive characters for determining both genus and species, the correct placement will depend on finding new and better preserved material. This may easily lead to rejection of *Hallopora*, one of the commonly used generic names of Ordovician halloporids.

11. In my opinion, the optimal solution will be to follow the Code strictly, accepting Dybowski's (and Lonsdale's) interpretation of *petropolitana* Pander, and reserving the name *Diplotrypa* for this group. The material falling under Nicholson's interpretation can easily be accommodated in the genus *Panderpora* Bassler, 1953, with the type species *dybowskii* Bassler, 1911, which in my opinion is a subjective synonym of *Diplotrypa* in the sense of Nicholson (1879).

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- Nicholson, H.A. & Etheridge, R.** 1877. On *Prasopora grayae*, a new genus and species of Silurian corals. *Annals and Magazine of Natural History*, (4)**20**: 388–392.
- Steinmann, G.** 1882. Referat von: Nicholson, H.A. 1881. *Neues Jahrbuch für Geologie, Mineralogie und Palaeontologie*, **1882**: 314–319.
- Taylor, P.D. & Wilson, M.A.** 1999. *Dianulites* Eichwald 1829: an unusual Ordovician bryozoan with a high-magnesium calcite skeleton. *Journal of Paleontology*, **73**: 38–48.

(2) Patrick N. Wyse Jackson

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We welcome this opportunity to comment on some of the points (above) made by Prof Nils Spjeldnaes who we feel has misunderstood the reason for our application in the first place.

In our application we have simply asked the Commission to set aside the authorship of the specific name *petropolitana* Pander, 1830, which had been used subsequently as the specific name for two very different bryozoan taxa in the genera *Dianulites* and *Diplotrypa*, and to conserve the names and authorship of these specific concepts which are in line with 20th century conceptual usage. This is particularly important given that *Diplotrypa petropolitana*, in the taxonomic sense of Nicholson

(1879), is the type species of *Diplotrypa*. As it is uncertain what species Pander (1830) originally described, our request has been made in order to avoid potential future confusion over the issue.

Below we address some of the comments made by Spjeldnaes which we feel require clarification:

In 1877 Dybowski in describing some hemispherical bryozoans from the Baltic region used the name *Dianulites petropolitana* (Pander, 1830) for one such taxon. He provided a good description based on internal and external features and illustrated the major characteristics of the taxon. It is asserted by Spjeldnaes that Dybowski had priority over the name *petropolitana* (Pander, 1830) by virtue of his revision and that Nicholson in 1879 when he erected the genus *Diplotrypa* chose to ignore this. There is no evidence to suggest that Nicholson knew of Dybowski's publication when he published his book two years later. In any case, priority is not applicable in this case as Pander's (1830) name was used by both authors for two quite distinct bryozoan taxa. Neither had any idea of the true attribution of Pander's species as his descriptions are of external colony morphology only and none of the characteristic internal features were originally described or illustrated.

Subsequently Nicholson (1881) acknowledged Dybowski's work but still regarded his 1879 concept of *petropolitana* to be valid. Although Nicholson in earlier works (1874, 1875a, b, c, 1876) used the name *petropolitana* with *Chaetetes* he later (1881) regarded this as belonging to his species *Diplotrypa whiteavesii* Nicholson, 1879. At that time there was a great deal of confusion regarding the correct identity of many Lower Palaeozoic hemispherical bryozoans. It is the concept of the name as applied by Nicholson in 1879 as the type of *Diplotrypa* that is critical, not earlier misapplications of a specific name.

Spjeldnaes points out that many species presently in *Dianulites* do not resemble the turbinate-shaped type species *D. fastigiatus*. This is certainly true, but his assertion that they will lack a generic name if Nicholson's concept of *petropolitana* is accepted is not correct, as two distinct taxa are being confused. Nicholson's concept of *petropolitana* was never allied to *Dianulites*. It is possible that all non-turbinate *Dianulites* species may need to be accommodated in a new genus. Spjeldnaes's comments on methodologies are not relevant to this case. Reference is made to Lonsdale's (in Murchison, 1845) description of *Chaetetes petropolitanus*. We have examined this specimen in The Natural History Museum, London and it is referable to *Dianulites*. It has no bearing on our application.

Spjeldnaes is concerned that nomenclatural problems will arise with regard to the family HALLOPORIDAE Bassler, 1911, if Nicholson's definition of *Diplotrypa* is accepted. We can only assume that he believes that *Diplotrypa* becomes the type genus of the family by virtue of being the earliest described genus contained within it. This is not the case. The genus *Diplotrypa* as erected by Nicholson is certainly valid and conceptually sound. The type genus of the family HALLOPORIDAE is *Hallopora* Bassler, 1911 (= *Calopora*), and not the older genus *Diplotrypa*. Revision of the authorship of the type species of *Diplotrypa* from Pander, 1830 to Nicholson, 1879 does not affect this issue at all.

In coming to his conclusions Spjeldnaes acknowledges that Dybowski's and Nicholson's concepts of the species they described are entirely different. We quite agree and our application hinges on this.

Spjeldnaes has proposed the rejection of Nicholson's name (and concept) of the species *petropolitana* and the adoption of Dybowski's name (and therefore concept) of *petropolitana* as type species for *Diplotrypa* Nicholson, 1879. Such a course of action would be incorrect and invalid, as Dybowski's concept of *petropolitana* is different from that of Nicholson, and does not belong in *Diplotrypa*, but rather in *Dianulites*. Indeed, this action would lead to the disappearance of *Diplotrypa* Nicholson, 1879, which (contrary to its description) would become a junior synonym of *Dianulites* Eichwald, 1829, and would (as documented in para. 6 of our application) be contrary to the usage of names throughout the 20th century. In our original application we have asked that Pander's authorship of the name be set aside, and that authorship of the type species of *Diplotrypa* be attributed to Nicholson, 1879; this preserves the usage of *Diplotrypa* and its type species.

### Additional references

- Nicholson, H.A. 1874. Descriptions of some species of *Chaetetes* from the Lower Silurian rocks of North America. *Quarterly Journal of the Geological Society of London*, **30**: 499–515.
- Nicholson, H.A. 1875a. *Report upon the palaeontology of the province of Ontario*. Hunter, Rose & Co., Toronto.
- Nicholson, H.A. 1875b. On some massive forms of *Chaetetes*, from the Lower Silurian. *Geological Magazine*, (2)**2**: 175–177.
- Nicholson, H.A. 1875c. Description of the corals of the Silurian and Devonian systems. *Palaeontology of Ohio*, vol. 2, part 2 (Palaeontology), pp. 181–242.
- Nicholson, H.A. 1876. Notes on the Palaeozoic corals of the state of Ohio. *Annals and Magazine of Natural History*, (4)**18**: 85–95.

(3) Support for the conservation of the names *Dianulites petropolitana* Dybowski, 1877 and *Diplotrypa petropolitana* Nicholson, 1879 has been received from Professor Roger J. Cuffey (Department of Geoscience, 412 Deike Building, Pennsylvania State University, University Park, PA 16802, U.S.A.).

### Comment on the proposed conservation of the specific name of *Leptodactylus chaquensis* Ceí, 1950 (Amphibia, Anura)

(Case 3172; see BZN **58**: 116–118)

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We are studying the systematics of the complex of frogs associated with the name *Leptodactylus ocellatus*, which includes the species known as *L. chaquensis* Ceí, 1950.

One of us (W.R.H.) has assembled a bibliography of *Leptodactylus*. This is sufficient to support Ceí's statement in his application that the name *L. chaquensis* has been used very extensively for the species (there are at least 156 citations of the

name), and the species is commonly used as a laboratory animal (54 of the 156 references). In contrast, the name *typica* (or *typicus*) has never been used for the species since 1950.

We support the application.

**Comment on the proposed precedence of the specific name of *Euphryne obesus* Baird, 1859 over that of *Sauromalus ater* Duméril, 1856 (Reptilia, Squamata)**  
(Case 3143; see BZN 58: 37–40, 229, 307–308)

Roy W. McDiarmid (USGS Patuxent Wildlife Research Center, National Museum of Natural History, Washington, D.C. 20560-0111, U.S.A.), Kevin de Queiroz (National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560-0162), Kent Beaman (Natural History Museum of Los Angeles County, Los Angeles, California 90007-4057), Brian Crother (Southeastern Louisiana University, Hammond, Louisiana 70402-0736), Richard Etheridge (San Diego State University, San Diego, California 92182-4614), Oscar Flores-Villela (Museo de Zoología, Facultad de Ciencias, Universidad Nacional Autónoma de México, México Distrito Federal 04510, Mexico), Darrel Frost (American Museum of Natural History, Central Park West at 79th Street, New York, N.Y. 10024-5192), L. Lee Grismer (La Sierra University, 4700 Pierce Street, Riverside, California 92515-8247), Bradford D. Hollingsworth (San Diego Natural History Museum, P.O. Box 121390, San Diego, California 92112), Maureen Kearney (Field Museum of Natural History, Chicago, Illinois 60605-2496), Jimmy A. McGuire (Museum of Natural Science, Louisiana State University, Baton Rouge, Louisiana 70803-3216), John Wright (Natural History Museum of Los Angeles County, Los Angeles, California 90007-4057), George Zug (National Museum of Natural History, Smithsonian Institution, Washington, D.C. 20560-0162)

We write to oppose the proposal by Montanucci et al. to give precedence to the specific name of *Euphryne obesus* Baird, 1859 over *Sauromalus ater* Duméril, 1856. In our view this proposal runs counter to promoting stability and universality in nomenclature.

The proposal is based on two issues: first, uncertainty regarding the type locality of *Sauromalus ater*, and second, a greater number of papers using the name *obesus* than the name *ater*.

The uncertain type locality of *Sauromalus ater* is irrelevant to the precedence of the name *ater* relative to the name *obesus*; uncertainty about a type locality is not usually considered sufficient reason for granting precedence to a junior synonym, provided that the synonymy can be established based on characters of the type specimen.

*Sauromalus ater* is the type species of the genus *Sauromalus*, and *ater* has been in use as a valid name longer than any other specific name in combination with *Sauromalus*. Moreover, following Bocourt's (1870) and Coues's (1875) treatments of *Euphryne obesus* as a junior synonym of *Sauromalus ater*, *ater* was the name used for all the populations of chuckwalla lizards affected by the proposal of Montanucci et

al. in several important papers published prior to 1923 (Cope, 1875, 1900; Yarrow, 1882; Stejneger, 1891; Stejneger & Barbour, 1917; Van Denburgh, 1922). The names *Sauromalus ater* and *S. obesus* were applied to different putative species by Schmidt (1922), and both names were treated as valid in four successive editions of the influential *Check list of North American amphibians and reptiles* (Stejneger & Barbour, 1923, 1933, 1939, 1943), Shaw's (1945) review of the genus, and several subsequently published works not restricted to the fauna of the United States (Smith & Taylor, 1950; Etheridge, 1982; Flores-Villela, 1993; Liner, 1994; de Queiroz, 1995). In a more recent review of the genus, Hollingsworth (1998) treated the names *Sauromalus ater* and *S. obesus* as synonyms and, following the Principle of Priority, used *S. ater* as the valid name of the taxon, as did Crother et al. (2000). Thus, the senior name *S. ater* has been in continuous use since it was first published in 1856 while, prior to the proposal by Hollingsworth (1998), the junior name *obesus* had been in continuous use only since 1922.

Papers using the name *obesus* are indeed more abundant than those using the name *ater* (para. 6 of the application), but this discrepancy reflects the large number of papers published on taxa occurring in the United States. The source of data used by Montanucci et al. (para. 6) is an extensive bibliography of 626 references on lizards of the genus *Sauromalus* (Beaman et al., 1997). Montanucci et al. point out that over 100 papers dealing with the distribution of chuckwallas used the name *S. obesus*. However, 97 of the 168 papers (58%) included in the Distribution category, the largest of the many subject categories indexed in the bibliography, deal only with populations occurring within the United States. These references, by the nature of their geographic focus, would not be expected to use the name *S. ater*, which from 1922 to 1998 was applied to populations occurring only in Mexico. Moreover, as noted by Montanucci et al., 46 papers used the name *S. ater*, and 46 is not an insignificant number.

Greater discrepancies are found for references indexed under the headings Physiology (124 total references) and Thermoregulation (29), which report the findings of studies that often require extensive instrumentation in laboratory settings and consequently have relied on more accessible mainland populations as the source of research. Populations that occur on uninhabited or sparsely peopled islands, especially those lacking fresh water, are generally less accessible and therefore less studied than comparable mainland populations. From 1945 to 1998 the name *S. ater* was applied to populations restricted to islands in the southern part of the Gulf of California, Mexico. As independently pointed out by the compilers of the bibliography (Beaman et al., 1997), studies requiring large sample sizes and long-term observations, including many behavioral and ecological studies (of which 117 were indexed in the bibliography), also have almost exclusively focused on the more accessible populations of *Sauromalus* from the U.S.A. that were then called *S. obesus*. None of these studies is diminished by a change in the scientific name, nor would a name change have any known harmful effect on the scientific community or the public.

The titles and author names in the bibliography indicate that the preponderance of publications using the name *Sauromalus obesus* reflects a discrepancy in the numbers of scientists working in the U.S.A. versus Mexico. In a cursory examination, we recorded only 22 papers (3.5%) in the bibliography (Beaman et al., 1997) written in



Spanish by Mexican scientists. Moreover, between the years 1922 and 1998, a time interval that accounts for 580 (93%) of the papers in the bibliography, the name *S. obesus* was applied to the populations of chuckwallas in the United States. It is not surprising, therefore, that more has been written about chuckwallas called, until recently, *S. obesus*, but this has little bearing on the appropriate scientific name for these populations.

Granting the name *obesus* precedence over *ater* on the basis of frequency of use is questionable for several inter-related reasons. First, it trivializes the Principle of Priority. Although any proposal to grant a junior synonym precedence over a senior synonym sets aside priority, this case differs from other such cases in that the senior synonym has been used often and continuously as the valid name of a species since it was first published. Therefore, the proposal to grant precedence to the junior synonym rests entirely on a difference in the numbers of times the two names have been used.

Second, the proposal rests on a misapplication of the concept of stability, by considering the names of only some of the relevant populations. Specifically, it focuses on a change in the species name applied to some populations from *obesus* to *ater*, while disregarding the change in the species name applied to other populations from *ater* to *obesus* that would occur if the order of precedence of these names were to be reversed. The reason that the precedence of these names is at issue is a taxonomic proposal based on the conclusion that two species formerly considered separate constitute a single species (Hollingsworth, 1998). Such a taxonomic proposal will result in a change in the name applied to some of the populations in question regardless of which name has precedence. This situation contrasts sharply with those in which an older name is discovered for what is considered a single species both before and after discovery of that name, and in which nomenclatural stability for all populations in question can be achieved by granting precedence to the junior synonym.

Third, and of considerable concern to us, is the consequences of using the number of citations, rather than priority, to determine precedence in cases involving taxonomic unification. Are we to anticipate that each time a study proposes to unify species that occur on opposite sides of an international border, practiced nomenclaturists in the larger and/or wealthier country will move to set aside priority in an attempt to preserve 'their' name if that name is junior but has been used in more published articles? Such actions will constantly jeopardize nomenclatural stability, as is the case with more than 145 years of use of the name *Sauromalus ater*. This practice is not only contrary to the purpose of the Code but also gives a bad impression to zoologists in the developing world by effectively, though unintentionally, presenting a chauvinistic perspective that results in a form of nomenclatural imperialism. Montanucci and his co-authors could be interpreted as arguing a U.S.-centric view that rests on a discrepancy in the number of biologists in the United States versus Mexico.

We are in a period of unprecedented availability of old literature. This will allow a number of older names for well-known taxa to be found and, in some cases, suppressing such names or reversing their order of precedence will be necessary. Although justification for these actions will often involve the numbers of publications in which competing names have been used, it is critical to distinguish between cases

involving forgotten or long unused names and those involving names that have all been in use, some more frequently than others.

In summary, the proposal to give the specific name *obesus* Baird, 1859 precedence over its senior subjective synonym *ater* Duméril, 1856, is based on questionable reasoning and would not promote nomenclatural stability or continuity. Accordingly, we ask that the Commission reject the proposal.

Two of us (K. de Queiroz and R.W. McDiarmid) have formulated a proposal that the holotype of *Sauromalus ater* should be set aside and that a neotype be designated, fixing the type locality as Isla Espiritu Santo, Gulf of California, Mexico. This was the locality to which Smith & Taylor (1950) restricted the species (para. 2 of the application).

### Additional references

- Crother, B.I., Boundy, J., Campbell, J.A., de Queiroz, K., Frost, D.R., Highton, R., Iverson, J.B., Meylan, P.A., Reeder, T.W., Seidel, M.E., Sites, J.W. Jr., Taggart, T.W., Tilley, S.G. & Wake, D.B. 2000. Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding. *Society for the Study of Amphibians and Reptiles, Herpetological Circular*, **29**: 1–82.
- de Queiroz, K. 1995. Checklist and key to the extant species of Mexican iguanas (Reptilia: Iguania). *Publicaciones Especiales del Museo de Zoología, Universidad Nacional Autónoma de México*, **9**: 1–48.
- Etheridge, R.E. 1982. Checklist of iguanine and Malagasy iguanid lizards. Pp. 7–37 in Burghardt, G.M. & Rand, A.S. (Eds.), *Iguanas of the world. Their behavior, ecology, and conservation*. Noyes Publications, Park Ridge, New Jersey.
- Flores-Villela, O. 1993. Herpetofauna Mexicana. *Carnegie Museum of Natural History Special Publication*, **17**: 1–73.
- Liner, E.A. 1994. Scientific and common names for the amphibians and reptiles of Mexico in English and Spanish. *Society for the Study of Amphibians and Reptiles, Herpetological Circular*, **23**: 1–113.

### Comment on the proposed conservation of usage of 15 mammal specific names based on wild species which are antedated by or contemporary with those based on domestic animals

(Case 3010; see BZN **53**: 28–37, 125, 192–200, 286–288; **54**: 119–129, 189; **55**: 43–46, 119–120; **56**: 72–73, 280–282; **58**: 231–234)

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Our application has received many comments since it was published and is now due for a ruling by the Commission. Before it is submitted for voting we should like to make clear the current situation in the usage of the names for wild species with domestic derivatives, how this might be seen to differ from a strict interpretation of the Code, and the consequences which would result from approval of our proposals.

Many wild species and their domestic derivatives share the same name. However, in a few, well known, cases the two are named separately: the wild species and their domestic derivatives are recognisable as distinct entities and it is usually necessary to separate them. Among these are 15 mammals in which the name for the wild ancestor postdates or is contemporary with that of the domestic form.

The treatment of wild and domestic forms as recognizable and distinct biological species, as conceived by the majority of workers, usually presents no problems in nomenclature. However, confusion arises when, in a minority of cases, the two forms are treated as conspecific and the senior name (based on the domestic form) is adopted, or when the forms are treated as separate and the name for the domestic form is then transferred to the wild taxon. Our application seeks to stabilise the current majority usage of the 15 names for wild mammal species, which are the first available names in use based on wild populations.

Our intentions regarding the names for wild and domestic forms, both when they are treated as separate species (two names) and when they are included in one species (one name), have been set out by ourselves (see BZN: 54: 128) and in comments by others (see, for example, Corbet in BZN 53: 193, Kitchener in BZN 53: 194, and Uerpman in BZN 58: 233). The nomenclatural situation is no different from any other in taxonomy but, in accord with majority usage for several years, we do not follow priority in our use of names when the two forms are indistinguishable and are treated as one species. In BZN 58: 234 we noted: 'Approval of our proposals by the Commission will merely ratify the current nomenclatural situation: names based on wild populations will continue to be used for wild species and will include those for domestic forms if these are considered conspecific'. As noted above, our proposals apply to a very limited number of taxa.

Most commentators on our application have approved our proposals and there has been considerable support from workers in zoology, archaeozoology, palaeontology, conservation, ecology, ethology and endangered species management. There have been a few commentators who are not in favour but this seems to be because they have misunderstood the intention of the application: they have assumed that we were either proposing the suppression of senior names based on domestic forms or that two alternative names should be adopted as valid for the wild species. As noted in BZN 54: 127–129 and above, neither assumption is correct.

In this application we have confined our attention to the names for 15 wild ancestral species and have made no proposals for the naming of domestic animals. Names based on domestic animals in Linnaeus (1758, 1766) and other authors are available (Article 1.2.1 of the Code) but have not been universally adopted; having

been misapplied to the wild species by some authors they are inevitably compromised. A number of systems, some of which are notational, for naming domestic forms are currently in use (see para. 3 of the application). Approval of the current application will settle part of the problem and will allow the use of names for domestic animals to be formalised by subsequent agreement between all those interested.

## OPINION 1986 (Case 3166)

***Campanularia noliformis* McCrady, 1859 (currently *Clytia noliformis*; Cnidaria, Hydrozoa): specific name conserved by the designation of a neotype**

**Keywords.** Nomenclature; taxonomy; Cnidaria; Hydrozoa; CAMPANULARIIDAE; hydroids; medusae; *Clytia noliformis*.

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### Ruling

- (1) Under the plenary power all previous type fixations for the nominal species *Campanularia noliformis* McCrady, 1859 are hereby set aside and the fertile hydroid colony from Castle Harbour, Bermuda, and now in the Royal Ontario Museum, Toronto, Canada (collection no. ROMIZ B365), is designated as the neotype.
- (2) The name *noliformis* McCrady, 1859, as published in the binomen *Campanularia noliformis* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

### History of Case 3166

An application for the conservation of the specific name of *Campanularia noliformis* McCrady, 1859 by the designation of a neotype was received from Mr Alberto Lindner (*Centro de Biologia Marinha, Universidade de São Paulo, São Sebastião, Brazil*) and Dr Dale R. Calder (*Centre for Biodiversity and Conservation Biology, Royal Ontario Museum, Toronto, Canada*) on 19 May 2000. After correspondence the case was published in BZN 57: 140–143 (September 2000). Notice of the case was sent to appropriate journals.

### Decision of the Commission

On 1 September 2001 the members of the Commission were invited to vote on the proposal published in BZN 57: 141–142. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 23: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Štys

Negative votes — 1: van Tol.

No votes were received from Dupuis, Kerzhner and Song.

Calder abstained since he was co-author of the case.

### Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

*noliformis*, *Campanularia*, McCrady, 1859, *Proceedings of the Elliott Society of Natural History*, 1: 194.

**OPINION 1987 (Case 3111)*****Pachycerianthus* Roule, 1904 (Cnidaria, Anthozoa): *Pachycerianthus multiplicatus* Carlgren, 1912 designated as the type species**

**Keywords.** Nomenclature; taxonomy; Cnidaria; Anthozoa; Ceriantharia; *Pachycerianthus*; *Pachycerianthus multiplicatus*.

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**Ruling**

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Pachycerianthus* Roule, 1904 are hereby set aside and *Pachycerianthus multiplicatus* Carlgren, 1912 is designated as the type species.
- (2) The name *Pachycerianthus* Roule, 1904 (gender: masculine), type species by designation under the plenary power in (1) above *Pachycerianthus multiplicatus* Carlgren, 1912, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *multiplicatus* Carlgren, 1912, as published in the binomen *Pachycerianthus multiplicatus*, is hereby placed on the Official List of Specific Names in Zoology.

**History of Case 3111**

An application to conserve the usage of *Pachycerianthus* Roule, 1904 by the designation of *P. multiplicatus* Carlgren, 1912 as the type species was received from Dr Eamonn Kelly and Dr Brendan F. Keegan (*Martin Ryan Marine Science Institute, National University of Ireland, Galway, Ireland*) on 13 January 1999. After correspondence the case was published in BZN 57: 11–13 (March 2000). Notice of the case was sent to appropriate journals.

A comment in support was published in BZN 57: 166 (September 2000).

**Decision of the Commission**

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 12. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 23: Alonso-Zarazaga, Bock, Böhme, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Štys

Negative votes — 2: Bouchet and van Tol.

No votes were received from Dupuis, Kerzhner and Song.

**Original references**

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

*multiplicatus*, *Pachycerianthus*, Carlgren, 1912, *The Danish Ingolf Expedition*, vol. 5, part 3, p. 5.

*Pachycerianthus* Roule, 1904, *Compte Rendu de l'Association Française pour l'Avancement des Sciences*, 32me session (Angers, 1903), p. 793.

**OPINION 1988 (Case 3135)*****Scyllarus orientalis* Lund, 1793 (currently *Thenus orientalis*;  
Crustacea, Decapoda): neotype designated**

**Keywords.** Nomenclature; taxonomy; Crustacea; Decapoda; SCYLLARIDAE: *Thenus orientalis*; shovel-nose lobsters; Indian Ocean; West Pacific Ocean.

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**Ruling**

- (1) Under the plenary power all previous fixations of type specimens for the nominal species *Scyllarus orientalis* Lund, 1793 are hereby set aside and the female specimen from Padang, Sumatra, Indonesia, no. ZRC-1999.0481 in the Zoological Reference Collection, National University of Singapore, is designated as the neotype.
- (2) The entry on the Official List of Specific Names in Zoology for the name *orientalis* Lund, 1793, as published in the binomen *Scyllarus orientalis*, is hereby emended by the deletion that it is the valid name (senior subjective synonym) for *Thenus indicus* Leach, 1815, the type species of *Thenus* Leach, 1815, and by the addition of an endorsement that it is defined by the neotype designated in (1) above.
- (3) The name *indicus* Leach, 1815, as published in the binomen *Thenus indicus* (specific name of the type species of *Thenus* Leach, 1815), is hereby placed on the Official List of Specific Names in Zoology.

**History of Case 3135**

An application for the designation of a neotype for *Scyllarus orientalis* Lund, 1793 was received from Drs P.J.F. Davie (*Queensland Museum, South Brisbane, Queensland, Australia*) and T.E. Burton (*University of Queensland, St Lucia, Queensland, Australia*) on 19 August 1999. After correspondence the case was published in BZN 57: 84–86 (June 2000). Notice of the case was sent to appropriate journals.

The names *Thenus* Leach, 1815 and *Scyllarus orientalis* Lund, 1793 (then thought to be a senior subjective synonym of *Thenus indicus* Leach, 1815, the type species of *Thenus* Leach, 1815 by monotypy) were placed on Official Lists in Opinion 519 (August 1958). However, the typification of *S. orientalis* was not then considered.

**Decision of the Commission**

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 86. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes – 23: Alonso-Zarazaga, Bock, Böhme, Bouchet, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Štys, van Tol

Negative votes — 2: Brothers and Rosenberg.

No votes were received from Dupuis, Kerzhner and Song.

### Original references

The following are the original references to the name placed on an Official List by the ruling given in the present Opinion and to the name on an Official List, entry emended by the ruling:

*indicus*, *Thenus*, Leach, 1815, *Transactions of the Linnean Society of London*, **11**: 338.  
*orientalis*, *Scyllarus*, Lund, 1793, *Skrifter af Naturhistorie-Selskabet. Kiobenhavn*, **2**(2): 22.



**OPINION 1989 (Case 3103)*****Orsodacne* Latreille, 1802 (Insecta, Coleoptera): *Chrysomela cerasi* Linnaeus, 1758 designated as the type species**

**Keywords.** Nomenclature; taxonomy; Coleoptera; CHRYSOMELIDAE: *Orsodacne*; *Orsodacne cerasi*; leaf beetles; plant pests.

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**Ruling**

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Orsodacne* Latreille, 1802 are hereby set aside and *Chrysomela cerasi* Linnaeus, 1758 is designated as the type species.
- (2) The name *Orsodacne* Latreille, 1802 (gender: feminine), type species by designation under the plenary power in (1) above *Chrysomela cerasi* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *cerasi* Linnaeus, 1758, as published in the binomen *Chrysomela cerasi* (specific name of the type species of *Orsodacne* Latreille, 1802), is hereby placed on the Official List of Specific Names in Zoology.

**History of Case 3103**

An application to conserve the usage of *Orsodacne* Latreille, 1802 by the designation of *Chrysomela cerasi* Linnaeus, 1758 as the type species was received from Dr Hans Silfverberg (*Zoological Museum, Helsingfors, Finland*) on 6 November 1998. After correspondence the case was published in BZN 57: 94–96 (June 2000). Notice of the case was sent to appropriate journals.

A comment in support of the application was published in BZN 57: 227–228 (December 2000).

**Decision of the Commission**

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 95. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 25: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Štys, van Tol

Negative votes — none.

No votes were received from Dupuis, Kerzhner and Song.

**Original references**

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

*cerasi*, *Chrysomela*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 376.

*Orsodacne* Latreille, 1802, *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 3, p. 223.

## OPINION 1990 (Case 3076)

### ***Tanaecia heringi* Niepelt, 1935 (Insecta, Lepidoptera): specific name placed on the Official List of Specific Names in Zoology**

**Keywords.** Nomenclature; taxonomy; Lepidoptera; NYMPHALIDAE; *Tanaecia heringi*; *Tanaecia coelebs*; southeast Asia.

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#### **Ruling**

- (1) The name *heringi* Niepelt, 1935, as published in the binomen *Tanaecia heringi*, is hereby placed on the Official List of Specific Names in Zoology.

#### **History of Case 3076**

An application for the conservation of the specific name of *Tanaecia coelebs* Corbet, 1941 was received from Dr Takashi Yokochi (*Owariasahi, Aichi, Japan*) on 7 January 1998. After correspondence the case was published in BZN 56: 177–178 (September 1999). Notice of the case was sent to appropriate journals.

The application was sent to the Commission for voting on 1 September 2000. The proposal to conserve the specific name of *Tanaecia coelebs* Corbet, 1941 by the suppression of *T. heringi* Niepelt, 1935 received a majority of the votes cast but failed to reach the required two-thirds majority (13 votes in favour and seven against; four Commissioners did not vote).

Shortly before the case was sent for voting a comment in support of the application was received from Dr Bernard d'Abera (*c/o The Natural History Museum, London, U.K.*) and was recorded on the voting papers.

A number of Commissioners commented on their voting papers. Bouchet commented: 'The application fails to document the usage of the name *coelebs*. Only five references are cited in support'. Lamas commented: 'I recommend strict adherence to priority in this case. The presumption that Corbet (1941) was unaware of the publication of Niepelt's (1935) name is not tenable; it indicates carelessness on the part of Corbet who, in attempting a revision of *Tanaecia*, should at least have consulted *Zoological Record* where in 1935 Niepelt's publication and name were cited. Further, as both names correspond to what is regarded as 'the rarest Malayan species' (of *Tanaecia*) they have been mentioned infrequently in the literature. I see no disaster in replacing *Tanaecia coelebs* by its senior subjective synonym, as butterfly taxonomists and enthusiasts surely will get used easily and quickly to the name *Tanaecia heringi* Niepelt'. Štys commented: 'Clearly all authors except Yokochi publishing on *Tanaecia* have simply ignored the name of a taxon published in an international journal and relied on the subsequent monograph by Corbet (1941). A line must be drawn between observance of continuity and supporting an inadequate scientific work'.

Under the Bylaws the application was submitted for a revote.

#### **Decision of the Commission**

On 1 September 2001 the members of the Commission were invited to revote on the proposals published in BZN 56: 178. The voting paper cited the comments above. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 9: Bock, Evenhuis, Fortey, Mahnert, Mawatari, Ng, Nielsen, Papp, Patterson

Negative votes — 16: Alonso-Zarazaga, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Halliday, Kraus, Lamas, Macpherson, Martins de Souza, Minelli, Rosenberg, Štys, van Tol.

No votes were received from Dupuis, Kerzhner and Song.

Since there was a majority against the conservation of the junior synonym, the specific name of *Tanaecia heringi* Niepelt, 1935 is placed on the Official List as the valid name.

### Original reference

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

*heringi*, *Tanaecia*, Niepelt, 1935, *Internationale Entomologische Zeitschrift*, **29**(2): 13.

**OPINION 1991 (Case 3131)*****Hybognathus stramineus* Cope, 1865 (currently *Notropis stramineus*; Osteichthyes, Cypriniformes): specific name conserved**

**Keywords.** Nomenclature; taxonomy; Osteichthyes; Cypriniformes; CYPRINIDAE; freshwater fish; sand shiner; *Notropis stramineus*; *Notropis ludibundus*; North America.

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**Ruling**

- (1) Under the plenary power the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  - (a) *ludibunda* Girard, 1856, as published in the binomen *Cyprinella ludibunda*;
  - (b) *lineolatus* Putnam, 1863, as published in the binomen *Alburnus lineolatus*.
- (2) The name *stramineus* Cope, 1865, as published in the binomen *Hybognathus stramineus* and as defined by the lectotype (catalogue no. ANSP 4131 in the Museum of Zoology, University of Michigan) designated by Fowler (1910), is hereby placed on the Official List of Specific Names in Zoology.
- (3) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
  - (a) *ludibunda* Girard, 1856, as published in the binomen *Cyprinella ludibunda* and as suppressed in (1)(a) above;
  - (b) *lineolatus* Putnam, 1863, as published in the binomen *Alburnus lineolatus* and as suppressed in (1)(b) above.

**History of Case 3131**

An application for the conservation of the specific name of *Hybognathus stramineus* Cope, 1865 was received from Prof Reeve M. Bailey (*Museum of Zoology, The University of Michigan, Ann Arbor, Michigan, U.S.A.*) on 16 June 1999. After correspondence the case was published in BZN 56: 240–246 (December 1999). Notice of the case was sent to appropriate journals.

Comments in support were published in BZN 57: 111–112 (June 2000) and BZN 57: 171 (September 2000). An opposing comment was published in BZN 57: 168–170. A reply from the author of the application to the opposing comment was published in BZN 57: 171–172.

It was noted on the voting paper that the list of publications using the names *Notropis stramineus* and *N. ludibundus* compiled by Mr William Poly (*Southern Illinois University, Carbondale, Illinois, U.S.A.*) and mentioned in his comment (BZN 57: 171) had been brought up to date by him (in litt. to the Commission Secretariat, August 2001). In addition to the usage references cited in the application and in the comment by Gilbert et al. (BZN 57: 168–170), the list included 173 works in which the name *stramineus* had been used at specific rank, and 16 works in which it had been used for a subspecies of *N. deliciosus* (Girard, 1856). These publications were post 1959 and most dated from the 1980s and 1990s. There were 15 additional

publications using *ludibundus*, all since 1989 when the name was reintroduced by R.L. Mayden and C.R. Gilbert (para. 2 of the application).

### Decision of the Commission

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 56: 243. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 17: Bock, Böhme, Brothers, Evenhuis, Fortey, Halliday, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Ng, Nielsen, Papp, Rosenberg, Štys, van Tol

Negative votes — 8: Alonso-Zarazaga, Bouchet, Calder, Cogger, Eschmeyer, Kraus, Minelli and Patterson.

No votes were received from Dupuis, Kerzhner and Song.

Calder commented: 'The case for conservation of the specific name of *Notropis stramineus* (Cope, 1865) has been undermined by usage of its senior subjective synonym *N. ludibundus* (Girard, 1856) in several influential works over the past decade'. Cogger commented: 'A number of relevant questions have not been addressed. How many and what species are represented in the paralectotypic series of *N. lundibundus* and how many are extant, i.e. is the problem caused by an inappropriate lectotype designation or would selection of a different syntype as lectotype have created the same problem? To argue that two properly established names be suppressed on the basis of their subjective synonymy with a well used (but not universally used) junior name is, in my view, unwarranted'. Eschmeyer commented: 'The name *ludibundus* is being adopted by ichthyologists (see para. 7 of the application), and I favor following priority'.

### Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

*lineolatus*, *Alburnus*, Putnam, 1863, *Bulletin of the Museum of Comparative Zoology, Cambridge, Massachusetts, U.S.A.*, **1**: 9.

*ludibunda*, *Cyprinella*, Girard, 1856, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **8**(5): 35. (Issued in the serial in 1857 but published as a separate in 1856.)

*stramineus*, *Hybognathus*, Cope, 1865, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **16**(8): 283.

The following is the reference for the designation of the lectotype of *Hybognathus stramineus* Cope, 1865:

Fowler, H.W. 1910. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **62**: 274.

**OPINION 1992 (Case 3085)**

***Lacerta undata* A. Smith, 1838 (currently *Pedioplanis undata*; Reptilia, Sauria): specific name conserved by the designation of a neotype**

**Keywords.** Nomenclature; taxonomy; Reptilia; Sauria; LACERTIDAE; *Pedioplanis undata*; western sand lizard; spotted sand lizard; Namibia.

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**Ruling**

- (1) Under the plenary power all previous type fixations for the nominal species *Lacerta undata* A. Smith, 1838 are hereby set aside and the adult male specimen from near Windhoek, Namibia, in the Naturhistorisches Museum Wien (NMW 31886), is designated as the neotype.
- (2) The name *undata* A. Smith, 1838, as published in the binomen *Lacerta undata* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

**History of Case 3085**

An application for the conservation of the specific name of *Lacerta undata* A. Smith, 1838 by the designation of a neotype was received from Dr Werner Mayer (*Naturhistorisches Museum Wien, Austria*) and Prof Wolfgang Böhme (*Zoologisches Forschungsinstitut und Museum A. Koenig, Bonn, Germany*) on 2 March 1998. After correspondence the case was published in BZN 57: 100–102 (June 2000). Notice of the case was sent to appropriate journals.

**Decision of the Commission**

On 1 September 2001 the members of the Commission were invited to vote on the proposal published in BZN 57: 101–102. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 22: Alonso-Zarazaga, Bock, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Štys

Negative votes — 1: van Tol.

Böhme abstained since he was co-author of the case.

No votes were received from Dupuis, Kerzhner, Rosenberg and Song.

**Original reference**

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

*undata*, *Lacerta*, A. Smith, 1838, *Magazine of Natural History*, (2)14: 93.

**OPINION 1993 (Case 2980)*****Procoptodon* Owen, 1874 (Mammalia, Marsupialia) and the specific names of *P. rapha* Owen, 1874 and *P. pusio* Owen, 1874: conserved**

**Keywords.** Nomenclature; taxonomy; Marsupialia; MACROPODIDAE: *Procoptodon*; *Procoptodon rapha*; *Procoptodon pusio*; *Halmaturotherium*; *Halmatutherium*; kangaroos; Pleistocene; Australia.

**Ruling**

- (1) Under the plenary power the following names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  - (a) the generic names:
    - (i) *Halmaturotherium* Krefft, 1872;
    - (ii) *Halmatutherium* Krefft, 1873;
  - (b) the specific names:
    - (i) *scottii* Krefft, 1870, as published in the binomen *Halmaturus scottii*;
    - (ii) *thomsonii* Krefft, 1870, as published in the binomen *Halmaturus thomsonii*.
- (2) The name *Procoptodon* Owen, 1874 (gender: masculine), type species by original designation *Macropus goliah* Owen in Waterhouse, 1846, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *goliah* Owen in Waterhouse, 1846, as published in the binomen *Macropus goliah* (specific name of the type species of *Procoptodon* Owen, 1874);
  - (b) *rapha* Owen, 1874, as published in the binomen *Procoptodon rapha*;
  - (c) *pusio* Owen, 1874, as published in the binomen *Procoptodon pusio*.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) *Halmaturotherium* Krefft, 1872, as suppressed in (1)(a)(i) above;
  - (b) *Halmatutherium* Krefft, 1873, as suppressed in (1)(a)(ii) above.
- (5) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
  - (a) *scottii* Krefft, 1870, as published in the binomen *Halmaturus scottii* and as suppressed in (1)(b)(i) above;
  - (b) *thomsonii* Krefft, 1870, as published in the binomen *Halmaturus thomsonii* and as suppressed in (1)(b)(ii) above.

**History of Case 2980**

An application for the conservation of *Procoptodon* Owen, 1874, *P. rapha* Owen, 1874 and *P. pusio* Owen, 1874 was received from Dr Angela C. Davis and Prof W.D.L. Ride (Australian National University, Canberra, Australia) on 21 April 1995. After correspondence the case was published in BZN 57: 103–107 (June 2000). Notice of the case was sent to appropriate journals.

### Decision of the Commission

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 105–106. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 24: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Štys, van Tol

Negative votes — 1: Cogger.

No votes were received from Dupuis, Kerzhner and Song.

Voting against, Cogger commented: 'While I would certainly favour priority being given to the junior Owen names in prevailing use over the senior Krefft names whenever an author considers them to be synonyms, the subjectivity of the synonymy would make me unwilling to permanently suppress the senior names which may well be found, in future studies, to represent distinct taxa'.

### Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

*golia*, *Macropus*, Owen in Waterhouse, 1846, *A natural history of the Mammalia*. Vol. 1, p. 59.  
*Halmaturus* Krefft, 1872, *The Sydney Mail and New South Wales Advertiser*, no. 637, vol. 14, p. 327.

*Halmaturus* Krefft, 1873, *The Sydney Mail and New South Wales Advertiser*, no. 686, vol. 16, p. 238.

*Procoptodon* Owen, 1874, *Philosophical Transactions of the Royal Society of London*, **164**: 786.  
*pusio*, *Procoptodon*, Owen, 1874, *Philosophical Transactions of the Royal Society of London*, **164**: 788.

*rapha*, *Procoptodon*, Owen, 1874, *Philosophical Transactions of the Royal Society of London*, **164**: 788.

*scottii*, *Halmaturus*, Krefft, 1870, *New South Wales Parliamentary Paper. Wellington Caves (Correspondence relative to exploration of)*, p. 9.

*thomsonii*, *Halmaturus*, Krefft, 1870, *New South Wales Parliamentary Paper. Wellington Caves (Correspondence relative to exploration of)*, p. 9.



**OPINION 1994 (Case 3095)**

***Mystacina* Gray, 1843, *Chalinolobus* Peters, 1866, *M. tuberculata* Gray, 1843 and *Vespertilio tuberculatus* J.R. Forster, 1844 (currently *C. tuberculatus*) (Mammalia, Chiroptera): usage of the generic and specific names conserved**

**Keywords.** Nomenclature; taxonomy; Mammalia; Chiroptera; MYSTACINIDAE; VESPERTILIONIDAE; *Chalinolobus*; *Mystacina*; *Chalinolobus tuberculatus*; *Mystacina tuberculata*; *Mystacina velutina*; bats; New Zealand.

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**Ruling**

- (1) Under the plenary power the name *Vespertilio tuberculatus* J.R. Forster, 1844 is hereby ruled to be not invalid (under Article 49 of the Code) as a consequence of the inclusion by Gray (1843) of the taxon within the nominal species *Mystacina tuberculata* Gray, 1843.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Mystacina* Gray, 1843 (gender: feminine), type species by original designation *Mystacina tuberculata* Gray, 1843;
  - (b) *Chalinolobus* Peters, 1866 (gender: masculine), type species by original designation *Vespertilio tuberculatus* J.R. Forster, 1844.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *tuberculata* Gray, 1843, as published in the binomen *Mystacina tuberculata* (specific name of the type species of *Mystacina* Gray, 1843);
  - (b) *tuberculatus* J.R. Forster, 1844, as published in the binomen *Vespertilio tuberculatus* (specific name of the type species of *Chalinolobus* Peters, 1866).
- (4) The name *Mystacops* Lydekker, 1891 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Mystacina* Gray, 1843).
- (5) The name *velutina* Hutton, 1872, as published in the binomen *Mystacina velutina*, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology (a junior objective synonym of *Mystacina tuberculata* Gray, 1843).

**History of Case 3095**

An application for the conservation of the usage of the names *Mystacina* and *M. tuberculata*, both of Gray (1843), and of *Chalinolobus* Peters, 1866 and *Vespertilio tuberculatus* J.R. Forster, 1844, was received from Drs Hamish G. Spencer and Daphne E. Lee (*University of Otago, Dunedin, New Zealand*) on 11 August 1998. After correspondence the case was published in BZN 56: 250–254 (December 1999). Notice of the case was sent to appropriate journals.

Comments in support were published in BZN 57: 117–118 (June 2000). An opposing comment was published in BZN 57: 172–176 (September 2000). A reply

from the authors of the application was published at the same time (BZN 57: 176) and included the proposal that the Commission use its plenary power to rule that the specific name of *Vespertilio tuberculatus* J.R. Forster, 1844 (currently *Chalinolobus tuberculatus*) is not invalid (under Article 49 of the Code) as a consequence of the inclusion by Gray (1843) of the taxon within the nominal species *Mystacina tuberculata* Gray, 1843.

### Decision of the Commission

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 56: 253 and 57: 176. At the close of the voting period on 1 December 2001 the votes were as follows:

Affirmative votes — 18: Bock, Böhme, Bouchet, Brothers, Calder, Eschmeyer, Fortey, Halliday, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Ng, Nielsen, Papp, Patterson, Rosenberg

Negative votes — 5: Evenhuis, Kraus, Minelli, Štys and van Tol.

Cogger abstained.

No votes were received from Alonso-Zarazaga, Dupuis, Kerzhner and Song.

Cogger and Nielsen commented that lectotypes or neotypes should be designated for the taxa involved.

### Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

*Chalinolobus* Peters, 1866, *Monatsberichte der Königlich Preussischen Akademie der Wissenschaften zu Berlin*, 1866: 680. (Published in the serial in 1867 but issued as a separate in 1866).

*Mystacina* Gray, 1843, in Dieffenbach, E., *Travels in New Zealand; with contributions to the geography, geology, botany, and natural history of that country*, vol. 2, p. 296.

*Mystacops* Lydekker, 1891, in Flower, W.H. & Lydekker, R. *An introduction to the study of mammals living and extinct*, p. 671.

*tuberculata*, *Mystacina*, Gray, 1843, in Dieffenbach, E., *Travels in New Zealand; with contributions to the geography, geology, botany, and natural history of that country*, vol. 2, p. 296.

*tuberculatus*, *Vespertilio*, J.R. Forster, 1844, *Descriptiones Animalium quae in Itinere ad Maris Australis Terras per Annos 1772, 1773 et 1774 suscepto . . .*, p. 62.

*velutina*, *Mystacina*, Hutton, 1872, *Transactions and Proceedings of the New Zealand Institute*, 4: 185.

**OPINION 1995 (Case 3004)****LORISIDAE Gray, 1821, GALAGIDAE Gray, 1825 and INDRIIDAE Burnett, 1828 (Mammalia, Primates): conserved as the correct original spellings**

**Keywords.** Nomenclature; taxonomy; Mammalia; Primates; LORISIDAE; LORIDAE; GALAGIDAE; GALAGONIDAE; INDRIIDAE; INDRIDAE; *Galago*; *Galago senegalensis*; *Indri*; *Lemur indri*; lorises; bushbabies; lemurs; Asia; East Indies; Africa; Madagascar.

**Ruling**

- (1) Under the plenary power it is hereby ruled that for the purposes of Article 29 the stems of the following generic names are as shown:
  - (a) *Loris* E. Geoffroy Saint-Hilaire, 1796: the stem is LORIS-;
  - (b) *Galago* E. Geoffroy Saint-Hilaire, 1796: the stem is GALAG-.
- (2) It is hereby ruled that the correct original spelling of the family-group name based on *Indri* E. Geoffroy Saint-Hilaire, 1796 is INDRIIDAE Burnett, 1828.
- (3) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Galago* E. Geoffroy Saint-Hilaire, 1796 (gender: masculine), type species by monotypy *Galago senegalensis* E. Geoffroy Saint-Hilaire, 1796;
  - (b) *Indri* E. Geoffroy Saint-Hilaire, 1796 (gender: masculine), type species by absolute tautonymy *Lemur indri* Gmelin, 1788.
- (4) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *senegalensis* E. Geoffroy Saint-Hilaire, 1796, as published in the binomen *Galago senegalensis* (specific name of the type species of *Galago* E. Geoffroy Saint-Hilaire, 1796);
  - (b) *indri* Gmelin, 1788, as published in the binomen *Lemur indri* (specific name of the type species of *Indri* E. Geoffroy Saint-Hilaire, 1796).
- (5) The following names are hereby placed on the Official List of Family-Group Names in Zoology:
  - (a) LORISIDAE Gray, 1821 (type genus *Loris* E. Geoffroy Saint-Hilaire, 1796);
  - (b) GALAGIDAE Gray, 1825 (type genus *Galago* E. Geoffroy Saint-Hilaire, 1796);
  - (c) INDRIIDAE Burnett, 1828 (type genus *Indri* E. Geoffroy Saint-Hilaire, 1796), ruled in (2) above to be the correct original spelling.
- (6) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
  - (a) LORIDAE Gray, 1821 (spelling emended to LORISIDAE by the ruling in (1)(a) above);
  - (b) GALAGONIDAE Gray, 1825 (spelling emended to GALAGIDAE by the ruling in (1)(b) above);
  - (c) INDRIDAE Burnett, 1828 (ruled in (2) above to be an incorrect original spelling).

### History of Case 3004

An application for the conservation of the spellings of the primate family-group names LORISIDAE Gray, 1821 and GALAGIDAE Gray, 1825 was received from Drs Jeffrey H. Schwartz (*University of Pittsburgh, Pittsburgh, Pennsylvania, U.S.A.*), Jeheskel Shoshani (*Wayne State University, Detroit, Michigan, U.S.A.*), Ian Tattersall (*American Museum of Natural History, New York, U.S.A.*), Elwyn L. Simons (*Duke University Primate Center, Durham, North Carolina, U.S.A.*) and Gregg F. Gunnell (*University of Michigan, Ann Arbor, Michigan, U.S.A.*) on 13 November 1995. After correspondence the case was published in BZN 55: 165–168 (September 1998). Notice of the case was sent to appropriate journals.

A comment in support of these proposals was published in BZN 56: 73 (March 1999). An opposing comment was published in BZN 57: 51 (March 2000). A reply by the authors of the application, together with Prof Friderun Ankel-Simons, was published in BZN 57: 121–123 (June 2000).

In relation to para. 4 of the application, the conservation of *Loris* was subsequently approved by the Commission; the name and that of the type species, *Lemur tardigradus* Linnaeus, 1758, were placed on Official Lists in Opinion 1922 (March 1999).

A further proposal to conserve the spelling of INDRIIDAE Burnett, 1828 as the correct spelling for the family-group name based on *Indri* E. Geoffroy Saint-Hilaire, 1796 was put forward by Drs Kenneth Mowbray (*American Museum of Natural History, New York, U.S.A.*), Ian Tattersall and Jeffrey H. Schwartz and published in BZN 57: 228–231.

A comment in support of the conservation of all three family-group names LORISIDAE, GALAGIDAE and INDRIIDAE was published in BZN 58: 61–62 (March 2001).

### Decision of the Commission

On 1 September 2001 the members of the Commission were invited to vote on the proposals published in BZN 55: 166–167 and 57: 229–230. The proposals to conserve the family-group names LORISIDAE, GALAGIDAE AND INDRIIDAE were offered for voting in three parts (Votes 1, 2 and 3). In Vote (1) Commissioners were asked to vote on the proposals set out in BZN 55: 166–167, (1)(a), (4)(a) and (5)(a). In Vote (2) Commissioners were asked to vote on the proposals set out in BZN 55: 166–167, (1)(b), (2), (3), (4)(b) and (5)(b). In Vote (3) Commissioners were asked to vote on the proposals set out in BZN 57: 229–230. At the close of the voting period on 1 December 2001 the votes were as follows:

Votes 1 and 2. Affirmative votes — 23: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Ng, Nielsen, Papp, Patterson, Rosenberg, Štys, van Tol

Negative votes — 2: Kraus and Minelli.

Vote 3. Affirmative votes — 24: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Ng, Nielsen, Papp, Patterson, Rosenberg, Štys, van Tol

Negative votes — 1: Minelli.

No votes were received from Dupuis, Kerzhner and Song.

## Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

GALAGIDAE Gray, 1825, *Annals of Philosophy*, (N.S.)**10**: 338 (incorrectly spelled as GALAGONIDAE).

*Galago* E. Geoffroy Saint-Hilaire, 1796, *Magasin Encyclopédique, ou journal des sciences, des lettres et des arts*, (2)**1**(1): 49.

GALAGONIDAE Gray, 1825, *Annals of Philosophy*, (N.S.)**10**: 338 (an incorrect original spelling of GALAGIDAE).

*Indri* E. Geoffroy Saint-Hilaire, 1796, *Magasin Encyclopédique, ou journal des sciences, des lettres et des arts*, (2)**1**(1): 46.

*indri*, *Lemur*, Gmelin, 1788, *Caroli a Linné Systema Naturae*, Ed. 13, vol. 1, p. 42.

INDRIDAE Burnett, 1828, *Quarterly Journal of Science, Literature, and Art*, (N.S.)**4**: 307 (incorrectly spelled as INDRIIDAE).

INDRIIDAE Burnett, 1828, *Quarterly Journal of Science, Literature, and Art*, (N.S.)**4**: 307 (an incorrect original spelling of INDRIDAE).

LORIDAE Gray, 1821, *London Medical Repository*, **15**(1): 298 (an incorrect original spelling of LORISIDAE).

LORISIDAE Gray, 1821, *London Medical Repository*, **15**(1): 298 (incorrectly spelled as LORIDAE).

*senegalensis*, *Galago*, E. Geoffroy Saint-Hilaire, 1796, *Magasin Encyclopédique, ou journal des sciences, des lettres et des arts*, (2)**1**(1): 49.

## INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the *Bulletin*; manuscripts not prepared in accordance with these guidelines may be returned.

*General.* Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

*Text.* Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described . . .'. The Abstract will be prepared by the Commission's Secretariat.

*References.* These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication.

*Submission of Application.* Two copies should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

Rulings of the Commission

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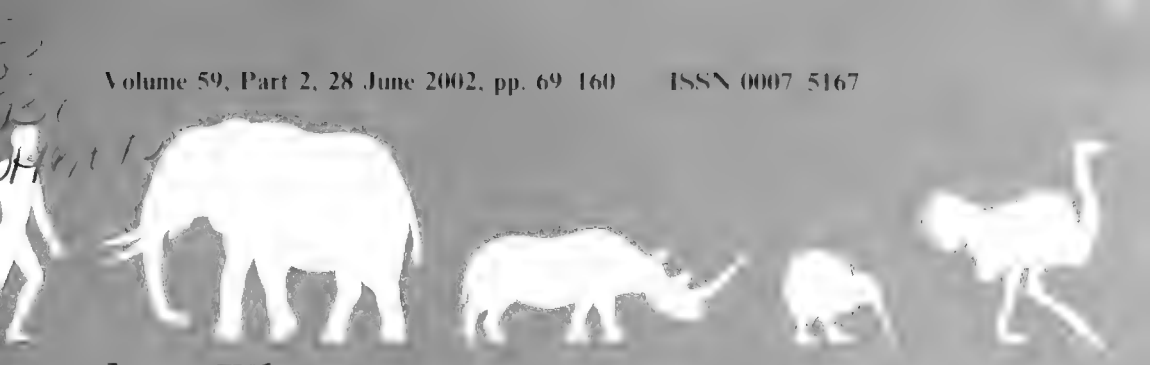
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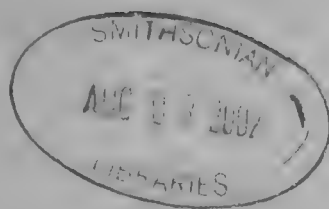
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# The Bulletin of Zoological Nomenclature



***ICZN*** The Official Periodical  
of the International Commission  
on Zoological Nomenclature

## THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The *Bulletin* is published four times a year for the International Commission on Zoological Nomenclature by the International Trust for Zoological Nomenclature, a charity (no. 211944) registered in England. The annual subscription for 2002 is £120 or \$215, postage included. All manuscripts, letters and orders should be sent to:

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International Commission on Zoological Nomenclature,  
c/o The Natural History Museum,  
Cromwell Road,  
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**BULLETIN OF ZOOLOGICAL NOMENCLATURE**

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Volume 59, part 2 (pp. 69–160)

28 June 2002

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**Notices**

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his or her contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 59, part 1 (published on 27 March 2002). Under Article 82 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

Case 3229. *Erbocyathus* Zhuravleva, 1960 (Archaeocyatha): proposed precedence over *Pluralicyathus* Okulitch, 1950. F. Debrenne, A.Yu. Zhuravlev & P.D. Kruse.

Case 3230. *Colobodus* Agassiz, 1844 (Osteichthyes, Perleidiformes): proposed conservation of *C. bassanii* de Alessandri, 1910 and its designation as type species, with designation of a neotype. R.J. Mutter.

Case 3231. STAPHYLINIDAE (Insecta, Coleoptera): proposed conservation of 17 specific names. L.H. Herman.

Case 3232. *Melania curvicostata* Reeve, 1861 and *M. densicostata* Reeve, 1861 (Mollusca, Gastropoda): designation of a neotype. F.G. Thompson & E.L. Mihalcik.

Case 3233. *Achatina janii* De Betta & Martinati, 1855 (currently *Ceciloides janii*; Mollusca, Gastropoda): proposed conservation of the specific name. F. Giusti & G. Manganeli.

Case 3234. *Ascalaphus* Fabricius, 1776 (Insecta, Neuroptera): proposed conservation. M.J. Dawson.

Case 3235. *Sclerocrinus* Jaekel, 1891 (Crinoidea, Cyrtocrinida): proposed conservation. H. Hess.

Case 3236. *Zeriassa* Pocock, 1897 (Arachnida, Solifugae): proposed conservation. M.S. Harvey.

Case 3237. *Leucopelaea albescens* Bates, 1891 (Insecta, Coleoptera): proposed validation of the lectotype designation. A. Smith.

Case 3238. *Rhagodes* Pocock, 1897 (Arachnida, Solifugae): proposed conservation. M.S. Harvey.

Case 3239. *Geostiba* Thomson, 1858 (Insecta, Coleoptera): proposed precedence over *Evanystes* Gistel, 1856. V.I. Gusarov.

Case 3240. *Vespertilio nanus* Peters, 1852 (currently *Pipistrellus nanus*; Mammalia, Chiroptera): proposed conservation of the specific name. M. Happold.

Case 3241. Status of butterfly (Insecta, Lepidoptera) names introduced by Denis & Schiffermüller, 1775. O. Kudrna & J. Belicek.

(d) *Rulings of the Commission*. Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

## **Council of the International Commission on Zoological Nomenclature**

The following members of the Commission constitute the Council of the Commission:

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Dr W.N. Eschmeyer (Vice-President)

Prof P. Bouchet

Prof D.J. Brothers

Dr I.M. Kerzhner

Prof Dr O. Kraus

## **Call for nominations for new members of the International Commission on Zoological Nomenclature**

Since the last meeting of the Commission in Athens in August 2000, one Commissioner (Prof W.D.L. Ride, Australia; Mammalia, a past-President of the Commission) has retired. One member of the Commission (Prof C. Dupuis, France; Heteroptera) retires this year (2002) and at the next meeting (planned for Bangkok in March 2003), two members will reach the end of their current terms of service: Dr H.G. Cogger (Australia; Herpetology) and Prof Dr O. Kraus (Germany; Arachnology). A number of actual and prospective vacancies thus exist, and the Commission invites nominations from any person or institution of potential candidates for election.

The nationalities and specialist fields of the present members of the Commission may be found on the Commission's website ([www.iczn.org](http://www.iczn.org)) or on the inside cover of each part of the *Bulletin of Zoological Nomenclature*.

Article 2.2 of the Commission's Constitution prescribes that 'the members of the Commission shall be eminent scientists, irrespective of nationality, with a distinguished record in any branch of zoology, who are known to have an interest in zoological nomenclature'. It should be noted that 'zoology' here includes the applied biological sciences (medicine, agriculture, etc.) that use zoological names.

Nominations made since 1999 will automatically be taken into account and need not be repeated. Additional nominations, giving the age, nationality and qualifications (by the criteria mentioned above) of each nominee should be sent as soon as possible to The Executive Secretary, International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

### **20th Pacific Science Congress, Bangkok, Thailand, 17-21 March 2003**

This Congress is being hosted by the Government of Thailand, the National Research Council of Thailand (NRCT) in collaboration with the Thai Academy of Science & Technology (TAST) and with the support of Pacific Science Association. It will be held at the Sofitel Central Plaza Bangkok Hotel, Bangkok, Thailand. It is intended that the next meeting of the International Commission on Zoological Nomenclature will take place during the Congress.

The theme of the Congress is 'science and technology for healthy environments' and includes sessions on modified and natural environments such as agricultural ecosystems, oceans and coral reefs, terrestrial ecosystems and biodiversity. Details are available from: XX Pacific Science Congress Secretariat, c/o National Research Council of Thailand, 196 Phaholyothin Rd., Chatuchak, Bangkok 10900, Thailand. Tel: +66 2 5792690, 9406369, Fax: +66 2 5613049, 9406369.

The Congress website is: <http://www.nrct.go.th/Pacific20th/Index.html>

All zoologists attending the Congress will be able to take part in elections to fill vacancies on the International Commission on Zoological Nomenclature.

### **Bulletin of Zoological Nomenclature — Back Copies**

Back copies of all the volumes of the *Bulletin*, and of most of the *Opinions and Declarations* that were published concurrently with vols. 1–16 of the *Bulletin*, are still available. Prices on application to I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

## The International Code of Zoological Nomenclature

The extensively revised 4th Edition of the *International Code of Zoological Nomenclature* (ISBN 0 85301 006 4) was published (in a bilingual volume in English and French) in August 1999. It came into effect on 1 January 2000 and entirely supersedes the 3rd (1985) edition.

The price of the English and French volume of the 4th Edition is £40 or \$65; the following discounts are offered:

**Individual members of a scientific society** are offered a discount of 25% (price £30 or \$48); the name and address of the society should be given.

**Individual members of the American or European Associations for Zoological Nomenclature** are offered a discount of 40% (price £24 or \$39).

**Postgraduate or undergraduate students** are offered a discount of 25% (price £30 or \$48); the name and address of the student's supervisor should be given.

**Institutions or agents** buying 5 or more copies are offered a 25% discount (price £30 or \$48 for each copy).

Prices include surface postage; for Airmail please add £2 or \$3 per copy.

Copies may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)), or AAZN, Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: [smith.davidg@nmnh.si.edu](mailto:smith.davidg@nmnh.si.edu)).

Payment should accompany orders. Cheques should be made out to 'ITZN' (in sterling or dollars) or to 'AAZN' (in dollars only). Payment to ITZN (but not to AAZN) can also be made by Visa or MasterCard giving the cardholder's number, name and address and the expiry date.

Individual purchasers of the Code are offered a 50% discount on the following publications for personal use:

*Towards Stability in the Names of Animals — a History of the International Commission on Zoological Nomenclature 1895–1995* (1995) — reduced from £30 to £15 and from \$50 to \$25;

*The Bulletin of Zoological Nomenclature* (the Commission's quarterly journal) — discount valid for up to four years; for 2002 the discounted price would be £60 or \$107.

Official texts of the Code in several languages have been authorized by the Commission, and all (including English and French) are equal in authority. German, Japanese, Russian and Spanish texts have now been published and others are planned. Details of price and how to buy the published texts can be obtained from the following e-mail addresses:

German — [books@insecta.de](mailto:books@insecta.de)

Japanese — [tomokuni@kahaku.go.jp](mailto:tomokuni@kahaku.go.jp)

Russian — [kim@ik3599.spb.edu](mailto:kim@ik3599.spb.edu)

Spanish — [mcnb168@mn.cn.csic.es](mailto:mcnb168@mn.cn.csic.es)

## **Official Lists and Indexes of Names and Works in Zoology — Supplement 1986–2000**

The volume entitled *Official Lists and Indexes of Names and Works in Zoology* (ISBN 0 85301 004 8) was published in 1987. It gave details of the names and works on which the Commission had ruled and placed on the Official Lists and Indexes since it was set up in 1895 through to the end of 1985. The volume contained 9917 entries, 9783 being family-group, generic or specific names and 134 relating to works.

In the 15 years between 1986 and the end of 2000 a further 601 Opinions and Directions have been published in the *Bulletin* listing 2371 names and 14 works placed on the Official Lists and Indexes. Details of these 2385 entries are given in a Supplement of 141 pages (ISBN 0 85301 007 2) published early in 2001. Additional sections include (a) a systematic index of names on the Official Lists covering both the 1987 volume and the Supplement; (b) a table correlating the nominal type species of genera listed in the 1987 volume with the valid names of those species when known to be different; and (c) emendments to the 1987 volume.

The cost of the 1987 volume and of the Supplement is £60 or \$110 each, and £100 or \$170 for both volumes ordered together.

Individual buyers of the volumes for their own use are offered a price of £50 or \$85 for each volume, and £90 or \$150 for both.

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**Case 3217*****Scleritoderma* Schmidt, 1879 and *Setidium* Schmidt, 1879 (Porifera): proposed conservation by the designation of *Scleritoderma flabelliformis* Sollas, 1888 as the type species of *Scleritoderma***

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**Abstract.** The purpose of this application is to conserve the accustomed understanding and usage of the names for two genera of sponges, *Scleritoderma* and *Setidium*, both of Schmidt (1879) (family SCLERITODERMIDAE), by the designation of *Scleritoderma flabelliformis* Sollas, 1888 as the type species of *Scleritoderma*. At present the type species by monotypy of these genera, *Scleritoderma paccardi* Schmidt, 1879 and *Setidium obtectum* Schmidt, 1879 respectively, are conspecific. The name *Scleritoderma* relates to a group of five species from the tropics world wide at 15° north and south; the name *Setidium* relates to a single species from the Caribbean. The specific name *obtectum* is given precedence over *paccardi*.

**Keywords.** Nomenclature; taxonomy; Porifera; Demospongiae; 'lithistids'; SCLERITODERMIDAE; *Scleritoderma*; *Setidium*; *Scleritoderma paccardi*; *Scleritoderma flabelliformis*; *Setidium obtectum*; sponges.

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1. The SCLERITODERMIDAE currently consist of a group of polymorphic, massive, encrusting, ear, foliated, cup-to-vase shaped or flabellate sponges with choanosomal desmas as thorny or tuberculated rhizoclonal; ectosomal spicules when present are various acanthorhabds/acanthostrongyles, styles or smooth strongyloxeas; microscleres when present are spinose sigmaspires.

2. Schmidt (1879, p. 28, pl. 2, fig. 3) established the rhizomorphine lithistid genus *Scleritoderma* and species *S. paccardi* by means of a joint description. The species was based on a single specimen (catalogue no. MZUS PO175 in the Musée de Zoologie, Université de Strasbourg), probably from the Mexican Gulf but no exact location or depth was given. As the single included species in the genus, *S. paccardi* is the type species by monotypy. The description and illustrations were very general.

3. Subsequently, Sollas (1888, p. 316, pl. 35, figs. 26–50) described and illustrated a second rhizomorphine lithistid species, *Scleritoderma flabelliformis*, from Ki Island in Indonesia. The species was based on five specimens (collection number BM(NH) 1891.5.4.10 in The Natural History Museum, London) and is characterized by



the presence of ectosomal acanthorhabds, choanosomal rhizoclone desmas and sigmaspire microscleres. Following Sollas's (1888) description, the presence of ectosomal acanthorhabds has been regarded as the characteristic feature of the genus *Scleritoderma*. Sollas (1888, pp. 316–317) recorded that the resemblance of *S. flabelliformis* to *S. paccardi* was 'very close' but (pp. 346–347) that it could be very clearly distinguished.

4. We have examined the original specimen of *Scleritoderma paccardi* and found that it has ectosomal smooth rhabds or amphistrongyles, instead of acanthorhabds. We also found that it is morphologically very similar to the holotype (MCZ 6462 in the Museum of Comparative Zoology, Harvard University, collected off Havana) of another taxon, *Setidium obtectum* Schmidt, 1879 (p. 30, pl. 1, fig. 9, pl. 2, fig. 14), described and illustrated in the same work. *Setidium obtectum* also displays choanosomal rhizoclone desmas and sigmaspire microscleres, as shown by the recent revision by Pisera (1999), but smooth strongyloxeas as ectosomal spicules, instead of acanthorhabds. We believe that *Scleritoderma paccardi* and *Setidium obtectum* are conspecific and, as a consequence, the specific names are synonyms. The nominal species *paccardi* was established in the genus *Scleritoderma* and, in the interests of nomenclatural stability, as First Revisers (Article 24 of the Code) we select *obtectum* to take precedence over *paccardi* for the name of the type species of *Setidium*.

5. Since Sollas's (1888) publication, the name *Scleritoderma* has consistently been used for a genus of five species characterised by acanthorhabds and with a world wide distribution in the tropics at 15° north and south. The name *Setidium* has been used for a monotypic genus lacking acanthorhabds, originally dredged off Havana (see Sollas, 1888; Lendenfeld, 1903; and Van Soest & Stentoft, 1988) and now known from several localities in the Caribbean (see Pisera, 1999). Recognition of *Scleritoderma paccardi*, which lacks acanthorhabds, as the type species of *Scleritoderma* would cause considerable confusion. Moreover, the names *Scleritoderma* and *Setidium* would become subjective synonyms, leaving the remaining species currently included in *Scleritoderma* in need of a new generic name. Sollas's (1888) species *Scleritoderma flabelliformis* clearly shows the acanthorhabds characteristic of *Scleritoderma* and has been treated as a reference in the placement of other species in the genus (see, for example, Thiele, 1900; Lévi & Lévi, 1983, 1989; Van Soest & Stentoft, 1988; and Gruber, 1993). *Scleritoderma flabelliformis* was well described and illustrated, and original material is preserved and available for study (para. 3 above). We therefore propose that *S. flabelliformis* be designated as the type species of *Scleritoderma*, thereby maintaining the current universal usage and understanding of both the names *Scleritoderma* and *Setidium*.

6. In a forthcoming revision of the Recent genera of lithistid sponges for the international project 'Systema Porifera', to be published in late 2002, we have proposed that *Scleritoderma paccardi* should be set aside as the type species of *Scleritoderma* and that *S. flabelliformis* be designated as the type, while maintaining *Setidium* as a distinct genus with *S. obtectum* as its type.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Scleritoderma* Schmidt, 1879 and to designate *Scleritoderma flabelliformis* Sollas, 1888 as the type species;

- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Scleritoderma* Schmidt, 1879 (gender: neuter), type species by designation in (1) above *Scleritoderma flabelliformis* Sollas, 1888;
  - (b) *Setidium* Schmidt, 1879 (gender: neuter), type species by monotypy *Setidium obtectum* Schmidt, 1879;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *flabelliformis* Sollas, 1888, as published in the binomen *Scleritoderma flabelliformis* (specific name of the type species of *Scleritoderma* Schmidt, 1879);
  - (b) *obtectum* Schmidt, 1879, as published in the binomen *Setidium obtectum* (specific name of the type species of *Setidium* Schmidt, 1879).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

**Case 3233*****Achatina janii* De Betta & Martinati, 1855 (currently *Cecilioides janii*; Mollusca, Gastropoda): proposed conservation of the specific name**

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**Abstract.** The purpose of this application is to conserve the specific name of *Achatina janii* De Betta & Martinati, 1855 for a subterranean, eyeless pulmonate gastropod (family FERUSSACIIDAE) from southern Europe. The name has been used consistently but is threatened by the subjective synonym *Achatina veneta* Strobel, 1855 which appeared only a few days earlier and which has remained virtually unused since publication. It is proposed that the latter specific name be suppressed.

**Keywords.** Nomenclature; taxonomy; Mollusca; Gastropoda; FERUSSACIIDAE; *Cecilioides janii*; *Cecilioides veneta*; southern Europe.

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1. O.F. Müller (1774) established a new species of subterranean and eyeless pulmonate gastropod from Germany as *Buccinum acicula*. The taxon, currently known as *Cecilioides acicula*, is now recognised as widespread in Europe (family FERUSSACIIDAE). De Cristofori & Jan (1832) subsequently described the same species under the name *Columna aciculoides* (see para. 2 below). This name was used by later authors for a second, more local, species from northern Italy. The second species, currently known as *Cecilioides janii* (De Betta & Martinati, 1855) (see paras. 2 and 3 below), is also subterranean and eyeless but its shell is larger and broader and has a larger aperture. It is now known from southern Europe.

2. De Betta (1852) redescribed the species *aciculoides* De Cristofori & Jan, 1832 and placed it in *Achatina* Lamarck, 1799. As Giusti (1976) demonstrated, from De Betta's publication it is clear that his specimens represented the smaller, widespread species, i.e. *acicula* Müller. De Betta (1852, pp. 76–77) noted that he had sent some of his material to Jan, and that Jan had confirmed that it was identical to his own. Thus, the name *aciculoides* became a junior subjective synonym of *acicula*. However, in an unfortunate transfer of names, De Betta (1852) and De Betta & Martinati (1855) applied the name *acicula* to the larger, broader and more restricted species (De Betta, 1852, figs. 2a and b) and *aciculoides* to the smaller, widespread one (figs. 3a and b). In 1864, De Betta reversed his use of names, adopting *acicula* (with *aciculoides* as a synonym) for the widespread species and, with a detailed description and illustration (pp. 555–558, pl. 14, figs. 4–6), *Achatina janii* Betta & Martinati, 1855 for the more restricted one. This nomenclature has been followed by virtually all subsequent authors (see para. 5 below).

3. The specific name of *Achatina janii* was made available as a conditional replacement name (Articles 11.5.1 and 12.2.3 of the Code) in a nomenclatural note by De Betta & Martinati (1855, p. 59). They pointed out that, since the name *aciculoides*

(following the correct usages of Charpentier and Pfeiffer) was a junior synonym of *acicula* Müller, 1774 (para. 2 above), a new name would be required for the larger, more restricted species. The name *janii* was adopted later in the same year by Strobel (1855b), who referred to De Betta & Martinati's (1855) work, and by De Betta & Martinati in Massalongo (1861).

4. In 2000, Bank, Falkner & Gittenberger published a paper on the nomenclature of species of *Cecilioides* Férussac, 1814 from the Italian and Swiss Alps. They argued that a new name must be adopted for the larger and broader species currently named *C. janii*. This arose because Bank et al., 'digging in the old literature', had discovered an older name for the species, *Achatina veneta*, which was first introduced in the synonymy of *Achatina aciculoides* auctt. in a paper by Strobel (1855a, p. 137) published a few days before that by De Betta & Martinati (1855) in which *Achatina janii* was established. The papers by De Betta & Martinati (1855) and Strobel (1855a) were both published in February. The title page of De Betta & Martinati's paper records publication as 'Febbrajo 1855' and Strobel, p. 144, notes 'Dispensato nel 2 mese del 1855'. That the name *A. veneta* appeared earlier than *A. janii* is shown by the reference in De Betta & Martinati (1855, p. 59, footnote) to Strobel's work. As Bank et al. (2000) noted, although published in synonymy, the specific name of *Achatina veneta* is available under Article 11.6.1 of the Code, having been adopted before 1961 by some authors as a valid name (see, for example, Strobel, 1857, p. 248; Küster, 1879, p. 93; and Riezler, 1929, p. 161). Bank et al. (2000) asserted that the specific name of *Cecilioides veneta* 'cannot be suppressed in favour of *janii*' because both conditions of Article 23.9.1 of the Code had not been met in that the junior name *janii* had not been used in at least 25 works in the preceding 50 years, and the senior name *veneta* had not remained unused since 1899, having been adopted by Pilsbry in 1908 and by Thorson in 1930.

5. On investigation we have found that the name *Cecilioides janii* has been used in at least 27 publications by 33 different authors between 1971 and 1999. The publications include those by Kerney & Cameron (1979) and subsequent Dutch (1980), German (1983) and French (1999) translations, Cossignani & Cossignani (1995), Giusti, Manganelli & Schembri (1995), Manganelli, Bodon, Favilli & Giusti (1995), Goto & Poppe (1996), Bole & Slapnik (1998), Turner et al. (1998), and by two of the authors themselves of the proposed name change (Bank, 1985, p. 68 and Falkner, 1990, p. 168, fig. 5). A complete list of the works is held by the Commission Secretariat. We also found that in one of the two examples given by Bank et al. (2000) of putative usage of *C. veneta* since 1899 the name was not adopted as valid. Pilsbry (1908, pp. 22–23) cited *Achatina veneta* 'Charpentier]. Kuester, Neunter Bercht. naturforsch. Ges. Bamberg, 1870, p. 93' in the list of synonyms of *A. janii* and specified that, since he had not had access to De Betta's (1864) 'Esame critico' in which he (De Betta) figured the species, he used Westerlund's account which in its turn, as Pilsbry noted, 'seems to have been taken mainly from Kuester's article of 1870, which was the first critical discussion of the species'. Pilsbry concluded, reporting a sentence from Küster (1870): 'One might say that this species [*Acicula gredleri* Küster, 1870] represents a shortened widened *aciculoides*, just as *veneta* seems to be a derivative of *acicula*'. In the second example of *veneta* usage cited by Bank et al. (2000),

Thorson (1930, p. 229) considered *C. veneta* to be a local variety from Trento of *C. aciculoides* auctt.

6. The 4th Edition of the Code, which was published in 1999 and came into force in January 2000, puts stronger emphasis on stability in nomenclature than did previous editions. Thus, even if Bank et al. (2000) believed that the conditions of Article 23.9.1 (Reversal of Precedence) had not been met for the 'automatic' conservation of *Cecilioides jani* (cf. para. 4 above; Article 23.9.1 is not concerned with suppression), they should not have resurrected the name *Achatina veneta* in place of *C. jani*. Instead, they should have maintained the use of the latter name and applied to the Commission for its conservation. Bank et al. appear to have overlooked Article 23.9.3 which states that 'If the conditions of 23.9.1 are not met but nevertheless an author considers that the use of the older synonym or homonym would threaten stability or universality or cause confusion, and so wishes to maintain use of the younger synonym or homonym, he or she must refer the matter to the Commission for a ruling under the plenary power. While the case is under consideration use of the junior name is to be maintained'. We now propose that, for the sake of stability, the name *Achatina jani* De Betta & Martinati, 1855 be conserved by the suppression of the slightly earlier but virtually unused name *A. veneta* Strobel, 1855. To our knowledge, in addition to Bank et al. (2000) the latter name has been used only twice in the recent literature (Eikenboom, 1996 and Falkner, Bank & Proschwitz, 2001). Its adoption would cause considerable and unnecessary confusion.

7. Bank et al. (2000, p. 100) selected a shell of *Cecilioides jani* figured by Giusti (1976, p. 236, fig. 29A) as the 'lectotype' of both *C. jani* and *C. veneta*, supposedly rendering the names objective synonyms. The specimen selected is very probably one of De Betta and Martinati's original syntypes of *Achatina jani*, collected by De Betta and preserved in the De Betta collection in the Museo di Storia Naturale di Verona and is isolated in a glass tube with a label with a red corner stating LECTOTYPE in capital letters. It is not a specimen of Strobel's original material of *veneta*, which consists of a mixture of a number of shells of *C. acicula* and *C. jani* in the Museo di Storia Naturale del Dipartimento di Biologia Evolutiva e Funzionale dell'Università degli Studi di Parma. The lectotype designation is therefore valid for *C. jani* but not for *C. veneta*, and the names *jani* and *veneta* are subjective synonyms.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *veneta* Strobel, 1855, as published in the binomen *Achatina veneta*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *jani* De Betta & Martinati, 1855, as published in the binomen *Achatina jani* and as defined by the lectotype (specimen labelled LECTOTYPE on a label with a red corner in the De Betta collection in the Museo di Storia Naturale di Verona and figured by Giusti, 1976, p. 236, fig. 29A) designated by Bank, Falkner & Gittenberger (2000);
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *veneta* Strobel, 1855, as published in the binomen *Achatina veneta* and as suppressed in (1) above.

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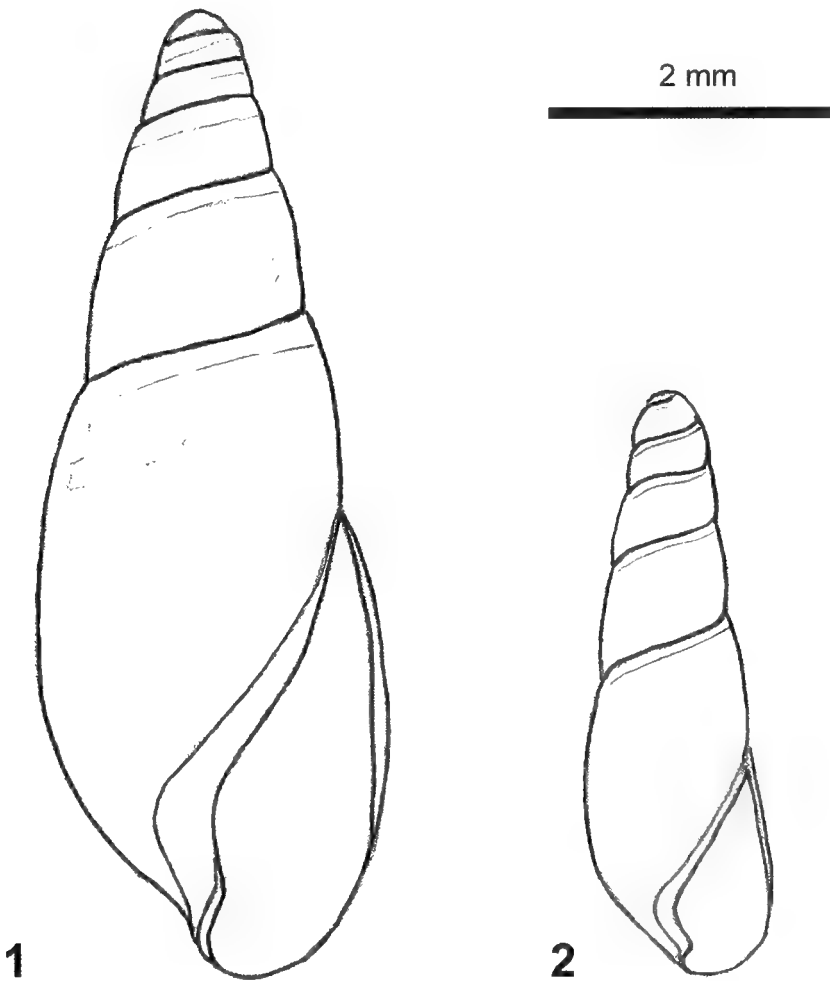
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The lectotype of *Cecilioides janii* (De Betta & Martinati, 1855) (fig. 1) and a shell of *C. acicula* (O.F. Müller, 1774) (fig. 2). Both specimens were collected in the Val di Non, northern Italy, by E. De Betta and published in his 1852 monograph as *Achatina acicula* and *A. aciculoides* respectively; they are kept in the Museo Civico di Storia Naturale di Verona.

**Case 3198*****Heteromesus* Richardson, 1908 (Crustacea, Isopoda): proposed designation of *H. granulatus* Richardson, 1908 as the type species**

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**Abstract.** The purpose of this application is to conserve the accustomed usage of the marine isopod genus *Heteromesus* Richardson, 1908 (family ISCHNOMESIDAE), which currently contains 12 species. In 1962 *Ischnosoma thomsoni* Beddard, 1886 was designated as the type species, but this has the characters of the genus *Haplomesus* Richardson, 1908. It is proposed that *Heteromesus granulatus* Richardson, 1908 should be designated as the type species of *Heteromesus*.

**Keywords.** Nomenclature; taxonomy; Crustacea; Isopoda; ISCHNOMESIDAE; *Heteromesus*; *Haplomesus*; *Heteromesus granulatus*; *Haplomesus thomsoni*; marine.

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1. Sars (1866, p. 115) established the genus *Ischnosoma* for a new species of deep-sea isopod, *I. bispinosum*. Richardson (1908, p. 81) divided the six species then included in *Ischnosoma* among four new genera: *Ischnomesus* (a replacement name for *Ischnosoma* Sars, a junior homonym of the name *Ischnosoma* as used twice in 1829 for genera of fish and beetles), *Haplomesus*, *Heteromesus* and *Rhabdomesus*.

2. The type species of *Ischnomesus* is *Ischnosoma bispinosum* Sars, 1866 (Article 67.8 of the Code), and that of *Haplomesus* is *Ischnosoma quadrispinosus* Sars, 1879 (p. 432) by monotypy. Richardson (1908) included five species in her genus *Heteromesus*: *Ischnosoma thomsoni* Beddard, 1886 (p. 169, fig. 1), *I. spinosum* Beddard, 1886, *I. greeni* Tattersall, 1906 and the two new species *Heteromesus granulatus* (p. 82, figs. 14–18) and *H. spinescens* (p. 83, fig. 19). No type species was selected for *Heteromesus*.

3. In a revision of many crustacean families, Hansen (1916) synonymised *Rhabdomesus* with *Ischnomesus*. Hansen placed *Ischnomesus*, *Haplomesus* and *Heteromesus* in a new family-group taxon, the ISCHNOMESINI (p. 54), which has subsequently been used at family rank. Hansen's diagnoses of these genera (pp. 56, 59 and 66 respectively) are widely accepted today.

4. Birstein (1960, p. 6) transferred *Ischnosoma thomsoni* from *Heteromesus* to *Haplomesus*, and included in the latter genus the two new species *Haplomesus brevispinis* (p. 11, fig. 7) and *Haplomesus cornutus* (p. 12, figs. 8, 9); see also Birstein (1963). Wolff (1962) referred to the type specimen of *Ischnosoma thomsoni* in The Natural History Museum, London, and supported Birstein's placement of this



species in *Haplomesus*. The taxonomic differences between *Haplomesus* and *Heteromesus* given by Richardson (1908) and Hansen (1916) have formed the basis of the keys (Wolff, 1962; Menzies, 1962) to genera and species which are in current use.

5. Twelve species belong to *Heteromesus* as now understood, the most recently described being *H. wolffi* and *H. drachi* Chardy, 1974 (p. 1543, figs. 4, 5 and p. 1546, figs. 6, 7). *Heteromesus* has appeared in other recent works on the taxonomic diversity and ecology of the deep sea (e.g. Menzies, George & Rowe, 1973; Wolff, 1976; Gooday, 1984; Thistle & Wilson, 1987; Kussakin, 1988; Svavarsson, Strömberg & Brattegard, 1993; Svavarsson & Davidsdóttir, 1994; Brandt, 1997).

6. Although Birstein (1960) had transferred *Ischnosoma thomsoni* Beddard, 1886 from *Heteromesus* to *Haplomesus*, a placement supported by Wolff (1962) (see para. 4 above) and by later authors, Menzies (1962, p. 121) designated *I. thomsoni* as the type species of *Heteromesus*. This action effectively made *Heteromesus* a subjective synonym of *Haplomesus* and, if accepted, would leave the 12 species currently thought to belong to *Heteromesus* outside any named genus.

7. No authors have referred to Menzies' (1962) designation of *I. thomsoni* as the type species for *Heteromesus*. His action would require the creation of a new generic name for what is currently accepted as *Heteromesus*. In order to preserve current usage and avoid instability or confusion we propose, under Article 70.2 of the Code, that *I. thomsoni* should be set aside as the type species and be replaced by the originally included species *Heteromesus granulatus* Richardson, 1908. The holotype of *H. granulatus*, from south of Martha's Vineyard, Massachusetts, U.S.A., is specimen No. 38969 in the U.S. National Museum of Natural History, Washington, D.C.

8. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Heteromesus* Richardson, 1908 and to designate *Heteromesus granulatus* Richardson, 1908 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Heteromesus* Richardson, 1908 (gender: masculine), type species by designation in (1) above *Heteromesus granulatus* Richardson, 1908;
- (3) to place on the Official List of Specific Names in Zoology the name *granulatus* Richardson, 1908, as published in the binomen *Heteromesus granulatus* (specific name of the type species of *Heteromesus* Richardson, 1908).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

**Case 3227**

***Geophilus brevilabiatus* Newport, 1845 (currently *Orphnaeus brevilabiatus*) and *Chomatobius brasilianus* Humbert & Saussure, 1870 (currently *O. brasilianus*) (Chilopoda): proposed conservation of the specific names**

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**Abstract.** The purpose of this application is the conservation of the specific names of *Geophilus brevilabiatus* Newport, 1845 (currently *Orphnaeus brevilabiatus*) and *Chomatobius brasilianus* Humbert & Saussure, 1870 (currently *O. brasilianus*) for two widely distributed species of geophilomorph centipedes (family ORYIDAE). Although senior subjective synonyms for these two nominal species have been used only infrequently, the junior names do not fully meet the criteria for protection under Article 23.9 of the Code. *Scolopendra phosphorea* Linnaeus, 1758, a senior synonym of *G. brevilabiatus*, has been used once as a valid name in 1901. There are two senior synonyms of the nominal species *G. brasilianus* — *G. lineatus* and *G. whitei*, both of Newport (1845), but neither has been used as the valid name of the taxon.

**Keywords.** Nomenclature; taxonomy; Chilopoda; Geophilomorpha; ORYIDAE; *Scolopendra phosphorea*; *Orphnaeus brevilabiatus*; *Orphnaeus brasilianus*; *Orphnaeus lineatus*; *Orphnaeus whitei*; geophilomorph centipedes; pantropical.

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1. Linnaeus (1758, p. 638) introduced the name *Scolopendra phosphorea* for a geophilomorph centipede species from 'Asia'. The specific name refers to the animal's ability to glow by putative bioluminescence, which Linnaeus compared to that of fireflies. This light-producing mechanism is known to occur in several geophilomorphs (see Minelli, 1978). The short description provided by Linnaeus indicates that this centipede is clearly a member of the Geophilomorpha as it has 14 antennal articles and 72–76 pairs of legs. These centipedes are now known to possess 27 to 191 pairs of legs (see Minelli, Foddai, Pereira & Lewis, 2000). The number of pairs of legs is always odd but Linnaeus may have omitted to count the last pair, which is usually

quite modified and not obviously leg-like. *Scolopendra phosphorea* was listed by Fabricius (1781, p. 534) and Gmelin (1790, p. 3017). Newport (1845, p. 438) referred to *Geophilus phosphorea* [sic] as 'Geophilidae which I have been unable to identify from imperfect description'. Lucas (1846) listed the species as 'exotique et peu connue' (exotic and little known) and Gervais (1847, p. 328) also regarded Linnaeus's species as 'incomplètement connus'. Indeed, its identity remains difficult to determine.

2. Haase (1887, pp. 111–112) listed *S. phosphorea* Linnaeus, 1770 [sic] as a possible ('?') synonym of *Geophilus brevilabiatus* Newport, 1845 (currently *Orphnaeus brevilabiatus*) on the basis of the original description of *S. phosphorea*, its geographical distribution and the number of pairs of legs of *G. brevilabiatus* known at that time. The very few descriptive details provided by Linnaeus (1758) are not enough to support this synonymy but are at least compatible with it. In particular, the distribution of *Orphnaeus brevilabiatus* (Newport, 1845) is pantropical and includes Borneo, Java, Sumatra, Celebes, Formosa and Madagascar (see Foddai, Pereira & Minelli, 2000). The number of pairs of legs ranges between 67–81 (Attems, 1929, p. 122) including both numbers given by Linnaeus. One of us (D.F.) checked for specimens of *S. phosphorea* in the series of dried centipedes in Linnaeus's collection at the Linnean Society, London, but this species was not present there.

3. Meinert (1870, p. 17) introduced the generic name *Orphnaeus* and included two species: *O. lividus* Meinert, 1870 (p. 19) from Oahu and Nicobar and *O. brasiliensis* Meinert, 1870 (p. 20) from Rio de Janeiro. The generic diagnosis is clear as are the descriptions and illustrations provided for the two species. No type species was fixed for *Orphnaeus* by Meinert (1870).

4. Cook (1896a, p. 34) proposed *Orphnaeus phosphoreus* (Linnaeus) as the type species of *Orphnaeus* Meinert, 1870, disregarding the fact that *phosphoreus* (i.e. *Scolopendra phosphorea* Linnaeus) had not been originally included in *Orphnaeus*. There are three further citations of *O. phosphoreus* as a valid name: Cook (1896b, p. 67; 1896c, pp. 35, 37) and Pocock (1901, p. 463). The latter formally listed *Geophilus brevilabiatus* Newport, 1845 as its junior synonym. Disregarding this synonymy, but following the likely taxonomic implications of Cook's (1896a) designation, Attems (1929, p. 112) also incorrectly listed *O. brevilabiatus* (Newport, 1845) as the type species of *Orphnaeus* and ignored the Linnaean nominal species *S. phosphoreus*.

5. Crabill (1968, p. 109) established a valid type species designation for the nominal genus *Orphnaeus* Meinert, 1870 by selecting *O. lividus* Meinert, 1870 from the two originally included nominal species (Article 67.3 of the Code; see para. 3 above). At the same time he synonymized *O. lividus* Meinert, 1870 with *O. brevilabiatus* (Newport, 1845), which became the valid name for the type species of *Orphnaeus*, thus preserving the taxonomic concept intended by Cook (1896a) and followed by Attems (1929).

6. Despite the priority of *Orphnaeus phosphoreus* (Linnaeus, 1758) over *O. brevilabiatus* (Newport, 1845), the latter name has been consistently used as the valid name for this centipede species by all authors after Pocock (1901). Twenty nine works by 21 authors, encompassing a span of not less than 10 years within the last 50 years, were cited in a comprehensive list provided by Foddai, Pereira & Minelli (2000).

Except for its use by Pocock (1901) *phosphorea* would have been considered a nomen oblitum and the widely used younger name *brevilabiatus* automatically protected under Article 23.9 of the Code. We propose that *brevilabiatus* be conserved and placed on the Official List.

7. Two of the many new species described by Newport (1845) are *Geophilus lineatus* from Honduras and *G. whitei* (both on p. 436) for which no locality was given. According to Crabill (1962, p. 507) both correspond to the species currently known as *Orphnaeus brasilianus* (Humbert & Saussure, 1870, p. 205), originally described as *Chomatobius brasilianus*. We confirm this identification following personal examination (D.F.) of the type material of both of Newport's taxa in the collection of The Natural History Museum, London (*G. lineatus*: the lectotype BM(NH) 200460 designated by Crabill (1962, p. 507); and *G. whitei*: holotype BM(NH) 200486). Crabill (1962) considered the two Newport names to be forgotten (nomina oblita) under Article 23b of the (first, 1961) edition of the Code then in force, because they apparently had not been used for more than 50 years. Mayr (1963, p. 509) supported this interpretation. However, as noted by Crabill himself, both *G. lineatus* and *G. whitei* had also been cited by Attems (1929, pp. 348–9), although as *Geophilomorpha incertae sedis*.

8. The name *Orphnaeus brasilianus* has been used for this taxon by different authors before, as well as after, Crabill's 1962 paper (e.g. by Brölemann (1919, p. 235), Attems (1929, pp. 112–113), Verhoeff (1937, p. 6), Kraus (1957, p. 368), Crabill (1960, pp. 170–171), Mayr (1963, p. 509) and Shear & Peck (1992, pp. 2270, 2272)). A total of 15 citations was given by Foddai, Pereira & Minelli (2000, pp. 112–113).

9. Replacement of the specific name of *Orphnaeus brevilabiatus* by *phosphorea*, or *O. brasilianus* with either *lineatus* or *whitei*, would cause undue confusion in the nomenclature of the ORYIDAE (a group badly affected by nomenclatural problems) without offering any advantage.

10. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  - (a) *phosphorea* Linnaeus, 1758, as published in the binomen *Scolopendra phosphorea*;
  - (b) *lineatus* Newport, 1845, as published in the binomen *Geophilus lineatus*;
  - (c) *whitei* Newport, 1845, as published in the binomen *Geophilus whitei*;
- (2) to place on the Official List of Generic Names in Zoology the name *Orphnaeus* Meinert, 1870 (gender: masculine), type species by subsequent designation by Crabill (1968) *Orphnaeus lividus* Meinert, 1870 (a junior subjective synonym of *Geophilus brevilabiatus* Newport, 1845);
- (3) to place on the Official List of Specific Names in Zoology, the following names:
  - (a) *brevilabiatus* Newport, 1845, as published in the binomen *Geophilus brevilabiatus* (senior subjective synonym of *Orphnaeus lividus* Meinert, 1870, the type species of *Orphnaeus* Meinert, 1870);
  - (b) *brasilianus* Humbert & Saussure, 1870, as published in the binomen *Chomatobius brasilianus*;

(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:

- (a) *phosphorea* Linnaeus, 1758, as published in the binomen *Scolopendra phosphorea* and as suppressed in (1)(a) above;
- (b) *lineatus* Newport, 1845, as published in the binomen *Geophilus lineatus* and as suppressed in (1)(b) above;
- (c) *whitei* Newport, 1845, as published in the binomen *Geophilus whitei* and as suppressed in (1)(c) above.

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**Case 3181*****Cryptotermes dudleyi* Banks, 1918 (Insecta, Isoptera): proposed precedence over *Calotermes (Cryptotermes) jacobsoni* Holmgren, 1913**

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**Abstract.** The purpose of this application is to conserve the usage of the specific name of *Cryptotermes dudleyi* Banks, 1918 for an important economic termite pest species widely distributed by man. The senior specific name, *Calotermes (Cryptotermes) jacobsoni* Holmgren, 1913, has not been used since 1934 while the junior name has been universally used in an extensive biological, systematic and pest control literature since at least 1949. It is proposed that the specific name *Cryptotermes dudleyi* be given precedence over *Calotermes jacobsoni*.

**Keywords.** Nomenclature; taxonomy; Isoptera; KALOTERMITIDAE; *Cryptotermes*; *Cryptotermes dudleyi*; *Cryptotermes jacobsoni*; termites.

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1. Holmgren (1913a, p. 48) described the species *Calotermes (Cryptotermes) jacobsoni* from Java in a general study of termites from the Oriental region; the date of publication of 23 May is given on p. 276 of the paper. The following month, on 30 June, Holmgren (1913b, p. 14) repeated the description and referred to it as a new species, even though the name had been made available in his earlier article.

2. Banks (1918, p. 660, pl. 51, fig. 3) described and illustrated the kalotermitid species *Cryptotermes dudleyi* in a faunal revision of the termites of Panama and British Guiana.

3. From 1918 through 1934 the specific names *C. jacobsoni* and *C. dudleyi* were both in use. In 1934 Kemner (p. 49) made the last mention of *C. jacobsoni* as a valid species in a study of termites from Java and Celebes.

4. Snyder (1949, p. 41), in a general catalog and classification of the termites of the world, recognized that the species proposed by Banks (1918) and Holmgren (1913a, b) were conspecific, along with a few more junior species which had been established by other authors. Snyder brought the names together for the first time but, without explanation, chose the junior name, *C. dudleyi*, as the valid name for the species; the reason may have been the growing usage of this name in the termite literature in comparison with *C. jacobsoni*.



5. Since the recognition of the synonymy in 1949, all subsequent authors have followed Snyder's precedence and used the name *C. dudleyi* for this important and widely distributed economic pest species. All modern catalogs and revisions of the genus have either listed *C. jacobsoni* as a junior synonym of *C. dudleyi* despite its precedence (e.g., Araujo, 1977, pp. 13–14; Constantino, 1998, pp. 143–144) or overlooked the senior name altogether (e.g., Chhotani, 1970; Bacchus, 1987; Watson, Miller & Abbey, 1998). The name *C. dudleyi* has been widely used during the past 53 years in the literature of economic entomology, termite systematics and biology, and pest control (e.g., Harris, 1961; Krishna, 1961; Snyder & Francia, 1962; Gay, 1969; Araujo, 1970; Bess, 1970; Roonwal, 1970; Bose, 1984; Huang, Li & Zhu, 1989; Roonwal & Chhotani, 1989).

6. To use the name *C. jacobsoni* in place of its junior synonym *C. dudleyi* would bring about a change in a widely used name for a regularly encountered economic pest. The resurrection of the long forgotten name *C. jacobsoni* would unnecessarily create confusion and loss of continuity in a growing economic and agricultural literature and would promote nomenclatural instability. Presently preparing a new catalog and classification of the world's termites, we propose that the name *C. dudleyi* should be given precedence over *C. jacobsoni*, although the latter name would remain available for any isopterist who may in the future consider the two to represent separate species.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *dudleyi* Banks, 1918, as published in the binomen *Cryptotermes dudleyi*, precedence over the name *jacobsoni* Holmgren, 1913, as published in the binomen *Calotermes (Cryptotermes) jacobsoni*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *dudleyi* Banks, 1918, as published in the binomen *Cryptotermes dudleyi*, with the endorsement that it is to be given precedence over the name *jacobsoni* Holmgren, 1913, as published in the binomen *Calotermes (Cryptotermes) jacobsoni*, whenever the two are considered to be synonyms;
  - (b) *jacobsoni* Holmgren, 1913, as published in the binomen *Calotermes (Cryptotermes) jacobsoni*, with the endorsement that it is not to be given priority over the name *dudleyi* Banks, 1918, as published in the binomen *Cryptotermes dudleyi*, whenever the two are considered to be synonyms.

### Acknowledgements

We are grateful to Valerie Krishna, Charles D. Michener and Molly G. Rightmyer for comments on the petition. This work is supported by a National Science Foundation grant to catalog the termites of the world (NSF DEB-9870097 to K. Krishna and D. Grimaldi).

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## Case 3202

***Podalgus* Burmeister, 1847 and *Philoscaptus* Brèthes, 1919 (Insecta, Coleoptera): proposed conservation by the designation of *Podalgus cuniculus* Burmeister, 1847 as the type species of *Podalgus***

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**Abstract.** The type species of *Podalgus* Burmeister, 1847 (SCARABAEIDAE, DYNASTINAE) is formally *P. bonariensis* Burmeister, 1847 but this fixation has been rejected or ignored by virtually all authors. The purpose of this application is to accept the designation by Arrow (1908) of *P. cuniculus* Burmeister, 1847, thereby maintaining the current usage of *Podalgus* for an abundant small rhinoceros beetle from the northern Afrotropics, North Africa, Arabia and west Asia to northern India, and *Philoscaptus* Brèthes, 1919 (type species *Podalgus bonariensis*, by monotypy) for South American species.

**Keywords.** Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; DYNASTINAE; *Podalgus*; *Philoscaptus*; *Podalgus cuniculus*; *Philoscaptus bonariensis*; rhinoceros beetles; Africa; Asia; South America.

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1. Dejean (1833, p. 152) published the nomen nudum *Podalgus cuniculus* for an undescribed species from Senegal. Burmeister (1847) published the first description for both the genus (p. 117) and species (p. 119), rendering the names available. *Podalgus cuniculus* refers to a common and widespread small rhinoceros beetle (SCARABAEIDAE, DYNASTINAE) from Africa, Arabia and western Asia to northern India. Burmeister initially included some American species in *Podalgus*, the first listed being *P. bonariensis* Burmeister, 1847 (p. 118) from Argentina. He did not designate a type species for the genus.

2. Later in the same book, Burmeister (1847, p. 542) transferred some of the American species from *Podalgus* into his new genus *Ligyris*. Lacordaire (1856, p. 408) removed the remaining American species from *Podalgus* and placed them in *Scaptophilus* Burmeister, 1847, *Bothynus* Hope, 1837, and in a 'genre nouveau' to which he did not give a name. The last comprised *P. bonariensis*, *P. obesus* Burmeister, 1847 and three other species. As a result, only the Afroasian species *P. cuniculus* remained in *Podalgus*.

3. Despite this, Reiche (1859, p. 10) designated *Podalgus bonariensis* from Argentina as the type species of *Podalgus*, and for *P. cuniculus* he introduced the new monotypic genus *Vertumnus* (however, this generic name is twice preoccupied). This taxonomic arrangement was followed only by Gemminger & Harold (1869), Fairmaire (1895; see para. 4 below) and, as far as *P. bonariensis* is concerned, by Bruch (1911; but not 1915 – see para. 5 below).

4. Unaware of the nominal species *Podalgus cuniculus*, Semenow (1889) described the same taxon under the name *Crator infantulus* (p. 207), while introducing the new genus *Crator* (p. 206). Fairmaire (1895) synonymized *Crator* with *Vertumnus* Reiche, 1859 and used the latter name, unaware that it is a junior homonym. After Reitter (1899, p. 38) had noted the homonymy of *Vertumnus* Reiche and adopted *Crator* instead, this name was used occasionally until the end of the 1950s, mostly by authors working on the northern African fauna. To my knowledge the name *Crator* has been used only in the works by Winkler (1929), Peyerimhoff (1931), Zavattari (1934), Normand (1936), Mateu Sanpere (1950), Kocher & Reymond (1954), Kocher (1958) and Petrovitz (1958).

5. Arrow (1908, p. 341) transferred *Podalgus bonariensis* to the genus *Ligyris* Burmeister, 1847 (which was followed by Bruch, 1915), and designated *P. cuniculus* as the type species of *Podalgus*, in accord with the early taxonomic history (see paras. 1 and 2 above) of the two genera. Arrow's type species designation was accepted by Paulian (1954), Medvedev (1960), Ferreira (1966), Endrödi (1969b, 1985) and Nikolaev (1987), and was independently proposed by Prell (1936). *Podalgus* is currently the only generic name in use for *P. cuniculus* (see above; also Arrow, 1937, Baraud, 1985, and a number of regional publications on the fauna of Israel, Arabia and North Africa, a list of which is held by the Commission Secretariat).

6. Brèthes (1919, p. 602) introduced the name *Philoscaptus* for Lacordaire's (1856) unnamed new genus (see para. 2 above). *Podalgus bonariensis* is the type by monotypy because only this species was definitely included in the genus; two other nominal species, *Podalgus obesus* Burmeister (= *Aphonus castaneus* (Melsheimer)) and *Heteronychus globosus* Burmeister (currently *Eutheola bidentata* (Burmeister)), were only tentatively included. *Philoscaptus* is currently treated as a distinct genus which includes two species (Endrödi, 1969a; Dechambre, 1979), and has been included in standard catalogues (Arrow, 1937 and Blackwelder, 1944).

7. The names *Podalgus* Burmeister, 1847 and *Philoscaptus* Brèthes, 1919 have been in use in their current senses since 1908 (Arrow's type species designation) and 1919 (original publication) respectively. Acceptance of Reiche's (1859) designation of *Podalgus bonariensis* as the type species of *Podalgus* would mean the transfer of the name *Podalgus* to the New World genus currently known as *Philoscaptus*, loss of the latter name as a junior objective synonym of *Podalgus*, and resurrection of the disused name *Crator* Semenow, 1889 for the Afroasian taxon currently known as *Podalgus*. As with any transfer of a name between taxa this would inevitably cause considerable and unnecessary confusion.

8. I propose that the type designation for *Podalgus* made by Reiche (1859) be set aside and that *P. cuniculus* Burmeister, 1847 be confirmed as the type species following the designation by Arrow (1908). This will allow the accustomed usages of the names *Podalgus* and *Philoscaptus* for Afroasian and American genera respectively to be maintained.

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all fixations of type species for the nominal genus *Podalgus* Burmeister, 1847 prior to the designation by Arrow (1908) of *Podalgus cuniculus* Burmeister, 1847;

- (2) to place on the Official List of Generic Names in Zoology the following names:
- (a) *Podalgus* Burmeister, 1847 (gender: masculine), type species by subsequent designation by Arrow (1908) *Podalgus cuniculus* Burmeister, 1847, as ruled in (1) above;
  - (b) *Philoscaptus* Brèthes, 1919 (gender: masculine), type species by monotypy *Podalgus bonariensis* Burmeister, 1847;
- (3) to place on the Official List of Specific Names in Zoology the following names:
- (a) *cuniculus* Burmeister, 1847, as published in the binomen *Podalgus cuniculus* (specific name of the type species of *Podalgus* Burmeister, 1847);
  - (b) *bonariensis* Burmeister, 1847, as published in the binomen *Podalgus bonariensis* (specific name of the type species of *Philoscaptus* Brèthes, 1919).

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**Case 3237*****Leucopelaea albescens* Bates, 1891 (Insecta, Coleoptera): proposed validation of the lectotype designation**

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**Abstract.** The purpose of this application is to validate the lectotype designation of *Leucopelaea albescens* Bates, 1891 under Article 86.1.2 of the Code. The nominal species has very recently been considered a junior synonym of *Platycoelia lutescens* Blanchard, 1851, the name for a scarab beetle (family SCARABAEIDAE) from the Andes in Ecuador, Peru and southern Colombia. The lectotype designation was made under the provisions of the third (1985) edition of the Code in a paper that was accepted for publication in November 1999. However, the paper was not published until May 2000, after the fourth (1999) edition of the Code had come into operation. The lectotype designation was made without an express statement of its taxonomic purpose and is invalid under Article 74.7.3 of the fourth edition of the Code.

**Keywords.** Nomenclature; taxonomy; Coleoptera; SCARABAEIDAE; *Leucopelaea*; *Leucopelaea albescens*; *Platycoelia lutescens*; scarab beetle; Andes Mountains; South America.

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1. Smith & Paucar (2000, pp. 408–409) designated a lectotype for *Leucopelaea albescens* Bates, 1891 (p. 30, pl. facing p. 31) and for the first time considered the nominal species to be a junior synonym of *Platycoelia lutescens* Blanchard, 1851 (p. 227) (family SCARABAEIDAE), a scarab beetle that is used as a food source by the people of the Ecuadorian Highlands, South America. The paper was submitted on 12 August 1999 and accepted for publication on 23 November 1999. These dates were explicitly stated in Smith & Paucar (2000, p. 414).

2. The lectotype designation of *Leucopelaea albescens* was proposed under the provisions of the third (1985) edition of the Code that was in operation at the time the paper was written and before the fourth (1999) edition of the Code came into force on 1 January 2000. As a result, the paper did not contain an express statement of the taxonomic purpose of the lectotype designation (see Article 74.7.3 of the fourth edition of the Code).

3. Article 86.1.2 of the Code states that ‘if an author submits for publication before 1 January 2000 a work containing names and nomenclatural acts proposed under the provisions of the third (1985) edition of the Code which was then in force, but the work is not published until after 31 December 1999, the names and acts are not to be set aside on the grounds that they do not comply with the changed provisions of the fourth edition. The Commission should be asked to validate the names or acts (and is empowered to do so without giving advance notice)’.

4. The International Commission on Zoological Nomenclature is accordingly asked:

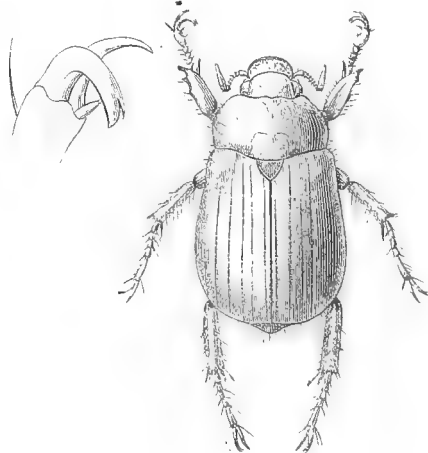
- (1) to validate the lectotype designation for *Leucopelaea albescens* Bates, 1891 by Smith & Paucar (2000) under Article 86.1.2 of the Code;
- (2) to place on the Official List of Generic Names in Zoology the name *Leucopelaea* Bates, 1891 (gender: feminine), type species by monotypy *Leucopelaea albescens* Bates, 1891;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *albescens* Bates, 1891, as published in the binomen *Leucopelaea albescens* and as defined by the lectotype designated by Smith & Paucar (2000) and validated by the Commission in (1) above (specific name of the type species of *Leucopelaea* Bates, 1891 and a junior synonym of *Platycoelia lutescens* Blanchard, 1851);
  - (b) *lutescens* Blanchard, 1851, as published in the binomen *Platycoelia lutescens* (senior synonym of *Leucopelaea albescens* Bates, 1891, the type species of *Leucopelaea* Bates, 1891).

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).



The illustration of *Leucopelaea albescens* that accompanied the original description by Bates (1891). Dorsal habitus and close-up of the anterior claw of the male. Body length 22 mm.



**Case 3207****STAPHYLINIDAE Latreille, 1804 (Insecta, Coleoptera): proposed conservation of 65 specific names**

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**Abstract.** The purpose of this application is the conservation of 65 specific names that have been in use for many years for rove beetles (family STAPHYLINIDAE), but which were junior primary homonyms when published. The species are now placed in several different genera and none of the species denoted by the homonyms has been considered congeneric since 1899. This case is submitted to the Commission in accord with Article 23.9.5 of the Code where both senior and junior homonyms are in current use, or in accord with Article 23.9.3 where the senior and junior homonyms are not both in current use because the senior homonyms are treated as junior synonyms and the junior homonyms have not been used in 25 works in the preceding 50 years.

**Keywords.** Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; rove beetles.

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1. The current paper submits 65 cases of primary homonymy in the rove beetles (family STAPHYLINIDAE) for action under the Commission's plenary power to conserve the existing usage of the junior homonyms. This would allow the greatest stability in the naming of these staphylinid taxa. In 35 cases, both the senior and junior primary homonyms are in current use, but in none of these cases are the taxa considered to be congeneric (Herman, 2001). Article 23.9.5 of the Code states that even though 'the names apply to taxa not considered congeneric after 1899, an author must not automatically replace the junior homonym' and 'the case should be referred to the Commission'. As a result, the prevailing usage of the junior names has been retained in Herman (2001), as directed by Articles 23.9.5 and 82. In a further 27 cases, the situation is similar in that none of the taxa is considered congeneric (see Herman, 2001). In these cases the senior primary homonyms are not in current use as they are treated as junior synonyms (Article 23.9.1.1), but the junior homonyms have not been used in 25 works in the preceding 50 years (Article 23.9.1.2) and the matter is referred to the Commission under Article 23.9.3.

2. The senior and junior homonyms are presented in the form of a table (Table 1). Reference should be made to Herman (2001) for further bibliographic and nomenclatural detail. In most cases the junior name was established after, often long after, the senior name was moved from the genus in which the names were homonyms. In most cases the junior homonym is from a non-European region and the names have been cited only rarely.

3. In three cases, Article 23.9.1 of the Code applies and I propose that the use of the junior homonyms should be maintained under Article 23.9.2 (Table 2).

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the specific names in column 2 of Table 1, as originally published in binomina with the generic names in column 5, are not invalid by reason of being junior primary homonyms of the specific names in column 4;
- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) the specific names in column 4, as originally published in binomina with the genus names in column 5;
  - (b) the specific names in column 2, as originally published in binomina with generic names in column 5, ruled in (1) above to be not invalid by reason of being junior primary homonyms of the names in column 4.

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**Table 1.** 62 specific names (junior primary homonyms) that are proposed for conservation, with their senior primary homonyms and other information**KEY:**

Names are arranged in alphabetical order within subfamilies and the numbers applied to them have relevance only within the table.

\* - the species denoted by the homonyms have not been considered congeneric since 1899.

s.h. - senior homonym.

j.h. - junior homonym.

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
<b>1</b>	<b>Subfamily OMALINAE</b> <i>Mannerheimia</i> <i>brevipennis</i> (Motschulsky, 1860, p. 545)	Palearctic	<i>Micralymna brevipenne</i> (Gyllenhal, 1810, p. 234)	<i>Omaliium</i> Gravenhorst, 1802	# s.h. = j.s. of <i>Micralymna</i> <i>marinum</i> (Storm, 1783) *	Article 23.9.3
<b>2</b>	<i>Omaliotomimus robustus</i> (Broun, 1911, p. 96)	Chatham Islands	<i>Eusphalerum robustum</i> (Heer, 1839, p. 179)	<i>Omaliium</i> Gravenhorst, 1802	*	Article 23.9.5
<b>3</b>	<i>Onaltopsis rufa</i> (Sachse, 1852, p. 148)	South Africa	<i>Acidoita rufa</i> (Gravenhorst, 1802, p. 115)	<i>Omaliium</i> Gravenhorst, 1802	# s.h. = j.s. of <i>Acidoita</i> <i>crenata</i> (Fabricius, 1793) *	Article 23.9.3
<b>4</b>	<i>Omaliium crassicornie</i> Lea, 1906 (p. 212)	Australia	<i>Phyllodrepa crassicornis</i> (Mathews, 1863, p. 8650)	<i>Omaliium</i> Gravenhorst, 1802	# s.h. = j.s. of <i>Phyllodrepa</i> <i>salicis</i> (Gyllenhal, 1810) *	Article 23.9.3
<b>5</b>	<i>Omaliium marginatum</i> Cameron, 1941 (p. 58)	Kashmir	1. <i>Eusphalerum</i> <i>marginatum</i> (Say, 1832, p. 50) 2. <i>Olophrum</i> <i>marginatum</i> (Kirby, 1837, p. 89) <i>Phyllodrepa nigra</i> (Gravenhorst, 1806, p. 212)	<i>Omaliium</i> Gravenhorst, 1802	1. * 2. = j.s. of <i>O. consimile</i> (Gyllenhal, 1810) *	Article 23.9.5
<b>6</b>	<i>Omaliium nigrum</i> Coiffait, 1982 (p. 151)	Nepal	<i>Phyllodrepa nigra</i> (Gravenhorst, 1806, p. 212)	<i>Omaliium</i> Gravenhorst, 1802	*	Article 23.9.5
<b>7</b>	<i>Phyllodrepa atra</i> (Casey, 1894, p. 420)	North America	<i>Eusphalerum atrum</i> (Heer, 1839, p. 178)	<i>Omaliium</i> Gravenhorst, 1802	*	Article 23.9.5
<b>8</b>	<i>Pycnoglypta</i> <i>denticollis</i> (Sharp, 1889, p. 475)	Japan	<i>Megarthrus denticollis</i> (Beck, 1817, p. 26)	<i>Omaliium</i> Gravenhorst, 1802	*	Article 23.9.5

Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
9	<i>Xylodromus concinnus</i> (Marsham, 1802, p. 510)	Widespread in Europe and elsewhere	<i>Philonthus concinnus</i> (Gravenhorst, 1802, p. 21)	<i>Staphylinus</i> Linnaeus, 1758	Since 1954, j.h. has been cited as valid in at least 29 publications by 27 authors *	Article 23.9.5
10	<b>Subfamily OXYPORINAE</b> <i>Oxyporus</i> <i>melanocephalus</i> Kirshenblat, 1938 (p. 529)	Eastern Russia	<i>Tachyporus</i> <i>melanocephalus</i> (Fabricius, 1793, p. 534)	<i>Oxyporus</i> Fabricius, 1775	# s.h. = j.s. of <i>Tachyporus</i> <i>chrysomelius</i> (Linnaeus, 1758) *	Article 23.9.3
11	<b>Subfamily OXYTELINAE</b> <i>Anotylus cornutus</i> (Bernhauer, 1936a, p. 86)	Philippines	<i>Platystethus cornutus</i> (Gravenhorst, 1802, p. 109)	<i>Oxytelus</i> Gravenhorst, 1802	*	Article 23.9.5
12	<i>Bledius atricapillus</i> (Germar, 1825, p. 4)	Palaearctic	<i>Oxytelus atricapillus</i> Nicolaï, 1822 (p. 40)	<i>Oxytelus</i> Gravenhorst, 1802	* s.h. = nomen dubium, cited only once. j.h. = cited as valid at least 22 times by 14 authors in the last 50 years *	Article 23.9.3
13	<i>Bledius bicornis</i> (Germar, 1823, p. 15)	Palaearctic	<i>Piestus bicornis</i> (Olivier, 1811, p. 615)	<i>Oxytelus</i> Gravenhorst, 1802	*	Article 23.9.5
14	<i>Carpelinius parvulus</i> (Mulsant & Rey, 1861, p. 175)	Europe & North Africa	<i>Anotylus parvulus</i> (Melsheimer, 1844, p. 41)	<i>Oxytelus</i> Gravenhorst, 1802	# s.h. = j.s. of <i>Anotylus</i> <i>exiguus</i> (Erichson, 1840) *	Article 23.9.3
15	<b>Subfamily STAPHYLININAE</b> <i>Belonuchus</i> <i>haemorrhoidalis</i> (Fabricius, 1801, p. 596)	S. America	1. <i>Staphylinus</i> <i>haemorrhoidalis</i> Gmelin, 1790 (p. 2036) 2. <i>Staphylinus</i> <i>haemorrhoidalis</i> Olivier, 1795 (genus 42, p. 11)	<i>Staphylinus</i> Linnaeus, 1758	1. = nomen dubium. 2. was replaced by <i>S.</i> <i>gmellini</i> Blackwelder, 1944 *	Article 23.9.3

Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
16	<i>Belonuchus terminalis</i> (Laporte, 1840, p. 176)	Brazil	<i>Oligotergus terminalis</i> (Erichson, 1839, p. 396)	<i>Staphylinus</i> Linnaeus, 1758	*	Article 23.9.5
17	<i>Bisnius nitidulus</i> (Gravenhorst, 1802, p. 27)	Palaeartic	<i>Tachyporus nitidulus</i> (Fabricius, 1781, p. 337)	<i>Staphylinus</i> Linnaeus, 1758	j.h. cited as valid in at least 28 publications by 24 authors in last 50 years *	Article 23.9.5
18	<i>Cafius litoreus</i> (Broun, 1880, p. 108)	New Zealand	<i>Sepedophilus litoreus</i> (Linnaeus, 1758, p. 422)	<i>Staphylinus</i> Linnaeus, 1758	*	Article 23.9.5
19	<i>Cafius minimus</i> (Sharp, 1874, p. 38)	Japan	<i>Gabronthus minimus</i> (Rottenberg, 1870, p. 30)	<i>Philonthus</i> Stephens, 1829	# s.h. = j.s. of <i>Gabronthus</i> <i>maritimus</i> (Motschulsky, 1858) * 1. = nomen dubium. 2. paper in preparation. 3. = j.s. of <i>Astenus</i> <i>gracilis</i> (Paykull, 1789) *	Article 23.9.3
20	<i>Cheilocolpus</i> <i>angustatus</i> (Solier, 1849, p. 320)	Chile	1. <i>Staphylinus</i> <i>angustatus</i> Schrank, 1781 (p. 233) 2. <i>Rugilus angustatus</i> (Geoffroy, 1785, p. 172) 3. <i>Astenus angustatus</i> (Paykull, 1789, p. 36)	<i>Staphylinus</i> Linnaeus, 1758	*	Article 23.9.3
21	<i>Diatrechus</i> <i>huemorrhoidalis</i> (Brancsik, 1893, p. 220)	Madagascar	<i>Hesperus</i> <i>huemorrhoidalis</i> (MacLeay, 1873, p. 140)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
22	<i>Endeius punctipennis</i> (Solier, 1849, p. 319)	Chile & Argentina	<i>Othius punctipennis</i> (Lacordaire, 1835, p. 409)	<i>Staphylinus</i> Linnaeus, 1758	# s.h. = j.s. of <i>Othius</i> <i>laeviusculus</i> (Stephens, 1833) *	Article 23.9.3
23	<i>Gabrieus montanus</i> (Bernhauer, 1934, p. 237)	Congo	<i>Quedius montanus</i> (Heer, 1839, p. 277)	<i>Philonthus</i> Stephens, 1829	# s.h. = j.s. of <i>Quedius</i> <i>dubius</i> (Heer, 1839) *	Article 23.9.3



Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
24	<i>Gabrieus picipennis</i> (Mäklin, 1852, p. 313)	North America	<i>Quedius picipennis</i> (Heer, 1839, p. 279)	<i>Philonthus</i> Stephens, 1829	s.h. = cited 1907–1916 as j.s. of <i>Quedius fulvicollis</i> Stephens, 1833 *	Article 23.9.5
25	<i>Gabrieus propinquus</i> (Cameron, 1933a, p. 389)	Indonesia	<i>Paederonimus</i> <i>propinquus</i> (Sharp, 1876, p. 176)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
26	<i>Gabrieus punctatellus</i> (Horn, 1884, p. 215)	North America	<i>Quedius punctatellus</i> (Heer, 1839, p. 275)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
27	<i>Gabrieus viduus</i> (Cameron, 1933b, p. 346)	Indonesia & Malaysia	<i>Syngnetus viduus</i> (Erichson, 1840, p. 506)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
28	<i>Hesperus gratus</i> (Cameron, 1943, p. 342)	New Guinea	<i>Neobisnius gratus</i> (LeConte, 1863, p. 38)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
29	<i>Hesperus rufipennis</i> (Gravenhorst, 1802, p. 40)	Europe & North Africa	<i>Belonuchus rufipennis</i> (Fabricius, 1801, p. 597)	<i>Staphylinus</i> Linnaeus, 1758	j.h. = cited as valid in at least 17 publications by 14 authors in last 50 years * *	Article 23.9.5
30	<i>Leptacinus debilis</i> (Cameron, 1950 p. 28)	Congo	<i>Sonoleptus debilis</i> (Erichson, 1839, p. 336)	<i>Leptacinus</i> Erichson, 1839	*	Article 23.9.5
31	<i>Nordus testaceus</i> (Fabricius, 1801, p. 595)	Central & northern South America	<i>Lobrathium testaceum</i> (Paykull, 1789, p. 28)	<i>Staphylinus</i> Linnaeus, 1758	# s.h. = j.s. of <i>Lobrathium</i> <i>multipunctum</i> (Gravenhorst, 1802) * (paper in preparation)	Article 23.9.3
32	<i>Paederonimus</i> <i>cognatus</i> (Sharp, 1876, p. 169)	Brazil	<i>Philonthus cognatus</i> Stephens, 1832 (p. 229)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
33	<i>Philonthus aberrans</i> (Cameron, 1932 p. 111)	India	<i>Paederonimus aberrans</i> (Sharp, 1876, p. 174)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5

Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
34	<i>Philonthus australis</i> Cameron, 1943 (p. 342)	Australia	<i>Hesperus australis</i> (MacLeay, 1873, p. 139)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
35	<i>Philonthus bicolor</i> Fauvel, 1903 (p. 240)	Cameroon	<i>Quedius bicolor</i> (Redtenbacher, 1849, p. 710)	<i>Philonthus</i> Stephens, 1829	# s.h. = j.s. of <i>Quedius</i> <i>fulgidus</i> (Fabricius, 1793) *	Article 23.9.3
36	<i>Philonthus binotatus</i> (Gravenhorst, 1806, p. 73)	Palaeartic	<i>Heterothops binotatus</i> • (Gravenhorst, 1802, p. 28)	<i>Staphylinus</i> Linnaeus, 1758	j.h. = cited as valid by 20 authors in 28 publications in last 50 years *	Article 23.9.5
37	<i>Philonthus humilis</i> Cameron, 1932 (p. 106)	India	<i>Neobisnius humilis</i> (Erichson, 1840, p. 512)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
38	<i>Philonthus hybridus</i> Cameron, 1930a (p. 163)	Borneo	<i>Quedius hybridus</i> (Erichson, 1840, p. 432)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
39	<i>Philonthus nigriceps</i> Eppelsheim, 1885 (p. 112)	Ghana	<i>Erichsonius nigriceps</i> (Gemminger & Harold, 1868, p. 590)	<i>Philonthus</i> Stephens, 1829	# s.h. = j.s. of <i>Erichsonius</i> <i>cinerascens</i> (Gravenhorst, 1802) *	Article 23.9.3
40	<i>Philonthus rivularis</i> Cameron, 1932 (p. 138)	India	<i>Erichsonius rivularis</i> (Kiesenwetter, 1858, p. 61)	<i>Philonthus</i> Stephens, 1829	*	Article 23.9.5
41	<i>Philonthus thoracicus</i> (Gravenhorst, 1802, p. 170)	North America	1. <i>Paederidus thoracicus</i> (Geoffroy, 1785, p. 170) 2. <i>Staphylinus</i> <i>thoracicus</i> Villers, 1789 (p. 420)	<i>Staphylinus</i> Linnaeus, 1758	# 1. = j.s. of <i>Paederidus</i> <i>rubrothoracicus</i> (Goeze, 1777). 2. = nomen dubium not cited after original publication *	Article 23.9.3

Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
42	<i>Platydracus biguttatus</i> (Bernhauer, 1937, p. 304)	Uganda	<i>Stenus biguttatus</i> (Linnaeus, 1758, p. 422)	<i>Staphylinus</i> Linnaeus, 1758	*	Article 23.9.5
43	<i>Platydracus purpurascens</i> (Cameron, 1920, p. 217)	India	<i>Staphylinus purpurascens</i> Nordmann, 1837 (p. 47)	<i>Staphylinus</i> Linnaeus, 1758	*	Article 23.9.5
44	<i>Platydracus tomentosus</i> (Gravenhorst, 1802, p. 161)	North America	<i>Sepedophilus tomentosus</i> (Rossi, 1792, p. 97)	<i>Staphylinus</i> Linnaeus, 1758	#	Article 23.9.3 s.h. = j.s. of <i>Sepedophilus littoreus</i> (Linnaeus, 1758) *
45	<i>Quedius hirtipennis</i> Broun, 1915 (p. 279)	New Zealand	<i>Philonthus hirtipennis</i> (Stephens, 1832, p. 221)	<i>Quedius</i> Stephens, 1829	# s.h. = j.s. of <i>Philonthus albipes</i> (Gravenhorst, 1802) *	Article 23.9.3
46	<i>Quedius unicolor</i> Kiesenwetter, 1847 (p. 75)	Europe	<i>Philonthus unicolor</i> (Stephens, 1832, p. 224)	<i>Quedius</i> Stephens, 1829	s.h. = j.s. of <i>Philonthus varians</i> (Paykull, 1789), but s.h. cited as valid in 1957 & 1975. j.h. cited as valid in 25 publications by 20 authors in last 50 years *	Article 23.9.3
47	<i>Staphylinus affinis</i> Solsky, 1868 (p. 126)	Mexico & Guatemala	<i>Atrecus affinis</i> (Paykull, 1789, p. 24)	<i>Staphylinus</i> Linnaeus, 1758	*	Article 23.9.5
48	<i>Staphylinus auricomus</i> Cameron, 1929 (p. 65)	Congo	<i>Glenus auricomus</i> (Brullé, 1842, pl. 5, fig. 6)	<i>Staphylinus</i> Linnaeus, 1758	# s.h. = j.s. of <i>Glenus chrysis</i> (Gravenhorst, 1806) *	Article 23.9.3
49	<i>Staphylinus chrysis</i> Bernhauer, 1936b (p. 24)	Congo	<i>Glenus chrysis</i> (Gravenhorst, 1806, p. 124)	<i>Staphylinus</i> Linnaeus, 1758	*	Article 23.9.5

Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
50	<i>Staphylinus dimidiatus</i> Laporte, 1835 (p. 115)	South Africa	1. <i>Philonthus dimidiatus</i> (Sahlberg, 1830, p. 326) 2. <i>Philonthus dimidiatus</i> (Say, 1830, p. 37) 3. <i>Philonthus dimidiatus</i> (Lacordaire, 1835, p. 402)	<i>Staphylinus</i> Linnaeus, 1758	1. has been cited as valid since 1899, but has been considered a j.s. of <i>P. caucasicus</i> Nordmann, 1837 since at least 1868. * 2. is a j.s. of <i>P. sericans</i> (Gravenhorst, 1802). # * 3. is a j.s. of <i>P. quisquiliarius</i> (Gyllenhal, 1810). # *	Article 23.9.3
51	<i>Staphylinus marginatus</i> Cameron, 1944 (p. 11)	India	1. <i>Philonthus marginatus</i> (Müller, 1764, p. 23) 2. <i>Philonthus marginatus</i> (Ström, 1768, p. 332) 3. <i>Philonthus marginatus</i> (Fabricius, 1775, p. 226) 4. <i>Tachinus marginatus</i> (Geoffroy, 1785, p. 169)	<i>Staphylinus</i> Linnaeus, 1758	1. is a primary j.h. of 2. Only 1. is currently a valid name. 2. & 3. are j.s. of 1. 4. is a j.s. of <i>Tachinus marginellus</i> (Fabricius, 1781) * Article 23.9.5	Article 23.9.5
52	<i>Staphylinus rufipennis</i> Cameron, 1930b (p. 156)	Malaysia & Indonesia	1. <i>Belonuchus rufipennis</i> (Fabricius, 1801, p. 597) 2. <i>Hesperus rufipennis</i> (Gravenhorst, 1802, p. 40) 3. <i>Philonthus rufipennis</i> (Solier, 1849, p. 317)	<i>Staphylinus</i> Linnaeus, 1758	1. & 2. are currently valid (see 29 above). 3. = j.s. of <i>Philonthus hepaticus</i> Erichson, 1840 ■	Article 23.9.5

Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
53	<i>Xantholinus minutus</i> Coffiat, 1962 (p. 73)	Algeria	<i>Leptacinus minutus</i> (Lacordaire, 1835, p. 417)	<i>Xantholinus</i> Dejean, 1821	# s.h.=j.s. of <i>Leptacinus</i> <i>pusillus</i> (Stephens, 1833) *	Article 23.9.3
54	<i>Xantholinus piceus</i> Cameron, 1926 (p. 345)	India & Nepal	<i>Zeteotomus piceus</i> (MacLeay, 1873, p. 138)	<i>Xantholinus</i> Dejean, 1821	# s.h.=j.s. of <i>Zeteotomus</i> <i>atriceps</i> (MacLeay, 1873) *	Article 23.9.3
55	<i>Xanthopygus</i> <i>haemorrhoidalis</i> (Germar, 1824, p. 34)	Brazil & Paraguay	1. <i>Staphylinus</i> <i>haemorrhoidalis</i> Olivier, 1795 (genus 42, p. 11) 2. <i>Belonuchus</i> <i>haemorrhoidalis</i> (Fabricius, 1801, p. 596) 3. <i>Staphylinus</i> <i>haemorrhoidalis</i> Gmelin, 1790 (p. 2036)	<i>Staphylinus</i> Linnaeus, 1758	1. was replaced by <i>S. gmelini</i> Blackwelder, 1944 * 3. nomen dubium, not used since publication	Article 23.9.5
56	<i>Xenopygus analis</i> (Erichson, 1840, p. 495)	South America	<i>Gabrius analis</i> (Heer, 1839, p. 268)	<i>Philonthus</i> Stephens, 1829	# s.h.=j.s. of <i>Gabrius</i> <i>splendidulus</i> (Gravenhorst, 1802) *	Article 23.9.3
57	<i>Xenopygus bicolor</i> (Laporte, 1835, p. 115)	Guyana	1. <i>Lesteva bicolor</i> (Paykull, 1789, p. 21) 2. <i>Staphylinus bicolor</i> Gmelin, 1790 (p. 2027)	<i>Staphylinus</i> Linnaeus, 1758	1. # j.s. of <i>L.</i> <i>longoelyrata</i> (Goeze, 1777). * 2. is a nomen dubium, unused since publication *	Article 23.9.3

Table 1. Continued

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
<b>Subfamily TACHYPORINAE</b>						
58	<i>Coproporus apicalis</i> (Erichson, 1839, p. 250)	West Indies	<i>Tachinus apicalis</i> Stephens, 1832 (p. 195)	<i>Tachinus</i> Gravenhorst, 1802	# s.h. = j.s. of <i>Tachinus</i> <i>signatus</i> Gravenhorst, 1802 *	Article 23.9.3
59	<i>Tachinomorphus</i> <i>fulvipes</i> (Erichson, 1840, p. 921)	India, Indochina & Indonesia	<i>Tachinus fulvipes</i> Stephens, 1832 (p. 195)	<i>Tachinus</i> Gravenhorst, 1802	# s.h. = j.s. of <i>Tachinus</i> <i>signatus</i> Gravenhorst, 1802 *	Article 23.9.3
60	<i>Tachinus axillaris</i> Erichson, 1839 (p. 261)	North America	<i>Lordithon axillaris</i> (Gravenhorst, 1806, p. 29)	<i>Tachinus</i> Gravenhorst, 1802	*	Article 23.9.5
61	<i>Tachinus bruneus</i> Ullrich, 1975 (p. 207)	Myanmar	<i>Coproporus bruneus</i> (Erichson, 1839, p. 249)	<i>Tachinus</i> Gravenhorst, 1802	*	Article 23.9.5
62	<i>Tachinus piceus</i> Cameron, 1932 (p. 389)	India & Myanmar	1. <i>Coproporus piceus</i> (Erichson, 1839, p. 246) 2. <i>Bryoporus piceus</i> (Stephens, 1829, p. 268)	<i>Tachinus</i> Gravenhorst, 1802	1. #, replaced by <i>Coproporus ebokus</i> Blackwelder, 1943. 2. = cited only once in 1943 *	Article 23.9.3

**Table 2.** Three junior homonyms whose use should be maintained under Article 23.9.2 of the Code.**KEY:**

Names are arranged in alphabetical order within subfamilies and the numbers applied to them have relevance only within the table.

\* - the species denoted by the homonyms have not been considered congeneric since 1899.

s.h. - senior homonym.

j.h. - junior homonym.

No. (column 1)	Junior homonym (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)	Code (column 7)
<b>1</b>	<b>Subfamily OMALINAE</b> <i>Haplaraca pygmaea</i> (Paykull, 1800, p. 410) nomen protectum	Widespread in Europe	<i>Staphylinus pygmaeus</i> Villers, 1789 (p. 420) nomen oblitum	<i>Staphylinus</i> Linnaeus, 1758	s.h. = nomen dubium. j.h. = cited as valid in at least 31 publications by 22 authors over last 50 years	Article 23.9.1 Article 23.9.2
<b>2</b>	<i>Phyllochepta</i> <i>melanocephala</i> (Fabricius, 1787, p. 222) nomen protectum	Europe	<i>Staphylinus</i> <i>melanocephalus</i> Geoffroy, 1785 (p. 172) nomen oblitum	<i>Staphylinus</i> Linnaeus, 1758	s.h. = nomen dubium, cited only twice. j.h. = cited as valid at least 30 times, by 25 authors in last 50 years *	Article 23.9.1 Article 23.9.2
<b>3</b>	<b>Subfamily STAPHYLININAE</b> <i>Bisnius cephalotes</i> (Gravenhorst, 1802, p. 22) nomen protectum	Western Palearctic and North America	<i>Staphylinus cephalotes</i> Gmelin, 1790 (p. 2036) nomen oblitum	<i>Staphylinus</i> Linnaeus, 1758	s. h. = a nomen dubium. j.h. = cited in at least 40 publications by 31 authors over last 50 years *	Article 23.9.1 Article 23.9.2

**Case 3222*****Papilio eurymedon* Lucas, 1852 (Insecta, Lepidoptera): proposed conservation of the specific name**

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**Abstract.** The purpose of this application is to conserve the specific name of *Papilio eurymedon* Lucas, 1852 for the well-known swallowtail butterfly from western North America (family PAPILIONIDAE). The name is threatened by the unused senior subjective synonym *P. antinous* Donovan, 1805, which until 1985 had been thought to be an Australian species. It is proposed that the senior synonym is suppressed and the case is brought to the Commission under Recommendation 23A of the Code.

**Keywords.** Nomenclature; taxonomy; Lepidoptera; PAPILIONIDAE; *Papilio eurymedon*; *Papilio antinous*; swallowtail butterfly; western North America; Mexico.

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1. Donovan (1805, pl. 16) illustrated a new species of swallowtail butterfly (family PAPILIONIDAE), naming it *Papilio antinous*. The holotype is in the Australian National Insect Collection (see Upton, 1985, p. 167). Donovan was mistaken in thinking that the species came from New South Wales, Australia. Later, Godart in Latreille & Godart (1819, p. 54) further compounded the error by identifying the origin of this species as New Holland (a former name for Australia). The nominal taxon *P. antinous* has remained in the listings of Australian species until 1985, when its inclusion in the Australian fauna was demonstrated to be erroneous by Upton (1985).

2. Lucas (1852, p. 140) described a new swallowtail butterfly, *Papilio eurymedon*, from California (U.S.A.). This species is the well-known and common pale or pallid tiger swallowtail of the western United States and Canada (see Scott, 1986, p. 182; Emmel et al., 1998b).

3. *P. antinous* has not been used as a valid name in relation to the North American fauna. Upton (1985, p. 169) examined the holotype of *P. antinous* and discovered it to be conspecific with specimens of *P. eurymedon*. The name *P. antinous* is therefore a senior subjective synonym of *P. eurymedon*. The only reference to the name *P. antinous* in North American literature prior to 1985 was by Doubleday (1844; 1846), who mistakenly synonymised *P. antinous* with the name for an eastern North American swallowtail, *Papilio turnus* Linnaeus, 1771 (currently *P. glaucus* Linnaeus,



1758); this synonymy has not been repeated subsequently by other authors. Under Article 23.9.6 of the Code, 'the mentioning of a name in a synonymy, or its mere listing in an abstracting publication, or in a nomenclator or other index or list of names must not be taken into account in determining usage under Articles 23.9.1.1 and 23.9.1.2. Accordingly, neither Upton (1985) nor Doubleday (1844; 1846) constitutes a valid use of the name *antinous*.

4. *Papilio eurymedon* Lucas, 1852 (or in various other combinations such as *Pterourus eurymedon*) is the name that has been applied to this taxon since Lucas first described the species. This name has been used exclusively in North American literature for over 140 years, e.g. Morris (1862, p. 4), Dyar (1902, p. 2), Comstock (1927, p. 24), Brown et al. (1957, p. 229), Scott (1986, p. 182), Emmel (1998, p. 826), Opler (1999, p. 140) and numerous other publications, a list of which dates from 1844 to 1999 and is held by the Commission's Secretariat.

5. Boisduval (1852, p. 280) also described the pale tiger swallowtail and gave it the name *Papilio eurymedon*, but this post-dated the publication of Lucas's (1852) description. Boisduval put forward the name in an oral presentation on 25 February 1852, but this was not published until August 1852. Lucas, who meant merely to note some new Californian species in Boisduval's collection, had his paper published first in March/July 1852, and hence his name has priority (see Emmel et al., 1998a, p. 3; 1998b, p. 77).

6. According to Upton (1985, p. 169) there would appear to be a clear case for application to the Commission for suppression of the name *P. antinous*, thereby preventing the threat to the established stability of the name *P. eurymedon*. Both conditions of Article 23.9.1 of the Code are met in relation to the names *P. antinous* and *P. eurymedon* and the case for suppression of the name *P. antinous* is brought to the Commission under Recommendation 23A of the Code.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *antinous* Donovan, 1805, as published in the binomen *Papilio antinous*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *eurymedon* Lucas, 1852, as published in the binomen *Papilio eurymedon*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *antinous* Donovan, 1805, as published in the binomen *Papilio antinous* and as suppressed in (1) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

## Case 3210

***Catocala alabamae* Grote, 1875 (Insecta, Lepidoptera): proposed conservation of the specific name**

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**Abstract.** The purpose of this application is to conserve the specific name of *Catocala alabamae* Grote, 1875 for a small, yellow-hindwinged moth from North America (family NOCTUIDAE). The name is threatened by the earlier synonym *Catocala polygama* Guenée, 1852, which has been applied in the past to other species. The name *C. polygama* has not been used as valid for many years, and since 1938 it has been erroneously treated as a junior synonym of *C. grynea* (Cramer, 1780). It is proposed that the name *C. polygama* be suppressed.

**Keywords.** Nomenclature; taxonomy; Lepidoptera; NOCTUIDAE; *Catocala*; *Catocala alabamae*; *Catocala grynea*; *Catocala polygama*; moths; North America.

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1. In 1852 Guenée described and illustrated (p. 105, pl. 16, fig. 2) a male specimen of a new, small yellow-hindwinged species of *Catocala* Schrank, 1802 as *Catocala polygama*. He gave the provenience of the moth as 'Amérique septentrionale'.

2. In his revision of the Nearctic *Catocala*, Grote (1872, pp. 15–16) noted 'I have before me a number of specimens (Canada to Virginia) which differ in appearance among themselves but which I cannot separate into species, and which I refer to Guenée's *C. polygama*. I think we have to do with a single variable species'. Grote distributed specimens determined by him as *polygama* to many workers and thus the name *polygama* sensu Grote became widely used for one of the common and much collected *Catocala* species occurring in northeastern North America.

3. In 1875 Grote described (p. 427) another small, yellow-hindwinged species from the southern United States as *Catocala alabamae* (type locality Demopolis, Alabama). He compared *alabamae* to the ubiquitous eastern Nearctic species *C. grynea* (Cramer, 1780, index; originally published as *Phalaena grynea*).

4. In the first of two treatises on *Catocala*, Hulst (1880, pp. 6–7) placed Grote's *alabamae* as a variety of *grynea* and treated *polygama* Guenée as valid. In his second treatise, Hulst (1884, pp. 35–39) noted, correctly, that Grote (1872) had misidentified Guenée's species *polygama*. Hulst placed *polygama* Guenée as a synonym of *grynea* Cramer, 1780, and, to resolve Grote's misidentification, proposed the new name *blandula* for the species the latter had called *polygama*. Hulst (1884, p. 36) noted 'The description of *polygama*, Guen., seems to fit this species [*grynea*]; the figure [given by Guenée], which is poor, seems more like var. *alabamae*; neither description nor figure approach the insect identified as *polygama* by Grote'. Under his treatment of *blandula*, Hulst (1884, p. 39) added: 'With regard to *polygama*, Guen., a glance at his figure Noct. 3, pl. 16, f. 2, will convince any one that this species [*blandula*] could not

have been intended. The primaries and secondaries are entirely different. The description accords with *grynea*, and the figure fits it as well as any species known to me<sup>7</sup>.

5. Smith (1893) followed Hulst in placing both *polygama* Guenée and *alabamae* as synonyms of *grynea*, and used *blandula* for *polygama* sensu Grote. Dyar (1903) apparently avoided the issue of Grote's misidentification, and listed *polygama* as a full species with *blandula* as its synonym, and treated *alabamae* as a full species. Hampson (1913) placed *polygama* as a synonym of *grynea*, *blandula* as a synonym of *crataegi* Grote, 1876, and treated *alabamae* as a full species.

6. In their monograph of the Nearctic *Catocala*, Barnes & McDunnough (1918, p. 40) treated *polygama* Guenée as a synonym of *grynea*, and both *blandula* and *alabamae* as full species, indicating: 'It should be borne in mind that the '*polygama* Guenée', referred to by Lintner, Saunders, and others of the older authors is not the true species but probably what we have designated as *blandula* Hulst . . . Guenée's figure of *polygama* is very poor but we do not see to what other species [i.e. *grynea*] it can be referred; it is certainly not *blandula*'. In his Nearctic macrolepidopteran checklist, McDunnough (1938) followed Barnes & McDunnough's (1918) treatment of these *Catocala* names.

7. Since McDunnough (1938), the names *blandula* and *alabamae* have been used exclusively in the Nearctic literature for the respective species. Similarly, *C. polygama* has not been used as a valid name since 1938; it was listed as a synonym of *grynea* in Tietz (1972), Hodges et al. (1983) and Poole (1989), and as a synonym of *alabamae* in Forbes (1954, p. 335: 'probably *polygama* Guenée'). Unquestionably, Grote's (1872) misidentification of *polygama* Guenée, 1852, Hulst's (1884) placement of both *polygama* Guenée and *alabamae* as synonyms of *grynea*, and the relative scarcity of specimens for this group of closely related species were all responsible for the unstable position of the name *polygama* in the 19th and early 20th centuries. Dyar's (1903) catalogue was the last major taxonomic work to use the name *polygama* as valid rather than treat it as a synonym. Holland's (1903) *Moth Book*, the most widely available popular book on Nearctic moths in the 20th century, treated *C. polygama* as a full species and pictured a specimen of *C. mira* Grote, 1876 under the name *polygama*. Hence, both Dyar (1903) and Holland (1903) were responsible for continued sporadic erroneous use of *polygama* as the species name for either *blandula* or *mira* (for example, Engel, 1909; Rowley & Berry, 1910; Schroers, 1914; Leonard, 1928). Holland's mistake was well known (see Forbes, 1954, p. 335, for a succinct statement) and not repeated in the taxonomic literature, although the *Moth Book* was not corrected until its 1968 reprinting.

8. Occasionally adults of the group of closely related, small yellow-hindwinged species of *Catocala* can be difficult to determine, but as a result of recent collecting, rearing and life history work it is now firmly established that *alabamae*, *blandula* and *grynea* are all distinct species. The adults breed true, and the larvae are also readily separable. Although Guenée's original illustration (1852, pl. 16, fig. 2) of *polygama* is clearly not *blandula* Hulst, 1884, a detailed re-examination shows that it is not *grynea* either. The figure is an acceptable, albeit somewhat stylized, rendering of *alabamae*, as Hulst (1884, p. 36) originally suggested (para. 4 above). Guenée's figure of *polygama* agrees with Grote's (1875) description and type of *alabamae* (accounting for sexual differences: the *alabamae* type is a female, whereas Guenée's figure is a

male) in The Natural History Museum, London, as well as with other specimens of *alabamae* from the Gulf Coast of the southern United States, especially Florida (Gall & Hawks, in press). Thus, since McDunnough (1938), and also for the most part since Barnes & McDunnough (1918), the name *polygama* Guenée, 1852 has been erroneously treated as a junior synonym of *grynea* Cramer, 1780, rather than as a senior synonym of *alabamae* Grote, 1875. Reintroduction of the name *polygama* in place of *alabamae* would upset established nomenclatural usage and would cause considerable and unnecessary confusion, and I therefore propose that *polygama* be suppressed. Recent works which demonstrate the usage of the name *alabamae* include Forbes (1954), Sargent (1976), Covell (1984) and Poole (1989). A representative list of a further seven publications, dating from 1965 to 1999, in which the name has been adopted is held by the Commission Secretariat.

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the specific name *polygama* Guenée, 1852, as published in the binomen *Catocala polygama*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *alabamae* Grote, 1875, as originally published in the binomen *Catocala alabamae*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *polygama* Guenée, 1852, as published in the binomen *Catocala polygama*, and as suppressed in (1) above.

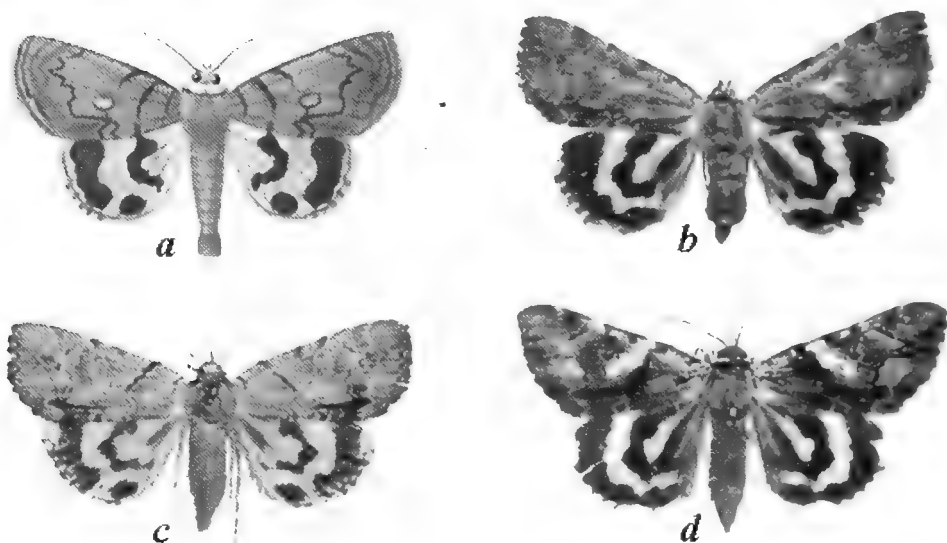
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Nearctic species of *Catocala* moths. **a:** *C. polygama* Guenée (1852), type, original drawing. **b:** *C. grynea* (Cramer, 1780). **c:** *C. alabamæ* Grote (1875), type. **d:** *C. blandula* Hulst (1884), type.

## Case 3215

**E.L. Holmberg (1917, 1918), 'Las especies argentinas de *Coelioxys*' (Insecta, Hymenoptera): proposed suppression of 139 names applied to groups of species**

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**Abstract.** The purpose of this application is the suppression of 139 names which were published by E.L. Holmberg in 1917–1918 for divisions and subdivisions of the megachilid bee genus *Coelioxys* Latreille, 1809 (family MEGACHILIDAE). These names were devised for a key to species of *Coelioxys* which occur in Argentina; they have never been used as names for taxa nor have type species been fixed, but under Article 10.4 of the Code they are available as genus-group names and, unless they are suppressed, some would be senior synonyms of currently accepted subgenera of *Coelioxys*, and possibly senior homonyms of genus-group names in use in other taxonomic fields.

**Keywords.** Nomenclature; taxonomy; Hymenoptera; Apoidea; MEGACHILIDAE; *Coelioxys*; bees; Argentina.

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1. Holmberg (1917, 1918a, 1918b) published 139 uninominal names for infra-generic groups of species of the bee genus *Coelioxys* Latreille, 1809 (family MEGACHILIDAE) which occur in Argentina. Each group was characterized in keys and in descriptive synopses.

2. Under Article 10.4 of the Code Holmberg's names for divisions and subdivisions of *Coelioxys* are available as genus-group names; even if they are regarded as names established for 'certain assemblages of taxonomic convenience known as collective groups' (Article 42.2.1) they would still be available for purposes of homonymy (Article 56.1). However, the names have never been used for taxa by subsequent authors and no type species have been designated for the groups. His names have not been cited in the *Zoological Record* or in compendia such as Neave's *Nomenclator Zoologicus*. I have previously (Michener, 2000, p. 527) noted their existence and cautioned against their use.

3. In his Introduction Holmberg (1917, pp. 544–545) discussed his classification as follows (translated from the Spanish): 'In the present state of our knowledge it would be useless to attempt to group the species of *Coelioxys* in the form of scientifically unimpeachable subgenera. Many of our species are known only by one sex; others only from extremely brief descriptions . . . I propose for our species eleven groups, artificial like all those which have been tentatively established for this interesting genus'. He expressed the hope that his provisional arrangement would assist understanding of the species, but this has not proved to be the case (see para. 6 below).

4. Holmberg divided each of his major sections of Argentinian *Coelioxys* in a very complicated and hierarchical way, each level being further subdivided. For example, a section called *Erythrobasis* was described and divided into two major subsections which were described and named as *Haematonotos* and *Melanonotos*. *Haematonotos* (containing 10 species) comprised Cohort 1 while *Melanonotos* (61 species) comprised Cohorts 2–9. The cohorts themselves were neither named nor described, but they were further divided into groups which were and species were assigned to the subsidiary groups. As an example, Cohort 3 included 16 named groups at various levels.

5. Holmberg reported 82 Argentinian species of *Coelioxys*, some of them new, and in classifying their characters introduced 136 names for divisions of the genus; the genus-group names outnumbered the species because of the hierarchical tiers of his classification system. The new species are adequately described and some of his specific names are in use, so his works (as distinct from the genus-group names) should not be suppressed for nomenclatural purposes.

6. Schrottky (1920) did not accept Holmberg's treatment of *Coelioxys* and remarked (p. 191, in translation) 'without wishing to deny in any way the quality of Dr Holmberg's work, I must admit that his classification confuses me in several respects', and he did not adopt any of Holmberg's names for supraspecific taxa.

7. Of 15 subgeneric names currently used in the genus *Coelioxys* (see Michener, 2000) all but two were published after Holmberg's works and would probably fall as junior synonyms, with resultant instability, if Holmberg's names were recognized. For example, *Coelioxys vidua* Smith, 1854, the type species of *Glyptocoelioxys* Mitchell, 1973, was included by Holmberg (1917, p. 559) in the section of *Coelioxys* named *Erythrobasis*, its subsection *Melanonotos* and successively less inclusive named components of the latter.

8. As mentioned in para. 2 above none of Holmberg's supraspecific names have been used. In order to conserve both the currently accepted subgeneric names in *Coelioxys* and genus-group names in other taxonomic fields which might otherwise be junior homonyms, I urge the Commission to suppress all the genus-group names established by Holmberg (1917, 1918a,b) for his tentative classification of *Coelioxys*.

9. The International Commission on Zoological Nomenclature is accordingly asked:
- (1) to use its plenary power to suppress for the purposes of both the Principle of Priority and the Principle of Homonymy the genus-group names published by Holmberg (1917, 1918a, 1918b) which are listed in the Appendix below;
  - (2) to place the names suppressed in (1) above on the Official Index of Rejected and Invalid Generic Names in Zoology.

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## Appendix

The page number for each name refers to its publication in Holmberg (1917) except where (1918a) or (1918b) is indicated.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

**Comment on the proposed designation of *Isospora suis* Biester, 1934 as the type species of *Isospora* Schneider, 1881 (Protista, Apicomplexa)**

(Case 3187; see BZN 58: 272–274)

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As a coccidial biologist who has published over 150 species descriptions and redescrptions during the last 20 years, I write in opposition to the proposal to designate *Isospora suis* Biester, 1934 as the type species of the genus *Isospora* Schneider, 1881.

In his application Modrý has proposed the designation of a new type species for *Isospora* and to transfer the genus and some species from the EIMERIIDAE Minchin, 1903 into the SARCOCYSTIDAE Poche, 1913. While I concur that a new type species should be designated, and agree with the published literature that the genus is polyphyletic and currently includes members of two separate families, I disagree with the proposed approach since it would involve needlessly giving a new generic name to virtually all species within both families. Instead, it is desirable to retain the majority (80% of the total number) of the more than 250 *Isospora* species in the EIMERIIDAE and exclude approximately 50 species, including *I. suis*, most closely allied with the SARCOCYSTIDAE. The excluded species would then receive a new generic name, the first available being the commonly used *Cystoisospora* Frenkel, 1977 (see para. 4 below). The following points are presented for consideration.

1. The original description by Schneider (1881) of the genus *Isospora* and illustration of the oocysts strongly suggest that it represented an avian pseudoparasite. Although reported to have been found associated with 'a little black slug', the shape and characteristics of the oocysts and sporocysts are identical to the general isosporan morphology found in passeriform and related birds; the parasite has never been rediscovered. The only originally included species, *I. rara* Schneider, 1881, was reported to produce two piriform spores. The line drawings and description are both clear about the shape of the sporocysts and it is quite obvious that each had what are now termed Stieda bodies (sporocyst plugs) at the pointed ends, typical of avian isosporans. By the end of the 19th century over 30 different avian species and one lizard were known hosts for these morphologically similar isosporans (see Candorelli Francaviglia & de Fiore, 1892; Hagenmüller, 1898; Labbé, 1893, 1896, 1899; Laveran, 1898; Sjöbring, 1897). The only isosporan known at this time to lack Stieda bodies on the sporocysts was an anuran isosporan (currently *I. lieberkuehni* (Labbé, 1894)).

2. For *Isospora*, Schneider (1881) was uncertain about the exact numbers of sporozoites within each sporocyst and he simply referred to the sporozoites as being 'numerous'. This uncertainty led to a taxonomic scheme at the generic level based solely on perception errors about the numbers of sporozoites within the sporocysts (see Labbé, 1893, 1894, 1896, 1899). Thus, the genus *Isospora* was erroneously defined as being polyzoic (see Labbé, 1893). Subsequently new genera were introduced to accommodate the differing numbers of sporozoites. The genus *Diplospora* Labbé, 1893 (p. 1301 in *Comptes Rendus de l'Académie des Science*, (3)116 and not p. 407 in (3)117 as cited by Modrý, 2001, BZN 58: 273) was defined as having sporocysts each with four sporozoites, and two new species *D. lacazii* and *D. rivoltae* were proposed for isosporans from the goldfinch *Carduelis carduelis* Linnaeus and

the chaffinch *Fringilla coelebs* Linnaeus respectively. Some authors accepted the name *Isospora* as valid for these morphologically similar coccidia (see Laveran, 1898; Sjöbring, 1897), whereas others employed the multi-generic scheme accepting the new genus *Diplospora* for the avian isosporans (see Hagenmüller, 1898). Laveran & Mesnil (1902) recognized the trivial nature of the errors and synonymized the various genera with *Isospora*. The generic name *Isospora* has been in continual use since 1902 for those homoxenous coccidia within the EIMERIIDAE containing two sporocysts, each sporocyst possessing four sporozoites. By far the majority of the isosporan species were avian.

3. Recent findings have shown the nominal genus *Isospora* to be polyphyletic; it may soon need to be split into two or more genera. Limited molecular analyses by Carreno et al. (1998), Carreno & Barta (1999), Franzen et al. (2000), Barta et al. (2001) and Modrý et al. (2001) have shown that at least one primate isosporan (*I. belli* Wenyon, 1923 from humans), two carnivore isosporans (*I. felis* Wenyon, 1923 from felids and *I. ohioensis* Dubey, 1975 from canids), as well as *I. suis* Biester, 1934 from piglets and *I. lieberkuehni* (Labbé, 1894) from frogs, are all more closely related to the cyst-forming coccidia (i.e. *Toxoplasma* and *Sarcocystis*) than to two of the avian (passeriform) isosporans (*I. robini* McQuiston & Holmes, 1988 from *Turdus migratorius* Linnaeus and *I. gryphoni* Olsen, Gissing, Barta & Middleton, 1998 from *Carduelis tristis* Linnaeus). All valid primate and carnivore isosporans lack Stieda bodies, as do the morphologically similar *I. suis* from swine and *I. lieberkuehni* from frogs, whereas avian isosporans all have distinct Stieda bodies.

4. The genus *Cystoisospora* Frenkel, 1977 (type species *Isospora felis* Wenyon, 1923) was established for those isosporans of carnivores that form dormant unizuite stages in multiple organs of facultative intermediate hosts (see Frenkel, 1977). None of the species possessed Stieda bodies on the sporocysts. Dormant unizuite cysts have been reported for *I. belli* in humans (see Michiels et al., 1994; Lindsay et al., 1997; Restrepo et al., 1987; Velasquez et al., 2001), but not for *I. suis* from swine (see Pinckney et al., 1993). Since 1977 most of the commonly studied isosporans of carnivores and primates have already been transferred into *Cystoisospora* (family SARCOCYSTIDAE).

5. If *Isospora suis* were designated the type species of *Isospora*, and if the genus is split into two genera as commonly suggested, it would result in the 'historically wrong' lineage being assigned to the SARCOCYSTIDAE and name changes for virtually all existing species. I propose the retention of *Isospora* within the EIMERIIDAE thereby conserving the published names of approximately 80% of the species. The type species should be an avian isosporan with early historical significance, and *Diplospora lacazii* Labbé, 1893 (para. 2 above) is a suitable choice since its taxonomic status has been extensively reviewed (see Levine, 1982).

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to set aside the proposals in BZN 58: 273 (Case 3187);
- (2) to use the plenary power to set aside all previous fixations of type species for the nominal genus *Isospora* Schneider, 1881 and to designate *Diplospora lacazii* Labbé, 1893 as the type species;
- (3) to place on the Official List of Generic Names in Zoology the name *Isospora* Schneider, 1881 (gender: feminine), type species *Diplospora lacazii* Labbé, 1893 as designated in (2) above;

- (4) to place on the Official List of Specific Names in Zoology the name *laczii* Labbé, 1893, as published in the binomen *Diplospora laczii* (specific name of the type species of *Isoospora* Schneider, 1881);
- (5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Diplospora* Labbé, 1893 (a junior objective synonym of *Isoospora* Schneider, 1881).

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(2) Andrew Wakeham-Dawson (Executive Secretary)

*I.C.Z.N., clo The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk)*

Two different approaches for resolving nomenclatural difficulties relating to *Isospora* Schneider, 1881 have been proposed to the Commission. The first approach was published as Case 3187 in BZN **58**: 272–274 (December 2001) and the second in the comment above. Without expert advice it will be difficult for the Commission to provide a ruling that will best serve the medical and veterinary professions as well as protistologists and parasitologists. It has been drawn to the attention of the Secretariat by Dr Upton that discussions on the taxonomy of *Isospora* are planned for the 10th International Congress of Parasitology, which will be held in British Columbia, Canada, in August 2002. Numerous coccidian biologists will be present, and one session will attempt to reach a consensus on how to split the genus *Isospora*, name the resulting genera and resolve the type species issue. The Commission Secretariat hopes to publish a summary of the discussion on *Isospora* in the *Bulletin* in due course. This will allow the Commission to take into consideration the recommendations of the Congress when ruling in relation to Case 3187.

Further comments on all aspects of this case are invited.

**Comment on the proposed conservation of *Hydrobia* Hartmann, 1821 (Mollusca, Gastropoda) and *Cyclostoma acutum* Draparnaud, 1805 (currently *Hydrobia acuta*) by the replacement of the lectotype of *H. acuta* with a neotype; proposed designation of *Turbo ventrosus* Montagu, 1803 as the type species of *Ventrosia* Radoman, 1977; and proposed emendation of spelling of HYDROBIINA Mulsant, 1844 (Insecta, Coleoptera) to HYDROBIUSINA, so removing the homonymy with HYDROBIIDAE Troschel, 1857 (Mollusca)**

(Case 3087; see BZN **55**: 139–145; **56**: 56–63, 143–148, 187–190, 268–270; **58**: 56–58, 140–141, 301–303)

Andrzej Falniowski and Magdalena Szarowska

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We fully support the application.

The phylogeny and taxonomy of *Hydrobia* Hartmann, 1821, based on shell morphology, ultrastructure and soft part anatomy, have been studied in our Department of Malacology for about 30 years (see Falniowski, Dyduch & Smagowiec, 1977; Falniowski, 1986, 1987, 1988, 1990; Falniowski & Szarowska, 1995; Falniowski, Szarowska & Mazan, 1996). Thus, we feel well qualified to present our views on the current application.

1. The restriction that Radoman (1977) made in the locality where *Cyclostoma acutum* Draparnaud, 1805 was collected is little justified. As previously noted in a comment on this case (BZN 58: 301), Draparnaud (1805) might have collected his specimens at any locality in France. Where *Hydrobia* taxa are concerned, the occurrence of a species at a locality is certainly not so constant that we can be sure that the species currently found is the same as that collected 200 years ago. In fact, the occurrence of a species of *Hydrobia* is the result of several factors (see, for example, Fenchel, 1975a, 1975b; Hylleberg, 1975, 1976; Lappalainen, 1978) and different species can be found in nearly the same habitats. It must also be stressed that the brackish water habitats of *Hydrobia* are very unstable. Therefore, the present occurrence of *Hydrobia acuta* species at the restricted type locality does not prove its presence at the time Draparnaud was collecting.

2. In his selection of the lectotype of *Hydrobia acuta*, Boeters (1984) followed the letter of the Code without regard to its spirit. The main principle of the Code is to support and ensure the stability of nomenclature but this, unfortunately, is not what Boeters achieved. Possessing the two syntypes of *H. acuta*, Boeters had to choose one of them as the lectotype. The shells seemingly belonged to two species, one of them (putatively) *Ventrosia ventrosa* (Montagu, 1803) while the character states of the other corresponded to *H. acuta* as understood from the abundant literature. In fixing a type for *H. acuta*, Boeters thus had two alternatives: (1) to designate the *acuta*-like shell as the lectotype and to recognise the other specimen as a distinct species, probably *V. ventrosa*; or (2) to designate the *ventrosa*-like shell as the lectotype and to leave the other shell as an indeterminate '*Hydrobia* sp.'. If he had chosen alternative (1), stability of the names *Hydrobia acuta*, *Hydrobia*, *Ventrosia* and HYDROBIIDAE would all have been secured. His choice of alternative (2) has caused many problems, well documented by Wilke et al. and Giusti et al. (BZN 58: 301–303).

3. We cannot agree with the arguments of Boeters et al. (BZN 56: 56–63) that stability of nomenclature would be achieved by transferring the taxonomic understanding of the name *Hydrobia acuta* to *Ventrosia ventrosa*. It does not make much sense to give examples of how *Ventrosia* Radoman, 1977 was understood as *Hydrobia* many years before the name *Ventrosia* was introduced. It must also be said that there are many species of *Hydrobia* and they are the subjects of important and extensive research by marine biologists, ecologists, parasitologists and others. Therefore, the undesirable consequences following acceptance of the unfortunate designation of the *H. acuta* lectotype by Boeters (1984) would be profound and not limited to the field of malacology.

4. We agree with Naggs et al. (BZN 56: 143–148) that type specimens in the Mollusca are mostly empty shells and their identity may well not be in doubt. Some species of *Hydrobia* may be determined by their shells if numerous specimens from one locality are carefully examined. However, *Hydrobia acuta* is a special case because we do not know (1) where the original material was collected, nor (2) how many and which species are part of the sample. We have examined several thousand specimens of *H. acuta*, *Ventrosia ventrosa* and *Peringia ulvae*, some hundreds of them anatomically, and must state that it is not possible to determine these species without a knowledge of their soft part anatomy and pigmentation (see Muus, 1967; Falniowski, 1986, 1987, figs. 1, 2 and 4; Falniowski & Szarowska, unpublished data).

Considering all the above, it is our view that replacement of the lectotype for *Hydrobia acuta* by a neotype is very necessary.

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**Comment on the proposed conservation of the specific name of *Thalassema taenioides* Ikeda, 1904 (currently *Ikeda taenioides*; Echiura)**  
(Case 3212; see BZN **58**: 277–279)

Edward B. Cutler

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I write in full support of Dr T. Nishikawa's application to conserve the specific name of *Ikeda taenioides* (Ikeda, 1904) for the echiuran from the coasts of Japan. It is my view that he has uncovered all of the relevant literature. He has personal familiarity with the organism under consideration and I urge the Commission to concur with this request.



**Comment on the proposed precedence of *Remipes pacificus* Dana, 1852 over *Remipes marmoratus* Hombron & Jacquinot, 1846 (Crustacea, Anomura)**  
(Case 3106; see BZN 59: 12–16)

L.B. Holthuis

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The Netherlands*

I do not see the necessity to use the plenary power to give precedence to the specific name of *Remipes pacificus* Dana, 1852 over *R. marmoratus* Hombron & Jacquinot, 1846.

Both names have always been used for the same species and thus there is no question of confusion. *Remipes marmoratus* is not a forgotten name; its identity has been discussed by various authors, as mentioned in the application, and the existence of type material makes it possible to identify the species. The name *Hippa pacifica* (Dana, 1852) is not a widely used name as shown by the applicants, who found only 17 uses reported in *Zoological Record* between 1864 and 1998. The species is not of medical importance nor is it used in applied science. I do not see any harm in a change from *pacificus* to *marmoratus* and certainly not enough reason to suspend the Code.

The author of the name *R. marmoratus* is cited in the application as Jacquinot, 1846. However, the first mention of the name was on pl. 8 in livraison 17 of '*Atlas d'Histoire naturelle Zoologie* par MM. Hombron et Jacquinot' published in 1846. There is no indication in this livraison that Jacquinot is the sole author. This claim was made much later, namely in the text volume (1853, p. 4) where it is said that Jacquinot was responsible for the new species (with the named exception of a few). This later claim is, of course, invalid.

**Comments on the proposed precedence of NYMPHULINAE Duponchel, 1845 over ACENTROPINAE Stephens, 1835 (Insecta, Lepidoptera)**  
(Case 3048; see BZN 56: 31–33; 57: 46–48; 58: 305–306; 59: 38–40)

(1) Wolfgang Speidel and Wolfram Mey

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In her application, Alma Solis has put forward understandable reasons for giving precedence to the family-group name NYMPHULINAE over ACENTROPINAE. In a comment (BZN 57: 46–48), we stated that these reasons, at least in our view, may not be sufficient. A comment has subsequently been published by Agassiz (BZN 58: 305–306). We generally agree with all the statements made by the latter except for two, newly introduced into the discussion:

(1) We did not say in our comment that we were the only authors to have used the family-group name ACENTROPINAE as valid, neither in Europe nor in Asia (cf. Agassiz's comment on BZN 59: 306).

(2) We agree that there are some species of major economic importance in the group, and their names should be conserved. The synonymy of the available family-group names, however, has no influence on the use of generic and specific names for these species. The majority of species in the group have no economic importance and 'considerable disruption' in the literature by synonymising the family-group names need not be feared. Generally, we see problems with including 'economic importance' as an argument in the discussion on the application of family-group names.

We did not intend to provoke a long discussion on the application of a family-group name in the Microlepidoptera. In such a scarcely-studied group and with the comparatively short time since the synonymy of the names NYMPHULINAE and ACENTROPINAE was made and even shorter time since this synonymy was generally accepted, we think it is difficult to apply the criterion of 'general usage'.

(2) Jay C. Shaffer

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I wish to add my support to the application by Dr Alma Solis to conserve the subfamily name NYMPHULINAE. I have worked with pyralid moths since the 1960s and have been familiar with the name NYMPHULINAE since my undergraduate days (even farther back in time). I had not heard of the name ACENTROPINAE until recently and am unaware of any use prior to Speidel (1981). The name apparently has not been used for well over 100 years.

The central purpose of the Code is to promote stability of names. The use of the name ACENTROPINAE in place of the familiar NYMPHULINAE runs counter to that purpose.

**Comment on the proposed emendation of spelling of MACROPODINAE Hoedeman, 1948 (Osteichthyes, Perciformes) to MACROPODUSINAE, so removing the homonymy with MACROPODIDAE Gray, 1821 (Mammalia, Marsupialia)**  
(Case 2661; see BZN 58: 297–299)

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I have found that in an aquarist publication Hoedeman introduced the name MACROPODINAE for a group of ANABANTIDAE in 1948, which is considerably earlier than the date cited (Liem, 1963) in the application. The group was diagnosed in a key (p. 2) to the subfamilies of the ANABANTIDAE (A. II. 1. Dorsal and anal fins both with more than 12 spines). The emended family-group name MACROPODUSINAE should therefore be attributed to Hoedeman (1948).

There is also an English version of Hoedeman's work, entitled *Encyclopedia of water life*, loose leaf 1948–195?, which I have not seen.

The name MACROPODINAE also appeared in Hoedeman (1954, pp. 472 and 476).

### Additional references

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### Comments on the proposed placement of the name *Aphanius* Nardo, 1827

#### (Osteichthyes, Cyprinodontiformes) on the Official List

(Case 3028; see BZN 58: 110–115)

##### (1) W. Villwock

*Zoologisches Institut und Zoologisches Museum, Martin-Luther-King-Platz 3,  
20146 Hamburg, Germany*

I support the application by Prof Dr M. Kottelat and Mr A. Wheeler.

I protest strongly against the invalid introduction of the generic name *Lebias* Goldfuss, 1820 by Dr K.J. Lazara in 1995 in place of the well known and long used name *Aphanius* Nardo, 1827. I shall continue to use *Aphanius* because the adoption of *Lebias* would lead to considerable confusion in the literature concerned.

##### (2) Juraj Holèik

*Institute of Zoology, Slovak Academy of Sciences, Dúbravská cesta 9,  
842 06 Bratislava, Slovakia*

I support the conclusions of the application by Kottelat & Wheeler to place *Aphanius* on the Official List. I agree with them that, as most species of *Aphanius* are threatened and listed as endangered in most of the Mediterranean region, the nomenclatural change to *Lebias* proposed by Lazara (1995) is very unfortunate. I urge the Commission to approve the application and retain the name *Aphanius*.

##### (3) R.H. Wildekamp

*Aug. de Witstraat 5, 5421RK Gemert, The Netherlands*

I write to support the application that has been submitted to the Commission by Kottelat & Wheeler to place the name *Aphanius* Nardo, 1827 on the Official List. My use of the name was explained in Wildekamp, Küçük, Ünlüsayın & van Neer (1999).

### Additional reference

**Wildekamp, R.H., Küçük, F., Ünlüsayın, M. & van Neer, W.** 1999. Species and subspecies of the genus *Aphanius* Nardo, 1827 (Pisces, Cyprinodontidae) in Turkey. *Turkish Journal of Zoology*, 23: 23–44.

(4) Ignacio Doadrio

*Museo Nacional de Ciencias Naturales, José Gutiérrez Abascal 2, Madrid 28006, Spain*

I support the application to place the name *Aphanius* Nardo, 1827 on the Official List.

I include the following list of recent references in which I have adopted the name: Doadrio, Perdices & Machordom (1996), Perdices, Carmona & Doadrio (2001) and Doadrio, Carmona & Fernández-Delgado (2002).

**Additional references**

- Doadrio, I., Carmona, J.A. & Fernández-Delgado, C.** 2002. Morphometric study of the Iberian *Aphanius* (Actinopterygii, Cyprinodontiformes) with descriptions of two new species. *Folia Zoologica*.
- Doadrio, I., Perdices, A. & Machordom, A.** 1996. Allozymic variation of the endangered killifish *Aphanius iberus* (Val., 1846) and its application to conservation. *Environmental Biology of Fishes*, **45**: 259–271.
- Perdices, A., Carmona, J.A. & Doadrio, I.** 2001. Nuclear and mitochondrial data reveal high genetic divergence among Atlantic and Mediterranean populations of the Iberian killifish *Aphanius iberus* (Teleostei, Cyprinodontidae). *Heredity*, **87**: 314–324.

(5) Support for the application has been received from Dr Philippe Keith (*Muséum National d'Histoire Naturelle, Laboratoire d'Ichtyologie, 43 rue Cuvier, 75231 Paris, cedex 05, France*), Dr Jörg Freyhof (*Leibniz-Institut für Gewässerökologie und Binnenfischerei, Müggelseedamm 310, D-12561 Berlin, Germany*), Prof Ioannis Leonardos (*Biological Applications and Technology Department, University of Ioannina, 45110 Ioannina, Greece*), Dr Roberta Barbieri (*National Centre of Marine Research, Institute of Inland Waters, Ag. Kosmas, GR-166 04 Hellenikon, Athens*) and Prof P.S. Economidis (*Aristotle University, School of Biology, Zoology Department, Box 134, GR-540 06, Thessaloniki, Greece*).

**OPINION 1996 (Case 3158)*****Helix lucorum* Linnaeus, 1758 and *Helix punctata* Müller, 1774 (currently *Otala punctata*; Mollusca, Gastropoda): usage of the specific names conserved by the replacement of the syntypes of *H. lucorum* with a neotype**

**Keywords.** Nomenclature; taxonomy; Gastropoda; Pulmonata; HELICIDAE; *Helix lucorum*; *Otala punctata*; edible snails.

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**Ruling**

- (1) Under the plenary power all previous fixations of type specimens for the nominal species *Helix lucorum* Linnaeus, 1758 are hereby set aside and the specimen labelled as the neotype (length 32.71 mm, diameter 39.96 mm) in the Zoological Museum of the University of Copenhagen is designated as the neotype.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *lucorum* Linnaeus, 1758, as published in the binomen *Helix lucorum* and as defined by the neotype designated in (1) above;
  - (b) *punctata* Müller, 1774, as published in the binomen *Helix punctata*.

**History of Case 3158**

An application to conserve the usage of the specific names of *Helix lucorum* Linnaeus, 1758 and *Helix punctata* Müller, 1774 by the replacement of the syntypes of *H. lucorum* with a neotype was received from Drs Christian Van Osselaer, Frédéric Chérot and Bernard Tursch (*Université Libre de Bruxelles, Laboratoire de Bio-Ecologie, Brussels, Belgium*) and Dr Thierry Backeljau (*Institut royal des Sciences Naturelles de Belgique, Brussels, Belgium*) on 4 May 2000. After correspondence the case was published in BZN 58: 8–12 (March 2001).

**Decision of the Commission**

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 58: 11. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 24: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, Štys, van Tol

Negative votes – none.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

Bouchet commented: 'It would have been possible to select a lectotype of *Helix castanea* Olivier, 1801 as the neotype of *H. lucorum* Linnaeus, 1758. One 'probable' syntype, from among three in the Muséum National d'Histoire Naturelle, Paris, was illustrated by Tillier & Mordan (1983, *Journal of Conchology*, 31: 157, pl. 6, fig. 1). In

this way *H. mutata* Lamarck, 1822 (the first available replacement name for the homonymous *H. castanea* Olivier) would have been an objective, rather than subjective, synonym of *H. lucorum*. *Helix castanea* Olivier, 1801, non Müller, 1774, was also renamed *H. mahometana* Bourguignat, 1860'.

### Original references

The following are the original references to the names placed on an Official List by the ruling given in the present Opinion:

*lucorum*, *Helix*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 773.

*punctata*, *Helix*, Müller, 1774, *Vermium terrestrium et fluviatilium, seu Animalium infusoriorum, Helminthicorum et Testaceorum, non marinorum, succincta historia*, vol. 2, p. 21.

**OPINION 1997 (Case 3175)*****Ampullaria canaliculata* Lamarck, 1822 (currently *Pomacea canaliculata*; Mollusca, Gastropoda): specific name conserved**

**Keywords.** Nomenclature; taxonomy; *Natica canaliculata*; *Amauropsina canaliculata*; *Pomacea canaliculata*; Gastropoda; NATICIDAE; AMPULLOSPIRIDAE; AMPULLARIIDAE; Eocene; Recent; apple snails; pest species.

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**Ruling**

- (1) Under the plenary power it is hereby ruled that the specific name *canaliculata* Lamarck, 1822, as published in the binomen *Ampullaria canaliculata*, is not invalid by reason of being a junior primary homonym of *Ampullaria canaliculata* Lamarck, 1804.
- (2) The name *Amauropsina* Chelot, 1885 (gender: feminine), type species by original designation *Ampullaria canaliculata* Lamarck, 1804, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *canaliculata* Lamarck, 1804, as published in the binomen *Ampullaria canaliculata* (specific name of the type species of *Amauropsina* Chelot, 1885);
  - (b) *canaliculata* Lamarck, 1822, as published in the binomen *Ampullaria canaliculata* (not invalid by the ruling in (1) above).
- (4) The name *canalifera* Lamarck, 1822, as published in the binomen *Ampullaria canalifera*, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology (a junior objective synonym of *Ampullaria canaliculata* Lamarck, 1804).

**History of Case 3175**

An application for the conservation of the specific name of *Ampullaria canaliculata* Lamarck, 1822, a junior primary homonym of *Ampullaria canaliculata* Lamarck, 1804, was received from Dr Robert H. Cowie (*Center for Conservation Research and Training, University of Hawaii, Honolulu, Hawaii, U.S.A.*), Dr Neal L. Evenhuis (*Bishop Museum, Honolulu, Hawaii, U.S.A.*) and Dr Alan R. Kabat (*c/o National Museum of Natural History, Smithsonian Institution, Washington, D.C., U.S.A.*) on 19 September 2000. After correspondence the case was published in BZN 58: 13–18 (March 2001). Notice of the case was sent to appropriate journals.

**Decision of the Commission**

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 58: 16. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 22: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Eschmeyer, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, Štys, van Tol

Negative votes – 1: Cogger.

Evenhuis abstained.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

Cogger commented: 'Retention of primary homonymous names by the same author (albeit with different dates of publication) is especially confusing and, in my view, should be avoided whenever possible. The solution suggested but rejected by the applicants in para. 7 of the application (to adopt *Ampullaria canalifera* Lamarck, 1822 in place of *A. canaliculata* Lamarck, 1804) would have been preferable to the one requested'.

### Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

*canaliculata*, *Ampullaria*, Lamarck, 1804, *Annales du Muséum National d'Histoire Naturelle*, **5**(25): 32.

*canaliculata*, *Ampullaria*, Lamarck, 1822, *Histoire naturelle des animaux sans vertèbres*, vol. 6, part 2, p. 178.

*canalifera*, *Ampullaria*, Lamarck, 1822, *Histoire naturelle des animaux sans vertèbres*, vol. 7, p. 549.



**OPINION 1998 (Case 3123)****DOLICHOPODINI Brunner von Wattenwyl, 1888 (Insecta, Grylloptera): spelling emended to DOLICHOPODAINI, so removing the homonymy with DOLICHOPODIDAE Latreille, 1809 (Insecta, Diptera)**

**Keywords.** Nomenclature; taxonomy; Diptera; Grylloptera; DOLICHOPODIDAE; DOLICHOPODAINI; *Dolichopus*; *Dolichopoda*; long-legged flies; camel crickets; cave crickets.

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**Ruling**

- (1) Under the plenary power it is hereby ruled that for the purposes of Article 29 of the Code the stem of the generic name *Dolichopoda* Bolivar, 1880 (Grylloptera) is DOLICHOPODA-.
- (2) The name *Dolichopoda* Bolivar, 1880 (gender: feminine), type species by monotypy *Gryllus (Tettigonia) palpata* Sulzer, 1776, is hereby placed on the Official List of Generic Names in Zoology (Grylloptera).
- (3) The name *palpata* Sulzer, 1776, as published in the binomen *Gryllus (Tettigonia) palpata* (specific name of the type species of *Dolichopoda* Bolivar, 1880) is hereby placed on the Official List of Specific Names in Zoology (Grylloptera).
- (4) The entry on the Official List of Family-Group Names in Zoology for the name DOLICHOPODIDAE Latreille, 1809 is hereby emended to record that it was first published in the correct form by Agassiz (1846) (Diptera).
- (5) The name DOLICHOPODAINI Brunner von Wattenwyl, 1888, type genus *Dolichopoda* Bolivar, 1880 is hereby placed on the Official List of Family-Group Names in Zoology (spelling emended by the ruling in (1) above) (Grylloptera).
- (6) The name DOLICHOPODINI Brunner von Wattenwyl, 1888 is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology (spelling emended to DOLICHOPODAINI by the ruling in (1) above) (Grylloptera).

**History of Case 3123**

An application to remove the homonymy between the family-group names DOLICHOPODINI Brunner von Wattenwyl, 1888 (Insecta, Grylloptera) and DOLICHOPODIDAE Latreille, 1809 (Insecta, Diptera) was received from Drs Spyros D. Skareas and Scott E. Brooks (*Lyman Entomological Museum and Research Laboratory, McGill University (Macdonald Campus), Ste-Anne-de-Bellevue, Quebec, Canada*) on 16 September 1999. After correspondence the case was published in BZN 57: 147–150 (September 2000). Notice of the case was sent to appropriate journals.

The names of *Dolichopus* Latreille, 1796 and of its type species, *Dolichopus unguatus* Linnaeus, 1758, and the family-group name DOLICHOPODIDAE Latreille, 1809 (Diptera), were placed on Official Lists in Direction 49 (November 1956). However, the homonymy with the gryllopteran family-group name DOLICHOPODINI was not then considered.

### Decision of the Commission

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 148–149. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 24: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, Štys, van Tol

Negative votes – none.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

### Original references

The following are the original references to the names placed on Official Lists and an Official Index, and to the emended entry on an Official List, by the ruling given in the present Opinion:

*Dolichopoda* Bolivar, 1880, *Annales de la Société Entomologique de France*, (5)10(1): 72.

DOLICHOPODAINI Brunner von Wattenwyl, 1888, *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien*, 38: 256 (incorrectly spelled as DOLICHOPODINI).

DOLICHOPODIDAE Latreille, 1809, *Genera crustaceorum et insectorum secundum ordinem naturalem in familias disposita* . . ., vol. 4, pp. 239, 290.

DOLICHOPODINI Brunner von Wattenwyl, 1888, *Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien*, 38: 256 (an incorrect original spelling of DOLICHOPODAINI).

*palpata*, *Gryllus* (*Tettigonia*), Sulzer, 1776, *Abgekürzte Geschichte der Insecten Nach dem Linnaeischen System*, p. 83.

**OPINION 1999 (Case 3096)**

***Dichrorampha* Guenée, 1845 (Insecta, Lepidoptera): *Grapholitha plumbagana* Treitschke, 1830 designated as the type species, and *Dichrorampha*: given precedence over *Amaurosetia* Stephens, 1835**

**Keywords.** Nomenclature; taxonomy; Lepidoptera; Microlepidoptera; TORTRICIDAE; moths; *Dichrorampha*; *Dichrorampha plumbagana*; *Amaurosetia*; *Amaurosetia albinella*.

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**Ruling**

- (1) Under the plenary power:
  - (a) all fixations of type species for the nominal genus *Dichrorampha* Guenée, 1845 are hereby set aside before the designation by Fernald (1908) of *Grapholitha plumbagana* Treitschke, 1830;
  - (b) the name *Dichrorampha* Guenée, 1845 is hereby given precedence over the name *Amaurosetia* Stephens, 1835 whenever the two are considered to be synonyms.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Dichrorampha* Guenée, 1845 (gender: feminine), type species by designation by Fernald (1908), as ruled in (1)(a) above, *Grapholitha plumbagana* Treitschke, 1830, with the endorsement that it is to be given precedence over the name *Amaurosetia* Stephens, 1835 whenever the two are considered to be synonyms;
  - (b) *Amaurosetia* Stephens, 1835 (gender: feminine), type species by designation by Westwood (1840) *Phalaena albinella* Linnaeus, 1758, with the endorsement that it is not to be given priority over the name *Dichrorampha* Guenée, 1845 whenever the two are considered to be synonyms.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *plumbagana* Treitschke, 1830, as published in the binomen *Grapholitha plumbagana* (specific name of the type species of *Dichrorampha* Guenée, 1845);
  - (b) *albinella* Linnaeus, 1758, as published in the binomen *Phalaena albinella* (specific name of the type species of *Amaurosetia* Stephens, 1835).

**History of Case 3096**

An application for the conservation of the generic name *Dichrorampha* Guenée, 1845 by giving it precedence over *Amaurosetia* Stephens, 1835 was received from Dr Leif Aarvik (Zoological Museum, University of Oslo, Oslo, Norway) on 13 August 1998. After correspondence the case was published in BZN 57: 210–213 (December 2000). Notice of the case was sent to appropriate journals.

### Decision of the Commission

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 211–212. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 23: Alonso-Zarazaga, Bock, Böhme, Bouchet (part), Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, van Tol

Negative votes – 1: Štys.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

Bouchet voted for the designation of *Grapholitha plumbagana* Treitschke, 1830 as the type species of *Dichrorampha* Guenée, 1845, but not for giving the latter name precedence over *Amaurosetia* Stephens, 1835. He commented: 'As the name *Amaurosetia* has been treated as a junior synonym of *Borkhausenia* Hübner, 1825 (family OECOPHORIDAE; para. 1 of the application), and it has not been used (apart from Leraut, 1997) during the 20th century, this should have been reflected in the proposals. Instead it was proposed that *Amaurosetia* be treated as a potentially valid name in the TORTRICIDAE and, in my view, this might be a threat to stability'.

### Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

*albinella*, *Phalaena*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 541.

*Amaurosetia* Stephens, 1835, *Illustrations of British Entomology*, vol. 4 (Haustellata), p. 353.

*Dichrorampha* Guenée, 1845, *Annales de la Société Entomologique de France*, (2)3: 185.

*plumbagana*, *Grapholitha*, Treitschke, 1830, *Die Schmetterlinge von Europa*, vol. 8, p. 218.

The following is the reference for the designation of *Phalaena albinella* Linnaeus, 1758 as the type species of the nominal genus *Amaurosetia* Stephens, 1835:

**Westwood, J.O.** 1840. *Synopsis of the genera of British insects*, p. 114. Published with *Introduction to the modern classification of insects*, vol. 2.

The following is the reference for the designation of *Grapholitha plumbagana* Treitschke, 1830 as the type species of the nominal genus *Dichrorampha* Guenée, 1845:

**Fernald, C.H.** 1908. *The genera of the Tortricidae and their types*, p. 56.

**OPINION 2000 (Case 3132)**

***Eudorylas* Aczél, 1940 and *Microcephalops* De Meyer, 1989 (Insecta, Diptera): conserved by the designation of *Pipunculus fuscipes* Zetterstedt, 1844 as the type species of *Eudorylas***

**Keywords.** Nomenclature; taxonomy; Diptera; PIPUNCULIDAE; *Eudorylas*; *Eudorylas fuscipes*; *Microcephalops*; *Microcephalops banksi*; *Microcephalops opacus*; *Neodorylas*.

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**Ruling**

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Eudorylas* Aczél, 1940 are hereby set aside and *Pipunculus fuscipes* Zetterstedt, 1844 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Eudorylas* Aczél, 1940 (gender: masculine), type species by designation in (1) above *Pipunculus fuscipes* Zetterstedt, 1844;
  - (b) *Microcephalops* De Meyer, 1989 (gender: feminine), type species by original designation *Pipunculus banksi* Aczél, 1940.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *fuscipes* Zetterstedt, 1844, as published in the binomen *Pipunculus fuscipes* and as defined by the lectotype (specimen no. 296, type number ZML 2442:1 in the Zetterstedt collection in Lund) designated by Collin (1956) (specific name of the type species of *Eudorylas* Aczél, 1940);
  - (b) *banksi* Aczél, 1940, as published in the binomen *Pipunculus banksi* (specific name of the type species of *Microcephalops* De Meyer, 1989).
- (4) The name *Neodorylas* Kuznetsov, 1995 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Eudorylas* Aczél, 1940).

**History of Case 3132**

An application for the conservation of the name *Eudorylas* Aczél, 1940 was received from Dr Marc De Meyer (*Koninklijk Museum voor Midden Afrika, Tervuren, Belgium*) and Dr Jeff Skevington (*University of Queensland, St. Lucia, Queensland, Australia*) on 4 August 1999. After correspondence the case was published in BZN 58: 19–23 (March 2001). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that *Cephalops opacus* Fallén, 1816 was the type species of *Eudorylas* Aczél, 1940, but the original designation was apparently based on an error. *Cephalops opacus* and *Pipunculus vestitus* Becker, 1900, a species placed in the pipunculid genus *Microcephalops* De Meyer, 1989, were synonyms (paras. 7, 8 and 10 of the application) and, as a consequence, the name *Microcephalops* was formally a junior subjective synonym of *Eudorylas*. The application recorded (Abstract, paras. 7 and 12) that the proposed designation of *Pipunculus*

*fuscipes* Zetterstedt, 1844 as the type species of *Eudorylas*, in accord with the usage of *Eudorylas*, would also conserve the current usage of the name *Microcephalops*. It was proposed that the names of *Microcephalops* and of its type species, *P. banksi* Aczél, 1940, be placed on Official Lists in addition to the proposals in para. 13 on BZN 58: 21–22.

### Decision of the Commission

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 58: 21–22. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes 24: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, Štys, van Tol

Negative votes – none.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

### Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

*banksi*, *Pipunculus*, Aczél, 1940, *Zoologischer Anzeiger*, **132**: 152.

*Eudorylas* Aczél, 1940, *Zoologischer Anzeiger*, **132**: 151.

*fuscipes*, *Pipunculus*, Zetterstedt, 1844, *Diptera Scandinaviae disposita et descripta*, vol. 3, p. 953.

*Microcephalops* De Meyer, 1989, *Bulletin de l'Institut Royal des Sciences Naturelles de Belgique (Entomologie)*, **59**: 120.

*Neodorylas* Kuznetzov, 1995, *International Journal of Dipterological Research*, **6**(4): 326.

The following is the reference for the designation of the lectotype of *Pipunculus fuscipes* Zetterstedt, 1844:

Collin, J.E. 1956. *Opuscula Entomologica*, **21**(2–3): 151.

**OPINION 2001 (Case 3157)*****Halictoides dentiventris* Nylander, 1848 (currently *Dufourea dentiventris*; Insecta, Hymenoptera): specific name conserved**

**Keywords.** Nomenclature; taxonomy; Hymenoptera; APOIDEA; HALICTIDAE; *Dufourea*; *Halictoides*; *Dufourea dejeanii*; *Dufourea dentiventris*; Palaearctic.

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**Ruling**

- (1) Under the plenary power the specific name *dejeanii* Lepeletier, 1841, as published in the binomen *Dufourea dejeanii*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Halictoides* Nylander, 1848 (gender: masculine), type species by subsequent designation by Cockerell & Porter (1899) *Halictoides dentiventris* Nylander, 1848, is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *dentiventris* Nylander, 1848, as published in the binomen *Halictoides dentiventris* and as defined by the lectotype (female specimen no. 5153 in the Zoological Museum, Helsinki) designated by Ebmer (1976) (specific name of the type species of *Halictoides* Nylander, 1848), is hereby placed on the Official List of Specific Names in Zoology.
- (4) The name *dejeanii* Lepeletier, 1841, as published in the binomen *Dufourea dejeanii* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

**History of Case 3157**

An application for the conservation of the specific name of *Halictoides dentiventris* Nylander, 1848 by the suppression of the senior synonym *Dufourea dejeanii* Lepeletier, 1841 was received from Dr P.A.W. Ebmer (*Puchenau, Austria*) on 14 April 2000. After correspondence the case was published in BZN 58: 32–33 (March 2001). Notice of the case was sent to appropriate journals.

**Decision of the Commission**

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 58: 33. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 20: Alonso-Zarazaga, Bock, Böhme, Brothers, Calder, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song

Negative votes – 4: Bouchet, Cogger, Štys and van Tol.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

Bouchet commented: 'The application (paras. 1 and 2) indicates 20 usages of the name *Halictoides dentiventris* since 1935. In my view this does not justify the use of the plenary power to set aside priority'. Cogger commented: 'While I accept the need

to preserve usage of the name *Halictoides dentiventris*, it is unlikely that the systematics of this group is so firmly established that further taxonomic changes in the group to which *dentiventris* belongs will not occur. Suppression of the name of a species with extant type(s) is unwarranted in such cases, and maintenance of existing usage of the junior name is best achieved by giving priority to that name whenever the two are considered to be synonyms'. Štys commented: 'The case does not seem to merit the use of the plenary power and, in my view, priority should be followed'.

### Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

*dejeanii*, Dufourea, Lepeletier, 1841, *Histoire naturelle des insectes*, vol. 2, p. 228.

*dentiventris*, *Halictoides*, Nylander, 1848, *Notiser ur Sällskapetets pro fauna et flora Fennica*, vol. 1, p. 195.

*Halictoides* Nylander, 1848, *Notiser ur Sällskapetets pro fauna et flora Fennica*, vol. 1, p. 195.

The following is the reference for the designation of *Halictoides dentiventris* Nylander, 1848 as the type species of the nominal genus *Halictoides* Nylander, 1848:

**Cockerell, T.D.A. & Porter, W.** 1899. *Annals and Magazine of Natural History*, (7)4: 420.

The following is the reference for the designation of the lectotype of *Halictoides dentiventris* Nylander, 1848:

**Ebmer, A.W.** 1976. *Nachrichtenblatt der Bayerischen Entomologen*, 25: 1.



**OPINION 2002 (Case 3162)*****Ceratichthys micropogon* Cope, 1865 (currently *Nocomis micropogon*; Osteichthyes, Cypriniformes): usage of the specific name conserved by the designation of a neotype**

**Keywords.** Nomenclature; taxonomy; Osteichthyes; Cypriniformes; CYPRINIDAE; *Nocomis micropogon*; river chub; North America.

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**Ruling**

- (1) Under the plenary power all previous fixations of type specimens for the nominal species *Ceratichthys micropogon* Cope, 1865 are hereby set aside and specimen no. USNM 166416 in the National Museum of Natural History, Washington, D.C., is designated as the neotype.
- (2) The name *micropogon* Cope, 1865, as published in the binomen *Ceratichthys micropogon* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

**History of Case 3162**

An application to conserve the specific name of *Ceratichthys micropogon* Cope, 1865 by the designation of a neotype was received from Dr Carter R. Gilbert (*Florida Museum of Natural History, University of Florida, Gainesville, Florida, U.S.A.*) and the other members of the joint Common and Scientific Names Committee of the American Fisheries Society and the American Society of Ichthyologists and Herpetologists on 19 May 2000. After correspondence the case was published in BZN 57: 214–217 (December 2000). Notice of the case was sent to appropriate journals.

**Decision of the Commission**

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 216. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 23: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, van Tol

Negative votes – 1: Štys.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

Bouchet commented: ‘The application addresses only partially the stability of names for species in the genus *Nocomis* Girard, 1856. The name *Luxilus kentuckiensis* Rafinesque, 1820 was used until 1926 (para. 5) and remains available. The fact that the original description “did not list any diagnostic characters” (para. 5) applies to many descriptions of nominal species in current use and it is nomenclaturally unacceptable to disregard a name on such weak ground. The name *L. kentuckiensis* is the oldest that applies to a species of *Nocomis* from Kentucky and, in my view, stability would have been best achieved by designating a neotype and adopting it for the species in question’.

**Original reference**

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

*micropogon*; *Ceratichthys*, Cope, 1865, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **16**(5): 277.

**OPINION 2003 (Case 3163)*****Holacanthus ciliaris bermudensis* Goode, 1876 (currently *Holacanthus bermudensis*; Osteichthyes, Perciformes): usage of the subspecific name conserved by the designation of a neotype**

**Keywords.** Nomenclature; taxonomy; Osteichthyes; Perciformes; POMACANTHIDAE; *Holacanthus bermudensis*; blue angelfish; Western Atlantic.

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**Ruling**

- (1) Under the plenary power all previous fixations of type specimens for the nominal subspecies *Holacanthus ciliaris bermudensis* Goode, 1876 are hereby set aside and specimen no. CAS-SU 363 in the California Academy of Sciences, San Francisco, is designated as the neotype.
- (2) The name *bermudensis* Goode, 1876, as published in the trinomen *Holacanthus ciliaris bermudensis* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.
- (3) The name *isabelita* Jordan & Rutter, 1898, as published in the binomen *Angelichthys isabelita* is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology (a junior objective synonym of *Holacanthus ciliaris bermudensis* Goode, 1876).

**History of Case 3163**

An application to conserve the subspecific name of *Holacanthus ciliaris bermudensis* Goode, 1876 by the designation of a neotype was received from Dr Carter R. Gilbert (*Florida Museum of Natural History, University of Florida, Gainesville, Florida, U.S.A.*) and the other members of the joint Common and Scientific Names Committee of the American Fisheries Society and the American Society of Ichthyologists and Herpetologists on 19 May 2000. After correspondence the case was published in BZN 57: 218–222 (December 2000). Notice of the case was sent to appropriate journals.

**Decision of the Commission**

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 221. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 22: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, van Tol

Negative votes – 2: Calder and Štys.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

Calder commented: 'I am in favour of stabilizing the name *Holacanthus bermudensis* for the well known blue angelfish but the neotype is from Florida and, in my view, this is excessively far away from the type locality of Bermuda'.

**Original references**

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

*bermudensis*, *Holacanthus ciliaris*, Goode, 1876, *Bulletin of the United States National Museum*, **5**: 43.  
*isabelita*, *Angelichthys*, Jordan & Rutter, 1898, in Jordan, D.S. & Evermann, B.W., *Bulletin of the United States National Museum*, **47**(2): 1684.

**OPINION 2004 (Case 3167)*****Schistochlamys* Reichenbach, 1850 and *Neothraupis* Hellmayr, 1936  
(Aves, Passeriformes): conserved**

**Keywords.** Nomenclature; taxonomy; Aves; Passeriformes; THRAUPIDAE; EMBERIZIDAE; THRAUPINAE; *Schistochlamys*; *Neothraupis*; *Schistochlamys capistrata*; *Schistochlamys ruficapillus capistrata*; *Neothraupis fasciata*; tanagers; South America.

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**Ruling**

- (1) Under the plenary power:
  - (a) the following names are hereby suppressed:
    - (i) *Diucopsis* Bonaparte, 1850 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
    - (ii) *Neothraupis* Berlepsch, 1879 and all uses of that name prior to the publication of *Neothraupis* Hellmayr, 1936 for the purposes of both the Principle of Priority and the Principle of Homonymy;
  - (b) all previous fixations of type species for the nominal genus *Schistochlamys* Reichenbach, 1850 prior to that by P.L. Sclater (1886) of *Tanagra capistrata* Wied, 1821 are hereby set aside.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Schistochlamys* Reichenbach, 1850 (gender: feminine), type species by subsequent designation by P.L. Sclater (1886) *Tanagra capistrata* Wied, 1821, as ruled in (1)(b) above;
  - (b) *Neothraupis* Hellmayr, 1936 (gender: feminine), type species by subsequent designation by G.R. Gray (1855) of the replaced nominal genus *Diucopsis* Bonaparte, 1850, *Tanagra fasciata* Lichtenstein, 1823.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *capistrata* Wied, 1821, as published in the binomen *Tanagra capistrata* (specific name of the type species of *Schistochlamys* Reichenbach, 1850);
  - (b) *fasciata* Lichtenstein, 1823, as published in the binomen *Tanagra fasciata* (specific name of the type species of *Neothraupis* Hellmayr, 1936).
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) *Diucopsis* Bonaparte, 1850 (suppressed in (1)(a)(i) above);
  - (b) *Neothraupis* Berlepsch, 1879 (suppressed in (1)(a)(ii) above and a junior objective synonym of *Cyanicterus* Bonaparte, 1850);
  - (c) *Callithraupis* Berlepsch, 1879 (a junior objective synonym of *Cyanicterus* Bonaparte, 1850 and of *Neothraupis* Berlepsch, 1879).

**History of Case 3167**

An application for the conservation of the generic names *Schistochlamys* Reichenbach, 1850 and *Neothraupis* Hellmayr, 1936 by the designation of *Tanagra*

*capistrata* Wied, 1821 as the type species of *Schistochlamys* was received from Mr Steven M.S. Gregory (Northampton, Northamptonshire, U.K.) on 2 October 1999. After correspondence the case was published in BZN 57: 162–165 (September 2000). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that the sentence in para. 5 of the application which stated 'Recognition of *Tanagra fasciata* as the type species of *Schistochlamys* would mean the loss of *Neothraupis* Hellmayr as a junior synonym of *Schistochlamys*, and a new name would be needed for the taxon currently known as *Neothraupis* . . .' should be emended to read ' . . . a new name would be needed for the taxon currently known as *Schistochlamys* . . . '.

### Decision of the Commission

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 164. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 21: Alonso-Zarazaga, Bock, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Macpherson, Mahnert, Martins de Souza, Mawatari, Nielsen, Papp, Patterson, Song, Štys, van Tol

Negative votes – 2: Böhme and Minelli.

Lamas abstained.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

### Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

*Callithraupis* Berlepsch, 1879, *Ornithologisches Centralblatt*, 4(8): 63.

*capistrata*, *Tanagra*, Wied, 1821, *Reise nach Brasilien in den Jahren 1815–1817*, vol. 2, p. 179.

*Diucopis* Bonaparte, 1850, *Conspectus Generum Avium*, part 1, p. 491.

*fasciata*, *Tanagra*, Lichtenstein, 1823, *Verzeichniss der Doubletten des zoologischen Museums der Königl. Universität zu Berlin*, p. 32.

*Neothraupis* Berlepsch, 1879, in Schalow, H., *Ornithologisches Centralblatt*, 4(7): 55.

*Neothraupis* Hellmayr, 1936, *Field Museum of Natural History Publications*, Zoology Series, 13(9): 432.

*Schistochlamys* Reichenbach, 1850, *Avium Systema Naturale*, Atlas, pl. 77.

The following is the reference for the designation of *Tanagra capistrata* Wied, 1821 as the type species of the nominal genus *Schistochlamys* Reichenbach, 1850:

Slater, P.L. 1886. *Catalogue of birds in the British Museum*, vol. 11 (Fringilliformes, part 2. Coerebidae, Tanagridae and Icteridae), p. 301.

The following is the reference for the designation of *Tanagra fasciata* Lichtenstein, 1823 as the type species of the nominal genus *Neothraupis* Hellmayr, 1936:

Gray, G.R. 1855. *Catalogue of the genera and subgenera of birds contained in the British Museum*, p. 73.

**OPINION 2005 (Case 3022)*****Catalogue des mammifères du Muséum National d'Histoire Naturelle* by Étienne Geoffroy Saint-Hilaire (1803): placed on the Official List of Works Approved as Available for Zoological Nomenclature**

**Keywords.** Nomenclature; taxonomy; Mammalia; Étienne Geoffroy Saint-Hilaire; *Catalogue des mammifères du Muséum National d'Histoire Naturelle* (1803).

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**Ruling**

- (1) The work entitled *Catalogue des mammifères du Muséum National d'Histoire Naturelle* by Étienne Geoffroy Saint-Hilaire (1803) is hereby confirmed as available for nomenclatural purposes.
- (2) The above work is hereby placed on the Official List of Works Approved as Available for Zoological Nomenclature.

**History of Case 3022**

An application to place the work entitled *Catalogue des mammifères du Muséum National d'Histoire Naturelle* (Paris) by Étienne Geoffroy Saint-Hilaire (1803) on the Official List, and thus resolve instability in the use of names established in it, was received from Dr Peter Grubb (London, U.K.) on 1 September 2000. After correspondence the case was published in BZN 58: 41–52 (March 2001). Notice of the case was sent to appropriate journals.

It was noted on the voting paper that support for the application had been received by Dr Robert S. Voss (*American Museum of Natural History, New York, NY, U.S.A.*) who noted: 'The rejection of Geoffroy's work would, as stated in para. 8 of the application, lead to changes in the accepted names of a number of taxa and would have no compensating advantages'.

The paper by Voss, Lunde & Simmons, cited as 'In press' in para. 8(c) of the application, was published in June 2001 in *Bulletin of the American Museum of Natural History*, 263. The black-handed tamarin of southeastern Amazonia was cited under the name *Saguinus niger* É. Geoffroy Saint-Hilaire, 1803 and an adult male neotype was designated (specimen no. AMNH 96500 from Cametá, Brazil).

The specific name of *Sciurus* (currently *Xerus* or *Euxerus*) *erythropus* was placed on the Official List in Opinion 945 (March 1971) attributed to Étienne Geoffroy Saint-Hilaire (1803).

**Decision of the Commission**

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 58: 47. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 24: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, Štys, van Tol

Negative votes – none.

No votes were received from Dupuis, Kraus, Ng and Rosenberg.

Approval by the Commission of the placement of the *Catalogue* on the Official List means that authorship and date of the following names established in it are attributable to É. Geoffroy Saint-Hilaire (1803):

(Page numbers refer to the *Catalogue*; the currently accepted name of the taxon is given in square brackets)

- P. 13. *Sagouin niger* [*Saguinus midas niger*]
- P. 46. *Vespertilio borbonicus* [*Scotophilus borbonicus*]
- P. 47. *Pteropus rufus* [*P. rufus*]
- P. 61. *Phyllostoma crenulata* [*Mimon crenulatum*]
- P. 69. *Erinaceus aegyptius* [*Hemiechinus auritus aegyptius*]
- P. 77. *Scalopus* [*Scalopus*]
- P. 113. *Civetta indica* [*Viverricula indica*]
- P. 124. *Felis yagouaroundi* [*Herpailurus yagouaroundi*]
- P. 134. *Canis niloticus* [*Vulpes vulpes niloticus*]
- P. 140. *Phalangista maculata* [*Spilocuscus maculatus*]
- P. 142. *Didelphis nudicaudata* [*Metachirus nudicaudatus*]
- P. 165. *Cavia cristata* [*Dasyprocta cristata*]
- P. 176. *Sciurus rufiventer* [*Sciurus niger rufiventer*]
- P. 177. *Sciurus pusillus* [*Sciurillus pusillus*]
- P. 186. *Lemmus albicaudatus* [A senior homonym of *Otomys* (= *Mystromys*) *albicaudatus* A. Smith, 1834?]
- P. 186. *Lemmus niloticus* [*Arvicanthus niloticus*]
- P. 192. *Mus alexandrinus* [*Rattus rattus alexandrinus*]
- P. 195. *Mus guyannensis* [*Proechimys guyannensis*]
- P. 195. *Mus cahirinus* [*Acomys cahirinus*]
- P. 202. *Dipus pyramidum* [*Gerbillus pyramidum*]
- P. 213. *Manis crassicaudata* [*Manis crassicaudata*]
- P. 259. *Antilope equina* [*Hippotragus equinus*]
- P. 269. *Antilope caama* [*Alcelaphus buselaphus caama*].

### Original reference

The following is the original reference to the work placed on an Official List by the ruling given in the present Opinion:

**Geoffroy Saint-Hilaire, É.** 1803. *Catalogue des mammifères du Muséum National d'Histoire Naturelle.*



## Nomenclatural Note

### The true identity of *Astacus vitreus* Fabricius, 1775 (Crustacea, Stomatopoda)

L.B. Holthuis

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In 1818 Lamarck gave the name *Squilla scabricauda* (currently *Lysiosquilla scabricauda*; family LYSIOSQUILLIDAE) to the mantis shrimp, one of the best known stomatopod Crustacea of the Western Atlantic. However, for many years the name has been considered as pre-dated by the synonym *Astacus vitreus* Fabricius, 1775, which was based on a larva. The name *vitreus* has been mentioned as referring to the larval form but it has not been adopted for the adult crustacean, and *scabricauda* has been used in numerous publications. To avoid any possible confusion in November 2000 I submitted an application to the Commission seeking the suppression of *vitreus*. The case was announced in BZN 58: 1 (March 2001).

Fabricius's (1775) rather general description of *Astacus vitreus* fitted the larva of *Lysiosquilla scabricauda* and mentioned no characters that would make the synonymy impossible. The type locality of *vitreus* was given by Fabricius as 'in Oceana atlantico' which, as I showed (Holthuis, 2000, pp. 12-13), was most likely near Rio de Janeiro, Brazil, and within the range for *L. scabricauda*.

Hansen (1895) gave special attention to the identity of *Astacus vitreus*, and was sure that it was the larva of *Lysiosquilla scabricauda*, and most later authors followed him. Hansen pointed out that the correct name for the species should be *Lysiosquilla vitrea* (Fabricius, 1775) but, in his view, to adopt that specific name was absurd and would lead to unlimited confusion. He suggested that the nomenclature for adults and larvae should be kept separate. He continued to use the name *Lysiosquilla scabricauda* for the species, as have all subsequent authors even if agreeing that *Astacus vitreus* was an older synonym. Under *L. scabricauda*, Gurney (1946) referred to Hansen and noted '*Lysierichthus vitreus* is its larva'. Manning (1969), in his monographic review of the Stomatopoda of the Western Atlantic, cited *Astacus vitreus* in the synonymy of *Lysiosquilla scabricauda* with a question mark and noted (p. 33) 'Several larval forms, including *Astacus vitreus* Fabricius . . . have been identified with *Lysiosquilla scabricauda*. As all of these identifications are tentative, the names are accompanied with a question-mark in the synonymy'.

In his description of *Astacus vitreus*, Fabricius (1775) referred to 'Mus. Banks'. There are no existing type specimens of the species (see White, 1847 and Zimsen, 1964) but Wheeler (1986) recorded that Fabricius based his description on material in the collection of Sir Joseph Banks, most probably the drawing by Sydney Parkinson made during the outward journey of James Cook's first circumnavigational voyage in the *Endeavour* (August 1768 to July 1771). The drawing forms part of the collection given by Banks before 1815 to the Linnean Society of London and in 1863 passed to the British Museum and thence to The Natural History Museum, London.

Mrs Anthea Gentry (The Secretariat, ICZN) recently pointed out to me that the drawing of *Astacus vitreus* was reproduced by Wheeler (1983, p. 209, pl. 189b). It

shows enlarged dorsal and ventral views, as well as a natural sized view, and is annotated '*Cancer vitreus*' and 'Sydney Parkinson pinxt 1768' on the front, and 'Coast of Brasil' on the reverse, possibly by Fabricius when he studied Banks's collection (see Wheeler, 1983, pp. 200-201).

I have recently received on loan the publication by Wheeler (1983) in which Parkinson's figures of *Astacus vitreus* were reproduced and found that the drawing represents a larva of *Alima* Leach, 1816, most probably *A. neptuni* (Linnaeus, 1768), instead of the expected *Lysiosquilla* larva. It seems clear that none of the previous authors who dealt with the nomenclature of *L. scabricauda* had seen this illustration. As noted above, Fabricius's (1775) description was rather general and fitted both species, although it now seems certain that an *Alima* larva was meant. Fabricius's (1775) description fits Parkinson's figures very well.

The first mistake in the identification of *Astacus vitreus* was made by Desmarest (1823) who synonymised *vitreus* with *Smerdis vulgaris* Leach, 1818, the latter being very similar to species of *Lysiosquilla*, judging by Leach's figure. Leach's type specimen originates from West Africa and certainly is not *L. scabricauda*.

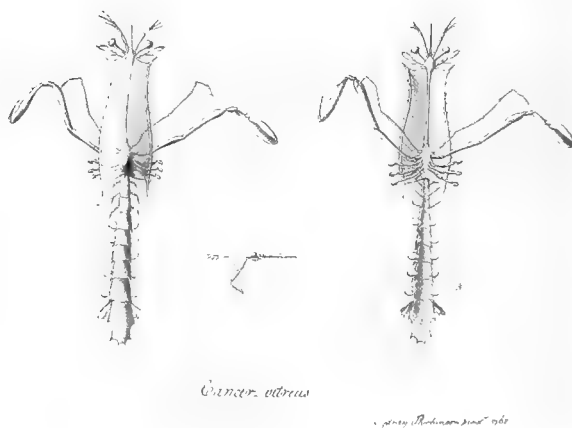
Since *Astacus vitreus* Fabricius, 1775 is not a senior synonym of *Lysiosquilla scabricauda* Lamarck, 1818 but a junior synonym of *Alima neptuni* (Linnaeus, 1768), there is no need for Commission action to conserve the name *scabricauda* and I have therefore withdrawn my application. The larval form *A. neptuni* was known as *A. hyalina* Leach, 1817 until Manning & Lewinsohn (1986, pp. 13, 14) demonstrated that the names were synonyms and adopted *neptuni*. Manning (1962) had already shown that *A. hyalina* referred to the larva of the adult stomatopod *Squilla alba* Bigelow, 1893, which Manning (1969, pp. 127-139) considered distinct from other species of *Squilla* Fabricius, 1793 and placed in the genus *Alima*. I (Holthuis, 2000, p. 18) designated the lectotype of *A. alba* as the neotype of *A. neptuni* (for which species there was no existing type material), rendering *A. neptuni* the valid name in accord with current usage. To the synonymy of *A. neptuni*, *A. hyalina* and *A. alba* must now be added *Astacus vitreus* Fabricius, 1775, judging from Parkinson's figure of the latter.

The name *Cancer neptuni* was published (p. 226) in a zoological Appendix to vol. 1 (Regnum Animale, 1766, 1767) of Linnaeus's *Systema Naturae* (Edition 12). This Appendix (pp. 223-228) was published in 1768 following vol. 3 (Regnum Lapideum, pp. 5-222) of the work. There is also a botanical Appendix to vol. 2 (Regnum Vegetabile, 1767), and a single addition to vol. 3. Part of Linnaeus's *Systema Naturae* (Ed. 12), vol. 3 (Regnum Lapideum) dealing with fossil animals (pp. 153-174) was rejected for nomenclatural purposes by the Commission in Opinion 296 (October 1954). Fitton (1978; see also Wheeler, 1991) thought that the zoological Appendix might have also been 'accidentally suppressed', but it is clear from the original application (BZN 2: 88) and subsequent comments (reproduced in the Opinion) that only the section on Petrificata was at issue, and thus *Cancer neptuni* Linnaeus, 1768 is an available name.

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Drawing of a crustacean larva made by Sydney Parkinson during Cook's first voyage, 1768–1771, named *Astacus vitreus* by Fabricius (1775). Fabricius's taxon was subsequently erroneously identified as the larval stage of the mantis shrimp, *Lysiosquilla scabricauda* (Lamarck, 1818), but is now known to be probably conspecific with *Alima neptuni* (Linnaeus, 1768). Enlarged dorsal (left), ventral (right) and side (centre) views (life size approximately 40 mm).

## Correspondence

### Description of taxa

Alireza Saboori

*Department of Plant Protection, College of Agriculture, Tehran University,  
Karaj-Iran*

It is very important that taxonomists can understand papers which include descriptions of new taxa. Unfortunately, some descriptions are written in non-Latin based national languages (such as Persian and Chinese etc.) and these are not easy for many taxonomists to translate. I propose that the Commission ratifies English as the common scientific language for description of all new animal taxa. This would greatly improve understanding of these descriptions for zoologists around the world.

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Correspondence on this subject, or any other topic related to nomenclature, is invited for publication (subject to editing) in the *Bulletin*; it should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

## INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; authors submitting general papers and comments should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

**General.** Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants are strongly encouraged to discuss their cases with other workers in the same field before submitting applications so that they are aware of any wider implications and the likely reactions of other zoologists.

**Text.** Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Abstracts will be prepared by the Secretariat. Text references should give dates and pages in parenthesis, e.g.

Hinton (1941, p. 358) pointed out the problem and attempted . . .

When an author(s) has published more than one work in a particular year, and these are referred to in the text, the works should be differentiated using a, b, c etc. in the text and reference list, e.g.

. . . the name continued to appear in literature for another 35 years (e.g. Kinzig, 1921; Pearse, 1929a, b).

Up to four authors' names in a multi-authored publication are given the first time the work is cited in the text, then et al. (not in italics) is used.

**References.** These should give all authors of a publication. Where possible, ten or more reasonably recent references should be given illustrating the usage of names that are to be conserved or given precedence over older names. For both periodical and book citations, lines subsequent to the first are indented. Authors' initials always follow the surname.

**1. Periodicals.** The title of periodicals should be in full and in italics. The title of the paper is given in Roman script, capitals are only used for proper nouns in English, and where appropriate in other languages, e.g.

**Miers, E.J.** 1878. Revision of the Hippidea. *Journal of the Linnean Society of London*, (Zoology), **14**: 312–336.

The author and volume number are given in bold. The year of publication is not in bold and is followed by a full stop. A comma separates periodical title and series/volume/part number. A colon separates series/volume/part number and page numbers. A hyphen separates first and last page of relevance. The reference ends with a full stop.

Series numbers are given in parenthesis (but not in bold) before the volume number; part or issue numbers are given in parenthesis after the volume number (but not in bold), e.g.

*Memoire della Reale Accademia delle Scienze di Torino*, (2)**13**: 19–94.

*Bulletin of the Museum of Comparative Zoology*, (Harvard College), **52**(16): 303–317.

Papers by more than one author are cited as shown below, with an ampersand (&) before the last author in a list (ampersands are similarly used in the text); commas separate surname and initials; full stops separate initials and come after the last initial. There is no space between initials, e.g.

**Michener, C.D. & Moure, J.S.** 1957. A study of the . . .

**Michener, C.D., McGinley, R.J. & Danforth, B.N.** 1994. The bee genera . . .

**2. Book titles.** These should be in italics and followed by the number of pages (both Roman and Arabic numerals where appropriate) and plates, the publisher and place of publication, e.g.

**Michener, C.D.** 2000. *The bees of the world*. xiv, 913 pp. Johns Hopkins University Press, Baltimore.

If a title is given in Latin, publisher and place of publication may also be given in their latinized form and as in the original publication, e.g.

**Gmelin, J.F.** 1788. *Caroli a Linné, Systema Naturae*, Ed. 13, vol. 1, part 4. Lipsiae. Long titles may be abbreviated, but should continue to make sense, e.g.

**Owen, R.** 1839. Crustacea. Pp. 77–92, pl. 25 in Beechey, F.W. (Ed.), *The zoology of Captain Beechey's voyage . . . to the Pacific and Behring's straits performed in Her Majesty's ship Blossom . . . in the years 1825, 26, 27 and 28*. Bohn, London.

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**Jones, A.B.** 2002. *Animals of the world*, Ed. 2, vol. 1, part 2. 222 pp., 12 pls.

**Smith, A.B. & Jones, B.** 2001. *In search of rare animals*, vol. 1, part 3. 254 pp., 6 pls.

### Submission of Application

Two copies should be sent to: Executive Secretary, The International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. If possible, accompany the printed copies of the application with a version saved in a Word (preferably) or .rtf file on an IBM PC compatible disk or as an e-mail attachment. Where possible photocopies of the relevant pages of the main references should be provided with an application.

The Commission's Secretariat is willing to advise on all aspects of the formulation of an application.

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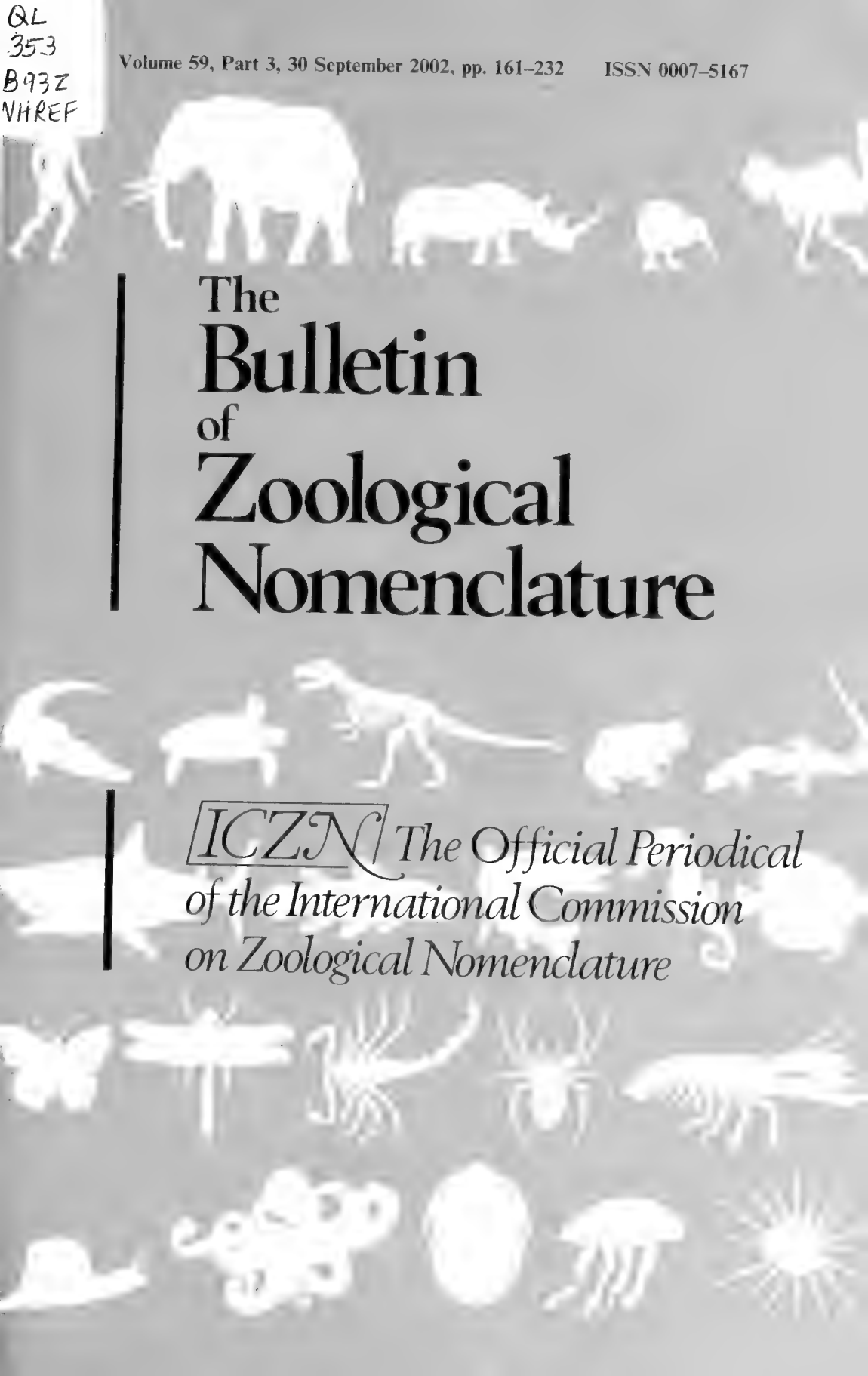
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# The Bulletin of Zoological Nomenclature

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on Zoological Nomenclature*

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## BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 59, part 3 (pp. 161–232)

30 September 2002

### Notices

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his or her contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 59, part 2 (28 June 2002). Under Article 82 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

Case 3243. *Lyda gyllenhali* Dahlbom, 1835 (currently *Pamphilius gyllenhali*; Insecta, Hymenoptera): proposed conservation of the specific name. A. Shinohara, M. Viitasaari & V. Vikberg.

Case 3244. *Termopsis* Heer, 1849 and *Mioterme*s Rosen, 1913 (Insecta, Isoptera): proposed conservation by the designation of *Termes breinii* Heer, 1849 as the type species of *Termopsis*. M.S. Engel, K. Krishna & C. Boyko.

Case 3245. *Hastigerinella* Cushman, 1927 (Rhizopoda, Foraminifera): proposed conservation by the designation of *Hastigerina digitata* Rhumbler, 1911 as the type species. H. Coxall.

Case 3248. *Prositata* Germain, 1915 (Mollusca, Gastropoda): proposed conservation. B. Verdcourt & A.C. van Bruggen.

Case 3249. *Lithasia* Haldeman, 1840 (Mollusca, Gastropoda): proposed conservation. R.L. Minton & A.E. Bogan.

Case 3250. *Cavia acouchy* Erxleben, 1777 (currently *Myoprocta acouchy*; Mammalia, Rodentia): proposed conservation of the specific name by the designation of a neotype. G.E.I. Ximenes.

(d) *Rulings of the Commission.* Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by

virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

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## The International Code of Zoological Nomenclature

The extensively revised 4th Edition of the *International Code of Zoological Nomenclature* (ISBN 0 85301 006 4) was published (in a bilingual volume in English and French) in August 1999. It came into effect on 1 January 2000 and entirely supersedes the 3rd (1985) edition.

The price of the English and French volume of the 4th Edition is £40 or \$65; the following discounts are offered:

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*The Bulletin of Zoological Nomenclature* (the Commission's quarterly journal) — discount valid for up to four years; for 2002 the discounted price would be £60 or \$107.

Official texts of the Code in several languages have been authorized by the Commission, and all (including English and French) are equal in authority. German, Japanese, Russian and Spanish texts have now been published and others are planned. Details of price and how to buy the published texts can be obtained from the following e-mail addresses:

German — [books@insecta.de](mailto:books@insecta.de)

Japanese — [tomokuni@kahaku.go.jp](mailto:tomokuni@kahaku.go.jp)

Russian — [kim@ik3599.spb.edu](mailto:kim@ik3599.spb.edu)

Spanish — [mcnb168@mncn.csic.es](mailto:mcnb168@mncn.csic.es)

## **Official Lists and Indexes of Names and Works in Zoology — Supplement 1986–2000**

The volume entitled *Official Lists and Indexes of Names and Works in Zoology* (ISBN 0 85301 004 8) was published in 1987. It gave details of the names and works on which the Commission had ruled and placed on the Official Lists and Indexes since it was set up in 1895 through to the end of 1985. The volume contained 9917 entries, 9783 being family-group, generic or specific names and 134 relating to works.

In the 15 years between 1986 and the end of 2000 a further 601 Opinions and Directions have been published in the *Bulletin* listing 2371 names and 14 works placed on the Official Lists and Indexes. Details of these 2385 entries are given in a Supplement of 141 pages (ISBN 0 85301 007 2) published early in 2001. Additional sections include (a) a systematic index of names on the Official Lists covering both the 1987 volume and the Supplement; (b) a table correlating the nominal type species of genera listed in the 1987 volume with the valid names of those species when known to be different; and (c) emendments to the 1987 volume.

The cost of the 1987 volume and of the Supplement is £60 or \$110 each, and £100 or \$170 for both volumes ordered together.

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Individual members of the American or European Association for Zoological Nomenclature are offered a price of £45 or \$70 for each volume, and £80 or \$120 for both.

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## Neotypification of protists, especially ciliates (Protozoa, Ciliophora)

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**Abstract.** Historically, most soft-bodied species of heterotrophic protists (Protozoa) have been difficult to preserve and consequently lack type material that can be re-investigated. This causes taxonomic and nomenclatural problems and increases the degree of subjectivity in the identification of these organisms. There are hardly any ciliate species whose identity has not been queried, or will be disputed as new data become available. However, recently methods have been developed that allow ciliates (Ciliophora) to be preserved in a way that allows type material to be preserved and re-examined. The current paper proposes that ciliate species are accurately re-described and neotypes designated that can be preserved using the new methods. The paper also proposes that the Commission should consider waiving Article 75.3.6 of the Fourth Edition of the International Code of Zoological Nomenclature (1999) in relation to ciliates and other groups of protists and small Metazoa. This Article states that neotypes should be designated from specimens that come as near as practicable from the original type locality. The reasons why the Article should be waived for these organisms are discussed.

**Keywords.** Nomenclature; taxonomy; Protozoa; Ciliophora; protists; ciliates; neotypification; type locality.

---

### Introduction

This paper aims to stimulate discussion about the absence of or inadequate quality of type material for protists, especially ciliates (Protozoa, Ciliophora). To date, this important problem has been largely ignored by the scientists concerned and by the scientific community in general. The lack of interest in protist nomenclatural problems is illustrated by the low number of relevant cases published in the *Bulletin of Zoological Nomenclature* and an ignorance of the International Code of Zoological Nomenclature displayed in recent publications by protozoologists. There are probably two main reasons for this: (i) there are very few people studying these minute organisms and even fewer are interested in their alpha-taxonomy and nomenclature, and (ii) there is a lack of type material, which causes nomenclatural problems and leaves identification extremely subjective. Similar problems exist in most 'microfaunal' groups and even more severely in the nematodes (Nematoda).

### Inadequate type material

The lack of type material is the result of historical problems with the preservation of ciliate specimens and more than 90% of all described ciliates lack type material. Where it does exist, species are often represented by material that fails to show the diagnostic features. Further, in some cases material is difficult to obtain because it is deposited in private collections (see Foissner & Pfister, 1997).

The lack of type material is one of the most difficult problems facing protozoologists involved in ciliate or other protozoan alpha-taxonomy. There are innumerable examples of poorly described species, doubtful identifications, and problematic redescriptions. Although my own research group may recognize a thorough redescription as 'authoritative', others may not. Berger (1999), for example, assigned *Onychodromopsis flexilis* Stokes, 1887, accurately redescribed and neotypified by Petz & Foissner (1996), to *Allotricha*, a genus and species which has never been illustrated or accurately described. Obviously, in the absence of reliable type material, no consensus can be reached and ciliate identification and nomenclature must remain a matter of choice.

### **Improved methods for preserving ciliates**

At present, most 'modern' ciliate types are deposited at two centres: the Smithsonian Institution in the U.S.A. (Corliss, 1972; Cole, 1994) and the Biology Center of the Museum of Upper Austria in Linz (Aesch, 1994). In the last 30 years, protozoologists have developed improved methods for preserving these soft-bodied organisms, allowing reliable type material to be obtained and preserved. Specimens are impregnated with silver nitrate and/or protargol to show the arrangement of somatic and oral cilia (known as infraciliature or the silverline system), which are among the most important features in ciliate alpha-taxonomy (Foissner, 1991). Under certain circumstances other methods such as the Feulgen reaction are used to examine the main features in the nuclear apparatus.

Usually, light- and/or electron-microscopical micrographs and molecular data alone are not sufficient for description of species, but may add important additional data to the information available from conventional (silver) preparations. The methods needed will depend on the group of protists under consideration. What is important is that the feature(s) mentioned in the description can be seen in the designated type material. Often several 'holotype specimens' might be necessary because not all features can be seen in a single specimen or preparation. Here, the concept of the hapantotypes can be applied (Article 73.3).

### **A solution to taxonomic and nomenclatural difficulties in the ciliates**

Many protist taxonomic and nomenclatural problems could be solved by the provision of type material using the new methods mentioned above. The present practice of using illustrations as holotypes does not solve the underlying problem because these illustrations often cannot be examined to reveal new data when an existing description is found to be incomplete or inaccurate. Further, features which are considered as unimportant at the time of description may later become decisive taxonomic characters for comparison with new species. Neotypification is the one way to overcome these and related problems and to bring stability in ciliate taxonomy and identification. This was emphasized by Corliss (1972), who established some neotypes for 'difficult' ciliates in the sixties. Likewise, Medioli & Scott (1985) established neotypes for some testate amoebae.

Generally, however, neotypification has not been practised widely in the protists. It was only recently that my own research group adopted this valuable approach to clarifying protist taxonomy and nomenclature (Foissner, 1997, 1999b; Foissner & Brozek, 1996; Foissner & Dragesco, 1996; Foissner & Kreutz, 1996; Petz & Foissner,



1996). However, it is a practice that several specialists have since followed (Agatha & Riedel-Lorjé, 1998; Petz et al., 1995; Song et al., 2001).

Neotypification is especially useful when:

- (1) no type material is available (holotype specimen and hapantotypes; see Article 73.3), but identification of the taxon is comparatively straightforward;
- (2) type material is available, but too poorly preserved for the diagnostic features to be recognizable. This situation may need to be referred to the Commission;
- (3) the original description is so incomplete and/or based on so few specimens that any identification becomes a matter of arbitrary judgement. Alternatively, such descriptions could be considered as referring to species indeterminate. However, this would greatly increase the number of scientific names because many original descriptions of ciliates are very incomplete. We prefer, where possible, to identify our taxa in relation to previously described species, and to redefine these species by detailed redescriptions. We ensure that the redescription is based on material which shares at least one main distinctive feature of the original material;
- (4) it has been argued that the species has one or more subjective synonyms. This indicates that the taxon has a questionable identity in the literature and, in the absence of type material, creates a 'classical' justification for neotypification;
- (5) there are several similar species whose identity will be fully differentiated by neotypification;
- (6) there are competing redescriptions for a taxon.

#### **Article 75 of the Code**

Most of the neotypes that my group has designated are in accordance with Article 75 of the Code. However, as protists form resting cysts, have a wide geographical distribution, and often lack any type material (Corliss, 1993), it is sometimes difficult to designate neotypes that fully satisfy Article 75. In some cases our ciliate neotype designations do not comply with Article 75.3.6 as they were not collected from or near the type locality. As such, these and similar neotypifications could be considered to be invalid. However, we do not consider Article 75.3.6 to be relevant to protist neotypes for the following reasons:

- (1) most ciliates and protists are cosmopolitan, at least at the morphospecies level (Finlay et al., 1996; Foissner, 1999a). In addition, many are symbionts, commensals, or parasites of metazoan animals that often have a much wider biogeographical distribution than the narrow definition of 'type locality' implies;
- (2) the existing uncertainties can be overcome only by making types universally available to protozoologists. The improvements in protist taxonomy that neotypification produces far outweigh the possible danger of misidentified neotypes that can occur from specimens selected out of original type locality;
- (3) as there are only a few alpha-taxonomists working with ciliates, it is difficult for them to obtain neotype material from or near the type locality. The application of Article 75.3.6 could prevent neotypes from ever being designated;

- (4) the likelihood of re-discovering ciliates and other protists at a certain locality is not guaranteed because the organisms may be in a dormant (cystic) stage for most of their life and laboratory cultivation is often unsuccessful.

## Conclusion

To sum up, I suggest that neotypes of protists, especially ciliates, should be freed from the type locality regulation of Article 75.3.6 of the Code, provided that neotypification is based on a thorough redescription of the organism and usable neotype material has been deposited in an acknowledged repository. In addition, existing neotypes that have already been designated from other than original type localities should be validated by the Commission.

## Acknowledgements

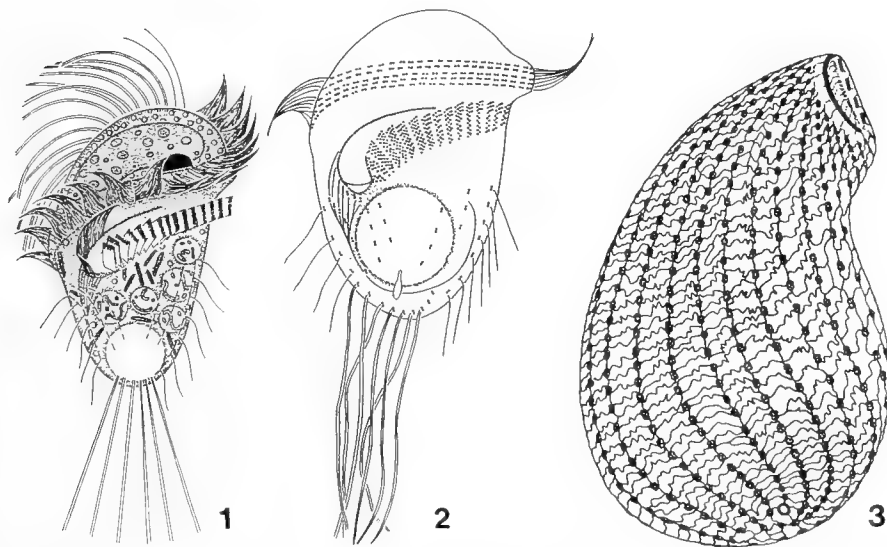
I thank David Patterson (Australia), Michael Dolan, John Corliss, Neil Evenhuis (U.S.A.) and Andrew Wakeham-Dawson (Commission Secretariat, London) for helpful comments on an earlier draft of this paper.

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Figs. 1–3. Two of several ciliate species neotypified in Foissner et al. (2002). 1, 2: Ventral views of *Metopus gibbus* Kahl, 1927 in vivo and after protargol silver impregnation. This species was erroneously synonymized with *M. striatus* McMurrich, 1884 in a recent revision. 3: Silver nitrate impregnated specimen of *Platyophryides latus* (Kahl, 1930), a species with a complicated taxonomic history settled by neotypification.

**Case 3206*****Halcampella* Andres, 1883 (Cnidaria, Anthozoa, Actiniaria): proposed designation of *H. maxima* Hertwig, 1888 as the type species**

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**Abstract.** The purpose of this application under Article 61.1.3 of the Code is to designate *Halcampella maxima* Hertwig, 1888 as the type species of the soft-bottom dwelling genus of sea anemone *Halcampella* Andres, 1883 (family HALCAMPOIDIDAE). The nominal species *Halcampa endromitata* Andres, 1881 is the type species by monotypy but is a nomen dubium and has not been recognized since its use by Andres in 1883.

**Keywords.** Nomenclature; taxonomy; Cnidaria; Anthozoa; Actiniaria; HALCAMPOIDIDAE; *Halcampella*; *Halcampella endromitata*; *Halcampella maxima*; sea anemones.

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1. Andres (1883, p. 315) established the genus *Halcampella* to accommodate the anthozoan species *Halcampa endromitata* Andres, 1881 (p. 331) from the Mediterranean. His paper was reprinted the following year (Andres, 1884) where the reference to *Halcampella* appears on page 103. Both papers referred to *Halcampella* as 'gen. nov.'. Andres distinguished *Halcampella* from the genus *Halcampa* Gosse, 1858 by the number and disposition of the tentacles (12 in *Halcampa* and more abundant in *Halcampella*). The diagnostic characters for *Halcampella* given by Andres were so broad that species of several genera could be included. Andres's description of *Halcampella endromitata* is so vague that the species cannot be recognized with confidence, and it has not been reported since its original description. Furthermore, Carlgren's comments (1949, pp. 28–29) on Andres's manuscript notes about the internal anatomy of *H. endromitata* indicate a mesentery disposition pattern similar to that shown by some species of the family EDWARDSIDAE. Andres's specimens cannot be located and must be presumed lost. We agree with Chintiroglou, Doumenc & Zamponi (1997, p. 66) and den Hartog (pers. comm.) that *H. endromitata* should be considered a nomen dubium.

2. Hertwig (1888, p. 29) described a second species in the genus *Halcampella*, *H. maxima*, from Philippine waters. Hertwig's species description is more accurate and detailed than Andres's description of *H. endromitata*, including for the first time anatomical characters to the diagnosis of the genus: 'Ilyanthidae with six powerfully developed pairs of mesenteries, but with numerous rudimentary mesenteries, and numerous tentacles'. However, Hertwig had no opportunity to examine specimens of *H. endromitata* for comparative purposes.

3. Carlgren (1931, p. 30) established another species which he included in the genus *Halcampella*, *H. robusta* from near Tristan da Cunha, mid-Atlantic. He examined Hertwig's type material of *H. maxima* and compared it with his new species; both

species agree in general with the diagnostic anatomical features given by Hertwig in 1888. Carlgren did not make any comparisons or references to *H. endromitata*.

4. In his important monograph on sea anemones, Carlgren (1949, p. 28) gave the prevailing diagnosis of the genus *Halcampella*. He referred for the first time to *H. endromitata* as the 'genotype' of the genus. Basing his conclusions on Andres's notes on *H. endromitata* he included that species, together with *H. maxima* and *H. robusta*, in *Halcampella*, although stressing the absence of details of some necessary characters in the description of *H. endromitata*. The explanations given by Carlgren about Andres's notes are confusing, because of the possible description of the edwardsiid mesentery pattern in *H. endromitata*: 'moreover that 6 pairs of mesenteries were perfect, 8 mesenteries of which are arranged as the macrocnemes in *Edwardsia* and stronger than the others, and that microcnemes were present only in the uppermost part of the body'.

5. Following Carlgren (1949, p. 28), the genus *Halcampella* is currently placed in the family HALCAMPOIDIDAE Appellöf, 1896 and includes the three species *H. endromitata* (the type species), *H. maxima* and *H. robusta*. The genus is characterised by an elongate body divisible into physa, scapus and scapulus; physa more or less distinct, scapus with tenaculi; no sphincter; tentacles short, more numerous than the mesenteries in the aboral part of the body, their longitudinal muscles ectodermal; radial muscles of oral disc ectodermal to meso-ectodermal; siphonoglyphs weak; six pairs of perfect and fertile mesenteries, two pairs of directives; microcnemes only in the uppermost part of the body; retractors strong, restricted, forming numerous high folds; parietobasilar muscles rather well developed.

6. The nominal genus *Halcampella* is not often cited, the most recent reference being by Fautin (1998) to an indeterminate species from the Californian coast. In a recent paper, we (Rodríguez & López-González, 2002) describe a new species of *Halcampella*, *H. fasciata*, from the Weddell Sea and the Antarctic Peninsula. We compare this species with *H. maxima* and (p. 44) designate a lectotype (SMNH-type-1160) of *H. maxima* from the collections in the Swedish Museum of Natural History, Stockholm. In this application we propose that the Commission should designate *H. maxima* as the type species of *Halcampella*.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Halcampella* Andres, 1883 and to designate *Halcampella maxima* Hertwig, 1888 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the name *Halcampella* Andres, 1883 (gender: feminine), type species by designation in (1) above *Halcampella maxima* Hertwig, 1888;
- (3) to place on the Official List of Specific Names in Zoology the name *maxima* Hertwig, 1888, as published in the binomen *Halcampella maxima* (specific name of the type species *Halcampella* Andres, 1883).

### Acknowledgements

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Museum of Natural History, Stockholm) for the loan of the type material of *Halcampella maxima* and *H. robusta*.

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*Halcampella maxima* Hertwig, 1888. Lateral view of the lectotype (left) and one of the paralectotypes (right). Scale bar 50 mm.

**Case 3220*****Ovula gisortiana* Passy, 1859 (currently *Gisortia gisortiana*; Mollusca, Gastropoda): proposed precedence of the specific name over that of *Cypraea coombii* Sowerby in Dixon, 1850**

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**Abstract.** The purpose of this application under Articles 23.9.3 and 81.2.3 of the Code is to conserve the widely used specific name *Ovula gisortiana* Passy, 1859 for an Eocene fossil species of cowrie (family CYPRAEIDAE) from western Europe by giving it precedence over the senior subjective synonym *Cypraea coombii* Sowerby in Dixon, 1850.

**Keywords.** Nomenclature; taxonomy; Mollusca; Gastropoda; CYPRAEIDAE; *Gisortia*; *Gisortia gisortiana*; *Cypraea coombii*; cowrie; Eocene; western Europe.

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1. The name *Ovula gisortiana* Passy, 1859 (p. 948) was given to an Eocene fossil species of cowrie (family CYPRAEIDAE). This nominal species is the type species by original designation of the genus *Gisortia* Jousseaume, 1884 (p. 89). The name *O. gisortiana* has been used by numerous authors. A list of 25 representative references, which include Vredenburg (1927), Schilder (1930), Wenz (1941), Walls (1979), Burgess (1985) and Lorenz & Hubert (1999), has been given to the Commission Secretariat.

2. Cossmann (1886, p. 434) made an unjustified emendation of *gisortiana* to *gisortiensis*. The bibliographic reference *Ovula gisortiana* Valenciennes, 1843, introduced by Deshayes (1865, pp. 568–569), refers to an oral presentation at the Académie des Sciences de Paris. It has never been published (see Vredenburg, 1927) and as such is an unavailable name.

3. *Cypraea coombii* Sowerby was described in Dixon (1850, p. 188, pl. 8, fig. 6). However, with the exception of systematic lists (see Article 23.9.6 of the Code), this name has had only limited use (see Schilder, 1929, pp. 299–300, 306).

4. Schilder (1929, p. 306) noted the similarity between the nominal taxa *C. coombii* and *O. gisortiana*. Discoveries of new specimens from the Late Ypresian of Gan (see Dolin, Dolin & Lozouet, 1985) and from the Early Lutetian of the Paris Basin show that the species *C. coombii* (type material from the Lower Bracklesham beds (Lutetian), England; Schilder, 1929, p. 306) is probably conspecific with the species *O. gisortiana* (type material from the Middle Eocene of Gisors (Lutetian), France; Schilder, 1929, p. 306) making the name *O. gisortiana* a junior subjective synonym of the name *C. coombii*.

5. We propose that the specific name of *Ovula gisortiana* Passy, 1859, which is in widespread use, be given conditional precedence over the little-used name *Cypraea coombii* Sowerby in Dixon, 1850 in accord with Article 81.2.3 of the Code. Commission approval will mean that if the two names are considered to be synonyms, *gisortiana* becomes the valid name for the taxon.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *gisortiana* Passy, 1859, as published in the binomen *Ovula gisortiana*, precedence over the name *coombii* Sowerby in Dixon, 1850, as published in the binomen *Cypraea coombii*, whenever the two names are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the name *Gisortia* Jousseume, 1884 (gender: feminine), type species by original designation *Ovula gisortiana* Passy, 1859;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *gisortiana* Passy, 1859, as published in the binomen *Ovula gisortiana*, with the endorsement that it is to be given precedence over the name *coombii* Sowerby in Dixon, 1850, as published in the binomen *Cypraea coombii*, whenever the two names are considered to be synonyms (specific name of the type species of *Gisortia* Jousseume, 1884);
  - (b) *coombii* Sowerby in Dixon, 1850, as published in the binomen *Cypraea coombii*, with the endorsement that it is not to be given priority over the name *gisortiana* Passy, 1859, as published in the binomen *Ovula gisortiana*, whenever the two names are considered to be synonyms;
- (4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *gisortiensis* Cossmann, 1886, as published in the binomen *Ovula gisortiensis* (an unjustified emendation of *Ovula gisortiana* Passy, 1859).

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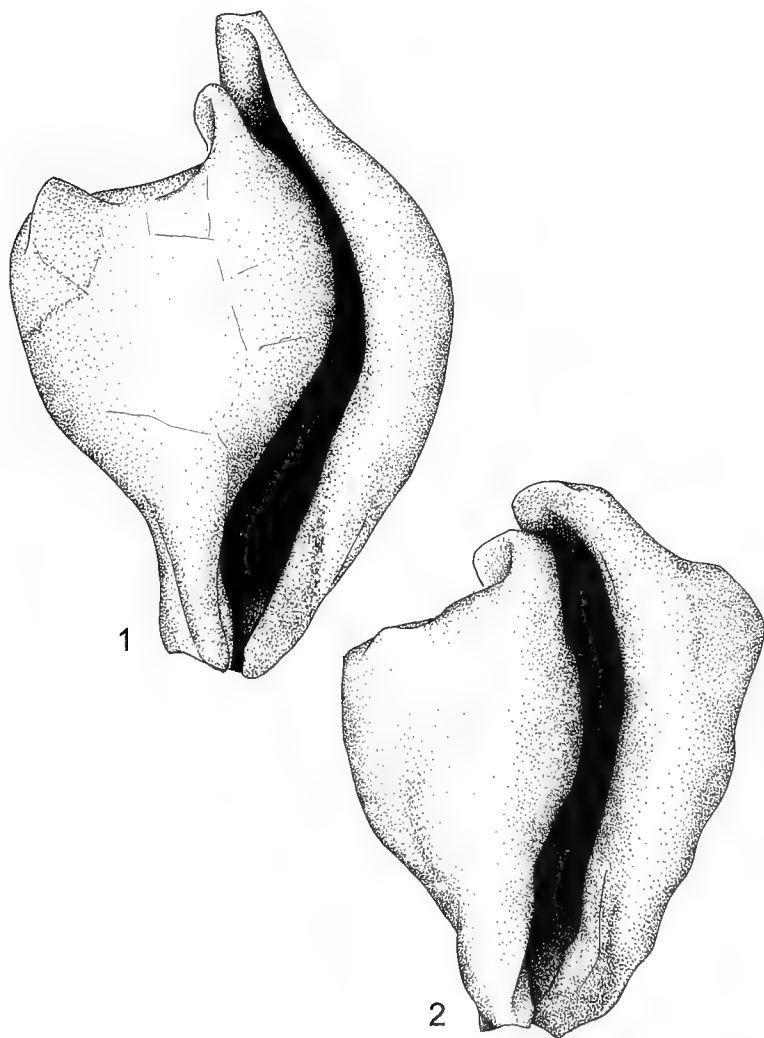
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1. *Ovula gisortiana* Passy, 1859, Holotype by monotypy (MNHN-LP, Cast no. R62966) from Lutetian (Eocene) of Mont-de-Magny, Gisors (Eure), height: 290 mm.
2. *Cypraea coombii* Sowerby in Dixon, 1850, Lectotype (BMNH, no. 71708a) from Lutetian (Eocene) of Bracklesham (England), height: 165 mm.

**Case 3213*****Bothriurus alticola* Pocock, 1899 (Arachnida, Scorpiones): proposed precedence of the specific name over the subspecific name of *Cercophonius brachycentrus bivittatus* Thorell, 1877**

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**Abstract.** The purpose of this application under Articles 23.9.3 and 81.2.3 of the Code is to conserve the well known specific name of *Bothriurus alticola* Pocock, 1899 for a scorpion (family BOTHRIURIDAE) from Argentina by giving it precedence over the little used subspecific name *Cercophonius brachycentrus bivittatus* Thorell, 1877. Pocock's nominal species is the type of *Orobothriurus* Maury, 1976 — a genus currently including 10 species from Andean and sub-Andean localities in Argentina and Peru, most occurring at high altitude.

**Keywords.** Nomenclature; taxonomy; Arachnida; Scorpiones; BOTHRIURIDAE; *Urophonius*; *Orobothriurus*; *Cercophonius brachycentrus bivittatus*; *Bothriurus alticola*; Argentina.

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1. Thorell (1877a, p. 180) described the new species *Cercophonius brachycentrus* (currently placed in *Urophonius* Pocock, 1893) and followed it with a description of a juvenile specimen, which he denoted (p. 183) as a variety of the species, Var.  $\beta$ , *bivittatum* [recte *bivittatus*]. Thorell suggested that the specimen, which is deposited in the Naturhistoriska Riksmuseet in Stockholm, might represent a distinct species.

2. All contemporary authors ignored the variety and, for example, in their publications Thorell (1877b, 1878), Pocock (1893) and Kraepelin (1894, 1899) did not mention *bivittatus*. Mello-Leitão (1931, p. 100) was the first author to cite the taxon as a subspecies, *Urophonius brachycentrus bivittatus*. Thereafter, Mello-Leitão (1933, 1934, 1938, 1939, 1945) and Abalos (1959, 1963) cited the trinomen, in all cases either just as part of a list or in referring to Thorell's (1877a) description.

3. As part of a revision of *Urophonius brachycentrus*, Maury (1977, p. 148) was the first author to re-examine the type of *U. b. bivittatus*. Despite poor preservation of the single specimen (several legs had been lost), he was able to determine that it did not belong in the genus *Urophonius* but most probably represented a juvenile specimen of *Bothriurus alticola* Pocock, 1899 (p. 357, fig. 1), described from Mendoza in the high Andes of Argentina and the type species of *Orobothriurus* Maury, 1976 (p. 14) by original designation. Maury (1977), however, made no comment on the

valid name for the specimen. Subsequently, Acosta & Maury (1998) cited *U. b. bivittatus* as of doubtful status, whereas Lowe & Fet (2000) continued to list the subspecies as valid in *Urophonius*.

4. I have examined the type specimen (paras. 1 and 3 above) of *C. b. bivittatus* Thorell, 1877 and can confirm Maury's (1977) suggestion that it is a specimen of *Orobothriurus alticola* (Pocock, 1899). The names *bivittatus* and *alticola* are therefore synonyms and a strict following of priority would result in *bivittatus* becoming the valid name for the species currently known as *alticola*. This would threaten nomenclatural stability. Nearly all citations of the name *bivittatus* are either included in lists or just quote Thorell's (1877a) original description. No new material has ever been attributed to the taxon and those authors mentioning it have incorrectly cited it as a subspecies within *Urophonius* and not in the sense of the genus *Orobothriurus*. In other words, with the exception of Maury (1977), no author knew for certain what taxon the name *bivittatus* represented. In contrast, the original description of *Bothriurus alticola* by Pocock (1899) is good, based on an adult male and an adult female specimen deposited in The Natural History Museum, London, and includes a general illustration of the female (fig. 1). Maury's (1976) redescription of *alticola* was complete, with many illustrations of the type material. Lowe & Fet (2000, p. 35) listed 10 authors in 20 publications, with one exception (1911) dating from the 1930s onwards, as having adopted the name *alticola* for the species. In recent years in further revisionary work on *Orobothriurus*, I have consistently cited the species under this name (see Acosta & Ochoa, 2000, 2001; Ochoa & Acosta, 2002).

5. The type specimen of *Cercophonius brachycentrus bivittatus* Thorell, 1877 is a small juvenile and the taxonomic status of the species might be considered uncertain by some authors. Occurrences of species of *Orobothriurus* in Argentina are in high montane localities so that, at the present state of knowledge, the existence of further species cannot be discounted. I therefore propose that the name *Bothriurus alticola* Pocock, 1899 be given conditional precedence over *C. b. bivittatus*, in accordance with Article 81.2.3 of the Code. Commission approval will mean that if the two names are considered to be synonyms, *alticola* becomes the valid name for the taxon. The name *bivittatus* will remain available for use if taxonomically required for a species or subspecies distinct from *alticola*.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, precedence over the name *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the name *Orobothriurus* Maury, 1976 (gender: masculine), type species by original designation *Bothriurus alticola* Pocock, 1899;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, with the endorsement that it is to be given precedence over the name *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, whenever the two are considered to be synonyms;

- (b) *bivittatus* Thorell, 1877, as published in the trinomen *Cercophonius brachycentrus bivittatus*, with the endorsement that it is not to be given priority over the name *alticola* Pocock, 1899, as published in the binomen *Bothriurus alticola*, whenever the two are considered to be synonyms.

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**Case 3200**

***Gryllus brachypterus* Ocskay, 1826 (currently *Euthystira brachyptera*) and *Gryllus brachypterus* Haan, 1842 (currently *Duolandrevus brachypterus*) (Insecta, Orthoptera): proposed conservation of the specific names**

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**Abstract.** The purpose of this application under Article 23.9.5 of the Code is to conserve the specific names of *Gryllus brachypterus* Ocskay, 1826 (currently *Euthystira brachyptera* Caelifera, ACRIDOIDEA) and *G. brachypterus* Haan, 1842 (currently *Duolandrevus brachypterus* Ensifera, GRYLLOIDEA) for two distinct species of grasshopper and cricket (Orthoptera) respectively. These two specific names are junior primary homonyms of *G. brachypterus* Linnaeus, 1761 (currently *Metrioptera brachyptera* Ensifera, TETTIGONIOIDEA) a bush cricket. A third junior primary homonym, *G. brachypterus* Linnaeus, 1763 (Phasmida) was later in 1763 given the replacement name *G. necydaloides* by Linnaeus (currently *Pseudophasma phthisicum* (Linnaeus, 1758)) a stick-insect. None of these species has been considered congeneric since the mid-nineteenth century.

**Keywords.** Nomenclature; taxonomy; Orthoptera; Phasmida; Ensifera; TETTIGONIOIDEA; *Gryllus brachypterus*; GRYLLOIDEA: *Duolandrevus brachypterus*; Caelifera; ACRIDOIDEA: *Euthystira brachyptera*; bush crickets; crickets; grasshoppers; phasmids.

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1. Linnaeus (1761, p. 237) established the name *Gryllus brachypterus* for a species of bush cricket (Ensifera, TETTIGONIOIDEA) from Sweden, based on material in De Geer's collection. Linnaeus, (1767, p. 698) synonymised *G. brachypterus* Linnaeus, 1761 with *G. (Tettigonia) viridissimus* Linnaeus, 1758 without explanation. The specific name was resurrected by De Geer (1773, pp. 434–436, pl. 22, figs. 2, 3) in combination with *Locusta* Geoffroy, 1762 (nec Linnaeus, 1758). Gmelin (1790, p. 2068) was the last to use *brachypterus* Linnaeus, 1761 in its original combination. According to Marshall (1983, p. 384) no material of the species is present in the collection of the Linnean Society, London. The species was considered to belong in one of a number of different genera by various subsequent authors; a list of five genera and 28 references is held by the Commission Secretariat. Caudell (1908, p. 31) established the currently accepted usage in combination with *Metrioptera* Wesm  l (1838, p. 592) [Ensifera, TETTIGONIOIDEA] (e.g. Chopard, 1952; Harz, 1969; Otte, 1997;

Heller et al., 1998; Ragge & Reynolds, 1998; 21 additional references are held by the Commission Secretariat). Several junior synonyms of the specific name are known (see Zeuner, 1941, pp. 40–41). *Gryllus brachypterus* Linnaeus, 1761 is the type species of *Metrioptera* by monotypy.

2. Linnaeus (1763a [June], p. 14, no. 32) again introduced the name *Gryllus brachypterus* for a new species of phasmid described under *Gryllus* (*Mantis*). Under Article 57.4 of the Code 'the presence of different subgeneric names . . . is irrelevant to the homonymy between the names concerned'. Almost as soon as it was published Linnaeus apparently recognized a problem in giving the same name to a different species. In the second edition of the dissertation, published later in the same year, the new replacement name *Gryllus necydaloides* was given by Linnaeus (1763b [September], p. 397). The species number, description and habitat (Surinam) is exactly the same as that published for *brachypterus* in the first edition (Linnaeus, 1763a). No synonyms were indicated for this taxon. This nominal species, whose name is a junior primary homonym of *Gryllus brachypterus* Linnaeus, 1761, has long been known by another specific name as well as other generic names. Marshall (1983, pp. 379, 384) cited its current usage in *Pseudophasma*. Marshall (1983, p. 381) stated that 'Linnaeus proposed (an) unnecessary replacement name . . . for *brachyptera* [sic]'. However it was not *Gryllus brachypterus* Linnaeus, 1761 but the homonymous species described by Linnaeus (1763a) for which the replacement name *necydaloides* was given (Linnaeus, 1763b). The subgenus *G.* (*Mantis*) was raised to full generic rank and the species cited as *M. necydaloides* by Linnaeus (1767, pp. 689, 691). The name *necydaloides* is currently treated as a junior synonym of *Pseudophasma phthisicum* (Linnaeus, 1758). This nominal species has not been known by its original binomen after it was first published.

3. Ocskay (1826, p. 409) described a new species of grasshopper (Caelifera, ACRIDOIDEA) with the name *Gryllus brachypterus* based on material from Hungary. According to Otte (1995, p. 164) the type series is lost. Furthermore, the neotype designation by Harz (1975, p. 648) is invalid because it failed to meet the qualifying conditions of Article 75(d) of the Code then in force (1964) (see also Marshall, 1983, pp. 376–377). Nevertheless the specific name of *Gryllus brachypterus* Ocskay, 1826 has long been used in combination with other generic names such as *Gomphocerus* Thunberg, 1815 (see Burmeister, 1838, p. 651) in the early 19th century and *Chrysochraon* Fischer, 1853 during the second half of the 19th century. The currently accepted usage in combination with *Euthystira* Fieber in Kelch (1852, p. 2) was established by Bey-Bienko (1932, p. 45; see Coray & Lehmann, 1998, pp. 125–127) and followed by, for example, Chopard (1952), Jago (1971), Yin, Shi & Yin (1996), Heller et al. (1998), Ragge & Reynolds (1998). Sixteen additional references are held by the Commission Secretariat. In a few recent works, however, the name has been cited as *Chrysochraon* (*Euthystira*) *brachyptera* [sic] (Ocskay, 1826) (see Harz, 1975; Thorens & Nadig, 1997). Several synonyms are known, but have not been used for the species (see Yin et al., 1996, pp. 285–286). *Gryllus brachypterus* Ocskay, 1826 is the type species of *Euthystira* by subsequent designation of Bey-Bienko (1932, p. 43).

4. Haan (1842, p. 230) gave the name *Gryllus brachypterus* to a new species of cricket (Ensifera, GRYLLOIDEA) from Java. The work was published in parts between 1842 and 1844 (see Horn & Schenkling, 1928, p. 494). Following Sherborn (1922,

p. 853) we adopt the year 1842 as the date of publication for the original description of *Gryllus brachypterus* Haan. Although he mentioned some specimens, the type series is considered lost (see Otte, 1988, p. 289). The name was used by Walker (1869, p. 42). Saussure (1877, pp. 271–272) redescribed the species and transferred it to *Landrevus*, an unjustified emendation of *Landreva* Walker, 1869. Kirby (1906, p. 50) introduced the new generic name *Duolandrevus* and used the combination *D. brachypterus* which is currently in use (see Chopard, 1967; Otte, 1988, 1994). We are not aware of a junior synonym for the species (see Otte, 1994). *Gryllus brachypterus* Haan, 1842 is the type species of *Duolandrevus* by original designation.

5. The specific names of *Gryllus brachypterus* Ocskay, 1826 and *G. brachypterus* Haan, 1842 are junior primary homonyms of *G. brachypterus* Linnaeus, 1761 and of *G. brachypterus* Linnaeus, 1763. However, none of these species is now included in the original genus *Gryllus* Linnaeus, 1758. The first mentioned two junior homonyms have been consistently in use since their establishment and neither has been used as congeneric with the senior homonym after 1877. *Gryllus brachypterus* Linnaeus, 1761 is the type species of *Metrioptera* Wesmaël, 1838; *G. brachypterus* Ocskay, 1826 is the type species of *Euthystira* Fieber in Kelch, 1852 and *G. brachypterus* Haan, 1842 is the type species of *Duolandrevus* Kirby, 1906. To avoid confusion that would result from upsetting the long-established usage of these junior homonyms and in the interest of nomenclatural stability, we propose that under Article 23.9.5 of the Code these names be conserved, as the species concerned have not been considered congeneric after 1899.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the following names are not invalid:
  - (a) *brachypterus* Ocskay, 1826, as published in the binomen *Gryllus brachypterus*, by reason of being a junior primary homonym of *Gryllus brachypterus* Linnaeus, 1761 and of *Gryllus brachypterus* Linnaeus, 1763;
  - (b) *brachypterus* Haan, 1842, as published in the binomen *Gryllus brachypterus*, by reason of being a junior primary homonym of *Gryllus brachypterus* Linnaeus, 1761, of *Gryllus brachypterus* Linnaeus, 1763 and of *Gryllus brachypterus* Ocskay, 1826;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Metrioptera* Wesmaël, 1838 (gender: feminine), type species by monotypy *Gryllus brachypterus* Linnaeus, 1761;
  - (b) *Euthystira* Fieber in Kelch, 1852 (gender: feminine), type species by subsequent designation by Bey-Bienko (1932) *Gryllus brachypterus* Ocskay, 1826;
  - (c) *Duolandrevus* Kirby, 1906 (gender: masculine), type species by original designation *Gryllus brachypterus* Haan, 1842;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *brachypterus* Linnaeus, 1761, as published in the binomen *Gryllus brachypterus* (specific name of the type species of *Metrioptera* Wesmaël, 1838);
  - (b) *brachypterus* Ocskay, 1826, as published in the binomen *Gryllus brachypterus* (specific name of the types species of *Euthystira* Fieber in Kelch, 1852) (not invalid by the ruling in (1)(a) above);



- (c) *brachypterus* Haan, 1842, as published in the binomen *Gryllus brachypterus* (type species of *Duolandrevus* Kirby, 1906) (not invalid by the ruling in (1)(b) above).

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*Euthystira brachypterus* (Ocskay, 1826) from Northern Switzerland, in copula. Photograph: A. Coray.

**Case 3193*****Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 (Insecta, Coleoptera): proposed conservation of usage by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema***

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**Abstract.** The purpose of this application is to conserve, under Article 70.2 of the Code, the usage of the buprestid (jewel beetle) generic names *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 by the designation of *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema*. At present *C. sumptuosa* Laporte & Gory, 1835 is the valid type species of both genera. The name *Chrysodema* refers to a genus of 100 species found in the Australasian, Oriental and eastern Palaearctic regions and *Iridotaenia* refers to a genus comprised of 80 species from the tropical African, Australian and Oriental regions.

**Keywords.** Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Chrysodema*; *Iridotaenia*; *Chrysodema sumptuosa*; *Chrysodema sonnerati*; jewel beetles; Africa; Australasia; eastern Palaearctic; Oriental region.

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1. Laporte & Gory (1835, p. 1) introduced the generic name *Chrysodema* including 33 nominal species and their diagnoses, descriptions and illustrations. The first two species listed were *C. sumptuosa* (p. 2) from Ind(es)–Or(ientales): Singapore and *C. sonnerati* (p. 3) from Indes–Orientales. *Chrysodema sumptuosa* was subsequently designated as the type species of *Chrysodema* by Duponchel (1843, p. 653).

2. The generic name *Iridotaenia* was introduced by Deyrolle (1864, p. 25) with a diagnosis, and a key to 11 nominal species. The first species listed was *Chrysodema sumptuosa* Laporte & Gory, 1835. Kurosawa (1982, p. 192) subsequently designated *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema* and (p. 188) designated *C. sumptuosa* as the type species of *Iridotaenia*, apparently unaware that Duponchel had designated it as the type species of *Chrysodema*. *Chrysodema sonnerati* has been included in *Chrysodema* since its original publication.

3. The composition of these two genera has varied over time, but almost all authors subsequent to Deyrolle (1864) have followed his use of the name *Iridotaenia* for the genus which includes *Chrysodema sumptuosa* (see, for example, Saunders, 1871, pp. 13–15; Kerremans, 1892, pp. 37–42; 1903, pp. 72–76; 1909, pp. 445–583; and Obenberger, 1926, pp. 125–135). The only exception was Gemminger & Harold (1869, p. 1356) who included both genera in *Chalcophora* Dejean, 1833. At present the name *Chrysodema* refers to a genus of 100 species found in the Australasian, Oriental and eastern Palaearctic regions and *Iridotaenia* refers to a genus comprised of 80 species from the tropical African, Australian and Oriental regions (for example

see Bellamy, 1985, 1986; Hołyński, 1993; and Volkovitsh, 2001). To apply the Principle of Priority would disturb accustomed usage of two generic names that have been accepted since Deyrolle (1864). Recognition of *Chrysodema sumptuosa* as the type species of *Chrysodema* would result in the loss of the name *Iridotaenia* as a junior objective synonym of *Chrysodema* under Article 61.3.3 of the Code. All species presently known by the name *Iridotaenia* would be called *Chrysodema* and all species presently known as *Chrysodema* would require a new generic name. This would cause considerable confusion. Recent publications in which the name *Chrysodema* has been used in the sense of *C. sonnerati* as the type species include Hołyński, 1994, 1997 and Bílý & Volkovitsh, 1996. Examples demonstrating the current usage of the name *Iridotaenia* are Tôyama, 1987 and Hołyński, 2001. The tribe name IRIDOTAENINI was introduced by Tôyama (1987, pp. 5–6) based on *Iridotaenia* Deyrolle, 1864.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Chrysodema* Laporte & Gory, 1835 and to designate *Chrysodema sonnerati* Laporte & Gory, 1835 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Chrysodema* Laporte & Gory, 1835 (gender: feminine), type species by designation in (1) above *Chrysodema sonnerati* Laporte & Gory, 1835;
  - (b) *Iridotaenia* Deyrolle, 1864 (gender: feminine), type species by designation by Kurosawa (1982) *Chrysodema sumptuosa* Laporte & Gory, 1835;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *sonnerati* Laporte & Gory, 1835, as published in the binomen *Chrysodema sonnerati* (specific name of the type species of *Chrysodema* Laporte & Gory, 1835);
  - (b) *sumptuosa* Laporte & Gory, 1835, as published in the binomen *Chrysodema sumptuosa* (specific name of the type species of *Iridotaenia* Deyrolle, 1864).

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*Chrysodema sonnerati* Laporte & Gory, 1835. Type specimen in Muséum National d'Histoire Naturelle, Paris. Body length: 25 mm. Photograph: T. Lander.

**Case 3208*****Geodromicus* Redtenbacher, 1857 (Insecta, Coleoptera): proposed precedence over *Psephidonus* Gistel, 1856**

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**Abstract.** The purpose of this application under Articles 23.9.3 and 81.2.3 of the Code is to conserve the generic name *Geodromicus* Redtenbacher, 1857 for a widespread and well-known Palearctic genus of rove beetles (family STAPHYLINIDAE), by giving it precedence over the earlier name *Psephidonus* Gistel, 1856. Prior to 1952, all authors used *Geodromicus* as the valid name of the genus. Presently most authors continue to use *Geodromicus* and 50 species have been described in combination with *Geodromicus* since 1952, while only 11 have been described using *Psephidonus*. Species of *Geodromicus* occupy habitats near fast flowing water or at the snow line in mountains.

**Keywords.** Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Geodromicus*; *Psephidonus*; *Staphylinus plagiatus*; *Geobius kunzei*; rove beetles; Holarctic; Oriental.

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1. *Geodromicus* Redtenbacher, 1857 (p. 244) was proposed as a replacement name for the preoccupied name *Geodromus* Heer, 1841 (p. 572). *Geodromus* Heer, 1841 was itself a replacement for the name *Geobius* Heer, 1839 (p. 193) that had been used for a Palearctic genus of rove beetles. However, Blackwelder (1952, p. 324) resurrected *Psephidonus* Gistel, 1856 (p. 29), a long forgotten name, and listed *Geodromicus* as a junior subjective synonym.

2. The work by Gistel (1856), which included *Psephidonus*, was published on 18 February 1856 (Evenhuis, 1997, p. 305). The date of publication for *Geodromicus* is more difficult to determine, but as it was published in part 2 (p. 244) of Redtenbacher's work it most probably appeared in 1857 (Anonymous, 1856, 1857).

3. The type species of *Geobius* Heer, 1839 was fixed by subsequent designation by Lacordaire (1854, p. 136) as *Staphylinus plagiatus* Fabricius, 1798 (p. 180) and hence *S. plagiatus* is the type species of *Geodromicus* (Article 67.8 of the Code). The type species of *Psephidonus* is *Geobius kunzei* Heer, 1839 (p. 193) by monotypy. These species are currently considered congeneric (e.g. Herman, 2001, pp. 287–289).

4. Prior to 1952, all authors used *Geodromicus* Redtenbacher, 1857 as the valid name of the genus. Presently most authors continue to use *Geodromicus*, while some now use *Psephidonus* Gistel, 1856 following Blackwelder (1952, see para. 1 above). In fact, since 1952 fifty species have been described using *Geodromicus*, while only 11 have been described using *Psephidonus* (see Herman, 2001, pp. 287–306). Although *Psephidonus* is older and has priority over *Geodromicus*, the latter has a long history of use and has been used abundantly (Herman, 2001, pp. 287–306). Recent major

works that use *Geodromicus* include Tottenham (1954), Hatch (1957), Smetana (1959), Palm (1961), Horion (1963), Lohse (1964), Tikhomirova (1973), Pope (1977), Watanabe (1990) and Hansen (1996). *Psephidonus* was unused until 1952 and since then has been used only sporadically (see Herman, 2001, pp. 287–306).

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *Geodromicus* Redtenbacher, 1857, precedence over the name *Psephidonus* Gistel, 1856, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Geodromicus* Redtenbacher, 1857 (gender: masculine), type species by subsequent designation by Lacordaire (1854) *Staphylinus plagiat* Fabricius, 1798, with the endorsement that it is to be given precedence over the name *Psephidonus* Gistel, 1856 whenever the two are considered to be synonyms;
  - (b) *Psephidonus* Gistel, 1856 (gender: masculine), type species by monotypy *Geobius kunzei* Heer, 1839, with the endorsement that it is not to be given priority over the name *Geodromicus* Redtenbacher, 1857 whenever the two are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the names:
  - (a) *plagiatus* Fabricius, 1798, as published in the binomen *Staphylinus plagiat* (specific name of the type species of *Geodromicus* Redtenbacher, 1857);
  - (b) *kunzei* Heer, 1839, as published in the binomen *Geobius kunzei* (specific name of the type species of *Psephidonus* Gistel, 1856).

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## Case 3209

***Lesteva* Latreille, 1797 and *Anthophagus* Gravenhorst, 1802 (Insecta, Coleoptera): proposed designation of *L. punctulata* Latreille, 1804 as the type species of *Lesteva***

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**Abstract.** The purpose of this application under Article 70.2 of the Code is to conserve the widespread usage of the generic names *Lesteva* Latreille, 1797 and *Anthophagus* Gravenhorst, 1802 for two groups of Palaearctic rove beetles (family STAPHYLINIDAE) by designating *Lesteva punctulata* Latreille, 1804 as the type species of *Lesteva*. Species of *Lesteva* and *Anthophagus* have a Holarctic and Oriental distribution and are usually found in wet habitats.

**Keywords.** Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Lesteva*; *Anthophagus*; *Staphylinus alpinus*; *Lesteva punctulata*; rove beetles; Holarctic; Oriental.

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1. The name *Lesteva* Latreille, 1797 (p. 75) (family STAPHYLINIDAE) was first published with a few distinguishing characters, but without any included species. Although the date of publication of this name has long been cited as 1796, it was probably published on 13 January 1797 (see Evenhuis, 1997, p. 437). Latreille (1802, p. 129) briefly characterized the genus again with additional characters and included one species, *Carabus abbreviatus* Fabricius, 1779 (p. 263), with the statement 'Gen. Lestève; *lesteva*. (G. *Antophagus* [= *Anthophagus*]. Graven. [= Gravenhorst]) Exemple. *Carabus abbreviatus*. F.' As *C. abbreviatus* was the only species expressly included by name, it is the type species of *Lesteva* by subsequent monotypy (Article 69.3 of the Code).

2. Latreille (1804, pp. 286, 366–369) redescribed *Lesteva*, and listed *Anthophagus* Gravenhorst, 1802 (p. 120) as a synonym, included the nominal species listed in *Anthophagus* by Gravenhorst (among them *Staphylinus alpinus* Fabricius, 1793, p. 526), and added more including *Lesteva punctulata* Latreille, 1804 (p. 369). Of these, only four (including *L. punctulata*) remain in *Lesteva* (see Herman, 2001).

3. In the paragraph following the original description of *Lesteva punctulata*, Latreille (1804, p. 369) wrote 'C'est d'après cette espèce que j'avois formé ce genre [i.e. *Lesteva*]'. This statement was accepted as the type species designation for *Lesteva* by Tottenham (1949, p. 358), but not by Blackwelder (1952, p. 218; see para. 4. below).

4. Later Latreille (1810, p. 182) again characterized *Lesteva* and (p. 427) listed two names, *Staphylinus alpinus* Fabricius, 1793 and *Carabus dimidiatus* Panzer, 1795. Citing Latreille's (1810) publication, Blackwelder (1952, p. 218) regarded *Staphylinus alpinus* Fabricius, 1793 as the type of *Lesteva* Latreille, 1797, although aware that Thomson (1859, p. 48) had already fixed this species as the type of *Anthophagus*.

5. *Carabus abbreviatus* Fabricius (the type of *Lesteva* Latreille, 1797 by subsequent monotypy, see para. 1 above) is currently assigned to *Anthophagus* Gravenhorst. If this species were accepted as the type of *Lesteva*, the name *Anthophagus* would be lost as a junior subjective synonym of *Lesteva*, and *Lesteva* would become the valid name for the taxon currently called *Anthophagus* (Herman, 2001, p. 241). Consequently, a new name would be required for the genus currently called *Lesteva*. There would be a similar result if *Staphylinus alpinus* Fabricius, 1793, the type species of *Anthophagus* Gravenhorst, were accepted as the type species of *Lesteva* (see para. 4 above). The next available name for *Lesteva* auctt. is *Tevales* Casey, 1894, a rarely used name proposed for a North American species (see Casey, 1894, pp. 398–399; Herman, 2001, p. 312).

6. *Lesteva* and *Anthophagus*, with 97 and 36 species respectively, are well known, largely European genera that have each been abundantly cited as separate taxa (Herman, 2001, pp. 241–266, 309–333). In accordance with Article 70.2 of the Code, I propose that *L. punctulata* should be designated as the type species of *Lesteva* Latreille, 1797, in accord with Latreille's own (1804) designation, thereby maintaining *Lesteva* and *Anthophagus* in their widespread current usage. For a comprehensive list of usage, which is too long to publish here, see Herman (2001, pp. 241–266, 309–333).

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous fixations of type species for the nominal genus *Lesteva* Latreille, 1797 and to designate *Lesteva punctulata* Latreille, 1804 as the type species;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Lesteva* Latreille, 1797 (gender: feminine), type species by designation in (1) above *Lesteva punctulata* Latreille, 1804;
  - (b) *Anthophagus* Gravenhorst, 1802 (gender: masculine), type species by subsequent designation by Thomson (1859) *Staphylinus alpinus* Fabricius, 1793;
- (3) to place on the Official List of Specific Names in Zoology the names:
  - (a) *punctulata* Latreille, 1804, as published in the binomen *Lesteva punctulata* (specific name of the type species of *Lesteva* Latreille, 1797);
  - (b) *alpinus* Fabricius, 1793, as published in the binomen *Staphylinus alpinus* Fabricius, 1793 (specific name of the type species of *Anthophagus* Gravenhorst, 1802).

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Civico di Storia Naturale, Verona, Italy) and L. Zerche (Deutsches Entomologisches Institut, Eberswalde, Germany).

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**Case 3224*****Mycetoporus mulsanti* Ganglbauer, 1895 (Insecta, Coleoptera):  
proposed conservation of the specific name**

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**Abstract.** The purpose of this application is to conserve, under Article 23.9.3 of the Code, the specific name *Mycetoporus mulsanti* Ganglbauer, 1895 for a widespread mountain species of Palaearctic rove beetle (family STAPHYLINIDAE) of ecological and conservation interest. The name is threatened by the recent resurrection of a largely unused senior synonym, *Mycetoporus tenuis* Mulsant & Rey, 1853.

**Keywords.** Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; *Mycetoporus*; *Mycetoporus mulsanti*; *Mycetoporus tenuis*; rove beetles; Palaearctic; mountain forests; alpine vegetation zone.

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1. The name *Mycetoporus mulsanti* was given to a widespread species of Palaearctic rove beetle (family STAPHYLINIDAE) by Ganglbauer (1895, p. 375). This species is of ecological and conservation interest, and lives in mountain forests and in the alpine vegetation zone. This name is a junior objective synonym of *Mycetoporus tenuis* Mulsant & Rey, 1853 (p. 54). Ganglbauer proposed the name *M. mulsanti* to replace *M. tenuis* Mulsant & Rey assuming that the latter name was a junior secondary homonym of *Mycetoporus tenuis* Stephens, 1832 (p. 169), a species that had originally been included in the genus *Ischnosoma* Stephens, 1829. The name *M. mulsanti* was subsequently used by almost all authors.

2. Herman (2001a, p. 35; 2001b, p. 800) was of the opinion that the name *Ischnosoma tenuis* Stephens, 1832 was unavailable. Herman's reasoning was that Stephens (1832, p. 169) did not in fact describe this species. Stephens thought wrongly that he had a specimen of *Staphylinus tenuis* Fabricius, 1793 in front of him and consequently misidentified his material. *S. tenuis* Fabricius is now in the genus *Rabigus* Mulsant & Rey, 1876, and according to Herman (2000b, p. 800) the species, to which Stephens mistakenly attributed this name, is currently known as *Ischnosoma splendidum* (Gravenhorst, 1806). Herman (2001a, p. 35), therefore, considered *M. mulsanti* Ganglbauer to be an unnecessary replacement name, and consequently resurrected *M. tenuis* Mulsant & Rey as the valid name for the species.

3. However, *Mycetoporus mulsanti* Ganglbauer has been cited as the valid name for this species of rove beetle in numerous publications on taxonomy, zoogeography, ecology and beetle conservation. Use of the older synonym *M. tenuis* Mulsant & Rey would create significant instability in the European scientific literature. In a recent catalogue of the STAPHYLINIDAE, Herman (2001b, p. 801) presented only 12 bibliographic references by 11 different authors who used *M. mulsanti* as a valid name during the last 50 years. However, I have presented to the Commission Secretariat a list of 68 additional references by 59 authors citing *M. mulsanti* Ganglbauer as valid

in the last 50 years (e.g. Comellini, 1974; Biström, 1985; Böhme, 1996). This list, which is compiled from my own database, is far from complete. Many additional references could be found in a more thorough search, especially in ecological and environmental studies.

4. Prior to its resurrection by Herman (2000a), the name *M. tenuis* Mulsant & Rey was used at least three times in the 20th century by Holdhaus & Prossen (1900, p. 140), Bernhauer (1902, p. 698) and Johansen (1914, p. 336). Therefore, the condition of Article 23.9.1.1 of the Code (that the senior synonym has not been used as a valid name since 1899) is not met and an application to the Commission is required.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the name *tenuis* Mulsant & Rey, 1853, as published in the binomen *Mycetoporus tenuis*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Specific Names in Zoology the name *mulsanti* Ganglbauer, 1895, as published in the binomen *Mycetoporus mulsanti*;
- (3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *tenuis* Mulsant & Rey, 1853, as published in the binomen *Mycetoporus tenuis* and as suppressed in (1) above.

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**Case 3130*****Pelastoneurus* Loew, 1861 (Insecta, Diptera): proposed conservation**

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**Abstract.** The purpose of this application, under Article 23.9.3 of the Code, is to conserve the name *Pelastoneurus* Loew, 1861 for a genus of predaceous flies in the family DOLICHOPODIDAE. This is a diverse and widespread genus of over 100 species, which are distributed in the Nearctic, Neotropical, Afrotropical and Oriental regions. The name is threatened by the little used senior synonym *Paracleius* Bigot, 1859.

**Keywords.** Nomenclature; taxonomy; DOLICHOPODIDAE; *Pelastoneurus*; *Pelastoneurus vagans*; Nearctic, Neotropical, Afrotropical and Oriental regions.

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1. Bigot (1859, pp. 215, 227) established the genus *Paracleius* for the single species of fly *Dolichopus heteronevrus* Macquart, 1850 (the type species of this genus by monotypy). Specimens of *Dolichopus heteronevrus* Macquart, 1850 are unknown and the original description is insufficient for precise identification; consequently, this species is unrecognizable (Foote et al., 1965; Dyte in litt.) but apparently belongs to *Pelastoneurus* Loew, 1861 (see Robinson, 1970).

2. Loew (1861, p. 36) established the genus *Pelastoneurus* for six New World species, which he named: *Pelastoneurus longicauda*, *P. lugubris*, *P. laetus*, *P. arcuatus*, *P. vagans* and *P. cognatus*. Coquillett (1910, p. 586) subsequently designated *Pelastoneurus vagans* as the type species.

3. Robinson (1970) suggested that *Paracleius* Bigot, 1859 should be suppressed on the basis that the genus has generally been recognized for over one hundred years by the younger name *Pelastoneurus* Loew, 1861. He further stated that the type species of *Paracleius* Bigot, *Dolichopus heteronevrus* Macquart, is clearly referable to *Pelastoneurus* as currently defined. Dyte (1975) concurred with Robinson's argument for the suppression of *Paracleius* Bigot, 1859.

4. *Pelastoneurus* Loew has been in wide use since its proposal in 1861 and has been repeatedly cited in the zoological literature. A representative list of 48 references is held by the Commission Secretariat. However, fewer than 25 of these were published in the last 50 years. As a result, this name cannot be considered a nomen protectum under Articles 23.9.1.2 and 23.9.2 of the Code. However, as this genus is a diverse and

widespread group of over 100 species distributed in the Nearctic, Neotropical, Afrotropical and Oriental regions (Foote et al., 1965; Robinson, 1970; Dyte, 1975; Dyte & Smith, 1980), we propose that in the interests of nomenclatural stability the Commission should conserve its widely used name *Pelastoneurus* Loew, 1861 by suppression of the name *Paracleius* Bigot, 1859 under Article 23.9.3 of the Code.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to suppress the generic name *Paracleius* Bigot, 1859 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
- (2) to place on the Official List of Generic Names in Zoology the name *Pelastoneurus* Loew, 1861 (gender: masculine), type species by subsequent designation by Coquillett (1910) *Pelastoneurus vagans* Loew, 1861;
- (3) to place on the Official List of Specific Names in Zoology the name *vagans* Loew, 1861, as published in the binomen *Pelastoneurus vagans* (specific name of the type species of *Pelastoneurus* Loew, 1861);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Paracleius* Bigot, 1859, as suppressed in (1) above.

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**Case 3203*****Sauripterus* Hall, 1843 (Osteichthyes, Sarcopterygii): proposed conservation as the correct original spelling**

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**Abstract.** The purpose of this application is to conserve *Sauripterus* Hall, 1843 as the correct original spelling for a fossil fish (family RHIZODONTIDAE). The genus was established with the name *Sauritolepis* Hall, 1840, but this has not been used since publication. In 1843, Hall introduced the replacement name *Sauripteris*, which was emended to *Sauripterus* by Woodward in 1891. Most authors have followed the change of spelling from *Sauripteris* to *Sauripterus*, but there is limited use of the alternative spelling. Stability is important as the genus is of wide interest in that it shows evidence of the evolution of the tetrapod limb.

**Keywords.** Nomenclature; taxonomy; Sarcopterygii; Rhizodontida; *Sauripterus*; *Sauripteris*; *Sauripterus taylori*; fossil fish; Catskill Formation; Devonian.

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1. Hall (1840, p. 453) applied the name *Sauritolepis taylori* to an assortment of material collected from an exposure of the Catskill Formation beside the Tioga River in Pennsylvania. The material was only briefly described, but included a large, articulated fin (Hall, 1840, pp. 393–394).

2. Hall (1843, pp. 281–282) figured and described the fin and three scales from the earlier report (Hall, 1840). He abandoned the generic name *Sauritolepis* and established *Sauripteris* in recognition of the similarity of the fin to a tetrapod limb. The name *Sauritolepis* was never used again after Hall (1840).

3. *Sauripteris taylori* was used by a number of subsequent authors when referring to the material figured by Hall (1843) (e.g. Newberry, 1873, 1889; Woodward, 1890).

4. Woodward (1891, p. 364) used a revised spelling '*Sauripterus*, Hall' with the correct reference and the original spelling in parenthesis, but without further comment. The new spelling is deemed to be a justified emendation through usage



under Article 33.2.3.1 of the Code. Woodward (1891, p. 179) 'provisionally' erected a new species, *Sauripterus anglicus* and moved another species, *Glyptosteus favosus* (Agassiz, 1844), to the genus. The revised spelling was used by Traquair (1897, p. 383) when establishing a further species, *Sauripterus crassidens* Traquair, 1897, and it became the standard during the 20th century (e.g. Gregory, 1912; Waterston, 1954; Andrews, 1973; Panchen & Smithson, 1987; Daeschler & Shubin, 1998; Laurin et al., 2000 and a long-list of other references that has been submitted to the Commission Secretariat. Some of these noted that the spelling had been modified).

5. However, as a small number of authors have returned to the original spelling *Sauripteris* (Hussakof, 1908, 1911; Broom, 1913 and more recently Shubin & Alberch, 1986; Shubin et al., 1997; Dineley & Metcalf, 1999; Johanson et al., 2000; Janvier & Villarroel, 2000), the incorrect subsequent spelling *Sauripterus* cannot automatically be preserved under Article 33.3.1.

6. The type series of *S. taylori* Hall, 1843 has also been a source of confusion. Hall (1843, pp. 281–282) applied the name to three scales and an articulated fin. After Hall's death, the fin was catalogued under the number AMNH 3341 in the American Museum of Natural History, New York, along with a number of other fossils that were not part of Hall's (1843, pp. 281–282) material. Meanwhile, the scales had been catalogued under the number AMNH 3340.

7. Hussakof's (1908) catalogue of the fossil vertebrates at the American Museum of Natural History gave the 'type' as AMNH 3341 (explicitly including all the material under that number, i.e. Hall's fin and the other fossils that had not been described by Hall in 1843 (pp. 281–282), and the scales as AMNH 3340). Subsequently, Eastman (1917, p. 253) made reference to the 'pectoral limb of the type specimen'. Gregory (1915, p. 360) implied that the fin alone was the holotype specimen, and (1935, p. 678) described the fin and some postcranial material, but did not make it clear which specimens belonged to the type series. Andrews & Westoll (1970a, pp. 433, 452) stated that the fin and scales formed the type series, but explicitly restricted the type series to AMNH 3341. Similarly, Andrews (1985, p. 83) stated that the 'type' specimen was AMNH 3341, explicitly referring only to the fin. These references cannot be considered to be a 'fixation of a lectotype by inference' under Article 74.6.1 of the Code, because Hall (1843) clearly indicated his type series to include both fin and scale material. To stabilise the situation, we herewith designate the articulated fin specimen figured by Hall (1843, p. 282) to be the lectotype of *Sauripteris* (or *Sauripterus*) *taylori* Hall, 1843, thereby preventing further confusion from the fossil material that was catalogued with the fin under AMNH 3341. This specimen is the best known of the type series (it has been figured repeatedly, e.g. Hussakof, 1908; Eastman, 1917; Gregory, 1915; Andrews & Westoll, 1970a) and also obviously belongs to a single individual. It will not be necessary to re-accession the material, as it is clearly identifiable amongst the material accessioned under AMNH 3341 (see Recommendation 72F of the Code).

8. The discovery of new material of *S. taylori* (e.g. Daeschler & Shubin, 1998; Davis et al., 2001), and the proposal of a close relationship between rhizodontids and tetrapods (e.g. Ahlberg, 1991; Young et al., 1992; Jeffery, 1999) has revived interest in this species. It is therefore important to stabilise the nomenclature of the genus.

9. Whilst the original spelling (*Sauripteris*) has technical priority, the revised spelling (*Sauripterus*) has had by far the widest usage since its introduction by

Woodward (1891). Significantly, the most frequently cited works describing specimens of this genus use the revised spelling (Andrews & Westoll, 1970a, b). Thus workers not specialising in palaeoichthyology (and therefore unfamiliar with the complex history of *Sauripteris*) will almost certainly use the revised spelling. Of the six recent papers to use Hall's original spelling, none describes new material of the genus, and most address specialist palaeontological readers.

10. The preamble of the Code states its object is to 'promote stability and universality in the scientific names of animals . . .'. We believe that any attempt to suppress the revised spelling is unlikely to meet with success, because of its widespread usage, whereas the suppression of the original spelling would affect a minority of palaeoichthyologists.

11. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power:
  - (a) to suppress the generic name *Sauritolepis* Hall, 1840 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
  - (b) to rule that *Sauripteris* is an incorrect original spelling of *Sauripterus* Hall, 1843;
- (2) to place on the Official List of Generic Names in Zoology the name *Sauripterus* Hall, 1843 (gender: masculine), type species *Sauritolepis taylori* Hall, 1840 by monotypy of the replaced nominal genus *Sauritolepis* Hall, 1840;
- (3) to place on the Official List of Specific Names in Zoology the name *taylori* Hall, 1840, as published in the binomen *Sauritolepis taylori* and as defined by the lectotype designated in para. 7 above (catalogue no. AMNH 3341 in the American Museum of Natural History, New York) (specific name of the type species of the genus *Sauripterus* Hall, 1843);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
  - (a) *Sauritolepis* Hall, 1840, as suppressed in (1) (a) above;
  - (b) *Sauripteris* Hall, 1843, as ruled in (1) (b) above to be an incorrect original spelling of *Sauripterus* Hall, 1843.

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**Young, G.C., Long, J.A. & Ritchie, A.** 1992. Crossopterygian fishes from the Devonian of Antarctica: systematics, relationships and biogeographic significance. *Records of the Australian Museum*, Supplement **14**: 1–77.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).



*Sauritolepis taylori* Hall, 1840. Left pectoral girdle and articulated fin, now part of catalogue no. AMNH 3341, herewith designated as the lectotype. Reproduced from Hall, 1843, pl. 3, fig. 1.

**Comment on the proposed fixation of *Lycosa alacris* C.L. Koch, 1833 as the type species of *Pardosa* C.L. Koch, 1847 (Arachnida, Araneae) to conserve the usage of *Pardosa* and of *Alopecosa* Simon, 1885**

(Case 3174; see BZN 59: 7–11)

Pavel Štys and Jan Buchar

*Department of Zoology, Charles University, Vinicna 7, CZ-12844, Praha 2, Czech Republic*

We write in support of Kronestedt, Dondale & Zyuzin's proposal which is nomenclaturally sound, and aims to maintain usage of the generic names *Pardosa* C.L. Koch, 1847 and *Alopecosa* Simon, 1885 in their present and universally accepted meaning. The replacement of *Alopecosa* by *Pardosa*, and the concomitant establishment of a substitute name for *Pardosa*, as currently used, would not only seriously disturb the nomenclature of the family LYCOSIDAE but would not be acceptable for the wider community of zoologists, ecologists and biogeographers.

We would like to point out that the species of the two genera concerned represent over 60% of the species of the LYCOSIDAE in Central Europe, and that they form one of the most important components of the epigeic arthropod fauna in the Palaearctic region (and for *Pardosa*, in the Nearctic and Oriental regions as well). The ecology of lycosids (jointly with the beetle family CARABIDAE) has been the subject of numerous ecological and similar studies based mainly on widely used methods of pitfall trapping. Many species of *Pardosa* and *Alopecosa* are used as bioindicators. Any drastic change of the current nomenclatural usage in favour of the Principle of Priority would cause confusion and bring the Code into disrepute.

**Comment on the proposed conservation of the specific name of *Scarabaeus punctatus* Villers, 1789 (currently *Pentodon bidens punctatus*; Insecta, Coleoptera)**

(Case 3201; see BZN 59: 27–29)

Brett C. Ratcliffe

*Systematics Research Collections, University of Nebraska, W436 Nebraska Hall, Lincoln, Nebraska 68588–0514, U.S.A.*

In his application, Dr Krell makes a cogent argument for conserving the junior primary homonym of *Scarabaeus punctatus* Villers, 1789 because it and its senior homonym (a ruteline scarab) have both been in constant use, without confusion, for two centuries. I support the application to conserve the junior homonym.

**Comment on the proposed conservation of the specific name of *Papilio eurymedon* Lucas, 1852 (Insecta, Lepidoptera)**  
(Case 3222; see BZN 59: 114–116)

E.D. Edwards

*CSIRO Entomology, GPO Box 1700, Canberra, ACT 2601, Australia*

M.S. Upton

*Unit 2125, Temperley Street, Nicholls, ACT 2913, Australia*

We support the application by Heppner and Emmel to suppress the name *Papilio antinous* Donovan, 1805 for the purposes of the Principle of Priority. The name was listed in a few Australian catalogues in the 19th century for an Australian (or reputedly Australian) butterfly species. It was not mentioned again in the Australian literature until Upton (1985, p. 169) pointed out that it is a senior subjective synonym of *Papilio eurymedon* Lucas, 1852 from North America and recommended that the name *P. antinous* be suppressed. The name *P. antinous* has never been associated with any true Australian butterfly and suppression of the name will not affect the nomenclature of Australian butterflies.

**Comment on the proposed conservation of the specific name of *Chlorops meigenii* Loew, 1866 (Insecta, Diptera)**  
(Case 3190; see BZN 58: 286–287)

Terry A. Wheeler and Stéphanie Boucher

*Department of Natural Resource Sciences, McGill University, Macdonald Campus, Ste-Anne-de-Bellevue, QC, H9X 3V9 Canada*

We support the application under Article 23.9 of the Code, for conservation by reversal of precedence of the specific name of *Chlorops meigenii* Loew, 1866 over that of *Chlorops meigenii* Fallén, 1823. Strict application of the Code in this case would cause confusion as to the correct name of the Palaearctic species referred to by most authors for over 100 years as *Chlorops meigenii* Loew, 1866. A number of references in addition to those cited in BZN 58: 287 use this name (or the unjustified emendation *Chlorops meigeni*) for the Palaearctic chloropid species. Nartshuk (BZN 58: 286, para. 3) noted, correctly, that the junior synonym *Chlorops rufescens* Oldenberg, 1923 cannot be used as the valid name for this species because of its homonymy with the Nearctic species *Chlorops rufescens* Coquillett, 1910.

The senior homonym *Chlorops meigenii* Fallén, 1823 has not been used as a valid name for over 100 years. *Cerodontha denticornis* Panzer, 1806 (Insecta, Diptera, AGROMYZIDAE) is the type species of the genus *Cerodontha*, and is an abundant, widespread and easily recognized Palaearctic species. As the type of *Chlorops meigenii* Fallén, 1823 is an agromyzid and has long been considered a junior synonym of *Cerodontha denticornis* (e.g. Nowakowski, 1973; Papp, 1984) to reverse precedence and treat this name as junior to *Chlorops meigenii* Loew, 1866 would not cause

nomenclatural confusion in the AGROMYZIDAE but would remove confusion in the CHLOROPIDAE created by the recent use of two names, both junior homonyms, for the same common Palaearctic species.

#### **Additional references**

- Nowakowski, J.T.** 1973. Monographie der europäischen Arten der Gattung *Cerodontha* Rond. (Diptera: Agromyzidae). *Annales Zoologici, Warsaw*, **31**: 1–327.
- Papp, L.** 1984. Family Agromyzidae. Pp. 263–343 in Soós, Á. & Papp, L. (Eds.), *Catalogue of Palaearctic Diptera*, vol. 9. Akadémiai Kiadó, Budapest.

#### **Comment on the proposed precedence of the specific name of *Euphryne obesus* Baird, 1858 over that of *Sauromalus ater* Duméril, 1856 (Reptilia, Squamata)**

(Case 3143; see BZN **58**: 37–40)

Ken Nagy

*Department of Organismic Biology, Ecology, and Evolution, University of California, Los Angeles, California 90095–1606, U.S.A.*

I oppose the proposal to change *Sauromalus obesus* (Baird, 1858) to *S. ater* Duméril, 1856. The change would make it difficult to access the literature in the areas of physiology and ecology.

**OPINION 2006 (Case 3171)*****Cryphops* Richter & Richter, 1926 (Trilobita): conserved**

**Keywords.** Nomenclature; taxonomy; Trilobita; phacopoid trilobites; PHACOPIDAE; *Cryphops*; Devonian.

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**Ruling**

- (1) Under the plenary power the generic name *Gortania* Cossmann, 1909 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *Cryphops* Richter & Richter, 1926 (gender: masculine), type species by original designation *Phacops cryptophthalmus* Emmrich, 1844 is hereby placed on the Official List of Generic Names in Zoology.
- (3) The name *cryptophthalmus* Emmrich, 1844, as published in the binomen *Phacops cryptophthalmus* (specific name of the type species of *Cryphops* Richter & Richter, 1926) is hereby placed on the Official List of Specific Names in Zoology.
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) *Gortania* Cossmann, 1909, as suppressed in (1) above;
  - (b) *Microphthalmus* Gortani, 1907 (a junior homonym of *Microphthalmus* Mecznirow, 1865).

**History of Case 3171**

An application for the conservation of the name *Cryphops* was received from Dr D.J. Holloway (*Museum Victoria, Melbourne, Victoria, Australia*) and Dr K.S.W. Campbell (*Australian National University, Canberra, Australia*) on 29 August 2000. After correspondence the case was published in **BZN 58**: 97–99 (June 2001). The title, abstract and keywords of the case were published on the Commission's website. Additionally, as an experiment in the use of specialist websites for handling applications to the Commission, the application was placed on a specialist trilobite website (<http://www.aloha.net/~smgon/ICZN3171.htm>) by courtesy of the webmaster, Dr Sam Gon III of the Nature Conservancy of Hawaii, Honolulu, Hawaii. Comments were invited to be placed on the website instead of the usual practice of publication in the *Bulletin*. Five comments were received, three via the Secretariat and two direct to the website. A note that comments on the case had been placed on the website was published in **BZN 58**: 304 (December 2001), and further comments were invited.

**Comments on Case 3171 placed on the trilobite website**

A summary of the comments is presented here because of the ephemeral nature of the website on which these were originally published.



Four comments placed on the website were in favour of the application and confirmed that the senior name *Gortania* Cossmann, 1909 had not been used as a valid name since its publication. H.B. Whittington (*University of Cambridge, Cambridge, U.K.*) added that 'to treat *Cryphops* Richter & Richter, 1926 as junior to the unused name *Gortania* Cossmann, 1909 would cause considerable confusion and serve no useful purpose'. The other supportive comments were from R. Thomas Becker (*Museum für Naturkunde, 10115 Berlin, Germany*), Adrian Rushton (*The Natural History Museum, London, U.K.*) and S.M. Gon III (*Honolulu, Hawaii, U.S.A.*). An opposing comment was received from P. Bouchet (*Muséum National d'Histoire Naturelle, Paris, France*) who, although accepting that the list of references 'is not exhaustive', pointed out that the application gave only 11 references to works published in the last 50 years that have used the name *Cryphops*, which was far less than the 25 references requested by Article 23.9. He also pointed out that *Gortania* Cossmann, 1909 is a senior homonym of *Gortania* Rabbi, 1960 (*Giornale di Geologia* [Bologna], ser. 2, **28**: 190).

### Decision of the Commission

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN **58**: 98. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 20: Bock, Böhme, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Ng, Nielsen, Papp, Patterson, Rosenberg, Song

Negative votes – 7: Alonso-Zarazaga, Bouchet, Kerzhner, Lamas, Minelli, Štys, van Tol.

No vote was received from Dupuis.

Brothers commented: 'Although the strict application of numbers of references, as pointed out by Bouchet in his comments, would seem not to justify the suppression of *Gortania* Cossmann, 1909, such numbers must surely be tempered by considerations of intensity of publication activity in the field concerned. Although no information has been provided about *Gortania* Rabbi, 1960, suppression of *Gortania* Cossmann, 1909 should apparently also clarify the status of that name'. The status of *Gortania* Rabbi is not affected by this ruling, since *Gortania* Cossmann is not suppressed for the purposes of the Principle of Homonymy.

Patterson commented: 'This case raises issues about the use of the web. I applaud the use of the web, and urge that we promote it. I am concerned that we may not receive with fidelity all views posted and believe that the opinions should be taken into account only if the webmaster accepts an obligation to return to the Secretariat all views expressed, leaving it to the Secretariat to edit those. I am concerned that some of those commenting on the web may have no access to the Code or to its interpretation'.

Voting against, Alonso-Zarazaga, Lamas, Štys and van Tol submitted comments in agreement with those of Bouchet. However, Bouchet's comment on the number of references required refers to Article 23.9.1 of the Code, whereas this application was referred to the Commission for a ruling under the plenary power (Article 23.9.3), and there was no requirement for 25 references to be presented to the Commission in support of this application.

### Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

*Cryphops* Richter & Richter, 1926, *Abhandlungen der Preussischen geologischen Landesanstalt*, **99**: 157.

*cryptophthalmus*, *Phacops*, Emmrich, 1844, *Zur Naturgeschichte der Trilobiten*, p. 15.

*Gortania* Cossmann, 1909, *Revue critique de paléozoologie*, **13**: 67.

*Microphthalmus* Gortani, 1907, *Memorie della Reale Accademia delle Scienze dell'Istituto di Bologna*, (6)**4**: 229.

**OPINION 2007 (Case 3164)*****Kaloterme* Hagen, 1853 (Insecta, Isoptera): *Termes flavicollis* Fabricius, 1793 designated as the type species**

**Keywords.** Nomenclature; taxonomy; Isoptera; *Kaloterme*; *Proelectrotermes*; KALOTERMITIDAE; termites; Middle Eocene; Recent.

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**Ruling**

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Kaloterme* Hagen, 1853 are hereby set aside and *Termes flavicollis* Fabricius, 1793 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Kaloterme* Hagen, 1853 (gender: masculine), type species by designation in (1) above *Termes flavicollis* Fabricius, 1793;
  - (b) *Proelectrotermes* von Rosen, 1913 (gender: masculine), type species by original designation and monotypy *Termes berendtii* Pictet, 1856.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *flavicollis* Fabricius, 1793, as published in the binomen *Termes flavicolle* (specific name of the type species of *Kaloterme* Hagen, 1853);
  - (b) *berendtii* Pictet, 1856, as published in the binomen *Termes berendtii* (specific name of the type species of *Proelectrotermes* von Rosen, 1913).
- (4) The name *Caloterme* Hagen, 1858 (a junior objective synonym of *Kaloterme* Hagen, 1853) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

**History of Case 3164**

An application to conserve the usage of the generic name of *Kaloterme* Hagen, 1853 by the designation of *Termes flavicollis* Fabricius, 1793 as the type species was received from Dr Michael S. Engel (*Natural History Museum and Biodiversity Research Center, University of Kansas, Lawrence, Kansas, U.S.A.*) and Dr Kumar Krishna (*American Museum of Natural History, New York, U.S.A.*) on 16 May 2000. After correspondence the case was published in BZN 58: 100–104 (June 2001). The title, abstract and keywords of the case were published on the Commission's website.

**Decision of the Commission**

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 102. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 27: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Song, Štys, van Tol

Negative votes – 0.

No vote was received from Dupuis.

### Original references

The following are the original references to the names placed on Official Lists and an Official Index by the ruling given in the present Opinion:

*berendtii*, Termes, Pictet, 1856, in Pictet, F.J. & Hagen, H., Die im Bernstein befindlichen Neuropteren der Vorwelt. P. 49 in Berendt, G.C. (Ed.), *Die im Bernstein befindlichen organischen Reste der Vorwelt*, vol. 2.

*Calotermes* Hagen, 1858, *Linnaea Entomologica*, **12**: 32–33.

*flavicollis*, Termes, Fabricius, 1793, *Entomologia Systematica Emendata et Aucta, Secundum Classes, Ordines, Genera, Species, Adjectis Synonymis, Locis, Observationibus, Descriptionibus*, vol. 2, p. 91.

*Kalotermes* Hagen, 1853, Bericht über die zur Bekanntmachung geeigneten Verhandlungen der Königlichen Preussischen Akademie der Wissenschaften zu Berlin, **18**: 479–480.

*Proelectrotermes* von Rosen, 1913, *Transactions of the Second International Congress of Entomology, Oxford 1912*, **2**: 331.

**OPINION 2008 (Case 3149)****30 species-group names originally published as junior primary homonyms in *Buprestis* Linnaeus, 1758 (Insecta, Coleoptera): conserved**

**Keywords.** Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Buprestis*; buprestids; jewel beetles.

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**Ruling**

- (1) Under the plenary power it is hereby ruled that the following specific names are not to be treated as invalid by reason of having been originally published as junior primary homonyms in combination with *Buprestis* Linnaeus, 1758:

- (1.1) *arcuata* Laporte & Gory, 1838;
- (1.2) *aurata* Fabricius, 1787;
- (1.3) *bella* Gory, 1840;
- (1.4) *bilineata* Latreille, 1813;
- (1.5) *caerulea* Olivier, 1790;
- (1.6) *cayennensis* Herbst, 1801;
- (1.7) *cuprifera* Laporte & Gory, 1836;
- (1.8) *cyanipes* Say, 1823;
- (1.9) *depressa* Fabricius, 1775;
- (1.10) *drummondi* Kirby, 1837;
- (1.11) *excellens* Klug, 1855;
- (1.12) *fasciata* Villers, 1789;
- (1.13) *femorata* Olivier, 1790;
- (1.14) *flavofasciata* Herbst, 1801;
- (1.15) *foveicollis* Gory, 1840;
- (1.16) *geminatus* Say, 1823;
- (1.17) *gibbicollis* Say, 1823;
- (1.18) *haemorrhoidalis* Olivier, 1790;
- (1.19) *interrupta* Laporte & Gory, 1837;
- (1.20) *maculipennis* Gory, 1841;
- (1.21) *mucronata* Laporte & Gory, 1836;
- (1.22) *nobilis* Fabricius, 1787;
- (1.23) *picta* Thunberg, 1827;
- (1.24) *picta* Waterhouse, 1882;
- (1.25) *pumila* Klug, 1829;
- (1.26) *salicis* Lewis, 1893;
- (1.27) *sulcata* Fischer von Waldheim, 1824;
- (1.28) *variolosa* Fabricius, 1801;
- (1.29) *ventralis* Waterhouse, 1882;
- (1.30) *vetusta* Boisduval, 1835.

- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
- (2.1) *Actenodes* Dejean, 1833 (gender: masculine), type species by monotypy *Buprestis nobilis* Linnaeus, 1758;
  - (2.2) *Carininota* Volkovitsh, 1979 (gender: feminine), type species by original designation *Buprestis flavofasciata* Piller & Mitterpacher, 1783;
  - (2.3) *Cyphogastra* Deyrolle, 1864 (gender: feminine), type species by subsequent designation by Bellamy (1998) *Buprestis foveicollis* Boisduval, 1835;
  - (2.4) *Nascio* Laporte & Gory, 1838 (gender: feminine), type species by monotypy *Buprestis vetusta* Boisduval, 1835.
- (3) The following names, published in combination with *Buprestis* Linnaeus, 1758, are hereby placed on the Official List of Specific Names in Zoology:
- (3.1) *arcuata* Say, 1825;
  - (3.2) *arcuata* Laporte & Gory, 1838;
  - (3.3) *aurata* Pallas, 1776;
  - (3.4) *aurata* Fabricius, 1787;
  - (3.5) *bella* Gory, 1840;
  - (3.6) *bilineata* Weber, 1801;
  - (3.7) *bilineata* Latreille, 1813;
  - (3.8) *caerulea* Thunberg, 1789;
  - (3.9) *caerulea* Olivier, 1790;
  - (3.10) *cayennensis* Gmelin, 1790;
  - (3.11) *cayennensis* Herbst, 1801;
  - (3.12) *cuprifera* Kirby, 1818;
  - (3.13) *cuprifera* Laporte & Gory, 1836;
  - (3.14) *cyanipes* Fabricius, 1787;
  - (3.15) *cyanipes* Say, 1823;
  - (3.16) *depressa* Linnaeus, 1771;
  - (3.17) *depressa* Fabricius, 1775;
  - (3.18) *drummondi* Laporte & Gory, 1836;
  - (3.19) *drummondi* Kirby, 1837;
  - (3.20) *excellens* Klug, 1825;
  - (3.21) *excellens* Klug, 1855;
  - (3.22) *fasciata* Fabricius, 1787;
  - (3.23) *fasciata* Villers, 1789;
  - (3.24) *femorata* Olivier, 1790;
  - (3.25) *flavofasciata* Piller & Mitterpacher, 1783 (specific name of the type species of *Carininota* Volkovitsh, 1979);
  - (3.26) *flavofasciata* Herbst, 1801;
  - (3.27) *foveicollis* Boiduval, 1835 (specific name of the type species of *Cyphogastra* Deyrolle, 1864);
  - (3.28) *foveicollis* Gory, 1840;
  - (3.29) *geminatus* Say, 1823;
  - (3.30) *gibbicollis* Illiger, 1803;
  - (3.31) *gibbicollis* Say, 1823;
  - (3.32) *haemorrhoidalis* Herbst, 1780;

- (3.33) *haemorrhoidalis* Olivier, 1790;
  - (3.34) *interrupta* Olivier, 1790;
  - (3.35) *interrupta* Laporte & Gory, 1837;
  - (3.36) *maculipennis* Laporte & Gory, 1837;
  - (3.37) *maculipennis* Gory, 1841;
  - (3.38) *mucronata* Klug, 1825;
  - (3.39) *mucronata* Laporte & Gory, 1836;
  - (3.40) *nobilis* Linnaeus, 1758 (specific name of the type species of *Actenodes* Dejean, 1833);
  - (3.41) *nobilis* Fabricius, 1787;
  - (3.42) *picta* Thunberg, 1827;
  - (3.43) *picta* Waterhouse, 1882;
  - (3.44) *pumila* Illiger, 1803;
  - (3.45) *pumila* Klug, 1829;
  - (3.46) *rauca* Fabricius, 1787 (senior synonym of *Buprestis geminatus* Illiger, 1803);
  - (3.47) *salicis* Fabricius, 1776;
  - (3.48) *salicis* Lewis, 1893;
  - (3.49) *sulcata* Thunberg, 1789;
  - (3.50) *sulcata* Fischer von Waldheim, 1824;
  - (3.51) *variolosa* Fabricius, 1801;
  - (3.52) *ventralis* Laporte & Gory, 1838;
  - (3.53) *ventralis* Waterhouse, 1882;
  - (3.54) *vetusta* Ménétries, 1832;
  - (3.55) *vetusta* Boisduval, 1835 (specific name of the type species of *Nascio* Laporte & Gory, 1838).
- (4) The following names are hereby placed on the Official List of Specific Names in Zoology:
- (4.1) *hungarica* Scopoli, 1772, as published in the binomen *Chrysis hungarica* (senior synonym of *Buprestis femorata* Villers, 1789);
  - (4.2) *maulica* Molina, 1782, as published in the binomen *Chrysomela maulica* (senior synonym of *Buprestis bella* Guérin Méneville, 1830).

### History of Case 3149

An application for the conservation of 31 specific names originally published as junior primary homonyms in *Buprestis* Linnaeus, 1758 was received from Dr C.L. Bellamy (*Plant Pest Diagnostics Lab, California Department of Food and Agriculture, Sacramento, California, U.S.A.*) on 9 November 1999. After correspondence the case was published in BZN 58: 24–31 (March 2001). Notice of the case was sent to appropriate journals.

A comment in support of the application was published in BZN 58: 228 (September 2001).

A comment from Dr Eduard Jendek (*Institute of Zoology, Slovak Academy of Sciences, Bratislava, Slovak Republic*), received during the voting period, noted that the specific name of '*Buprestis cyanea*' was listed by Rossi (1790, pp. 189–190) with a reference to Fabricius's (1775) description of the species ('F. Sp. 282.6') and a short diagnosis. In fact, Rossi misidentified Fabricius's taxon and used Fabricius's name

for a species of *Agrilus* Curtis, 1825. Although *Agrilus* 'cyanea' Rossi was used for some time, it is an unavailable name and since Schaefer (1949, pp. 370, 371) the species has been known as *A. sulcicollis* Boisduval & Lacordaire, 1835. Dr Bellamy agreed with the comment and the name *Buprestis* 'cyanea' Rossi, 1790 has not been placed on the Official List.

**Schaefer, L.** 1949. Les buprestides de France. Tableaux analytiques des coléoptères de la faune franco-rhénane. Famile 56. *Miscellanea Entomologica*, Supplement. 511 pp.

In para. 2(24) of the application, *Buprestis picta* Pallas, 1773 was incorrectly cited as the type species of *Trachypteris* Kirby, 1837. Kirby (1837) designated *B. decostigma* Fabricius, 1787 as the type species of his new genus, and Kiesenwetter (1857, p. 74) subsequently synonymised *B. decostigma* with *B. picta*. This was set out in Case 2837/2, published in BZN 50: 31 (para. 3) and 32 (para. 5) (March 1993).

**Kiesenwetter, H. von.** 1857. *Naturgeschichte der Insecten Deutschlands* (W.F. Erichson), vol. 1 (Coleoptera), part 4 (Buprestidae).

The name *Poecilnota* Eschscholtz, 1829 and that of the type species, *Buprestis variolosa* Paykull, 1799, were placed on Official Lists in Opinion 1825 (March 1996).

### Decision of the Commission

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 58: 28–29. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 22: Alonso-Zarazaga, Bock, Böhme, Brothers, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Nielsen, Papp, Patterson, Song, Štys, van Tol  
Negative votes – none.

Bouchet and Calder abstained.

No votes were received from Dupuis, Kerzhner, Ng and Rosenberg.

The names *Buprestis femorata* Olivier, 1790 and *Buprestis bella* Gory, 1840 are ruled in (1.13) and (1.3) not to be treated as invalid, but it is their senior synonyms *Chrysis hungarica* Scopoli, 1772 and *Chrysomela maulica* Molina, 1782 that are placed on the Official List of Specific Names in Zoology in (4.1) and (4.2).

### Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

*Actenodes* Dejean, 1833, *Catalogue des coléoptères de la collection de M. le Comte Dejean*, Ed. 2, livraison 1, p. 80.

*arcuata*, *Buprestis*, Say, 1825, *Annals of the Lyceum of New York*, 1: 251.

*arcuata*, *Buprestis*, Laporte & Gory, 1838, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 159.

*aurata*, *Buprestis*, Pallas, 1776, *Reise durch verschiedene Provinzen des Russischen Reiches in den Jahren 1768–1774*, p. 719.

*aurata*, *Buprestis*, Fabricius, 1787, *Mantissa insectorum* . . . , vol. 1, p. 178.

*bella*, *Buprestis*, Gory, 1840, *Histoire naturelle et iconographie des insectes coléoptères*. Monographie des buprestides, Supplement, p. 116.



- bilineata*, Buprestis, Weber, 1801, *Observationes entomologicae, continentes novorum quae condidit generum characteres, et nuper detectarum specierum descriptiones*, p. 74.
- bilineata*, Buprestis, Latreille, 1813, in Humboldt, F.H.A. von & Bonpland, A.J.A., *Voyage aux régions équinoxiales du Nouveau Continent, fait en 1799–1804*, vol. 2, part 2, p. 60.
- caerulea*, Buprestis, Thunberg, 1789, *Novas Insectorum species*. 5. Dissertation, p. 91.
- caerulea*, Buprestis, Olivier, 1790, *Entomologie, ou histoire naturelle des insectes ... Coléoptères*, genera 9–34, vol. 2(32), p. 21.
- Carininota* Volkovitsh, 1979, *Entomologicheskoe Obozrenie*, 58(2): 352. [In Russian; English translation in *Entomological Review*, 58(2), 1979].
- cayennensis*, Buprestis, Gmelin, 1790, *Caroli a Linné, Systema Naturae*, Ed. 13, vol. 1, part 4 (Insecta), p. 1931.
- cayennensis*, Buprestis, Herbst, 1801, *Natursystem aller bekannten in- und ausländischen Insecten, als eine Fortsetzung der Büssonschen Naturgeschichte. Der Käfer*, vol. 9, p. 56.
- cuprifera*, Buprestis, Kirby, 1818, *Transactions of the Linnean Society of London*, 12: 457.
- cuprifera*, Buprestis, Laporte & Gory, 1836, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 59.
- cyanipes*, Buprestis, Fabricius, 1787, *Mantissa insectorum ...*, vol. 1, p. 178.
- cyanipes*, Buprestis, Say, 1823, *Journal of the Academy of Natural Sciences of Philadelphia*, 3: 164.
- Cyphogastra* Deyrolle, 1864, *Annales de la Société Entomologique de Belgique*, 8: 36.
- depressa*, Buprestis, Linnaeus, 1771, *Mantissa Plantarum*, p. 533.
- depressa*, Buprestis, Fabricius, 1775, *Systema entomologiae ...*, p. 219.
- drummondi*, Buprestis, Laporte & Gory, 1836, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 37.
- drummondi*, Buprestis, Kirby, 1837, in Richardson, J. (Ed.), *Fauna Boreali-Americana*, part 4, p. 57.
- excellens*, Buprestis, Klug, 1825, *Nova Acta Physico-Medica Academiae Caesareae-Leopoldino Carolinae, Naturae Curiosorum*, 12(2): 421.
- excellens*, Buprestis, Klug, 1855, *Bericht über die zur Bekanntmachung geeigneten Verhandlungen der Königlich Preussischen Akademie der Wissenschaften zu Berlin*, 1855: 644.
- fasciata*, Buprestis, Fabricius, 1787, *Mantissa insectorum ...*, vol. 1, p. 177.
- fasciata*, Buprestis, Villers, 1789, *Caroli Linnaei Entomologia*, p. 339.
- femorata*, Buprestis, Olivier, 1790, *Entomologie, ou histoire naturelle des insectes ... Coléoptères*, genera 9–34, vol. 2(32), p. 47.
- flavofasciata*, Buprestis, Piller & Mitterpacher, 1783, *Iter per Poseganum, Sclavoniae provinciam mensibus Junio et Julio 1782 susceptum*, p. 84.
- flavofasciata*, Buprestis, Herbst, 1801, *Natursystem aller bekannten in- und ausländischen Insecten, als eine Fortsetzung der Büssonschen Naturgeschichte. Der Käfer*, vol. 9, p. 306.
- foveicollis*, Buprestis, Boisduval, 1835, *Voyage de découvertes de l'Astrolabe exécuté, ... pendant les années 1826–1827–1828–1829, sous les commandement de M.J. Dumont d'Urville. Faune entomologique de l'Océan Pacifique, avec l'illustration des insectes nouveaux recueillis pendant le voyage. Deuxième partie (Coléoptères et autres ordres)*, p. 73.
- foveicollis*, Buprestis, Gory, 1840, *Histoire naturelle et iconographie des insectes coléoptères. Monographie des buprestides, Supplement*, p. 95.
- geminatus*, Buprestis, Say, 1823, *Journal of the Academy of Natural Sciences of Philadelphia*, 3: 163.
- gibbicollis*, Buprestis, Illiger, 1803, *Magazin für Insektenkunde*, 2: 239.
- gibbicollis*, Buprestis, Say, 1823, *Journal of the Academy of Natural Sciences of Philadelphia*, 3: 161.
- haemorrhoidalis*, Buprestis, Herbst, 1780, *Schriften der Berlinerischen Gesellschaft Naturforschender Freunde*, 1: 97.
- haemorrhoidalis*, Buprestis, Olivier, 1790, *Entomologie, ou histoire naturelle des insectes ... Coléoptères*, genera 9–34, vol. 2(32), p. 38.
- hungarica*, Chrysis, Scopoli, 1772, *Annus V*, p. 122.

- interrupta*, *Buprestis*, Olivier, 1790, *Entomologie, ou histoire naturelle des insectes ... Coléoptères, genera 9–34*, vol. 2(32), p. 26.
- interrupta*, *Buprestis*, Laporte & Gory, 1837, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 81.
- maculipennis*, *Buprestis*, Laporte & Gory, 1837, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 111.
- maculipennis*, *Buprestis*, Gory, 1841, *Histoire naturelle et iconographie des insectes coléoptères. Monographie des buprestides, Supplement*, p. 118.
- maulica*, *Chrysomela*, Molina, 1782, *Saggio sulla storia naturale del Chili*, p. 209.
- mucronata*, *Buprestis*, Klug, 1825, *Nova Acta Physico-Medica Academiae Caesareae-Leopoldino Carolinae, Naturae Curiosorum*, **12**(2): 426.
- mucronata*, *Buprestis*, Laporte & Gory, 1836, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 62.
- Nascio* Gory & Laporte, 1838, *Histoire naturelle et iconographie des insectes coléoptères, publiée par monographies séparées, Genre Nascio*, p. 2.
- nobilis*, *Buprestis*, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 410.
- nobilis*, *Buprestis*, Fabricius, 1787, *Mantissa insectorum ...*, vol. 1, p. 180.
- picta*, *Buprestis*, Thunberg, 1827, *Nova Acta Regiae Societatis Scientiarum Upsaliensis*, **9**: 47.
- picta*, *Buprestis*, Waterhouse, 1882, in Godman, F.D. & Salvin, O. (Eds.), *Biologia Centrali-Americana*, vol. 3, part 1 (Insecta, Coleoptera, Buprestidae), p. 15.
- pumila*, *Buprestis*, Illiger, 1803, *Magazin für Insektenkunde*, **2**: 275.
- pumila*, *Buprestis*, Klug, 1829, *Symbolae physicae seu icones et descriptiones insectorum quae ex itinere per Africam borealem et Asiam occidentalem Friderici Gulielmi Hemprich et Christiani Godofredi Ehrenberg ...*, fol. 5, p. 37.
- rauca*, *Buprestis*, Fabricius, 1787, *Mantissa insectorum ...*, vol. 1, p. 177.
- salicis*, *Buprestis*, Fabricius, 1776, *Genera insectorum*, p. 237.
- salicis*, *Buprestis*, Lewis, 1893, *Journal of the Linnean Society of London (Zoology)*, **24**: 337.
- sulcata*, *Buprestis*, Thunberg, 1789, *Novas Insectorum species*. 5. Dissertation, p. 90.
- sulcata*, *Buprestis*, Fischer von Waldheim, 1824, *Entomographia Imperii Russici. Genera Insectorum systematica exposita et analysi iconographica instructa. Coleoptera*, vol. 2, p. 197.
- variolosa*, *Buprestis*, Fabricius, 1801, *Systema Eleutheratorum*, vol. 2, p. 190.
- ventralis*, *Buprestis*, Laporte & Gory, 1838, *Histoire naturelle et iconographie des insectes coléoptères*, vol. 1, p. 158.
- ventralis*, *Buprestis*, Waterhouse, 1882, in Godman, F.D. & Salvin, O. (Eds.), *Biologia Centrali-Americana*, vol. 3, part 1 (Insecta, Coleoptera, Buprestidae), p. 14.
- vetusta*, *Buprestis*, Ménétries, 1832, *Catalogue raisonné des objets de zoologie recueillis dans un voyage au Caucase et jusqu'aux frontières actuelles de la Perse*, p. 152.
- vetusta*, *Buprestis*, Boisduval, 1835, *Voyage de découvertes de l'Astrolabe exécuté, ... pendant les années 1826–1827–1828–1829, sous les commandement de M.J. Dumont d'Urville. Faune entomologique de l'Océan Pacifique, avec l'illustration des insectes nouveaux recueillis pendant le voyage. Deuxième partie (Coléoptères et autres ordres)*, p. 85.

The following is the reference for the designation of *Buprestis foveicollis* Boisduval, 1835 as the type species of *Cyphogastra* Deyrolle, 1864:

**Bellamy, C.L.** 1998. *Deutsche Entomologische Zeitschrift*, **45**(1): 10.

**OPINION 2009 (Case 3118)**

***Anthaxia* Eschscholtz, 1829 and *Trichocraterus* Richter, 1949 (Insecta, Coleoptera): generic names conserved by the designation of *Buprestis nitida* Rossi, 1794 (currently *A. fulgurans* (Schrunk, 1789)) as the type species of *Anthaxia***

**Keywords.** Nomenclature; taxonomy; Coleoptera; *Trichocraterus*; *Trichocraterus manca*; BUPRESTIDAE; *Anthaxia*; *Anthaxia fulgurans*; *Buprestis nitida*.

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**Ruling**

- (1) Under the plenary power all previous fixations of type species for the nominal genus *Anthaxia* Eschscholtz, 1829 are hereby set aside and *Buprestis nitida* Rossi, 1792 is designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Anthaxia* Eschscholtz, 1829 (gender: feminine), type species by designation under the plenary power in (1) above *Buprestis nitida* Rossi, 1792 (a junior subjective synonym of *Buprestis fulgurans* Schrank, 1789);
  - (b) *Trichocraterus* Richter, 1949 (gender: masculine), type species by original designation *Buprestis manca* Linnaeus, 1767 (a junior objective synonym of *Anthaxia* Eschscholtz, 1829).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *fulgurans* Schrank, 1789, as published in the binomen *Buprestis fulgurans* (senior subjective synonym of the specific name of *Buprestis nitida* Rossi, 1792, the type species of *Anthaxia* Eschscholtz, 1829 as ruled in (1) above);
  - (b) *manca* Linnaeus, 1767, as published in the binomen *Buprestis manca*, type species by original designation of *Trichocraterus* Richter, 1949.

**History of Case 3118**

An application to conserve the usage of the name *Anthaxia* Eschscholtz, 1829 by the designation of *Buprestis nitida* Rossi, 1792 (currently *A. fulgurans* (Schrunk, 1789)) as the type species was received from Svatopluk Bílý (*National Museum, Praha, Czech Republic*) on 15 February 1999. After correspondence the case was published in BZN 57: 97–99 (June 2000).

Comments in support of the application were published in BZN 57: 227 (December 2000) and BZN 58: 58 (March 2001).

It was noted on the voting paper that *Buprestis manca* Linnaeus, 1767 is the valid but unrecognised type species of *Anthaxia* (para. 2(2) of the application). The same species is also the type by original designation of *Trichocraterus* Richter, 1949 (para. 3) and, as a consequence, the latter name is formally a junior objective synonym of *Anthaxia*.

The proposed designation of *B. nitida* Rossi, 1792 as the type species of *Anthaxia*, in accord with usage (para. 4), will also conserve the name *Trichocraterus*. It was

proposed that the names *Trichocratomerus* and its type species *B. manca* be placed on Official Lists in addition to the proposals in para. 5 in BZN 57: 98. Notice of the case was sent to appropriate journals.

### Decision of the Commission

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 57: 98 and in the voting paper. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 27: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Song, Štys, van Tol

Negative votes – 0.

No vote was received from Dupuis.

### Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

- Anthaxia* Eschscholtz, 1829, *Abbildungen und Beschreibungen neuer Tierarten, während des Flottcapitains v. Kotzebue zweiter Reise um die Welt, auf der Russisch-Kaiserlichen Kriegsschlop Predpriaetie in den Jahren 1823–1826*. Zoologischer Atlas, erste Hefte, p. 9.
- fulgurans*, *Buprestis*, Schrank, 1789, *Der Naturforscher* (Halle), 24: 85.
- manca*, *Buprestis*, Linnaeus, 1767, *Systema Naturae*, Ed. 12, vol. 1, pars 2, p. 1067.
- nitida*, *Buprestis*, Rossi, 1792, *Mantissa insectorum* . . . , vol. 1, p. 63.
- Trichocratomerus* Richter, 1949, *Buprestidae. Fauna of the U.S.S.R.*, vol. 13, no. 2, p. 102.

**OPINION 2010 (Case 3154)**

***Scymnus splendidulus* Stenius, 1952 (currently *Nephus (Sidis) splendidulus*; Insecta, Coleoptera): neotype retained as the name-bearing type**

**Keywords.** Nomenclature; taxonomy; Coleoptera; COCCINELLIDAE; *Nephus*; *Nephus (Sidis)*; *Nephus (Sidis) splendidulus*; ladybird beetles.

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**Ruling**

- (1) Under the plenary power the name-bearing type for *Scymnus splendidulus* Stenius, 1952 is hereby confirmed as the neotype designated by Fürsch (1965) and registered as type number 2659 in the Zoological Museum, Helsinki.
- (2) The name *splendidulus* Stenius, 1952, as published in the binomen *Scymnus splendidulus* and as defined by the neotype confirmed in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

**History of Case 3154**

An application for the retention of the neotype designated by Fürsch (1965) as the name-bearing type of the Mediterranean coccinellid beetle *Nephus (Sidis) splendidulus* (Stenius, 1952) despite the rediscovery of the holotype was received from Dr Helmut Fürsch (*Ruderting, Germany*) and Dr Hans Silfverberg (*Zoological Museum, Helsinki, Finland*) on 9 February 2000. After correspondence the case was published in BZN 58: 108–109 (June 2001). The title, abstract and keywords of the case were published on the Commission's website.

**Decision of the Commission**

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 109. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 23: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Song, Štys

Negative votes – 4: Cogger, Kerzhner, Lamas and van Tol.

No vote was received from Dupuis.

Voting against, van Tol commented: 'The authors are apparently able to establish the identity of the holotype, since they state that the holotype and neotype are conspecific. Consequently, there is no reason to retain the neotype'.

**Original references**

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

*splendidulus*, *Scymnus*, Stenius, 1952, *Notulae Entomologicae*, 32: 155.

The following is the reference for the designation of the neotype of *Scymnus splendidulus* Stenius, 1952:

Fürsch, H. 1965. *Mitteilungen der Münchner Entomologischen Gesellschaft*, 55: 204.

**OPINION 2011 (Case 3061)**

***Hemibagrus* Bleeker, 1862 (Osteichthyes, Siluriformes), *Bagrus nemurus* Valenciennes in Cuvier & Valenciennes, 1840, *B. planiceps* Valenciennes, 1840, *B. flavus* Bleeker, 1846 and *B. sieboldii* Bleeker, 1846: previous fixations of type specimens not to be set aside**

**Keywords.** Nomenclature; taxonomy; Osteichthyes; Siluriformes; catfish; BAGRIDAE; *Hemibagrus*; *Hemibagrus flavus*; *Hemibagrus nemurus*; *Hemibagrus planiceps*; *Hemibagrus sieboldii*.

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**Ruling**

- (1) The previous fixations of type specimens for *Bagrus nemurus* Valenciennes in Cuvier & Valenciennes, 1840, *B. planiceps* Valenciennes in Cuvier & Valenciennes, 1840, *B. flavus* Bleeker, 1846 and *B. sieboldii* Bleeker, 1846 are not to be set aside.
- (2) The name *Hemibagrus* Bleeker, 1862 (gender: masculine), type species by original designation *Bagrus nemurus* Valenciennes in Cuvier & Valenciennes, 1840 is hereby placed on the Official List of Generic Names in Zoology.
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *nemurus* Valenciennes in Cuvier & Valenciennes, 1840, as published in the binomen *Bagrus nemurus* (specific name of the type species of *Hemibagrus* Bleeker, 1862);
  - (b) *planiceps* Valenciennes in Cuvier & Valenciennes, 1840, as published in the binomen *Bagrus planiceps* and as defined by the lectotype RMNH 2939 in the Nationaal Natuurhistorisch Museum, Leiden, designated by Ng, Goh, Ng & Dodson (1999);
  - (c) *flavus* Bleeker, 1846, as published in the binomen *Bagrus flavus*;
  - (d) *sieboldii* Bleeker, 1846, as published in the binomen *Bagrus sieboldii*.

**History of Case 3061**

An application to stabilise the usage of the specific names of: (a) *Bagrus nemurus* Valenciennes in Cuvier & Valenciennes, 1840 (type species of *Hemibagrus* Bleeker, 1862) by the designation of a single neotype for both *B. nemurus* and *B. sieboldii* Bleeker, 1846 and (b) *B. planiceps*, Valenciennes, 1840 by the designation of the lectotype of *B. planiceps* as the neotype of *B. flavus* Bleeker, 1846 was received from Drs H.H. Ng, Y.Y. Goh and P.K.L. Ng (*National University of Singapore, Singapore, Republic of Singapore*) and Julian Dodson (*Cité Universitaire, Québec, Canada*) on 22 August 1997. After correspondence the case, including information in (a) above, was published in BZN 56: 34–41 (March 1999). Notice of the case was sent to appropriate journals. The information in (b) above was added to Proposal 19(1)(a) in BZN 56: 40 by its inclusion on the second voting paper (1 March 2002).

A comment opposing the application was published in BZN 56: 200 (September 1999). A comment in support of the application was published in BZN 56: 271–272

(December 1999). The application was sent to the Commission for voting on 1 September 2000. The case received a majority of the votes cast but failed to reach the required two-thirds majority (13 votes in favour and seven against; four Commissioners did not vote).

On 1 March 2002 the application was submitted for a re-vote under the Bylaws. It was noted on the voting paper that further information on Bleeker type material involved in the case was given by Dr M.J.P. van Oijen (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) in BZN 56: 200–201 (September 1999); this additional information does not affect the issues in the case. It was also noted that a lectotype for the nominal species *Bagrus planiceps* Valenciennes, 1840 (specimen RMNH 2939 in Leiden) was designated by Ng et al. in BZN 56: 38, and a lectotype for *B. anisurus* Valenciennes, 1840 (specimen RMNH 2956 in Leiden, not Paris as stated in BZN 56: 272) was designated by Kottelat in BZN 56: 272. The name *B. planiceps* has precedence over *B. anisurus* (para. 3 of the application). It was further noted that two Commissioners had commented on their voting papers in response to the original vote. Voting against, Calder commented: 'Inasmuch as nomenclatural stability and universality are not threatened to any significant degree in this case (the names of both species have been stable for more than 140 years), I see no clear need to use the plenary power to designate neotypes for *Bagrus nemurus*, *B. flavus* and *B. sieboldii*. Instead, it is my view that the authors could, if they see 'exceptional need' for neotype designations, proceed on their own as requested in paras. 19(1)(a), 19(1)(b) and 19(1)(c) by applying the provisions of Article 75. Based on the information provided in the application, no type material is in existence for *B. nemurus* (paras. 11–13, 17). The types of *B. flavus* 'can never be recognized with certainty' (para. 10). The same applies to *B. sieboldii* (the authors have noted in para. 17: 'Our revision of this species-group is seriously complicated by the absence of types'). The strongest case could be made for a neotype of *B. nemurus*, type species of the genus *Hemibagrus*'. Rosenberg commented: 'Based on current biological knowledge, the names involved are undoubted subjective synonyms. Since there currently are no taxonomic problems, there is no need for neotypes'.

### Decision of the Commission

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 56: 40 and in the voting paper. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 16: Bock, Böhme, Bouchet, Cogger, Eschmeyer, Halliday, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Ng, Nielsen, Papp, Patterson, Song

Negative votes – 10: Alonso-Zarazaga, Brothers, Evenhuis, Fortey, Kerzhner, Kraus, Minelli, Rosenberg, Štys and van Tol.

Calder abstained.

No vote was received from Dupuis.

The comments cited above were endorsed by Brothers, Calder, Papp and Štys.

Again, the required two thirds majority for use of the plenary power to set aside all previous fixations of type specimens for *Bagrus flavus*, *B. nemurus* and *B. sieboldii* and designate neotypes was not reached and therefore the existing type specimens are retained and accordingly the species-group names are added to Official Lists.

### Original references

The following are the original references to the names placed on Official Lists by the ruling given in the present Opinion:

*flavus*, *Bagrus*, Bleeker, 1846, *Natuur- en Geneeskundig Archief voor Neêrland's Indië*, **3**: 156.

*Hemibagrus* Bleeker, 1862, *Atlas ichthyologique des Indes Orientales Néerlandaises*, vol. 2.

Siluroïdes, Chacoïdes et Hétérobranchoïdes, p. 9.

*nemurus*, *Bagrus*, Valenciennes in Cuvier & Valenciennes, 1840, *Histoire naturelle des poissons*, vol. 14, p. 423.

*planiceps*, *Bagrus*, Valenciennes in Cuvier & Valenciennes, 1840, *Histoire naturelle des poissons*, vol. 14, p. 421.

*sicboldii*, *Bagrus*, Bleeker, 1846, *Natuur- en Geneeskundig Archief voor Neêrland's Indië*, **3**: 155.

The following is the reference for the designation of the lectotype of *Bagrus planiceps* Valenciennes in Cuvier & Valenciennes, 1840:

Ng, H.H., Goh, Y.Y., Ng, P.K.L. & Dodson, J. 1999. BZN **56**: 38.



**OPINION 2012 (Case 3041)**

***Cynodon* Spix in Spix & Agassiz, 1829 and *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 (Osteichthyes, Characiformes): conserved, and *C. gibbus* and *R. vulpinus* Spix & Agassiz, 1829 designated as the respective type species of *Cynodon* and *Rhaphiodon***

**Keywords.** Nomenclature; taxonomy; Osteichthyes; Characiformes; CYNODONTIDAE; CHARACIDAE; *Cynodon*; *Rhaphiodon*; *Cynodon gibbus*; *Cynodon vulpinus*; *Rhaphiodon gibbus*; *Rhaphiodon vulpinus*; freshwater fish; South America.

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**Ruling**

- (1) Under the plenary power:
  - (a) the following names are suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy:
    - (i) *Cynodon* Cuvier, 1829 and all uses of the name *Cynodon* prior to the publication of *Cynodon* Spix in Spix & Agassiz, 1829;
    - (ii) *vulpinus* Cuvier, 1829, as published in the binomen *Cynodon vulpinus*, and all uses of the name *Cynodon vulpinus* prior to the publication of *Cynodon vulpinus* Spix & Agassiz, 1829;
  - (b) the name *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 is to be treated as the name of a new genus and not as a replacement name for *Cynodon* Spix in Spix & Agassiz, 1829;
  - (c) the name *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 is to be given precedence over *Cynodon* Spix in Spix & Agassiz, 1829 whenever the two names are considered to be synonyms;
  - (d) all previous type species fixations for the following nominal genera are hereby set aside:
    - (i) *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 and *Rhaphiodon vulpinus* Spix & Agassiz, 1829 is hereby designated as the type species;
    - (ii) *Cynodon* Spix in Spix & Agassiz, 1829 and *Cynodon gibbus* Spix & Agassiz, 1829 is hereby designated as the type species.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
  - (a) *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 (gender: masculine), type species by designation in (1)(d)(i) above *Rhaphiodon vulpinus* Spix & Agassiz, 1829, with the endorsement that it is to be given precedence over the name *Cynodon* Spix in Spix & Agassiz, 1829 whenever the two names are considered to be synonyms;
  - (b) *Cynodon* Spix in Spix & Agassiz, 1829 (gender: masculine), type species by designation in (1)(d)(ii) above *Cynodon gibbus* Spix & Agassiz, 1829, with the endorsement that it is not to be given priority over the name *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 whenever the two names are considered to be synonyms.

- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *gibbus* Spix & Agassiz, 1829, as published in the binomen *Cynodon gibbus* (specific name of the type species of *Cynodon* Spix in Spix & Agassiz, 1829);
  - (b) *vulpinus* Spix & Agassiz, 1829, as published in the binomen *Rhaphiodon vulpinus* (specific name of the type species of *Rhaphiodon* Agassiz in Spix & Agassiz, 1829).
- (4) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:
  - (a) *Cynodon* Cuvier, 1829, as suppressed in (1)(a)(i) above;
  - (b) *Rhaphiodontichthys* Campos, 1945 (a junior objective synonym of *Rhaphiodon* Agassiz in Spix & Agassiz, 1829);
  - (c) *Camposichthys* Travassos, 1946 (a junior objective synonym of *Cynodon* Spix in Spix & Agassiz, 1829).
- (5) The name *vulpinus* Cuvier, 1829, as published in the binomen *Cynodon vulpinus* and as suppressed in (1)(a)(ii) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

### History of Case 3041

An application for the conservation of the usage of the names *Cynodon* Spix in Spix & Agassiz, 1829 and *Rhaphiodon* Agassiz in Spix & Agassiz, 1829 and the designation of *C. gibbus* and *R. vulpinus* Spix & Agassiz, 1829 as the respective type species of *Cynodon* and *Rhaphiodon* was received from Dr M. Toledo-Piza (*Museu de Zoologia da Universidade de São Paulo, São Paulo, Brazil*) and Dr K.J. Lazara (*United States Merchant Marine Academy, Kings Point, New York, U.S.A.*) on 3 February 1997. After correspondence the case was published in BZN 57: 151–157 (September 2000).

A note in support of the application was published in BZN 58: 306 (December 2001).

A specimen of *Rhaphiodon vulpinus* in the Musée d'Histoire Naturelle, Neuchâtel (catalogue no. MNHN 822), recorded by Kottelat (1988, p. 84) as 'potential holotype', was accepted as the holotype by Toledo-Piza (2000, p. 74, fig. 28). Notice of the case was sent to appropriate journals.

### Decision of the Commission

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 57: 154. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 25: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Rosenberg, Song, van Tol

Negative votes – 2: Patterson and Štys.

No vote was received from Dupuis.

### Original references

The following are the original references to the names placed on Official Lists and Official Indexes by the ruling given in the present Opinion:

*Camposichthys* Travassos, 1946, *Summa Brasiliensis Biologiae*, **1**: 132.

*Cynodon* Cuvier, 1829, *Le règne animal distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée*, Ed. 2, vol. 2, p. 312.

*Cynodon* Spix & Agassiz, 1829, *Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et observationibus anatomicis illustravit Dr. L. Agassiz*, pl. 26.

*gibbus*, *Cynodon*, Spix & Agassiz, 1829, *Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et observationibus anatomicis illustravit Dr. L. Agassiz*, pl. 27.

*Rhaphiodon* Agassiz in Spix & Agassiz, 1829, *Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et observationibus anatomicis illustravit Dr. L. Agassiz*, pp. 59, 76.

*Rhaphiodontichthys* Campos, 1945, *Arquivos de Zoologia do Estado de São Paulo*, **4**: 473.

*vulpinus*, *Cynodon*, Cuvier, 1829, *Le règne animal distribué d'après son organisation, pour servir de base à l'histoire naturelle des animaux et d'introduction à l'anatomie comparée*, Ed. 2, vol. 2, p. 312.

*vulpinus*, *Rhaphiodon*, Spix & Agassiz, 1829, *Selecta genera et species piscium quos in itinere per Brasiliam . . . Collegit et pingendos curavit Dr. J.B. de Spix . . . Digessit, descripsit et observationibus anatomicis illustravit Dr. L. Agassiz*, p. 76.

**OPINION 2013 (Case 3173)**

***Phrynidium crucigerum* Lichtenstein & Martens, 1856 (currently *Atelopus cruciger*; Amphibia, Anura): specific name conserved by the designation of a neotype**

**Keywords.** Nomenclature; taxonomy; Amphibia; Anura; BUFONIDAE; *Atelopus cruciger*; *Atelopus varius*; Venezuela; Neotropics.

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**Ruling**

- (1) Under the plenary power all previous type fixations for the nominal species *Phrynidium crucigerum* Lichtenstein & Martens, 1856 are hereby set aside and the specimen from the vicinity of Rancho Grande on the road from Maracay to Ocumare de la Costa (ca. 1000 m above sea level), Estado Aragua, Venezuela, ZSM 93/1947/10, Zoologische Staatssammlung, Munich, is designated as the neotype.
- (2) The name *crucigerum* Lichtenstein & Martens, 1856, as published in the binomen *Phrynidium crucigerum* and as defined by the neotype designated in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

An application for the conservation of the specific name of *Phrynidium crucigerum* Lichtenstein & Martens, 1856 by the designation of a neotype was received from Drs Stefan Lötters (*University of Mainz, Mainz, Germany*) and Enrique La Marca (*Universidad de Los Andes, Mérida, Venezuela*) on 4 September 2000. After correspondence the case was published in BZN 58: 119–121 (June 2001). The title, abstract and keywords of the case were published on the Commission's website. No comments on the case were received.

**Decision of the Commission**

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 120. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 20: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Macpherson, Mahnert, Martins de Souza, Mawatari, Nielsen, Papp, Song, van Tol

Negative votes – 7: Kerzhner, Lamas, Minelli, Ng, Patterson, Rosenberg and Štys.  
No vote was received from Dupuis.

Voting against, Ng, Rosenberg and Štys commented that Lötters, Böhme & Günther (1998) accepted the synonymy of the two taxa in question, and their conclusions follow the Code. It is not evident from the application that the names of these frogs have been cited frequently other than in systematic literature. The arguments for the need for a neotype are not very compelling, therefore it would be more logical to accept the synonymy and apply a new name for the Venezuelan species.

**Original reference**

The following is the original reference to the name placed on an Official List by the ruling given in the present Opinion:

*crucigerum*, *Phrynidium*, Lichtenstein & Martens, 1856, *Nomenclator reptilium et amphibiorum musei zoologici berolinensis*, p. 41.

**OPINION 2014 (Case 3136)*****Crotaphytus vestigium* Smith & Tanner, 1972 (Reptilia, Squamata):  
specific name conserved**

**Keywords.** Nomenclature; taxonomy; Reptilia; Squamata; CROTAPHYTIDAE; *Crotaphytus fasciolatus*; *Crotaphytus vestigium*; Mexico; California.

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**Ruling**

- (1) Under the plenary power the specific name *fasciolatus* Mocquard, 1903, as published in the binomen *Crotaphytus fasciolatus*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.
- (2) The name *vestigium* Smith & Tanner, 1972, as published in the trinomen *Crotaphytus insularis vestigium*, is hereby placed on the Official List of Specific Names in Zoology.
- (3) The following names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:
  - (a) *fasciolatus* Mocquard, 1903, as published in the binomen *Crotaphytus fasciolatus* and as suppressed in (1) above;
  - (b) *fasciatus* Mocquard, 1899, as published in the binomen *Crotaphytus fasciatus* (a junior primary homonym of *Crotaphytus fasciatus* Hallowell, 1853).

**History of Case 3136**

An application for the conservation of the specific name of *Crotaphytus vestigium* Smith & Tanner, 1972 was received from Dr J.A. McGuire (*Division of Natural Sciences, Louisiana State University, Baton Rouge, Louisiana, U.S.A.*) on 23 August 1999. After correspondence the case was published in BZN 57: 158–161 (September 2000). Notice of the case was sent to appropriate journals.

An opposing comment was published in BZN 58: 59 (March 2001). A reply from the author of the application, together with a supportive comment, was published at the same time.

**Decision of the Commission**

On 1 December 2001 the members of the Commission were invited to vote on the proposals published in BZN 57: 159. At the close of the voting period on 1 March 2002 the votes were as follows:

Affirmative votes – 17: Bock, Böhme, Brothers, Calder, Eschmeyer, Evenhuis, Fortey, Halliday, Kraus, Macpherson, Mahnert, Mawatari, Nielsen, Papp, Patterson, Song, Štys

Negative votes – 7: Alonso-Zarazaga, Bouchet, Cogger, Lamas, Martins de Souza, Minelli and van Tol.

No votes were received from Dupuis, Kerzhner, Ng and Rosenberg.

Cogger commented: 'It is misleading to assert (para. 5 of the application) that 'the name *Crotaphytus fasciolatus* Mocquard, 1903 has never been used for the species for

which it was intended, during a period of nearly 100 years by virtue of having been incorrectly assigned to the synonymy of *Gambelia wizlizenii* (Baird & Girard, 1852), because the species to which it was applied was itself not recognised by herpetologists for a long time. This fact alone suggests that the taxonomy of this group of lizards will still undergo significant changes, so that the suppression of the senior subjective synonym *C. fasciolatus* is unwarranted. For the sake of the issues of stability and universality identified by the applicant I would agree to priority being given to the younger name *C. vestigium* by authors who consider the latter and *C. fasciatus* to be synonyms'.

### Original references

The following are the original references to the names placed on an Official List and an Official Index by the ruling given in the present Opinion:

*fasciatus*, *Crotaphytus*, Mocquard, 1899, *Nouvelles Archives du Muséum d'Histoire Naturelle*, Paris, (4)1: 303.

*fasciolatus*, *Crotaphytus*, Mocquard, 1903, *Bulletin du Muséum d'Histoire Naturelle*, Paris, 9: 209.

*vestigium*, *Crotaphytus insularis*, Smith & Tanner, 1972, *Great Basin Naturalist*, 32: 29.

**OPINION 2015 (Case 3145)*****Dactyloa biporcata* Wiegmann, 1834 (currently *Anolis biporcatus*) and *Anolis petersii* Bocourt, 1873 (Reptilia, Sauria): specific names conserved by the designation of a neotype for *A. biporcatus***

**Keywords.** Nomenclature; taxonomy; Reptilia; Sauria; IGUANIDAE; *Anolis biporcatus*; *Anolis petersii*; *Anolis copei*; lizards; anoles; Central America.

---

**Ruling**

- (1) Under the plenary power all previous type fixations for the nominal species *Dactyloa biporcata* Wiegmann, 1834 are hereby set aside and the holotype of *Anolis copei* Bocourt, 1873 (MNHM 2426) is designated as the neotype.
- (2) The following names are hereby placed on the Official List of Specific Names in Zoology:
  - (a) *biporcata* Wiegmann, 1834, as published in the binomen *Dactyloa biporcata* and as defined by the neotype designated in (1) above;
  - (b) *petersii* Bocourt, 1873, as published in the binomen *Anolis petersii*.
- (3) The name *copei* Bocourt, 1873, as published in the binomen *Anolis copei* (a junior objective synonym of *Dactyloa biporcata* Wiegmann, 1834) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

**History of Case 3145**

An application to conserve the usage of the specific names of *Dactyloa biporcata* Wiegmann, 1834 and *Anolis petersii* Bocourt, 1873 by the designation of the holotype of *A. copei* Bocourt, 1873 as the neotype of *A. biporcatus* was received from Drs Gunther Köhler (*Forschungsinstitut und Naturmuseum Senckenberg, Frankfurt a.M., Germany*) and Aaron M. Bauer (*Villanova University, Villanova, PA, U.S.A.*) on 4 October 1999. After correspondence the case was published in BZN 58: 122–125 (June 2001). The title, abstract and Keywords of the case were published on the Commission's website. No comments on the case were received.

**Decision of the Commission**

On 1 March 2002 the members of the Commission were invited to vote on the proposals published in BZN 58: 124. At the close of the voting period on 1 June 2002 the votes were as follows:

Affirmative votes – 27: Alonso-Zarazaga, Bock, Böhme, Bouchet, Brothers, Calder, Cogger, Eschmeyer, Evenhuis, Fortey, Halliday, Kerzhner, Kraus, Lamas, Macpherson, Mahnert, Martins de Souza, Mawatari, Minelli, Ng, Nielsen, Papp, Patterson, Rosenberg, Song, Štys, van Tol

Negative votes – 0.

No vote was received from Dupuis.

**Original references**

The following are the original references to names placed on an Official List and an Official Index by the ruling given in the present Opinion:



- biporcata*, *Dactyloa*, Wiegmann, 1834, *Herpetologia mexicana, seu Descriptio amphibiorum Novae Hispaniae, quae itineribus Comitum de Sack, F. Deppe et C.G. Schiede in Museum Zoologicum Berolinense pervenerunt*. Pars prima Saurorum species amplexans, &c, pp. 47–48.
- copei*, *Anolis*, Bocourt, 1873, in Duméril, M.A., Bocourt, M. & Mocquard, M. (Eds.), *Recherches Zoologiques*. Vol. 3, (Section 1). Etudes sur les reptiles et les Batraciens. *Mission Scientifique au Mexique et dans l'Amérique Centrale*, p. 77.
- petersii*, *Anolis*, Bocourt, 1873, in Duméril, M.A., Bocourt, M. & Mocquard, M. (Eds.), *Recherches Zoologiques*. Vol. 3, (Section 1). Etudes sur les reptiles et les Batraciens. *Mission Scientifique au Mexique et dans l'Amérique Centrale*, p. 79.

## INFORMATION AND INSTRUCTIONS FOR AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Applications should be prepared in the format of recent parts of the Bulletin; manuscripts not prepared in accordance with these guidelines may be returned.

*General.* Applications are requests to the Commission to set aside or modify the Code's provisions as they relate to a particular name or group of names when this appears to be in the interest of stability of nomenclature. Authors submitting cases should regard themselves as acting on behalf of the zoological community and the Commission will treat all applications on this basis. Applicants should discuss their cases with other workers in the same field before submitting applications, so that they are aware of any wider implications and the likely reactions of other zoologists.

*Text.* Typed in double spacing, this should consist of numbered paragraphs setting out the details of the case and leading to a final paragraph of formal proposals to the Commission. Text references should give dates and pages in parentheses, e.g. 'Daudin (1800, p. 49) described ...'. The Abstract will be prepared by the Commission's Secretariat.

*References.* These should be given for all authors cited. Where possible, ten or more reasonably recent references should be given illustrating the usage of names which are to be conserved or given precedence over older names. The title of periodicals should be in full and in italics; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be in italics and followed by the number of pages and plates, the publisher and place of publication. More detailed instructions on the preparation of references are given in BZN 59: 159–160.

*Submission of Application.* Two copies should be sent to: Executive Secretary, the International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. It would help to reduce the time it takes to process the large number of applications received if the typescript could be accompanied by a disk with copy in IBM PC compatible format, or the script sent via e-mail to 'iczn@nhm.ac.uk' within the message or as an attachment (disks and attachments to be in Word, rtf or ASCII text). It would also be helpful if applications were accompanied by photocopies of relevant pages of the main references where this is possible.

The Commission's Secretariat is very willing to advise on all aspects of the formulation of an application.

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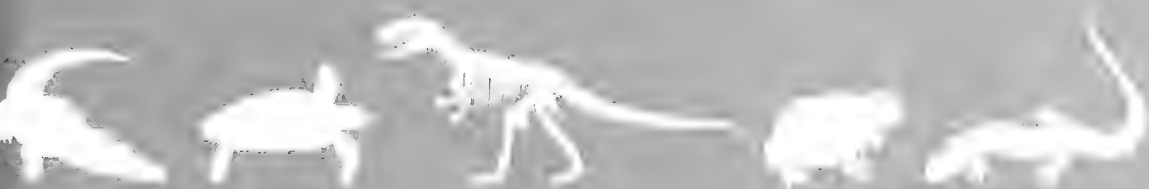
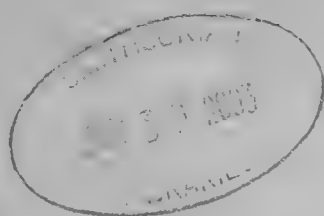
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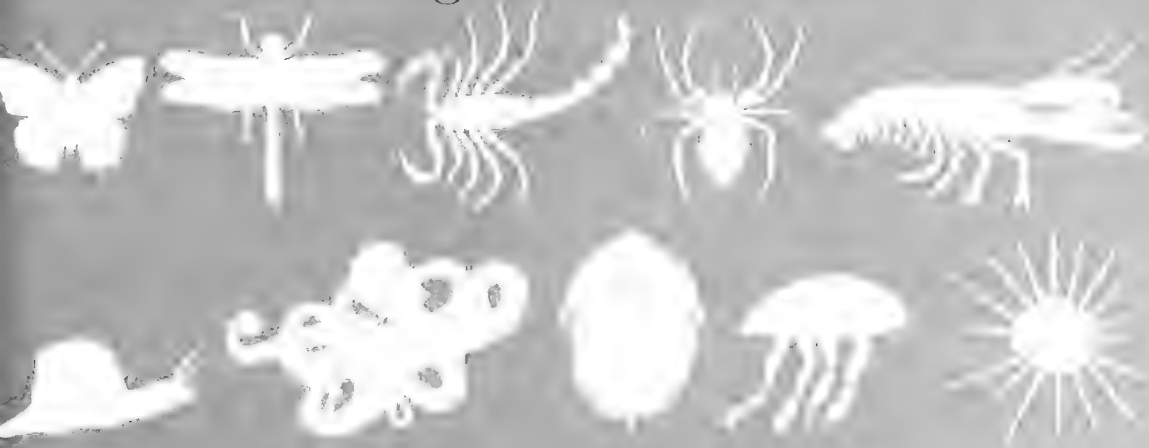
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Dr N. L. Evenhuis ( <i>U.S.A.; Diptera</i> )	Prof D. J. Patterson ( <i>Australia; Protista</i> )
Prof R. A. Fortey ( <i>U.K.; Trilobita</i> )	Dr G. Rosenberg ( <i>U.S.A.; Mollusca</i> )
Dr R. B. Halliday ( <i>Australia; Acari</i> )	Prof D. X. Song ( <i>China; Hirudinea</i> )
Dr I. M. Kerzhner ( <i>Russia; Heteroptera</i> )	Dr P. Štys ( <i>Czech Republic; Heteroptera</i> )
Prof Dr O. Kraus ( <i>Germany; Arachnology</i> )	Mr J. van Tol ( <i>The Netherlands; Odonata</i> )

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The Earl of Cranbrook (*Chairman*)  
Dr M. K. Howarth (*Secretary and Managing Director*)

**BULLETIN OF ZOOLOGICAL NOMENCLATURE**

Volume 59, part 4 (pp. 233–306)

19 December 2002

**Notices**

(a) *Invitation to comment.* The Commission is authorised to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after their publication but this period is normally extended to enable comments to be submitted. Any zoologist who wishes to comment on any of the applications is invited to send his or her contribution to the Executive Secretary of the Commission as quickly as possible.

(b) *Invitation to contribute general articles.* At present the *Bulletin* comprises mainly applications concerning names of particular animals or groups of animals, resulting comments and the Commission's eventual rulings (Opinions). Proposed amendments to the Code are also published for discussion.

Articles or notes of a more general nature are actively welcomed provided that they raise nomenclatural issues, although they may well deal with taxonomic matters for illustrative purposes. It should be the aim of such contributions to interest an audience wider than some small group of specialists.

(c) *Receipt of new applications.* The following new applications have been received since going to press for volume 59, part 3 (30 September 2002). Under Article 82 of the Code, existing usage is to be maintained until the ruling of the Commission is published.

Case 3251. *Thereva* Latreille, [1797] and *Phasia* Latreille, 1804 (Insecta, Diptera): proposed conservation by designation of *Musca plebeja* Linnaeus, 1758 as the type species of *Thereva*. K.C. Holston, M.E. Irwin & F.C. Thompson.

Case 3252. Confirmation that the French version of Article 13.1.1 of the Code and the Glossary definition of 'diagnose' embody the respective intended meanings, and that *Haemocera morii* Tokioka, 1949 (Crustacea, Copepoda) is an available name. M.J. Grygier.

Case 3253. *Libellula aenea* Linnaeus, 1758 (currently *Cordulia aenea*) and *L. flavomaculata* Vander Linden, 1825 (currently *Somatochlora flavomaculata*; Insecta, Odonata): proposed conservation of the specific names by redesignation of a lectotype for *L. aenea*. R. Jödicke & J. van Tol.

Case 3255. *Macropodus opercularis concolor* Ahl, 1937 (currently *Macropodus concolor*; Osteichthyes, Perciformes): proposed conservation of the specific name. I. Schindler & W. Staack.

Case 3256. *Leptusa* Kraatz, 1856 and *Cyllopisalia* Pace, 1982 (Insecta, Coleoptera): proposed precedence over *Sipalia* Mulsant & Rey, 1853. V.I. Gusarov & L.H. Herman.

Case 3257. *Acmaeodera oaxacae* Fisher, 1949 and *Polycesta deserticola* Barr, 1974 (Insecta, Coleoptera): proposed conservation of the specific names. C.L. Bellamy & R.L. Westcott.

(d) *Rulings of the Commission.* Each Opinion published in the *Bulletin* constitutes an official ruling of the International Commission on Zoological Nomenclature, by virtue of the votes recorded, and comes into force on the day of publication of the *Bulletin*.

### ICZN Discussion List now Available Online

In an effort to improve interaction between the Commission and the zoological community, a Commission Discussion List has just been created. Subscription is free of charge and open to all with access to the Internet. Just send an e-mail to [join-iczn-list@lyris.bishopmuseum.org](mailto:join-iczn-list@lyris.bishopmuseum.org), leaving the subject line and body of the message blank.

All Commissioners (with e-mail addresses) and the Commission Secretariat are subscribers to the list. It is hoped that Commissioners will benefit from the discussions that take place on the list and participate actively to assist the zoological community with questions or problems relating to nomenclature, the role of the Commission and in particular the Code.

Hopefully, this discussion list will help bring Code-related problems out into the open and serve as a medium for constructive solutions and intelligent discussions pertaining to all aspects of zoological nomenclature.

The decision-making process of the Commission does not change with the introduction of this list. The protocol for such decisions still lies within the Constitution, By-Laws, and Articles of the Code. This discussion list exists only in an advisory capacity. The Commission Secretariat is still available for those who do not wish to use or do not have access to the discussion list and will answer questions on all aspects of the Commission and the Code. In addition, all applications to the Commission, other articles for publication in the *Bulletin*, orders for the Code and other publications and all other communications of an administrative nature should continue be sent to the Executive Secretary (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)).

**Neal L. Evenhuis, Commission President**



## **The *Bulletin of Zoological Nomenclature***

Subscriptions for volume 60 (for 2003) of the *Bulletin of Zoological Nomenclature* are now due. The subscription price is £ 123 or US\$ 220; individual zoologists wishing to subscribe to the *Bulletin* for their own personal use are offered a 50% discount, reducing the subscription to £ 61 or US\$ 110. Cheques should be made out to 'ITZN' and sent to: I.T.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.

Four issues of the *Bulletin* are published each year at the end of March, June and September and the third week of December. They are sent to subscribers by Accelerated Surface Post which should reach all subscribers in less than three weeks of publication.

## **Official Lists and Indexes of Names and Works in Zoology — Supplement 1986–2000**

The volume entitled *Official Lists and Indexes of Names and Works in Zoology* (ISBN 0 85301 004 8) was published in 1987. It gave details of the names and works on which the Commission had ruled and placed on the Official Lists and Indexes since it was set up in 1895 through to the end of 1985. The volume contained 9917 entries, 9783 being family-group, generic or specific names and 134 relating to works.

In the 15 years between 1986 and the end of 2000 a further 601 Opinions and Directions have been published in the *Bulletin* listing 2371 names and 14 works placed on the Official Lists and Indexes. Details of these 2385 entries are given in a Supplement of 141 pages (ISBN 0 85301 007 2) published early in 2001. Additional sections include (a) a systematic index of names on the Official Lists covering both the 1987 volume and the Supplement; (b) a table correlating the nominal type species of genera listed in the 1987 volume with the valid names of those species when known to be different; and (c) emendments to the 1987 volume.

The cost of the 1987 volume and of the Supplement is £60 or \$110 each, and £100 or \$170 for both volumes ordered together.

Individual buyers of the volumes for their own use are offered a price of £50 or \$85 for each volume, and £90 or \$150 for both.

Individual members of the American or European Association for Zoological Nomenclature are offered a price of £45 or \$70 for each volume, and £80 or \$120 for both.

Prices include postage by surface mail; for Airmail, please add £3 or \$5 for each volume.

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## The International Code of Zoological Nomenclature

The extensively revised 4th Edition of the *International Code of Zoological Nomenclature* (ISBN 0 85301 006 4) was published (in a bilingual volume in English and French) in August 1999. It came into effect on 1 January 2000 and entirely supersedes the 3rd (1985) edition.

The price of the English and French volume of the 4th Edition is £40 or \$65; the following discounts are offered:

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Copies may be ordered from: ITZN, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk)), or AAZN, Attn. D.G. Smith, MRC-159, National Museum of Natural History, Washington, D.C. 20560-0159, U.S.A. (e-mail: [smith.davidg@nmnh.si.edu](mailto:smith.davidg@nmnh.si.edu)).

Payment should accompany orders. Cheques should be made out to 'ITZN' (in sterling or dollars) or to 'AAZN' (in dollars only). Payment to ITZN (but not to AAZN) can also be made by Visa or MasterCard giving the cardholder's number, name and address and the expiry date.

Individual purchasers of the Code are offered a 50% discount on the following publication for personal use:

*Towards Stability in the Names of Animals — a History of the International Commission on Zoological Nomenclature 1895-1995* (1995) — reduced from £30 to £15 and from \$50 to \$25;

Official texts of the Code in several languages have been authorized by the Commission, and all (including English and French) are equal in authority. German, Japanese, Russian and Spanish texts have now been published and others are planned. Details of price and how to buy the published texts can be obtained from the following e-mail addresses:

German — [books@insecta.de](mailto:books@insecta.de)

Japanese — [tomokuni@kahaku.go.jp](mailto:tomokuni@kahaku.go.jp)

Russian — [kim@ik3599.spb.edu](mailto:kim@ik3599.spb.edu)

Spanish — [mcnbl68@mncn.csic.es](mailto:mcnbl68@mncn.csic.es)

## International Trust for Zoological Nomenclature

### Financial Report for 2001

The Trust's surplus of £15,430 for the year 2000 was reduced to a deficit of £4,734 for 2001, due mainly to quickly diminishing proceeds (£14,342) from sales of the 4th edition of the *International Code for Zoological Nomenclature* after the sales peak in 2000. That deficit would have been larger but for royalties of £11,490 obtained for publication of translations of the Code into German, Japanese, Russian and Spanish, an amount of income that is unlikely to be as high in future years. The sum of £33,820 received for other publications — the *Bulletin of Zoological Nomenclature*, the *Official Lists and Indexes* and the *Centenary History of the Commission* — was boosted by sales of a Supplement to the *Official Lists and Indexes* published during the year. £6,501 was received from donations, and interest and investment income of £10,479 brought the total income for the year to £76,632.

The main expenditures in 2001 were £62,283 for the salaries, fees and National Insurance of the Commission's Secretariat, £5,616 for printing the Supplement to the *Official Lists and Indexes*, and £11,243 for printing the *Bulletin of Zoological Nomenclature* and for the distribution of all publications. Other costs of £1,736 for office expenses and £488 for depreciation of office equipment brought the total expenditure to £81,366.

The main work of the Commission during the year was on applications from zoologists in 21 countries to resolve problems of zoological nomenclature. These were published in the *Bulletin*, together with Opinions (rulings) made by the Commission on other cases. Further applications are under consideration. Advice was given by the Commission's Secretariat in response to a large number of informal enquiries on matters of nomenclature from zoologists worldwide.

The Commission's Secretariat was again housed in The Natural History Museum, London, whom we thank for their continuing support. The Trust wishes to express its thanks to all the donors listed below who contributed to its work during the year. Continuation of the work of the Commission for the international zoological and palaeontological community is only possible because of the support received from donors to the Trust.

M.K. HOWARTH

Secretary and Managing Director

24 April 2002

### List of donations and grants received during the year 2001

American Association for Zoological Nomenclature	£3,644
Dr F.M. Bayer	84
Canadian Society of Zoologists	87
European Association for Zoological Nomenclature	467
International Union of Biological Sciences	1,246
Royal Danish Academy of Sciences and Letters	205
Russian Academy of Sciences	358
St John's College, Cambridge	250
Zoological Society of London	160
Total	£6,501

**INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE  
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED  
31 DECEMBER 2001**

## Income

## SALE OF PUBLICATIONS

Bulletin of Zoological Nomenclature	£28,418
International Code of Zoological Nomenclature	14,342
Royalties on Code	11,490
Official Lists and Indexes	4,988
Centenary History	414

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59,652

## GRANTS AND DONATIONS

6,501

## BANK AND INVESTMENT INTEREST

10,479

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76,632

## Expenditure

## SALARIES, NATIONAL INSURANCE AND FEES

62,283

## OFFICE EXPENSES

1,736

PRINTING OF SUPPLEMENT TO OFFICIAL LISTS  
AND INDEXES

5,616

PRINTING OF BULLETIN AND DISTRIBUTION OF  
PUBLICATIONS

11,243

## DEPRECIATION OF OFFICE EQUIPMENT

488

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81,366

## Deficit for the year

£4,734

## Case 3248

### ***Prositala* Germain, 1915 (Mollusca, Gastropoda): proposed precedence over *Massaihelix* Germain, 1913**

Bernard Verdcourt

*Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AB, U.K.*

A.C. van Bruggen

*clo National Museum of Natural History, P.O. Box 9517, 2300 RA Leiden, The Netherlands (e-mail: acvanbruggen@hetnet.nl)*

**Abstract.** The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Prositala* Germain, 1915 for a group of African land snails (family CHAROPIDAE) by giving it conditional precedence over the little used senior subjective synonym *Massaihelix* Germain, 1913 whenever the type species of these genera are considered to be conspecific.

**Keywords.** Nomenclature; taxonomy; Mollusca; Gastropoda; Pulmonata; CHAROPIDAE; *Massaihelix*; *Prositala*; *Massaihelix butumbiana*; *Prositala fernandopoensis*; African land snails.

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1. The name *Massaihelix* was proposed by Germain (1913, p. 352) as a subgenus of the genus *Halolimnohelix* to include a species of African land snail (family CHAROPIDAE). The type species by monotypy is *Helix butumbiana* von Martens, 1895 (p. 179). As far as we are aware, this name has only been used after Germain by the following authors: Thiele (1931, p. 696), Fischer-Piette (1947, p. 91), Zilch (1960, p. 647) and Verdcourt (1969, p. 180). *Massaihelix* is a misleading name as its type species is neither a helicid nor does it come from Massailand.

2. Germain (1915, p. 283) proposed the name *Sitala* (*Prositala*) *fernandopoensis* for what he considered to be another group of African land snails (family CHAROPIDAE). On the same page, Germain designated it as the type species of a new subgenus *Prositala*, which he described five pages later (p. 288).

3. Verdcourt (1983a, p. 179) examined a paratype of *Helix butumbiana* von Martens held in The Natural History Museum (London), type material of *Prositala fernandopoensis* (Germain) held in the Muséum National d'Histoire Naturelle (Paris) and specimens collected by Å. Holm in East Africa. This study showed that *Helix butumbiana* and *Prositala fernandopoensis* are conspecific. Verdcourt reported his discovery by using the combination *Prositala butumbiana* when, according to nomenclatural priority, he should have used *Massaihelix butumbiana* as the valid name for this species of snail.

4. Before the discovery that *Helix butumbiana* and *Prositala fernandopoensis* were conspecific, the name *Prositala* was used for this group of land snails by Germain (1915, p. 288; 1916, p. 281), Connolly (1928, p. 538), Thiele (1931, p. 374) and Verdcourt (1972, p. 331).

5. After the discovery that *Helix butumbiana* and *Prositala fernandopoensis* were conspecific, the name *Prositala* was used for this group of land snails by Verdcourt (1983b, p. 220; 1984, p. 136; 1991, p. 356), De Winter (1990, p. 308), van Bruggen (1993, p. 106), Tattersfield et al. (2001, p. 1821) and van Bruggen & Van Goethem (2001) amongst others. Various recent compilers have mentioned both generic names (*Massaihelix* and *Prositala*), but have not taken into account recent work and have overlooked Verdcourt (1983a). Vaught (1989, pp. 73, 104) doubtfully placed *Massaihelix* as a subgenus of *Halolimnohelix* (HYGROMIIDAE) and *Prositala* as a subgenus of *Philalanka* in the ENDODONTIDAE. This action was followed by Millard (1997, pp. 93, 104). Schileyko (2001, p. 909) maintained *Prositala* and mentions '2 spp.' but on the same page synonymised *Massaihelix* with *Psichion* Gude, 1911, which is certainly not correct.

6. We propose that the generic name *Prositala* Germain, 1915, which is in widespread use, be given conditional precedence over the little-used name *Massaihelix* Germain, 1913 in accord with Article 81.2.3 of the Code. Commission approval will mean that if the two names are considered to be synonyms, *Prositala* becomes the valid name for the taxon.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *Prositala* Germain, 1915 precedence over the name *Massaihelix* Germain, 1913, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Prositala* Germain, 1915 (gender: feminine), type species by original designation *Sitala* (*Prositala*) *fernandopoensis* Germain, 1915, with the endorsement that it is to be given precedence over the name *Massaihelix* Germain, 1913 whenever the two are considered to be synonyms;
  - (b) *Massaihelix* Germain, 1913 (gender: feminine), type species by monotypy *Helix butumbiana* von Martens, 1895, with the endorsement that it is not to be given priority over the name *Prositala* Germain, 1915 whenever the two are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *fernandopoensis* Germain, 1915, as published in the binomen *Sitala* (*Prositala*) *fernandopoensis* (specific name of the type species of *Prositala* Germain, 1915);
  - (b) *butumbiana* von Martens, 1895, as published in the binomen *Helix butumbiana* (specific name of the type species of *Massaihelix* Germain, 1913).

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Acknowledgement of receipt of this application was published in BZN **59**: 161.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

**Case 3070*****Phrynus ceylonicus* C.L. Koch, 1843 (Arachnida, Amblypygi): proposed precedence of the specific name over *Phalangium reniforme* Linnaeus, 1758 and *Phalangium lunatum* Pallas, 1772**

Peter Weygoldt

*Institut für Biologie I (Zoologie), Albert-Ludwigs-Universität, Hauptstrasse 1, D-79104 Freiburg, Germany (e-mail: peter.weygoldt@biologie.uni-freiburg.de)*

**Abstract.** The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the specific name *Phrynus ceylonicus* C.L. Koch, 1843 for a species of whip spider from Sri Lanka (family PHRYNICHIDAE) by giving it conditional precedence over the senior subjective synonyms *Phalangium reniforme* Linnaeus, 1758 and *Phalangium lunatum* Pallas, 1772. The senior synonyms have confusingly been applied to various taxa.

**Keywords.** Nomenclature; taxonomy; Amblypygi; PHRYNICHIDAE; *Phrynychus*; *Phalangium*; *Phrynychus ceylonicus*; *Phalangium reniforme*; *Phalangium lunatum*; whip spider; Sri Lanka.

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1. Koch (1843, p. 35; pl. 336, fig. 776) described a species of whip spider (family PHRYNICHIDAE) from 'East India and Ceylon' on the basis of a large female specimen (holotype specimen number ZMHB 820 in the Museum für Naturkunde, Humboldt-Universität Berlin) and named it *Phrynus ceylonicus*.

2. He was unaware that Linnaeus (1758, p. 619) had already described this species on the basis of a slightly smaller but otherwise identical female specimen that he thought was from 'America' and had named *Phalangium reniforme*. The specimen is still present in the Uppsala University Zoological Museum, where it has the specimen number 234. In addition, Pallas (1772, p. 35; pl. 3, figs. 3, 4) had also described this species and given it the name *Phalangium lunatum*. This means that *Phrynus ceylonicus* is a junior subjective synonym of both *Phalangium reniforme* and *Phalangium lunatum*. The type species of the genus *Phalangium* Linnaeus, 1758 (p. 918) is *P. opilio* Linnaeus, 1758 (p. 918) by subsequent designation by Latreille (1810, p. 425).

3. However, both the names *Phalangium reniforme* and *P. lunatum* have been used at various times by various authors in relation to neotropical and oriental species of the PHRYNIDAE and PHRYNICHIDAE other than the species to which the names were first given by Linnaeus and Pallas (e.g. Fabricius, 1793, pp. 432–433; Lichtenstein & Herbst, 1797, pp. 71, 79; Koch, 1840, p. 12; Latreille, 1806, p. 129; Gervais, 1844, p. 5; Blanchard, 1852, p. 170; Butler, 1873, p. 118).

4. Karsch (1879, p. 197) introduced the generic name *Phrynychus* and designated *Phalangium reniforme* Linnaeus, 1758 as the type species. He noted that *Phalangium reniforme* represented a species from Ceylon (Sri Lanka).



5. As a result of the different usage of the name *Phalangium reniforme* Linnaeus, 1758 and the uncertainty of the identity of the species, later authors used the name *reniforme* only to cite the type species of the genus *Phrynichus* Karsch, 1879 (e.g. Gravely, 1915a, p. 447; Simon, 1936, p. 295).

6. The name *Phrynus ceylonicus* (C.L. Koch), however, has been used consistently only for the large and common species from Sri Lanka (e.g. by Gervais, 1847, p. 564; Simon, 1892, p. 50; Gravely, 1915a, p. 526, 1915b, p. 449; Werner, 1935, pp. 472, 476; Millot, 1938, p. 847; Weygoldt, 1995, p. 76, 1998, p. 19, 2000, p. 37; Weygoldt & Hoffmann, 1995, p. 2). I propose that the specific name *Phrynus ceylonicus* that is in use for a species of whip spider from Ceylon should be given conditional precedence over the names *Phalangium reniforme* Linnaeus, 1758 and *Phalangium lunatum* Pallas, 1772 (the usage of both of which has been confused) in accord with Article 81.2.3 of the Code. Commission approval will mean that if the three names are considered to be synonyms, *Phrynus ceylonicus* becomes the valid name.

7. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, precedence over the names *reniforme* Linnaeus, 1758, as published in the binomen *Phalangium reniforme*, and *lunatum* Pallas, 1772, as published in the binomen *Phalangium lunatum*, whenever it and either of the other two are considered to be conspecific;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Phrynichus* Karsch, 1879 (gender: masculine), type species by designation by Karsch (1879) *Phalangium reniforme* Linnaeus, 1758;
  - (b) *Phalangium* Linnaeus, 1758 (gender: neuter), type species by subsequent designation by Latreille (1810) *Phalangium opilio* Linnaeus, 1758;
- (3) to place on the Official List of Specific Names in Zoology the names:
  - (a) *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, with the endorsement that it is to be given precedence over the names *reniforme* Linnaeus, 1758, as published in the binomen *Phalangium reniforme*, and *lunatum* Pallas, 1772, as published in the binomen *Phalangium lunatum*, whenever it and either of the other two are considered to be conspecific;
  - (b) *reniforme* Linnaeus, 1758, as published in the binomen *Phalangium reniforme*, with the endorsement that it is not to be given priority over the name *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, whenever the two are considered to be synonyms (specific name of the type species of *Phrynichus* Karsch, 1879);
  - (c) *lunatum* Pallas, 1772, as published in the binomen *Phalangium lunatum*, with the endorsement that it is not to be given priority over the name *ceylonicus* C.L. Koch, 1843, as published in the binomen *Phrynus ceylonicus*, whenever the two are considered to be synonyms;
  - (d) *opilio* Linnaeus, 1758, as published in the binomen *Phalangium opilio* (specific name of the type species of *Phalangium* Linnaeus, 1758).

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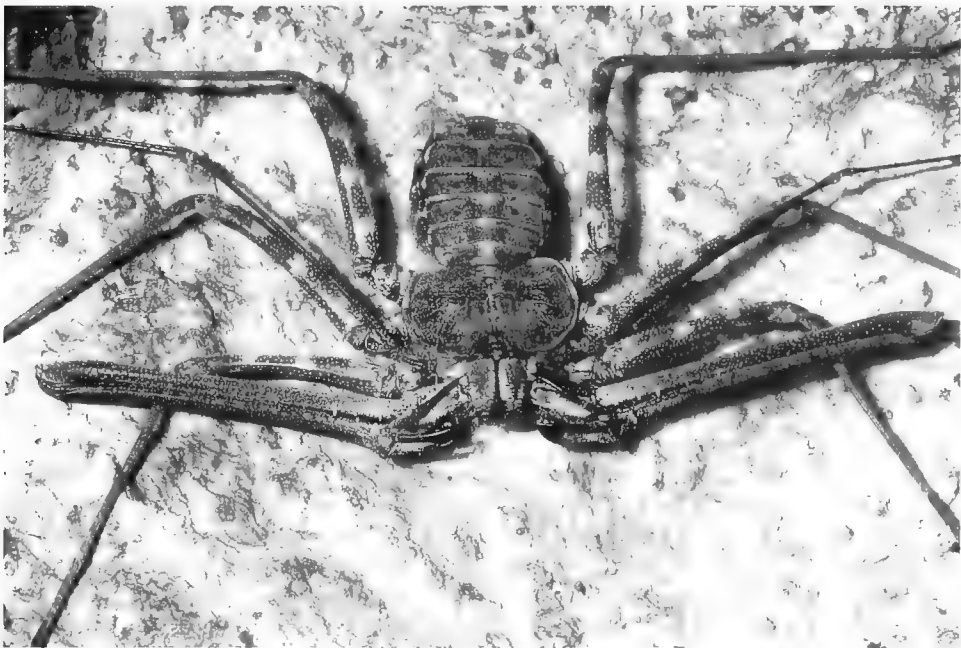
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*Phrynus ceylonicus* C.L. Koch, 1843. Living female from Sri Lanka.

**Case 3097*****Bolboceras* Kirby, 1819 (July) (Insecta, Coleoptera): proposed precedence over *Odonteus* Samouelle, 1819 (June)**

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**Abstract.** The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Bolboceras* Kirby, 1819 for a group of scarab beetles (family GEOTRUPIDAE) by giving it conditional precedence over the older name *Odonteus* Samouelle, 1819 whenever they are considered to be synonyms. The name *Bolboceras* is threatened by a single usage by Krell in 1990 of the otherwise unused name *Odonteus*.

**Keywords.** Nomenclature; taxonomy; Coleoptera; GEOTRUPIDAE; *Bolboceras*; *Odonteus*; *Odontaeus*; *Scarabaeus mobilicornis*; *Scarabaeus armiger*; scarab beetle.

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1. Kirby, 1819 (p. 459) proposed the generic name *Bolboceras* for a genus of scarab beetle (family GEOTRUPIDAE). Although the publication in which the name *Bolboceras* first appeared was dated 1818, it was not published until July 1819 (see Raphael, 1970, p. 64). Kirby did not designate a type species for the genus *Bolboceras*, but he did state (1819, p. 461) that the 'details of *Bolboceras* were taken from *B. quadridens*'. Curtis (1829, p. 74) subsequently designated *Scarabaeus mobilicornis* Fabricius, 1775 (pp. 11–12) as the type species of *Bolboceras*.

2 Samouelle (June 1819, p. 189) proposed the generic name *Odonteus* for a genus of scarab beetle (family GEOTRUPIDAE), and *Scarabaeus mobilicornis* Marsham, 1802 (pp. 8–9) is the type species by monotypy. This name is a junior primary homonym of *Scarabaeus mobilicornis* Fabricius, 1775, but is recognised as a junior synonym of *Scarabaeus armiger* Scopoli, 1772 (p. 78) (see Boucomont, 1912, p. 15; Howden, 1984, p. 5; Krell, 1990, p. 104). No description of the genus was provided by Samouelle. The name *Odontaeus* Dejean, 1821 (p. 56) is sometimes incorrectly used in place of the name *Odonteus* Samouelle, 1819. *Odontaeus* Dejean, 1821 was synonymized with the genus *Bolboceras* Kirby by Cartwright (1953, p. 96).

3. After initial publication, the name *Odonteus* was not used until it was shown by Krell (1990) to be synonymous with and to pre-date the name *Bolboceras* Kirby, 1819. Despite many years of worldwide usage of the name *Bolboceras* for many hundreds of species (e.g. Boucomont, 1912; Neave, 1940), Krell proposed that the Principle of Priority should be implemented and that the name *Odonteus* Samouelle should be used instead of the name *Bolboceras* Kirby.

4. The genus presently includes ten species in the New World and one species (the type species) in the Old World. Old World and New World species are congeneric,

and one generic name should be applied to all species (see Cartwright, 1953). The genus *Bolboceras* is the type genus for the tribe Bolboceratini, subfamily BOLBOCERATINAE and family BOLBOCERATIDAE (referred to here as GEOTRUPIDAE). The genus has been redescribed by Wallis (1928) and by Woodruff (1973). The taxonomy and ecology of species in the genus were discussed by Howden (1955, 1964) and Woodruff (1973). If it were not for its use by Krell in 1990, the name *Odonteus* could be treated as a nomen oblitum under Articles 23.9.1 and 23.9.2 of the Code.

5. As the generic name *Odonteus* Samouelle has not been used in the primary taxonomic literature for many years, and because the name *Bolboceras* Kirby has been used during this period to refer to many widespread and well-known species of scarab beetles, we do not believe that Krell's (1990) acceptance of the priority of the name *Odonteus* Samouelle over the name *Bolboceras* Kirby will best serve nomenclatural stability. It will only cause confusion.

6. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *Bolboceras* Kirby, 1819 precedence over the name *Odonteus* Samouelle, 1819, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Bolboceras* Kirby, 1819 (gender: masculine), type species by subsequent designation by Curtis (1829) *Scarabaeus mobilicornis* Fabricius, 1775, with the endorsement that it is to be given precedence over the name *Odonteus* Samouelle, 1819 whenever the two are considered to be synonyms;
  - (b) *Odonteus* Samouelle, 1819 (gender: masculine), type species by monotypy *Scarabaeus mobilicornis* Marsham, 1802 (a junior synonym of *Scarabaeus armiger* Scopoli, 1772), with the endorsement that it is not to be given priority over the name *Bolboceras* Kirby, 1819 whenever the two are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *mobilicornis* Fabricius, 1775, as published in the binomen *Scarabaeus mobilicornis* (specific name of the type species of *Bolboceras* Kirby, 1819);
  - (b) *armiger* Scopoli, 1772, as published in the binomen *Scarabaeus armiger* (senior synonym of the specific name of *Scarabaeus mobilicornis* Marsham, 1802, type species of *Odonteus* Samouelle, 1819).

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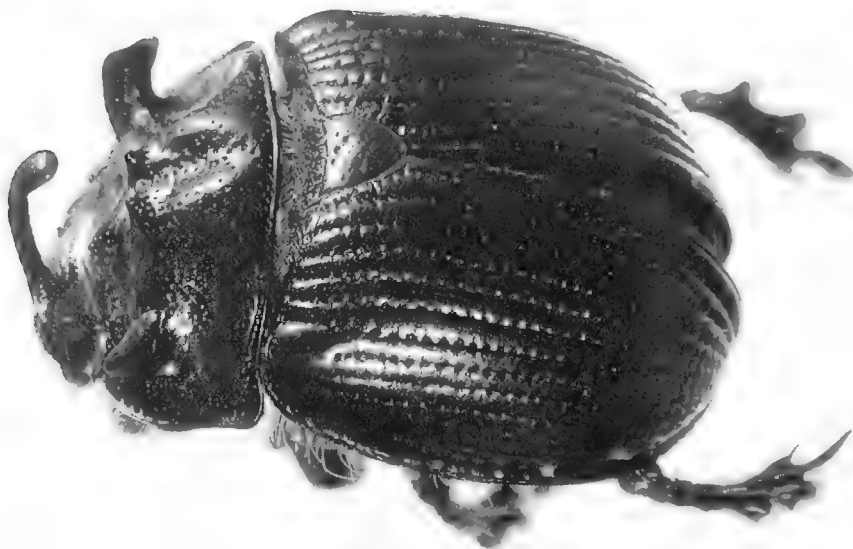
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*Bolboceras armiger* Scopoli, 1772. Body length 7.5 mm. Photo by Donna Naughton, Canadian Museum of Nature.

**Case 3205*****Cyphosoma* Mannerheim, 1837 (Insecta, Coleoptera): proposed conservation, and *Halecia* Laporte & Gory, 1837 (Insecta, Coleoptera): proposed precedence over *Pristiptera* Dejean, 1833**

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**Abstract.** The purpose of this application, under Articles 23.9.3, 81.2.2 and 81.2.3 of the Code, is to conserve the widely used generic names *Cyphosoma* Mannerheim, 1837 and *Halecia* Laporte & Gory, 1837 for groups of jewel beetles by suppression of *Cyphonota* Dejean, 1833 (the senior synonym of *Cyphosoma*) and by giving conditional precedence to *Halecia* over its senior synonym *Pristiptera* Dejean, 1833. The two senior names have been used only once since 1899.

**Keywords.** Nomenclature; taxonomy; Coleoptera; BUPRESTIDAE; *Cyphosoma*; *Halecia*; *Pristiptera*; jewel beetles; Palearctic; neotropical.

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1. Dejean (1833) introduced the generic names *Cyphonota* (p. 79) and *Pristiptera* (p. 78) for two groups of jewel beetles (family BUPRESTIDAE), but did not designate type species for either genus. *Cyphonota* contained two species: *Buprestis sibirica* Fabricius, 1781 and *B. tatarica* Pallas, 1773 (p. 464) (see Evenhuis, 1997, p. 594 for date of publication of Pallas, 1773). Bílý (2001, p. 150) subsequently designated *Buprestis tatarica* Pallas, 1773 as the type species of *Cyphonota*. *Pristiptera* contained four specific names. The last three of these are nomina nuda and so the first of the included names, *Buprestis blanda* Fabricius, 1781 (p. 276), is the type species by monotypy of *Pristiptera*.

2. Mannerheim (1837, p. 91) introduced *Cyphosoma* as a replacement name for *Cyphonota* Dejean, 1833 having supposed Dejean's name to be a homonym of *Cyphonotus* Fischer, 1824 (family MELOLONTHIDAE). Although Mannerheim was wrong (*Cyphonota* and *Cyphonotus* are not homonyms), the name *Cyphosoma* Mannerheim, 1837 has been used continuously since 1837 for a small group of eight species from the Mediterranean region. The type species of *Cyphosoma* is *Buprestis tatarica* Pallas, 1773 by designation by Bílý (2001) (see Article 67.8).

3. According to the provisions of Article 23.9.1 of the Code, we have found more than 30 authors who used the name *Cyphosoma* Mannerheim, 1837 in the course of

the previous 50 years in more than 35 papers. With a single exception, Holynski (1993), the name *Cyphonota* Dejean, 1833 has not been used after 1899.

4. Laporte & Gory (1837, p. 108) introduced the generic name *Halecia*. Nine species were included, but no type species was designated. Lacordaire (1857, p. 23) treated *Pristiptera* as a synonym of *Halecia* and designated *Buprestis blanda* Fabricius, 1781 as the type species of *Halecia*. There are currently 90 Neotropical species placed within *Halecia*. We have found an uninterrupted use of *Halecia* by more than 10 authors in more than 25 papers since the time of Lacordaire's (1857) synonymy of *Pristiptera* under *Halecia*. With a single exception, Holynski (1993), the name *Pristiptera* Dejean, 1833 has not been used after 1899.

5. Holynski (1993) used the names *Cyphonota* and *Pristiptera* and so prevented action to conserve the junior names under Article 23.9.1 of the Code. He used both names without any comment, probably without knowledge of all the circumstances and only among other names as an example of genera of the tribes Psilopterini and Chalcophorini respectively.

6. It should be noted that *Buprestis blanda* Fabricius is not congeneric with the widely accepted, traditional definition of *Halecia*. This species was considered either in *Buprestis*, *Pristiptera* or *Halecia* until Théry (1930) cited K.G. Blair (The Natural History Museum, London), who considered *B. blanda* as a synonym of *Pelecops-elaphus elongatus* Thomson, 1878 (p. 24). Staig (1940) provides a detailed description of this species and a color plate that confirms the opinion of Blair and Théry. Obenberger (1958) recognized the misidentification of *B. blanda* by Laporte & Gory, and proposed a replacement name: *blandula*, for the species described and figured by them.

7. To avoid the confusion that would result by overturning the traditional stability of these genera, a new type species is needed for *Halecia*. Of the original nine species listed under *Halecia* by Laporte & Gory, 1837 (pp. 108–114), four are now placed in other genera. From the remaining five species, we herewith designate *Buprestis trisulcata* Laporte & Gory, 1837 (p. 112) as the type species of *Halecia* under Article 70.3 of the Code.

8. In summary, we make this application because: (i) the names *Cyphosoma* and *Halecia* have been used continuously since 1837 in many papers by numerous authors and their respective taxonomic definition and content are clear; (ii) the only usage of the names *Cyphonota* and *Pristiptera* within the last 154 years were not accompanied by any comment and were mentioned only as examples of genera included in the tribes Psilopterini and Chalcophorini respectively; and (iii) the re-introduction of *Cyphonota* and *Pristiptera* would be a source of much misunderstanding and confusion among those working in applied entomology.

9. The International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary power:

(a) to suppress the name *Cyphonota* Dejean, 1833 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(b) to give *Halecia* Laporte & Gory, 1837 precedence over the name *Pristiptera* Dejean, 1833 whenever the two are considered to be synonyms;

(2) to place on the Official List of Generic Names in Zoology the following names:



- (a) *Cyphosoma* Mannerheim, 1837 (gender: feminine), type species *Buprestis tatarica* Pallas, 1773, by subsequent designation by Bílý (2001) of the replaced nominal genus *Cyphonota* Dejean, 1833;
- (b) *Halecia* Laporte & Gory, 1837 (gender: feminine), type species by subsequent designation by Bílý & Bellamy in para. 7 above *Buprestis trisulcata* Laporte & Gory, 1837, with the endorsement that it is to be given precedence over the name *Pristiptera* Dejean, 1833, whenever the two are considered to be synonyms;
- (c) *Pristiptera* Dejean, 1833, (gender: feminine), type species by monotypy *Buprestis blanda* Fabricius, 1781, with the endorsement that it is not to be given priority over the name *Halecia* Laporte & Gory, 1837 whenever the two are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *tatarica* Pallas, 1773, as published in the binomen *Buprestis tatarica* (specific name of the type species of *Cyphosoma* Mannerheim, 1837);
  - (b) *trisulcata* Laporte & Gory, 1837, as published in the binomen *Buprestis trisulcata* (specific name of the type species of *Halecia* Laporte & Gory, 1837);
  - (c) *blanda* Fabricius, 1781, as published in the binomen *Buprestis blanda* (specific name of the type species of *Pristiptera* Dejean, 1833);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Cyphonota* Dejean, 1833, as suppressed in (1)(a) above.

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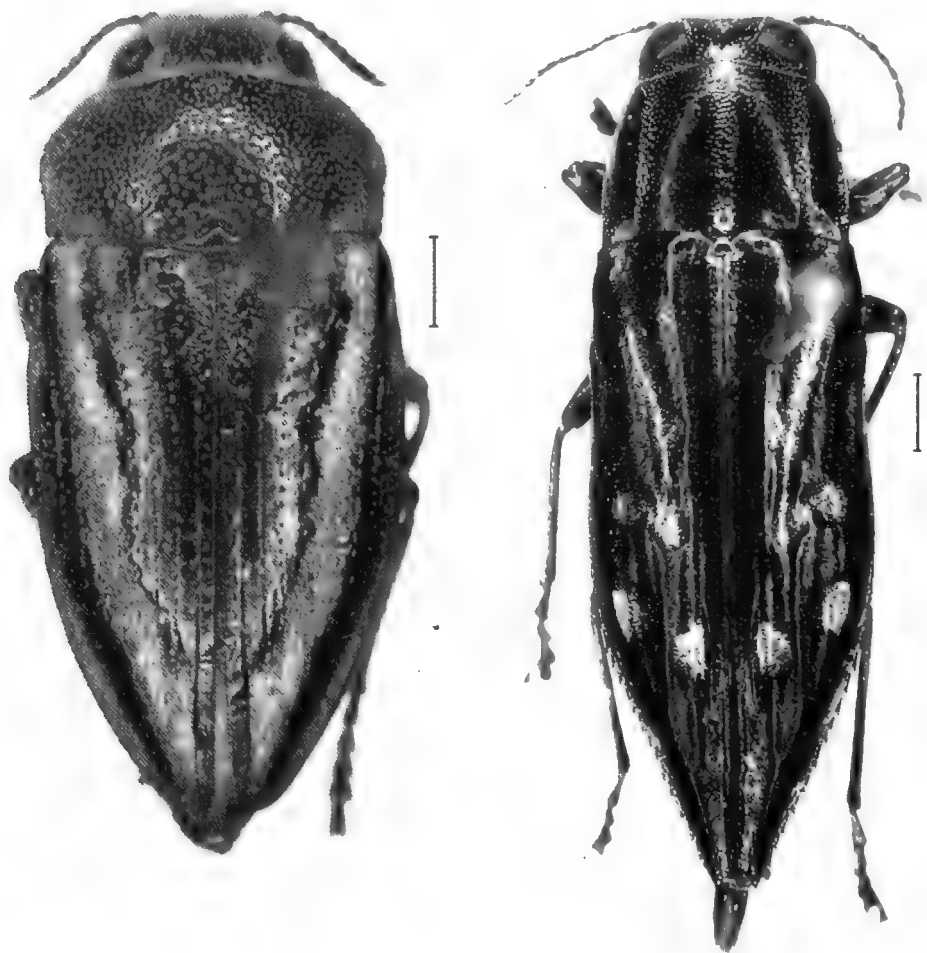
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Left: *Buprestis tatarica* Pallas, 1773.

Right: *Halecia trisulcata* Laporte & Gory, 1837.  
Scale bar is 1.00 mm.

**Case 3214*****Aegorhinus* Erichson, 1834 (Insecta, Coleoptera): proposed precedence over *Psuchocephalus* Latreille, 1828**

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**Abstract.** The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the generic name *Aegorhinus* Erichson, 1834, which is in widespread use for a genus of South American weevils (family CURCULIONIDAE), by giving it precedence over the earlier name *Psuchocephalus* Latreille, 1828, which was used as the valid name by Alonso-Zarazaga & Lyal in 1999. These beetles are of considerable interest to biogeographers, and two species are pests of fruit trees.

**Keywords.** Nomenclature; taxonomy; Coleoptera; CURCULIONIDAE; *Aegorhinus*; *Psuchocephalus*; *Aegorhinus phaleratus*; *Curculio leprosus*; weevils; Argentina; Chile; Subantarctic subregion.

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1. The genus *Psuchocephalus* was established by Latreille (1828, p. 597) for a single species of weevil (family CURCULIONIDAE) named as *Curculio leprosus* Olivier, 1807 (p. 395). *C. leprosus* is a junior synonym of *C. vitulus* Fabricius, 1775 (p. 152) and the name of the type species by monotypy of the genus *Psuchocephalus*. This weevil is endemic to the Magellanic forest province of the Subantarctic subregion. The name *Psuchocephalus* was only listed once after its original publication (in an emended spelling: *Psuphocephalus*) by Imhoff (1856, p. 221). However, Alonso-Zarazaga & Lyal (1999, p. 140) became aware of its existence and opted for its resurrection as the valid name on the grounds of priority, although they did not use it taxonomically.

2. Erichson (1834, p. 261) established the nominal genus *Aegorhinus* for *Aegorhinus phaleratus* Erichson, 1834 (p. 262), which is the type species by monotypy. This weevil is found in the Maule province of the Subantarctic subregion and in the Central Chile subregion.

3. *Psuchocephalus* and *Aegorhinus* are subjective synonyms (Alonso-Zarazaga & Lyal, 1999, p. 140). Following the Principle of Priority, *Psuchocephalus* has priority over *Aegorhinus*. The name *Psuchocephalus* is available but has never been used taxonomically (see Article 23.9.6 of the Code) since its proposal more than one and a half centuries ago (see para. 1 above). Consequently, it would not be in the best interest of stability if the well established name *Aegorhinus* were replaced with *Psuchocephalus* as proposed by Alonso-Zarazaga & Lyal (1999). A list of 45 works (by over 35 authors) published between 1946 and 2001 using the name *Aegorhinus* has

been presented to the Commission Secretariat (e.g. Marshall, 1946; van Emden, 1951; Caballero, 1972; Morrone & Roig-Juñent, 2000; Devotto & Gerding, 2001). In Chile, the weevils included in this genus are popularly known as 'cabritos' (little goats) because of their peculiar appearance. These beetles are common between Central Chile and Cape Horn (a distance of 3,800 miles) and the genus includes 22 species. About half of these species are associated with the tree genus *Nothofagus*, the remainder with plant genera of the families Proteaceae, Winteraceae and Gunneraceae (all associated with the biogeography of Gondwanaland). Weevils in this genus are related to genera in Australia and New Zealand, providing evidence of the ancient link between the South American and Australasian land masses. Two species are pests of fruit trees. A key to the species in this genus has been provided by Morrone & Roig-Juñent (2000).

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *Aegorhinus* Erichson, 1834 precedence over the name *Psuchocephalus* Latreille, 1828, whenever the two are considered to be synonyms;
- (2) to place on the Official List of Generic Names in Zoology the following names:
  - (a) *Aegorhinus* Erichson, 1834 (gender: masculine), type species by monotypy *Aegorhinus phaleratus* Erichson, 1834, with the endorsement that it is to be given precedence over the name *Psuchocephalus* Latreille, 1828 whenever the two are considered to be synonyms;
  - (b) *Psuchocephalus* Latreille, 1828 (gender: masculine), type species by monotypy *Curculio leprosus* Olivier, 1807, with the endorsement that it is not to be given priority over the name *Aegorhinus* Erichson, 1834, whenever the two are considered to be synonyms;
- (3) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *phaleratus* Erichson, 1834, as published in the binomen *Aegorhinus phaleratus* (specific name of the type species of *Aegorhinus* Erichson, 1834);
  - (b) *vitulus* Fabricius, 1775, as published in the binomen *Curculio vitulus* (senior synonym of *Curculio leprosus* Olivier, 1807, the specific name of the type species of *Psuchocephalus* Latreille, 1828);
- (4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Psuphocephalus* Imhoff, 1856 (an incorrect subsequent spelling of *Psuchocephalus* Latreille, 1828).

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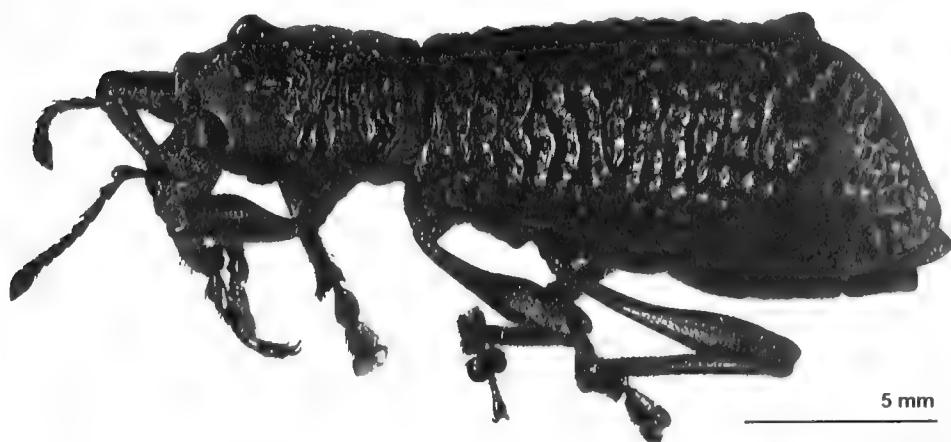
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*Aegorhinus vitulus* (Fabricius, 1775). Lateral view of 21 mm long female specimen from Tres Pasos, Natales, Magallanes, Chile.

**Case 3231****STAPHYLINIDAE Latreille, 1804 (Insecta, Coleoptera): proposed conservation of 17 specific names**

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**Abstract.** The purpose of this application is the conservation of 17 specific names that have been in use for many years for rove beetles (family STAPHYLINIDAE). These names are threatened by the limited use of senior (or, in three cases, junior) synonyms. Use of the senior (or, in three cases, junior) names would cause confusion and the matter is submitted to the Commission under Article 23.9.3 of the Code. In the three cases where conservation of the senior synonym (and in one case where conservation of the junior synonym) is necessary, the names being proposed for conservation were junior primary homonyms when published. These names were replaced to prevent homonymy, but the replacement names have not been used widely. The species represented by the homonyms are now placed in different genera and have not been considered congeneric since 1899. This matter is submitted to the Commission in accord with Article 23.9.5 of the Code.

**Keywords.** Nomenclature; taxonomy; Coleoptera; STAPHYLINIDAE; rove beetles.

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1. This paper submits, in accord with Article 23.9.3 of the Code, 14 examples of synonymy in the rove beetles (family STAPHYLINIDAE) for action under the Commission's plenary power to conserve the existing usage of the junior synonym. This would allow the greatest stability in the naming of these staphylinid taxa. In a further three cases, the Commission is asked to consider conservation of the senior synonym. Conservation of the senior name is necessary here because the names being proposed for conservation were junior primary homonyms when published and as such have been replaced. However, the replacement names have not been used widely.

2. The senior and junior synonyms are presented in the form of a table (Table 1). Reference should be made to Herman (2001) for further bibliographic and nomenclatural detail, and evidence of usage, as summarised in Table 1, has been given to the Commission Secretariat. The case is presented to the Commission in accordance with Article 23.9.3 because, even though the names being proposed for conservation are the ones in prevailing usage, they do not meet the conditions of both 23.9.1.1 and 23.9.1.2. As a result, the junior names cannot automatically be protected without a ruling from the Commission.

3. The three senior names, and one of the junior names, that are proposed for conservation were junior primary homonyms when published. The junior and senior homonyms are presented in Table 2, with reasons why their conservation is proposed. The species represented by the homonyms are now placed in different genera and have not been considered congeneric since 1899.

4. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to rule that the specific names in column 2 of Table 1, as originally published in binomina with the generic names indicated in column 2, should be given precedence over the specific names in column 4, whenever they are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) the specific names in column 2 of Table 1, as originally published in binomina with the generic names indicated in column 2 of Table 1, with the endorsement, as ruled in (1) above, that they are to be given precedence or priority over the names in column 4 of Table 1, as originally published in binomina with the generic names indicated in column 4 of Table 1, whenever they are considered to be synonyms;
  - (b) the valid specific names in column 4 of Table 1, as originally published in binomina with the generic names indicated in column 4 of Table 1, with the endorsement that they are not to be given priority or precedence over the names in column 2 of Table 1, whenever they are considered to be synonyms;
- (3) to use its plenary power to rule that the specific names in column 2 of Table 2, as originally published in binomina with the generic names in column 5 of Table 2, are not invalid by reason of being junior primary homonyms of the specific names in column 4 of Table 2;
- (4) to place on the Official List of Specific Names in Zoology the specific names in column 4 of Table 2, as originally published in binomina with the generic names in column 5 of Table 2, except where already listed in (2)(b) above;
- (5) to endorse the specific names in column 2 of Table 2, as originally published in binomina with the generic names in column 5 of Table 2 and placed on the Official List of Specific Names in Zoology in (2)(a) above, that they are not invalid by reason of being junior primary homonyms of the names in column 4 of Table 2 as ruled in (3) above.

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Table 1. 17 specific names (synonyms) that are proposed for conservation, with other information.

## KEY:

Names are arranged in alphabetical order within subfamilies and the numbers applied to them have relevance only within the table.

s.s.—senior synonym

j.s.—junior synonym

j.p.h.—junior primary homonym

No. (column 1)	Synonym (junior unless otherwise stated) proposed for conservation (column 2)	Geographic distribution of species referred to by the synonyms (column 3)	Synonym(s) (senior unless otherwise stated) proposed not to be given priority or precedence (column 4)	Notes (column 5)
<b>Subfamily STENINAE</b>				
1	<i>Stenus scaber</i> Fauvel, 1871 (p. 20)	Algeria, Italy, France, Slovenia	1. <i>Stenus italicus</i> Baudi, 1870 (p. 397) 2. <i>Stenus bituberculatus</i> Motschulsky, 1857 (p. 511)	1. s.s. has not been used for over 125 years, but the j.s. is not a commonly cited species (only 15 publications by 6 authors in the last 50 years), so it cannot be protected under Article 23.9.1.2 2. is conspecific with <i>Stenus aceris</i> Stephens, 1833 (p. 292). <b>New synonymy</b> (V. Puthz, personal communication)
2	<b>Subfamily OMALINAE</b> <i>Anthophagus angusticollis</i> (Mannerheim, 1830, p. 56) (= nomen protectum in relation to <i>A. fulvus</i> ) Species originally described in the genus <i>Lesteva</i> Latreille, 1797	Europe, Russia	1. <i>Anthophagus abbreviatus</i> (Fabricius, 1779, p. 263) Species originally described in the genus <i>Carabus</i> Linnaeus, 1758 2. <i>Anthophagus fulvus</i> (De Geer, 1774, p. 25) another s.s. of <i>A. angusticollis</i> has not been used since 1789 (= nomen oblitum) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid in at least 30 publications by 25 authors over the last 50 years, however s.s. 1. was cited as valid in the early 1900s, preventing automatic protection of the j.s. under Article 23.9.1.1

Table 1. Continued

No. (column 1)	Synonym (junior unless otherwise stated) proposed for conservation (column 2)	Geographic distribution of species referred to by the synonyms (column 3)	Synonym(s) (senior unless otherwise stated) proposed not to be given priority or precedence (column 4)	Notes (column 5)
3	<i>Eusphalerum longipenne</i> (Erichson, 1839, p. 640) Species originally described in the genus <i>Anthobium</i> Leach, 1819 = senior synonym	Europe	<i>Eusphalerum imhoffii</i> (Heer, 1839, p. 184) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802 = junior synonym	s.s. has been cited as valid by at least 22 authors in 25 publications over the last 50 years, but j.s. has been used as a replacement name for s.s. by Adám (1995, p. 41), because the s.s. is a j.p.h. of <i>Anthobium longipenne</i> Stephens, 1834, p. 342 (see Table 2, species 1)
4	<i>Eusphalerum sorbi</i> (Gyllenhal, 1810, p. 206) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802	Western Palaearctic	<i>Eusphalerum testaceum</i> (Gravenhorst, 1806, p. 218) (see Table 1, species 8) Species originally described in the genus <i>Omalium</i> Gravenhorst, 1802	j.s. has been cited as valid by at least 27 authors in 34 publications over the last 50 years s.s. was considered invalid between 1839 and 1996, when it was used to replace j.s. by Adám (1996a, p. 237) (see Table 2, species 2)
5	<i>Lesteva punctata</i> Erichson, 1839 (p. 618)	Europe, Turkey	<i>Lesteva villosa</i> (Waltl, 1838, p. 268) Species originally described in the genus <i>Anthophagus</i> Gravenhorst, 1802	j.s. has been cited as valid by at least 21 authors in 29 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 239; 1996b, p. 47) preventing automatic protection of the j.s. under Article 23.9.1.1

Table 1. Continued.

No. (column 1)	Synonym (junior unless otherwise stated) proposed for conservation (column 2)	Geographic distribution of species referred to by the synonyms (column 3)	Synonym(s) (senior unless otherwise stated) proposed not to be given priority or precedence (column 4)	Notes (column 5)
6	<i>Onalium rivulare</i> (Paykull, 1789, p. 65) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	Europe, Algeria, Egypt, Turkey, Nearctic	<i>Onalium cursor</i> (O. Müller, 1776, p. 97) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid by at least 47 authors in 54 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 238) preventing automatic protection of the j.s. under Article 23.9.1.1
7	<i>Phloeostiba plana</i> (Paykull, 1792, p. 145) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	Europe, Russia, Japan	<i>Phloeostiba flavipes</i> (Linnaeus, 1758, p. 423) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid by at least 30 authors in 33 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 238) preventing automatic protection of the j.s. under Article 23.9.1.1
8	<i>Xylodromus testaceus</i> (Erichson, 1840, p. 885) Species originally described in the genus <i>Onalium</i> Gravenhorst, 1802	Europe, Russia, Turkey	<i>Xylodromus pygmaeus</i> (Gravenhorst, 1806, p. 206) Species originally described in the genus <i>Onalium</i> Gravenhorst, 1802	j.s. has been cited as valid by at least 26 authors in 31 publications over the last 50 years until replaced with <i>Xylodromus heterocerus</i> (Flori, 1900, p. 90) by Adám (1996a, p. 238) as it is a j.p.h. of <i>Eusphalerum testaceum</i> (Gravenhorst, 1806) (see Table 1, species 4; Table 2, species 2) s.s. was used as valid name in 1906

Table 1. Continued.

No. (column 1)	Synonym (junior unless otherwise stated) proposed for conservation (column 2)	Geographic distribution of species referred to by the synonyms (column 3)	Synonym(s) (senior unless otherwise stated) proposed not to be given priority and precedence (column 4)	Notes (column 5)
	<b>Subfamily ONYTELINAE</b>			
9	<i>Bledius graellsii</i> Fauvel, 1865 (p. 309)	Western Palaearctic	<i>Bledius antilope</i> Peyron, 1858 (p. 431)	s.s. has been an invalid synonym since 1872 and effectively has never been used. j.s. has been used continuously since its description but cited by only 9 authors in 12 publications over the last 50 years, preventing its protection under Article 23.9.1.2
10	<i>Anoryctus rugosus</i> (Fabricius, 1775, p. 267) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 (see Table 2, species 4)	Holarctic, New Zealand	<i>Anoryctus striatus</i> (Ström, 1768, p. 333) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid by at least 49 authors in 53 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 240) preventing automatic protection of the j.s. under Article 23.9.1.1
11	<i>Carpelinus rivularis</i> (Motschulsky, 1860, p. 552) Species originally described in the genus <i>Trogophloeus</i> Mannerheim, 1830	Palaearctic	<i>Carpelinus obscurus</i> Stephens, 1834 (p. 326)	j.s. has been cited as valid by at least 35 authors in 45 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 239) preventing automatic protection of the j.s. under Article 23.9.1.1

Table 1. Continued.

No. (column 1)	Synonym (junior unless otherwise stated) proposed for conservation (column 2)	Geographic distribution of species referred to by the synonyms (column 3)	Synonym(s) (senior unless otherwise stated) proposed not to be given priority or precedence (column 4)	Notes (column 5)
12	<b>Subfamily STAPHYLININAE</b> <i>Ocypus picipennis</i> (Fabricius, 1793, p. 521) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	Palearctic	<i>Ocypus penetrans</i> (O. Müller, 1776, p. 97) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid by at least 25 authors in 40 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 246) preventing automatic protection of the j.s. under Article 23.9.1.1
13	<i>Philonthus splendidus</i> (Fabricius, 1793, p. 523) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	Palearctic	<i>Philonthus niger</i> (O. Müller, 1764, p. 23) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid by at least 31 authors in 36 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 244) preventing automatic protection of the j.s. under Article 23.9.1.1
14	<i>Quedius plagiatus</i> Mannerheim, 1843, p. 231 (= nomen protectum in relation to <i>Q. flavopterus</i> )	Holarctic	1. <i>Quedius glaber</i> (O. Müller, 1776, p. 98) 2. <i>Quedius flavopterus</i> (Geoffroy, 1785, p. 166) another s.s. of <i>Q. plagiatus</i> has not been used since 1840 (= nomen oblitum) Both species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid by at least 22 authors in 27 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 247) preventing automatic protection of the j.s. under Article 23.9.1.1

Table 1. Continued.

No. (column 1)	Synonym (junior unless otherwise stated) proposed for conservation (column 2)	Geographic distribution of species referred to by the synonyms (column 3)	Synonym(s) (senior unless otherwise stated) proposed not to be given priority or precedence (column 4)	Notes (column 5)
15	<i>Quedius scitus</i> (Gravenhorst, 1806, p. 50) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	Europe	<i>Quedius analis</i> (Fabricius, 1787, p. 221) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758	j.s. has been cited as valid by at least 24 authors in 32 publications over the last 50 years, but s.s. has been used by Adám (1996a, p. 247) preventing automatic protection of the j.s. under Article 23.9.1.1
16	<i>Quedius fulgidus</i> (Fabricius, 1793, p. 525) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = senior synonym	Worldwide	1. <i>Quedius assimilis</i> (Nordmann, 1837, p. 78) 2. <i>Q. ruftarsis</i> (Marshall, 1802, p. 512) (synonymy with <i>Q. fulgidus</i> cited as invalid in recent years) 3. <i>Q. iracundus</i> (Say, 1830, p. 35), cited as a valid name a few times since 1899 4. <i>Q. fuscipennis</i> (Block, 1799, p. 116), cited as a valid name only once (in 1996) since 1899. This name was declared a nomen oblitum in relation to 1. above in 2000. species 1 was originally described in the genus <i>Philonthus</i> Stephens, 1829; species 2, 3 & 4 were originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = junior synonyms	s.s. has been cited as valid by at least 32 authors in 45 publications over the last 50 years, but was replaced with j.s. 1 by Tottenham (1939, p. 237) as the s.s. is a j.p.h. of <i>Gauropterus fulgidus</i> (Fabricius, 1787, p. 220) (see Table 2, species 3)
<b>Subfamily TACHYPORINAE</b>		Europe, Morocco	<i>Carphacus angularis</i> (Paykull, 1800, p. 395) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = junior synonym	s.s. has been cited as valid by at least 25 authors in 25 publications over the last 50 years, but was replaced with j.s. by Adám (1996a, p. 248), as the s.s. is a j.p.h. of <i>Anonylus striatus</i> (Ström, 1768, p. 333) (see Table 2, species 4)
17	<i>Carphacus striatus</i> (Olivier, 1795, genus 42, p. 28) Species originally described in the genus <i>Staphylinus</i> Linnaeus, 1758 = senior synonym			

**Table 2.** Four specific names (junior primary homonyms) that are proposed for conservation, with their senior primary homonyms and other information.

**KEY:**

Names are arranged in alphabetical order within subfamilies and the numbers applied to them have relevance only within the table.

- s.h. - senior homonym
- j.h. - junior homonym
- j.s. - junior synonym

No. (column 1)	Junior homonym proposed (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)
1	<b>Subfamily ONALINIÆ</b> <i>Eusphalerum longipenne</i> (Erichson, 1839, p. 640)	Europe	<i>Anthobium longipenne</i> Stephens, 1834 (p. 342)	<i>Anthobium</i> Leach, 1819	s.h. = j.s. of <i>A.</i> <i>atrocephalum</i> (Gyllenhal, 1827) and not cited as valid since 1851 j.h. has been cited as valid in at least 25 publications by 22 authors in the last 50 years, until action by Adam (1995, p. 41) who declared it invalid and replaced it with <i>Eusphalerum imhoffi</i> (Heer, 1839) (see Table 1, species 3)



Table 2. Continued

No. (column 1)	Junior homonym proposed for conservation (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)
2	<i>Xylodromus testaceus</i> (Erichson, 1840, p. 885)	Europe, Russia, Turkey	<i>Eusphalerum testaceum</i> (Gravenhorst, 1806, p. 218)	<i>Omalius</i> Gravenhorst, 1802	s.h. is an invalid synonym of <i>Eusphalerum sorbi</i> (Gyllenhal, 1810, p. 206) and was cited as invalid between 1839 and 1996, when it was used by Ádám (1996a, p. 237) to replace <i>Eusphalerum sorbi</i> (Gyllenhal, 1810, p. 206) (see Table 1, species 4) j.h. cited as valid by at least 26 authors in 31 articles in last 50 years and replaced with <i>Xylodromus heteroceris</i> (Flori, 1900, p. 90) by Ádám (1996a, p. 238) (see Table 1, species 8)
3	<b>Subfamily</b> STAPHYLININAE <i>Quedius fulgidus</i> (Fabricius, 1793, p. 525)	Worldwide	<i>Gauropterus fulgidus</i> (Fabricius, 1787, p. 220)	<i>Staphylinus</i> Linnaeus, 1758	both names have a long history as valid and have been cited in different genera since 1795 (Panzer, 1795, p. 363) j.h. has been cited as valid in at least 45 publications by 32 authors in the last 50 years, but was considered invalid by Tottenham (1939, p. 237) who replaced it with <i>Quedius assimilis</i> (Nordmann, 1837) (see Table 1, species 16)

Table 2. Continued

Nö. (column 1)	Junior homonym proposed for conservation (column 2)	Geographic distribution of species referred to by the junior homonym (column 3)	Senior homonym(s) (column 4)	Genus in which originally described (column 5)	Notes (column 6)
4	Subfamily TACHYPORINAE <i>Carphacis striatus</i> (Olivier, 1795, genus 42, p. 28)	Morocco	<i>Anotylus striatus</i> (Ström. 1768, p. 333)	<i>Staphylinus</i> Linnaeus, 1758	s.h. has been used as s.s. of <i>Anotylus rugosus</i> (Fabricius, 1775, p. 267) (see Table 1, species 10) j.h. has been cited as valid in at least 25 publications by 25 authors in the last 50 years until action by Ádám (1996a, p. 248) who declared it invalid and replaced it with <i>Carphacis</i> <i>angularis</i> (Paykull, 1800) (see Table 1, species 17)

**Case 3221*****Opomyza* Fallén, 1820 (Insecta, Diptera): proposed conservation of usage by designation of a neotype for its type species *Musca germinationis* Linnaeus, 1758**

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**Abstract.** The purpose of this application is to conserve the accepted understanding and usage of the generic name *Opomyza* Fallén, 1820 for a group of flies (family OPOMYZIDAE) by designating, under Article 75.6 of the Code, a neotype for its type species *Musca germinationis* Linnaeus, 1758. The application also refers to other nomenclatural acts carried out under the Code in relation to the the genera *Balioptera* Loew, 1864, *Geomyza* Fallén, 1810 and *Palloptera* Fallén, 1820.

**Keywords.** Nomenclature; taxonomy; OPOMYZIDAE; *Opomyza*; *Balioptera*; *Geomyza*; *Palloptera*; *Opomyza germinationis*; flies; Holarctic.

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1. Linnaeus (1758, p. 600) proposed the name *Musca germinationis* for a species of fly currently known as *Palloptera umbellatarum* (Fabricius, 1775, p. 785) (family PALLOPTERIDAE). *Palloptera umbellatarum* (Fabricius, 1775) is thus an invalid name as it is a junior subjective synonym of *Musca germinationis* Linnaeus, 1758.

2. Linnaeus (1767, p. 996) proposed the name *Musca combinata* for specimens of a fly currently known as *Opomyza germinationis* (Linnaeus, 1758) (family OPOMYZIDAE). Cogan & Dear (1975, p. 177) and the current authors have studied the type material of *Musca germinationis* and *Musca combinata*. These studies have indicated that authors subsequent to Linnaeus have confused these two names and also incorrectly applied them to species other than those intended by Linnaeus.

3. Fallén (1810, p. 18) erected the genus *Geomyza* to accommodate the single species *Musca combinata* Linnaeus, 1767, thus making it the type species by monotypy. Our examination of the type material of *Musca combinata* and the material of *Geomyza combinata* sensu Fallén revealed that the two species are not conspecific. *Geomyza combinata* sensu Fallén, 1810 is in fact the species known as *Geomyza hackmani*

Nartshuk, 1984 (p. 57). Since the type species of the genus *Geomyza* (*Musca combinata* Linnaeus, 1767) was misidentified and fixation of the species actually involved as the type species serves stability, *Geomyza hackmani* Nartshuk, 1984 is herewith designated as the type species of the genus *Geomyza* in accordance with Article 70.3.2 of the Code and no action by the Commission is necessary.

4. Loew (1864, p. 347), overlooking the publication by Fallén (1810) (see para. 3 above), erected the genus *Balioptera* to accommodate the species *Musca combinata* Linnaeus, 1767, *Opomyza apicalis* Meigen, 1830 and six other species. Coquillett (1910, p. 513) designated *Musca combinata* Linnaeus, 1767, the first species mentioned by Loew, as the type species of *Balioptera*. In Loew's opinion the description of *Musca combinata* Linnaeus, 1767 could not apply to *Balioptera combinata* as he interpreted it, even with some freedom of interpretation of the original description (Loew, 1864, p. 352). Since he could not indicate another species to which the Linnaean description might apply he retained the Linnaean name for this species even though he suspected that a misidentification was involved. Examination of *Balioptera combinata* from Loew's collection revealed that he had composite type material and that two nominal species currently known as *Geomyza balachowskyi* Mesnil, 1934 and *Geomyza martineki* Drake, 1992 respectively are actually involved. According to Article 67.2.5, *Musca combinata* is deemed not to be originally included since it was doubtfully included. Therefore the designation of *Musca combinata* as the type species of the genus *Balioptera* is invalid. The second included species, *Opomyza apicalis* Meigen, 1830 (p. 109), is herewith designated under Article 70.3.2 of the Code as the type species of the genus *Balioptera* Loew, 1864 and no action by the Commission is necessary.

5. Fallén (1820b, p. 23) erected the genus *Palloptera* to accommodate the species *Musca gangraenosa* Panzer, 1798, *Musca arcuata* Fabricius, 1781 and the new nominal species *P. marginella* and *P. ustulata*. Westwood (1840, p. 150) designated *M. umbellatarum* Fabricius, 1775 as the type species of the genus *Palloptera*. Since *M. umbellatarum* was not originally included in the genus *Palloptera* by Fallén, this type designation is invalid (Article 67.2). Czerny (1934, p. 28) listed *Palloptera ustulata* Fallén, 1820 as the type species of the genus *Palloptera* and thereby validly designated the type species.

6. Fallén (1820a, p. 10) erected the genus *Opomyza* to accommodate *Musca germinationis* Linnaeus, 1758 and two other species. Westwood (1840, p. 152) subsequently designated *Musca germinationis* as the type species of the genus *Opomyza*. However, again our examination of the type material of *Musca germinationis* and the material of *Opomyza germinationis* sensu Fallén, 1820a revealed that the two species are not conspecific. *Opomyza germinationis* sensu Fallén, 1820 is in fact the species that was originally named *Musca combinata* by Linnaeus in 1767.

7. To conserve prevailing usage of the name *O. germinationis* and the current meaning of the generic name *Opomyza*, we propose designation of a neotype for *Musca germinationis* that is conspecific with *Opomyza germinationis* sensu Fallén, 1820 (see Article 75.6). This would also allow the name *M. umbellatarum* Fabricius, 1775 (a junior subjective synonym of *Musca germinationis* Linnaeus, 1758) to be used for the species currently known as *Palloptera umbellatarum* (Fabricius, 1775).

8. In Fallén's opomyzid collection (which is deposited in the Naturhistoriska Riksmuseet, Stockholm) there are two specimens (a male and a female) of *Opomyza germinationis* sensu Fallén, 1810 with accompanying labels. The male specimen with an accompanying label reading '*Opomyza germinationis* ♂ 2.7' is here considered to be the most suitable for designation as a neotype. The probable original type locality (Sweden) of this nominal species would thereby be retained. A summary of the names and nomenclatural acts involved in this application is provided in Table 1.

9. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Musca germinationis* Linnaeus, 1758, and to designate the specimen labelled '*Opomyza germinationis* ♂ 2.7' in the Naturhistoriska Riksmuseet, Stockholm, as the neotype;
- (2) to place on the Official List of Generic Names in Zoology the name *Opomyza* Fallén, 1820 (gender: feminine), type species by subsequent designation by Westwood (1840) *Musca germinationis* Linnaeus, 1758;
- (3) to place on the Official List of Specific Names in Zoology the name *germinationis* Linnaeus, 1758, as published in the binomen *Musca germinationis* and as defined by the neotype designated in (1) above (specific name of the type species of *Opomyza* Fallén, 1820).

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**Table 1.** Summary of names and nomenclatural acts in Case 3221

Genus	Name of type species	Name of taxon actually designated as type species	Nomenclatural problem	Solution
<i>Geomyza</i> Fallén, 1810	<i>Musca combinata</i> Linnaeus, 1767	<i>Geomyza hackmani</i> Nartshuk, 1984	Misidentified type species	<i>Geomyza hackmani</i> designated (under Article 70.3) as type species in para. 3
<i>Opomyza</i> Fallén, 1820	<i>Musca germinationis</i> Linnaeus, 1758	<i>Musca combinata</i> Linnaeus, 1767	Misidentified type species	Proposal in this application (under Article 75.6) to designate a neotype for <i>Musca germinationis</i> that is conspecific with <i>Musca combinata</i>
<i>Palloptera</i> Fallén, 1820	<i>Musca umbellatarum</i> Fabricius, 1775	<i>Musca germinationis</i> Linnaeus, 1758	Invalid type species designation (under Article 67.2)	Czerny (1934) designated a valid type species, <i>Palloptera ustulata</i> Fallén, 1820
<i>Balioptera</i> Loew, 1864	<i>Musca combinata</i> Linnaeus, 1767	No valid designation (see para. 4)	Invalid type species designation as <i>Musca combinata</i> was doubtfully included in the genus (see Article 67.2.5) and probably misidentified	<i>Opomyza apicalis</i> Meigen, 1830 designated (under Article 70.3) as type species in para. 4

Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

## Case 3196

### *Ctenotus decaneurus yampiensis* Storr, 1975 (currently *C. yampiensis*; Reptilia, Sauria): proposed designation of a neotype

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**Abstract.** The purpose of this application, under Article 75.6 of the Code, is to designate a neotype for the nominal species *Ctenotus yampiensis* Storr, 1975. Storr inadvertently designated a specimen of *C. militaris* Storr, 1975 as the holotype of *C. decaneurus yampiensis*, thus making the subspecific name *C. yampiensis* a synonym of *C. militaris*. In accordance with Article 75.6 it is proposed that the established usage of these names should be conserved by the designation of a specimen labelled 'type of *Ctenotus yampiensis*' by Storr, WAM R11741, as the neotype. *Ctenotus yampiensis* Storr, 1975 and *C. militaris* Storr, 1975 are used for Western Australia skink species (family SCINCIDAE).

**Keywords.** Nomenclature; taxonomy; Reptilia; Sauria; Lacertilia; SCINCIDAE: *Ctenotus*; *Ctenotus yampiensis*; *Ctenotus militaris*; skinks; Western Australia.

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1. Storr (1975, p. 235) established the name *Ctenotus decaneurus yampiensis* for a skink species (family SCINCIDAE) from Wotjulum, West Kimberley, Western Australia, registering three specimens in the Western Australian Museum as original type material. He noted the holotype as having registration number R11795 and the paratypes as having registration numbers R11796 and R11797. The subspecies was subsequently elevated to specific status by Storr, Smith & Johnstone (1981).

2. In re-appraising the skinks of Western Australia, Storr et al. (1981) discovered that a mistake had been made and that the specimens registered as R11795–11797 and published as the holotype and paratypes of Storr's (1975) subspecies *Ctenotus decaneurus yampiensis* were actually specimens of the species that had been named *C. militaris* Storr, 1975 (p. 231). The holotype of *Ctenotus militaris* was given the WAM register number R40779. The specimen labelled 'Type of *Ctenotus yampiensis*' had actually been given the registration number WAM R11741.

3. Evidence from Storr's original manuscript data sheets for *Ctenotus* specimens from Kimberley and North West Division indicates that he was aware of the error in citing the original material for *C. yampiensis*. Specimens R11795–11797 are bracketed and labelled '*decaneurus yampiensis*' with the comment: '11740–11742 not examined'. However, Storr subsequently found these three specimens (R11740–11742), originally intended to represent *C. yampiensis*, and obviously added them at the bottom of the data sheet. Registration numbers R11795–11797 have been circled and labelled '*militaris*' and R11740–11742 were bracketed and labelled '*yampiensis*'; similar emendments were made in the register. There can be no doubt that Storr was aware of his original mistake and took informal steps to clarify the identity of *C. d. yampiensis* to

conform to his original intent. Storr et al. (1981) redescribed *C. yampiensis* and revised the meristic data based on the specimens Storr had originally intended to be the type series (R11740–11742) but without formally mentioning the error.

4. The nominal taxon *Ctenotus decaneurus yampiensis* is represented by type specimens that do not fit the original description which is a composite of what even Storr recognised to be two distinct taxa (measurements derive from specimens numbers R11795–11797 and the colour from specimens R11740–11742). The name *C. d. yampiensis* could be interpreted as a nomen dubium or, from evidence in the original publication and data sheets, a synonym of *C. militaris*. Although the nominal species was recognised as 'rare and insufficiently known' by Cogger, Cameron, Sadler & Egger (1993, p. 169), Storr's concept of *C. yampiensis* is recorded in the Australian herpetological literature (e.g. Cogger, 1979, 1983, 2000). In accordance with Article 75.6, it is proposed that the species-group name should be conserved by the designation of the specimen labelled 'type of *C. yampiensis*' from Wotjulum, West Kimberley, Western Australia, register number R11741, as the neotype for *C. yampiensis*.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to set aside all previous type fixations for the nominal species *Ctenotus yampiensis* Storr, 1975 and to designate the specimen labelled as the 'type of *Ctenotus yampiensis*' from Wotjulum, West Kimberley, Western Australia in the Western Australian Museum, registration number R11741, as proposed in para. 4 above, as the neotype;
- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *militaris* Storr, 1975, as published in the binomen *Ctenotus militaris* and as defined by the holotype in the Western Australian Museum, registration number R40779;
  - (b) *yampiensis* Storr, 1975, as published in the trinomen *Ctenotus decaneurus yampiensis* and as defined by the neotype designated in (1) above.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).



**Case 3219*****Vilcunia periglacialis* Cei & Scolaro, 1982 (currently *Liolaemus periglacialis*; Reptilia, Sauria): proposed precedence over *Liolaemus hatcheri* Stejneger, 1909**

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**Abstract.** The purpose of this application, under Articles 23.9.3 and 81.2.3 of the Code, is to conserve the widely used specific name *Vilcunia periglacialis* Cei & Scolaro, 1982 for a Patagonian tropidurine lizard by giving it conditional precedence over the largely unused senior subjective synonym *Liolaemus hatcheri* Stejneger, 1909.

**Keywords.** Nomenclature; taxonomy; Reptilia; TROPIDURIDAE; *Liolaemus*; *Liolaemus periglacialis*; *Liolaemus hatcheri*; South America; tropidurine lizards.

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1. Stejneger (1909, p. 218) described a new species of tropidurine lizard (family TROPIDURIDAE) from material collected in Southern Argentina between 1896 and 1899 by J.B. Hatcher and named it *Liolaemus hatcheri*. Stejneger's descriptions of the type locality and distribution of *L. hatcheri* are not reliable. After its initial publication, the name has only appeared in two museum check-lists (see Burt & Burt, 1930, 1933) and in a list of names by Liebermann (1939). None of these constitutes use under Article 23.9.6 of the Code. This nominal species was later erroneously synonymized with *L. magellanicus* (Hombron & Jacquinot, 1847) by Donoso Barros (1970), Peters & Donoso Barros (1970) and Cei (1986).

2. A redescription of the holotype of *L. hatcheri* was made by Etheridge (1998). Etheridge also found specimens of *L. kingii* Stejneger, 1909 (p. 218) and *L. lineomaculatus* Stejneger, 1909 (p. 218), which are species closely related to *L. hatcheri*, mixed in the original jars with the redescribed holotype of *L. hatcheri*. Little or no collection locality or ecological information about *L. hatcheri* is available.

3. A tropidurine lizard from the volcanic region surrounding Belgrano Lake, Santa Cruz, was described by Cei & Scolaro (1982, p. 357) and named as *Vilcunia periglacialis*. In 1995 (p. 20), Etheridge moved this species to the genus *Liolaemus*. The type locality of *L. periglacialis* is Estancia Lago Belgrano, 6–10 km from Belgrano Lake, 1000 m above sea level, Santa Cruz). The species has a wide distribution that corresponds to a mainly volcanic region from latitudes 47° 40' South to 49° South, and longitudes 71° 30' West to 72° 10' West. *L. periglacialis* lives in

rocky areas on sandy ground, is almost herbivorous, with a noticeable tendency to social grouping in winter (see Cei & Scolaro, 1982). Stejneger's reports on type locality and distribution do not coincide with the peculiar biotope found for the species (see Cei, 1986).

4. With the exception of Etheridge (1998), the name *L. hatcheri* has not been used after its original publication. In contrast *L. periglacialis*, in spite of its relatively recent establishment (1982), has been widely used (e.g. Laurent, 1984, 1995; Etheridge, 1986, 1995; Cei, 1986; Vanzolini, 1986; Etheridge & de Queiroz, 1988; Reeder & Wiens, 1996; Shine, 1985; a further 20 usage references have been submitted to the Commission Secretariat). In addition, Etheridge (1998) recorded that *L. hatcheri* is 'probably a senior synonym of *Vilcunia periglacialis* (now named *Liolaemus periglacialis*)'.

5. The International Commission on Zoological Nomenclature is accordingly asked:

- (1) to use its plenary power to give the name *periglacialis* Cei & Scolaro, 1982, as published in the binomen *Vilcunia periglacialis*, precedence over the name *hatcheri* Stejneger, 1909, as published in the binomen *Liolaemus hatcheri*, whenever the two names are considered to be synonyms;
- (2) to place on the Official List of Specific Names in Zoology the following names:
  - (a) *periglacialis* Cei & Scolaro, 1982, as published in the binomen *Vilcunia periglacialis*, with the endorsement that it is to be given precedence over the name *hatcheri* Stejneger, 1909, as published in the combination *Liolaemus hatcheri*, whenever the two names are considered to be synonyms;
  - (b) *hatcheri* Stejneger, 1909, as published in the combination *Liolaemus hatcheri*, with the endorsement that it is not to be given priority over the name *periglacialis* Cei & Scolaro, 1982, as published in the binomen *Vilcunia periglacialis*, whenever the two names are considered to be synonyms.

### Acknowledgements

We thank Dr George Zug from the U.S. National Museum, Washington, for his great courtesy in providing an excellent documentation on types from the Collection under his care, and Dr Ronald Heyer, from the same Institution, for his friendly bibliographic support.

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Comments on this case are invited for publication (subject to editing) in the *Bulletin*; they should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk).

**Draft proposal to emend Article 74.7.3: request for comments from the Commission and zoological community**

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A proposal by one us (Pulawski) to delete Article 74.7.3 from the Code was published in BZN **58**(2): 133. Deletion was proposed on the grounds that the Article is unnecessary and requires repetitious statements to be made when several lectotypes are designated in a revisionary work. A number of zoologists wrote in support of the proposal, while others were in strong disagreement with the proposal, claiming that the Article is integral and important to the way that nomenclature serves taxonomy. These comments were published in BZN **58**(2): 133–140. Following the original proposal to delete Article 74.7.3, Pulawski & Kerzhner wrote a formal proposal to the Commission Secretariat on 25 February 2001 and published a paper outlining their proposal in *Zoosystematica Rossica*, vol. **10**(1): 1–7 (December 2001). This included additional comments and an appeal to zoologists to inform the Commission about their attitudes towards the proposal. Since publication of the latter article, over 100 zoologists from around the world have sent responses to the Commission. An overwhelming majority of zoologists support deletion of the Article (to date, 105 in favor of deletion; 1 against deletion).

As currently worded, Article 74.7.3 requires that a valid lectotype designation be accompanied by a statement expressing the taxonomic purpose of the designation. The intent of introducing such a requirement was explained in detail by some of the contributors to the discussion in BZN **58**(2): 133–140, especially Prof W.D.L. Ride (Chairman of the Commission's Editorial Committee for preparation of the current edition of the Code). Article 74.7.3 may be construed as introducing some rigor into the lectotypification process in order to prevent inappropriate designations that are made purely for curatorial purposes without proper cognisance of the taxonomic and nomenclatural consequences. However, we see this wording as a potential cause of confusion and misinterpretation (an estimated 1300 lectotypes designated in publications in the year 2000 are invalid because of not following this Article), as well

as requiring an unnecessary and often repetitious task for an action that is traditionally self-defining.

After much detailed correspondence between the four of us, we have come to an agreement that some change to Article 74.7.3 is necessary and it needs to be done quickly to avoid the rising number of invalid lectotypifications that will otherwise clog the nomenclatural system. We prefer to see total deletion of Article 74.7.3, but run the risk that the Commission may not consider such a proposal as a minor one and therefore not able to be made under Articles 78.3.2 and 80.1 of the Code.

Instead, we propose as a minor change that the wording of Article 74.7.3 be emended, an example be given for clarification, and a Recommendation be added to explain the intent of the Article further. If two-thirds of the Commissioners are in agreement with this change, and that it is essentially a matter of clarification, the Commission may immediately publish an appropriate Declaration (Articles 78.3 and 80.1 of the Code; Article 1.1 of the Constitution).

We therefore propose the following:

- (1) that the wording of Article 74.7.3 be changed to: 'contain an express statement of deliberate designation (merely citing a specimen as 'lectotype' is insufficient)';
- (2) that the following Example be added directly below Article 74.7.3: 'Example: A statement such as "lectotype hereby designated", "lectotype by present designation", "I choose specimen X as lectotype" would fulfil this requirement, but "lectotype: specimen X" would not';
- (3) add the following Recommendation: 'Recommendation 74G: Not merely for curatorial purposes. The designation of lectotypes should be done as part of a revisionary or other taxonomic work to enhance the stability of nomenclature, and not for mere curatorial convenience';
- (4) that these changes be backdated to include all publications after 31 December 1999.

(2) Andrew Wakeham-Dawson, Executive Secretary

*International Commission on Zoological Nomenclature, c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K.*

This draft proposal was sent to Commissioners on 8 April 2002 for their opinion on whether they considered the proposal to include a minor change to the Code or not, and inviting further refinement to the wording before the proposers made a formal proposal to the Commission for a final vote. A count of votes on 22 August 2002, showed that 20 Commissioners had voted in favour of the proposal being put to formal vote, three had voted against and votes had not been received from a further five Commissioners.

In voting against the proposal, Prof Kraus wrote (18 April 2002) that in principle he was against any changes of the Code. He felt strongly that the stability of the Code itself is of high importance. He was also against any changes to Article 74.7.3. He agreed that that the brevity of the wording of Article 74.7.3 leaves it open to misunderstanding and suggested that rewording in the form of a Declaration is appropriate. He commented that lectotype designations should *only* be made — and

hence be valid — as a part of revisionary or other taxonomic work (i.e. where there is composite type material), never as a purely curatorial exercise. Mechanical lectotype designation can easily lead to designation of a less than ideal specimen from syntypes, and a syntypic series may be more representative of a taxon than a single lectotypè specimen. In conclusion, he strongly urged that Recommendation 74G of the proposal be transformed into a mandatory provision.

In a further communication (23 April 2002), Prof Kraus commented that Article 78.3.2 of the Code strictly applies to Declarations that clarify the Code. In his opinion, deletion of Article 74.7.3 must qualify as a major change and not just a clarification.

In voting against the proposal, Dr Cogger (17 April 2002) said that he was also against any changes to Article 74.7.3. He stated the primary purpose of this Article was to ensure that lectotype designations be made only for taxonomic purposes. While it has been argued that this is nearly always the purpose of lectotypification, experience would suggest otherwise. Lectotypes are often chosen arbitrarily and with consequent serious disruption to nomenclatural stability and universality. Such disruptions most often occur when lectotypes are designated as a result of the routine curatorial publication of catalogues such as type lists, or of regional or global 'checklists' that are compiled primarily from secondary sources. The utility of such publications can be seriously compromised by the nomenclatural problems they create because of inappropriate lectotype designations.

He further stated that while he would be happy to support any changes to the Article that clarify its purpose and application, he did not support a proposal that reduces the essential taxonomic purpose of lectotypification to a mere Recommendation.

In voting against the proposal, Prof Mawatari (April 2002) said that he strongly supported retention of the Article as it currently stands. He stressed that the taxonomic purpose of lectotype designations should be clearly explained in revisionary works, particularly for readers who are not taxonomists.

Although over two-thirds of the Commissioners were in agreement with the wording of draft proposal (and accepted it as a minor change for clarification), the draft is published here to allow further comments from the Commission and the zoological community at large before it is brought to formal vote.

Comments on this draft proposal are invited and should be sent to the Executive Secretary, I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: iczn@nhm.ac.uk) before 28 February 2003.

**Comment on the proposed precedence of *Bolboceras* Kirby, 1819 (July) (Insecta, Coleoptera) over *Odonteus* Samouelle, 1819 (June)**  
(Case 3097; see BZN 59: 246–248)

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I write in support of Case 3097, but make the following exceptions to the statement in para. 3 that the name *Odonteus* was not used between its original publication and its use by Krell in 1990. The name *Odonteus* Samouelle, 1819 was used at least once in the primary literature before 1990 with the original spelling and including the

nominal species *O. armiger* Scopoli, 1772 (see Jessop, 1986). Since 1990, Baraud (1992) used *Odontaeus* Samouelle, with the correct authorship and date, citing Krell (1990) as the basis for this action. The use of the name *Odontaeus* is also being proposed for an up-coming volume in the *Fauna-Iberica* series:

([www.fauna-iberica.mncn.csic.es/htmlfauna/faunibe/zoolist/insecta/coleoptera/geotrupidae.html](http://www.fauna-iberica.mncn.csic.es/htmlfauna/faunibe/zoolist/insecta/coleoptera/geotrupidae.html)).

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**Comment on the proposed conservation of usage of *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 (Insecta, Coleoptera) by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema***  
(Case 3193; see BZN 59: 185–187)

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The present situation where the two nominal genera *Chrysodema* Laporte & Gory, 1835 and *Iridotaenia* Deyrolle, 1864 both have the same type species, *C. sumptuosa* Laporte & Gory, 1835, is clearly contrary to the Code and complicates my research. Dr Bellamy's proposal to resolve the problem of synonymy by the designation of *C. sonnerati* Laporte & Gory, 1835 as the type species of *Chrysodema* has my full support.

**Comment on the proposed conservation of 65 specific names in the family STAPHYLINIDAE Latreille, 1804 (Insecta, Coleoptera)**  
(Case 3207; see BZN 59: 99–113)

Andrew Wakeham-Dawson (Executive Secretary)

*I.C.Z.N., c/o The Natural History Museum, Cromwell Road, London SW7 5BD, U.K. (e-mail: [iczn@nhm.ac.uk](mailto:iczn@nhm.ac.uk))*

A few small errors have found their way into this application.

The Key to Table 1 should include the following:

# — the senior homonyms marked with this symbol have not been used as valid names since at least 1899.

j.s. — means junior synonym.

Sentence (2)(a) of para. 4 should read: '(a) the **valid** specific names in column 4 of **Table 1** . . . '.

Sentence (2)(b) of para. 4 should read: '(b) the specific names in column 2 of **Table 1** . . . '.

The following sentence should be added: '(2)(c) the specific names in column 2 of **Table 2**, as originally published in binomina with generic names in column 5.'

## Nomenclatural Notes

### Type specimens: dead or alive?

(1) Andrew Wakeham-Dawson and Solene Morris

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It is a widespread misunderstanding that an animal species cannot be given a scientific name until a specimen has been killed and preserved as the name-bearing type specimen for that taxon. An example of this misunderstanding was published in *The Daily Telegraph* magazine *Weekend* (London; 17 November 2001). The leading article by Sandy Mitchell claimed that it had been necessary for a scientist (Julia Robinson Dean) to return to Indonesia to kill a rare bird before she could name it and thereby allow it to be added to a list of protected species. A letter outlining the error was sent in response to the magazine article by the then Executive Secretary of the Commission, Philip Tubbs. However, the letter was not published.

The Code does not require a museum specimen as type material or that the naming process requires an anatomically detailed description to be made on the basis of such material. However, every new name must 'be accompanied by a description or definition that states in words characters that are purported to differentiate the taxon' (Article 13.1.1 of the Code), and since January 2000 the specimen (holotype) or specimens (syntypes) on which the name is based must be explicitly stated (Article 11.6.4.1).

In the case of the Indonesian bird, a description based on notes from the scientist's notebook, or even the picture and description that appeared in the newspaper article, would have been sufficient to make the name available. The holotype or syntypes remain the specimens of which the photographs were taken and the descriptions made, even if they are allowed to return alive to their natural habitat and are never seen again. The holotype (or syntype) is not the picture of the specimen (see Articles 72.5.6 and 73.1.4). Similarly, when a new species is described and named on the basis of DNA sequences, the specimen from which these were taken remains the holotype (or syntypes in the case of a series of specimens from which samples are taken). For example, a new species of Somalian shrike was named from a living specimen that was released after samples had been taken for DNA analysis (see Smith, Arctander, Fjeldsa & Amir, 1991; Hughes, 1992).

There are good reasons why a dead specimen cannot be required for formal naming. Capture, killing and export may be illegal, unethical or impossible (e.g. capture of a new taxon of fish seen from a deep-sea submersible may not be practical) and absence of a museum specimen to act as holotype does not prevent the naming process. Many thousands of names would be invalid if dead type specimens were mandatory. For example, many of the species named by Linnaeus were not based on



any cited type material, and name-bearing specimens have never been fixed for many well-known species.

The misconception that a dead holotype specimen is mandatory under the Code has perhaps arisen from the wording used in relation to designation of new species in early editions of the *International Code of Zoological Nomenclature* (1961, 1964) and the *Règles Internationales de la Nomenclature Zoologique* (1905) that preceded them. This misunderstanding has been compounded in textbooks on taxonomy.

However, preserved specimens have never been a mandatory requirement, although they have been (and still are) recommended. In 1926, the *Règles* were translated into English and published as the International Rules of Zoological Nomenclature in the *Proceedings of the Biological Society of Washington*, 39: 75–104. In this document, Recommendation B (pp. 7R–8R) on Articles 1–3 recommended ‘that in published descriptions of a new species or of a new subspecies, only one specimen should be designated as *type*. The specimen itself should be labelled *type*’. Recommendation B was re-presented in the form of Article 72(a) of the First and Second Editions (1961 & 1964) of the Code (p. 75 in both editions). This stated that ‘the type of each taxon of the species-group is a single specimen’. In Article 72 of the Third Edition (1985, p. 139) it is explained that ‘the term “type” forms part of many compound terms used by taxonomists to distinguish between particular kinds of specimens’. Some of these terms do not refer to name-bearing types.

The wording of the *Règles* and First and Second Editions of the Code (1961 & 1964) might have been held to imply that a holotype could only be designated when a dead specimen was to hand. The Third Edition (1985) did not state that this was not the case, but Article 73(a)(iv) stated that ‘designation of an illustration of a single specimen as a holotype is to be treated as designation of the specimen illustrated; the fact that the specimen cannot be traced does not of itself invalidate the designation’. This clearly indicated that a preserved specimen was not a mandatory requirement of the Code. Eligibility for name-bearing type status was stated in Article 72(c). In addition, the introduction to the Third Edition of the Code (1985) stated (p. xvi) that ‘although the principle [of name-bearing types] is fundamental, it is still not obligatory for name-bearing types to be designated for new species-group taxa although the Code recommends the practice and provides procedures by which the name-bearing type of any species-group taxon can be discovered and fixed’.

The introduction to the Fourth (current) Edition of the Code (1999) states (p. xxvii) that ‘when the name-bearing type of a species group taxon proposed after 1999 consists of a preserved specimen or specimens, the proposer is required to include a statement naming the collection in which the name-bearing type is or will be deposited’. From this statement, it is clear that a dead type specimen is not essential under the Code. However, it is desirable that this should be stated directly, rather than just by implication, in future editions of the Code to prevent nomenclature and taxonomy from being wrongly discredited in situations of biological conservation sensitivity or where modern techniques (e.g. blood sampling for molecular analysis etc.) are a viable alternative to killing specimens.

In the future, it may be possible to describe all species solely on the results of molecular analysis techniques from blood or other samples taken from living animals. For the time being, it is still desirable to have preserved specimens at hand

to allow a full description of new taxa to be made, and for re-examination of those specimens at a later date.

In the case of marine organisms, there are some old nominal species that were based on animals only seen in the water. As no specimens were actually obtained these have not been considered 'taxonomically sound' (William Perrin, personal communication) even though these names remain available under the Code. The following note by Drs Dalebout and Scott Baker on the description of a new whale species illustrates the value of having preserved specimens. The use of morphological comparison and DNA analysis techniques allowed the determination and description of a new animal taxon, which would have been impossible in the absence of preserved material.

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(2) Merel L. Dalebout and C. Scott Baker

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Beaked whales (ZIPHIIDAE) are among the least known of mammals (Wilson, 1992). Twelve new cetacean species have been described in the last 100 years, of which seven were beaked whales, primarily of the genus *Mesoplodon*. This total does not include *M. bahamondi* Reyes, Van Waerebeek, Cárdenas & Yañez, 1995, a species now recognized as synonymous with *M. traversii* (Gray, 1874) (van Helden et al., 2002). Given this synonymy, the most recently described beaked whale species was *M. peruvianus* Reyes, Mead & Van Waerebeek, 1991.

Sightings of beaked whales at sea are generally rare due to their elusive habits and preference for deep oceanic waters. Several species have yet to be seen alive and the distinctiveness of others has been questioned. Species of beaked whales are comparatively undifferentiated in external morphology. Species identification is based primarily on features of cranial morphology and, especially for the most species-rich genus *Mesoplodon*, on the size, shape and position of the teeth in the lower jaw. All beaked whale species (except the monotypic *Tasmacetus*) have a highly reduced dentition, retaining only one or two pairs of teeth in the lower jaw. In genera with a single pair of teeth, such as *Mesoplodon*, the teeth develop and erupt from the gum only in adult males. Females and juveniles are effectively toothless. These teeth are not used for feeding. Instead, based on observations of scarring patterns on stranded animals, males use these tusk-like teeth as weapons in intra-specific combat with other males (see Heyning, 1984). Due to the often small number of known specimens, pronounced sexual dimorphism and wide geographic distribution (all oceans except the high Arctic), the potential for the misidentification of beaked whales based on morphological features is considerable, even for experts.

In the mid to late 1970s, four beaked whales (an adult male, an adult female and two calves) were stranded within 50 miles of each other along the southern coast of California. These animals were identified as *Mesoplodon hectori* (Hector's beaked whale) from morphology, the first and only records of this species from the Northern Hemisphere (Mead, 1981). Three of the specimens were collected for the Smithsonian Institution National Museum of Natural History, while the fourth was collected for the Los Angeles County Museum of Natural History.

In 1997, a database of mitochondrial (mt) DNA control region sequences was compiled to assist in beaked whale species identification (Henshaw et al., 1997; Dalebout et al., 1998). All specimens in this reference database were validated through examination by experts in cetacean morphology and the collection of diagnostic skeletal material or photographic records following the recommendations of Dizon et al. (2000). A sequence from one of the California specimens was included in the database but was found to differ from specimens of Southern Hemisphere *M. hectori* and all other species in the database at that time (Dalebout et al., 1998).

To investigate this anomaly, DNA was extracted from cartilage and tooth material from the remaining three California specimens described by Mead (1981). Phylogenetic comparisons of mtDNA control region and cytochrome *b* sequences from these specimens to a now complete reference database including all 20 recognized beaked whale species (Dalebout, 2002; see also [www.dna-surveillance.auckland.ac.nz](http://www.dna-surveillance.auckland.ac.nz)) confirmed that all four are of the same species, yet do not represent *M. hectori* or any other known ziphiid species. A fifth specimen, a calf stranded at Monterey in 1997 and initially identified as a neonate *Ziphius cavirostris* (Cuvier's beaked whale) from external morphology, is also grouped with these anomalous California specimens in phylogenetic analyses. These analyses provided strong evidence that these five specimens represent a previously undescribed species of beaked whale (Dalebout et al., 2002). This conclusion was confirmed through phylogenetic analysis of nuclear DNA sequence data (Dalebout, 2002) and supported by re-examination of morphological features (Dalebout et al., 2002).

A formal description of this new species including details of diagnostic molecular and morphological features was given by Dalebout et al. (2002). This species, like *M. hectori*, is a small beaked whale, approximately 4 m in length, with a relatively short rostrum (beak/upper jaw). Both species have a single pair of triangular teeth set at the apex of the mandible, but there are subtle differences in position and angle of inclination. Of the four specimens stranded in California in the 1970s, the adult female and one of the calves share the same mtDNA haplotype (the mitochondrial genome is inherited only through the maternal line). These specimens were found a week apart and are probably a mother and her offspring. There are no confirmed observations of this species at sea and little is known of its ecology. We assume that like many other beaked whales, these animals eat mainly pelagic squid. The adult male bore a number of white, linear scars on its postcranial flanks, probably inflicted by the teeth of conspecific males. Although the stranding pattern of the five specimens known to date is suggestive of an eastern North Pacific distribution, there are too few records to date to draw any bounds on this. We have named this new species *Mesoplodon perrini* (Perrin's beaked whale) in tribute to the American

cetologist, William F. Perrin, of the U.S. National Marine Fisheries Service South West Fisheries Science Center (La Jolla, California) for his role in the collection of two of the known specimens of this species and his ongoing contribution to marine mammal science and conservation.

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## *Acaulona peruviana* Townsend, 1913 (Insecta, Diptera): application of Article 75.8 of the Code

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In 1913, Townsend (p. 93) described a species of parasitic fly (family TACHINIDAE) and named it *Acaulona peruviana*. His description was based on two reared specimens (a male and a female), from San Jacinto, Chira valley, Piura Department, Peru. They emerged as adults on 29 October 1912, having been collected by E.W. Rust from adults of the cotton stainer bug *Dysdercus ruficollis* (Linnaeus, 1764) (Hemiptera,

PYRRHOCORIDAE). The syntypes were deposited in the United States National Museum, Washington D.C. (U.S.N.M.). Townsend (1913) reported that *Acaulona peruviana* was comparatively rare and that he had collected only five specimens in the course of three years. The capture data are as follows:

- (1) one female, Somate, Rio Chira, 18 November 1910, on flower of *Telanthera* sp.;
- (2) one male on foliage, Chapaira, Rio Piura valley, 21 May 1911;
- (3) two females, Cañada de Samán, Chira valley, 14 February 1912, on flowers of *Philibertella flava*;
- (4) one female, Sullana, Chira valley, 17 February 1912, on foliage.

In 1950 Sabrosky (pp. 369–370) stated that the cotton stainer parasite, *Acaulona peruviana*, had not been formally described, but that the name had been established in connection with the full-page figure published by Townsend (1928, p. 7, fig. 3). Sabrosky (1950) redescribed the species from Townsend's figure and designated a neotype, an allotype, and seventeen neoparatypes. Four of these had the same data as the material listed by Townsend (1913).

Sabrosky (1951, p. 210), after being alerted by Dr Claude Dupuis to his oversight of the original description of *Acaulona peruviana*, acknowledged that he had made a mistake in redescribing the species. However, as he had been unable to find the syntypes of *Acaulona peruviana* deposited by Townsend in the U.S.N.M., Sabrosky (1951) assumed that they were lost and stated that his neotype designation was still valid.

In 1989, the two supposedly lost original specimens on which the description of *Acaulona peruviana* was based were rediscovered in the U.S.N.M. According to Article 75.8 of the Code: 'if, after the designation of a neotype, the name-bearing type of the nominal species-group taxon that was presumed lost is found still to exist, on publication of that discovery the rediscovered material again becomes the name-bearing type and the neotype is set aside'. As a result, Sabrosky's (1950) neotype designation is no longer valid and herewith I designate the male syntype specimen numbered U.S.N.M. 19477 as the lectotype of the nominal species *Acaulona peruviana* Townsend, 1913. The taxonomic reason underlying this lectotype designation is that the female and (to a lesser extent) male genitalia of species in the genus *Acaulona* Wulp, 1888 are very similar and it is only possible to differentiate *Acaulona peruviana* from other species of the genus *Acaulona* by the morphology of the male genitalia whenever the yellow pruinosity of the abdomen of the specimens is not conserved.

The lectotype is a male fly in good condition with the left wing separated from the thorax and glued on a paper support (Figure 1). It is from San Jacinto, Chira valley, Piura Department, Peru, and was collected by E.W. Rust. The paralectotype is the former syntype specimen U.S.N.M. 19477 (the same number as the lectotype). It is a female in good condition, but without the fore left leg and middle right leg. It has the same data as the lectotype.

### Acknowledgements

I thank Dr Ubirajara R. Martins de Souza (Museu de Zoologia da Universidade de São Paulo) and Dr Andrew Wakeham-Dawson (Executive Secretary, International Commission on Zoological Nomenclature) for reading the manuscript, Dr

Norman Woodley for the loan of specimens and Dan Hansen for providing the bibliography. This work was supported by a grant from Fundação de Amparo à Pesquisa do Estado de São Paulo.



**Figure 1** The lectotype of *Acaulona peruviana* Townsend, 1913. Male, emerged on 29 October 1912, accession no. U.S.N.M. 19477. From San Jacinto, Chira valley, Piura Department, Peru. Collected by E.W. Rust. The fly is 6.8 mm in length.

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## NAMES AND WORKS PLACED ON OFFICIAL LISTS AND INDEXES IN RULINGS OF THE COMMISSION PUBLISHED IN VOLUME 59 (2002)

Names and Works placed on the Official Lists and Indexes in Volume 59, together with emendments of existing entries, are listed below under four headings: Family-Group Names, Generic Names, Specific Names and Works. Entries on the Official Lists are in bold type and those on the Official Indexes in non-bold type.

### Family-Group Names

**DOLICHOPODAINI** Brnner von Wattenwyl, 1888 (Grylloptera) Op. 1998  
**DOLICHOPODIDAE** Agassiz, 1846 (Diptera) Op. 1998  
**DOLICHOPODIDAE** Latreille, 1809 (Diptera) Op. 1998  
**DOLICHOPODINI** Brunner von Wattenwyl, 1888 (Grylloptera) Op. 1998  
**GALAGIDAE** Gray, 1825 (Mammalia) Op. 1995  
**GALAGONIDAE** Gray, 1825 (Mammalia) Op. 1995  
**INDRIDAE** Burnett, 1828 (Mammalia) Op. 1995  
**INDRIIDAE** Burnett, 1828 (Mammalia) Op. 1995  
**LORIDAE** Gray, 1821 (Mammalia) Op. 1995  
**LORISIDAE** Gray, 1821 (Mammalia) Op. 1995

### Generic Names

**Actenodes** Dejean, 1833 (Coleoptera) Op. 2008  
**Amauropsina** Chelot, 1885 (Gastropoda) Op. 1997  
**Amaurosetia** Stephens, 1835 (Lepidoptera) Op. 1999  
**Anthaxia** Eschscholtz, 1829 (Coleoptera) Op. 2009  
*Callithraupis* Berlepsch, 1879 (Aves) Op. 2004  
*Calotermes* Hagen, 1858 (Isoptera) Op. 2007  
*Camposichthys* Travassos, 1946 (Osteichthyes) Op. 2012  
**Carininota** Volkovitsh, 1979 (Coleoptera) Op. 2008  
**Chalinolobus** Peters, 1866 (Mammalia) Op. 1994  
**Cryphops** Richter & Richter, 1926 (Trilobita) Op. 2006  
*Cynodon* Cuvier, 1829 (Osteichthyes) Op. 2012  
**Cynodon** Spix in Spix & Agassiz, 1829 (Osteichthyes) Op. 2012  
**Cyphogastra** Deyrolle, 1864 (Coleoptera) Op. 2008  
**Dichrorampha** Guenée, 1845 (Lepidoptera) Op. 1999  
*Diucopis* Bonaparte, 1850 (Aves) Op. 2004  
**Dolichopoda** Bolivar, 1880 (Grylloptera) Op. 1998  
**Eudorylas** Aczél, 1940 (Diptera) Op. 2000  
**Galago** Geoffroy Saint-Hilaire, 1796 (Mammalia) Op. 1995  
*Gortania* Cossmann, 1909 (Trilobita) Op. 2006  
**Halictoides** Nylander, 1848 (Hymenoptera) Op. 2001  
*Halmaturotherium* Krefft, 1872 (Mammalia) Op. 1993  
*Halmatutherium* Krefft, 1873 (Mammalia) Op. 1993  
**Hemibagrus** Bleeker, 1862 (Osteichthyes) Op. 2011  
**Indri** Geoffroy Saint-Hilaire, 1796 (Mammalia) Op. 1995

**Kalotermes** Hagen, 1853 (Isoptera) Op. 2007  
**Microcephalops** De Meyer, 1989 (Diptera) Op. 2000  
*Microphthalmus* Gortani, 1907 (Trilobita) Op. 2006  
**Mystacina** Gray, 1843 (Mammalia) Op. 1994  
*Mystacops* Lydekker, 1891 (Mammalia) Op. 1994  
**Nascio** Laporte & Gory, 1838 (Coleoptera) Op. 2008  
*Neodorylas* Kuznetsov, 1995 (Diptera) Op. 2000  
*Neothraupis* Berlepsch, 1879 (Aves) Op. 2004  
**Neothraupis** Hellmayr, 1936 (Aves) Op. 2004  
**Orsodacne** Latreille, 1802 (Coleoptera) Op. 1989  
**Pachycerianthus** Roule, 1904 (Anthozoa) Op. 1987  
**Procoptodon** Owen, 1874 (Mammalia) Op. 1993  
**Proelectrotermes** von Rosen, 1913 (Isoptera) Op. 2007  
**Raphiodon** Agassiz in Spix & Agassiz, 1829 (Osteichthyes) Op. 2012  
*Raphiodontichthys* Campos, 1945 (Osteichthyes) Op. 2012  
**Schistochlamys** Reichenbach, 1850 (Aves) Op. 2004  
**Trichocratomerus** Richter, 1949 (Coleoptera) Op. 2009

### Specific Names

**albinella**, **Phalaena**, Linnaeus, 1758 (Lepidoptera) Op. 1999  
**arcuata**, **Buprestis**, Laporte & Gory, 1838 (Coleoptera) Op. 2008  
**arcuata**, **Buprestis**, Say, 1825 (Coleoptera) Op. 2008  
**aurata**, **Buprestis**, Fabricius, 1787 (Coleoptera) Op. 2008  
**aurata**, **Buprestis**, Pallas, 1776 (Coleoptera) Op. 2008  
**banksi**, **Pipunculus**, Aczél, 1940 (Diptera) Op. 2000  
**bella**, **Buprestis**, Gory, 1840 (Coleoptera) Op. 2008  
**berendtii**, **Termes**, Pictet, 1856 (Isoptera) Op. 2007  
**bermudensis**, **Holacanthus ciliaris**, Goode, 1876 (Osteichthyes) Op. 2003  
**bilineata**, **Buprestis**, Latreille, 1813 (Coleoptera) Op. 2008  
**bilineata**, **Buprestis**, Weber, 1801 (Coleoptera) Op. 2008  
**biporcata**, **Dactyloa**, Wiegmann, 1934 (Reptilia) Op. 2015  
**caerulea**, **Buprestis**, Olivier, 1790 (Coleoptera) Op. 2008  
**caerulea**, **Buprestis**, Thunberg, 1789 (Coleoptera) Op. 2008  
**canaliculata**, **Ampullaria**, Lamarck, 1804 (Gastropoda) Op. 1997  
**canaliculata**, **Ampullaria**, Lamarck, 1822 (Gastropoda) Op. 1997  
*canalifera*, **Ampullaria**, Lamarck, 1822 (Gastropoda) Op. 1997  
**capistrata**, **Tanagra**, Wied, 1821 (Aves) Op. 2004  
**cayennensis**, **Buprestis**, Gmelin, 1790 (Coleoptera) Op. 2008  
**cayennensis**, **Buprestis**, Herbst, 1801 (Coleoptera) Op. 2008  
**cerasi**, **Chrysomela**, Linnaeus, 1758 (Coleoptera) Op. 1989  
*copei*, **Anolis**, Bocourt, 1873 (Reptilia) Op. 2015  
**crucigerum**, **Phrynidium**, Lichtenstein & Martens, 1856 (Amphibia, Anura) Op. 2013  
**cryptophthalmus**, **Phacops**, Emmrich, 1844 (Trilobita) Op. 2006  
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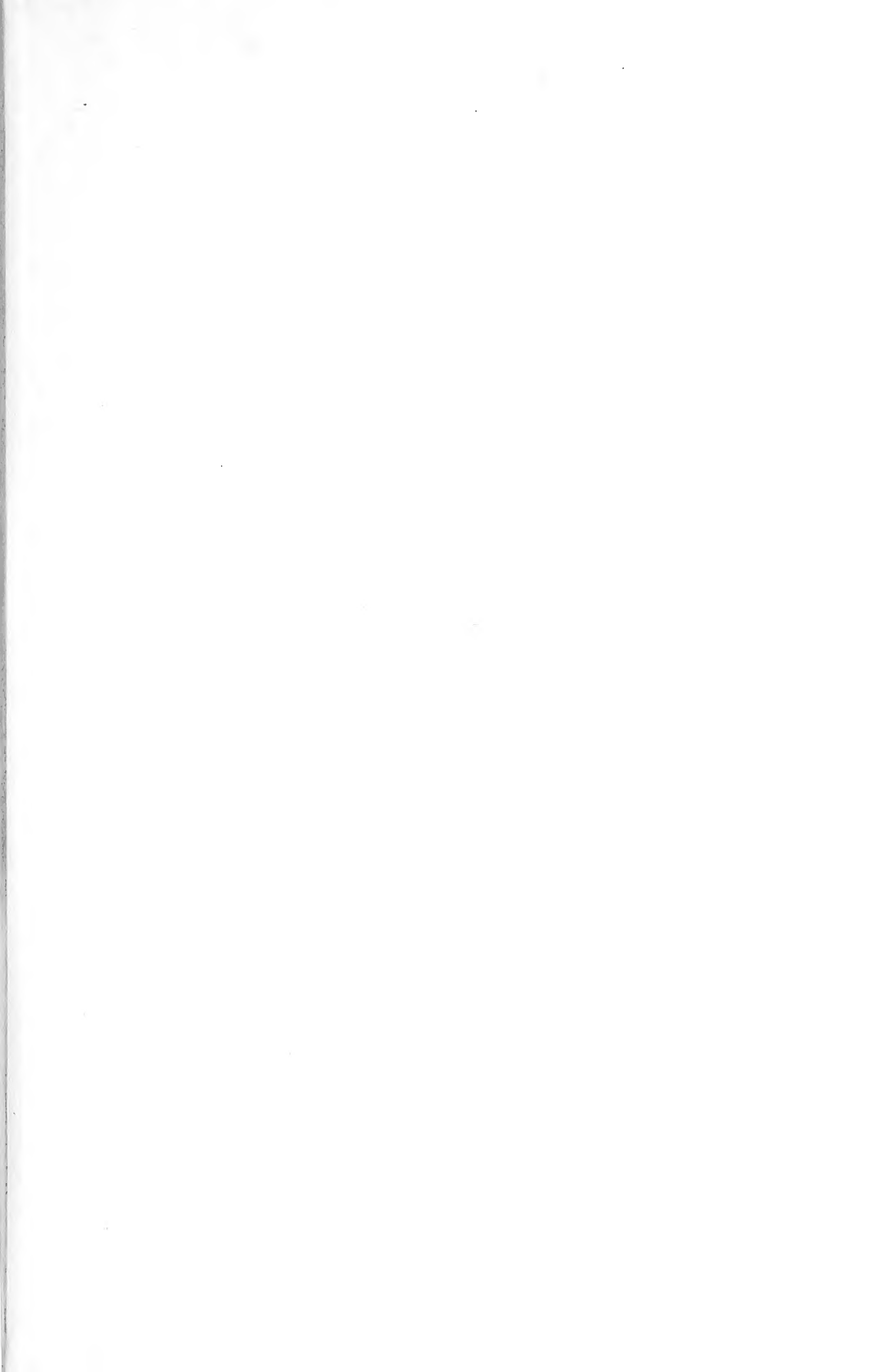
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