The Bulletin of Zoological Nomenclature

ICZN The Official Periodical of the International Commission on Zoological Nomenclature

Volume 45, 1988

Published on behalf of the Commission by
The International Trust for Zoological Nomenclature
c/o British Museum (Natural History)
Cromwell Road
London, SW7 5BD, U.K.

ISSN 0007-5167
© International Trust for Zoological Nomenclature

The Bulletin of Zoological Nomenclature

Volume 45, 1988

Published on behalf of the International Commission on Zoological Nomenclature by
International Trust for Zoological Nomenclature
c/o British Museum (Natural History)
Cromwell Road
London, SW7 5BD, U.K.

TABLE OF CONTENTS

Page

Notices 1
The International Commission and its publications 2
Addresses and specialist fields of members of the Commission 3
International Trust for Zoological Nomenclature 4
Call for nominations for new members of the International Commission on Zoological Nomenclature 4
The International Code of Zoological Nomenclature 5
Official Lists and Indexes of Names and Works in Zoology 5

General Article

An appraisal of the Zoology of C. S. Rafinesque. Alwyne Wheeler 6

Applications

Madrepora limax Esper, 1797 (currently *Herpolitha limax*) and *Fungia talpina* Lamarck, 1801 (currently *Polyphyllia talpina*; Cnidaria, Anthozoa). B. W. Hoeksema . . . 13
Coenobita Latreille, 1829 (Crustacea, Decapoda). G. J. Morgan & L. B. Holthuis . 18
Sphaeroma hookeri Leach, 1814 (currently *Lekanesphaera hookeri*; Crustacea, Isopoda). B. J. M. Jacobs & L. B. Holthuis 21
Hydrobius Leach, 1815 and *Berosus* Leach, 1817 (Insecta, Coleoptera). M. Hansen . 25
Elachista Treitschke, 1833 (Insecta, Lepidoptera). E. S. Nielsen & I. W. B. Nye . . 27
Colias alfacariensis Ribbe, 1905 (Insecta, Lepidoptera). S. E. Whitebread, L. Rezbanyai-Reser & H. Geiger 29
Ludita Nagy, 1967 (Insecta, Hymenoptera). C. van Achterberg 33
Vespa triangulum Fabricius, 1775 (currently *Philanthus triangulum*; Insecta, Hymenoptera). W. J. Pulawski 34
Ictiobus Rafinesque, 1820 (Osteichthyes, Cypriniformes). R. M. Bailey & W. N. Eschmeyer 36
Hydrolycus Müller & Troschel, 1844 (Osteichthyes, Cypriniformes). J. Géry & V. Mahnert 38
Ascalabotes gigas Bocage, 1875 (currently *Tarentola gigas*; Reptilia, Squamata). H. H. Schleich 41
Euryotis brantsii A. Smith, 1834 (currently *Parotomys brantsii*; Mammalia, Rodentia). L. C. Rookmaaker & J. Meester 43

Comments

On 'Use versus priority', with alternative proposals for the conservation of well-known names. K. H. L. Key 45
On the suggested introduction of 'Protected Works'. M. B. Best & B. W. Hoeksema . 47
On the introduction of the term 'pragmatype' and on the role of the International Commission. G. Hahn 48
On Pragmatypes and the role of the Commission: a reply to Dr P. K. Tubbs. R. H. L. Disney & Y. Z. Erzinclioglu 48
On the proposed conservation of *Chelifer* Geoffroy, 1762 (Arachnida, Pseudoscorpionida). I. M. Kerzhner 49
On the proposed suppression of *Belemnites* Lamarck, 1799 and the conservation of BELEMNITIDAE d'Orbigny, 1845. G. Hahn; M. K. Howarth; T. I. Nal'nyaeva . . . 50
On the proposed conservation of *Conus floridanus* Gabb, 1869 (Mollusca, Gastropoda). M. G. Harasewych & R. E. Petit 51
On the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington. G. J. Ingram & J. Covacevich; A. E. Greer; J. Stone 52
On the proposed designation of *Tylenchus vulgaris* Brzeski, 1963 as the type species of *Filenchus* Andrássy, 1954 (Nematoda). R. Fortuner, A. R. Maggenti & P. A. A. Loof; M. R. Siddiqi & D. J. Hunt 55

Rulings of the Commission

Opinion 1464. *Calcarina calcar* d'Orbigny, 1839 (currently *Pararotalia calcar*; Protista, Foraminiferida) 56
Opinion 1465. *Laomedea gracilis* Sars, 1850 (currently *Clytia gracilis*; Cnidaria, Hydrozoa) 57
Opinion 1466. *Terebratula triangulus* Valenciennes, 1819, *T. catulloi* Pictet, 1867 and *T. janitor* Pictet, 1867 (Brachiopoda, Articulata) 59
Opinion 1467. *Criopus* Poli, 1791 and *Criopoderma* Poli, 1795 (Brachiopoda) . . . 61
Opinion 1468. *Orbicula* Cuvier, 1798 (Brachiopoda, Inarticulata) 62
Opinion 1469. *Crania tuberculata* Nilsson, 1826 (Brachiopoda) 63
Opinion 1470. SINUITIDAE Dall, 1913, MACLURITIDAE Carpenter, 1861 and EUOMPHALIDAE de Koninck, 1881 (Gastropoda, Archaeogastropoda) 64
Opinion 1471. *Aplysia* (originally *Laplysia*) *viridis* Montagu, 1804 (Mollusca, Gastropoda) 67
Opinion 1472. *Cyclaxyra* Broun, 1893 (Insecta, Coleoptera) 69
Opinion 1473. *Tetropium* Kirby, 1837 (Insecta, Coleoptera) 71
Opinion 1474. *Tropiphorus* Schönherr, 1842 (Insecta, Coleoptera) 73
Opinion 1475. *Dexia* Meigen, 1826 (Insecta, Diptera) 74
Opinion 1476. *Agromyza* Fallén, 1810 (Insecta, Diptera) 76
Opinion 1477. *Napomyza* Westwood, 1840 (Insecta, Diptera) 77
Opinion 1478. *Lycaena mirza* Plotz, 1880 (currently *Azanus mirza*; Insecta, Lepidoptera) 78
Opinion 1479. *Antispila* Hübner, [1825] (Insecta, Lepidoptera) 79
Opinion 1480. *Apanteles ornigis* Weed, 1887 (currently *Pholetesor ornigis*; Insecta, Hymenoptera) 80
Opinion 1481. *Siphamia* Weber, 1909 and *S. permutata* Klausewitz, 1966 (Osteichthyes, Perciformes) 82
Opinion 1482. *Heteroclonium bicolor* Cope, 1896 (currently *Bachia bicolor*; Reptilia, Squamata) 84
Opinion 1483. *Rhabdodon* Matheron, 1869 (Reptilia, Ornithischia) 85
Direction 122. *Bubo* Duméril, 1806 and *Surnia* Duméril, 1806 (Aves) 87

Notices 89
The International Code of Zoological Nomenclature 90
Official Lists and Indexes of Names and Works in Zoology 90

General Article

Changes in North American Fish Names, especially as related to the International Code of Zoological Nomenclature. R. M. Bailey & C. R. Robins 92
Note by P. K. Tubbs (Executive Secretary, I.C.Z.N.) 103

Applications

Nonion de Montfort, 1808 (Foraminiferida): proposed designation of *Nautilus faba* Fichtel & Moll, 1798 as type species. H. J. Hansen & F. Rögl 104
Hanzawaia Asano, 1944 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 106
Calcarina d'Orbigny, 1826 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 109
Dendritina d'Orbigny, 1826 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 112
Planularia Defrance, 1826 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 114
Borelis de Montfort, 1808 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 116
Nautilus repandus Fichtel & Moll, 1798 (currently *Eponides repandus*; Foraminiferida): proposed replacement of the neotype. H. J. Hansen & F. Rögl 118

Palaemon longirostris H. Milne Edwards, 1837 (Crustacea, Decapoda): proposed conservation of the specific name. L. B. Holthuis 120
Pycinaster magnificus Spencer, 1913 (Echinodermata, Asteroidea): conservation proposée pour le nom spécifique. G. Breton 125
Cordylodus? dubius Rhodes, 1953 (currently *Distomodus? dubius*; Conodonta): proposed conservation of the specific name. L. Jeppsson & R. J. Aldridge . . . 127
LIPARIDAE Gill, [30 September] 1861 (Osteichthyes, Scorpaeniformes); proposed confirmation of spelling. K. D. Vogt 130
Scorpaenichthys marmoratus Girard, 1854 (Osteichthyes, Scorpaeniformes): proposed conservation of the specific name and confirmation of authorship. R. N. Lea & W. N. Eschmeyer 132
Ameiurus Rafinesque, 1820 (Osteichthyes, Siluriformes): proposed designation of *Silurus lividus* Rafinesque, 1820 (= *Pimelodus natalis* Lesueur, 1819) as the type species. R. M. Bailey & G. R. Robins 135
Hyla chrysoscelis Johnson, 1961 (Amphibia, Anura): proposed conservation and designation of a neotype. H. M. Smith, K. T. Fitzgerald & L. J. Guillette, Jr . . 138
Camelus Linnaeus, 1758 (Mammalia, Artiodactyla): proposed designation of *Camelus bactrianus* Linnaeus, 1758 as type species. N. Erridge 141

Comments

On the proposed conservation of the name *Ctenopoma oxyrhynchum* Boulenger, 1902 (Osteichthyes, Perciformes) by the suppression of *C. weeksii* Boulenger, 1896. C. J. Ferraris, Jr; S. M. Morris 143
On the suggested introduction of 'Protected Works' (P. F. S. Cornelius). R. L. Manuel; G. A. Boxshall 144
On the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington. M. N. Hutchinson; A. Dubois, R. Bour, E.-R. Brygoo, J. Lescure, P. Bouchet & S. Tillier; V. B. Meyer-Rochow; C. J. Birrel, L. Dodds, P. Evans, E. J. Nield, R. Peters, D. Sell, D. Shannon; M. King; L. B. Holthuis; M. J. Tyler; supporting letters from 81 persons 145
On the proposed conservation of *Platanista* Wagler, 1830 (Mammalia, Cetacea). J. E. Heyning & L. G. Barnes 153

Rulings of the Commission

Opinion 1484. *Trypanosoma brucei* Plimmer & Bradford, 1899 (Protista, Mastigophora) 154
Opinion 1485. *Filellum serpens* Hassall, 1848 (Cnidaria, Hydrozoa) 155
Opinion 1486. *Tubulanus* Renier, [1804] and *T. polymorphus* Renier, [1804] (Nemertea) 157
Opinion 1487. *Megalonaias* Utterback, 1915 (Mollusca, Bivalvia) 159
Opinion 1488. *Heriaeus* Simon, 1875 (Arachnida, Araneae) 160
Opinion 1489. *Biformalia vittata* Sjöstedt, 1920 (currently *Phaulacridium vittatum*: Insecta, Orthoptera) 162
Opinion 1490. *Phisis* Stål, 1861 and *Teuthras* Stål, 1874 (Insecta, Orthoptera, Grylloptera) 164
Opinion 1491. *Micronecta griseola* Horváth, 1899 (Insecta, Heteroptera) 165
Opinion 1492. *Corixa albifrons* Motschulsky, 1863 (currently *Micronecta albifrons*; Insecta, Heteroptera) 167
Opinion 1493. *Geonemus* Schoenherr, 1833 (Insecta, Coleoptera) 168
Opinion 1494. *Leptura marginata* Fabricius, 1781 (currently *Acmaeops marginata*; Insecta, Coleoptera) 170
Opinion 1495. *Colydium castaneum* Herbst, 1797 (currently *Tribolium castaneum*; Insecta, Coleoptera) 171
Opinion 1496. *Simulia ferruginea* Wahlberg, 1844 (currently *Helodon ferrugineus*; Insecta, Diptera) 173
Opinion 1497. *Opius* Wesmael, 1835 (Insecta, Hymenoptera) 175

Opinion 1498. *Cornalatus* Attems, 1931 (Diplopoda, Polydesmida) 176
Opinion 1499. *Lepralia punctata* Hassall, 1841 (currently *Cribrilina punctata*; Bryozoa, Cheilostomata) 177
Opinion 1500. *Cobitis* Linnaeus, 1758 (Osteichthyes, Cypriniformes) 178
Direction 123. The Sowerbys' *Mineral Conchology of Great Britain*: Official List entry authorised 180

Notices 181
The International Code of Zoological Nomenclature 182
Classical Adviser to the Commission 182
Letter: Increased nomenclatural stability through Lists of Names in Current Use. D. L. Hawksworth 183

Applications

Septotrochammina Zheng, 1979 (Foraminiferida): proposed designation of *Remaneica gonzalezi* Seiglie, 1964 as the type species. A. R. Loeblich, Jr & H. Tappan Loeblich 186
Pleuromma princeps Scott, 1894 (currently *Gaussia princeps*; Crustacea, Copepoda): proposed conservation of the specific name. K. Hulsemann 188
ACRIDIDAE Karny, 1907, OEDIPODIDAE Walker, 1870 and LOCUSTIDAE Latreille, 1802 (Insecta, Orthoptera): proposed order of precedence. K. H. L. Key 191
Bruchus Linnaeus, 1767, *Ptinus* Linnaeus, 1767 and *Mylabris* Fabricius, 1775 (Insecta, Coleoptera): proposed conservation. L. Borowiec 194
Coryphium angusticolle Stephens, 1834 (Insecta, Coleoptera): proposed conservation of both the generic and specific names. L. Zerche 197
Tachina orbata Wiedemann, 1830 (currently *Peribaea orbata*; Insecta, Diptera): proposed confirmation of neotype designation. R. W. Crosskey & H. Shima . . 199
Tenthredo zonula Klug, 1817 (Insecta, Hymenoptera): proposed conservation of the specific name. A. Taeger 202
Saccopharynx Mitchill, 1824 (Osteichthyes, Saccopharyngiformes): proposed conservation. W. N. Eschmeyer & C. R. Robins 204
ICHTHYOPHIIDAE Taylor, 1968 (Amphibia, Gymnophiona): proposed conservation. M. Wilkinson & R. A. Nussbaum 207
Thorius pennatulus Cope, 1869 (Amphibia, Caudata): proposed conservation of the specific name. H. M. Smith, J. Hanken & D. Chiszar 210
Semioptera wallacii Gray, 1859 (Aves, Paradisaeidae): proposed confirmation as the correct spelling. M. LeCroy 212
Mus musculus domesticus Schwarz & Schwarz, 1943 (Mammalia, Rodentia): proposed conservation. G. B. Corbet 214

Comments

Amendment to a published comment on the proposed suppression of three works by R. W. Wells and C. R. Wellington. A. E. Greer 216
On Pragmatypes: a reply to Dr G. Hahn. R. H. L. Disney & Y. Z. Erzinclioglu . . 216
On the proposed conservation of *Borelis* de Montfort, 1808 (Foraminiferida), and on the neotype of its type species. F. T. Banner 217
On the proposal to set aside the status of the putative type specimen of *Silurus felis* Linnaeus, 1766 (currently *Ariopsis felis*; Osteichthyes, Siluriformes). A. Wheeler . 219
On the family name for the storm petrels (Aves). W. R. P. Bourne 221
On the proposed conservation of the specific name of *Euryotis brantsii* A. Smith, 1834 (Mammalia, Rodentia). D. Kock 223
On the proposed conservation of *Platanista* Wagler, 1830 (Mammalia, Cetacea). J. E. Heyning & L. G. Barnes 223

Rulings of the Commission

Opinion 1501. *Alveolina* d'Orbigny, 1826 (Foraminiferida): *Oryzaria boscii* Defrance in Bronn, 1825 designated as the type species 224

Opinion 1502. *Conus fergusoni* G. B. Sowerby III, 1873 (Mollusca, Gastropoda): specific name conserved 226
Opinion 1503. PSEUDOCALANIDAE Sars, 1901 (Crustacea, Copepoda): not to be given precedence over CLAUSOCALANIDAE Giesbrecht, 1892 228
Opinion 1504. BERYTIDAE Fieber, [1851] and *Berytinus* Kirkaldy, 1900 (Insecta, Heteroptera): conserved 230
Opinion 1505. *Sigara scholtzi* Fieber, [1860] (currently *Micronecta* (*Dichaetonecta*) *scholtzi*; Insecta, Heteroptera): specific name conserved 233
Opinion 1506. *Oncomera* Stephens, 1829 (Insecta, Coleoptera): *Dryops femorata* Fabricius, 1792 designated as the type species 235
Opinion 1507. *Musca marginalis* Wiedemann, 1830 (currently *Chrysomya marginalis*; Insecta, Diptera): specific name conserved 236
Opinion 1508. *Simulium austeni* Edwards, 1915 (Insecta, Diptera): not to be given precedence over *Simulium posticatum* Meigen, 1838 237
Opinion 1509. *Paraphytomyza* Enderlein, 1936 (Insecta, Diptera): *Phytagromyza luteoscutellata* de Meijere, 1924 designated as the type species 238
Opinion 1510. *Microgaster* Latreille, 1804 (Insecta, Hymenoptera): *Microgaster australis* Thomson, 1895 designated as the type species 239
Opinion 1511. *Halictus costulatus* Kriechbaumer, 1873 (currently *Lasioglossum costulatum*; Insecta, Hymenoptera): specific name conserved 241
Opinion 1512. *Desorella* Cotteau, 1855 (Echinodermata, Echinoidea): confirmation of *Hyboclypus elatus* Desor, 1847 as the type species 242
Opinion 1513. *Synapturanus* Carvalho, 1954 (Amphibia, Anura): *Synapturanus mirandaribeiroi* Nelson & Lescure, 1975 designated as the type species 243
Opinion 1514. *Liasis* Gray, 1842 (Reptilia, Serpentes): *Liasis mackloti* Duméril & Bibron, 1844 designated as the type species 244
Opinion 1515. LARIDAE Rafinesque Schmaltz, 1815 (Aves) and LARINI LeConte, 1861 (Insecta, Coleoptera): homonymy removed 245
Opinion 1516. *Taeniolabis* Cope, 1882 (Mammalia, Multituberculata): *Polymastodon taoensis* Cope, 1882 designated as the type species 247
Opinion 1517. *Viverravus gracilis* Marsh, 1872 (Mammalia, Carnivora): generic and specific names conserved 248

Notices 249
Election of new Commissioners 251
Financial Report for 1987 252

Applications

Orbitolina d'Orbigny, 1850 (Foraminiferida): proposed confirmation of *Orbulites concava* Lamarck, 1816 as the type species. R. Schroeder & M. D. Simmons . . 254
Hapalorhynchus beadlei Goodman, 1987 (Trematoda, Digenea): proposed replacement of the holotype by a lectotype. T. R. Platt 258
Phyllodoce (Carobia) rubiginosa Saint-Joseph, 1888 (currently also *Nereiphylla rubiginosa*; Annelida, Polychaeta): proposed conservation of the specific name. F. Pleijel 260
Fizesereneia Takeda & Tamura, 1980 (Crustacea, Decapoda): proposed confirmation of *Troglocarcinus heimi* Fize & Serène, 1956 as the type species. R. K. Kropp . . 262
Bodotria Goodsir, 1843 (Crustacea, Cumacea) : proposed conservation. M. Bacescu & L. B. Holthuis 264
Iphinoe Bate, 1856 (Crustacea, Cumacea): proposed conservation. M. Bacescu & L. B. Holthuis 267
Leucon Krøyer, 1846 (Crustacea, Cumacea): proposed conservation. M. Bacescu & L. B. Holthuis 270
Aleuropteryx Löw, 1885 (Insecta, Neuroptera): proposed designation of *Aleuropteryx loewii* Klapálek, 1894 as the type species. J. D. Oswald & M. Meinander 272

Sialis Latreille, 1802 (Insecta, Megaloptera): proposed conservation by the confirmation of *Phryganea phalaenoides* Linnaeus, 1758 as the type species of *Semblis* Fabricius, 1775 (Insecta, Trichoptera). J. D. Oswald 275
Ophonus Dejean, 1821 and *Tachys* Dejean, 1821 (Insecta, Coleoptera): proposed designation of type species. H. Silfverberg 278
Papilio carthami Hübner, [1813] and *Syrichthus serratulae major* Staudinger, 1879 (currently both in *Pyrgus*; Insecta, Lepidoptera): proposed conservation of the names *carthami* and *major*. R. de Jong 280
Rapport sur les Myodaires du Docteur Robineau Desvoidy, (1826): proposed nomenclatural suppression. C. W. Sabrosky 283
Physcus Howard, 1895 (Insecta, Hymenoptera): proposed conservation. D. Rosen, T. Rivnay & G. Viggiani 288

Comments

On the proposed confirmation of the spelling of LIPARIDAE Gill, 1861 (Osteichthyes, Scorpaeniformes). L. B. Holthuis; A. Wheeler 292

Indexes

Authors in present volume 45 (1988) 293
Names placed on Official Lists and Indexes in rulings of the Commission published in volume 45 (1988) 295
Key names in Applications and Comments published in volume 45 (1988) 299
Corrigenda 304
Publication dates and pagination of present volume 45 (1988) 304
Instructions to Binder 304
Table of Contents of present volume 45 (1988) I

Volume 45, Part 1, 25 March 1988 pp. 1–88 ISSN 0007–5167

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 1988 is £57 or $110, postage included. All manuscripts, letters and orders should be sent to:

The Executive Secretary,
International Commission on Zoological Nomenclature,
c/o British Museum (Natural History),
Cromwell Road,
London, SW7 5BD, U.K. (Tel. 01-938 9387)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Officers

President	Dr W. D. L. Ride (*Australia*)
Vice-President	Prof Dr R. Alvarado (*Spain*)
Secretary-General	Dr L. B. Holthuis (*The Netherlands*)
Executive Secretary	Dr P. K. Tubbs (*United Kingdom*)

Members

Prof Dr R. Alvarado (*Spain*)
Dr F. M. Bayer (*U.S.A.*)
Dr G. Bernardi (*France*)
Dr L. R. M. Cocks (*U.K.*)
Dr H. G. Cogger (*Australia*)
Prof J. O. Corliss (*U.S.A.*)
Prof C. Dupuis (*France*)
Dr G. C. Gruchy (*Canada*)
Prof Dr G. Hahn (*Fed. Rep. Germany*)
Prof Dr O. Halvorsen (*Norway*)
Mr D. Heppell (*U.K.*)
Dr L. B. Holthuis (*The Netherlands*)
Dr Z. Kabata (*Canada*)
Prof Dr O. Kraus (*Fed. Rep. Germany*)
Dr P. T. Lehtinen (*Finland*)
Mr R. V. Melville (*U.K.*)
Dr M. Mroczkowski (*Poland*)
Dr W. D. L. Ride (*Australia*)
Prof J. M. Savage (*U.S.A.*)
Prof Dr R. Schuster (*Austria*)
Dr Y. I. Starobogatov (*U.S.S.R.*)
Dr F. C. Thompson (*U.S.A.*)
Dr V. A. Trjapitzin (*U.S.S.R.*)
Dr Shun-Ichi Uéno (*Japan*)
Prof A. Willink (*Argentina*)

Secretariat

Dr P. K. Tubbs (*Executive Secretary and Editor*)
Mr J. D. D. Smith, B.Sc., B.A. (*Scientific Administrator*)
Miss R. A. Cooper, B.Sc. (*Zoologist*)
Mrs A. Gentry, B.Sc. (*Zoologist*)

Officers of the International Trust for Zoological Nomenclature

Prof H. B. Whittington, F.R.S. (*Chairman*)
Dr M. K. Howarth (*Secretary and Managing Director*)

© International Trust for Zoological Nomenclature 1988

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 45, part 1 (pp. 1–88) 25 March 1988

Notices

(a) *Invitation to comment*. The Commission is entitled to start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. 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, in duplicate, to the Secretary of the Commission as quickly as possible, and in any case in time to reach the Secretary within twelve months of the date of publication of the application.

(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 44, part 4 (published on 11 December 1987):

(1) *Coryphium angusticolle* Stephens, 1834 (Insecta, Coleoptera): proposed conservation of both generic and specific names. (Case 2627). L. Zerche.

(2) *Tenthredo zonula* Klug, 1814 (Insecta, Hymenoptera): proposed conservation of specific name. (Case 2628). A. Taeger.

(3) *Physcus* Howard, 1895 (Insecta, Hymenoptera): proposed conservation. (Case 2629). D. Rosen, G. Viggiani & T. Rivnay.

(4) *Ameiurus* Rafinesque, 1820 (Osteichthyes, Siluriformes): proposed designation of *Silurus lividus* Rafinesque, 1820 as type species. (Case 2631). R. M. Bailey & C. R. Robins.

(5) *Tachina orbata* Wiedemann, 1830 (currently *Peribaea orbata*; Insecta, Diptera): proposed confirmation of neotype designation. (Case 2632). R. W. Crosskey & H. Shima.

(6) *Phyllodoce (Carobia) rubiginosa* Saint-Joseph, 1888 (currently also *Nereiphylla rubiginosa*; Polychaeta): proposed conservation of the specific name. (Case 2633). F. Pleijel.

(7) *Xeromunda* Di Mariadi di Monterosato, 1892 (Mollusca, Gastropoda): proposed designation of *Helix candiota* Mousson, 1854 as type species. (Case 2634). F. Giusti & G. Manganelli.

(d) *Rulings of the Commission.* Each Opinion, Declaration and Direction 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 III International Congress of Zoology, and at present consists of 25 zoologists from 15 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 its members are elected at open meetings held in conjunction with Congresses of IUBS or of its associated bodies. 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 all animals according to taxonomic judgments'. The latest (Third) Edition was published in 1985 in English and French by the International Trust for Zoological Nomenclature, acting on behalf of the Commission.

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 super-family. Its provisions can, if necessary, be waived or modified in their application to a particular case; however, this must never be done by an individual but only by the Commission, acting on behalf of all zoologists. Proposals for any such action should be addressed to the Commission Secretariat, and should follow the instructions on the inside back cover of the *Bulletin.*

The Bulletin of Zoological Nomenclature is published four times each year. 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. 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*, which also contains articles and notes relevant to zoological nomenclature; such contributions may be sent to the Secretariat.

The Commission's rulings are summarised in the *Official Lists and Indexes of Names and Works in Zoology*; a single volume covering the period 1895–1985 was published in 1987.

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

The International Trust for Zoological Nomenclature is a charity (non-profit making company) registered in the U.K. The Secretariat of the Commission is at present located in London, and the Trust is established there for legal reasons to handle the financial affairs of the Commission. The income of the Trust comes from the sale of publications (*Code, Bulletin* and *Official Lists*), from support by national and

international institutions, and from donations by societies and individuals. The level of income has been, and remains, a constraint on the services given to zoology by the Commission, and donations to the Trust are gratefully received.

Addresses and specialist fields of members of the Commission

Prof Dr Rafael ALVARADO (*Departamento de Zoologia, Facultad de Ciencias, Universidad de Madrid, Madrid 28040, Spain*) (Vice-President) Echinodermata

Dr F. M. BAYER (*U.S. National Museum of Natural History, Washington, DC 20560, U.S.A.*) Corallia; Systematics

Dr G. BERNARDI (*Muséum National d'Histoire Naturelle, 45 rue de Buffon, 75005 Paris, France*) Lepidoptera

Dr L. R. M. COCKS (*British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K.*) Brachiopoda

Dr H. G. COGGER (*Australian Museum, Sydney 2000, N.S.W., Australia*) Reptilia

Prof John O. CORLISS (*P.O. Box 53008, Albuquerque, New Mexico 87153, U.S.A.*) (Councillor) Protista: Systematics

Prof C. DUPUIS (*Muséum National d'Histoire Naturelle, 45 rue de Buffon, 75005 Paris, France*) Heteroptera

Dr G. C. Gruchy (*Canadian Conservation Institute, 1030 Innes Road, Ottawa, K1A 0M8, Canada*) Ichthyology

Prof Dr Gerhard HAHN (*Fachbereich Geowissenschaften, D.355 Marburg (Lahn), W. Germany*) Palaeontology

Prof Dr O. HALVORSEN (*Institute of Biology and Geology, University of Tromsö, P.O. Box 790, N-9001 Tromsö, Norway*) Parasitology

Mr David HEPPELL (*Department of Natural History, Royal Scottish Museum, Edinburgh EH1 1JF, U.K.*) (Councillor) Mollusca

Dr L. B. HOLTHUIS (*Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands*) (Councillor) Crustacea

Dr Z. KABATA (*Canada Department of Fisheries and Oceans, Pacific Biological Station, Nanaimo, B.C., V9R 5K6, Canada*) Copepoda

Prof Dr Otto KRAUS (*Zoologisches Institut und Zoologisches Museum, 2000 Hamburg 13, W. Germany*) Arachnida; Myriapoda

Dr P. T. LEHTINEN (*Zoological Museum, Department of Biology, University of Turku, SF-20500 Turku 50, Finland*) Arachnida

Mr R. V. MELVILLE (*93 Lock Road, Ham, Richmond, Surrey TW10 7LL, U.K.*) Palaeontology

Dr M. MROCZKOWSKI (*Instytut Zoologii, Polska Akademia Nauk, ul. Wilcza 64, Warsaw, Poland*) Coleoptera

Dr W. D. L. RIDE (*Department of Geology, The Australian National University, P.O. Box 4, Canberra, A.C.T. 2600, Australia*) (President) Mammalia

Prof Jay M. SAVAGE (*Department of Biology, University of Miami, P.O. Box 249118, Coral Gables, Florida 33124, U.S.A.*) (Councillor) Herpetology

Prof Dr R. SCHUSTER (*Institut für Zoologie, Universität Graz, Universitätsplatz 2, A-8010 Graz, Austria*) Acari

Dr Y. I. STAROBOGATOV (*Zoological Institute, Academy of Sciences, Leningrad 199164, U.S.S.R.*) Mollusca; Crustacea

Dr F. C. THOMPSON (*Systematic Entomology Laboratory, USDA, c/o U.S. National Museum, Washington, DC 20560, U.S.A.*) Diptera

Dr V. A. TRJAPITZIN (*Zoological Institute, Academy of Sciences, Leningrad 199034, U.S.S.R.*) Entomology

Dr Shun-Ichi UENO (*Department of Zoology, National Science Museum, Hyakunincho 3-23-1 Shinjukuku, Tokyo 160, Japan*) Entomology

Prof A. WILLINK (*Universidad Nacional de Tucumán, Instituo Miguel Lillo, Miguel Lillo 205, 4000 Tucumán, Argentina*) Hymenoptera

International Trust for Zoological Nomenclature

Members

Professor H.B. Whittington, F.R.S. *(Chairman)*
Dr M.K. Howarth *(Secretary and Managing Director)*
Prof Per Brinck
Prof J.H. Callomon
Dr P.F.S. Cornelius
Prof C.B. Cox
The Rt. Hon. the Earl of Cranbrook, F.L.S., F.Z.S.
Dr R.W. Crosskey
Sir Arthur Drew, K.C.B.
Sir Charles Fleming, K.B.E., F.R.S.
Prof J. Forest
Col. Francis J. Griffin, O.B.E.
Dr G.C. Gruchy
Dr R.H. Hedley, C.B., F.I.Biol.
Dr L.B. Holthuis
Dr F.G.W. Jones
Prof Dr O. Kraus
Dr M. Luc
Dr R.B. Manning
Mr R.V. Melville
Dr I.W.B. Nye
Dr W.D.L. Ride *(ex officio)*
Dr E.P.F. Rose, T.D.
Dr G.B. White
Dr A.G. Marshall *(Observer for the Royal Society)*

Officers

Dr P.K. Tubbs, M.A., Ph.D. *(Scientific Controller)*
Mr J.D.D. Smith, B.Sc., B.A. *(Scientific Administrator)*
Miss R.A. Cooper, B.Sc. *(Zoologist)*
Mrs A. Gentry, B.Sc. *(Zoologist)*

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

The following members of the Commission reach the end of their terms of service at the close of the XXIII General Assembly of the International Union of Biological Sciences to be held in Canberra in October 1988: Prof Dr R. Alvarado (Spain; specialist field Echinodermata); Dr G. Bernardi (France; Lepidoptera); Prof C. Dupuis (France; Heteroptera) and Dr L. B. Holthuis (The Netherlands; Crustacea). A further vacancy arises from the death of Prof B. S. Zheng (People's Republic of China; Ichthyology).

The addresses and specialist fields of the present members of the Commission may be found in the *Bulletin of Zoological Nomenclature*, **44**(1): 2–3 (March 1987). Under Article 3*b* of the Commission's Constitution a member whose term of service has terminated is not eligible for immediate re-election unless the Council of the Commission has decided to the contrary.

The Commission now invites nominations, by any person or institution, of candidates for membership. Article 2*b* of the 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.) which use zoological names).

Nominations, giving the date of birth, nationality and qualifications (by the criteria mentioned above) of each candidate should be sent as soon as possible to:

The Executive Secretary, International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K.

The International Code of Zoological Nomenclature

The Third Edition (1985) supersedes all earlier versions, and incorporates many changes.

Copies may be obtained from:
Natural History Publications, British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K. Price £17.50 plus £1.50 postage.

Orders from North America should be sent to:
University of California Press, Berkeley 94720, California, U.S.A.

Proposed amendments to the 1985 Code

Possible amendments will be considered in October 1988 by the Commission at its meeting in Canberra. Suggestions are invited, and should be sent to the Executive Secretary as soon as possible.

Official Lists and Indexes of Names and Works in Zoology

A revised and updated edition of the *Official Lists and Indexes of Names and Works in Zoology* was published in 1987. For the first time all the names and works on which the International Commission on Zoological Nomenclature has ruled since it was set up in 1895 are brought together in a single volume. Entries are arranged in four sections giving in alphabetical order the family-group names, generic names, specific names and titles of works which have been placed on the Official Lists or the Official Indexes. There are about 9,900 entries of which 134 are for works. In addition, there is a full systematic index and a reference list to all relevant Opinions and Directions. The volume is 366 pages, size A4, casebound.

Copies can be ordered from:

The International Trust for Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K. Price £60 or $110

or

The American Association for Zoological Nomenclature, c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. Price $110 ($100 to members of A.A.Z.N.)

An appraisal of the Zoology of C. S. Rafinesque

Alwyne Wheeler
Department of Zoology, British Museum (Natural History), London SW7 5BD, U.K.

The name Rafinesque will be familiar to many zoologists as the author of a large number of names of European and North American animals. The attribution of these names and the recognition of Rafinesque that this entails is due possibly as much to the application of the Principle of Priority as to acknowledgement of the perspicacity of the author in recognising undescribed animals. It is, however, a reversal of the situation which obtained during his life-time, when an atmosphere of animosity and mistrust led to wilful neglect of his work by many of his contemporaries and immediate successors.

Constantine Samuel Rafinesque is said to have been born on 22 October 1783 (see Fitzpatrick, 1911), although the year of his birth may have been 1784. In his autobiography, *A Life of Travels* (Rafinesque, 1836), he made no reference to his birth date, although specific enough as to the place — 'Galata, a suburb of Constantinople' (now Istanbul). His father was a partner in the Marseilles trading company of Laflèche and Rafinesque, his business taking him to various parts of western Asia and the Mediterranean borderlands. Rafinesque's mother's maiden name was Schmaltz, and, as he reports, she was born in Greece but of a German family from Saxony. His early conscious childhood was spent mainly in the vicinity of Marseilles with short visits to Livorno (Leghorn) in Italy, and later to Genoa and Pisa. In March 1802 Rafinesque sailed from Leghorn to Philadelphia but he returned to Italy in 1805.

This first visit to North America allowed Rafinesque to explore (mainly on foot) the neighbourhood of Philadelphia, southwards to Chesapeake Bay and Virginia and inland to the Allegheny Mountains, visiting naturalists, inspecting herbaria and museum collections, and collecting. On his return to Italy he claimed to have made a collection of 10,000 herbarium specimens of 2,400 species, as well as zoological specimens.

In March 1805 he sailed for Sicily, where he spent the next ten years, first acting as Secretary and Chancellor to the Consul of the United States of America, but from 1808 trading as a merchant mainly in herbs. During this period Sicily became the residence of the Neapolitan Court, thus isolating it from Italy and France and bringing it under British influence. As a consequence of the Napoleonic wars there was an extensive British naval and military presence on the island. Amongst the latter was the naturalist William Swainson, a commissary officer in the Army, with whom Rafinesque made friends and made several excursions. The period in Sicily was highly productive and several of his major publications date from the decade ending in 1815, when he sailed again for North America.

His arrival on 2 November 1815 was marred by the loss of his collections, library, manuscripts, clothes, and his share of the cargo in a ship-wreck off Long Island. He was subsequently befriended by Samuel Latham Mitchill of New York, and through him was introduced to many influential scientists and to medical society. Until 1817 Rafinesque was occupied with re-establishing his trading business, developing contacts

with scientists in the area, and on local exploration. In 1818 he set out for a 2,000 mile journey, again mostly on foot, which was to take him west of the Alleghenies, and as far as Kentucky and Illinois.

From 1819 to 1825 he was a professor of modern languages and natural sciences at Transylvania University, Lexington, Kentucky. From this base he explored Kentucky, penetrating into Tennessee, collecting natural history material and interesting himself in archaeology and ethnography. Leaving Lexington, he settled in Philadelphia where his career as naturalist and collector, lecturer, and traveller continued but his business gradually failed. He died on 18 September 1840 in Philadelphia, after living in poverty and increasingly bad health for several years. His collections and library were sold at public auction. Call (1875) claimed the minerals and mollusc shells were without labels and were valueless. A collection of marine worms was later acquired by the Academy of Natural Sciences of Philadelphia (Call, 1875). Rafinesque's herbarium, said to contain 50,000 specimens, was damaged by mice and other pests before his death; much of it was later discarded by 'contemptuous curators' (Ewan, 1975).

Rafinesque's interests embraced many disciplines in natural history, and although he described new taxa in mammals, birds, reptiles, amphibians and several invertebrate groups his major zoological publications were concerned with fishes and molluscs. The most important publications fell into two chronological and geographical periods, 1810 on the fauna of Sicily and 1819–20 on the fauna of the Ohio River.

His *Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia* was published at Palermo in 1810. It comprises 105 numbered pages of text and 20 (folded) leaves of illustrations. The first 69 pages are on zoology (pp. 10–69 and pl. I–XVII being concerned with fishes, of which 155 species are described). This book is said by Fitzpatrick (1911) to have been issued in two parts, the first part, which is the zoological section of the book, being published in 1809 and comprising text pages 3–69. Fitzpatrick reproduced title pages of the *Caratteri*. . . (his Plates III and IV), showing both the 1809 and 1810 dates which also have differing texts, but the only evidence that he had for publication in 1809 was based on a single 'carelessly rebound and arranged' copy in the Library of Congress. His suggestion that the whole zoological part of the work was published with the 1809 title page was derived from this copy, which had presumably been arranged for binding so that 'Prima parte' (the heading on page 5) followed the 1809 title page, and 'Seconda parte' (the heading on page 71) followed the 1810 title page. In fact, the division of the book into two parts was simply to make a distinction between the zoological and the botanical texts.

By examining an uncut, unbound copy of the book in the Rijksmuseum van Natuurlijke Historie, Leiden, Holthuis & Boeseman (1977) were able to show that the *Caratteri*. . . was not published in two parts. They concluded that the first five sheets were set in type and the first three printed, but with Rafinesque's decision to dedicate the book to Antonino Bivona Bernardi a new first sheet had to be set and printed, including a new title page and half-title. They argued from measurement of the type area that the break between the 1809 and the 1810 printings occurred between pages 40 and 41 (i.e. after the fifth sheet), and this is confirmed by a noticeable difference in the texture of the paper at this opening in the BM(NH) copy. Taxonomists can therefore be reassured that these bibliographic niceties confirm that the whole work was published in 1810 despite the existence of cancelled title-pages dated a year earlier.

The delayed publication of the *Caratteri...* was explained by Rafinesque (1836) as due to his exploration of Mount Etna and a subsequent sickness.

Rafinesque's *Indice d'ittiologia Siciliana* was also published in 1810. It apparently postdates the *Caratteri...* as the dedication is dated 15 May 1810, and four pages of corrections and additions (pp. 66–69) are dated 1 September 1810. The numerous textual references to the *Caratteri...* would have been made possible by the delay between printing and publishing the latter work. The *Indice...* contains 70 pages of text and two folded plates; 376 species of fishes are named in the text with references to their description by Rafinesque in *Caratteri...* or to other authors, but 34 are descriptions of new taxa (in the Appendice), 6 undescribed species are named in the Supplemento and a further 7 species are described in the 'Correzzioni, ed aggiunte'. Although the *Indice...* might appear to be merely a digest of the larger work it has considerable nomenclatural importance as an original publication.

The systematic arrangement of the fishes differs totally from that adopted in the *Caratteri...* but this might have been due to the influence of William Swainson, who supervised the printing of the *Indice...* at Messina (Rafinesque, 1836).

The taxonomic purist might also wish to note that both the books published in Sicily give the author's name as C. S. Rafinesque Schmaltz, and the new taxa therein should be so attributed. As Rafinesque (1836) explained in his autobiography, prudence dictated that he wrote in Italian rather than his native French during the Napoleonic wars, and by the addition of his mother's family name, Schmaltz, he hoped to pass for an American citizen.

The second period of zoological taxonomic activity was marked by the publication of his work on the fauna of the River Ohio. In 1820 the *Ichthyologia Ohiensis, or natural history of the fishes inhabiting the River Ohio and its tributary streams* (Lexington, Kentucky) was published. An extremely rare book (Fitzpatrick, 1911, lists only 14 copies known to him), it was subsequently reprinted with introductory matter by Call (1899). The text was originally printed in nine instalments in the *Western Review and Miscellaneous Magazine* (Lexington, Kentucky) between December 1819 and November 1820, a sequence which suggests that the book may not have been published until the end of 1820. The new names for fishes published by Rafinesque therefore date from the journal publication, not the book. Dates of publication for the *Western Review and Miscellaneous Magazine* were given by Jordan (1877) and Call (1899). They are reproduced here from Jordan with references to the page numbers in *Ichthyologia Ohiensis:*

Ichth. Ohiensis	*Magazine:* part, pagination, date of publication	
1–13	Vol 1, pt 1, pp. 305–313	December 1819
13–29	2, pp. 361–377	January 1820
?–37	3, pp. ?–57	February(?) 1820
37–45	Vol 2, pt 4, pp. 169–177	April 1820
45–53	5, pp. ?–243	May 1820
53–60	6, pp. 299–307	June 1820
61–69	7, pp. 355–363	July 1820
69–77	Vol 3, pt 8, pp. 165–173	October 1820
77–84	9, pp. 244–252	November 1820

Jordan (1877) also gave a list of the new genera and species names proposed by Rafinesque for North American fishes in several earlier papers in the *American Monthly Magazine and Criticial Review* (Rafinesque 1817, 1818a,b,c,d), the *Journal of the Academy of Natural Sciences of Philadelphia* (Rafinesque, 1818e), the *Journal de Physique, de Chimie et d'Histoire Naturelle* (Rafinesque, 1819) and the *Quarterly Journal of Science, Literature and Arts of the Royal Institution* (Rafinesque, 1820b). He also attempted to identify all the taxa of freshwater fishes described by Rafinesque.

The year 1820 also saw the publication of Rafinesque's monograph on the bivalve shells of the River Ohio published in *Annales Générales des Sciences Physiques* in Belgium (Rafinesque, 1820c). This paper included descriptions of 12 genera and 68 undescribed species of unionid mollusc from the Ohio. It was reprinted (or reissued with titled cover and changed pagination) as *Monographie des coquilles bivalves et fluviatiles de la rivière Ohio,* under the imprint of Weissenbrach père, rue du Musée, Bruxelles (Fitzpatrick, 1911, no. 363). Both printings contained three uncoloured plates.

In 1832 C. A. Poulson published an English translation as *A monograph of the fluviatile bivalve shells of the River Ohio containing twelve genera & sixty-eight species* (Rafinesque, 1832). Fitzpatrick (1911, no. 608) had examined ten copies, all of which had the frontispiece uncoloured; the copy in BM(NH) has the single plate as a coloured frontispiece. Perhaps the most significant part of Poulson's introduction is his statement that Rafinesque had deposited most of the shells described with his labels and references in Poulson's collection. This is one of the few cases where type material was kept by Rafinesque.

A second separate edition in French was published in Paris with both a frontispiece and all three plates.

In his lifetime and in the decades after his death Rafinesque was strongly criticised and even ridiculed by many of his contemporaries. The attitude to his scientific standing can be summed up by the ornithologist Elliott Coues's reputed suggestion that the adjective 'rafinesque' should stand alongside grotesque and picturesque as descriptive of his work (Starling, 1978). One factor in this ridicule was certainly the way in which he described several fictitious fishes from the Ohio River from drawings provided by Audubon, although more recent commentators suggest that this reflects more on the character of Audubon than on Rafinesque's credibility. Other factors were the diversity of his interests, his industry, the frequent superficiality of his descriptions, and the prodigal way he described new taxa (Ewan (1975) claims that he proposed 6,700 binomials of which Starling (1978) says 3,000 were plants). His hyperactivity and apparent lack of critical judgement in his approach to taxonomy caused his North American peers to have serious reservations about his work. As a result, after 1820 Benjamin Silliman, the editor of the *American Journal of Science,* refused to accept papers from him for this the leading scientific journal in the continent. When Silliman returned all 18 of Rafinesque's unpublished manuscripts the latter assumed that the motive was jealousy at the quantity of his discoveries rather than a desire on the part of the editor to maintain standards.

Rafinesque was undoubtedly an eccentric, single-minded in his passion for science (which extended through many disciplines beyond natural history), and could possibly be regarded as a genius. Like others of this calibre he lacked a sense of proportion and critical ability, all of which made him difficult to comprehend.

However, he lived in a region and an era which gave him no advantages. His peripatetic childhood and youth deprived him of much formal education. Europe at the time was racked firstly by the French revolution and then by the Napoleonic wars and, being of French nationality but resident in Sicily, he was isolated at the outset of his career from close contact with the thriving natural science of France exemplified by Georges Cuvier and Antoine Risso. During his years in North America Rafinesque became alienated from many of the leading naturalists and this in turn isolated him from the influence of practised taxonomists and natural scientists such as his contemporaries Amos Eaton, John Torrey, Thomas Say, and Charles Alexander Lesueur, to the detriment of his work. In addition, after he left Lexington, until his death he suffered increasingly from the ill health and crushing poverty which ended in the unmarked grave in Philadelphia in 1840.

In the present century taxonomists, prompted by the need to establish the priority of Rafinesque's scientific names, have reassessed his work to produce a more favourable conclusion. Holthuis (1954) noted that Rafinesque proposed 19 new generic and 42 specific names for Crustacea of which, after critical review, he concluded that 8 generic and 21 specific names were the oldest available names for the taxa for which they had been proposed. Of these only 3 generic names and two species names were in use by carcinologists, and Holthuis (1956) proposed that the remainder of the names in Decapoda and Stomatopoda should be suppressed for the sake of nomenclatural stability. This was accepted by the International Commission on Zoological Nomenclature in Opinion 522 (1958).

Rafinesque's work on North American freshwater bivalves has received rather better treatment, and Bogan *et al.* (1984) have recently published a short assessment of his work. They show that of Rafinesque's 36 names at generic or subgeneric level and 124 species names, relatively few have been assimilated into the literature, and although on critical appraisal many will prove to be nomina dubia others may well be senior synonyms. Their work was based particularly on the 61 species of which they had type material. However, in a draft list of the Unionidae of North America prepared by Bogan, no fewer than 30 species had been described by Rafinesque.

Ichthyologists have dealt more kindly with Rafinesque's work than carcinologists or malacologists, and despite neglect of his work by Albert Günther in his influential *Catalogue of Fishes* (1859–1870), his names have been widely adopted. The names proposed for North American freshwater fishes were extensively reviewed by Jordan (1877) and subsequently have become assimilated into the literature. The checklist of fishes of North America (Robins *et al.*, 1980) attributes a total of 35 species names to Rafinesque, and several familiar genus names, such as *Etheostoma, Stizostedion, Lepomis, Ambloplites, Ictalurus, Noturus, Notropis,* and *Aplodinotus* are Rafinesque names.

From his writings on Sicilian fishes many taxa, principally European, take their names. Amongst sharks, for example, the well-known *Hexanchus, Heptranchias, Isurus, Alopias,* and *Sphyrna,* are all Rafinesque genera, as are *Tetrapturus, Naucrates,* and *Epigonus* amongst bony fishes. The reluctance of early ichthyologists to adopt some of these taxa was partly due to the absence of type specimens, Rafinesque making notes of the freshly caught fish, often in Sicilian fish markets, but not keeping the specimen. His work on North American fishes suffered from the same practice, many of his published descriptions being compiled from notes made at the time of capture from

specimens then discarded. Apart from the unionid bivalves referred to by Bogan *et al.* and the collection of marine worms in Philadelphia mentioned by Call (1875), no zoological type material of Rafinesque's has been claimed to have survived.

In conclusion, it can be said that in recent years Rafinesque has been awarded the recognition that is his due. Eccentric, uncritical, impatient, and lacking the steadying influence of contact with competent colleagues, he nevertheless made a major contribution to zoological taxonomy in both Europe and North America.

References

Bogan, A. E., Starnes, L. B. & Williams, J. D. 1984. An examination of some C. S. Rafinesque North American unionid taxa (Bivalvia: Unionidae). [Abstract]. *American Malacological Bulletin* **3**(1): 105–106.

Call, R. E. 1895. *The life and writings of Rafinesque*, xii + 227 pp; 1 pl. Filson Club, Louisville, Kentucky.

Call, R. E. 1899. *Sketch of the life, the ichthyologic work, and the ichthyologic bibliography of Rafinesque in Ichthyologia Ohiensis...* [Reprinted edition: Burrows Brothers Co., Cleveland.]

Ewan, J. 1975. Rafinesque, Constantine Samuel. *Dictionary of Scientific Biography*, **11:** 262–264.

Fitzpatrick, T. J. 1911. *Rafinesque: a sketch of his life with bibliography*, 241 pp; 31 pls. Historical Department of Iowa, Des Moines.

Holthuis, L. B. 1954. C. S. Rafinesque as a carcinologist, an annotated compilation of the information on Crustacea contained in the works of that author. *Zoologische Verhandelingen*, **25**: 1–43.

Holthuis, L. B. 1956. Proposed suppression under the plenary powers of certain names given by C. S. Rafinesque to genera and species of the orders Decapoda and Stomatopoda (Class Crustacea).... *Bulletin of Zoological Nomenclature* **12**: 227–239.

Holthuis, L. B. & Boeseman, M. 1977. Notes on C. S. Rafinesque Schmaltz's (1810) *Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia. Journal of the Society for the Bibliography of Natural History*, **8**: 231–234.

Günther, A. 1859–1870. *Catalogue of the fishes in the British Museum.* 8 vols. British Museum, London.

Jordan, D. S. 1877. Contributions to North American ichthyology. I. Review of Rafinesque's memoirs on North American fishes. *Bulletin of the U.S. National Museum* **9**: 1–53.

Rafinesque Schmaltz, C. S. 1810a. *Caratteri di alcuni nuovi generi e nuove specie di animali e piante della Sicilia con varie osservazioni sopre i medesimi*, 106 pp; xx pl. Palermo.

Rafinesque Schmaltz, C. S. 1810b. *Indice d'ittiologia Siciliana ossia...* 70 pp; 2 pl. Messina.

Rafinesque, C. S. 1817. First decade of new North–American fishes. *The American Monthly Magazine and Critical Review*, **2**(II): 120–121.

Rafinesque, C. S. 1818a. Descriptions of two new genera of North-American fishes. *The American Monthly Magazine and Critical Review*, **2**(III): 203–204.

Rafinesque, C. S. 1818b. Second decade of new North-American fishes. *The American Monthly Magazine and Critical Review*, **2**(III): 204–206.

Rafinesque, C. S. 1818c. Discoveries in natural history, made during a journey through the Western Region of the United States, by Constantine Samuel Rafinesque... *The American Monthly Magazine and Critical Review*, **3**(V): 354–356.

Rafinesque, C. S. 1818d. Further account of discoveries in natural history, in the Western States, by Constantine Samuel Rafinesque, Esq... *The American Monthly Magazine and Critical Review*, **4**(I): 39–42.

Rafinesque, C. S. 1818e. Description of three new genera of fluviatile fish, *Pomoxis*, *Sarchirus* and *Exoglossum*. *Journal of the Academy of Natural Sciences of Philadelphia*, **1**(II): 417–422.

Rafinesque, C. S. 1819. Prodrome de 70 nouveaux genres d'animaux découverts dans l'intérieur des Etats–Unis d'Amérique, durant l'année 1818. *Journal de Physique, de Chimie et d'Histoire Naturelle, et des Arts*, **88**: 417–429.

Rafinesque, C. S. 1820a. *Ichthyologia Ohiensis, or natural history of the fishes inhabiting the River Ohio and its tributary streams...* [Reprinted edition: Burrows Brothers Co., Cleveland, 1899].

Rafinesque, C. S. 1820b. Description of the Silures or catfishes of the River Ohio. *Quarterly Journal of Science, Literature, and the Arts*, The Royal Institution of Great Britain, **9**: 48–52.

Rafinesque, C. S. 1820c. Monographie des coquilles bivalves fluviatiles de la rivière Ohio, contenant douze genres et soixante–huit espèces. *Annales Générales des Sciences Physiques*, **5**: 287–322, (2 pl.).

Rafinesque, C. S. 1832. *A monograph of the fluviatile bivalve shells of the River Ohio containing twelve genera & sixty–eight species.* [Translated by C. A. Poulson.] 72 pp; 1 pl. J. Dobson, Philadelphia.

Rafinesque, C. S. 1836. *A Life of travels and researches in North America and South Europe...*, 148 pp. Philadelphia.

Robins, C. R., Bailey, R. M., Bond, C. E., Brooker, J. R., Lachner, E. A., Lea, R. N. & Scott, W. B. 1980. *A list of common and scientific names of fishes from the United States and Canada.* Special Publication, American Fisheries Society, no. 12, 174 pp.

Sterling, K. B. 1978. Introduction to *Rafinesque, autobiography and lives.* 15 pp. Arno Press, New York.

Case 2609

Madrepora limax Esper, 1797 (currently *Herpolitha limax*) and *Fungia talpina* Lamarck, 1801 (currently *Polyphyllia talpina*; both Cnidaria, Anthozoa): proposed conservation of the specific names

Bert W. Hoeksema

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is the conservation of the specific names of *Madrepora limax* Esper, 1797 and *Fungia talpina* Lamarck, 1801, two mushroom corals. The former is a junior primary homonym of *M. limax* Houttuyn, 1772 and a junior subjective synonym of *M. trilinguis* Boddaert, 1768. *F. talpina* Lamarck, 1801 is a junior subjective synonym of both *M. talpa* Houttuyn, 1772 and *M. limax* Houttuyn, 1772.

---

1. Two species of corals belonging to the FUNGIIDAE (Scleractinia) appear to have invalid names which are nevertheless accepted by most coral taxonomists and coral reef ecologists. They are common and well-known species which are widely distributed in the Indo-Pacific. They have to be dealt with together, because their nomenclatural histories have been intermingled since the last half of the eighteenth century. The present proposal aims for a stabilisation in the nomenclature of both species.

2. The nomenclatural confusion started by the appearance of a publication in Dutch by Houttuyn (1772), who based the work on Linnaeus (1758). Later (17??), Houttuyn's work appeared in another edition, but exactly when is not indicated. Müller (1775) rewrote Houttuyn's (1772) work in German.

3. Both Houttuyn and Müller referred to a publication in Latin by Pallas (1766). This publication was translated into Dutch by Boddaert (1768), who added an appendix with notes. Wilkens (1787) used Boddaert's edition to translate and edit the work of Pallas (1766) into German.

4. Houttuyn (1772, p. 116) used the name *Madrepora talpa* for (1) a species described and figured as *Fungus saxeus oblongus* by Rumphius (1750, p. 248, pl. 88, fig. 2), and, (p. 117) for (2) a specimen illustrated by Boddaert (1768, pl. 14) which the latter had assigned to a new species, *Madrepora trilinguis*. Müller (1775, p. 677) referred under *M. talpa* only to the plate given by Boddaert.

5. Von Martens (1902, p. 135) believed that the specimen figured by Rumphius belonged to the genus *Polyphyllia* Quoy & Gaimard, 1833. Boschma (1959, p. 267) provisionally referred to this specimen as *Polyphyllia talpina* (Lamarck, 1801), though indicating that it might be *Herpolitha limax* (Esper, 1797). The specimen is not mentioned in the catalogue of the Rumphius collection in Florence (Martelli, 1903) and is most likely lost. Judging by both the description and the figure of Rumphius (1750, p. 248, pl. 88, fig. 2) I believe that the specimen belongs to the species described by Lamarck (1801, p. 370) as *Fungia talpina*. The coral illustrated by Boddaert (1768,

pl. 14) is a specimen of the species now known as *Herpolitha limax* (Esper) (see below). To minimise confusion, I select the specimen figured by Rumphius (1750, pl. 88, fig. 2) as lectotype for *Madrepora limax* Houttuyn, 1772.

6. In a later publication Lamarck (1816, p. 237) followed Oken (1815, p. 74) in using the binomen *Fungia talpa* as a replacement for his *F. talpina*. Neither Oken nor Lamarck refer to the former use of the name *talpa* in *Madrepora* by Houttuyn (1772). The last author to apply the name *talpa* for *Polyphyllia talpina* (Lamarck, 1801) was Ortmann (1888, p. 179; 1889, pl. 18, fig. 12b). Although the name *talpa* Houttuyn, 1772, is the first available name given to the species illustrated by Rumphius in 1750, it is not in use anymore. After 1889 the name *talpina*, as originally used by Lamarck, has been used in many publications (a list of 33 references is held at the Commission's Secretariat). Since Gardiner (1909, p. 287) the name *talpina* has only been published in the binomen *Polyphyllia talpina* (Lamarck, 1801).

7. The name *Madrepora limax* was introduced by Houttuyn (1772, p. 119) in a discussion of the nomenclature of a coral which was figured by Seba (1759, pl. 112, fig. 31). Houttuyn disagreed with Pallas (1766, p. 285), who described this coral as a variety of *Madrepora pileus* Linnaeus, 1758. Seba's specimen clearly belongs to the species described as *Fungia talpina* by Lamarck, who also refers (1801, p. 370) to illustrations given by Seba (1759, pl. 111, fig. 6; pl. 112, fig. 31). From the above it can be concluded that Houttuyn (1772) not only used the name *M. talpa* for two different species (later called *talpina* Lamarck, 1801 and *limax* Esper, 1797) but also applied the name *limax* to *talpina* Lamarck, 1801.

8. Houttuyn (1772, p. 121, pl. 126, fig. 4) described and figured a coral to which he did not attach a latin name. He believed it to be intermediate between his *M. talpa* and *M. limax*. Müller (1775, p. 678, pl. 20, fig. 4) followed him as far as the text is concerned, but in the legend of his plate 20 linked the name *M. limax* to the figure of the 'intermediate' form. The figure shows clearly that the coral belongs to the species described as *Madrepora* (now *Herpolitha*) *limax* Esper, 1797.

9. Esper (1797, p. 77) in describing *Madrepora limax* for the species at present generally known as *Herpolitha limax* (Esper) may not have been aware that the name had been used in 1772 by Houttuyn, so that by using it he introduced a homonym. Besides giving a figure himself (Esper, 1797, pl. 63, a duplicate of the figure given by Ellis & Solander (1786, pl. 45)), he also refers to illustrations by Seba (1759, pl. 111, figs. 4–6). By referring to Seba's figures Esper was not completely correct: only Seba's (1759, pl. 111) figures 3 and 5 represent the species.

10. The type specimen of *Herpolitha limax* (Esper, 1797) is the coral originally figured by Ellis & Solander (1768, pl. 45) which was according to them a variety of *Madrepora pileus*. According to Wells (1966, p. 240) the specimen may be one in the collection of the Linnean Society of London. I have found only one specimen of *H. limax* in that collection, and am sure that it is not the specimen figured by Ellis & Solander. By coincidence I came across a list of some of the corals figured by Ellis & Solander (including the specimen of pl. 45) which were found by Young (1877) in the Hunterian Museum in Glasgow. The holotype of *H. limax* (Esper) is still kept there (GLAHM: 2C0015).

11. Before Esper (1797) described his *M. limax*, the species had, as mentioned in paragraph 4, already been described by Boddaert (1768, p. 613, pl. 14) under the name *M. trilinguis*. The specimen that Boddaert used for his description had an unusual

shape which he thought had perhaps resulted from a fusion of three specimens. Houttuyn (1772, p. 117) considered Boddaert's species as a special form of his *M. talpa*. Esper (1797, p. 90, pl. 73) also knew about the existence of *M. trilinguis* and even duplicated Boddaert's figure, but he followed Wilkens (1787, p. 26, pl. 13, fig. 2) who thought it to be a variety of *M. pileus* (p. 29).

12. After 1797 the name *M. trilinguis* Boddaert, 1768 has only appeared in Dana's (1846, p. 309) synonymy list of *Herpetolitha stellaris* Leuckart, 1841, and in Klunzinger's (1879, p. 68) of *Herpetolitha foliosa* Leuckart, 1841. Those names are also synonyms of *Herpolitha limax* (Esper).

13. The name *limax* Esper, 1797 is not valid because it is both a junior homonym of *limax* Houttuyn, 1772 and a junior subjective synonym of *trilinguis* Boddaert, 1768. Houttuyn was not clear in the application of the name *limax*. At present the name *limax* is established, but since 1979 authors have also started to use *limax* Houttuyn instead of *limax* Esper, not realising that *M. limax* Houttuyn is a species different from *M. limax* Esper. (A list of eight recent publications with the name *limax* Houttuyn applied inaccurately is held by the Commission Secretariat).

14. The first combination of the name *limax* Esper in the accepted sense with the genus *Herpolitha* Eschscholtz, 1825 was by Eschscholtz (1825, p. 746). After him many authors have used that combination (or the misspelling *Herpetolitha limax* (Esper); a list of 51 publications is held by the Commission Secretariat). The valid name *trilinguis* in fact was only used by its own author and has since been overlooked or ignored.

15. I propose that the established use of *limax*, as published in the binomen *Madrepora limax* Esper, 1797 (p. 77) and of *talpina*, as published in the combination *Fungia talpina* Lamarck, 1801 (p. 370) should both be conserved.

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

(1) to use its plenary powers:
  (a) to suppress the specific name *limax* Houttuyn, 1772, as published in the binomen *Madrepora limax*, and all other uses prior to the publication of *Madrepora limax* Esper, 1797, for the purposes of both the Principle of Priority and the Principle of Homonymy;
  (b) to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
    (i) *talpa* Houttuyn, 1772, as published in the binomen *Madrepora talpa*;
    (ii) *trilinguis* Boddaert, 1768, as published in the binomen *Madrepora trilinguis*;

(2) to place on the Official List of Specific names in Zoology the following names:
  (a) *limax* Esper, 1797, as published in the binomen *Madrepora limax*;
  (b) *talpina* Lamarck, 1801, as published in the binomen *Fungia talpina*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
  (a) *limax* Houttuyn, 1772, as published in the binomen *Madrepora limax* and as suppressed in (1) (a) above;
  (b) *talpa* Houttuyn, 1772, as published in the binomen *Madrepora talpa* and as suppressed in (1) (b) (i) above;
  (c) *trilinguis* Boddaert, 1768, as published in the binomen *Madrepora trilinguis* and as suppressed in (1) (b) (ii) above.

Acknowledgements

The author expresses his gratitude to Dr M. B. Best for advice, Prof Dr E. Gittenberger for critical comments on the text, Prof Dr L. B. Holthuis for his generous assistance, Dr B. R. Rosen of the British Museum (Natural History) London for showing him the corals of the Linnean Society of London and Miss M. Reilly of the Hunterian Museum, Glasgow who kindly supplied photographs of Esper's type.

References

Boddaert, P. 1768. *Lyst der Plant–Dieren,* (50) + 654 pp. Van Paddenburg & Van Schoonhoven, Utrecht.

Boschma, H. 1959. The stony corals described by Rumphius. Pp. 249–276, pl. 27, *in* de Wit, H. C. D. (ed.), *Rumphius Memorial Volume,* 462 pp. Hollandia, Baarn.

Dana, J. D. 1846–1849. *United States Exploring Expedition during the years 1838–1842.* Zoophytes. Vol. VII, 740. Lea & Blanchard, Philadelphia. Atlas, 61 pls. Sherman, Philadelphia.

Ellis, J. & Solander, D. 1786. *The natural history of many curious and uncommon zoophytes,* 208 pp. White & Son, London.

Eschscholtz, J. F. von, 1825. Bericht über die zoologische Ausbeute während der Reise von Kronstadt bis St Peter und Paul. *Isis, Jena,* **16**: 734–747.

Esper, E. J. C. 1797. *Fortseszungen der Planzenthiere,* vol. 1. 230 pp. Raspe, Nürnberg.

Gardiner, J. S. 1909. The Percy Sladen Trust Expedition to the Indian Ocean in 1905. The madreporian corals. 1. The family Fungiidae, with a revision of its genera and species with an account of their geographical distribution. *Transactions of the Linnean Society of London,* Zoology, ser. 2. **12**: 257–290.

Houttuyn, M. 1772. *Natuurlyke Historie of Uitvoerige Beschryving der Dieren, Planten en Mineraalen,* vol. 1, pt. 17, 614 pp. Houttuyn, Amsterdam.

Houttuyn, M. 17??. *Natuurkundige Beschryving der Insecten, Wormen en Slakken, Schulpdieren, Hoorens en Plantdieren,* vol. 9, 614 pp. Van Es, Amsterdam.

Klunzinger, C. B. 1879. *Die Korallenthiere des Rothen Meeres,* vol. 3, 100 pp. Gutmann, Berlin.

Lamarck, J. B. P. A. de M. 1801. *Système des animaux sans vertèbres* 432 pp. Deterville, Paris.

Lamarck, J. B. P. A. de M. 1816. *Histoire naturelle des animaux sans vertèbres,* vol. 2, 568 pp. Verdière, Paris.

Leuckart, F. S. 1841. *Observationes zoologicae de Zoophytis coralliis, speciatim de genere Fungia,* 60 pp. Friburgi Brisigavorum.

Linnaeus, C. 1758. *Systema naturae,* ed. 10, vol. 1, 824 pp. Laurentii Salvii, Holmiae.

Martelli, U. 1903. *Le collezione di Giorgio Everardo Rumpf acquisate dal Granduca Cosimo III de' Medici,* 213 pp. Niccolai Firenze.

Martens E. von, 1902. Die Mollusken (Conchylien) und die übrigen wirbellosen Thiere in Rumpf's Rariteitenkamer. Pp. 109–136 *in* Greshoff, M. (ed.), *Rumphius Gedenkboek 1702–1902,* 221 pp. Koloniaal Museum, Haarlem.

Müller, P. L. S. 1775. *Des Ritters Carl von Linné vollstandiges Natursystem,* vol. 6, pp. 1–5 + 641–960. Raspe, Nürnberg.

Oken, L. 1815. *Lehrbuch der Naturgeschichte, Zoologie,* vol. 3(1), xxviii + 842 + xviii + iv pp. Schmidt, Leipzig, Jena.

Ortmann, A. 1888. Studien über Systematik und geographische Verbreitung der Steinkorallen. *Zoologischen Jahrbüchern. Abtheilung für Systematik, Geographie und Biologie der Thiere,* **3**: 143–188.

Ortmann, A. 1889. Beobachtungen an Steinkorallen von der Südküste Ceylons. *Zoologischen Jahrbüchern. Abtheilung für Systematik, Geographie und Biologie der Thiere,* **4**: 493–590.

Pallas, P. S. 1766. *Elenchus Zoophytorum,* 451 pp. Van Cleef, Hagae-Comitum.

Quoy, J. R. C. & Gaimard, J. P. 1833. *Voyage de découvertes de l'Astrolabe,* Zoologie, vol. 4, 390 pp. Tastu, Paris.

Rumphius, G. E. 1750. *Herbarium amboinense. Het Amboinsch Kruid-boek*, vol. 6, 256 pp. Vytwerf, Amsterdam.

Seba, A. 1759. *Locupletissimi Rerum naturalium Thesauri accurata Descriptio*, vol. 3, Janssonio–Waesbergios, Amsteloedami.

Wells, J. W. 1966. Evolutionary development in the scleractinian family Fungiidae. Pp. 223–246 *in* Rees, W. J. (ed.), The Cnidaria and their evolution. *Symposia of the Zoological Society of London*, No. 16, 449 pp. Academic Press, London, New York.

Wilkens, C. F. 1787. *Charakteristik der Thierflanzen*, vol. 2, 265 pp. Raspe, Nürnberg.

Young, J. 1877. Corals in the Hunterian Museum figured by Ellis & Solander. *Annals and Magazine of Natural History* (4), **19**: 116.

Case 2610

Coenobita Latreille, 1829 (Crustacea, Decapoda): proposed conservation

Gary J. Morgan
Department of Carcinology, Western Australian Museum, Francis Street, Perth, Western Australia 6000, Australia

L. B. Holthuis
Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is the conservation of the name of a circumtropic genus of land hermit crabs, *Coenobita* Latreille, 1829. It is threatened by the senior objective synonyms *Carcinion* Jarocki, 1825 and *Cenobites* Berthold, 1827 and by a possible senior subjective synonym, *Eremita* Osbeck, 1765; their suppression is proposed.

---

1. Latreille (1825, p. 277) first recognised *Coenobita* as a distinct taxon and provided a short description of it. He indicated it as follows: 'Le g.[enre] Cénobite (*Pagurus clypeatus*)'. No latin name was given. Four years later Latreille (1829, p. 77) used for the first time the latin name *Coenobita* for the genus, with, as the only nominal species, '*Pagurus clypeatus*, Fab.; Herbst, xxii, 2'. Since then the name *Coenobita* has been consistently and universally used for this genus of terrestrial hermit crabs, which occurs in all the tropics of the world, often in great numbers. Because of its peculiar terrestrial way of life, and by the fact that it can easily be obtained, *Coenobita* is a well known genus and its biology, physiology, ecology etc., are widely studied. It is of economic importance as it is a popular pet and sold in great quantities in the aquarium-terrarium trade.

2. As far as we know, *Coenobita* is the only name that has been used for this genus since 1827 (sometimes in the incorrect spelling *Cenobita*). However, three older names exist: two are senior objective synonyms (*Carcinion* Jarocki, 1825 and *Cenobites* Berthold, 1827), the other a possible senior subjective synonym (*Eremita* Osbeck, 1765).

3. F. P. von Jarocki (1825, p. 108) in the fifth volume of his 6 volume *Zoologiia* (1821–1838) described in Polish a new genus *Carcinion*, in which he mentioned as the only species "*Pagurus clypeatus*. Oliv." (= *Pagurus clypeatus* Fabricius, 1787), which thus is the type species of the new genus by monotypy. Although De Haan (1849, pp. 12, 212) noted the synonymy of *Carcinion* and *Coenobita*, he adopted the latter name for the genus. So far as we can find, the name *Carcinion* has not appeared since in the carcinological literature, and certainly has not been used as a valid generic name. As *Carcinion* Jarocki, 1825, is a senior objective synonym of *Coenobita* Latreille, 1829, and of *Cenobites* Berthold, 1827, and furthermore is a completely forgotten name, its reintroduction would cause a most undesirable confusion in carcinological nomenclature. Therefore its suppression is requested here.

4. Berthold (1827) translated Latreille's (1825) '*Familles Naturelles du Règne Animal*' into German under the title '*Latreille's Natürliche Familien des Thierreichs*'. In many instances Berthold replaced Latreille's vernacular names by latin names, and he translated (p. 263) Cénobite as *Cenobites*. *Cenobites* Berthold, 1827 (type species *Pagurus clypeatus* Fabricius, 1787) is a senior objective synonym of *Coenobita*. Introduction of *Cenobites* would cause great confusion in carcinological nomenclature.

5. Another possible threat to *Coenobita* is a similarly forgotten name, *Eremita* Osbeck, 1765. Osbeck (1765), in the German translation of his 1757 Swedish narrative of a voyage to China and the East Indies, described (p. 351–358) an excursion made on 19 January 1752 to a bay on the coast of W. Java in Strait Sunda, viz. Teluk Peutjang, 6° 42′S, 105° 18′E. Osbeck (1757, p. 88 & 269; 1765, p. 114 & 351) named this bay Nieu bay, Mjöbay, or Neuen Bay (=New Bay); it is best known by the Dutch name Meeuwen (or Mieuw) Bay (=Gulls Bay) but evidently Osbeck misunderstood the Dutch word Meeuw (or Mieuw as it was often written in the old times) for gull and interpreted it as Nieuw (=Dutch for new). His description leaves no doubt that Meeuwen Bay near the S.W. tip of Java is meant. He described a hermit crab from there as follows (p. 356): 'Der Schneckendieb oder *Eremita* javanica ward in einer Schneckenschaale angetroffen; die linke Klaue desselben war grösser, es ist aber doch eine andere Gattung, als unser gemeiner *Cancer* bernhardus'. Osbeck remarked that the beach was covered with corals and fossilized sponges; judging by his account it is not likely that he collected from the sea and he probably picked up the hermit crab described on dry land, which would make it most likely to be a species of *Coenobita* (*C. rugosus* H. Milne Edwards, 1837 being one of the most common species in the area).

6. Osbeck's short description (left chela larger) fits any Coenobitid and most Diogenid hermit crabs (but distinguishes it from all PAGURIDAE). *Eremita* Osbeck, 1765 could be considered a nomen dubium but as it is the oldest name ever to be given to a hermit crab genus (even *Pagurus* Fabricius, 1775 is younger) it provides a real threat to hermit crab nomenclature. So far as we know *Eremita* Osbeck, 1765 has not been used since its proposal and its resurrection could only cause great harm. It is not listed in Neave (1939), who lists *Eremita* Meuschen, 1778 (an erroneous spelling of the unavailable *Emerita* Gronovius, 1764 and itself published in a rejected work) and *Eremita* Reichenbach, 1854 (an available name for a genus of humming-birds but which at present is considered a junior subjective synonym of *Phaetornis* Swainson, 1827).

7. The type species of *Coenobita* is *Pagurus clypeatus* Fabricius, 1787 (p. 328). The author of the specific name has often been cited as Herbst, but Herbst's (1791, p. 22) description was published four years after that of Fabricius and in it Herbst referred to Fabricius' (1787) description.

8. The gender of *Coenobita* (the Greek word for monk) is masculine, as pointed out by previous authors, although the ending *-a* made some consider it to be feminine.

9. As the generic name *Coenobita* and the family name COENOBITIDAE Dana, 1851 (p. 269) have often been incorrectly spelt *Cenobita* and CENOBITIDAE, the addition of the two erroneous spellings to the Official Indexes is requested.

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

(1) to use its plenary powers to suppress for the purposes of the Principle of Priority but not for those of the Principle of Homonymy the following names:
   (a) *Carcinion* Jarocki, 1825;

(b) *Cenobites* Berthold, 1827;
(c) *Eremita* Osbeck, 1765;
(d) *javanica* Osbeck, 1765, as published in the binomen *Eremita javanica*;

(2) to place on the Official List of Generic Names in Zoology the name *Coenobita* Latreille, 1829 (gender: masculine), type species by monotypy *Pagurus clypeatus* Fabricius, 1787;

(3) to place on the Official List of Specific Names in Zoology the name *clypeatus* Fabricius, 1787, as published in the binomen *Pagurus clypeatus* (specific name of the type species of *Coenobita* Latreille, 1829);

(4) to place on the Official List of Family Group Names in Zoology the name COENOBITIDAE Dana, 1851 (correction by Ortmann (1892) of CENOBITIDAE) (type genus *Coenobita* Latreille, 1829);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
(a) *Carcinion* Jarocki, 1825 as suppressed in 1(a) above;
(b) *Cenobites* Berthold, 1827, as suppressed in (1) (b) above;
(c) *Eremita* Osbeck, 1765, as suppressed in (1) (c) above;
(d) *Cenobita* H. Milne Edwards, 1837, an incorrect subsequent spelling of *Coenobita* Latreille, 1829;

(6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *javanica* Osbeck, 1765 as published in the binomen *Eremita javanica* and as suppressed in (1) (d) above;

(7) to place on the Official Index of Rejected and Invalid Family Group Names in Zoology the name CENOBITIDAE (an incorrect original spelling of COENOBITIDAE) Dana, 1851.

References

Berthold, A. A. 1827. *Latreille's Natürliche Familien des Thierreichs.* 604 pp. Verlag des Grossherzoglichen Staates privates Landes-Industrie Comptoirs, Weimar.

Dana, J. D. 1851. Conspectus Crustaceorum quae in Orbis Terrarum circumnavigatione, Carolo Wilkes e classe Reipublicae Foederatae Duce, lexit et descripsit. *Proceedings of the Academy of Natural Sciences of Philadelphia,* **5**: 267–272.

Fabricius, J. C. 1787. *Mantissa Insectorum.* vol. 1, 348 pp. Proft, Copenhagen.

Haan, W. De, 1833–1850. *In* Siebold, F. von, *Fauna Japonica,* (Crustacea). ix–xvi, vii–xvii, i–xiii, 1–243.

Herbst, J. F. W. 1791. *Versuch einer Naturgeschichte der Krabben und Krebse,* vol. 2, pt. 1, 48 pp. Lange, Berlin und Stralsund.

Jarocki, F. P. von, 1821–1838. *Zoologia czyli zwiérzetopismo Ogólne, podlug Náynowszego Systematu.* 6 vols. (vol. 5 published in 1825). Warszawa.

Latreille, P. A. 1825. *Familles naturelles du règne animal,* 570 pp. Baillière, Paris.

Latreille, P. A. 1829. *Les Crustacés, les Arachnides et les Insectes, distribués en familles naturelles, ouvrage formant les tomes 4 et 5 de celui de M. le baron Cuvier sur le règne animal,* ed. 2, 584 pp. Déterville, Paris.

Milne Edwards, H. 1837. *Histoire naturelle des Crustacés,* vol. 2, 532 pp. Roret, Paris.

Neave, S. A. 1939. *Nomenclator Zoologicus,* vol. 2, 1025 pp. Zoological Society of London.

Ortmann, A. 1892. Die Decapoden-Krebse des Strassburger Museum. IV. Die Abtheilungen Galatheidea und Paguridea. *Zoologische Jahrbücher (Systematik, Geographie und Biologie),* **6**: 241–326.

Osbeck, P. 1757. *Dagbok öfwer en Ostindisk Resa Åren* 1750. 1751. 1752. 376 pp. Grefing, Stockholm.

Osbeck, P. 1765. *Reise nach Ostindien und China,* 552 pp. Koppe, Rostock.

Case 2613

Sphaeroma hookeri Leach, 1814 (currently *Lekanesphaera hookeri;* Crustacea, Isopoda): proposed conservation of the specific name

B. J. M. Jacobs & L. B. Holthuis

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA, Leiden, The Netherlands

Abstract. The purpose of this application is the conservation of the specific name *hookeri* Leach, 1814. It is threatened by the name *conglobator* Pallas, 1766 and its junior objective synonym *globator* Pallas, 1772, neither of which has been used as the valid name for a species of the family for over 150 years. The authorship and date of *Sphaeroma* is also discussed.

---

1. Pallas (1766, p. 194) described a new species of isopod as *Oniscus conglobator* and gave habitus figures of it in dorsal and lateral views. The description and figures make it beyond any doubt that the species belongs to the family SPHAEROMATIDAE and that it is either a species of *Sphaeroma* Bosc, 1802 (p. 182) or one of *Lekanesphaera* Verhoeff, 1943 (p. 172). Not enough morphological details are provided by Pallas to place the specific identity of his animal beyond doubt. However, Pallas' locality data make it practically certain that *Oniscus conglobator* is based on specimens of the species currently known as *Lekanesphaera* (or *Sphaeroma*) *hookeri* Leach, 1814 (p. 433).

2. Six years after the publication of *Oniscus conglobator,* Pallas (1772, p. 70–71, pl. 4, figs. 18, 18*) redescribed the species under the name *Oniscus globator* and republished with this description his 1766 figures. That *globator* is a replacement name for *conglobator* is quite evident, the more so as Pallas (1772) referred to his 1766 description and used the same figures for both. In order to make the objective synonymy definite, the specimen figured by Pallas (1766, pl. 14, fig. 18; 1772, pl. 4, fig. 18) is selected now to be the lectotype for both species. In his new (1772) description Pallas made the following remark about the colour of the species, which is not given in his 1766 account: 'Color scuti cinereo-fuscus'. *L. rugicauda* is usually of an ashy grey colour, while *L. hookeri* as a rule is darker and more brownish grey. This again confirms that *O. (con)globator* is the same as *L. hookeri.*

3. The name *conglobator* was from the start almost completely ignored by zoologists, probably because Pallas himself replaced it by *globator.* However the name *globator,* although sometimes mentioned in synonymy, was not accepted as the valid name either. Bosc (1802, p. 186) recognised a single species of *Sphaeroma,* to which he gave the new name *S. cinereum,* placing all older names (e.g. *Oniscus serratus* Fabricius, 1787 (p. 242) and *Oniscus globator* Pallas, 1772) in its synonymy. Leach (1814, p. 405, 433) recognised 3 species of *Sphaeroma: S. serratum* (Fabricius, 1787) and the two new species, *S. rugicauda* and *S. hookeri.* In the synonymy of *S. serratum* he cited *S. cinereum* Bosc, 1802 and *Oniscus globator* Pallas, 1772, completely disregarding the

priority of Pallas' name. This synonymy was accepted in most carcinological handbooks and the name *O. globator* was no more used as the valid name, being at the most cited as a synonym of *S. serratum*.

4. Although we are convinced that *Oniscus conglobator* Pallas, 1766, is the oldest available name for *Lekanesphaera hookeri* (Leach, 1814), we feel that a strict application of the Principle of Priority in this case would result in the disappearance of a well known specific name that has been and still is widely used in taxonomic and faunistic studies as well as such dealing with the ecology, biology, and population dynamics of the species. The replacement of this well known name by one that is entirely unfamiliar to most zoologists and which has not been used for the species for over 180 years, should be prevented in the interest of stability.

5. We also take this opportunity to request the placement of the names *Sphaeroma* Bosc, 1802 and SPHAEROMATIDAE Latreille, 1825, on their respective Official Lists. Both names are very well known, are in general use and are the valid names for their respective taxa. The problems concerning authorship, date of publication and gender of the name *Sphaeroma* have been discussed by Jacobs (1987, p. 11). The author of the genus has variously been cited as Latreille, or Latreille *in* Bosc. However, Bosc (1802: p. 48) although he makes clear that he had seen the manuscript of volume 3 (1802) of Latreille's *Histoire naturelle générale et particulière des Crustacés et des Insectes,* dealt with the genus *Sphaeroma* in his own words, providing new observations made by himself. There is no reason therefore not to cite him as author.

6. As to the date of publication of Bosc's work, Dupuis (1976, p. 4) showed that this is 20 January 1802 or earlier, while Latreille's account of *Sphaeroma* in volume 3 of his above cited work was shown by Dupuis to be published between April and 6 November 1802; Bosc's name therefore has priority. The gender of the name *Sphaeroma* has sometimes been treated as feminine, sometimes as neuter. Dr C. W. Wright, Classical Advisor to the Commission, has kindly informed us that 'Sphaeroma is a Greek word, third declension, neuter' (see also Jacobs, 1987). The correct spelling of the family name was also furnished by Dr Wright, as being SPHAEROMATIDAE; the often used SPHAEROMIDAE is definitely incorrect. We are most grateful to Dr Wright for this information.

7. The name *Lekanesphaera* (the genus to which *Oniscus conglobator* belongs) has a peculiar history. Until 1943 the species of that genus were assigned to the genus *Sphaeroma*. Verhoeff (1943, p. 169) established the new genus *Europosphaera* with two subgenera *Europosphaera* s.s. and *Lekanesphaera*. To the former he assigned two species: *Sphaeroma rugicauda* Leach, 1814 and *Europosphaera* (*E.*) *noduliger* nov. sp. Only one species was placed by Verhoeff in the subgenus *Lekanesphaera,* viz., *Europosphaera* (*Lekanesphaera*) *excavatum* nov. sp. Both the names *E. noduliger* and *E. excavatum* are considered junior synonyms of *Lekanesphaera monodi* (Arcangeli, 1934, p. 149). Verhoeff did not designate a type for either *Europosphaera* or *Lekanesphaera*, which makes the former an unavailable name (Art. 13b). *Lekanesphaera* Verhoeff, 1943 is available, as *E. excavatum* Verhoeff, 1943 is its type by monotypy. *Lekanesphaera*, being the oldest available name for the genus in question, is its valid name and we request that it be placed on the Official List.

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

(1) to use its plenary powers to suppress the following specific names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  (a) *conglobator* Pallas, 1766, as published in the binomen *Oniscus conglobator*;
  (b) *globator* Pallas, 1772, as published in the binomen *Oniscus globator;*
(2) to place on the Official List of Specific Names in Zoology the following names:
  (a) *hookeri* Leach, 1814, as published in the binomen *Sphaeroma hookeri*;
  (b) *monodi* Arcangeli, 1934, as published in the binomen *Sphaeroma monodi* (valid name for the type species of *Lekanesphaera* Verhoeff, 1943);
  (c) *serratus* Fabricius, 1787, as published in the binomen *Oniscus serratus* (specific name of the type species of *Sphaeroma* Bosc, 1802);
(3) place on the Official List of Generic Names in Zoology the following names:
  (a) *Lekanesphaera* Verhoeff, 1943 (gender; feminine), type species, by monotypy, *Europosphaera* (*Lekanesphaera*) *excavatum* Verhoeff, 1943 (a junior subjective synonym of *Sphaeroma monodi* Arcangeli, 1934);
  (b) *Sphaeroma* Bosc, 1802 (gender: neuter), type species by subsequent designation by Latreille, 1810, *Oniscus serratus* Fabricius, 1787;
(4) to place on the Official List of Family-Group Names in Zoology the name SPHAEROMATIDAE (correction by Dahl, 1916, p. 28 of SPHAEROMIDES) Latreille, 1825;
(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
  (a) *conglobator* Pallas, 1766, as published in the binomen *Oniscus conglobator* and as suppressed in (1) (a) above;
  (b) *globator* Pallas, 1772, as published in the binomen *Oniscus globator* and as suppressed under (1) (b) above;
(6) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Europosphaera* Verhoeff, 1943: an unavailable generic name because published without fixation of the type species.

References

Arcangeli, A. 1934. Brevi notizie sopra Isopoda marini del Mediterraneo. *Bollettino dei Musei di Zoologia e di Anatomia Comparata della R. Università di Torino*, **44** (3)(48): 147–152.

Bosc, L. A. G. 1802. *Histoire naturelle des Crustacés, contenant leur description et leurs moeurs*, **2:** 1–296. Paris.

Dahl, F. 1916. *Die Asseln oder Isopoden Deutschlands*, vi + 90 pp. Jena.

Dupuis, C. 1976. Objections aux propositions de Bousfield & Holthuis (1969) concernant une douzaine de genres d'Amphipodes. *Bulletin of Zoological Nomenclature*, **32** (1): 3–5.

Fabricius, J. C. 1787. *Mantissa Insectorum*, 1, xx + 348. Hafniae.

Jacobs, B. J. M. 1987. A taxonomic revision of the European, Mediterranean and N. W. African species generally placed in *Sphaeroma* Bosc, 1802 (Isopoda: Flabellifera: Sphaeromatidae). *Zoologische Verhandelingen*, **238**: 1–71.

Latreille, P. A. 1802. *Histoire naturelle générale et particulière des Crustacés et des Insectes*, vol. 3, 468 pp. Paris.

Latreille, P. A. 1810. *Considérations générales sur l'ordre naturel des animaux composant les classes des Crustacés, des Arachnides, et des Insectes; avec un tableau méthodique de leurs genres, disposés en familles*. 444 pp. Paris.

Latreille, P. A. 1825. *Familles naturelles du règne animal, exposées succinctement et dans un ordre analytique, avec l'indication de leurs genres*, 570 pp. Paris.

Leach, W. E. 1814. *Crustaceology*. Pp. 383–437 *in* Brewster, D. *The Edinburgh Encyclopaedia*, vol. 7, 767pp. Edinburgh.

Naylor, E. 1972. British marine Isopods. Synopses of the British Fauna (n.s.), vol. 3. 86 pp.

Omer-Cooper, J. & Rawson, J. H. 1934. Notes on the British Sphaeromatidae (Crustacea, Isopoda). *Report of the Dove Marine Laboratory, Cullercoats, Northumberland*, **3**(2): 22–58.

Pallas, P. S. 1766. *Miscellanea zoologica*. xii + 224 pp. Hagae, Comitum.

Pallas, P. S. 1772. *Spicilegia zoologica*, (9): 1–86. Berolini.

Stebbing. T. R. R. 1910. On the Crustacea Isopoda and Tanaidacea. Reports on the marine biology of the Sudanese Red Sea. XIV. *Journal of the Linnean Society of London* (Zoology), **31**: 215–230.

Verhoeff, K. W. 1943. Sphaeromatiden-Studien und Buchnerillo n. g. *Zeitschrift für Morphologie und Ökologie der Tiere*, **39**: 153–175.

Case 2607

Hydrobius Leach, 1815 and *Berosus* Leach, 1817 (Insecta, Coleoptera): confirmation of type species.

M. Hansen

Department of Entomology, Zoologisk Museum, Universitetsparken 15, DK 2100 København, Denmark.

Abstract. The purpose of this application is the confirmation of *Dytiscus fuscipes* Linnaeus, 1758 and *D. luridus* Linnaeus, 1761 as the respective nominal type species of the water beetle genera *Hydrobius* Leach, 1815 and *Berosus* Leach, 1817. To conserve current usage the hitherto overlooked original monotypy of *Hydrobius* Leach, 1815 is set aside.

---

1. Leach (1815, p. 96) erected the genus *Hydrobius* and included only one species, *Dytiscus luridus* Linnaeus, 1761, which is therefore the type species by monotypy.

2. In a later publication Leach (1817, p. 92) made a division of his 1815 concept of *Hydrobius*, presenting two genera: *Hydrobius* 'Corpus ovatum convexum utrinque obtusatum. Oculi simplices' and a new genus, *Berosus* 'Corpus antice angustius. Thorax subgibbosus. Oculi valde prominuli'. The latter included only *'Hydrophilus luridus auctorum'* (= *D. luridus* Linnaeus, 1761). Thus, by having the same type species, *Berosus* Leach, 1817 is a junior objective synonym of *Hydrobius* Leach, 1815.

3. Leach (1817) included three species in *Hydrobius: fuscipes* Linnaeus, 1758 (having 'Elytra striata'), *melanocephalus* Olivier, 1792 and *orbicularis* Fabricius, 1775 (the latter two having 'Elytra laevia').

4. The original monotypy of *Hydrobius* Leach, 1815 with *D. luridus* Linnaeus, 1761 as the type species has been overlooked by all subsequent authors, who without exception have followed the usage of Leach (1817) though correctly dating *Hydrobius* to 1815.

5. The first designation of type species for *Hydrobius* sensu Leach, 1817 was by Hope (1838, p. 125), who designated *'Hyd. fuscipes* Linnaeus'. This is in accordance with the present interpretation of *Hydrobius* Leach, 1815 as a genus exclusively comprising species with striate elytra. Other authors (e.g. Westwood (1840, p. 10); Thomson (1859, p. 17); Knisch (1924, p. 169)) have also referred to *fuscipes* as the type species of *Hydrobius*. The only exception is Chenu (1851, p. 249) who designated *Hydrophilus oblongus* Herbst, 1797, a species not mentioned by Leach.

6. Thus, *D. fuscipes* Linnaeus, 1758 and *D. luridus* Leach, 1761 have been regarded for more than 150 years as the type species of two well known and widely distributed hydrophilid genera, *Hydrobius* Leach, 1815 (comprising about 10 species) and *Berosus* Leach, 1817 (comprising more than 200 species) respectively. A list of representative references is held by the Commission Secretariat.

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

(1) to use its plenary powers to set aside all designations of type species for the nominal genus *Hydrobius* Leach, 1815 prior to that by Hope (1838);

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Hydrobius* Leach, 1815 (gender: masculine), type species by subsequent designation by Hope (1838) *Dytiscus fuscipes* Linnaeus, 1758;
   (b) *Berosus* Leach, 1817 (gender: masculine), type species by monotypy *Dytiscus luridus* Linnaeus, 1761;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *fuscipes* Linnaeus, 1758, as published in the binomen *Dytiscus fuscipes* (specific name of the type species of *Hydrobius* Leach, 1815);
   (b) *luridus* Linnaeus, 1761, as published in the binomen *Dytiscus luridus* (specific name of the type species of *Berosus* Leach, 1817).

References

Chenu, J. Ch. 1851. *Encyclopédie d'histoire naturelle . . . Coléoptères*, vol. 1, 312 pp. G. Harvard, Paris.

Hope, F. W. 1838. *The Coleopterist's Manual*. Vol. 2. Predaceous Land and Water Beetles. 16+168 pp. London.

Knisch, A. 1924. Hydrophilidae. *In* Junk & Schenkling, *Coleopterorum Catalogus XIV*, part 79, 306 pp. Berlin.

Leach, W. E. 1815. Entomology. *In* Brewster, D., *Edinburgh Encyclopaedia*, vol. 9, 57–172 pp. Edinburgh.

Leach, W. E. 1817. *The zoological miscellany*, vol. 3, 151 pp. London.

Linnaeus, C. 1758. *Systema Naturae*, ed. 10, vol. 1, 824 pp. Holmiae.

Linnaeus, C. 1761. *Fauna Svecica*, ed. 2, 578 pp. Laurentii Salvii, Stockholmiae.

Thomson, C. G. 1859. *Skandinaviens Coleoptera*, vol. 1, 304 pp. Lund.

Westwood, J. O. 1840. *An introduction to the modern classification of insects*, vol. 2, appendix. *Synopsis of the Genera of British Insects*, 158 pp. Longman, Orme, Brown, Green & Longmans, London.

Case 2481

Elachista Treitschke, 1833 (Insecta, Lepidoptera): proposed conservation, and confirmation of type species designation

E. S. Nielsen
CSIRO Division of Entomology, GPO Box 1700, Canberra, A.C.T. 2601, Australia

I. W. B. Nye
British Museum (Natural History), Cromwell Road, London, SW7 5BD, U.K.

Abstract. The purpose of this application is the conservation of the name *Elachista* Treitschke, 1833 (leaf-mining microlepidoptera) by the suppression of the unused senior homonym *Elachista* Kollar, 1832. In addition the Commission is asked to confirm that the type species of *Elachista* Treitschke, 1833, is *E. bifasciella* Treitschke, 1833.

---

1. *Elachista* Treitschke, 1833 (p. 177), was established for 17 species, all small microlepidoptera, now placed in several genera and families. The usage of this generic name was subsequently restricted by several authors to a large genus of microlepidoptera with larvae which are leaf-miners in the monocotyledonous families Cyperaceae, Poaceae and Juncaceae; this connotation of the name became firmly established following Frey (1859, p. 172) and has been universally accepted ever since. Bruand (1850, p. 50) proposed the family name ELACHISTIDAE, based on the same interpretation of *Elachista* as Frey, and this has also been widely accepted. A representative list of references is held by the Commission Secretariat.

2. Although *Elachista* Treitschke had been consistently used as the supposedly valid name for a large and widely distributed genus of ELACHISTIDAE since Frey (1859), the first type species designation in accordance with this usage was by Meyrick (1915, p. 210) of *Elachista bifasciella* Treitschke, 1833. There are, however, two earlier hitherto overlooked or ignored type species designations by Duponchel: the first in 1838 (p. 25) was *Tinea complanella* Hübner, [1817], and the second in [1845] (p. 221) was *Tinea blanchardella* Fabricius, 1781. *T. complanella* is the type species of *Tischeria* Zeller, 1839 (TISCHERIIDAE) and *T. blanchardella* is currently placed in *Phyllonorycter* Hübner, [1822] (GRACILLARIIDAE).

3. There is also an even earlier but unavailable type species designation for *Elachista, Elachista canifoliella* Treitschke, 1833, by Boisduval (1836, p. 138). Under Art. 69 a (iv), the type species designation of an author is eligible for consideration if he states that it is the type '. . .and if it is clear that that author accepts it as the type species'. Boisduval's type designations, although clearly stated, do not fulfil the last requirement and so are unavailable. Even though Boisduval's 1836 work was well known to lepidopterists, the type designations in it have not been accepted.

4. It has also been overlooked that *Elachista* Treitschke, 1833, is a junior homonym of *Elachista* Kollar, 1832 (p. 98). *Elachista* was a Treitschke manuscript name, obtained from a copy of his unpublished manuscript and made available by Kollar before the genus was described and named by Treitschke in 1833. *Elachista* Kollar, 1832, originally included four species, none of which belong to *Elachista* Treitschke, 1833, as used by and since Frey (1859). *Elachista* Kollar, 1832 has to our knowledge never been used subsequent to its original proposal and its introduction now would greatly upset usage.

5. As *Elachista* Treitschke, 1833, has been almost consistently used for the large and world-wide elachistid genus since Frey (1859) and as the family name ELACHISTIDAE is equally used, we consider that the general current usage should be maintained.

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

(1) to use its plenary powers to suppress the generic name *Elachista* Kollar, 1832, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to use its plenary powers to set aside all previous designations of type species for *Elachista* Treitschke, 1833, prior to that of Meyrick, 1915;

(3) to place on the Official List of Generic Names in Zoology the name *Elachista* Treitschke, 1833, type species by subsequent designation by Meyrick (1915) *Elachista bifasciella* Treitschke, 1833;

(4) to place on the Official List of Specific Names in Zoology the name *bifasciella* Treitschke, 1833, as published in the binomen *Elachista bifasciella* (specific name of the type species of *Elachista* Treitschke, 1833);

(5) to place on the Official List of Family-Group Names in Zoology the name ELACHISTIDAE Bruand, 1850 (type genus *Elachista* Treitschke, 1833);

(6) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Elachista* Kollar, 1832, as suppressed in (1) above.

References

Boisduval, J. B. A. D. 1836. *Histoire naturelle des Insectes*. Vol. 1, 690 pp.

Bruand, T. 1850. Catalogue des Lépidoptères du Doubs. *Mémoires (et Comptes Rendus) de la Société d'Emulation du Doubs*, ser. 1, **3** (5–6): 23–68.

Duponchel, J. B. 1838. *In* Godart & Duponchel, *Histoire naturelle des Lépidoptères ou Papillons de France*. Vol. 11, 720 pp.

Duponchel, J. B. [1845]. *In* d'Orbigny, *Dictionnaire universel d'Histoire Naturelle*. Vol. 5 (DIC–GAL), 768 pp.

Frey, H. 1859. Das Tineen-Genus *Elachista*. *Linnaea Entomologica*, **13**: 172–312.

Kollar, V. 1832. Systematisches Verzeichniss der Schmetterlinge im Erzherzogthume Oesterreich. *Beiträge zur Landeskunde Oesterreich's unter der Enns*, **2**: 1–101.

Meyrick, E. 1915. Description of New Zealand Lepidoptera. *Transactions of the New Zealand Institute*, **47**: 201–244.

Treitschke, F. 1833. *In* Ochsenheimer, *Die Schmetterlinge von Europa*. Vol. 9, pt. 2, 294 pp.

Case 2617

Colias alfacariensis Ribbe, 1905 (Insecta, Lepidoptera): proposed availability as a senior synonym of '*Colias australis* Verity, 1911'

S. E. Whitebread
Maispracherstrasse 51, CH-4312 Magden, Switzerland

L. Rezbanyai-Reser
Naturmuseum Luzern, Kasernenplatz 6, CH-6003 Luzern, Switzerland

H. Geiger
Zoologisches Institut, Baltzerstrasse 3, CH-3012 Bern, Switzerland

Abstract. The purpose of this application is confirmation that the specific name *alfacariensis* Ribbe, 1905 is available for the European butterfly known in English as Berger's Clouded Yellow, and that the often used name *australis* Verity, 1911 is not available from its first publication.

---

1. Berger's Clouded Yellow was first distinguished as a species distinct from *Colias hyale* Linnaeus, 1758 (the Pale Clouded Yellow) by Berger (1944; 1948; Berger & Fontaine, 1947–8). In these short papers the new species was differentiated from *C. hyale*, and the specific name *alfacariensis* Ribbe, 1905 (p. 137) was 'provisionally' adopted.

2. The butterfly has often been called *Colias australis* Verity, 1911 (p. 347). There is no consensus as to whether *alfacariensis* or *australis* should be used, as the following examples show:

(a) *Colias alfacariensis* Ribbe, 1905
Reissinger (1971); Schnack (1985).

(b) *Colias australis* Verity, 1911
Kloet & Hincks (1972); Dutreix (1980; used only 'provisoirement'); Higgins & Riley (1980); Leraut (1980); Koçak (1981); Berger (1986).

(c) *Colias alfacariensis* Berger, 1948
Kudrna (1982); Schadewald (1986).

3. The problem arises because both *alfacariensis* and *australis* were first published in ways which might, under Article 45 of the Code, be regarded as denoting infrasubspecific rank.

4. In a paper entitled 'Einige neue Formen von Schmetterlingen aus Andalusien' Ribbe (1905, p. 137) wrote: *'Colias hyale ab. alfacariensis.* Ich fing in der nördlich von Granada gelegenen Sierra de Alfacar, die gegen 1800 m hoch ist, eine Form von Colias hyale, die auffällig von solchen hyale, die aus andern Gebieten stammen, abweicht' ('North of Granada in the Sierra de Alfacar, which are almost 1800 m high, I found a form of *Colias hyale* which markedly differs from *hyale* found in other regions'). He described the differences briefly but clearly. In a later publication Ribbe (1910, p. 103) said that *only* a *'hyale* var.' was found in the Sierra de Alfacar, and on pp. 107 and 125 he referred to this population as *'C. hyale ab. alfacariensis'*. On the latter page Ribbe reported that 'Alfacariensis fliegt von Mitte Mai bis Mitte Juli in allen Tälern in der Sierra de Alfacar' (*'Alfacarienis* flies from mid-May to mid-July in all the valleys of the Sierra de Alfacar'). In 1912, in a list (p. 380) of 'In Andalusien allein heimische Arten' ('Species occurring only in Andalusia') and on p. 382 under 'Rein Iberische Arten' ('Pure Iberian species') Ribbe included *'Colias hyale ab. (v.) alfacariensis'*; the fact that the taxon is actually widely distributed is irrelevant to the present case.

5. In the Glossary of the Code 'aberration' is defined as 'a term which, *if used to denote a number of individuals* [our italics] within a species, unequivocally signifies infrasubspecific rank'. It is plainly meant to refer to a minority of aberrant individuals (e.g. albino specimens) rather than to a uniform geographically defined *population* as described by Ribbe (1905).

6. Verity (1911, Supplément, p. 347) said of *C. hyale*: 'En Andalousie vole une belle race bien distincte par la teinte jaune du ♂ excessivement vive . . . [*australis*]'.

7. In a letter to Berger (reproduced in Hemming & Berger, 1950) Francis Hemming, the then Secretary of the ICZN, wrote (p. 7) 'le nom *alfacariensis* a été donné comme nom infrasubspécifique à un exemplaire de votre espèce nouvelle', despite the fact that Ribbe had described a population and *not* an individual butterfly. Hemming continued '. . . en 1911 Verity publiait le nom subspécifique *australis* pour la population existant en Andalousie de votre espèce nouvelle', and stated that this was therefore the valid name. Convinced by 'l'exposé si complet et si lumineux de M. F. Hemming' Berger accepted (Hemming & Berger, 1950, p. 9) the name *australis,* and it has been widely used.

8. However, Hemming was clearly mistaken in saying that Verity (1911) had given *australis* subspecific rank. Verity illustrated on p. xiii of his Index Systématique his hierarchical classification, and on pp. xxxiv–xxxv applied it to *C. hyale* thus:

(p. xiii)		(pp. xxxiv–v)	
	GENRE		COLIAS
	espèce		*Colias hyale*
	sous-espèce		*hyale*
	race		*australis*

From this it is evident that Verity gave *australis* the infrasubspecific status of a race of *C. hyale hyale* (another race was given as *C. h. h. hyale*).

9. Dutreix (1980, p. 298) noted that Reissinger (1971, p. 159, figs 1 and 2) had designated one of Ribbe's specimens as lectotype of *C. alfacariensis,* and that the specimen designated by Riley (1954) as lectotype of *'C. australis* Verity, 1911' is of

doubtful provenance and may be an abnormal individual (Warren, 1954). Both Dutreix (1980) and Reissinger (1971) discuss the literature of the species at some length.

10. We contend that the name *alfacariensis* Ribbe, 1905 is available, even though in the name Ribbe used the expression '*ab.*' rather than 'variety' or 'form' as mentioned in Article 45g; in any case (see para. 4) his paper later used 'Formen' and 'eine Form von Colias hyale'. We do not believe that *australis* is available from Verity (1911), since it was only the fourth name in a 'tetranomen' and so is infra-subspecific under Article 45f (iii).

11. Accordingly, we ask the International Commission on Zoological Nomenclature:

(1) to place on the Official List of Specific Names in Zoology the name *alfacariensis* Ribbe, 1905, as published in the trinomen *Colias hyale alfacariensis*;
(2) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *australis* Verity, 1911, published as an addition to the trinomen *Colias hyale hyale* and therefore denoting infrasubspecific rank.

References

Berger, L. A. 1944. Espèce nouvelle pour la Science. *Lambillionea*, **44**: 9–10.

Berger, L. A. 1945. Rapport d'assemblée mensuelle du 3 février 1945. *Bulletin et Annales de la Société Entomologique de Belgique*, **81**: 33.

Berger, L. A. 1948. A *Colias* new to Britain. *The Entomologist*, **81**: 129–131.

Berger, L. A. 1986. Systématique du genre *Colias* F. (Lepidoptera–Pieridae). *Lambillionea*, Supplément. 68 pp.

Berger, L. A. & Fontaine, M. 1947–48. Une espèce méconnue du genre *Colias* F. *Lambillionea* **47**: 91–98; **48**: 12–15, 21–24, 91–110.

Dutreix, C. 1980. Etude des deux espèces affines *Colias hyale* Linné et *Colias australis* Verity. *Alexanor* **11**: 297–316.

Hemming, A. F. & Berger, L. A. 1950. Nouvelles règles de nomenclature — application au cas *Colias hyale* et *Colias australis*. *Lambillionea* **50**: 2–9.

Higgins, L. G. & Riley, N. D. 1980. *A field guide to the butterflies of Britain and Europe*. 384 pp. Collins, London.

Kloet, G. S. & Hincks, W. D. 1972. *A check list of British insects* (ed. 2), vol. 11(2), Lepidoptera.

Koçak, A. O. 1981. Critical check-list of European Papilionoidea. *Priamus* **1**: 46–90.

Kudrna, O. 1982. On the nomenclature of *Colias alfacariensis* Berger, 1948 (Lepidoptera: Pieridae). *Journal of Research on the Lepidoptera*, **20**: 103–110.

Leraut, P. 1980. Liste systématique et synonymique des lépidoptères de France, Belgique et Corse. *Supplément à Alexanor et au Bulletin de la Société entomologique de France*. 334 pp. Paris.

Reissinger, E. 1971. Die geographisch-subspezifische Gliederung von *Colias alfacariensis* Ribbe unter Berücksichtigung der Migrationsverhältnisse [1]. *Atalanta*, **3**: 145–176.

Ribbe, C. 1905. Einige neue Formen von Schmetterlingen aus Andalusien. *Societas Entomologica*, **XX Jahrgang** (18): 137–138.

Ribbe, C. 1909–1912. Beiträge zu einer Lepidopteren-Fauna von Andalusien (Süd-Spanien). Macrolepidopteren. *Deutsche Entomologische Zeitschrift, Iris*, (Supplement), **23**: 1–395.

Riley, N. D. 1954. The lectotype of *Colias australis* (Lep. Pieridae). *The Entomologist's Record and Journal of Variation*, **66**: 35–36.

Schadewald, G. 1986. Zur Unterscheidung von *Colias hyale* Linné, 1758 und *Colias alfacariensis* Berger, 1948 (= *australis* Verity) (Lep. Pieridae). *Entomologisches Nachrichtenblatt, Dresden*, **30**: 251–253.

Schnack, K. 1985. (Ed.) Katalog over de danske Sommerfugle. *Entomologiske Meddelelser*, **52**: 1–163.

Verity, R. 1905–1911. *Rhopalocera Palaearctica*. Papilionidae et Pieridae (Supplément, 1911). 86+368 pp.

Warren, R. C. S. 1954. A note on the genitalia of *Colias australis* Verity. *The Entomologist's Record and Journal of Variation*, **66**: 36.

Case 2411

Ludita Nagy, 1967 (Insecta, Hymenoptera): proposed designation of *Tiphia villosa* Fabricius, 1793 as type species

C. van Achterberg

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is the designation of the nominal species *Tiphia villosa* Fabricius, 1793 as type species of *Ludita* Nagy, 1967, a genus of parasitic wasps. The original selection being based on a misidentified species, this solution maintains *Ludita* in its original meaning.

---

1. Nagy (1967, p. 197) proposed the name *Ludita* for four nominal species: *Tiphia morio* Fabricius, 1787, *T. fulvipennis* Smith, 1879, *Ludita ramispinosa* Nagy, 1967 and *L. andromeda* Nagy, 1967. He designated *Tiphia morio* as type species.

2. Unfortunately Nagy (like authors before him) misidentified *T. morio*. The type specimen, still present in the collection of the Copenhagen Museum, is in fact not a tiphiid wasp as has until now been generally assumed, but a bee of the subfamily ANDRENINAE, (*Andrena carbonaria* (Linnaeus, 1767)). Examination of the type specimen of *Tiphia villosa* Fabricius, 1793 has shown this to be the species for which the name *morio* has been used by most authors, and in consequence of the misidentification the name *Tiphia morio* Fabricius falls as an subjective synonym of *Andrena carbonaria* (Linnaeus) (van Achterberg, 1983).

3. The name *Ludita* Nagy has rarely been used, because it is relatively recently published and literature on the TIPHIINAE of the Palaearctic region is very scarce. Accordingly there is minimal instability caused by changing the nominal type species of *Ludita* in order to preserve its original meaning.

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

(1) to use its plenary powers to set aside all previous designations of type species for the nominal genus *Ludita* Nagy, 1967 and to designate *Tiphia villosa* Fabricius, 1793;

(2) to place on the Official List of Generic Names in Zoology the name *Ludita* Nagy, 1967 (gender: feminine), type species by designation in (1) above, *Tiphia villosa* Fabricius, 1793;

(3) to place on the Official List of Specific Names in Zoology the name *villosa* Fabricius, 1793, as published in the binomen *Tiphia villosa* (specific name of the type species of *Ludita* Nagy, 1967).

References

Achterberg, C. van, 1983. Notes on the Fabrician types of Palaearctic Tiphiinae (Insecta, Hymenoptera Tiphiidae). *Steenstrupia*, **9**(3): 73–74.

Fabricius, J. C. 1793. *Entomologia systematica* . . . . vol. 2. 519 pp. Hafniae.

Nagy, C. 1967. Systematisches Studium der Tiphiidae Romaniens (Hym., Tiphiidae). *Reichenbachia*, **8**, no. 24: 175–204.

Case 2608

Vespa triangulum Fabricius, 1775 (currently *Philanthus triangulum*, Insecta, Hymenoptera): proposed conservation of the specific name.

Wojciech J. Pulawski

Department of Entomology, California Academy of Sciences, Golden Gate Park, San Francisco, California 94118, U.S.A.

Abstract. The purpose of this application is the conservation of the specific name *triangulum* Fabricius, 1775 in the sphecid wasp genus *Philanthus* by the suppression of the unused senior synonym *Vespa ruspatrix* Linnaeus, 1767. The species is a predator of honeybees and often known as the 'bee-wolf'.

---

1. Linnaeus (1767, p. 951) gave the name *Vespa ruspatrix* for a species found 'in Africa'. The species remained, unidentified, in *Vespa* until Day (1979, p. 71) studied the holotype and found it to be identical with a well-known sphecid, *Philanthus triangulum* (Fabricius, 1775). Day commented that 'workers with an interest in the taxonomy of the Sphecidae will doubtless wish to consider the advisability of seeking suppression of this name [*ruspatrix*] in view of the frequency of usage in biological texts of its junior synonym. *P. triangulum* (F.).'

2. Only two subsequent authors have mentioned the specific name *ruspatrix*. Menke (1986, p. 21) noted Day's (1979) report and quoted his comments on the synonymy, and Vikberg (1986, p. 78) used it as a valid name in his checklist of Finnish Aculeata.

3. Fabricius (1775, p. 373) described a new species *Vespa triangulum* and (1790, p. 224) transferred it to his genus *Philanthus*. Van der Vecht (1961, p. 61) studied the holotype of *Vespa triangulum* and confirmed that the name is at present interpreted correctly.

4. *Philanthus triangulum* is a widely distributed species, ranging from South Africa to northern Europe, east to Iran, Kazakh SSR and Turkmen SSR. This wasp uses honeybees exclusively as food for the larvae and is a serious apicultural pest in many areas. The name *triangulum* has been commonly used in faunal, taxonomic, apicultural, and toxicological literature. Dalla Torre (1897, p. 491–493) lists 31 citations for the period 1790–1893 (he omitted no fewer than nine citations for that time), and I know of at least 128 uses by 67 authors between 1937–1987. A list of the 1937–1987 citations is held by the Commission Secretariat.

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

(1) to use its plenary powers to suppress the specific name *ruspatrix* Linnaeus, 1767, as published in the binomen *Vespa ruspatrix*, 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 *triangulum* Fabricius, 1775, as published in the binomen *Vespa triangulum*:

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *ruspatrix* Linnaeus, 1767, as published in the binomen *Vespa ruspatrix* and as suppressed in (1) above.

Acknowledgement

I thank Arnold S. Menke and Vincent F. Lee for their comments on the manuscript.

References

Dalla Torre, C. G. de. 1897. *Catalogus Hymenopterorum hucusque descriptorum systematicus et synonymicus*, volumen VIII: Fossores (Sphegidae), 749 pp. Guilelmi Engelmann, Lipsiae.

Day, M. C. 1979. The species of Hymenoptera described by Linnaeus in the genera *Sphex, Chrysis, Vespa, Apis* and *Mutilla*. *Biological Journal of the Linnean Society of London*, **12** (1): 45–84.

Fabricius, I. Ch. 1775. *Systema Entomologiae*. 1–32, 1–832 pp. Flensburgi et Lipsiae.

Fabricius, I. Ch. 1790. Nova Insectorum genera. *Skrifter af Naturhistorie Selskabet*, **1** (1): 213–228.

Linnaeus, C. 1767. *Systema Naturae*. 12 ed., vol. 1, pt. 2, 533–1327 pp. Laur. Salvii, Holmiae.

Menke, A. S. 1986. *Philanthus ruspatrix* (L.). *Sphecos*, **12**: 21.

Vecht, J. van der, 1961. Hymenoptera Sphecoidea Fabriciana. *Zoologische Verhandelingen*, **48**: 1–85.

Vikberg, V. 1986. A checklist of aculeate Hymenoptera of Finland (Hymenoptera, Apocrita Aculeata). *Notulae Entomologicae*, **66** (2): 65–85.

Note added in proof: A similar application has also been received from Dr R. T. Simon Thomas of the *Instituut voor Taxonomische Zoologie, afd. Entomologie, Plantage Middenlaan 64, 1018 DH Amsterdam, The Netherlands.*

Case 2598

Ictiobus Rafinesque, 1820 (Osteichthyes, Cypriniformes) : proposed conservation

Reeve M. Bailey
Museum of Zoology, University of Michigan, Ann Arbor, Michigan 48109, U.S.A.

William N. Eschmeyer
California Academy of Sciences, San Francisco, California 94118, U.S.A.

Abstract. The purpose of this application is the conservation of the buffalofish generic name *Ictiobus* Rafinesque, 1820, by the suppression of the unused senior synonym *Amblodon* Rafinesque, 1819.

---

1. Rafinesque (1819, p. 421) proposed the genus *Amblodon* with two species from the Ohio River, *A. bubalus* (Rafinesque, 1818, p. 355) and the new *A. niger*, without type designation. Jordan & Evermann (1896, p. 163) regarded *Amblodon bubalus* as type species of *Amblodon*, a view with which we concur.

2. *Amblodon*, as proposed, is complex (Jordan 1917, p. 110). Rafinesque (1819, p. 421) named it for the 'Mâchoire inférieure pavée de dents osseuses serrées, arrondies, à couronne plate, inégales.' The remainder of his brief description applies to catostomid fishes, 'différent du genre *Catostomus*,' known as 'Buffaloe-fish.' Soon thereafter Rafinesque himself (1820, p. 55) recognised the complexity. 'I had called it *Amblodon bubalus* . . . . having been misled by the common mistake which ascribed to it the teeth of the *Amblodon grunniens*; but it is a real *Catostomus*, without any such teeth.' Thus, he retained the name *Amblodon*, applying it to *grunniens* (*op. cit.*, p. 24) in substitution for *Aplodinotus*. Subsequent workers, however, have customarily employed *Aplodinotus grunniens* for the freshwater drum, the grunting perch or bubbler of Rafinesque (1820).

3. Rafinesque (June 1820, p. '299' [i.e. 301] in *The Western Review and Miscellaneous Magazine*) proposed the subgenus *Ictiorus* [sic] (within *Catostomus*) for the species *Catostomus bubalus* Rafinesque (1818, p. 355), (previously mistakenly in the genus *Amblodon*), which he knew at first hand, and *niger* Rafinesque (1819, p. 421), known to him only from secondhand information received from Audubon (Rafinesque, 1820, p. 56).

4. In December 1820 parts of the three volumes of *The Western Review* were printed as *Ichthyologia Ohiensis*, and *Ictiobus* [sic], an intended correction for *Ictiorus*, appeared on p. 55 and p. 89 (index). *Ictiobus* is therefore an incorrect subsequent spelling, but it has been used without exception as the valid name of this genus and to revert to *Ictiorus* would not be in the interest of stability. The type species is *bubalus* by subsequent designation of Agassiz (1854, p. 354).

5. The catostomid genus currently known as *Ictiobus* includes three or more species; the geographic range extends from the southern part of the Great Lakes to northern Guatemala. The species are relatively large, are often common, enter into commercial fisheries, especially in the Mississippi basin, and have been known, at least in part, under the name *Ictiobus* (or its unjustified emendation, *Ichthyobus*) since the time of Rafinesque.

6. *Amblodon* (1819) antedates *Ictiobus* (1820), and the respective type species of both nominal genera, *Amblodon bubalus* and *Catostomus bubalus*, apply to the same taxon. Strict application of the rules of nomenclature would necessitate replacement of the familiar *Ictiobus* by *Amblodon*, unused for over a century and founded on a complex.

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

(1) to use its plenary powers:
  (a) to suppress the generic name *Amblodon* Rafinesque 1819, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
  (b) to rule that the correct original spelling of the generic name *Ictiorus* Rafinesque, 1820 is deemed to be *Ictiobus*;

(2) to place on the Official List of Generic Names in Zoology the name *Ictiobus* Rafinesque, 1820 (gender: masculine), type species by subsequent designation of Agassiz (1854) *Catostomus bubalus* Rafinesque, 1818;

(3) to place on the Official List of Specific Names in Zoology the name *bubalus* Rafinesque, 1818, as published in the binomen *Catostomus bubalus* (specific name of the type species of *Ictiobus* Rafinesque, 1820);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Amblodon* Rafinesque, 1819, as suppressed in (1) above.

References

Agassiz, L. 1854. Notice of a collection of fishes from the southern bend of the Tennessee River, in the State of Alabama. *American Journal of Science and Arts*, ser. 2, **17** (38): 353–369.

Jordan, D. S. & Evermann, B. W. 1896. The fishes of North and Middle America: a descriptive catalog. Pt. 1. *Bulletin of the U.S. National Museum*, **47**: 1–1240.

Jordan, D. S. 1917. The genera of fishes, pt. 1, from Linnaeus to Cuvier, 1758–1833. *Leland Stanford Junior University Publication, University series*, **27**: 1–161.

Rafinesque, C. S. 1818. Discoveries in Natural History, made during a journey through the Western Region of the United States. *American Monthly Magazine and Critical Review*, **3** (3): 354–356.

Rafinesque, C. S. 1819. Prodrome de 70 nouveaux Genres d'Animaux découverts dans l'intérieur des États-Unis d'Amérique, durant l'année 1818. *Journal de Physique, de Chimie et d'Histoire Naturelle et des Arts*, Paris. **88**: 417–429.

Rafinesque, C. S. 1820. *Ichthylogia Ohiensis, or natural history of the fishes inhabiting the River Ohio and its tributary streams*. Printed from December, 1819 to November, 1820 in volumes 1–3 of *The Western Review and Miscellaneous Magazine* [pertinent material in June, 1820, vol. 2 (5): pp. 299–307], assembled as a volume and issued together with supplement, corrections and additions, and index in November, 1820. 90 pp. Lexington, Kentucky].

Case 2556

Hydrolycus Müller & Troschel, 1844 (Osteichthyes, Cypriniformes): confirmation proposée de *Hydrocyon scomberoides* Cuvier, 1819 comme espèce-type

J. Géry
Argentonesse, 24220 Saint Cyprien, France

V. Mahnert
Muséum d'Histoire naturelle, case postale 434, CH-1211, Genève 6, Switzerland

Abstract. The purpose of this application is the confirmation of the nominal species *Hydrocyon scomberoides* Cuvier, 1819 as the type-species of the characoid fish genus *Hydrolycus* Müller & Troschel, 1844, although the authors had misidentified their species.

Sommaire. L'objet de cette demande est la confirmation de l'espèce nominale *Hydrocyon scomberoides* Cuvier, 1819 comme espèce-type du genre des poissons characoïdes *Hydrolycus* Müller & Troschel, 1844, cecí bien que les auteurs aient mal identifié leur espèce.

---

1. Cuvier (1819, pp. 357–359, pl. 27, fig. 2) a proposé le nom *Hydrocyon scomberoides* pour un poisson characoïde récolté probablement dans l'Amazone (type existant au Muséum d'Histoire Naturelle, Paris, sous le numéro A.8659–81.87.2.3).

2. Robert Schomburgk (1841, pp. 249–250, pl. 25) a proposé le nom *Hydrocyon armatus* pour une espèce des fleuves de Guyana (ex Guyane britannique) récoltée par lui-même, et dont le matériel typique n'a pas été déposé.

3. Müller & Troschel (1844, p. 93) ont établi le genre *Hydrolycus*, avec comme espèce-type par monotypie *'Hydrocyon scomberoides* Cuvier'. L'exemplaire étudié et illustré (1845, p. 19, pl. 5, fig. 2), à présent disparu, avait été récolté en Guyana par Richard Schomburgk.

4. Valenciennes (1849, en Cuvier & Valenciennes, pp. 324–329) donne une description complémentaire de *Cynodon scomberoides* fondée sur cinq exemplaires, dont deux, récoltés par R. Schomburgk (probablement Robert), provenaient de l'Essequibo (Guyana).

5. Günther (1866, pp. 30–31) décrit, sous le nom de *Cynodon pectoralis*, une espèce de l'Amazone 'closely allied to *C. scombroides'* [sic].

6. La plupart des auteurs modernes, en particulier Campos (1945), Schultz (1950), Howes (1976) et Géry (1978), ont réservé le nom de *pectoralis* à l'espèce amazonienne.

7. Géry (1986) a démontré:
   (i) que l'espèce de la Guyana vue par Müller & Troschel est distincte de l'espèce amazonienne;
   (ii) que la description donnée par Valenciennes est fondée sur du matériel hétérogène et qu'elle a induit plusieurs auteurs en erreur: par exemple Castelnau (1855), Kner (1860) et Günther (1864);
   (iii) que *Cynodon pectoralis* Günther est un synonyme subjectif plus récent de *Hydrocyon scomberoides* Cuvier;
   (iv) et que *armatus* Schomburgk serait le nom spécifique valide pour l'espèce de la Guyana confondue par Valenciennes et par Müller & Troschel avec *Hydrocyon scomberoides* Cuvier.

8. D'après les recherches modernes, une seule espèce du genre *Hydrolycus*, à savoir *H. armatus* (Schomburgk, 1841), semble exister en Guyana: il est donc évident que Müller & Troschel n'ont pu avoir sous les yeux le vrai *Hydrocyon scomberoides* Cuvier, 1819 et que l'espèce-type de leur genre a été mal identifiée.

9. Le statut taxonomique de ce genre est encore discuté. Plusieurs espèces ne sont pas encore nommées et seule l'espèce *Hydrocyon scomberoides* Cuvier peut actuellement être définie par son spécimen-type. En conséquence, la Commission Internationale de la Nomenclature Zoologique est priée de:

(1) confirmer l'espèce nominale *Hydrocyon scomberoides* Cuvier, 1819 (non Valenciennes, 1849 nec Müller & Troschel, 1844) comme espèce-type du genre *Hydrolycus* Müller & Troschel, 1844;

(2) inscrire sur la Liste Officielle des Noms Génériques en Zoologie le nom *Hydrolycus* Müller & Troschel, 1844 (genre: masculin), espèce-type par monotypie et confirmée ci-dessus (1), *Hydrocyon scomberoides* Cuvier, 1819;

(3) inscrire sur la Liste Officielle des Noms Spécifiques en Zoologie le nom *scomberoides* Cuvier, 1819, tel que publié dans le binôme *Hydrocyon scomberoides* (nom spécifique de l'espèce-type de *Hydrolycus* Müller & Troschel, 1844).

Références

Campos, A. Amaral, 1945. Contribuiçao ao conhecimento das especies brasileiras do genero Hydrocynus e afins. *Archivos de Zoologia,* São Paulo, **4** (12): 467–484.

Castelnau, F. de, 1855. *Animaux nouveaux ou recueillis pendant l'expédition dans les parties centrales de l'Amérique du Sud, etc.* Tome II. Poissons. xii + 112 pp., 50 pls. Paris.

Cuvier, G. 1819. Sur les Poissons du sous-genre Hydrocyon, sur deux nouvelles espèces de Chalceus, sur trois nouvelles espèces de Serrasalmes, et sur l'Argentina glossodonta de Forskahl, qui est l'Albula gonorhynchus de Bloch. *Mémoires du Muséum d'Histoire Naturelle,* Paris, **5**: 351–379, pls. 26–28.

Cuvier, G. & Valenciennes, A. 1849. *Histoire naturelle des Poissons,* vol. 22, 532 pp., 16 pls. Paris.

Géry, J. 1978. *Characoids of the World.* 672 pp. T.F.H. Publishing, Neptune, N.J., U.S.A.

Géry, J. 1986. Notes de Characologie néotropicale. 2. Progrès récents dans la connaissance des Cynodontinés (Characidés). *Revue française d'Aquariologie,* **13**(3): 61–68.

Günther, A. 1864. *Catalogue of the Fishes in the British Museum,* (Fam. 2, Characinidae), vol. 5, pp. 278–380.

Günther, A. 1866. Remarks on some fishes from the River Amazon (coll. Bartlett) in the British Museum. *Annals and Magazine of Natural History,* ser. 3, **18**: 30–31.

Howes, G. J. 1976. The cranial musculature and taxonomy of characoid fishes of the tribes Cynodontini and Characini. *Bulletin of the British Museum (Natural History),* Zoology, **29**(4): 201–248.

Kner, R. 1860. Zur Familie der Characinen. III. Folge der ichthyologischen Beiträge. (II. Abt.). *Denkschriften der Kaiserlichen Akademie der Wissenschaften*, Wien, **18**: 9–62, pls. 1–8.

Müller, J. & Troschel, F. H. 1844. Synopsis generum et specierum familiae Characinorum (Prodromus descriptionis novorum generum et specierum). *Archiv für Naturgeschichte*, Berlin, **10**(1): 81–99.

Müller, J. & Troschel, F. H. 1845. *Horae ichthyologicae*. Beschreibung und Abbildung neuer Fische; erstes und zweites Heft. Die Familie der Characinen. 40 pp., 11 pls. Berlin.

Schomburgk, R. H. 1841. *The natural History of the Fishes of Guiana*, Part I. *The Naturalist's Library, conducted by Sir William Jardine*. Ichthyology, vol. 3, 263 pp., 32 pls. Edinburgh.

Schultz, L. P. 1950. Review of thirteen genera of South American fishes in the subfamilies Cynodontinae, Hepsetinae and Characinae, with the description of a new *Cyrtocharax*. *Studies honoring T. Kincaid*, pp. 44–73. University of Washington, Seattle.

Case 2621

Ascalabotes gigas Bocage, 1875 (currently *Tarentola gigas*; Reptilia, Squamata): proposed conservation of the specific name

Hans Hermann Schleich

c/o Zoologische Staatssammlung, Münchhausenstr. 21, D-8000 München 60, West Germany

Abstract. The purpose of this application is the conservation of the specific name of the giant Cape Verde Gecko *Tarentola gigas* (Bocage, 1875), by the suppression of the unused and inappropriate senior subjective synonym *T. borneensis* Gray, 1845.

---

1. Bocage (1875, p. 108) gave a detailed description of *Ascalobotes gigas* from 'l'Archipel du Cap-Vert'.

2. Gray (1845, p. 165) described *Tarentola borneensis* from 'Borneo' but Joger (1984, p. 99) reviewed the type material from the British Museum (Natural History) and identified it as being from Branco (Cape Verde Islands).

3. The specific name *borneensis* Gray, 1845 has not been used (Schleich (1987, pp. 34–35)) except in synonymy by Loveridge (1947, p. 331) and Wermuth (1965, p. 179).

4. However, *T. gigas* (Bocage, 1875) has been in continuous use since its proposal (see Schleich (1987, p. 48) for a list of fifteen references). Usage of *T. borneensis* Gray, 1845 now would cause destabilisation, particularly as these geckos are endemic to the Cape Verde Islands off Africa, and not Borneo (Asia).

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

(1) to use its plenary powers to suppress the specific name *borneensis* Gray, 1845, as published in the binomen *Tarentola borneensis*, 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 *gigas* Bocage, 1875, as published in the binomen *Ascalabotes gigas*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *borneensis* Gray, 1845, as published in the binomen *Tarentola borneensis* and as suppressed in (1) above.

References

Bocage, J. V. B. du, 1875. Sur deux reptiles nouveaux de l'Archipel du Cap Vert. *Jornal de Sciencias Mathematicas, Physicas e Naturaes*, **5**: 108–112.

Gray, J. E. 1845. *Catalogue of the specimens of lizards in the collection of the British Museum*. 289 pp. Trustees of the British Museum, London.

Joger, U. 1984. Die Radiation der Gattung *Tarentola* in Makronesien. *Courier Forschungsinstitut Senckenberg*, **71**: 91–111.

Loveridge, A. 1947. Revision of the African lizards of the family GEKKONIDAE. *Bulletin of the Museum of Comparative Zoology, Harvard College*, **98**: 1–469.
Schleich, H. H. 1987. Herpetofauna Caboverdiana. *Spixiana*, Supplement, **12**: 1–75.
Wermuth, H. 1965. GEKKONIDAE, PYGOPODIDAE, XANTUSIIDAE. *Das Tierreich*, **80**: 1–246.

Case 2605

Euryotis brantsii A. Smith, 1834 (currently *Parotomys brantsii*; Mammalia, Rodentia): proposed conservation of the specific name

L. C. Rookmaaker
Dokter Guepinlaan 23, 4032 NH Ommeren, The Netherlands

J. Meester
Department of Biology, University of Natal, King George V Avenue, Durban 4001, R.S.A.

Abstract. The purpose of this application is the conservation of the specific name *brantsii* A. Smith, 1834 for a small southern African rodent. The name is threatened by a senior subjective synonym, *Arctomys vigil* Thunberg, 1811, unused since its proposal.

---

1. Carl Peter Thunberg established the name *Arctomys vigil* (p. 308) in his important revision of South African mammals published in 1811. He referred to an animal occurring in the Karroo, about the size of a rat, with a tail about one third of body length, with two rodent-like incisors, no canines and 'many molars' — obviously a reference to the laminae of the cheekteeth. The sloping burrow was open to the outside and the animal was frequently found sitting in front of it. Apart from tail length, which is closer to half body length, this description and particularly the habitat information leave no doubt that the animal referred to is that currently known as *Parotomys brantsii* (Smith, 1834).

2. Although not completely forgotten, Thunberg's paper was rarely cited, even in the 19th century (Rookmaaker, in press). The name *Arctomys vigil* itself has never been used in primary zoological literature since its proposal.

3. *Euryotis brantsii* was established by A. Smith (1834, p. 150). It was described again later (Smith, 1840, pl. 24) with the addition of a coloured plate.

4. *P. brantsii*, otherwise known as Brants' whistling rat, is a common animal in the western and northern Cape Province, south Namibia and south Botswana, and is regularly mentioned in the literature. The name *brantsii* A. Smith, either in the original binomen or in the currently recognised *Parotomys brantsii*, has been the only name consistently used. A list of references is held by the Commission Secretariat.

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

(1) to use its plenary powers to suppress the specific name *vigil* Thunberg, 1811, as published in the binomen *Arctomys vigil*, 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 *brantsii* A. Smith, 1834, as published in the binomen *Euryotis brantsii*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *vigil* Thunberg, 1811, as published in the binomen *Arctomys vigil* and as suppressed in (1) above.

References

Rookmaaker, L. C. (in press) The taxonomic importance of C. P. Thunberg's revision of South African mammals (1811). *South African Journal of Science*, (in press).

Smith, A. 1834. African zoology. *South African Quarterly Journal*, **2**: 145–160.

Smith, A. 1840. *Illustrations of the zoology of South Africa...* 51 pls. Smith Elder and Co. London.

Thunberg, C. P. 1811. Mammalia Capensia, recensita et illustrata. *Mémoires de l'Académie Impériale des Sciences de St. Petersbourg*, **3**: 299–323.

Use versus priority: comments on a paper by P. F. S. Cornelius, with alternative proposals for the conservation of well-known names

K. H. L. Key
Division of Entomology, CSIRO, G.P.O. Box 1700, Canberra 2601, Australia

Abstract. The proposal of P. F. S. Cornelius (1987; *Bulletin of Zoological Nomenclature*, **44**: 79–85) would require changes to the Code which might delay its implementation for years. His purposes could be largely achieved by streamlining the operation of Articles 23b & 79, with emphasis on direct conservation rather than on suppression. Conservation would be achieved by a ruling of the Commission that the name to be conserved is deemed to have precedence over *all* senior synonyms and homonyms.

The case presented by Cornelius (1987) in favour of the conservation of well-known names against the 'relentless' application of the unmoderated Principle of Priority is very impressive. So are his criticisms of the practical operation of Article 23b of the Code, with the heavy burden it places upon authors applying to the Commission for suppression of unused senior synonyms — and indeed upon the Commission itself. Abandonment of a currently used but junior name not only requires non–taxonomists (the principal users) to learn the 'new' name, but also to remember (or learn) that it refers to the same taxon cited in an extensive earlier literature under the 'old' name.

The solution Cornelius offers involves the designation by the Commission of 'Protected Works', on the recommendation of specialist panels. It thus places the emphasis squarely on the direct *conservation* of widely used names, as distinct from the *suppression* of their unused senior synonyms. The implications of the proposal will need to be carefully worked out, since there are some evident problems. Not the least of these is that, whatever its ultimate form, it would call for significant modifications and additions to the Code and might well not be operative until the next edition some years hence.

There is, however, an alternative procedure applicable within the present terms of the Code but with a less ritualistic use of Articles 23b & 79 than has been the practice. Certain features of these Articles do not seem to be generally appreciated: (1) Art. 23b states that 'an author who considers that the application of the Principle of Priority would disturb stability or universality or cause confusion *is to* [i.e. *must*, not *may*] maintain existing usage and refer the case to the Commission for a ruling'. (2) This positive instruction is, however, conditional upon the author 'considering' that stability or universality would be disturbed. It therefore gives him a wide subjective discretion which he may be tempted to rationalise. However, even if author A proceeds on the view that there would not be significant disturbance, a later author B may feel that there would. If B then applies to the Commission, Art. 79c(2)(i) requires that A's use of the otherwise unused senior synonym be not accepted as usage. Thus an author who fails to act under Art. 23b has to face the prospect that his usage may be challenged and invalidated. (3) The conditions listed under Art. 79c as providing a prima facie case that stability is threatened do no more than that. The 'guiding principles' governing

suppression of senior names by the Commission are said in Art. 79b not to 'limit its use of that power' (i.e. the plenary power to suspend the application of the Code in a particular case): thus a name may be suppressed even though the prima facie conditions have not been met. (4) Finally, Art. 79a prescribes that the Commission may *'conserve* [my italics], totally, partially, or conditionally suppress, or make available any name. . .'. That is, the Code does not envisage *conservation* of a name as being necessarily attainable only by the *suppression* of other names. This opens the way to some such scheme as that of Cornelius, but it also broadens the possibilities under the existing provisions of the Code.

The goal should be to conserve the widely used name against the threat of little-used senior synonyms or homonyms: the means to this end are secondary. Moreover, it should not be regarded as a requirement (and is not, under the Code — see above) that a senior name should never have been used during the previous 50 years. Enormous amounts of time have been wasted in attempting to establish that a name has never been used in the primary literature over that period. What the Commission needs is evidence that a name has been in extensive and almost exclusive use for the taxon in question over a considerable period of years, especially in authoritative revisions and major textbooks. It would be ritualistic to be bound by precise figures for number of publications, authors, and years: there should be sufficient flexibility to allow each case to be considered on its merits. Suppression of senior names is not necessary. Conservation can be achieved by a ruling under the plenary power that the name to be conserved is to have precedence over *any* senior synonym or homonym. Given that precedence, the status of chronologically senior names would come under the ordinary provisions of the Code as *junior* synonyms or homonyms.

The above procedure would save an enormous amount of time and labour on the part of both the applicant and the Commission's Secretariat. Further savings would result from an abandonment by the Commission of its 'in house' principle of 'completeness of ruling'. This principle can lead to involved investigation of matters having no significant relation to the purposes of an application, and concerning which there may be no conflict. It is not an investigation that an applicant should be required to undertake, and can only delay the reaching of a decision by the Commission. I believe that if these procedural changes are adopted much freer use will be made of those provisions of the Code that promote the conservation of well known names, without the need for any change in its wording.

Reference

Cornelius, P. F. S. 1987. Use versus priority in zoological nomenclature. *Bulletin of Zoological Nomenclature*, **44**(2): 79–85.

Comment on the suggested introduction of 'Protected Works'
(see BZN **44**: 79–85)

M. B. Best & B. W. Hoeksema
Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Dr Cornelius' suggestion to introduce 'Protected Works' for the sake of nomenclatural stability at first view seems indeed a step forward in the direction of a taxonomy which is more accessible for biologists who are not systematists, especially for those working in countries where the older scientific literature is difficult to obtain. Of course the problem arises as to what criteria should be used in declaring a work 'Protected'. Dr Cornelius offers some solutions for the case in which a potential 'Protected Work' is too regional (not covering complete distribution areas of all taxa dealt with), or in which not all taxa are treated thoroughly enough. Different kinds of supplements would have to be designated if the Protected Work is not adequately comprehensive. The nomenclature in such a work would also not be protected from the effect of subsequent taxonomic reassessments, as Cornelius has pointed out. Because of all these provisions the original aim, to provide a single accessible source of nomenclature, is not easily achieved.

As an example of a possible Protected Work Dr Cornelius suggests the five volumes by J. E. N. Veron* *et al.*, *Scleractinia of eastern Australia* (1976–1984, *Australian Institute of Marine Science Monograph Series*, Canberra). Those working on Indo–Pacific coral reefs are familiar with this very detailed work and find it the most useful available. However, Veron *et al.* certainly do not claim to have the last word about coral systematics. The taxonomic value of several species treated, or only mentioned, is left uncertain, and their studies are confined to the Great Barrier Reef.

We agree with Cornelius that if works are proposed for 'Protection' the conditions should be very strict. We suggest that the work should be of revisionary character (including the mentioning of type specimens), and cover the whole geographical area in which the treated taxa are distributed. An exception can be made when a monograph has been made about an area separated by impenetrable natural boundaries for a long enough period to ensure (1) that species do not occur at both sides of the boundaries, and (2) that no confusion can arise in the identification of two species from both sides of the boundaries. If the work meets the criteria of all formal rules, nevertheless at least five scientists working in the field of the taxa covered should be consulted and give their support to the suggested 'Protection', and of course the proposal should be widely published in appropriate journals.

*Erroneously printed as 'Vernon' in BZN **44**: 84.

Comment on the introduction of the term 'pragmatype' and on the role of the International Commission on Zoological Nomenclature
(See BZN **44**: 156–157)

G. Hahn
Fachbereich Geowissenschaften, Universitäts Lahnberge, 355 Marburg (Lahn), W. Germany

I absolutely disagree with the introduction of 'pragmatypes' as proposed by Disney & Erzinclioglu. The door would be wide open for nomenclatural instability, at least in palaeontology. All palaeontological types are incomplete specimens; if anyone who found a better preserved specimen were to promote it to a 'pragmatype', very soon every specialist would have his own types. Therefore the proposal to introduce pragmatypes is a very bad one and should be rejected.

Drs Disney and Erzinclioglu have apparently a completely wrong idea about the business of the ICZN. By authority of the International Congresses of Zoology the ICZN was instructed to elaborate *rules* of zoological nomenclature, not only advice. These rules should be followed by all zoologists as long as they are in use. If everybody were to interpret the rules in his own way, it would be better to stop the work of the Commission and save money!

Pragmatypes and the role of the Commission: a reply to Dr P. K. Tubbs
(See BZN **44**: 156–157 and 158–159).

R. H. L. Disney & Y. Z. Erzinclioglu
University Department of Zoology, Downing Street, Cambridge, CB2 3EJ, U.K.

We have read with interest Dr Tubbs' reply to our article on the role of the ICZN. We would like to reply in turn.

Regarding the comments of Dr Tubbs on our listing of various subterfuges, used by some taxonomists endeavouring to circumvent the problems posed by 'nuisance' type specimens, we would suggest that the adoption of the pragmatype concept would remove any temptation to practise such subterfuges.

In responding to the other points raised by Dr Tubbs we will refer to his numbered paragraphs (BZN **44**: 158–159):

(1) We agree that the Commission is not empowered to prevent taxonomists from publishing the results of their work in the manner acceptable to themselves (and to editors of journals!). This view evidently contradicts that expressed in the same paragraph in which Dr Tubbs argues that any setting aside of earlier types 'should be done not by an *individual* but *only* by the Commission . . .' [our italics].

(2) Article 75(a) gives the generally accepted definition of a neotype (a type designated when the original is thought to be lost or destroyed). As previously pointed out (Disney, 1987), this definition is contradicted by Recommendation 75E.

We remain convinced that the conceptual distinction between a neotype (*sensu stricto*) and a pragmatype is useful in practice. We regret that Dr Tubbs refrained from addressing this contention, but instead merely reiterated the provisions of

Recommendation 75E — the very recommendation at issue. In the absence of a reasoned defence of 75E we will continue to assume there is no rational defence. As we read 75E it seems to us to be an example of the mutually contradictory parts of a Code which has made it a document that can be used, by selective quotation, to support any position (like the Pentateuch in the hands of a Creationist!).

(3) Dr Tubbs expresses a fear that departure from the Code would open the floodgates to chaos. We contend that rigid *adherence* to the Code is manifestly causing some degree of chaos. It certainly causes misunderstanding. Dr Tubbs denies that the Code includes 'mandatory' recommendations. However the word 'mandatory' is very much part of the Code (e.g. Articles 19(b) and 36(a)). We are also told the Code is a set of recommendations. The implication is that some of these are mandatory. It is certainly interpreted this way by experienced taxonomists (e.g. Pont, 1986).

References

Disney, R. H. L. 1987. Defending 'pragmatypes'. *Nature* **328**: 673.
Pont, A. C. 1986. Type specimens in private collections: in defence of 72D. *Antenna* **10**: 58.

Comment on the proposed conservation of *Chelifer* Geoffroy, 1762 (Arachnida, Pseudoscorpionida)

(Case 2478; see BZN **44**: 188–189)

I. M. Kerzhner
Zoological Institute, Academy of Sciences of the U.S.S.R., Leningrad 199034, U.S.S.R.

I support M. S. Harvey's proposal for the conservation of *Chelifer* Geoffroy, 1762. I have already suggested this in my large paper on Geoffroy's (1762) generic names sent to the Commission in October 1978 (Case 2292), but which has not yet been published.

Two corrections not affecting the essence of Harvey's proposal should be made. As Fabricius (1775, p. 400) under *Scorpio cancroides* refers to *Acarus cancroides* Linnaeus, 1758 in the 12th edition of *Systema Naturae* (where the species was placed in *Phalangium*) and in the 2nd edition of *Fauna Svecica* ('Linn. Syst. Nat. II, 1028. 4. Fn. Sv. 1968') it is clear that *Scorpio cancroides* is merely a new combination, not a new specific name established by Fabricius. Latreille (1810) cited many type species in combinations first used by Fabricius. In such cases he did not indicate the original authors of specific names, but simply gave Fabricius as the author of a combination; this practice was common in Latreille's time. Hence the end of Proposal (2) on BZN **44**: 189 should be 'type species by subsequent designation of Latreille (1810) *Scorpio cancroides* (= *Acarus cancroides* Linnaeus, 1758)'. The correct authorship and date for OBISIIDAE is Sundevall (1833, p. 33, as 'Obisides'); since it has not had general acceptance this family name is rejected under Art. 40b.

Reference

Sundevall, C. J. 1833. *Conspectus Arachnidum*. 39 pp. C. F. Berling, Londini Goth. [= Lund.].

Comments on the proposed suppression of *Belemnites* Lamarck, 1799, and the conservation of BELEMNITIDAE d'Orbigny, 1845
(Case 2571: see BZN **43**: 355–359; **44**: 48 and 194)

(1) G. Hahn
Fachbereich Geowissenschaften, Universitats Lahnberg, 355 Marburg (Lahn), W. Germany

In the present situation I do not support the suppression of *Belemnites*. As the family name BELEMNITIDAE is widely used the suppression of the name-bearing genus *Belemnites* should be considered only if a real attempt has been made to select a neotype for its type species, and been proved to have failed.

(2) M. K. Howarth
Department of Palaeontology, British Museum (Natural History), London, SW7 5BD, U.K.

I support the application by Doyle and Riegraf for suppression of the generic name *Belemnites* Lamarck, 1799, and the specific name *paxillosa* Lamarck, 1801, as published in the binomen *Belemnites paxillosa*. Doyle & Riegraf (BZN **43**: 356) have pointed out that the lectotype of the species (which is now lost) was both generically and specifically indeterminate, and a senior belemnite specialist has admitted (Jeletzky, 1966) that selection of another type specimen from amongst the syntypes would lead to the replacement of one of the best known Upper Cretaceous generic names by *Belemnites*. The alternative course, to select a Lower Jurassic specimen as neotype, would therefore be in conflict with the remaining syntypes, and would not lead to an interpretation of *Belemnites paxillosa* that would be widely accepted. The suppression of both names, as advocated by Doyle & Riegraf, is a better solution, and is the only way to achieve long-term stability.

The second reason for the suppression of *Belemnites* is to avoid a clash with the widespread vernacular use of the word. This is especially appropriate in this case, because, unlike some other conflicts between vernacular words and generic names, the spelling is exactly the same for both 'belemnites' and *Belemnites*, and leads to very similar pronunciations. The possibilities for confusion are very real, and are better avoided by suppression of the generic name *Belemnites*. I also support the proposals for conservation of the family-group name BELEMNITIDAE, which is widely used and understood.

Reference

Jeletzky, J. A. 1966. Comparative morphology, phylogeny and classification of Coleoidea. *Paleontological Contributions, University of Kansas*, Mollusca, Art. 7, 162pp.

(3) T. I. Nal'nyaeva
Institute of Geology and Geophysics, Novosibirsk–90, 630090, U.S.S.R.

I support the application of Doyle & Riegraf to suppress the binomen *Belemnites paxillosa*.

I have previously (Saks & Nal'nyaeva, 1970, pp. 68–69) discussed in some detail the

names *Belemnites* and *Passaloteuthis*, and reached the same conclusions as Doyle & Riegraf have more recently. In particular, I agree that it would not be possible to designate a type specimen of *'Belemnites paxillosa'* that would not add to confusion, whereas *Passaloteuthis bruguieranus* (d'Orbigny, 1843) has been widely accepted since the work of Lissajous in 1915. I do not support the use of *Belemnites* as a generic name, any more than I would the analogous names *Ammonites*, *Trilobites* and *Graptolites*.

Reference

Saks, V. N. & Nal'nyaeva, T. I. 1970. *Early and Middle Jurassic belemnites of the northern part of the U.S.S.R.* 228 pp. Leningrad. [In Russian].

Comment on the proposed conservation of *Conus floridanus* Gabb, 1869 (Mollusca, Gastropoda)

(Case 2563: see BZN **44**: 21–22)

M. G. Harasewych & R. E. Petit
National Museum of Natural History, Smithsonian Institution, Washington, DC 20560, U.S.A.

We wish to express our opposition to Cernohorsky's proposed conservation of the specific name *floridanus* Gabb, 1869, as this would require the use of the plenary powers to suppress the senior synonym *Conus anabathrum* Crosse, 1865, a taxon that was validly proposed in a major malacological journal, was adequately illustrated, and for which a holotype exists and has always been available for study in a museum noted for its care and curation of type material. Vink (1985, p. 3) gives a history of the names involved, and makes it clear that previous misidentifications of *Conus anabathrum* Crosse stem from an initial misidentification by Smith (1884, p. 489), which was cited by Tomlin (1937, p. 211). Tomlin's listing in a catalogue of species-level names of *Conus*, not intended to be a taxonomic revision, was blindly accepted by later workers. Evidently, the first recent workers to examine the holotype of *Conus anabathrum* were Coomans, Moolenbeek & Wils (1980, p. 34), who recognised this taxon as a senior synonym of *Conus floridanus*.

Nomenclatural stability may be achieved by the strict application of the rule of priority or by the conserving of a 'metastable' species name, one used incorrectly but consistently for some period of time. With the increasing use of computerised data bases that can be cross-referenced, the need for fixing such metastable names for purposes of information retrieval will steadily diminish.

The suppression of *Conus anabathrum* Crosse would, we feel, endorse the uncritical perpetuation of previously published taxonomic opinions, accurate or not, without reference to primary type material. Although recognition of *Conus anabathrum* will upset existing usage to some extent, the nomenclature of the genus *Conus* is so confused at this time that only major taxonomic revisions will achieve real stability.

References

Cernohorsky, W. O. 1987. *Conus floridanus* Gabb, 1869 (Mollusca, Gastropoda): proposed conservation of the specific name. *Bulletin of Zoological Nomenclature*, **44**(1): 21–22.

Coomans, H. E., Moolenbeek, R. G. & Wils, E. 1980. Alphabetical revision of the (sub)species in recent Conidae. 3. *albus* to *antillarum* with the description of *Conus algoensis agulhasi*, nov. subspecies. *Basteria*, **44**: 17–49.

Crosse, H. 1865. Description de Cones nouveaux provenant de la collection Cuming. *Journal de Conchyliologie*, **13**: 299–315.

Gabb, W. M. 1869. Description of a new cone from the coast of Florida. *American Journal of Conchology*, **4**(4): 195–196.

Smith, E. A. 1884. Mollusca [in] *Report on the Zoological Collections made in the Indo–Pacific Ocean during the voyage of H.M.S. 'Alert'*, pp. 487–508.

Tomlin, J. R. Le B. 1937. Catalogue of recent and fossil cones. *Proceedings of the Malacological Society of London*, **22**: 205–333.

Vink, D. N. L. 1985. What price stability? The vexing problem of synonymy. *Hawaiian Shell News*, **33**: 3–4.

Comments on the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington

(Case 2531: see BZN **44**: 116–121 and 257–261)

(1) G. J. Ingram & J. Covacevich
Queensland Museum, P.O. Box 300, South Brisbane, Queensland 4101, Australia

We strongly support the case by the President of the Australian Society of Herpetologists for suppression of three works of Wells & Wellington for the purposes of nomenclature.

As taxonomists who work on both amphibians and reptiles, we are perturbed by the number and kinds of changes proposed for these groups. We are also disturbed by the potential success of Wells & Wellington's attempt to 'overload the system'. Through these works the authors have the opportunity to transform taxonomists working on Australian amphibians and reptiles into nomenclatural drudges for many years. It appears that Wells & Wellington have challenged the foundations of nomenclature and, in so doing, set out to test the efficacy of the International Code of Zoological Nomenclature.

We urge the Commission to suppress the works, to avoid two major problems we can foresee:

(1) taxonomists will be forced to make nomenclatural decisions by examining many holotypes and lectotypes designated, but not seen, by Wells & Wellington.

(2) the Bureau of Flora and Fauna, Canberra, intends the *Zoological Catalogue of Australia* to cover all the zoological groups. As each volume is produced, the groups covered will become vulnerable to the same nomenclatural catastrophes that may befall herpetology.

(2) Allan E. Greer
The Australian Museum, 6–8 College St., Sydney, N.S.W. 2000, Australia

1. The application by the President of the Australian Society of Herpetologists to suppress three works (Wells & Wellington, 1984; 1985a,b) should be rejected for the following reasons.

2. Suppression of entire works is undesirable because it smacks of censorship and summarily discards good ideas with the bad.

3. Suppression of these particular works is unnecessary because any criticisms, including the ones prepared for the application for suppression, could have been published through normal channels, thus carrying on normal scientific debate and avoiding extraordinary precedents.

4. The degree of 'destabilization' caused by the three works is not as great as implied by the application. There are good ideas in the works, and people are using the names and ideas they consider useful both in publications and in collection management. For example, the only comprehensive field guide to Australian reptiles and amphibians (Cogger, 1986) uses Wells & Wellington names, as does the Australian Museum, the museum with the largest reptile and amphibian collection in the world. Other examples of recent usage of Wells & Wellington taxonomy are: Greer & Cogger, 1985; Shea & Peterson, 1985, and Tilley, 1984.

5. Under the current rules the three works are validly published and many of the names therein are available. If the rules are inadequate, they should be addressed, and not individual works thought by some to manifest the consequences of inadequate (but legal) rules.

References

Cogger, H. G. 1986. *Reptiles and Amphibians of Australia.* Fourth Edition. 688 pp. Reed Books Pty Ltd., Frenchs Forest, N.S.W., Australia.

Greer, A. E. & Cogger, H. G. 1985. Systematics of the reduced-limbed and limbless skinks currently assigned to the genus *Anomalopus* (Lacertilia: Scincidae). *Record of the Australian Museum, Sydney*, **37**(1): 11–54.

Shea, G. M. & Peterson, M. 1985. The Blue Mountains water skink, *Sphenomorphus leuraensis* (Lacertilia: Scincidae): a redescription, with notes on its natural history. *Proceedings of the Linnean Society of New South Wales*, **108**(2): 141–148.

Tilley, S. J. 1984. *Skeletal variation in the Australian Sphenomorphus group (Lacertilia: Scincidae).* Unpublished Ph.D. thesis, La Trobe University, Bundoora, Victoria, Australia.

(3) Jonathon Stone (Biological Sciences Secretary, Australian Academy of Science)
Australian Academy of Science, GPO Box 783, Canberra, ACT 2601, Australia

I write to express the support of the Australian Academy of Science for the application by the Australian Society of Herpetologists for the suppression for nomenclatural purposes of three works published in the *Australian Journal of Herpetology*. This case raises some very serious issues.

I should perhaps make clear at the outset what the Academy is *not* advocating. First, controversy is a natural and proper part of science, and the Academy's support is in no

sense a concern to limit controversy. Second, we do not support the 'suppression' of scientific observations, however unorthodox their source or the manner in which they are put forward. The empirical testing of new and old observations is the proper response of a scientific discipline to unsettling new claims. Finally, we are not particularly concerned to defend the 'good name' of Australian science. One or two 'rogue papers', if such they are, will detract little, if at all, from a reputation established by the institutes and universities of this country over many years.

However, the intellectual liberty essential to science requires an open society based on substantial conventions. From time to time the conventions of intellectual liberty, like those of political liberty, need to be defended.

Two conventions seem threatened by the papers whose nomenclatural suppression is proposed. The first is general to all sciences, in which it is an established convention that papers published in learned journals undergo substantive independent review. The first section of the case raises the possibility that the material whose nomenclatural suppression is sought has been falsely represented as having undergone that normal process of review. We urge close consideration of that claim; the conventions of independent review are essential to the intellectual rigour and freedom of science.

The second convention at issue is more specific to the biological sciences. The existence of the Commission attests the importance of terminology in zoology. Terminology always involves classification, and classification goes to the fundamentals of any discipline. Zoologists and botanists have, for many decades, explored the problems of classification more deeply than scientists in other fields. In zoology, perhaps more than in any other subject, it has been necessary to establish conventions of nomenclature which, on the one hand, allow the open development of new ideas, and, on the other, provide sufficient stability to allow discourse within the field. As a consequence, zoologists have laid the intellectual foundations of biological classification, and among those foundations are a range of broadly accepted conventions. The later sections of the case present strong evidence of a substantial flouting of these conventions. Of particular concern is the detailed evidence of massive changes to classification and terminology made without proper supporting observations. At some point the requirement of science for an empirical basis to new claims must be stated. The Academy understands the case proposed by the Australian Society of Herpetologists to be a plea for the suppression of a nomenclature because it lacks an adequate empirical base and because, without nomenclatural suppression, there is an obligation on other scientists to use the terminology. If the Commission takes no action with respect to the nomenclature proposed in these publications other scientists may of course choose to ignore that obligation. If they so choose, then another convention is destroyed. The Academy asks the Commission to give the Society's plea its earnest consideration.

(4) Support for the application (BZN **43**: 116–121) has also been received from Dr H. Heatwole (*University of New England, Armidale, Australia*), Dr K. H. L. Key (*Division of Entomology, CSIRO, Canberra, Australia*), and Dr Alan Yen (*Museum of Victoria, Abbotsford, Australia*).

Editorial note: other comments on this case will be reported in the next issue of the *Bulletin*.

Comment on the proposed designation of *Tylenchus vulgaris* Brzeski, 1963 as the type species of *Filenchus* Andrássy, 1954 (Nematoda)
(Case 2582: see BZN **44**: 23–24)

(1) R. Fortuner
California Department of Food and Agriculture, Nematology Laboratory, Sacramento, California 95814, U.S.A.

A. R. Maggenti
Department of Nematology, University of California, Davis, California 95616, U.S.A.

P. A. A. Loof
Landbouwuniversiteit Wageningen, The Netherlands

As stated in the application, the description by Andrássy (1954), when proposing the generic name *Filenchus*, of the type species *'Tylenchus filiformis* Bütschli, 1873' is quite different from Bütschli's sparse description of his *filiformis* (see Raski & Geraert, 1987, pp. 265–266). Andrássy's neotype designation is in any case not valid. None of his specimens exist, and we therefore support the application to designate *Tylenchus vulgaris* Brzeski, 1963 as type species.

Reference

Raski, D. J. & Geraert, J. 1987. Review of the genus *Filenchus* Andrássy, 1954 and description of six new species (Nemata: Tylenchidae). *Nematologica*, **32**: 265–311.

(2) M. R. Siddiqi & D. J. Hunt
C.A.B. International Institute of Parasitology, 395a Hatfield Road, St. Albans, U.K.

The name *Tylenchus filiformis* Bütschli, 1873 has been widely used for over a century. It is true that Bütschli's description was inadequate by modern standards, but Andrássy's (1954) is good and taxonomically defines his nominal genus *Filenchus*. All are agreed on this, and we consider that nomenclatural stability is best served by invoking Art. 70(a): 'If an author. . . designates an already established nominal species of a new genus. . . it is to be assumed that the author has identified the species correctly'.

T. vulgaris Brzeski is a little known name and should be regarded as a junior subjective synonym, as done in a recent textbook (Siddiqi, 1986). Use of Art. 70a stabilizes not only *Filenchus* but also the established specific name *filiformis;* we are therefore opposed to the application by Brzeski *et al.* and consider that the nominal type species of *Filenchus* should remain *T. filiformis*, as originally designated by Andrássy.

Reference

Siddiqi, M. R. 1986. Tylenchida. *Parasites of Plants and Insects*. 645 pp. Commonwealth Agricultural Bureaux, Slough, U.K.

OPINION 1464

Calcarina calcar d'Orbigny, 1839 (currently *Pararotalia calcar;* Protista, Foraminiferida): specific name conserved

Ruling

(1) Under the plenary powers the name *stellata* de Férussac, 1827, as published in the binomen *Calcarina stellata,* is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *calcar* d'Orbigny, 1839, as published in the binomen *Calcarina calcar,* is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *stellata* de Férussac, 1827, as published in the binomen *Calcarina stellata* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2344

An application for the conservation of *Calcarina calcar* d'Orbigny, 1839 was first received from Dr H. J. Hansen (*Geologisk Centralinstitut, Copenhagen, Denmark*) on 30 April 1980. After correspondence the case was published in BZN **43**: 181–182 (July 1986), and notice of it was given to eleven journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 181. At the close of the voting period on 1 December 1987 the state of the voting was as follows:

Affirmative votes — 19: Alvarado, Bayer, Cocks, Cogger, Corliss, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 3: Bernardi, Dupuis, Thompson.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Bernardi thought it unnecessary to suppress *Calcarina stellata,* as it was of no economic or medical importance. Thompson considered that the published application did not meet the requirements of Art. 79c. Dupuis considered that the best solution would have been to conserve *calcar* d'Orbigny from 1826, the date of listing the name and the exhibition of a plaster model, but not of a written description.

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:

calcar, Calcarina, d'Orbigny, 1839, *in* de la Sagra, R., *Histoire physique, politique et naturelle de l'Ile de Cuba,* p. 81.

stellata, Calcarina, de Férussac, 1827, *Bulletin des Sciences Naturelles et de Géologie,* **10**: 182.

OPINION 1465

Laomedea gracilis Sars, 1850 (currently *Clytia gracilis;* Cnidaria, Hydrozoa): specific name conserved

Ruling

(1) Under the plenary powers the name *gracilis* Dana, 1846, as published in the binomen *Lomodea* (err. pro *Laomedea*) *gracilis*, and all uses of that name prior to its publication by Sars (1850) are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) Under the plenary powers the names *pileata, thompsoni, punctata* and *sarnica* Forbes, 1841, and the names *lineata* and *inconspicua* Forbes, 1848, all as combined with the generic name *Thaumantias* Eschscholtz, 1829, are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(3) The name *gracilis* Sars, 1850, as published in the binomen *Laomedea gracilis* and as interpreted by the lectotype designated in BZN **43**: 165, is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *gracilis* Dana, 1846, as published in the binomen *Lomodea* (err. pro *Laomedea*) *gracilis* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

(5) The names *pileata, thompsoni, punctata* and *sarnica* Forbes, 1841, and the names *lineata* and *inconspicua* Forbes, 1848, all as combined with the generic name *Thaumantias* Eschscholtz, 1829 and as suppressed in (2) above, are hereby placed on the Official Index of Rejected and Invalid Specific names in Zoology.

History of Case 2493

An application for the conservation of *Laomedea gracilis* Sars, 1850 was received from Dr P. F. S. Cornelius (*Department of Zoology, British Museum* (*Natural History*), *London*) and Dr C. Ostman (*Zoologiska Institutionen, Uppsala, Sweden*) on 19 September 1984. After correspondence a revised case was published in BZN **43**: 163–169 (July 1986) under the title *On the names of two species of the genus* Clytia *Lamouroux, 1812* (*Cnidaria, Hydrozoa*) *common in western Europe*. Notice of the case was given to ten general and eleven specialist serials.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals in BZN **43**: 166–167 (in proposal 1(b) *'conspicua'* should read *'inconspicua'*). At the close of the voting period on 1 December 1987 the votes were:

Affirmative votes — 19: Alvarado, Bayer, Bernardi, Cocks, Corliss, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 3: Cogger, Dupuis, Thompson.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Dupuis voted against the proposals owing to taxonomic doubts. Cogger considered that suppressing six specific names of indeterminate taxa, albeit to protect a moderately well-used name, was an unacceptable use of nomenclatural procedures to resolve or

avoid future taxonomic problems. Thompson considered para. 12 of the case to be irrelevant as Art. 79c does not refer to homonyms, and he saw no need to suppress the Forbes names until they are shown to be senior synonyms of names in use. His main objection was that the replacement of junior primary homonyms was an important matter of principle which should not be set aside in this instance.

Original references

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

gracilis, Laomedea, Sars, 1850, *Nytt Magasin for Naturvidenskapene*, Christiania, **9**: 138.

gracilis, Lomodea, Dana, 1846, *United States Exploring Expedition. . . under the command of Charles Wilkes, U.S.N.*, vol. 7 (Zoophytes), p. 689.

pileata and *thompsoni, Thaumantias*, Forbes, 1841, *Annals and Magazine of Natural History*, (1), **7**: 84.

punctata and *sarnica, Thaumantias*, Forbes, 1841, *Annals and Magazine of Natural History*, (1), **7**: 85.

lineata, Thaumantias, Forbes, 1848, *A monograph of the British naked-eyed medusae: with figures of all the species*, p. 48.

inconspicua, Thaumantias, Forbes, 1848, *A monograph of the British naked-eyed medusae: with figures of all the species*, p. 52.

OPINION 1466

Terebratula triangulus Valenciennes, 1819, *T. catulloi* Pictet, 1867 and *T. janitor* Pictet, 1867 (Brachiopoda, Articulata): specific names conserved

Ruling

(1) Under the plenary powers 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) *pileus* Bruguière, 1792, as published in the binomen *Terebratula pileus;*

(b) *antinomia* Catullo, 1827, as published in the binomen *Terebratula antinomia;*

(c) *duvallii* Newman, 1844, as published in the binomen *Terebratula duvallii;*

(d) *triquetrus* Parkinson, 1811, as published in the binomen *Terebratulites triquetrus.*

(2) Under the plenary powers the specific name *cor* Bruguière, 1792, as published in the binomen *Terebratula cor,* is hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology:

(a) *triangulus* Valenciennes, 1819, as published in the binomen *Terebratula triangulus;*

(b) *catulloi* Pictet, 1867, as published in the binomen *Terebratula catulloi;*

(c) *janitor* Pictet, 1867, as published in the binomen *Terebratula janitor.*

(4) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology, as suppressed in (1) above:

(a) *pileus* Bruguière, 1792, as published in the binomen *Terebratula pileus;*

(b) *antinomia* Catullo, 1827, as published in the binomen *Terebratula antinomia;*

(c) *duvallii* Newman, 1844, as published in the binomen *Terebratula duvallii;*

(d) *triquetrus* Parkinson, 1811, as published in the binomen *Terebratulites triquetrus.*

(5) The name *cor* Bruguière, 1792, as published in the binomen *Terebratula cor*, and as suppressed in (2) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

(6) The name *dilatata* Catullo, 1851, as published in the binomen *Antinomia dilatata,* is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology, having been replaced by Pictet (1867) when a junior secondary homonym of *Terebratula dilatata* Lamarck, 1819.

History of Case 2300

An application for the conservation of four brachiopod specific names was received from Dr F. A. Middlemiss (*Queen Mary College, University of London*) on 17 April 1979. An amended application was published in BZN **41**: 267–273 (November 1984), and notice of it was sent to ten journals.

In August 1987 the Executive Secretary and Dr Middlemiss agreed that proposals (a) (iii) and (b) on BZN **41**: 270–271 might be simplified by suppression of the names *triquetrus, antinomia* and *duvallii,* instead of giving their apparent junior synonyms precedence whenever the synonymy was accepted.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to choose between three proposals:

Proposal A. (1) (a) The suppression, except for the purposes of the Principle of Homonymy, of the specific names *pileus* Bruguière, 1792; *antinomia* Catullo, 1827; *duvallii* Newman, 1844; and *triquetrus* Parkinson, 1811;

(b) the suppression for the purposes of both the Principle of Priority and of Homonymy of the specific name *cor* Bruguière, 1792;

(2) the placing of the specific name *dilatata* Catullo, 1851 (cf. paragraph 9 on BZN **41**: 269) on the Official Index, as a junior secondary homonym replaced before 1961;

(3) the suppression, except for the purposes of the Principle of Homonymy, of the specific name *deltoidea* Valenciennes, 1819.

[These actions conserve the four names suggested by Dr Middlemiss: *triangulus, catulloi, janitor,* and also *diphya* von Buch, 1834].

Proposal B. Proposals A(1) and (2) as above, but instead of (3) the placing of *deltoidea* Valenciennes, 1819 (a senior subjective synonym of *diphya* von Buch, 1834) on the Official List.

Proposal C. The holding of a vote on the original proposals (BZN **41**: 270–271).

At the close of the voting period on 1 December 1987 the votes were as follows:

For proposal A–11: Bayer, Cocks, Corliss, Heppell, Kabata, Kraus, Melville, Schuster, Trjapitzin, Uéno, Willink

For proposal B–3: Alvarado, Gruchy, Lehtinen

For proposal C–5: Cogger, Hahn, Holthuis, Mroczkowski, Thompson.

Ride was on leave of absence. No votes were returned by Bernardi, Halvorsen, Savage and Starobogatov.

Dupuis commented that names should be voted upon individually. Holthuis considered that, after appropriate lectotype selections, the oldest names should be used in each case. Cogger, Hahn and Thompson favoured the 'relative precedence' procedure because subjective synonymies were involved.

The combined 14 votes for proposals A and B authorize the present ruling of the Commission. However, the ruling leaves unsettled the positions of the names *Terebratula deltoidea* Valenciennes, 1819 and *T. diphya* von Buch, 1834 (cf. BZN **41**: 268), and the Commission will further consider these.

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:

antinomia, Terebratula, Catullo, 1827, *Saggio di Zoologia Fossile,* Padua, p. 169, pl. 5, figs. p, r, s, t.

catulloi, Terebratula, Pictet, 1867, *Mélanges Paléontologiques,* vol. 1(3), p 202.

cor, Terebratula, Bruguière, 1792, *Choix des mémoires . . . formant les collections du Journal d'Histoire naturelle,* vol. 1, p. 425.

dilatata, Antinomia, Catullo, 1851, *Quarterly Journal of the Geological Society of London,* p. 75, fig. 4.

duvallii, Terebratula, Newman, 1844, *Zoologist,* **2:** 279.

janitor, Terebratula, Pictet, 1867, *Mélanges Paléontologiques,* vol. 1(3), p. 161.

pileus, Terebratula, Bruguière, 1792, *Choix des mémoires . . . formant les collections du Journal d'Histoire naturelle,* vol. 1, p. 424.

triangulus, Terebratula, Valenciennes, 1819, *In* Lamarck, *Histoire naturelle des Animaux sans Vertèbres,* vol. 6, p. 250.

triquetrus, Terebratulites, Parkinson, 1811, *Organic Remains of a Former World,* vol. 3, p. 229, pl. 16.

OPINION 1467

Criopus Poli, 1791 and *Criopoderma* Poli, 1795 (Brachiopoda): suppressed

Ruling

(1) Under the plenary powers the generic names *Criopus* Poli, 1791 and *Criopoderma* Poli, 1795, and their emendations *Cryopus* Deshayes, 1836 and *Criopododerma* Agassiz, 1848, are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The names *Criopus* Poli, 1791, *Cryopus* Deshayes, 1836, *Criopoderma* Poli, 1795 and *Criopododerma* Agassiz, 1848, as suppressed in (1) above, are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2546

An application for the suppression of *Criopus* Poli, 1791 and *Criopoderma* Poli, 1795 was received from Dr C. H. C. Brunton (*British Museum (Natural History), London*) and Dr D. E. Lee (*University of Otago, Dunedin, New Zealand*) on 13 December 1985. The case was published in BZN **43**: 213–214, and notice of it was sent to ten general and four specialist journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals in BZN **43**: 214. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 20: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

Holthuis abstained. No votes were received from Halvorsen and Starobogatov. Ride was on leave of absence.

Holthuis and Thompson said that by appropriate type species designations *Criopus* and *Criopoderma* could become junior objective synonyms of *Crania* Retzius, 1781 (type species *Anomia craniolaris* Linnaeus, 1758), and no action by the Commission would be necessary.

Original references

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

Criopus Poli, J. X. 1791. *Testacea utriusque Siciliae eorumque historia et anatome*. Vol. 1, p. 34. Parma.

Cryopus Deshayes, G. P. 1836. *In* Lamarck, J. B. P. A. de M. de, *Histoire naturelle des Animaux sans vertèbres,* . . . 2 ième ed., revue et augmentée de notes. . . . par MM. G. P. Deshayes et H. Milne Edwards. Tom. 7, p. 314. Paris et Londres.

Criopoderma Poli, J. X. 1795. *Testacea utriusque Siciliae eorumque historia et anatome*. Vol. 2, p. 255. Parma.

Criopododerma Agassiz, L. 1848. *Nomenclatoris Zoologici Index Universalis,* . . . p. 301, Soloduri.

OPINION 1468

Orbicula Cuvier, 1798 (Brachiopoda, Inarticulata): suppressed

Ruling

(1) Under the plenary powers the generic name *Orbicula* Cuvier, 1798 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Orbicula* Cuvier, 1798 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology, as suppressed in (1) above.

History of Case 2545

An application for the suppression of the generic name *Orbicula* Cuvier, 1798 was received on 13 December 1985 from Dr C. H. C. Brunton (*British Museum (Natural History), London*) and Dr D. E. Lee (*University of Otago, Dunedin, New Zealand*) and was published in BZN **43**: 210–212 (July 1986). Notice of the case was sent to ten general and four specialist journals.

The new nominal genus with *Patella anomala* Müller, 1776 as type species mentioned in BZN **43**: 210 (para. 1) is *Neocrania* Lee & Brunton, 1986 (*Bulletin of the British Museum (Natural History), (Geology)*, **40**(4): 141–160).

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals in BZN **43**: 211–212. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 15: Alvarado, Bayer, Bernardi, Cocks, Corliss, Dupuis, Gruchy, Heppell, Kabata, Kraus, Melville, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 7: Cogger, Hahn, Holthuis, Lehtinen, Mroczkowski, Savage, Thompson.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Cogger, Hahn, Holthuis, Savage and Thompson commented that as *Orbicula* had so long been disused its reintroduction as a valid generic name, with *Patella anomala* Müller, 1776 as type species, would cause no more confusion than the introduction of a new objective synonym, i.e. *Neocrania* Lee & Brunton, 1986. In reply Dr Brunton drew attention to paras. 4–9 of the application, which mentioned the fact that *Orbicula* had for long been associated with discinid rather than craniid brachiopods, so causing confusion.

Original reference

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

Orbicula Cuvier, 1798, *Tableau élémentaire de l'histoire naturelle des animaux*, p. 435.

OPINION 1469

Crania tuberculata Nilsson, 1826 (Brachiopoda): conserved

Ruling

(1) Under the plenary powers the names *Craniolites* and *brattenburgicus* Schlotheim, 1820, as published in the binomen *Craniolites brattenburgicus*, are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *tuberculata* Nilsson, 1826, as published in the binomen *Crania tuberculata*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *Craniolites* Schlotheim, 1820, as published in the binomen *Craniolites brattenburgicus* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(4) The name *brattenburgicus* Schlotheim, 1820, as published in the binomen *Craniolites brattenburgicus* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2551

An application for the conservation of *Crania tuberculata* Nilsson, 1826 was received from Dr C. H. C. Brunton (*British Museum (Natural History), London*) and Dr D. E. Lee (*University of Otago, New Zealand*) on 13 December 1985. After correspondence the case was published in BZN **43**: 215–217 (July 1986), and notice of it was given to ten general and four specialist journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 216. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 20: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

Holthuis abstained. No votes were returned by Halvorsen and Starobogatov. Ride was on leave of absence.

Thompson considered that the case as published had not formally met the requirements of Art. 79c. Holthuis abstained because he did not consider the case clear enough; he pointed out that if *brattenburgicus* were ruled to be an incorrect spelling of *brattensburgensis* Retzius, 1781 then *Craniolites* would fall as a junior subjective synonym of *Crania*.

Original references

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

tuberculata, Crania, Nilsson, 1826, *Kungliga Svenska Vetenskapsakademiens Handlingar*, **1825**: 326.

Craniolites Schlotheim, 1820, *Die Petrefactenkunde auf ihrem jetzigen Standpunkte*, **1**: 246.

brattenburgicus, Craniolites, Schlotheim, 1820, *Die Petrefactenkunde auf ihrem jetzigen Standpunkte*, **1**: 246.

OPINION 1470

SINUITIDAE Dall, 1913, MACLURITIDAE Carpenter, 1861 and EUOMPHALIDAE de Koninck, 1881 (Gastropoda, Archaeogastropoda): conserved

Ruling

(1) Under the plenary powers the following names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(a) *Protowarthia* Ulrich & Schofield, 1897;

(b) *Schizostoma* Bronn, [1834].

(2) Under the plenary powers the correct spelling of *Maclurite* Lesueur, 1818 is hereby ruled to be *Maclurites*.

(3) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Sinuites* Koken, 1896 (gender: masculine), type species by designation by Bassler (1915) *Bellerophon bilobatus* Sowerby, 1839;

(b) *Maclurites* Lesueur, 1818 (gender: masculine), type species by designation by de Koninck (1881) *Maclurites magna* Lesueur, 1818;

(c) *Euomphalus* Sowerby, 1814 (gender: masculine), type species by designation by Meek & Worthen (1866) *Euomphalus pentangulatus* Sowerby, 1814.

(4) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *bilobatus* Sowerby, 1839, as published in the binomen *Bellerophon bilobatus*, (specific name of the type species of *Sinuites* Koken, 1896);

(b) *magna* Lesueur, 1818, as published in the binomen *Maclurites magna*, (specific name of the type species of *Maclurites* Lesueur, 1818);

(c) *pentangulatus* Sowerby, 1814, as published in the binomen *Euomphalus pentangulatus*, (specific name of the type species of *Euomphalus* Sowerby, 1814).

(5) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

(a) SINUITIDAE Dall, 1913 (type genus *Sinuites* Koken, 1896);

(b) MACLURITIDAE (correction of MACLUREADAE) Carpenter, 1861 (type genus *Maclurites* Lesueur, 1818);

(c) EUOMPHALIDAE de Koninck, 1881 (type genus *Euomphalus* Sowerby, 1814).

(6) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Protowarthia* Ulrich & Schofield, 1897, as suppressed under the plenary powers in (1) (a) above;

(b) *Schizostoma* Bronn, [1834], as suppressed under the plenary powers in (1) (b) above;

(c) *Maclurite* Lesueur, 1818 (ruled in (2) above to be an incorrect spelling of *Maclurites*);

(d) *Maclurita* Blainville, 1823 (an unjustified emendation of *Maclurites* Lesueur, 1818);

(e) *Maclurea* Emmons, 1842 (an unjustified emendation of *Maclurites* Lesueur, 1818).

(7) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:

(a) PROTOWARTHIIDAE Ulrich & Schofield, 1897 (invalid because the name of the type genus has been suppressed under the plenary powers in (1) (a) above);

(b) SCHIZOSTOMATIDAE Eichwald, 1871 (invalid because the name of the type genus has been suppressed under the plenary powers in (1) (b) above).

History of Case 1212

An application was originally submitted to the Commission in March 1957. It was published in BZN **18**: 337–339 (November 1961) and presented to the Commission for voting on 3 October 1962. A comment by Dr L. B. Holthuis pointed out that it was impossible to suppress a family-group name unless the generic name on which it was based, i.e. that of its type genus, was also suppressed. As a consequence of this comment an Opinion was never published and the case lapsed.

Recently the case was resurrected and analysed by the Secretariat. Of the original proposals, one, that concerning the conservation of ORIOSTOMATIDAE Wenz, 1938 by suppression of HORIOSTOMATIDAE Koken, 1897, was found to have an automatic solution under Art. 35(d) of the Code in that HORIOSTOMATIDAE, based on the unjustified emendation *Horiostoma* Fischer, 1885 is corrected to ORIOSTOMATIDAE Koken, 1897.

After correspondence with one of the original authors (Dr Ellis Yochelson, *U.S. Geological Survey, USDI, U.S. National Museum, Washington, U.S.A.*) the case was published in BZN **43**: 199–204 (July 1986), and notice of it was given to ten general and five specialist journals. Some comments were received from Dr L. B. Holthuis, as a result of which, and of other considerations, the proposals in BZN **43**: 201–202 were slightly modified, although their substance was not changed.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 201–202 as modified. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Heppell.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Original references

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

Sinuites Koken, 1896, *Die Leitfossilien*, p. 393.

Maclurites Lesueur, 1818, *Journal of the Academy of Natural Sciences of Philadelphia*, **1**(2): 312.

Euomphalus Sowerby, 1814, *The Mineral Conchology of Great Britain*, vol. 1, no. 9, p. 97.

bilobatus, Bellerophon, Sowerby, 1839, *in* Murchison, R. I. *The Silurian System, founded on geological researches. . .*, p. 643.

magna, Maclurites, Lesueur, 1818, *Journal of the Academy of Natural Sciences of Philadelphia*, **1**(2): 312.

pentangulatus, Euomphalus, Sowerby, 1814, *The Mineral Conchology of Great Britain,* vol. 1, no. 9, p. 97.

SINUITIDAE Dall, 1913, *in* Eastman, C. R. & Zittel, K. A. von, *Textbook of Palaeontology,* 2nd ed., vol. 1, p. 521.

MACLURITIDAE Carpenter, 1861, *Annual Reports of the Smithsonian Institution,* **1861**: 216.

EUOMPHALIDAE de Koninck, 1881, *Musée Royal d'Histoire Naturelle de Belgique, Annales &c (Série Paléontologique),* **6**: 106.

Protowarthia Ulrich & Schofield, 1897, *Geological and Natural History Survey of Minnesota* (Final Report) **3**(2): 848.

Schizostoma Bronn, [1834], *Lethea Geognostica oder Abbildungen und Beschreibungen der für die Gibergs–Formationen bezeichnendsten Versteinerungen,* vol. 1, p. 95.

Maclurite Lesueur, 1818, *Journal of the Academy of Natural Sciences of Philadelphia,* **1**(2): 312.

Maclurita Blainville, 1823, *Dictionnaire des Sciences naturelles,* vol. 27, p. 519.

Maclurea Emmons, 1842, *Geology of New York,* part *2,* p. 312.

PROTOWARTHIIDAE Ulrich & Schofield, 1897, *Geological and Natural History Survey of Minnesota,* (Final Report) **3**(2): p. 847.

SCHIZOSTOMATIDAE Eichwald, 1871, *Geognostica-paläentologische Bemerkungen, über die Halbinsel Mangischlak und die Aleutischen Inseln,* p. 119.

OPINION 1471

Aplysia (originally *Laplysia*) *viridis* Montagu, 1804 (Mollusca, Gastropoda): specific name conserved

Ruling

(1) Under the plenary powers:

(a) the name *Laplisia* Lamarck, 1801 is hereby declared to be an incorrect subsequent spelling of *Laplysia* Linnaeus, 1767 (emended to *Aplysia* in Opinion 200);

(b) the name *viridis* Bosc, 1801, as published in the binomen *Laplisia viridis*, and all uses of that name prior to the publication of *Laplysia viridis* Montagu, 1804, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *viridis* Montagu, 1804, as published in the binomen *Laplysia* (emended to *Aplysia* in Opinion 200) *viridis*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *Laplisia* Lamarck, 1801, ruled under the plenary powers in (1) (a) above to be an incorrect subsequent spelling of *Laplysia* Linnaeus, 1767 (emended to *Aplysia* in Opinion 200), is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(4) The name *viridis* Bosc, 1801, as suppressed in (1b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2408

An application for the conservation of *Laplysia viridis* Montagu, 1804, was received from Dr P. Bouchet (*Muséum National d'Histoire Naturelle, Paris*) on 9 March 1982. After correspondence a revised case was published in BZN **43**: 205–209 (July 1986), and notice of it was given to ten general and five specialist journals. A favourable comment was received from Dr R. Giannuzzi-Savelli (*Palermo, Italy*).

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote for or against the proposals set out in BZN **43**: 207. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Bernardi, Cocks, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Cogger, Halvorsen and Starobogatov.

Original references

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

viridis, Laplysia, Montagu, 1804, *Transactions of the Linnean Society of London,* **7**: 76.

viridis, Laplisia, Bosc, 1801, *Histoire naturelle des Vers, contenant leur description et leurs moeurs; avec figures d'après nature,* tome 1, p. 64.

Laplisia Lamarck, 1801, *Système des animaux sans vertèbres,* p. 62.

OPINION 1472

Cyclaxyra Broun, 1893 (Insecta, Coleoptera): conserved

Ruling

(1) Under the plenary powers the generic name *Melanochroa* Broun, 1882, and all uses of this name prior to the publication of *Melanochroa* Roeder, 1886, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Cyclaxyra* Broun, 1893 (gender: feminine), type species by monotypy *Cyclomorpha politula* Broun, 1881;

(b) *Melanochroa* Roeder, 1886 (gender: feminine), type species by monotypy *Melanochroa dubia* Roeder, 1886.

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology:

(a) *politula* Broun, 1881, as published in the binomen *Cyclomorpha politula* (name of the type species of *Cyclaxyra* Broun, 1893);

(b) *dubia* Roeder, 1886 as published in the binomen *Melanochroa dubia* (name of the type species of *Melanochroa* Roeder, 1886).

(4) The name *Melanochroa* Broun, 1882, as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2511

An application for the conservation of *Cyclaxyra* Broun, 1893 was received from Dr J. C. Watt (*DSIR, Auckland, New Zealand*) and Dr R. A. Crowson (*The University, Glasgow, U.K.*) on 25 March 1985. The case was published in BZN **43**: 196–198 (July 1986), and notice of it was sent to ten general and nine entomological journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 197, with the following additions:

(a) Under proposal (2), the generic name *Melanochroa* Roeder, 1886 to be placed on the Official List of Generic Names in Zoology;

(b) Under proposal (3), the specific name *dubia* Roeder, 1886 to be placed on the Official List of Specific Names in Zoology.

At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

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:

Cyclaxyra Broun, T. 1893. *Manual of New Zealand Coleoptera*, Part V. New Zealand Institute, Wellington, p. 1076.

Melanochroa Broun, T. 1882. *Annals and Magazine of Natural History*, ser. 5, **9**: 409.

Melanochroa Roeder, V. von, 1886. *Entomologische Nachrichten*, **12**(1), no. 9, p. 139. Berlin.

politula, Cyclomorpha, Broun, T. 1881. *Manual of New Zealand Coleoptera*. Part II. Colonial Museum and Geological Survey Department, Wellington, p. 668.

dubia, Melanochroa, Roeder, V. von, 1886. *Entomologische Nachrichten*, **12**(1), no. 9, p. 140. Berlin.

OPINION 1473

Tetropium Kirby, 1837 (Insecta, Coleoptera): conserved

Ruling

(1) Under the plenary powers the name *Isarthron* Dejean, 1835 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Tetropium* Kirby, 1837 (gender: neuter), type species by subsequent designation by Thompson (1864) *Tetropium cinnamopterum* Kirby, 1837, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *cinnamopterum* Kirby, 1837, as published in the binomen *Tetropium cinnamopterum* (specific name of the type species of *Tetropium* Kirby, 1837) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Isarthron* Dejean, 1835, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(5) The name *Criomorphus* Mulsant, 1839 (a junior homonym of *Criomorphus* Curtis, 1829 (Insecta, Hemiptera) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2534

An application for the conservation of *Tetropium* Kirby, 1837 was received from Dr M. Mroczkowski (*Instytut Zoologii Polska Akademia Nauk, Warsaw, Poland*) on 23 September 1985. After correspondence a revised case was published in BZN **43**: 188–190 (July 1986), and notice of it was given to ten general and nine entomological journals. A supportive comment was received from Dr P. Švácha (*Czechoslovak Academy of Sciences, Prague*).

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 188, with proposal (1) amended to read '... to use its plenary powers to suppress the generic name *Isarthron* Dejean, 1835 for the purposes of the Principle of Priority but not for those of the Principle of Homonymy', and an additional proposal (5) reading '... to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Criomorphus* Mulsant, 1839 (a junior homonym of *Criomorphus* Curtis, 1829)'. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Dupuis considered that *Criomorphus* was a separate question and abstained from voting on the additional proposal (5) mentioned above.

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:

Tetropium Kirby, 1837, *in* Richardson, Sir J. (Ed.), *Fauna Boreali-Americana*, part 4, p. 174.

cinnamopterum, Tetropium, Kirby, 1837 *in* Richardson, Sir J. (Ed.), *Fauna Boreali–Americana*, part 4, p. 174.

Isarthron Dejean, 1835, *Catalogue des Coléoptères dans la collection de M. le Comte Dejean*, Ed. 2, p. 329.

Criomorphus Mulsant, 1839, *Histoire Naturelle des Coléoptères de France*, part 1, p. 58.

OPINION 1474

Tropiphorus Schönherr, 1842 (Insecta, Coleoptera): conserved

Ruling

(1) Under the plenary powers the generic name *Brius* Dejean, 1821 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Tropiphorus* Schönherr, 1842 (gender: masculine), type species by original designation *Curculio mercurialis* Fabricius, 1801, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *mercurialis* Fabricius, 1801, as published in the binomen *Curculio mercurialis* (specific name of the type species of *Tropiphorus* Schönherr, 1842), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Brius* Dejean, 1821, suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2537

An application by Dr H. Silfverberg (*Universitetets Zoologiska Museum, Helsinki*) for the conservation of *Tropiphorus* Schönherr, 1842 by the suppression of its senior but unused objective synonym *Brius* Dejean, 1821 was received on 28 October 1985. The case was published in BZN **43**: 186–187 (July 1986), and notice of it was given to ten general and nine entomological journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 186. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 20: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 2: Kabata, Thompson.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Kabata and Thompson considered that the case in the published application for setting aside the Principle of Priority was insufficiently strong.

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:

Brius Dejean, 1821, *Catalogue de la collection des Coléoptères de M. le Baron Dejean*. Paris, p. 92.

Tropiphorus Schönherr, 1842, *Synonymia Insectorum. Genera et Species Curculionidum*, p. 257.

mercurialis, Curculio, Fabricius, 1801, *Systema Eleutheratorum*. . . vol. 2, p. 530.

OPINION 1475

Dexia Meigen, 1826 (Insecta, Diptera): *Musca rustica* Fabricius, 1775 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Dexia* Meigen, 1826 are set aside and *Musca rustica* Fabricius, 1775 is designated as the type species.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Dexia* Meigen, 1826 (gender: feminine), type species by designation in (1) above, *Musca rustica* Fabricius, 1775;

(b) *Phyllomya* Robineau-Desvoidy, 1830 (gender: feminine), type species by monotypy, *Musca volvulus* Fabricius, 1794.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *rustica* Fabricius, 1775 as published in the binomen *Musca rustica* (specific name of the type species of *Dexia* Meigen, 1826);

(b) *volvulus* Fabricius, 1794 as published in the binomen *Musca volvulus* (specific name of the type species of *Phyllomya* Robineau-Desvoidy, 1830).

(4) The following name is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology: *Dexilla* Westwood, 1840 (a junior objective synonym of *Dexia* Meigen, 1826).

History of Case 2252

An application for the designation of *Musca rustica* Fabricius, 1775 as type species for *Dexia* Meigen, 1826 was first received from Drs R. W. Crosskey (*British Museum (Natural History), London*), B. Herting (*Naturkundemuseum, Stuttgart, West Germany*), L. P. Mesnil (now deceased) and D. M. Wood (*Biosystematics Research Institut, Ottawa, Canada*) on 27 February 1978. An amended version was published in BZN **43**: 282–287 (October 1986), and notice of the case was sent to twelve general and eleven entomological journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 285. At the close of the voting period on 1 December 1987 the votes were:

Affirmative votes — 21: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Lehtinen.

No votes were returned by Halvorsen and Starobogatov. Ride was on leave of absence.

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:

Dexia Meigen, 1826. *Systematische Beschreibung der bekannten europäischen zweiflugeligen Insekten*, vol. 5, p. 33.

rustica, Musca, Fabricius, 1775. *Systema entomologiae. .*, p. 777.

volvulus, Musca, Fabricius, 1794. *Entomologia systematica emendata et aucta. . . .*, vol. 4, p. 328.

Phyllomya, Robineau-Desvoidy, 1830. *Mémoires présentés par divers Savants à l'Académie Royal des Sciences de l'Institut de France*, **2**: 213.

Dexilla, Westwood, 1840. *Synopsis of the genera of the British Insects*, p. 140.

OPINION 1476

Agromyza Fallén, 1810 (Insecta, Diptera): *Agromyza reptans* Fallén, 1823 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Agromyza* Fallén, 1810 are hereby set aside and *Agromyza reptans* Fallén, 1823 is designated as the type species.

(2) The name *Agromyza* Fallén, 1810 (gender: feminine), type species, by designation in (1) above, *Agromyza reptans* Fallén, 1823, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *reptans* Fallén, 1823, as published in the binomen *Agromyza reptans* and as defined by the lectotype designated by Nowakowski (1944), (specific name of the type species of *Agromyza* Fallén, 1810) is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2395

An application for the designation of *Agromyza reptans* Fallén, 1823 as the type species of *Agromyza* Fallén, 1810 was received from Dr K. A. Spencer (*Exwell Farm, Callington, Cornwall, U.K.*) and Dr G. C. Steyskal (*U.S. Department of Agriculture, c/o U.S. National Museum of Natural History, Washington*) on 26 October 1981. The case was published in BZN **43**: 183–185 (July 1986), and notice of it was given to ten general and ten entomological journals. After publication the authors became aware that in 1848 J. W. Zetterstedt (*Diptera Scandinavica*, **7**: 2730) had designated *A. reptans* and two other species as 'typi generis' of *Agromyza;* even though the latter species have long been excluded from *Agromyza* this is not a valid designation of type species.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 184. At the end of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Original references

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

Agromyza Fallén, 1810, *Specimen entomologiae novam Diptera*. . . p. 21.

reptans, Agromyza, Fallén, 1823, *Diptera Sveciae*. . . vol. 2, Agromyzides, p. 1.

The reference for the designation of a lectotype for *A. reptans* is: Nowakowski, J. T. 1964. *Deutsche Entomologische Zeitschrift*, **11**: 188.

OPINION 1477

Napomyza Westwood, 1840 (Insecta, Diptera): conserved

Ruling

(1) Under the plenary powers the name *Napomyza* Curtis, 1837 and all uses of this name prior to the publication of *Napomyza* Westwood, 1840, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *Napomyza* Westwood, 1840 (gender: feminine), type species by monotypy *Phytomyza festiva* Meigen, 1830 (= *Phytomyza elegans* Meigen, 1830 by the first reviser action of Hendel (1920)), is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *elegans* Meigen, 1830, as published in the binomen *Phytomyza elegans* (valid name at the date of this ruling for the type species of *Napomyza* Westwood, 1840), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Napomyza* Curtis, 1837 as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2495

An application for the conservation of *Napomyza* Westwood, 1840 was received from Dr G. C. Steyskal (*Systematic Entomology Laboratory, c/o U.S. National Museum of Natural History, Washington, U.S.A.*) and Dr K. A. Spencer (*Exwell Farm, Callington, Cornwall, U.K.*) on 26 October 1981. On 1 October 1984 a similar application was received from Dr G. C. D. Griffiths (*Department of Entomology, University of Alberta, Canada*). A joint application was published in BZN **43**: 170–172 (July 1986), and notice of it was given to ten general and ten specialist journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 171. At the close of the voting period on 1 December 1987 the voting was as follows:

Affirmative votes — 22: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

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:

Napomyza Westwood, 1840, *An introduction to the modern classification of insects. Synopsis of the genera of British insects*, p. 152.

elegans, Phytomyza, Meigen, 1830, *Systematische Beschreibung der bekannten europäischen zweiflugeligen Insekten*, vol. 6, p. 148.

Napomyza Curtis, 1837, *A guide to an arrangement of British Insects; being a catalogue of all the named species hitherto discovered in Great Britain and Ireland*, p. 282.

OPINION 1478

Lycaena mirza Plotz, 1880 (currently *Azanus mirza;* Insecta, Lepidoptera): specific name conserved

Ruling

(1) Under the plenary powers the name *mirza* Staudinger, 1874, as published in the binomen *Lycaena mirza,* is hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *mirza* Plotz, 1880, as published in the binomen *Lycaena mirza,* 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) *mirza* Staudinger, 1874, as published in the binomen *Lycaena mirza;*

(b) *mirzaellus* Koçak, 1980, as published in the binomen *Azanus mirzaellus,* a junior objective synonym of *mirza* Plotz, 1880.

History of Case 2426

An application for the conservation of *Lycaena mirza* Plotz, 1880 by the suppression of the unused senior homonym *Lycaena mirza* Staudinger, 1874 was received from Dr T. B. Larsen (*Kastrup, Denmark*) on 30 September 1982. The case was published in BZN **43**: 342–343 (December 1986), and notice of it was given to eleven general and nine entomological journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 342. At the close of the voting period on 1 December 1987 the voting was as follows:

Affirmative votes — 18: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Trjapitzin, Uéno

Negative votes — 3: Bernardi, Holthuis, Thompson.

No votes were returned by Halvorsen, Starobogatov and Willink. Ride was on leave of absence.

Thompson objected on principle to the conservation of a junior primary homonym. Bernardi and Holthuis considered the Principle of Priority should apply: as the species was of no particular importance, the replacement of *mirza* Plotz by *mirzaellus* Koçak was justified.

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:

mirza, Lycaena, Plotz, 1880, *Stettiner Entomologische Zeitung,* **41**: 203.

mirza, Lycaena, Staudinger, 1874, *Stettiner Entomologische Zeitung,* **35**: 90.

mirzaellus, Azanus, Koçak, 1980, *Nota Lepidopterologica,* **2**: 141.

OPINION 1479

Antispila Hübner, [1825] (Insecta, Lepidoptera): *Antispila stadtmuellerella* Hübner, [1825] designated as type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Antispila* Hübner, [1825] are hereby set aside and *Antispila stadtmuellerella* Hübner, [1825] is designated as the type species.

(2) The name *Antispila* Hübner, [1825] (gender: feminine), type species by designation in (1) above *Antispila stadtmuellerella* Hübner, [1825], (a junior subjective synonym of *Tinea metallella* [Denis & Schiffermüller], 1775) is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *metallella* [Denis & Schiffermüller], 1775, as published in the binomen *Tinea metallella,* (valid specific name at the time of this ruling of the type species of *Antispila* Hübner, [1825] is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2463

An application for the designation of *Antispila stadtmuellerella* Hübner, [1825] as type species of *Antispila* Hübner, [1825] was received from Dr E. S. Nielsen (*CSIRO, Canberra, Australia*) and Dr I. W. B. Nye (*British Museum (Natural History), London*) on 13 January 1984. After correspondence the case was published in BZN **43**: 158–159 (July 1986) and notice was given to ten general and eleven entomological journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 159. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Original references

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

Antispila Hübner, [1825], *Verzeichniss bekannter Schmetterlinge*, p. 419.

metallella, Tinea, [Denis & Schiffermüller], 1775, *Ankundung eines systematischen Werkes von dem schmetterlingen der Wienergegend. . . ,* p. 144.

OPINION 1480

Apanteles ornigis Weed, 1887 (currently *Pholetesor ornigis;* Insecta, Hymenoptera): specific name conserved

Ruling

(1) Under the plenary powers it is hereby ruled that the specific name *ornigis* Weed, 1887, as published in the binomen *Apanteles ornigis,* is to have precedence over the name *robiniae* Fitch, 1859, as published in the binomen *Microgaster robiniae,* whenever the two are considered to be synonyms.

(2) The name *Pholetesor* Mason, 1981 (gender: masculine), type species by original designation *Apanteles ornigis* Weed, 1887, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *ornigis* Weed, 1887, as published in the binomen *Apanteles ornigis,* (specific name of the type species of *Pholetesor* Mason, 1981) is hereby placed on the Official List of Specific Names in Zoology, with the endorsement that it is to have precedence over the name *robiniae* Fitch, 1859, as published in the binomen *Microgaster robiniae,* whenever the two are considered to be synonyms.

(4) The name *robiniae* Fitch, 1859, as published in the binomen *Microgaster robiniae,* is hereby placed on the Official List of Specific Names in Zoology, with the endorsement that it is not to have precedence over the name *ornigis* Weed, 1887, as published in the binomen *Apanteles ornigis,* whenever the two are considered to be synonyms.

History of Case 2506

An application for the conservation of *Apanteles ornigis* Weed, 1887 by the suppression of its senior but unused subjective synonym *Microgaster robiniae* Fitch, 1859, was received from Dr J. B. Whitfield (*University of California, Berkeley, California*) on 24 January 1985, and after correspondence was published in BZN **43**: 96–98 (April 1986). Notice of the case was sent to twelve general and ten specialist journals. A supportive comment by Dr R. A. Wharton (*Texas A & M University, U.S.A.*) was published in BZN **43**: 324 (December 1986). Comments from Dr L. B. Holthuis and from Dr C. van Achterberg (both of the *Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) were published in BZN **44**: 46 (March 1987); Dr Holthuis suggested giving precedence to *ornigis* over *robiniae,* while Dr van Achterberg considered that the senior name *robiniae* should be used. In a reply, also published in BZN **44**: 46, Dr Whitfield reiterated his proposal for the conservation of *ornigis.*

Decision of the Commission

On 1 September 1987 the members of the Commission were asked to vote on the proposals set out in BZN **43**: 97. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 12: Alvarado, Bernardi, Cocks, Corliss, Heppell, Kraus, Lehtinen, Melville, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 9: Bayer, Cogger, Dupuis, Hahn, Holthuis, Kabata, Mroczkowski, Savage, Thompson.

Gruchy abstained and Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

The proposal to suppress the name *robiniae* Fitch, 1859 was thus not carried. However, with the exceptions of Cogger and Thompson, all those voting against the original proposals expressed support for *ornigis* Weed, 1887 having precedence over *robiniae* Fitch, 1859, and the ruling has been made accordingly.

Original references

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

Pholetesor Mason, 1981, *Memoirs of the Entomological Society of Canada*, **115**: 37.

ornigis, Apanteles, Weed, 1887, *Bulletin of the Illinois State Laboratory of Natural History*, **3**: 6. (Designated as type species of *Pholetesor* Mason, 1981: *Memoirs of the Entomological Society of Canada*, **115**: 37).

robiniae, Microgaster, Fitch, 1859, *New York State Agricultural Society Transactions*, **18**: 836.

OPINION 1481

Siphamia Weber, 1909 and *S. permutata* Klausewitz, 1966 (Osteichthyes, Perciformes): conserved

Ruling

(1) Under the plenary powers the generic name *Beanea* Steindachner, 1902 and the specific name *trivittata* Steindachner, 1902, as published in the binomen *Beanea trivittata,* are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Siphamia* Weber, 1909 (gender: feminine), type species by monotypy *Siphamia tubifer* Weber, 1909, 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) *permutata* Klausewitz, 1966, as published in the binomen *Siphamia permutata;*

(b) *tubifer* Weber, 1909, as published in the binomen *Siphamia tubifer* (specific name of the type species of *Siphamia* Weber, 1909).

(4) The name *Beanea* Steindachner, 1902, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(5) The name *trivittata* Steindachner, 1902, as published in the binomen *Beanea trivittata* and suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2517

An application for the conservation of both names in the binomen *Siphamia permutata* Klausewitz, 1966 of a Red Sea apogonid fish by the suppression of the senior subjective synonym *Beanea trivittata* Weber, 1909 was received on 29 April 1985 from Dr J. E. Randall (*Bishop Museum, Honolulu*), Dr E. A. Lachner (*National Museum of Natural History, Washington*) and Dr T. H. Fraser (*Environmental Quality Laboratory, Port Charlotte, Florida*). After correspondence the case was published in BZN **43**: 193–195 (July 1986), and notice of it was given to nine general and nine specialist journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out on BZN **43**: 194–195. At the close of the voting period on 1 December 1987 the votes were:

Affirmative votes — 18: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Heppell, Holthuis, Kabata, Melville, Mroczkowski, Ride, Schuster, Trjapitzin, Uéno, Willink

Negative votes — 5: Hahn, Kraus, Lehtinen, Savage, Thompson.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Hahn would have supported giving *S. permutata* precedence over *B. trivittata* when they were considered synonyms; Kraus said that as it was a nomen dubium there was no

need to suppress *B. trivittata*, while Savage and Thompson felt that the published grounds for departing from priority were inadequate.

Original references

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

Beanea Steindachner, 1902, *Anzeiger Akademie der Wissenschaften, Wien*, **39**: 337.

Siphamia Weber, 1909, *Notes from the Leyden Museum*, **31**: 168.

permutata, Siphamia, Klausewitz, 1966, *Senckenbergiana Biologica*, **47**: 217.

trivittata, Beanea, Steindachner, 1902, *Anzeiger der Akademie der Wissenschaften, Wien*, **39**: 337.

tubifer, Siphamia, Weber, 1909, *Notes from the Leyden Museum*, **31**: 168.

OPINION 1482

Heteroclonium bicolor Cope, 1896 (currently *Bachia bicolor*; Reptilia, Squamata): specific name conserved

Ruling

(1) Under the plenary powers the name *diglossis* Saenz, 1869, as published in the binomen *Chirotes diglossis*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *bicolor* Cope, 1896, as published in the binomen *Heteroclonium bicolor*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *diglossis* Saenz, 1869, as published in the binomen *Chirotes diglossis* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2424

An application for the conservation of *Heteroclonium* (now *Bachia*) *bicolor* Cope, 1896 was received from Dr Stephen C. Ayala (*Petaluma, California, U.S.A.*) on 27 September 1982. After correspondence and delays the case was published in BZN **43**: 160–162 (July 1986). Notice of the case was given to ten general and five herpetological journals. A comment in support was received from Prof. Carl Gans (*University of Michigan, U.S.A.*)

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote for or against the proposals set out on BZN **43**: 161. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Dupuis.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov. Dupuis voted against the suppression of *diglossis* Saenz, 1869 because a detailed description of the species was given; however, he was not opposed to *bicolor* Cope, 1896 having precedence when it and *diglossis* were considered 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:

bicolor, Heteroclonium, Cope, 1896, *Proceedings of the Academy of Natural Sciences of Philadelphia*, **1896**: 461.

diglossis, Chirotes, Saenz, 1869, *Anales de la Universidad Nacional de Estados Unidos de Colombia*, **1869**: 73.

OPINION 1483

Rhabdodon Matheron, 1869 (Reptilia, Ornithischia): conserved

Ruling

(1) Under the plenary powers the name *Rhabdodon* Fleischmann, 1831 and all uses of this name prior to the publication of *Rhabdodon* Matheron, 1869, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *Rhabdodon* Matheron, 1869 (gender: masculine), type species by monotypy *Rhabdodon priscus* (correction of *priscum*) Matheron, 1869, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *priscus* Matheron, 1869 (original termination corrected), as published in the binomen *Rhabdodon priscum* Matheron, 1869 (1869a, 1869b) (specific name of the type species of *Rhabdodon* Matheron, 1869), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Rhabdodon* Fleischmann, 1831 as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2536

An application for the conservation of *Rhabdodon* Matheron, 1869 was received from Dr W. Brinkmann (*Institut für Paläontologie, Freie Universität Berlin*) on 18 October 1985. After correspondence a revised case was published in BZN **43**: 269–272 (October 1986), and notice of it was given to eleven general and seven specialist journals.

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals in BZN **43**: 270. At the close of the voting period on 1 December 1987 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis, Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov.

Holthuis and Melville commented that *if* the paper cited in the application as 'Matheron 1869b' (see BZN **43**: 271), which used both the spellings *Rhabdodon* (on the plates) and *Rabdodon* (in the text), had been published before 'Matheron 1869a', which used only *Rhabdodon*, then a first reviser selection under Article 24 would be needed to establish the correct original spelling. However, even if this were the situation, Matheron himself, in what would be *ex hypothesi* his second 1869 paper, used *Rhabdodon* exclusively (as have all later authors). Evidently the '1869b' paper had not been published when '1869a' was in proof, for on p. 792 of the latter '1869b' is described as 'sous presse'.

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:

Rhabdodon Matheron, 1869, *Bulletin de la Société Géologique de France*, 2ème série, **26**: 792.

priscus, Rhabdodon, Matheron, 1869, *Bulletin de la Société Géologique de France*, 2ème série, **26**: 795.

Rhabdodon Fleischmann, 1831, *Dalmatiae nova serpentum genera*, p. 26.

DIRECTION 122

Bubo Duméril, 1806 and *Surnia* Duméril, 1806 (Aves): Official List entries completed

Ruling

(1) The name *Bubo* Duméril, 1806 is hereby placed on the Official List of Generic Names in Zoology, the entry to read:

Bubo Duméril, 1806 (gender: masculine), type species by subsequent monotypy by Froriep (1806) (*C. Duméril's analytische Zoologie aus dem französischen mit Zusätzen*, p. 35), *Strix bubo* Linnaeus, 1758.

(2) The name *Surnia* Duméril, 1806 is hereby placed on the Official List of Generic Names in Zoology, the entry to read:

Surnia Duméril, 1806 (gender: feminine), type species by subsequent monotypy by Froriep (1806) (*C. Duméril's analytische Zoologie aus dem französischen mit Zusätzen*, p. 35), *Strix hudsonia* Gmelin, 1788 (valid name at the time of this ruling = *Strix caparoch* Müller, 1766).

(3) The name *bubo* Linaeus, 1758, as published in the binomen *Strix bubo*, (specific name of the type species of *Bubo* Duméril, 1806) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *caparoch* Müller, 1766, as published in the binomen *Strix caparoch*, (valid specific name at the time of this ruling of the type species of *Surnia* Duméril, 1806) is hereby placed on the Official List of Specific Names in Zoology.

History of Case 1051

In 1910 Opinion 67 authorized the placing of 102 bird generic names, including *Bubo* and *Surnia* Duméril, 1806, on the Official List. However, because more than one method of fixing their type species was mentioned in Opinion 67, *Bubo* and *Surnia* were omitted from the first instalment of names on the Official Lists (published in 1958). In 1985 the then Secretary (Mr R. V. Melville) reviewed the case and an application was published in BZN **43**: 156–157 (July 1986).

Decision of the Commission

On 1 September 1987 the members of the Commission were invited to vote on the proposals set out in BZN **43**: 156–157. At the close of the voting period the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Bernardi, Cocks, Cogger, Corliss, Dupuis (in part), Gruchy, Hahn, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Savage, Schuster, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

Ride was on leave of absence. No votes were returned by Halvorsen and Starobogatov. Dupuis abstained from voting on *Surnia* because of doubts concerning the synonymy of *Strix hudsonia* Gmelin and *S. caparoch* Müller.

Original references

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

Bubo Duméril, 1806, *Zoologie analytique*, p. 34.

Surnia Duméril, 1806, *Zoologie analytique*, p. 34.

bubo, Strix, Linnaeus, 1758, *Systema Naturae*, ed. 10, vol. 1, p. 92.

caparoch, Strix, Müller, 1766, *Des Ritters C. von Linne's. . . vollständige Natursystem. . . ,* Suppl., p. 69.

Rulings of the Commission

Opinion 1464. *Calcarina calcar* d'Orbigny, 1839 (currently *Pararotalia calcar*; Protista, Foraminiferida) 56
Opinion 1465. *Laomedea gracilis* Sars, 1850 (currently *Clytia gracilis*; Cnidaria, Hydrozoa) 57
Opinion 1466. *Terebratula triangulus* Valenciennes, 1819, *T. catulloi* Pictet, 1867 and *T. janitor* Pictet, 1867 (Brachiopoda, Articulata) 59
Opinion 1467. *Criopus* Poli, 1791 and *Criopoderma* Poli, 1795 (Brachiopoda) . . . 61
Opinion 1468. *Orbicula* Cuvier, 1798 (Brachiopoda, Inarticulata) 62
Opinion 1469. *Crania tuberculata* Nilsson, 1826 (Brachiopoda) 63
Opinion 1470. SINUITIDAE Dall, 1913, MACLURITIDAE Carpenter, 1861 and EUOMPHALIDAE de Koninck, 1881 (Gastropoda, Archaeogastropoda) 64
Opinion 1471. *Aplysia* (originally *Laplysia*) *viridis* Montagu, 1804 (Mollusca, Gastropoda). 67
Opinion 1472. *Cyclaxyra* Broun, 1893 (Insecta, Coleoptera) 69
Opinion 1473. *Tetropium* Kirby, 1837 (Insecta, Coleoptera) 71
Opinion 1474. *Tropiphorus* Schönherr, 1842 (Insecta, Coleoptera) 73
Opinion 1475. *Dexia* Meigen, 1826 (Insecta, Diptera) 74
Opinion 1476. *Agromyza* Fallén, 1810 (Insecta, Diptera) 76
Opinion 1477. *Napomyza* Westwood, 1840 (Insecta, Diptera) 77
Opinion 1478. *Lycaena mirza* Plotz, 1880 (currently *Azanus mirza*; Insecta, Lepidoptera) 78
Opinion 1479. *Antispila* Hübner, [1825] (Insecta, Lepidoptera) 79
Opinion 1480. *Apanteles ornigis* Weed, 1887 (currently *Pholetesor ornigis*; Insecta, Hymenoptera) 80
Opinion 1481. *Siphamia* Weber, 1909 and *S. permutata* Klausewitz, 1966 (Osteichthyes, Perciformes). 82
Opinion 1482. *Heteroclonium bicolor* Cope, 1896 (currently *Bachia bicolor*; Reptilia, Squamata) 84
Opinion 1483. *Rhabdodon* Matheron, 1869 (Reptilia, Ornithischia). 85
Direction 122. *Bubo* Duméril, 1806 and *Surnia* Duméril, 1806 (Aves) 87

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Parts of the Bulletin since 44 (1) should be consulted as examples.

Title. This should be written in lower case letters and include the names to be conserved. A specific name should be cited in the original binomen, with the current binomen in parentheses.

Author's name. Full postal address should be given.

Abstract. This will be prepared by the Commission Secretariat.

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. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . . '.

References. These should be given for all authors cited. The titles of periodicals should be *in full* and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and the place of publication.

Submission of application. Two copies should be sent to the address on the inside front cover. The Secretariat is willing to offer additional advice at an early stage in the preparation of manuscripts.

CONTENTS

	Page
Notices	1
The International Commission and its publications	2
Addresses and specialist fields of members of the Commission	3
International Trust for Zoological Nomenclature	4
Call for nominations for new members of the International Commission on Zoological Nomenclature	4
The International Code of Zoological Nomenclature	5
Official Lists and Indexes of Names and Works in Zoology	5

General Article

An appraisal of the Zoology of C. S. Rafinesque. Alwyne Wheeler	6

Applications

Madrepora limax Esper, 1797 (currently *Herpolitha limax*) and *Fungia talpina* Lamarck, 1801 (currently *Polyphyllia talpina*; Cnidaria, Anthozoa). B. W. Hoeksema	13
Coenobita Latreille, 1829 (Crustacea, Decapoda). G. J. Morgan & L. B. Holthuis	18
Sphaeroma hookeri Leach, 1814 (currently *Lekanesphaera hookeri*; Crustacea, Isopoda). B. J. M. Jacobs & L. B. Holthuis	21
Hydrobius Leach, 1815 and *Berosus* Leach, 1817 (Insecta, Coleoptera). M. Hansen	25
Elachista Treitschke, 1833 (Insecta, Lepidoptera). E. S. Nielsen & I. W. B. Nye	27
Colias alfacariensis Ribbe, 1905 (Insecta, Lepidoptera). S. E. Whitebread, L. Rezbanyai-Reser & H. Geiger	29
Ludita Nagy, 1967 (Insecta, Hymenoptera). C. van Achterberg	33
Vespa triangulum Fabricius, 1775 (currently *Philanthus triangulum*; Insecta, Hymenoptera). W. J. Pulawski	34
Ictiobus Rafinesque, 1820 (Osteichthyes, Cypriniformes). R. M. Bailey & W. N. Eschmeyer	36
Hydrolycus Müller & Troschel, 1844 (Osteichthyes, Cypriniformes). J. Géry & V. Mahnert	38
Ascalabotes gigas Bocage, 1875 (currently *Tarentola gigas*; Reptilia, Squamata). H. H. Schleich	41
Euryotis brantsii A. Smith, 1834 (currently *Parotomys brantsii*; Mammalia, Rodentia). L. C. Rookmaaker & J. Meester	43

Comments

On 'Use versus priority', with alternative proposals for the conservation of well-known names. K. H. L. Key	45
On the suggested introduction of 'Protected Works'. M. B. Best & B. W. Hoeksema	47
On the introduction of the term 'pragmatype' and on the role of the International Commission. G. Hahn	48
On Pragmatypes and the role of the Commission: a reply to Dr P. K. Tubbs. R. H. L. Disney & Y. Z. Erzinclioglu	48
On the proposed conservation of *Chelifer* Geoffroy, 1762 (Arachnida, Pseudoscorpionida). I. M. Kerzhner	49
On the proposed suppression of *Belemnites* Lamarck, 1799 and the conservation of BELEMNITIDAE d'Orbigny, 1845. G. Hahn; M. K. Howarth; T. I. Nal'nyaeva	50
On the proposed conservation of *Conus floridanus* Gabb, 1869 (Mollusca, Gastropoda). M. G. Harasewych & R. E. Petit	51
On the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington. G. J. Ingram & J. Covacevich; A. E. Greer; J. Stone	52
On the proposed designation of *Tylenchus vulgaris* Brzeski, 1963 as the type species of *Filenchus* Andrássy, 1954 (Nematoda). R. Fortuner, A. R. Maggenti & P. A. A. Loof; M. R. Siddiqi & D. J. Hunt	55

Continued on Inside Back Cover

Printed in Great Britain by Henry Ling Ltd., at the Dorset Press, Dorchester, Dorset

Volume 45, Part 2, 24 June 1988 pp. 89–180 ISSN 0007-5167

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 1988 is £57 or $110, postage included. All manuscripts, letters and orders should be sent to:

The Executive Secretary,
International Commission on Zoological Nomenclature,
c/o British Museum (Natural History),
Cromwell Road,
London, SW7 5BD, U.K. (Tel. 01-938 9387)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Officers

President	Dr W. D. L. Ride (*Australia*)
Vice-President	Prof Dr R. Alvarado (*Spain*)
Secretary-General	Dr L. B. Holthuis (*The Netherlands*)
Executive Secretary	Dr P. K. Tubbs (*United Kingdom*)

Members

Prof Dr R. Alvarado (*Spain*)
Dr F. M. Bayer (*U.S.A.*)
Dr G. Bernardi (*France*)
Dr L. R. M. Cocks (*U.K.*)
Dr H. G. Cogger (*Australia*)
Prof J. O. Corliss (*U.S.A.*)
Prof C. Dupuis (*France*)
Dr G. C. Gruchy (*Canada*)
Prof Dr G. Hahn (*Fed. Rep. Germany*)
Prof Dr O. Halvorsen (*Norway*)
Mr D. Heppell (*U.K.*)
Dr L. B. Holthuis (*The Netherlands*)
Dr Z. Kabata (*Canada*)
Prof Dr O. Kraus (*Fed. Rep. Germany*)
Dr P. T. Lehtinen (*Finland*)
Mr R. V. Melville (*U.K.*)
Dr M. Mroczkowski (*Poland*)
Dr W. D. L. Ride (*Australia*)
Prof J. M. Savage (*U.S.A.*)
Prof Dr R. Schuster (*Austria*)
Dr Y. I. Starobogatov (*U.S.S.R.*)
Dr F. C. Thompson (*U.S.A.*)
Dr V. A. Trjapitzin (*U.S.S.R.*)
Dr Shun-Ichi Uéno (*Japan*)
Prof A. Willink (*Argentina*)

Secretariat

Dr P. K. Tubbs (*Executive Secretary and Editor*)
Mr J. D. D. Smith, B.Sc., B.A. (*Scientific Administrator*)
Miss R. A. Cooper, B.Sc. (*Zoologist*)
Mrs A. Gentry, B.Sc. (*Zoologist*)

Officers of the International Trust for Zoological Nomenclature

Prof H. B. Whittington, F.R.S. (*Chairman*)
Dr M. K. Howarth (*Secretary and Managing Director*)

© International Trust for Zoological Nomenclature 1988

BRITISH MUSEUM
(NATURAL HISTORY)
6 JUL 1988
PURCHASED
ZOOLOGY LIBRARY

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 45, part 2 (pp. 89–180) 24 June 1988

Notices

(a) *Invitation to comment.* The Commission is entitled to start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. 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, in duplicate, to the Secretary of the Commission as quickly as possible, and in any case in time to reach the Secretary within twelve months of the date of publication of the application.

(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 45, part 1 (published on 25 March 1988):

(1) *Odontoscelis iberica* Kolenati, 1846 (Insecta, Heteroptera): proposed designation of a replacement neotype. (Case 2635). U. Göllner–Scheiding.

(2) *Fizesereneia* Takeda & Tamura, 1980 (Crustacea, Decapoda): proposed designation of *Troglocarcinus heimi* Fize & Serène, 1955 as the type species. (Case 2636). R. K. Kropp.

(3) *Mus domesticus* Schwarz & Schwarz, 1943 (Mammalia, Rodentia): proposed conservation. (Case 2640). G. B. Corbet.

(4) *Nerita hebraea* Martyn, 1786 and *Limax fibratus* Martyn, 1784 (currently *Natica hebraea* and *Placostylus fibratus*; Mollusca, Gastropoda): proposed conservation of the specific names. (Case 2641). P. Bouchet.

(5) POLYGYRIDAE Pilsbry, 1894 (Mollusca, Gastropoda): proposed precedence over MESODONTIDAE Tryon, 1866. (Case 2642). K. C. Emberton.

(6) *Iphinoe* Bate, 1856 (Crustacea, Cumacea): proposed conservation. (Case 2643). M. Bacescu & L. B. Holthuis.

(7) *Leucon* Krøyer, 1846 (Crustacea, Cumacea): proposed conservation. (Case 2644). M. Bacescu & L. B. Holthuis.

(8) *Bodotria* Goodsir, 1843 (Crustacea, Cumacea): proposed conservation. (Case 2645). M. Bacescu & L. B. Holthuis.

(9) *Ptochus* Schönherr, 1826 (Insecta, Coleoptera): proposed designation of *Ptochus porcellus* Boheman, 1834 as the type species. (Case 2646). R. T. Thompson.

(10) *Heliophanus kochii* Simon, 1868 (Arachnida, Araneae): proposed conservation. (Case 2647). J. Prószyński.

(11) *Attus penicillatus* Simon, 1875 (currently *Sitticus penicillatus*; Arachnida, Araneae): proposed conservation. (Case 2648). J. Prószyński.

(12) *Thyene* Simon, 1885 (Arachnida, Araneae): proposed conservation. (Case 2649). J. Prószyński.

(13) *Thorius pennatulus* Cope, 1869 (Amphibia, Caudata): proposed conservation of the specific name. (Case 2650). H. M. Smith, J. Hanken & D. Chiszar.

(14) *Aleuropteryx* Löw, 1885 (Insecta, Neuroptera): proposed designation of *Aleuropteryx loewii* Klapálak, 1894 as the type species. (Case 2651). J. D. Oswald & M. Meinander.

(15) CHORISTIDAE Verrill, 1882 (Mollusca, Gastropoda) and CHORISTIDAE Esben-Petersen, 1915 (Insecta, Mecoptera): a proposal to remove the homonymy. (Case 2652). A. R. Kabat.

(16) *Hapalorhynchus beadlei* Goodman, 1987 (Trematoda, Digenea): proposed replacement of holotype. (Case 2653). T. R. Platt.

(17) *Rapport sur les Myodaires du Docteur Robineau Desvoidy* (Académie Royale des Sciences, Paris, 1826): proposed suppression for nomenclatural purposes. (Case 2654). C. W. Sabrosky.

(18) *Semblis* Fabricius, 1775 (Insecta, Trichoptera): proposed confirmation of *Phryganea phalaenoides* Linnaeus, 1758 as the type species. (Case 2655). J. D. Oswald.

(19) *Chira* Peckham & Peckham, 1896 (Arachnida, Araneae): proposed confirmation as the correct spelling of *Shira*. (Case 2656). M. E. Galiano.

The International Code of Zoological Nomenclature

The Third Edition (1985) supersedes all earlier versions, and incorporates many changes.

Copies may be obtained from:
Natural History Publications, British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K. Price £17.50 plus £1.50 postage.

Orders from North America should be sent to:
University of California Press, Berkeley 94720, California, U.S.A.

Official Lists and Indexes of Names and Works in Zoology

A revised and updated edition of the *Official Lists and Indexes of Names and Works in Zoology* was published in 1987. For the first time all the names and works on which the International Commission on Zoological Nomenclature has ruled since it was set up in 1895 are brought together in a single volume. Entries are arranged in four sections giving in alphabetical order the family-group names, generic names, specific names and titles of works which have been placed on the Official Lists or the Official Indexes. There are about 9,900 entries of which 134 are for works. In addition, there is a full systematic

index and a reference list to all relevant Opinions and Directions. The volume is 366 pages, size A4, casebound.

Copies can be ordered from:

The International Trust for Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K. Price £60 or $110

or

The American Association for Zoological Nomenclature, c/o NHB Stop 163, National Museum of Natural History, Washington D.C. 20560, U.S.A. Price $110 ($100 to members of A.A.Z.N.)

Changes in North American Fish Names, especially as related to the International Code of Zoological Nomenclature, 1985

Reeve M. Bailey
Museum of Zoology, University of Michigan, Ann Arbor, Michigan 48109–1079, U.S.A.

C. Richard Robins
Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, Miami, Florida 33149–1098, U.S.A.

Abstract. Changes incorporated in the third edition of the International Code of Zoological Nomenclature, published in 1985, are discussed relative to their impact on the nomenclature of North American fishes, but the discussion and conclusions are pertinent to the names of all animals. Species-group names formed from personal names in the genitive case or in the nominative case (as appositional nouns) and as adjectives are of special concern, and each is reviewed in detail. The gender of certain genus-group names, names of divisions of genera, and priority accorded to family-group names are other sections of the Code where changes have affected names of North American fishes.

Introduction

For over half a century the American Fisheries Society (AFS) has had a committee charged with assembly of recommendations for common and scientific names of fishes. An abbreviated List of important North American fishes was published in 1948. Soon thereafter the American Society of Ichthyologists and Herpetologists (ASIH) added its support to the enterprise, and a joint committee representing the two societies continued and expanded the coverage to include all North American freshwater and coastal marine fishes. The second edition of the List appeared in 1960, a year in advance of the first (1961) edition of the International Code of Zoological Nomenclature. Although the committee attempted to follow the incomplete deliberations of the Commission, some of its nomenclatural decisions were at variance with the 1961 Code. As discussed below, the committee's decisions disagreed even more with revisions in the 1964 Code. For the third and fourth editions (1970 and 1980) of the North American List the AFS held to the same principles utilised in 1960, feeling that the rules were far from stabilised, as indicated to us by various Commissioners.

The third edition of the Code, long awaited, was published in 1985. We have studied the new Code carefully with regard to its impact on various projects underway by the Committee on Names of Fishes of the AFS and ASIH. The new edition is more tightly written, many ambiguities have been removed, and an extensive Glossary has been made part of the Code. Many examples and recommendations are given to help explain the Code but neither these nor the appendices are part of the 'legislative' text (p. 1; Art. 87b, p. 179). Of greatest concern to us are Articles 31–34, which deal with species-group names, and Article 35, which deals with family-group names.

This paper attempts to clarify differences and pave the way for uniform interpretations and nomenclatural practices. Although we address chiefly North American fishes as represented on the AFS List of 1980, the comments apply equally to animals of other groups and areas. It is inevitable that a Code as complex as that of zoological nomenclature will be in places open to a variety of interpretations. The interpretations in this article represent our views, held after consultations with colleagues. In an appended note Dr P. K. Tubbs, Executive Secretary of the International Commission on Zoological Nomenclature, draws attention to a case where the present text of the Code may need clarification.

Species-Group Names formed from Personal Names

Article 31a of the Code concerns species-group names formed from personal names. These may be of three types: (1) a noun in the genitive case, (2) a noun in apposition, or (3) an adjective or participle.

(1) *Nouns in the genitive case*

Article 31a(i) prescribes that: 'A species-group name, if a noun in the genitive case formed from a personal name that is Latin, or from a modern personal name that is or has been latinized, is to be formed in accordance with the rules of Latin grammar.'

The six involved species on the North American list were all correctly given in the 1980 (4th) edition of the AFS List:

Page	AFS-1980 Entry	Latin or Latinized Personal name	Common name
13	*Centroscyllium fabricii*	Fabricius	black dogfish
24	*Notropis emiliae*	Emilia (from Emily)	pugnose minnow
52	*Chirolophis ascanii*	Ascanius	Atlantic warbonnet
52	*Lumpenus fabricii*	Fabricius	slender eelblenny
53	*Eleotris pisonis*	Piso*	spinycheek sleeper
56	*Nomeus gronovii*	Gronovius (from Gronow)	man-of-war fish

*Treated as a third declension *n*-stem Latin noun (like *leo*).

As noted in the examples that follow Article 31a(i), Latin-form names like Poda (a man) may be treated as a latinized name, giving *podae*, or as a modern name, giving *podai*. In such cases original spelling determines use.

The creole wrasse was described as *Brama parrae* by Bloch & Schneider (1801), who treated Parra as a Latin name and placed it in the genitive as *parrae*. This name should therefore be corrected from *Clepticus parrai*, as given on p. 48 of the 1980 List, to *C. parrae* (Bloch & Schneider, 1801).

A Central American catfish was named by Meek (1906) for Sr Don Mañuel Estrada Cabrera, President of Guatemala. The name as proposed was *Rhamdia cabrerae* rather than *cabrerai*. Cabrera was interpreted as a Latin-form name and thus the genitive *cabrerae* is not to be emended. Note that *cabrera, cabrerae, cabrerai*, and *cabreri* are all acceptable patronyms based on Cabrera under the 1985 Code, and which is correct in any instance depends on the original spelling.

The wahoo, *Acanthocybium solanderi* (p. 55), should be corrected to the original *solandri*; Cuvier treated the name Solander as Latin and as having the genitive *solandri* (cf. the family name SCOMBRIDAE from *Scomber*).

Article 31a(ii) states: 'A species-group name, if a noun in the genitive case formed *directly from a modern personal name* [emphasis added], is to be formed by adding to the stem of that name *-i* if the personal name is that of a man, *-orum* if of men or of man (men) and woman (women) together, *-ae* if of a woman, and *-arum* if of women (see Article 11h(i)(3) and Appendix DIII); the stem of such a name is determined by the action of the original author when forming the genitive.'

A predominant fraction of patronyms for North American fishes are formed in this way. We count 340 species names on the 1980 List, and many more have been employed for subspecies or for nominal species now placed in synonymy.

The early Opinion 8 (1910) ruled that names originally published 'incorrectly' (with respect to the 1905 International Rules) with the ending *-ii* instead of *-i* (e.g., *schrankii* instead of *schranki*) were nevertheless to be retained in the original form. In 1948 Opinion 8 was repealed by the Commission (see BZN **4**: 67–68), and correction of improperly formed names was thereby required. This issue led to dissension among nomenclaturists, and this debate has continued. In the 1960 AFS List the authors subscribed to the 1948 ruling and emended incorrectly formed *'-ii'* patronyms. This position was mandatory in the 1961 Code (Art 32) which called for emendation of 'incorrect' original spellings, i.e., those that contravened provisions of Articles 26 to 31. Soon thereafter, to the consternation of many who had attempted to adhere closely to the rules, in the 1964 edition of the Code the Commission reversed itself (see BZN **21**: 173), and in Article 32 changed 'Articles 26 to 31' to read 'Articles 26 to 30'. Thus, the termination of 'modern' (non Latin-form) patronyms in *-ii* was no longer outlawed, but merely recommended against (Recommendation 31A). In the interest of consistency, and in consideration of the continued debate, the practice of emendation was nevertheless continued by the AFS Committee on Names in the 1970 and 1980 Lists.

In the 1985 Code, the 1964 Recommendation 31A once again becomes mandatory, as Article 31a, and this Article is again cited in Article 32 as it had been in the 1961 edition. To assist in understanding the current ruling we exemplify with the genitive form of a name originally proposed as *smithii* in honor of a Mr Smith. Under Article 31a(ii) this spelling should have been *smithi*. Under Article 31a(iii) the original spelling formed under subsection (ii) is to be preserved *unless it is incorrect* [emphasis added], [Article 32c,d]. Under Article 32c an original spelling is 'an incorrect original spelling' if (i) it contravenes a provision of Articles 27 to 31; or (ii) 'there is in the original publication itself, without recourse to any external source of information, clear evidence of an inadvertent error, such as a lapsus calami or a copyist's or printer's error. . . .' An incorrect original spelling is to be corrected under Article 32d. Thus *smithii*, named for a Mr Smith, is corrected to *smithi*; this is termed a 'justified emendation', and it takes the author and date of the original spelling (Article 33b(ii)).

Hurried reading of the rules may lead to misinterpretation of Article 33d, which states that use of the termination *-i* in a subsequent spelling in which the *correct* [our emphasis] original spelling terminates with *-ii*, or vice versa, constitutes an incorrect subsequent spelling. The key words here are *subsequent spelling*; Article 33 is concerned with subsequent spellings, whereas Article 32 treats original spellings. For example, the aquarium fish known as the Argentine pearlfish (from La Plata) was named *Cynolebias Bellottii*, after Dr Bellotti. The author (Steindachner, 1881) took the entire name as the stem and correctly added *-i* (Article 31a(ii)), so the correct original spelling, emended only by use of the lower-case *b* (Article 28), is *Cynolebias bellottii*. Some aquarium

books, however, employ *C. bellotti*: as a subsequent spelling this is incorrect and in this form is unavailable (Article 33c).

If in a patronymic name a genitive suffix indicative of the wrong gender (Article 31a(ii)) is used it must be corrected (Art. 32c(ii),d). *Notropis cummingsi* Myers, 1925, the dusky shiner, and *Otophidium scrippsi* Hubbs, 1916, the basketweave cusk-eel, were stated by their authors to be in dedication of Mrs J. H. Cummings and Miss Ellen B. Scripps, respectively. The names are properly corrected to *Notropis cummingsae* and *Ophidion scrippsae*, as done in the 1980 AFS List (p. 24 and p. 31 respectively); some authors have retained the incorrect original spellings.

Article 31a(ii) of the 1985 Code stipulates that the 'stem' of a species-group name formed from a modern personal name is determined by the action of the original author when forming the genitive. For example, the Code notes (p. 63) that *puckridgi* may be formed from Puckridge by deletion of the terminal vowel, although *puckridgei* could also be a correct spelling *if used originally*. We identify one entry on the 1980 List to be corrected. The yellowtail, *Seriola lalandei* Valenciennes 1833, should be changed to *S. lalandi*, the original spelling. Valenciennes elected to delete the terminal vowel from the name of Lalande.

Two familiar Middle American fish names were formed by deletion of the terminal vowel before addition of the genitive suffix. The mullet, *Joturus pichardi* Poey, 1861, honored the Cuban author Don Esteban Pichardo, and the cichlid *Cichlasoma alfari* Meek, 1907, commemorated the Director of the National Museum of Costa Rica, Dr Anastasio Alfaro. Subsequent insertion of the vowel (to give *pichardoi* and *alfaroi*) would be incorrect. Other correct original spellings in the 1980 List include *Coregonus laurettae* Bean, 1881, for Mrs Lauretta H. Bean, *Exoglossum laurae* (Hubbs, 1931) for Mrs Laura C. Hubbs, and *Etheostoma jessiae* (Jordan & Brayton, 1877) for Mrs Jessie Dewey Brayton.

In the 1980 List the five names in the table below, originally terminating in *-ii*, were emended both by giving the *-i* ending and by changing the 'stem'. None of the surnames has been 'latinized' (e.g. to Whipplius). The names based on Commerson and Broussonet both have originally misspelt stems; their emendation is in accord with their derivations (Article 32d), and probably stability, but not with strict compliance with Article 32c(ii). It can also be maintained that the forms *whippli* and *duquesni* are permissible: if these spellings had been original they would have been correct, but we consider that as emendations *whipplei* and *duquesnei* are justified.

Patronyms in the genitive emended in the 1980 AFS List

AFS-1980 Page	AFS-1980 Entry	Original proposal	Personal name	Common name
25	*Notropis whipplei*	*Cyprinella whipplii* Girard, 1856	Whipple	steelcolor shiner
26	*Catostomus commersoni*	*Cyprinus Commersonnii* Lacepède, 1803	Commerson	white sucker
27	*Moxostoma duquesnei*	*Catostomus duquesnii* Lesueur, 1817	Duquesne	black redhorse
41	*Etheostoma whipplei*	*Boleichthys whipplii* Girard, 1859	Whipple	redfin darter
54	*Gobioides broussoneti*	*Gobioides Broussonnetii* Lacepède, 1800	Broussonet	violet goby

Very many patronyms in the genitive were those proposed with a double terminal *-ii*, but which should now have a single *-i*. As mentioned previously, in the interest of consistency the Committee elected to make this emendation in the 1970 and 1980 AFS Lists, as had been done in 1960. Because of this choice the Committee decision was

[continued on page 98]

Patronyms emended by deletion of a terminal *-i* to agree with Article 31a(ii) of the Code

Page	AFS-1980 Entry	Original proposal	Common name
11	*Eptatretus stouti*	*Bdellostoma stoutii* Lockington, 1878	Pacific hagfish
11	*Lampetra ayresi*	*Petromyzon ayresii* Günther, 1870	river lamprey
12	*Carcharhinus perezi*	*Platyodon perezii* Poey, 1876	reef shark
14	*Raja kincaidi*	*Raja kincaidii* Garman, 1908	sandpaper skate
15	*Chilorhinus suensoni*	*Chilorhinus suensonii* Lütken, 1851	seagrass eel
16	*Facciolella gilberti*	*Chlopsis gilbertii* Garman, 1899	dogface witch-eel
17	*Ophichthus gomesi*	*Ophisurus gomesii* Castelnau, 1855	shrimp eel
17	*Clupea harengus pallasi*	*Clupea pallasii* Valenciennes, 1847	Pacific herring
19	*Prosopium coulteri*	*Coregonus coulterii* Eigenmann & Eigenmann, 1892	pygmy whitefish
19	*Salmo clarki*	*Salmo clarkii* Richardson, 1836	cutthroat trout
19	*Salmo gairdneri**	*Salmo gairdnerii* Richardson, 1836	rainbow trout
22	*Gila orcutti*	*Phoxinus orcuttii* Eigenmann & Eigenmann, 1890	arroyo chub
26	*Catostomus clarki*	*C. clarkii* Baird & Girard, 1854	desert sucker
28	*Chologaster agassizi*	*C. agassizii* Putnam, 1872	spring cavefish
30	*Cryptopsaras couesi*	*C. couesii* Gill, 1883	warted seadevil
30	*Nezumia bairdi*	*Macrourus bairdii* Goode & Bean, 1877	marlin-spike
31	*Lycenchelys verrilli*	*Lycodes verrillii* Goode & Bean, 1877	wolf eelpout
32	*Hirundichthys rondeleti*	*Exocoetus rondeletii* Valenciennes, 1846	blackwing flying fish
33	*Fundulus notti*	*Zygonectes nottii* Agassiz, 1854	starhead topminnow
34	*Xiphophorus helleri*	*X. hellerii* Heckel, 1848	green swordtail
39	*Micropterus treculi*	*Dioplites Treculii* Vaillant & Bocourt, 1874	Guadelupe bass
39	*Ammocrypta beani*	*A. beanii* Jordan, 1877	naked sand darter
44	*Anisotremus davidsoni*	*Pristipoma davidsonii* Steindachner, 1875	sargo

Page	AFS-1980 Entry	Original proposal	Common name
45	*Haemulon plumieri*	*Labrus Plumierii* Lacepède, 1801	white grunt
45	*Diplodus holbrooki*	*Sargus holbrookii* Bean, 1878	spottail pinfish
46	*Roncador stearnsi*	*Corvina Stearnsii* Steindachner, 1875	spotfin croaker
47	*Pentaceros richardsoni*	*P. richardsoni* (and *P. richardsonii*) Smith, 1849 (Follett & Dempster, 1963 chose *richardsoni*)	pelagic armorhead
47	*Tilapia zilli*	*Acerina zillii* Gervais, 1848	redbelly tilapia
48	*Hysterocarpus traski*	*H. traskii* Gibbons, 1854	tule perch
50	*Opistognathus whitehursti*	*Gnathypops whitehurstii* Longley, 1931	dusky jawfish
51	*Stathmonotus hemphilli*	*S. hemphillii* Bean, 1885	blackbelly blenny
52	*Plagiogrammus hopkinsi*	*P. hopkinsii* Bean, 1894	crisscross prickleback
53	*Callionymus agassizi*	*C. agassizii* Goode & Bean, 1888	spotfin dragonet
54	*Coryphopterus nicholsi*	*Gobius nicholsii* Bean, 1882	blackeye goby
57	*Scorpaena agassizi*	*S. agassizii* Goode & Bean, 1896	longfin scorpionfish
57	*Scorpaena bergi*	*S. bergii* Evermann & Marsh, 1900	goosehead scorpionfish
58	*Sebastes gilli*	*Sebastodes gillii* [and *gilli*] Eigenmann, 1891	bronzespotted rockfish
60	*Cottus bairdi*	*C. bairdii* Girard, 1850	mottled sculpin
60	*Cottus beldingi*	*C. beldingii* Eigenmann & Eigenmann, 1891	Paiute sculpin
61	*Myoxocephalus thompsoni*	*Triglopsis thompsonii* Girard, 1851	deepwater sculpin
62	*Rhamphocottus richardsoni*	*R. richardsonii* Günther, 1874	grunt sculpin
62	*Triglops pingeli*	*T. pingelii* Reinhardt, 1838	ribbed sculpin
62	*Aspidophoroides olriki*	*A. olrikii* Lütken, 1876	Arctic alligatorfish
62	*Bothragonus swani*	*Hypsagonus swanii* Steindachner, 1877	rockhead
66	*Aluterus heudeloti*	*A. heudelotii* Hollard, 1855	dotterel filefish
66	*Aluterus schoepfi*	*Balistes schoepfii* Walbaum, 1792	orange filefish
96	*Esox reicherti*	*E. reichertii* Dybowski, 1869	Amur pike

*The intimate relationship of the Kamchatkan trout (*Salmo mykiss*) and the rainbow or steelhead trout was recognised by Behnke (1966), who refrained from combining the species, in part because of an apparent difference in vertebral count (now known to be erroneous). Okazaki (1984) has clearly demonstrated that they should be recognised as a single species. He suggested (but did not propose) their merger. *Salmo mykiss* Walbaum, 1792, has priority over *Salmo gairdneri* Richardson, 1836, and replaces it. The generic assignment of the western trouts presents an unresolved problem (Kendall & Behnke, 1984).

criticised or ignored by some workers. The reversal of ruling between the 1964 and 1985 Codes therefore brought our usage into compliance with the latest rule, and obfuscating vacillation in spelling was avoided by those who followed the AFS Lists. Some authors, however, employed original spellings during this interim. To clarify the inconsistency we list below those names for which emendation of original spelling (i.e., *-ii* to *-i*) is now required by Articles 31a(ii) and 32c,d.

(2) *Nouns in apposition*

Culminating a period of contradiction and debate, the 1985 Code (Article 31a) now directs that 'A species-group name formed from a personal name may be . . . a noun in apposition . . . [Article 11h(i)]', but, under Recommendation 31A, authors are discouraged from the establishment of a species-group name formed in this way. In the 1961 edition of the Code such use was disallowed and names so formed were subject to automatic correction by adding the appropriate genitive termination. The second (1964) edition of the Code eliminated the correction, following a decision of the 1963 International Congress of Zoology.

In the 1960, 1970, and 1980 editions of the AFS List we consistently emended personal names placed in apposition by adding the appropriate genitive terminations. In view of the current clear directive we now reluctantly have to adopt the original non-genitive spellings. Fortunately, few are in the North American List, all of which were proposed long ago. Regrettably, though, some involve familiar fishes and are commonly used names. These incorrect endings, which are in common use, could be conserved in line with Recommendation 31A of the Code if this were approved by the Commission under its plenary powers. We suggest submission of an application that this be done, so protecting the commonly used genitive-form names under Article 80 of the Code.

Patronyms in apposition with generic name

Correct scientific name	Name and page on 1980 List		Common name
Galeocerdo cuvier (Péron & Lesueur, 1822)	*G. cuvieri*	(12)	tiger shark
Squatina dumeril Lesueur, 1818	*S. dumerili*	(13)	Atlantic angel shark
Dasyatis say (Lesueur, 1818)	*D. sayi*	(14)	bluntnose stingray
Coregonus artedi Lesueur, 1818	*C. artedii*	(18)	cisco or lake herring
*Holocentrus poco** (Woods, 1965)	*H. poco*	(34)	saddle squirrelfish
Lophotus lacepede Giorna, 1809	*L. lacepedei*	(35)	crestfish
Micropterus dolomieu Lacepède, 1802	*M. dolomieui*	(39)	smallmouth bass
Haemulon parra (Desmarest, 1823)	*H. parrai*	(45)	sailors choice
Hypsoblennius hentz (Lesueur, 1825)	*H. hentzi*	(52)	feather blenny
Gobiosoma bosc (Lacepède, 1800)	*G. bosci*	(54)	naked goby

*The name *H. poco*, for Mary Ann 'Poco' Holloway, is an appositional nickname not identified as such in the 1980 List.

The name *Myripristis jacobus* Cuvier, 1829, for the blackbar soldierfish, was so used on page 34 of the 1980 List. Jacobus we interpret as the latinized equivalent of James; the species is reported by Jordan & Evermann (1896, p. 847) to be called Frère-Jacque, 'brother Jim', in Martinique.

(3) *Patronyms as adjectives*

Article 31a states: 'A species-group name formed from a personal name may be . . . an adjective or participle [Article 11h(i)].' Under Article 11h(i) such adjective or participle, if a Latin or latinised word, is to be in the nominative singular, and (Article 31b) 'must agree in gender with the generic name with which it is at any time combined, and its termination must be changed according to Latin inflection (Appendix DVII, Table 2], if necessary, when the species is transferred to another genus [Art. 34b];. . . .' The author and date of the species-group name remain unchanged (Articles 34b, 50c(ii), 23c).

Relatively few adjectival patronyms have been proposed as fish names in our area. We identify only the following among currently recognised species and at present no change in spelling is necessitated from the 1980 List.

Patronyms as adjectives

Page	AFS 1980 Entry	Original proposal	Common name
17	*Dorosoma cepedianum*	*Megalops cepediana* Lesueur, 1818 (for Compte de La Cepède = Citoyen Lacepède)	gizzard shad
22	*Hybopsis storeriana*	*Rutilus storerianus* Kirtland, 1842 (for David Humphreys Storer)	silver chub
28	*Aphredoderus sayanus*	*Scolopsis sayanus* Gilliams, 1824 (for Thomas Say)	pirate perch
39	*Etheostoma fricksium*	*E. fricksia* Hildebrand, 1923 (for L. D. Fricks)	Savannah darter
49	*Mugil gaimardianus*	*M. gaimardianus* Desmarest, 1831 (for P. Gaimard)	redeye mullet
51	*Chasmodes bosquianus*	*Blennius bosquianus* Lacepède, 1800 (for M. Bosc)	striped blenny
52	*Bryozoichthys marjorius*	*B. marjorius* McPhail, 1970 (for Marjorie McPhail)	pearly prickleback

Gender of genus-group names

Article 30 of the 1985 Code concerns the determination of gender of names in the genus group; the wording is little changed from earlier editions, but the examples are somewhat expanded and clarified. For example, Article 30a(ii) [new] specifies that 'A genus-group name ending in *-ops* is to be treated as masculine, regardless of its derivation or its treatment by the author.' Roughly 250 nominal genus-group names in ichthyology end in *-ops,* including 11 valid taxa in our fauna.

The suffix *-ops* is derived from different classical Greek roots, either masculine or feminine, hence the potential for confusion and its removal by the new ruling. The names *Megalops atlanticus* (tarpon), *Acyrtops beryllinus* (emerald clingfish), *Sciaenops ocellatus* (red drum), and *Hypsypops rubicundus* (garibaldi) were entered correctly in

the AFS List of 1980 because the ruling was entered into the Code in 1972 (BZN **29**: 182), but all were given feminine endings in one or both of the preceding editions.

The suffix *-gramma*, classically neuter, is added to the examples under Article 30a. Correction of the name for the threeline basslet to *Lipogramma trilineatum* (1980 List, p. 38) is in order. Of wider impact is the Neotropical cichlid genus *Apistogramma*, well known as aquarium fishes and improperly treated by some authors as feminine. As examples, *Apistogramma amoenum, A. taeniatum*, and *A. trifasciatum* are correct.

Of concern to students of North American freshwater fishes is recognition that the centrarchid genus *Lepomis*, although almost universally regarded as masculine, is of feminine gender (Article 30a). The name is derived from the Greek *lepis*, f., scale, and *omis*, f., a fish (Brown, 1954, pp. 332, 683). It is of interest that Rafinesque, the original (1819) author, in a later paper (1820) is one of the few to treat *Lepomis* as feminine (e.g., *L. notata, L. pallida, L. trifasciata*). When proposed in 1819, *Lepomis* was implied to be masculine (e.g., *L. cyanellus, L. macrochirus*) and included sunfishes, e.g., '*Labrus auritus* des auteurs', the designated type species [= *Lepomis aurita* (Linnaeus, 1758)]. Rafinesque replaced *Lepomis* by *Icthelis* in 1820 and transferred *Lepomis* to 'river bass', *Micropterus* as now understood. The names (1980 List, pp. 38–39) for the following species are corrected, as follows: *Lepomis aurita* (redbreast sunfish), *L. cyanella* (green sunfish), *L. gibbosa* (pumpkinseed), *L. gulosa* (warmouth), *L. macrochira* (bluegill), *L. marginata* (dollar sunfish), *L. punctata* (spotted sunfish), and *L. symmetrica* (bantam sunfish). All were incorrectly assigned masculine endings in the 1980 and earlier lists.

Names for Divisions of Genera

Article 10e of the 1985 Code reads: 'A uninomial name proposed for a genus-group division of a genus, even if proposed for a secondary (or further) subdivision, is deemed to be a subgeneric name even if the division is denoted by a term such as 'section' or 'division'; . . . .' The acceptability of secondary subdivisions as available names is new; Article 42d of the 1961 and 1964 Codes granted availability only to *primary* subdivisions of a genus. To our knowledge this modification poses the potential for nomenclatural change only among catfishes. In the genus *Pimelodus* Lacepède, 1803, Rafinesque (1820, pp. 61–67) proposed as new the subgenus *Ictalurus*, further divided by him into four sections (*Elliops, Leptops, Ameiurus, Ilictis*). Included in the account of *Leptops* is the original proposal of *Opladelus* for *Pimelodus nebulosus* Rafinesque (1820) [= *Pylodictis olivaris* (Rafinesque, 1818), not *Pimelodus nebulosus* Lesueur, 1819]. These genus-group names were included (together with *Noturus* and several Asiatic fishes currently classified in the OLYRIDAE and AKYSIDAE) by Gill (1861b, pp. 49–53) in his group Ictaluri of the subfamily PIMELODINAE, thus establishing the family-group name ICTALURIDAE (of which AMEIURIDAE Regan, 1911, is a junior synonym). Among the several genus-group names three represent widely accepted current genera: *Ictalurus* Rafinesque, 1820 (type species, *Pimelodus cerulescens* Rafinesque, 1820 [= *Silurus punctatus* Rafinesque, 1818], by subsequent designation of Gill (1861b, p. 49)); *Noturus* Rafinesque, 1818 (type species, *Noturus flavus* Rafinesque, 1818, by monotypy); and *Pylodictis* Rafinesque, 1819 (type species, *Pylodictis limosus* Rafinesque, 1819 [= *Silurus olivaris* Rafinesque, 1818], by monotypy). *Elliops* is an objective synonym of *Ictalurus*. *Leptops, Opladelus* (commonly but incorrectly emended to *Hopladelus*), and *Ilictis* are all subjective synonyms of *Pylodictis* (commonly misspelt *Pilodictis*). The remaining

generic-group name, *Ameiurus*, was long employed for the bullheads, although that spelling was unjustifiably emended to *Amiurus* by Agassiz (1846, p. 17) and by Gill (1861a, p. 44; 1861b, p. 50), as shown by Taylor (1954, p. 43). Since Taylor's merger of the groups most workers have placed the bullheads in the genus *Ictalurus*, sometimes (e.g., Lundberg, 1982) as a subgenus *Amiurus* of that genus. Miller (1986, pp. 124, 135) re-elevated the bullheads to generic level as *Amiurus*. In view of the change in the Code discussed above, *Ameiurus* Rafinesque, 1820 is an available name and *Amiurus* is an unjustified emendation of it.

Reconsideration of Rafinesque's account of his *Silurus cupreus*, the nominal type species of *Ameiurus*, has led us to conclude that it is a subjective synonym of his *Pylodictis limosus*, the type species of *Pylodictis*. To avoid this unfortunate change in the long-familiar *Ameiurus*, whether as genus or subgenus, we have proposed (Bailey & Robins, 1988; BZN **45**: 135–137) that the ICZN should designate the included species *Silurus lividus* Rafinesque, 1820 (a subjective synonym of *Pimelodus natalis* Lesueur, 1819) as the type species of *Ameiurus*, so preserving its established meaning.

Family-group names

These apply to 'all taxa at the ranks of superfamily, family, subfamily, tribe and any other rank below superfamily and above genus that may be desired, such as subtribe' (Article 35a), and the principle of priority applies to them. Few ichthyologists have given synonymies of family-group names, and names have come into standard use without attention to priority. Adherence to this provision of the Code will result in some changes in family-group names in fishes, one of which (HAEMULIDAE, based on HAEMULONIDAE of Richardson, 1846 has priority over POMADASYIDAE and thus replaces it) was already documented by AFS in its 1980 (4th) edition. In ichthyology (and in other fields) names like order, family, and tribe had little hierarchical meaning prior to this century. A name proposed as an 'order', if based on a generic name, and if subsequently used as a family-group name is valid and dates from its original proposal. As noted by McCosker (in press) Ophichthyctes proposed by Duméril (1806) as an 'order' but having the same basis as *Ophichthus* Ahl, 1789, is the earliest family-group name, correctly emended to OPHICHTHIDAE, for the family of snake eels. Emendation of this name to OPHICHTHYIDAE is improper (despite example 41 on pp. 226–227 of the Code) since *Ophichthys*, though classically correct, is an unjustified emendation.

Acknowledgements

The principles and many of the examples which comprise this paper were discussed personally or in correspondence with many persons, although we are responsible for views expressed. To the following we are much indebted: Frederick M. Bayer, Howard D. Cameron, John O. Corliss, William N. Eschmeyer, W. I. Follett, C. G. Gruchy, Lipke B. Holthuis, Julian M. Humphries, John E. McCosker, Raymond B. Manning, W. D. L. Ride, Jay M. Savage, William F. Smith-Vaniz, and George C. Steyskal. We also thank our colleagues on the Committee on Names of Fishes, Carl E. Bond, James E. Brooker, Robert N. Lea, Ernest A. Lachner, and W. B. Scott, for their many discussions of these problems and review of the manuscript. Barry Chernoff made available copies of several obscure publications. We are enormously grateful to Miss Cheryl Zello, who has endured the tedium of typing and correcting many developmental drafts of this paper. We thank Philip K. Tubbs for his editorial help.

References

Agassiz, L. 1846. *Nomenclatoris zoologici. Index Universalis.* vii + 393 pp. Soloduri.

American Fisheries Society (W. H. Chute, R. M. Bailey, W. A. Clemens, J. R. Dymond, S. F. Hildebrand, G. S. Myers, L. P. Schultz). 1948. *A list of common and scientific names of the better known fishes of the United States and Canada.* American Fisheries Society, Special Publication No. 1. 45 pp.

American Fisheries Society (R. M. Bailey, E. A. Lachner, C. C. Lindsey, C. R. Robins, P. M. Roedel, W. B. Scott, L. P. Woods). 1960. *A list of common and scientific names of fishes from the United States and Canada.* (2nd ed.). American Fisheries Society, Special Publication No. 2. 102 pp.

American Fisheries Society (R. M. Bailey, J. E. Fitch, E. S. Herald, E. A. Lachner, C. C. Lindsey, C. R. Robins, W. B. Scott). 1970. *A list of common and scientific names of fishes from the United States and Canada.* (3rd ed.). American Fisheries Society, Special Publication No. 6. 149 pp.

American Fisheries Society (C. R. Robins, R. M. Bailey, C. E. Bond, J. R. Brooker, E. A. Lachner, R. N. Lea, W. B. Scott). 1980. *A list of common and scientific names of fishes from the United States and Canada.* (4th ed.). American Fisheries Society, Special Publication No. 12. 174 pp.

Behnke, R. J. 1966. Relationships of the far eastern trout, *Salmo mykiss* Walbaum. *Copeia,* **1966**(2): 346–348.

Bloch, M. E. & Schneider, J. G. 1801. *Systema ichthyologiae iconibus cx illustratum* . . . lx + 584 pp. 110 plates. Berolini.

Brown, R. W. 1954. *Composition of scientific words.* 882 pp. Published by the author, Baltimore, Md.

Duméril, A. M. C. 1806. *Zoologie analytique, ou méthode naturelle de classification des animaux.* xxxiii + 344 pp.

Follett, W. I. & Dempster, L. J. 1963. Relationships of the percoid fish *Pentaceros richardsoni* Smith, with description of a specimen from the coast of California. *Proceedings of the California Academy of Sciences,* 4th series, **32**(10): 315–338.

Gill, T. 1861a. Descriptions of new species of Pimelodinae. *Proceedings of the Boston Society of Natural History,* **8**(1862): 42–46.

Gill, T. 1861b. Synopsis of the genera of the sub-family of Pimelodinae. *Proceedings of the Boston Society of Natural History,* **8**(1862): 46–55.

International Code of Zoological Nomenclature.
First edition, 1961. xvii + 176 pp. International Trust for Zoological Nomenclature, London.
Second edition, 1964. xx + 176 pp. International Trust for Zoological Nomenclature, London.
Third edition, 1985. xx + 338 pp. British Museum (Natural History), London; University of California Press, Berkeley and Los Angeles.

Jordan, D. S. & Evermann, B. W. 1896. The fishes of North and Middle America. *Bulletin of the United States National Museum,* **47**: Pt. 1. lx + 1240 pp.

Kendall, A. W., Jr & Behnke, R. J. 1984. Salmonidae: Development and relationships. Pp. 142–149 *in: Ontogeny and Systematics of Fishes,* Moser, H. G. (Ed.). American Society of Ichthyologists and Herpetologists, Special Publication No. 1.

Lundberg, J. G. 1982. The comparative anatomy of the toothless blindcat, *Trogloglanis pattersoni* Eigenmann, with a phylogenetic analysis of the ictalurid catfishes. *Miscellaneous Publications, Museum of Zoology, University of Michigan,* No. 163. 85 pp.

Meek, S. E. 1906. Description of three new species of fishes from Middle America. *Field Columbian Museum (Zoological Series),* **7**(3), Publication 116, pp. 93–95.

Miller, R. R. 1986. Composition and derivation of the freshwater fish fauna of Mexico. *Annales Escuela nacional Ciencias biologia,* Mexico **30**: 121–153.

Okazaki, T. 1984. Genetic divergence and its zoogeographic implications in closely related species *Salmo gairdneri* and *Salmo mykiss. Japanese Journal of Ichthyology,* **31**(3): 297–311.

Rafinesque, C. S. 1819. Prodrome de 70 nouveaux genres d'animaux découverts dans l'intérieur des Etats-Unis d'Amérique, durant l'année 1818. *Journal de Physique, de Chimie, d'Histoire Naturelle et des Arts, Paris,* **88**: 417–429.

Rafinesque, C. S. 1820. *Ichthyologia Ohiensis, or natural history of the fishes inhabiting the River Ohio and its tributary streams*. 90 pp. Lexington, Kentucky.

Steindachner, F. 1881. Beitrage zur kenntniss der flussfische Sudamerikas III. *Denkschriften Akademie der Wissenshaften Wien*, **44**: 1–18.

Taylor, W. R. 1954. Records of fishes in the John N. Lowe collection from the Upper Peninsula of Michigan. *Miscellaneous Publications, Museum of Zoology, University of Michigan*, No. 87: 1–50.

Note by P. K. Tubbs, Executive Secretary of the International Commission on Zoological Nomenclature

This article by Reeve M. Bailey and C. Richard Robins is a valuable survey of the application of the 1985 International Code of Zoological Nomenclature to a large fauna, the names of which have been carefully considered on a number of occasions, from both taxonomic and nomenclatural points of view, by a committee of specialists. Such a scrutiny serves the purpose of drawing attention to instances where the wording of the Code may be ambiguous, or where strict adherence to its provisions may not coincide with the general practice of those who use zoological names.

One example of (perennial) confusion is the termination of species-group names based on modern personal names. Both *-i* and *-ii* have been frequently used since the eighteenth century as genitive terminations of names based on those of recent or living men (patronymics). In early works personal names or even the whole text were Latin, or at least 'latinised', so that either termination was natural, and more recently specific names terminating in *-ii* have often been given, presumably because they give an appearance of classical form. The 1895 Règles prescribed (Article 14, translation) that '... the genitive is always to be formed by the addition of a simple *-i* to the exact and complete name of the person concerned, e.g. *Cuvieri*, ... In the case where the name of the person has been employed and declined in the Latin language the rules of declination should be followed, e.g. *Plinii, Aristotelis, Victoris, Antonii* ...'. This regulation was not adhered to, and the subsequent 'legislative' history has been summarised by Bailey & Robins.

It is a basic principle of zoological nomenclature, embodied in Article 32a of the Code, that the original spelling of a name is to be preserved unaltered unless it is 'demonstrably incorrect'. In pursuit of this most workers have used the original termination, whether *-i* or *-ii*, of modern genitive patronymics. Bailey & Robins (and others) have pointed out, however, that the 1985 Code can be read as directing that names such as *smithii* should be corrected (Articles 31a(ii) and 32c(i)), e.g. to *smithi*, unless *explicit* latinisation of the personal name (the quotation of Smithius) had been made.

Confusion continues over the *-i* and *-ii* terminations, despite repeated efforts to ensure uniformity. It is clear that both will continue in use in biological names, especially since the 1983 International Code of Botanical Nomenclature supports (Recommendation 73c) the *-ii* form. There are three possibilities for zoological names: (i) to follow the originally published spelling for all names; (ii) to 'correct' *-ii* to *-i* (except in patronymics derived from personal names such as Fabricius or Rossi); (iii) to regard *-i* and *-ii* as being entirely equivalent in all cases, the choice between them being at any user's discretion (the terminations are already treated as the same for purposes of homonymy (Art. 59b)). Similar considerations apply to *-ae* and *-iae*.

It would be most helpful to have the views of zoologists on this matter, and indeed on any other other point arising from the article by Drs Bailey and Robins.

Case 2225/1

Nonion de Montfort, 1808 (Foraminiferida): proposed designation of *Nautilus faba* Fichtel & Moll, 1798 as the type species

Hans Jørgen Hansen
Geological Institute, University of Copenhagen, Øster Voldgade 10, DK-1350, Copenhagen, Denmark

Fred Rögl
Geologisch-Paläontologische Abteilung, Naturhistorisches Museum Wien, Burgring 7, A-1014 Wien, Austria

Abstract. The purpose of this application is to designate the nominal species *Nautilus faba* Fichtel & Moll, 1798 as the type species of *Nonion* de Montfort, 1808. This is in conformity with the established concept of *Nonion* since its proposal.

---

1. The genus *Nonion* de Montfort (1808, p. 210–212) was originally described as: 'Coquille libre, univalve, cloisonnée, en disque, et contournée en spirale; mamelonnée sur les deux centres, le dernier tour de spire renfermant tous les autres; dos renflé, bouche arrondie, recouverte par un diaphragme ouvert en croissant contre le retour de la spire, qu'elle reçoit dans son milieu; cloisons unies'.

2. The type species by original designation is *Nautilus incrassatus* Fichtel & Moll, 1798 (p. 38). *Nonion* gained early acceptance and usage, being cited by de Blainville (1825, p. 143) and Deshayes (1832, p. 629) and has been consistently used as a valid genus name since. Family-group names, from sub-family to super-family, have been based on it; all have the authorship of Schultze (1854, p. 53) who published 'Nonionida'.

3. Although Fichtel & Moll (1798, pl. 4, figs. a–c) drew only one equatorial, lateral view to accompany the axial edge view of the test of *Nautilus incrassatus*, the bilateral symmetry which was shown by the axial view and implied in the accompanying brief description, together with its assignment to the planospiral genus *Nautilus*, led to the assumption that the genus *Nonion* de Montfort should be characterised by (inter alia) a planospiral, involute test with a bilaterally symmetrical, interiomarginal aperture. This interpretation has been universally and consistantly maintained in the usage of *Nonion*.

4. Our discovery, recognition and redescription (Rögl & Hansen, 1984) of the type specimens of *Nautilus incrassatus* have shown that the species is significantly different from the established concept of *Nonion*. *Nautilus incrassatus* is asymmetrical, a low trochospire, with its interiomarginal aperture extending into the spiral suture only on the more evolute side of the trochospire.

5. There is no doubt that the type specimens of *Nautilus incrassatus* belong to the taxon generally recognised as *Anomalinoides* Brotzen, 1942 (p. 23) which has as its type species by original designation *Anomalinoides plummerae* Brotzen, 1942 (= *Anomalina pinguis* Jennings, 1936). *Anomalinoides* has been extensively used for Cretaceous–

Cenozoic species since its original proposal. It is now evident that continued acceptance of *Nautilus incrassatus* as the type species of *Nonion* would involve a most unwelcome and widespread destabilisation in foraminiferan nomenclature.

5. In order to maintain stability, we have proposed (Hansen & Rögl, 1980; Rögl & Hansen, 1984) that the designation of *Nautilus incrassatus* as type of *Nonion* be set aside and *Nautilus faba* Fichtel & Moll, 1798 be designated instead. *N. faba* was one of the originally included species which conforms both to the original concept (de Montfort, 1808) and the current usage of *Nonion*. A lectotype of *N. faba* has been designated by Rögl & Hansen (1984, p. 65 and figures).

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

(1) to use its plenary powers to set aside all previous designations of type species made for the nominal genus *Nonion* de Montfort, 1808 and to designate *Nautilus faba* Fichtel & Moll, 1798 as type species;

(2) to place on the Official List of Generic Names in Zoology the name *Nonion* de Montfort, 1808 (gender: masculine), type species, by designation in (1) above, *Nautilus faba* Fichtel & Moll, 1798;

(3) to place on the Official List of Specific Names in Zoology the name *faba* Fichtel & Moll, 1798, as published in the binomen *Nautilus faba* (specific name of the type species of *Nonion* de Montfort, 1808) and as defined by the lectotype designated by Rögl & Hansen (1984).

References

Blainville, H. M. D. de, 1825. *In* Cuvier, M. F. (Ed.), *Dictionnaire des Sciences Naturelles*, vol. 35, F. G. Levrault, Paris.

Brotzen, F. 1942. Die Foraminiferengattung *Gavelinella* nov. gen. und die Systematik der Rotaliiformes. *Sveriges Geologiska Undersökning. Afhandlingar och Uppsatser*, **36**(8), ser. C, no. 451: 1–60.

Deshayes, G. P. 1832. *Encyclopédie méthodique. Histoire naturelle des Vers*, vol. 3, 1152 pp. Mme. V. Agasse, Paris.

Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam picta et descripta*. 123 pp. Anton Pichler, Vienna.

Hansen, H. J. & Rögl, F. 1980. What is *Nonion*? Problems involving foraminiferal genera described by Montfort, 1808 and the type species of Fichtel & Moll, 1798. *Journal of Foraminiferal Research*, **10**: 173–179.

Jennings, J. R. 1936. A microfauna from the Monmouth and basal Rancocas Groups of New Jersey. *Bulletin of American Paleontology*, **23**(78): 161–232.

Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées*. vol. 1. 409 pp. F. Schoell, Paris.

Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea Microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien*, vol. 3, 143 pp.

Schultze, M. S. 1854. *Ueber den Organismus der Polythalamien (Foraminiferen) nebst Bemerkungen über die Rhizopoden im Allgemeinen*. 68 pp. W. Engelmann, Leipzig.

Case 2225/2

Hanzawaia Asano, 1944 (Foraminiferida): proposed conservation

Hans Jørgen Hansen
Geological Institute, University of Copenhagen, Øster Voldgade 10, DK-1350, Copenhagen, Denmark.

Fred Rögl
Geologisch-Paläontologische Abteilung, Naturhistorisches Museum Wien, Burgring 7, A-1014 Wien, Austria.

Abstract. The purpose of this application is the conservation of the foraminiferan generic name *Hanzawaia* Asano, 1944 by the suppression of the senior synonyms *Florilus* de Montfort, 1808 and *Nonionina* d'Orbigny, 1826.

---

1. Fichtel & Moll (1798, p. 37, pl. 3, figs. e–h) described and figured their new species *Nautilus asterizans* ('der gestirnte Schiffer', the starry shell) from Recent zoophytic concretions at unspecified localities in the Mediterranean Sea.

2. De Montfort (1808, p. 134–136) proposed the new genus *Florilus*, citing as type species ('espèce servant de type au genre') *Florilus stellatus*, which, although redescribed and illustrated with a new figure, had *Nautilus asterizans* placed in synonymy. The de Montfort collection, if it ever existed, has never been identified or referred to. It has been assumed by modern authors that *stellatus* was an unnecessary replacement name for *asterizans* and they (e.g. Voloshinova, 1958, p. 144; Rögl & Hansen, 1984, p. 34) have cited *N. asterizans*, the senior synonym, as the type species of *Florilus*.

3. Although Banner & Culver (1978, p. 206) proposed a neotype for *F. stellatus* de Montfort, 1808, that specimen did not come from the type area, does not conform to the requirements for a neotype, is congeneric with *Nonion* de Montfort, 1808 as typified by *N. faba* Fichtel & Moll (Case 2225/1; see p. 104) and is ineligible under Article 75 d of the Code. A lectotype for *Nautilus asterizans* Fichtel & Moll has been described and figured (Rögl & Hansen, 1984, p. 34, pl. 8, figs. 1–3; text fig. 9A) and is to be found in the Fichtel & Moll collection, Naturhistorisches Museum, Vienna (Inv. No. MI–471).

4. The genus *Florilus* de Montfort, 1808 was not used from the time of its first publication until it was resurrected by Voloshinova (1958). All authors from 1808–1958 who had referred to *Florilus* assumed it to be a synonym of *Nonion* de Montfort, 1808. However, Voloshinova (1958) used the name *Florilus* for species related to *Nonion* and subsequent authors have agreed that *Florilus* belongs to the NONIONIDAE and is closely related to *Nonion*.

5. *Nautilus asterizans* was also designated by Parker & Jones (1863, p. 433) as type species of *Nonionina* d'Orbigny, 1826 (p. 293). *Nonionina* has also been considered to be a junior synonym of *Nonion* by all authors following Cushman's revisions of the known species of the latter genus (1930, 1939).

6. Only the species which were assigned to *Florilus* at its first publication have since been included in it, and no new species have been assigned to *Nonionina* since 1928 (Ellis & Messina, 1940 et seq.).

7. The type specimens of *Nautilus asterizans* have now been redescribed (Hansen & Rögl, 1980, p. 174; Rögl & Hansen, 1984, p. 34). These specimens of *N. asterizans* have the characteristics of *Hanzawaia* Asano, 1944 (type species by original designation, *H. nipponica* Asano, 1944) and are unlike the general concepts of *Florilus, Nonion, Nonionina* or any other related genera.

8. Continued recognition of *N. asterizans* as the type species of *Florilus* and of *Nonionina* would make these names senior subjective synonyms of *Hanzawaia,* with consequent disruption of usage and detriment to the stability of nomenclature. The suppression of *Florilus* and *Nonionina* is advocated: if species of the NONIONIDAE, which by recent (post-1958) usage have been distinguished from *Nonion* as *Florilus* auct., non de Montfort, are to continue to be so distinguished, the genus *Pseudononion* Asano, 1936 (type species *P. japonicum* Asano, 1936, p. 347) is already available for them. Saunders & Müller Merz (1982), aware of the problem created by recognition of the true nature of *Florilus asterizans* (Fichtel & Moll, 1798), have shown how *Pseudononion* may be employed for such nonionids.

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

(1) to use its plenary powers to suppress for the purposes of the Principle of Priority but not for those of the Principle of Homonymy the generic names:
  (a) *Florilus* de Montfort, 1808;
  (b) *Nonionina* d'Orbigny, 1826;

(2) to place on the Official List of Generic Names in Zoology the name *Hanzawaia* Asano, 1944 (gender: feminine), type species by original designation *Hanzawaia nipponica* Asano, 1944;

(3) to place on the Official List of Specific Names in Zoology the name *nipponica* Asano, 1944, as published in the binomen *Hanzawaia nipponica* (specific name of the type species of *Hanzawaia* Asano, 1944);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
  (a) *Florilus* de Montfort, 1808 as suppressed in (1)(a) above;
  (b) *Nonionina* d'Orbigny, 1826 as suppressed in (1)(b) above.

References

Asano, K. 1936. *Pseudononion,* a New Genus of Foraminifera found in Muraoko-mura, Kamakura-gôri, Kuanagawa Prefecture. *Journal of the Geological Society of Japan,* **43:** 347–348.

Asano, K. 1944. *Hanzawaia,* a new genus of foraminifera from the Pliocene of Japan. *Journal of the Geological Society of Japan,* **51** (106): 97–98.

Banner, F. T. & Culver, S. J. 1978. Quaternary *Haynesina* n. gen. and Paleogene *Protelphidium* Haynes; their morphology, affinities and distribution. *Journal of Foraminiferal Research,* **8** (3): 177–207.

Cushman, J. A. 1930. The foraminifera of the Atlantic Ocean, part 7. Nonionidae, Camerinidae, Peneroplidae and Alveolinellidae. *Bulletin of the U.S. National Museum,* **104** (7): 1–79.

Cushman, J. A. 1939. A monograph of the foraminiferal family Nonionidae. *United States Geological Survey Professional Paper,* **191**: 1–100.

Ellis, B. F. & Messina, A. R. 1940 et seq. *Catalogue of Foraminifera.* American Museum of Natural History, New York.

Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam picta et descripta.* 123 pp. Anton Pichler, Vienna.

Hansen, H. J. & Rögl, F. 1980. What is *Nonion*? Problems involving foraminiferal genera described by Montfort, 1808 and the type species of Fichtel & Moll, 1798. *Journal of Foraminiferal Research,* **10**: 173–179.

Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées,* vol. 1, 409 pp. F. Schoell, Paris.

Orbigny, A. D. d', 1826. Tableau méthodique de la classe des Céphalopodes. *Annales des Sciences Naturelles,* (1) **7**: 245–314.

Parker, W. K. & Jones, T. R. 1863. On the nomenclature of the foraminifera. The species enumerated by d'Orbigny in the 'Annales des Sciences Naturelles, vol. vii, 1826'. *Annals and Magazine of Natural History,* (3) **12**: 429–441.

Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea Microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien,* vol. 3, 143pp.

Saunders, J. B. & Müller Merz, E. 1982. The genus *Pseudononion* in relationship with *Nonion, Nonionella* and *Nonionellina. Journal of Foraminiferal Research,* **12** (3): 261–275.

Voloshinova, N. A. 1958. O novoi sistematike Nonionid. *Mikrofauna SSSR,* Sb. 9, Trudi VNIGRI, **115**: 117–191.

Case 2225/3

Calcarina d'Orbigny, 1826 (Foraminiferida): proposed conservation

Hans Jørgen Hansen
Geological Institute, University of Copenhagen, Øster Voldgade 10, DK-1350, Copenhagen, Denmark

Fred Rögl
Geologisch-Paläontologische Abteilung, Naturhistorisches Museum Wien, Burgring 7, A-1014 Wien, Austria

Abstract. The purpose of this application is the conservation of the name *Calcarina* d'Orbigny, 1826 against the possible senior synonym *Tinoporus* de Montfort, 1808.

---

1. Spengler (1781, p. 379) described (in non-Linnean terms) and drew illustrations of an 'ammonshorn' species of foraminifer which was formally named *Nautilus spengleri* by Gmelin (1791, p. 3371), using Spengler's description and figures.

2. The specimens had been obtained by Spengler from sand within a *Buccineum* (now *Cassis*) *cassideum* shell from the east Indian coast. *N. spengleri* was included within the original list of species assigned to the new genus *Calcarina* by d'Orbigny (1826, p. 276) and was subsequently designated the type species of *Calcarina* by Parker & Jones (1859, p. 482).

3. There are no foraminifera preserved in the Spengler collection in the Zoological Museum of the University of Copenhagen, but Hansen (1981) located the original specimen of *Cassis cassideum*, labelled in Spengler's handwriting, and extracted from within it topotype specimens of *N. spengleri*, one of which was designated the neotype and redescribed with scanning electron micrographs. The neotype is deposited in the Geological Museum, University of Copenhagen (no. MGUH 15076). Both *Calcarina* and the family-group names based upon it (CALCARINIDAE Schwager, 1876, p. 481) have remained in constant use up to the present day. A list of representative references is held by the Commission Secretariat.

4. This well-established name *Calcarina* is, however, threatened by the resurrection of the genus *Tinoporus* de Montfort, 1808. Spengler had sent specimens of *N. spengleri* to Fichtel & Moll, who described them (1798, p. 84) and illustrated them as five varieties of *N. spengleri* and another sectioned specimen as '*N. dimidiatus*'. De Montfort (1808, p. 147) proposed his new genus *Tinoporus* with type species by monotypy, *T. baculatus*. This species was illustrated but no record exists of any collection prepared by de Montfort which could have contained specimens to provide the basis for this drawing. However, de Montfort (loc. cit.) referred in the synonymy of *T. baculatus* to the description and figures of *N. spengleri* which had been published by Fichtel & Moll, quoting 'les auteurs allemands que nous avons cités dans notre synonymie' and citing '*Testacea microscopica* pag. 89, tab. 15, fig. i,k, quatrième variété'. The fourth variety

was in fact illustrated by Fichtel & Moll as 'var. δ', (pl. 15, figs d–f), pl. 15, figs, i–k represented *'N. dimidiatus'* (='sectioned'). As Loeblich & Tappan (1962, p. 34–35) stated, 'all later workers have agreed that de Montfort's figure and description were composites. . . .' Later, Loeblich & Tappan (1964, pp. C628–9) recognised *Calcarina* d'Orbigny as a distinct and valid genus of the family CALCARINIDAE and regarded *Tinoporus* de Montfort as an 'unrecognisable generic name'.

5. In our revision of the Fichtel & Moll collection, however, we (Rögl & Hansen, 1984, pp. 59–60) identified specimens of *Nautilus spengleri* which Fichtel & Moll had received from Spengler and stated (p. 60): 'The specimen figured and referred to by Montfort has been preserved. It is sectioned, showing the internal spire of *Calcarina spengleri* (Gmelin) . . . the sectioned specimen figured by these authors [Fichtel & Moll] was indicated by Montfort as the type of the new genus *Tinoporus* Montfort, 1808'. Rögl & Hansen described it as 'the holotype of *Tinoporus baculatus* Montfort 1808' and illustrated it with scanning electron micrographs, as '*Nautilus spengleri,* 'dimidiatus' (sectioned), the holotype of *Tinoporus baculatus* Montfort'. This specimen is one which has been equatorially sectioned by Fichtel & Moll and is undoubtedly that which was figured as 'dimidiatus'; it is therefore the figured specimen cited by de Montfort, but it is not the 'quatrième variété' placed by him in synonymy of *T. baculatus*. The specimen does not possess the lateral chambers shown by de Montfort in his (composite?) drawing of *T. baculatus*. The holotypic status of this specimen therefore remains equivocal, as the original synonymic citation, description and figure given by de Montfort were ambiguous. Suppression of the specific name *Tinoporus baculatus* is requested to prevent the possible threat to *Calcarina*.

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

(1) to use its plenary powers to suppress for the purposes of the Principle of Priority but not for those of the Principle of Homonymy the following names:
   (a) *Tinoporus* de Montfort, 1808
   (b) *baculatus* de Montfort, 1808, as published in the binomen *Tinoporus baculatus*;

(2) to place on the Official List of Generic Names in Zoology the name *Calcarina* d'Orbigny, 1826 (gender: feminine) type species, by subsequent designation by Parker & Jones (1859), *Nautilus spengleri* Gmelin, 1791;

(3) to place on the Official List of Specific Names in Zoology the name *spengleri* Gmelin, 1791, as published in the binomen *Nautilus spengleri* (specific name of the type species of *Calcarina* d'Orbigny, 1826 and as defined by the neotype designated by Hansen (1981));

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Tinoporus* de Montfort, 1808, as suppressed in (1) above;

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *baculatus* de Montfort, 1808, as published in the binomen *Tinoporus baculatus* and as suppressed in (1) above.

References

Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturum picta et descripta*. 123 pp. Anton Pichler, Vienna.

Gmelin, J. F. 1791. *Systema naturae Linnei*. ed. 13, vol. 1(6), Vermes. G. E. Beer, Lipsiae.

Hansen, H. J. 1981. On Lorentz Spengler and a neotype for the foraminifer *Calcarina spengleri*. *Bulletin of the Geological Society of Denmark*, **29**: 191–201.

Loeblich, A. R. Jr & Tappan, H. 1962. The status and type species of *Calcarina*, *Tinoporus* and *Eponides* (Foraminiferida). *Contributions from the Cushman Foundation for Foraminiferal Research*, **13**(2): 33–38.

Loeblich, A. R. Jr & Tappan, H. 1964. *In* Moore, R. C. (Ed.), *Treatise on Invertebrate Paleontology*. Part C. Protista 2, Sarcodina, vol. 2(2), pp. C511–900. Geological Society of America and University of Kansas Press, Lawrence, Kansas.

Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées*, vol. 1. 409 pp. F. Schoell, Paris.

Orbigny, A. D. d', 1826. Tableau méthodique de la classe des Céphalopodes. *Annales des Sciences Naturelles*, (1)**7**: 245–314.

Parker, W. K. & Jones, T. R. 1859. On the nomenclature of the foraminifera. Part 1. On the species enumerated by Linnaeus and Gmelin. *Annals and Magazine of Natural History*, (3) **3**: 472–482.

Rögl, F. & Hapsen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea Microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien*, vol. 3. 143 pp.

Schwager, C. 1876. Saggio di una classificazione dei Foraminiferi avuto riguardo alle loro famiglie naturali. *Bolletino del R. Comitato Geologica d'Italia*, **7**(11–12): 475–485.

Spengler, L. 1781. Beskrivelse over nogle i havsandet nylig opdagede Kokillier. *Nye Samling af det Kongelige Danske Videnskabernes Selskabs Skrifter*, **1**: 374–383.

Case 2225/4

Dendritina d'Orbigny, 1826 (Foraminiferida): proposed conservation

Hans Jørgen Hansen
Geological Institute, University of Copenhagen, Øster Voldgade 10, DK-1350, Copenhagen, Denmark

Fred Rögl
Geologisch-Paläontologische Abteilung, Naturhistorisches Museum Wien, Burgring 7, A-1014 Wien, Austria

Abstract. The purpose of this application is the conservation of the name *Dendritina* d'Orbigny, 1826. It is threatened by *Pelorus* de Montfort, 1808, unused since its proposal but whose type species has been found to be congeneric with that of *Dendritina*.

---

1. The name *Pelorus* was proposed by de Montfort (1808, p. 22) and included the single species (and hence type by monotypy) *Nautilus ambiguus* Fichtel & Moll, 1798 (p. 62). The name *Pelorus* has never been employed since. *N. ambiguus* was transferred to *Polystomella* Lamarck, 1822 (= *Elphidium* de Montfort, 1808) by d'Orbigny in 1826, although the type species of *Polystomella* and *Elphidium* are no longer considered congeneric with the type species of *Pelorus*.

2. D'Orbigny, 1826 (p. 285) proposed the name *Dendritina*. Cushman (1927, p. 189) designated *Dendritina arbuscula* d'Orbigny, 1826 as type species. The type specimens are extant, the genus is in common use and its status has never been in question.

3. We (Rögl & Hansen, 1984, p. 46) have redescribed the type specimen of *Nautilus ambiguus* Fichtel & Moll and showed it to be congeneric with *D. arbuscula*. Adoption of a name, unused for over 160 years, in place of *Dendritina*, would not be in the interests of stability.

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

(1) to use its plenary powers to suppress the name *Pelorus* de Montfort, 1808, 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 *Dendritina* d'Orbigny, 1826 (gender: feminine), type species by subsequent designation by Cushman (1927), *Dendritina arbuscula* d'Orbigny, 1826;

(3) to place on the Official List of Specific Names in Zoology the name *arbuscula* d'Orbigny, 1826, as published in the binomen *Dendritina arbuscula* (specific name of the type species of *Dendritina* d'Orbigny, 1826);

(4) to place on the Official Index of Rejected and Invalid Generic names in Zoology the name *Pelorus* de Montfort, 1808 as suppressed in (1) above.

References

Cushman, J. A. 1927. The designation of some genotypes in the foraminifera. *Contributions from the Cushman Laboratory for Foraminiferal Research*, 3(**4**): 188–190.

Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam picta et descripta*. 123 pp. Anton Pichler, Vienna.

Lamarck, J. B. P. A. de M. de, 1822. *Histoire naturelle des animaux sans vertèbres*, vol. 7. 711 pp. J. B. Baillière, Paris, Londres.

Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées*, vol. 1. 409 pp. F. Schoell, Paris.

Orbigny, A. D. d', 1826. Tableau méthodique de la classe des Céphalopodes. *Annales des Sciences Naturelles*, (1)**7**: 245–314.

Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea Microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien*, vol. 3. 143 pp.

Case 2225/5

Planularia Defrance, 1826 (Foraminiferida): proposed conservation

Hans Jørgen Hansen
Geological Institute, University of Copenhagen, Øster Voldgade 10, DK-1350, Copenhagen, Denmark

Fred Rögl
Geologisch-Paläontologische Abteilung, Naturhistorisches Museum Wien, Burgring 7, A-1014 Wien, Austria

Abstract. The purpose of this application is the conservation of the foraminiferan generic name *Planularia* Defrance, 1826 by the suppression of its unused senior subjective synonym *Linthuris* de Montfort, 1808 and of the unused homonym *Planularia* Nilsson, 1826.

---

1. De Montfort (1808, p. 254) proposed the genus *Linthuris* with the new species *L. cassidatus* de Montfort, 1808 the type by monotypy. *L. cassidatus* (although this was not stated) was a substitute name for *Nautilus cassis* 'var. β' Fichtel & Moll, 1798 (pp. 97–98), and its unnecessary nature was soon recognised. Defrance (in de Blainville, 1823, p. 555) noticed that *L. cassidatus* de Montfort, 1808 was based on Fichtel & Moll's described material, and in consequence he used *Linthuris cassis* for the taxon. *Linthuris* has not been used as a valid generic name for over 150 years, as it has been regarded as a synonym of either *Lenticulina* Lamarck, 1804, or of its junior synonym *Cristellaria* Lamarck, 1812.

2. The original type specimens of *N. cassis* Fichtel & Moll, 1798 have now been discovered and redescribed by us (Rögl & Hansen, 1984, pp. 61–63), including the original lectotype (loc. cit. p. 62, text-fig. 23, pl. 22, figs 3–4). All the specimens are undoubtedly conspecific. They are curated in the Naturhistorisches Museum, Vienna (Inv. Nos. MI 552, 554, 555 and 556).

3. The lectotype (and the paratypes) of *N. cassis* Fichtel & Moll, 1798 are without doubt congeneric with the widely used genus *Planularia* Defrance, 1826, p. 244; type species by monotypy, *Peneroplis auris* Defrance in de Blainville, 1824, p. 178. Resurrection of *Linthuris* de Montfort, 1808 as a senior synonym of *Planularia* Defrance, 1826 would be a serious disruption to nomenclatural stability.

4. In the same year Nilsson (1826, p. 342) independently proposed the generic name *Planularia* for two species (*P. elliptica* Nilsson, 1826 and *P. angusta* Nilsson, 1826), neither of which has subsequently been designated as type species. *Planularia* Nilsson, 1826 has been either ignored or regarded as a junior homonym of *Planularia* Defrance (e.g. Loeblich & Tappan, 1964, p. C522), but in view of the closeness of the publication dates and of the uncertainty of exact calendar priority it is requested that *Planularia* Nilsson, 1826 be formally suppressed in order to ensure stability.

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

(1) to use its plenary powers to suppress the following generic names:
   (a) *Linthuris* de Montfort, 1808, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
   (b) *Planularia* Nilsson, 1826, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Planularia* Defrance, 1826 (gender: feminine), type species by monotypy *Peneroplis auris* Defrance, 1824;

(3) to place on the Official List of Specific Names in Zoology the name *auris* Defrance, 1824, as published in the binomen *Peneroplis auris* Defrance, 1824 (specific name of the type species of *Planularia* Defrance, 1826);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
   (a) *Linthuris* de Montfort, 1808, as suppressed in (1)(a) above;
   (b) *Planularia* Nilsson, 1826, as suppressed in (1)(b) above.

References

Defrance, M. J. L. 1823. *In* de Blainville, H. M. D. (Ed.), *Dictionnaire des Sciences Naturelles*, vol. 26, 555 pp. F. G. Levrault, Paris.

Defrance, M. J. L. 1824. *In* de Blainville, H. M. D. (Ed.), *Dictionnaire des Sciences Naturelles*, vol. 32, 567 pp. F. G. Levrault, Paris.

Defrance, M. J. L. 1826. *In* Cuvier, M. F. (Ed.), *Dictionnaire des Sciences Naturelles*, vol. 41, 558 pp. F. G. Levrault, Paris.

Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam picta et descripta*. 123 pp. Anton Pichler, Vienna.

Loeblich, A. R. Jr & Tappan, H., 1964. *In* Moore, R. C. (Ed.) *Treatise on Invertebrate Paleontology*, Part C, Protista 2, vol. 2(2), pp. C511–900. Geological Society of America and University of Kansas Press. Lawrence, Kansas.

Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées*, vol. 1. 409 pp. F. Schoell, Paris.

Nilsson, S. 1826., Om de mångrummiga snäckor som förekomma i Kritformationen i Sverige. *Kungliga Svenska Vetenskapakademiens Handlingar*, **1825,** (2): 329–343.

Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea Microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien*, vol. 3, 143 pp.

Case 2225/6

Borelis de Montfort, 1808 (Foraminiferida): proposed conservation

Hans Jørgen Hansen
Geological Institute, University of Copenhagen, Øster Voldgade 10, DK–1350, Copenhagen, Denmark

Fred Rögl
Geologisch–Paläontologische Abteilung, Naturhistorisches Museum Wien, Burgring 7, A–1014 Wien, Austria

Abstract. The purpose of this application is to conserve the foraminiferan generic name *Borelis* de Montfort, 1808 in its accepted sense by the designation of *Nautilus melo* Fichtel & Moll, 1798 (defined by a recently designated neotype) as its type species, replacing the original but subsequently unused *Borelis melonoides*.

---

1. Fichtel & Moll (1798, pp. 118–123, tab. 24) described the foraminiferal species *Nautilus melo* with the two 'varieties' α and β. These forms were used by de Montfort (1808) to create his two new genera *Clausulus* and *Borelis* respectively.

2. *Clausulus* de Montfort (1808, pp. 178–180) included the single species and hence type by monotypy *Clausulus indicator*. *Borelis* de Montfort (1808, pp. 170–172) included the single species *Borelis melonoides*. The specific names *indicator* and *melonoides* are equivalent to the Fichtel & Moll '*melo* var. α' and '*melo* var. β' respectively.

3. *Borelis* has been used very extensively by later authors; *Clausulus* has remained unused, and we propose its suppression. The nomenclatural situation is complicated by the fact that the *Borelis melo* (Fichtel & Moll) of later authors corresponds to the description and figures of Fichtel & Moll's '*Nautilus melo* var. α', that is to say *Clausulus indicator*, so that the subsequent concept of *Borelis* does not match that of de Montfort, the original author (see Rögl & Hansen, 1984, p. 72).

4. In order to stabilize the name *Borelis melo* in its commonly used sense we (Rögl & Hansen (1984, pp. 71–72)) designated a specimen corresponding to *Nautilus melo* var. α as the neotype of *N. melo* (Naturhistorisches Museum Wien, inventory no. MI–599); this fixes the concept denoted by the specific name *melo*. According to modern practice de Montfort (1808) should have retained the name *melo* for one of his two new nominal species, *indicator* or *melanoides*, neither of which specific names has been used.

5. In the interests of nomenclatural stability we propose that the Commission should designate *Nautilus melo*, now defined by a neotype as the type species of *Borelis;* the use of the Commission's plenary powers under Article 79 of the Code is necessary to set aside *B. melonoides* as the type species.

6. The specific name *indicator* de Montfort, 1808, was based on '*Nautilus melo* var. α' (see para. 3), and following the neotype designation for *N. melo* mentioned in para. 4 it is a synonym of *melo;* we propose its suppression.

7. Examination of the type material of *Nautilus melo* var. β (=*melonoides* de Montfort), preserved in the Vienna museum, shows that *Nonionina bulloides* d'Orbigny, 1846 is conspecific. Parker & Jones (1862, p. 184) described *Pullenia* with *N. bulloides* as the type species by monotypy. The specific name *bulloides* d'Orbigny (1846, p. 107) is in wide use and we propose suppression of its unused senior subjective synonym *melonoides*.

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

(1) to use its plenary powers to set aside all previous fixations of type species for the nominal genus *Borelis* de Montfort, 1808, and to designate *Nautilus melo* Fichtel & Moll, 1798, as defined by the neotype designated by Rögl & Hansen (1984), as the type species;

(2) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
   (a) *Clausulus* de Montfort, 1808;
   (b) *melonoides* de Montfort, 1808, as published in the binomen *Borelis melonoides*;
   (c) *indicator* de Montfort, 1808, as published in the binomen *Clausulus indicator*;

(3) to place the following names on the Official List of Generic Names in Zoology:
   (a) *Borelis* de Montfort, 1808 (gender: masculine), type species by designation in (1) above *Nautilus melo* Fichtel & Moll, 1798;
   (b) *Pullenia* Parker & Jones, 1862 (gender: feminine), type species by monotypy *Nonionina bulloides* d'Orbigny, 1846;

(4) to place the following names on the Official List of Specific Names in Zoology:
   (a) *melo* Fichtel & Moll, 1798, as published in the binomen *Nautilus melo* and as defined by the neotype designated by Rögl & Hansen (1984) (specific name of the type species of *Borelis* de Montfort, 1808);
   (b) *bulloides* d'Orbigny, 1846, as published in the binomen *Nonionina bulloides* (specific name of the type species of *Pullenia* Parker & Jones);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Clausulus* de Montfort, 1808, as suppressed in (2) (a) above;

(6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the names:
   (a) *melonoides* de Montfort, 1808, as published in the binomen *Borelis melonoides* and as suppressed in (2) (b) above;
   (b) *indicator* de Montfort, 1808, as published in the binomen *Clausulus indicator* and as suppressed in (2) (c) above.

References

Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam picta et descripta.* 123 pp. Anton Pichler, Vienna.

Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées,* vol. 1. 409 pp. F. Schoell, Paris.

Orbigny, A. D. d', 1846. *Foraminifères fossiles du Bassin Tertiaire de Vienne (Autriche).* 312 pp. Gide et Comp., Paris.

Parker, W. K. & Jones, T. R. 1862 *in* Carpenter, W. B. *Introduction to the study of the Foraminifera,* 319 pp., 22 pl. Ray Society Publications, London.

Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of Testacea Microscopica. *Neue Denkschriften des Naturhistorischen Museums in Wien,* vol. 3, 143 pp.

Case 2225/7

Nautilus repandus Fichtel & Moll, 1798 (currently *Eponides repandus*; Foraminiferida): proposed replacement of the neotype

Hans Jørgen Hansen
Geological Institute, University of Copenhagen, Øster Voldgade 10, DK-1350, Copenhagen, Denmark

Fred Rögl
Geologisch-Paläontologische Abteilung, Naturhistorisches Museum Wien, Burgring 7, A-1014 Wien, Austria

Abstract. The purpose of this application is to set aside the neotype for *Nautilus repandus* (the type species of *Eponides* de Montfort, 1808) designated in 1962. The holotype of this species, once believed lost, was discovered and redescribed in 1984. The holotype and neotype are conspecific.

---

1. *Nautilus repandus* Fichtel & Moll, 1798 (p. 35, pl. 3, figs a–d) is the type species, by original designation, of *Eponides* de Montfort (1808, p. 127). The genus *Eponides* has been cited very extensively since its first proposal and the family EPONIDIDAE Hofker (1951, p. 321) is maintained in the most widely adopted classifications (e.g. Loeblich & Tappan, 1964).

2. The Fichtel & Moll collection was once believed to be lost, so a neotype for *N. repandus* was proposed by Loeblich & Tappan in 1962 (p. 36). It was refigured by these authors in 1964 (p. C679). The holotype of *N. repandus* has now been discovered and redescribed (Rögl & Hansen, 1984) and is curated in the Naturhistorisches Museum, Vienna (Inv. No. MI-470).

3. Under Article 75h of the Code rediscovery of original type material after designation of a neotype must be referred to the Commission. In this instance no change in the concept of the species will result; Loeblich & Tappan (pers. comm.) concur that the holotype and neotype are conspecific.

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

(1) to use its plenary powers to set aside the neotype designation by Loeblich & Tappan (1962) for *Nautilus repandus* Fichtel & Moll, 1798;

(2) to place on the Official List of Generic Names the name *Eponides* de Montfort, 1808 (gender: masculine), type species by original designation, *Nautilus repandus* Fichtel & Moll, 1798;

(3) to place on the Official List of Specific Names in Zoology the name *repandus* Fichtel & Moll, 1798, as published in the binomen *Nautilus repandus* (specific name of the type species of *Eponides* de Montfort, 1808) as defined by the holotype mentioned in para. 2 above.

References

Fichtel, L. von & Moll, J. P. C. von, 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam picta et descripta.* 123 pp. Anton Pichler, Vienna.

Hofker, J. 1951. *The Foraminifera of the Siboga Expedition,* part III, Siboga–Expeditie. 513 pp. E. J. Brill, Leiden.

Loeblich, A. R. Jr & Tappan, H. 1962. The status and type species of *Calcarina, Tinoporus* and *Eponides* (Foraminiferida). *Contributions from the Cushman Foundation for Foraminiferal Research,* **13**(2): 33–38.

Loeblich, A. R. Jr & Tappan, H. 1964. *In* Moore, R. C. (Ed.) *Treatise on Invertebrate Paleontology,* Part C. Protista 2, vol. 2(2), pp. C511–900. Geological Society of America and University of Kansas Press, Lawrence, Kansas.

Montfort, D. de, 1808. *Conchyliologie systématique et classification méthodique des coquilles. Coquilles univalves, cloisonnées,* vol. 1. 409 pp. F. Schoell, Paris.

Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea Microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien,* vol. 3, 143 pp.

Case 2612

Palaemon longirostris H. Milne Edwards, 1837 (Crustacea, Decapoda): proposed conservation of the specific name

L. B. Holthuis
Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is the conservation of the well known and widely used specific name *longirostris* H. Milne Edwards, 1837 (p. 392) for the White Prawn, *Palaemon longirostris*, by the suppression of the unused senior synonym *Astacus albescens* Pennant, 1812.

In addition *P. longirostris* H. Milne Edwards, 1837 (p. 392) is threatened by the first reviser action of Heller (1863), who gave the name *P. longirostris* H. Milne Edwards, 1837 (p. 394) precedence over its homonym published two pages earlier.

---

1. Pennant (1777, p. 18) in vol. 4 of the 4th edition of his *British Zoology* (the first edition in which the Crustacea were dealt with by him), described two species of prawns, both in the genus *Astacus*. One was described and figured (p. 19, pl. 16, fig. 28) under the latin name *Astacus serratus* and given the vernacular name 'Prawn'. At present this species is still known in Britain as the 'Common Prawn', and is currently named *Palaemon serratus* (Pennant, 1777). The other species was named (p. 19) *Astacus squilla* (a new combination for *Cancer squilla* L., 1758) and given the vernacular name 'White', probably meaning White Shrimp or White Prawn; no figure was provided of this species.

2. In the next (5th) edition of his work, Pennant (1812, p. 25) changed his views and used the name *Astacus squilla* for the Common Prawn and gave the new name *Astacus albescens* to the White Shrimp. The description of Pennant's 1777 *A. serratus* and his 1812 *A. squilla* are word for word the same; so are those of his 1777 *A. squilla* and his 1812 *A. albescens*. All the references that Pennant (1777) gave under *Astacus squilla* were retained by him for that species in 1812, as well as the reference that he gave under *A. serratus*. The only reference under *Astacus albescens* in 1812 is to his own 1777 *A. squilla*.

3. The bibliographic references given by Pennant (1777, p. 19) are the following:
   Under *A. serratus* he referred only to 'Squilla Crangon. Rondel. 547', which concerns *Penaeus kerathurus* (Forskål, 1775) (family PENAEIDAE), described and figured by Rondelet (1554, p. 547, fig.) in his chapter 'De Squilla crangone'; Pennant thus mistakenly referred Rondelet's species to his *Astacus serratus*, which thereby becomes a composite species;
   Under *Astacus squilla*:
   (a) 'Cancer Squilla *Lin. Syst.* 1051. *Faun. Suec. No.* 2037'. As shown before (Opinion 564), *Cancer squilla* described by Linnaeus (1758, p. 632; 1761, pp. 495–496) belongs to *Palaemon adspersus* Rathke, 1837. The latter name is

conserved by the Commission through suppression of the specific name *squilla* L.

(b) 'Squilla Batava. *Seb. Mus.* iii, *p.* 55, *tab.* xxi, *fig.* 9.10'. Pennant made an error here as the species which Seba (1759, p. 55) named 'Squilla marina, batava' was figured on pl. 21, fig. 8 and shows *Crangon crangon* (L.) (family CRANGONIDAE). The animals figured on pl. 21, figs. 9 and 10 were named by Seba 'Squilla mas et femina, ex freto Davisii' and are almost certainly *Eualus macilentus* (Krøyer, 1841) (family HIPPOLYTIDAE).

(c) 'Squilla fusca. *Baster* ii. p. 30, *tab.* iii, *fig.* 5'. Baster's (1762, p. 30, pl. 3, fig. 5) *Squilla fusca* is known at present as *Palaemonetes varians* (Leach, 1814). Baster's name is not available as his book is non-binominal.

(d) 'Squilla Gibba. *Rondel.* 549'. Rondelet (1554, p. 549, fig.) figured a species of *Palaemon,* almost certainly *P. serratus* judging by the shape of the rostrum.

4. There are no major nomenclatural problems with *Astacus serratus* Pennant, 1777. As pointed out above, however, it is a composite species. Pennant's description and figure are clearly based on the Common Prawn, but his reference to Rondelet shows that he also included *Penaeus kerathurus* (Forskål, 1775) in his species. Therefore to let the name *serratus* be continued to be used in its accustomed sense, I now select as lectotype of *Astacus serratus* Pennant, 1777 the specimen figured by Pennant (1777) on his pl. 16, fig. 28.

5. The valid specific name *serratus* is unanimously accepted by carcinologists, and the species is now generally known as *Palaemon serratus* (Pennant, 1777).

6. It is the name of Pennant's second species that causes difficulties. Pennant's (1777, pp. 19–20; 1812, pp. 25–26) description is as follows: 'L[obster] with a snout like the prawn [= *Palaemon serratus*], but deeper and thinner; and feelers longer in proportion to the bulk; the sub-caudal fins rather larger; is at full growth not above half the size of the former. Inhabits the coasts of *Kent*; is sold in *London* under the name of *the white shrimp*, as it assumes that color when boiled'. The fact that Pennant (1777) assigned the species to *Cancer squilla,* and his comparison of it with *Palaemon serratus* suggests it is a Palaemonid prawn. The morphological description by Pennant also fits a Palaemonid prawn, but gives very few clues as to the identity of the species; it might refer to practically any of the British PALAEMONINAE. Gurney (1923, p. 111) said that *Palaemon longirostris* is abundant in Norfolk and 'known to local fishermen as the "Jack Shrimp" or "White Prawn" '; it is caught there for bait. In S.W. France, in the area of the Gironde estuary, the species is named 'la crevette blanche' and is caught with shrimp nets (Sorbe, 1983, p. 258). Also, in the Netherlands the species is caught and used for bait. The species is thus of some economic importance and may have reached the London markets in Pennant's time. The name White Shrimp and Crevette Blanche are given to the species because, unlike *Palaemon elegans* Rathke, 'this species turns an opaque white when dead' (Smaldon, 1979, p. 36) and does not acquire the usual red colour when boiled.

7. It seems almost certain that the *Astacus albescens* described by Pennant (1812) is the same as *Palaemon longirostris* H. Milne Edwards, 1837 (p. 392), and that the junior specific name *longirostris* should have to make way for its senior synonym *albescens.* The specific name *albescens* Pennant, 1812, also is older than the names of most other British Palaemonids (*varians* Leach, 1814; *adspersus* Rathke, 1837; *elegans* Rathke,

1837). Only *serratus* Pennant, 1777, is older, but that is the only species of which we can be fully certain that it is different from *A. albescens*.

8. As the name *albescens* Pennant, 1812 has not been used for any species since it was established, it is a typical example of a forgotten name; its junior synonym *longirostris* H. Milne Edwards, 1837, has been used almost exclusively for the species for at least 60 years. Also, the other names cited in para. 7 are all well established and currently in general use, and they have already been placed on the Official List: *varians* Leach, 1814, *adspersus* Rathke, 1837, and *elegans* Rathke, 1837 (Opinions 470 (1957) and 564 (1959); *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*, **16**: 129 and **20**: 337). Therefore the suppression of *albescens* is requested here in the interest of nomenclatural stability.

9. It also seems appropriate to now place the specific names *longirostris* H. Milne Edwards, 1837 (p. 392) and *serratus* Pennant, 1777 on the Official List.

10. Furthermore, it is requested to place on the Official Index the name *longirostris* H. Milne Edwards, 1837 (p. 394). The history of this name is in itself quite complicated. The problems started with the fact that H. Milne Edwards (1837) in the second volume of his *Histoire naturelle des Crustacés* described two new species of *Palaemon* (pp. 392 and 394) with the latin name *Palemon longirostris*. The first of these is our white prawn, the type material of which came from the mouth of the river Garonne near Bordeaux, S.W. France. The other *P. longirostris* came from the mouth of the river Ganges in India. H. Milne Edwards (1840, p. 638) discovered his error and in an erratum changed the name of the Indian species ('T. 2, p. 394, ligne 11, *au lieu de* Palémon longirostre, *P. longirostris, lisez*: Palémon stylifère, *P. styliferus*'). The word *styliferus* probably is a grammatical error for *stylifer*, which is the masculine form of the latin word for stylet-bearing (stylifer, stylifera, styliferum). As, however, H. Milne Edwards did not give the derivation of the name, its spelling cannot be changed. His vernacular name 'stylifère' cannot be considered as giving the derivation, as the vernacular names in his book are not always a direct translation of the latin name, e.g. in vol. 2, p. 330, it says 'Ecrevisse commune — *Astacus fluviatilis*'. There is therefore no need to change the currently used spelling *styliferus* for the name in question.

11. H. Milne Edwards (1840) is usually considered the first reviser, reserving the name *longirostris* for the European species and giving the name *styliferus* to the Asiatic one. However this is not formally correct, as in 1840 he cited only a single name and did not mention the other, and so does not fulfil the requirements for the first reviser as set out in the Code. The actual first reviser to give the European *P. longirostris* precedence over the Asiatic was Rathbun (1902, pp. 50–51), who had rediscovered H. Milne Edwards' 1840 action, which had been overlooked by previous authors.

12. In the meantime, however, Heller (1863, p. 265) had proposed the replacement name *Palaemon edwardsii* for the European *P. longirostris* H. Milne Edwards, 1837 (p. 392). He did this 'da eine schon früher von Say beschriebene Art als P. longirostris bezeichnet ist'. However, Say (1818) never described *Palaemon longirostris*. Heller's statement is clearly caused by the fact that H. Milne Edwards (1837, p. 394), immediately after giving the name *P. longirostris* (for the Asiatic species), incorrectly referred to his footnote (2), which runs as follows: '(2) Say. Crustacea of the United States. Journ. of Sc. of the Acad. of Philadelphia, vol. V, p. 248'. On p. 248 of Say's (1818) publication *Palaemon vulgaris* is described, and it is clear that footnote (2) in H. Milne Edwards' text should have been placed with that species which immediately follows

P. longirostris. Heller (1863), evidently without consulting Say's (1818) paper, was of the erroneous belief that Say had introduced the name *P. longirostris* for the Asiatic species. Heller's action could be construed as a first reviser action, and, if so, the name *longirostris* should go to the Indian species. This would be most unfortunate, as the name *styliferus* has been used for the Indian species by all authors since 1903; it is an economically important species and is dealt with in numerous scientific and non-scientific papers.

13. In order to leave not the least doubt as to the validity of the name *P. longirostris* for the European species, it seems best to suppress the name *longirostris* H. Milne Edwards (1837, p. 394) for the Indian species.

14. No action is required for the names *Palaemon* and PALAEMONIDAE as both have already been placed on their respective Official Lists in Opinion 564.

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

(1) to use its plenary powers:
  (a) to suppress the specific name *albescens* Pennant, 1812, as published in the binomen *Astacus albescens*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;
  (b) to suppress the specific name *longirostris* H. Milne Edwards, 1837 (p. 394), as published in the binomen *Palaemon longirostris*, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the following names:
  (a) *longirostris* H. Milne-Edwards, 1837 (p. 392), as published in the binomen *Palaemon longirostris*;
  (b) *serratus* Pennant, 1777, as published in the binomen *Astacus serratus*;
  (c) *styliferus* H. Milne Edwards, 1840, as published in the binomen *Palaemon styliferus*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
  (a) *albescens* Pennant, 1812, as published in the binomen *Astacus albescens* and as suppressed in (1) (a) above;
  (b) *edwardsii* Heller, 1863, as published in the binomen *Palaemon edwardsii*, a junior objective synonym of *longirostris* H. Milne Edwards, 1837 (p. 392);
  (c) *longirostris* H. Milne Edwards, 1837 (p. 394), as published in the binomen *Palaemon longirostris*, and as suppressed in (1) (b) above.

References

Baster, J. 1765. *Opuscula subseciva, observationes miscellaneas de animalculis et plantis quibusdam marinis, eorumque ovariis et seminibus continentia*, vol. 2, 150 pp. Bosch, Haarlem.

Gurney, R. 1923. Some notes on *Leander longirostris* M. Edwards, and other British Prawns. *Proceedings of the Zoological Society, London*, **1923**: 97–123.

Heller, C. 1863. *Die Crustaceen des südlichen Europa*, 336 pp. Braumüller, Wien.

Linnaeus, C. 1758. *Systema Naturae*, ed. 10, vol. 1, 824 pp. Salvius, Holmiae.

Linnaeus, C. 1761. *Fauna Suecica*, ed. 2, 578 pp. Salvius, Holmiae.

Milne Edwards, H. 1837. *Histoire naturelle des Crustacés*, vol. 2, 532 pp. Roret, Paris.

Milne Edwards, H. 1840. *Histoire naturelle des Crustacés*, vol. 3, 638 pp. Roret, Paris.

Pennant, T. 1777. *British Zoology*, ed. 4, vol. 4, 136 pp. White, London.

Pennant, T. 1812. *British Zoology*, ed. 5, vol. 4, 379 pp. Walker et al, London.

Rathbun, M. J. 1902. Japanese stalk-eyed crustaceans. *Proceedings of the U.S. National Museum*, **26**: 23–55.

Rondelet, G. 1554. *Libri de piscibus marinis, in quibus verae piscium effigies expressae sunt*, 583 pp. Bonhomme, Lyon.

Say, T. 1818. An account of the Crustacea of the United States (Part 5). *Journal of the Academy of Natural Sciences of Philadelphia*, **1** (2): 235–253.

Seba, A. 1759. *Locupletissimi rerum naturalium thesauri accurata descriptio et iconibus artificiosissimis expressio per universam physices historiam*, vol. 3, 212 pp. Janssonius van Waesberge, Amsterdam.

Smaldon, G. 1979. British coastal shrimps and prawns. *Synopsis of British Fauna* (n. series), vol. 15, 126 pp.

Sorbe, J. C. 1983. Les Décapodes Natantia de l'estuaire de la Gironde (France). Contribution à l'étude morphologique et biologique de *Palaemon longirostris* H. Milne Edwards, 1837. *Crustaceana*, **44**: 251–270.

Case 2564

Pycinaster magnificus Spencer, 1913 (Echinodermata, Asteroidea): conservation proposée pour le nom spécifique

Gérard Breton

Muséum d'Histoire Naturelle, place du Vieux-Marché, 76600, Le Havre, France

Abstract. The object of this application is the conservation of the name *Pycinaster magnificus* Spencer, 1913 for a very large Cretaceous starfish by the suppression of a senior subjective synonym, *Pentetagonaster dutemplei* d'Orbigny, 1850 (unused since 1887 and the type series of which is composite).

Resumé. Le but de cette démarche est la conservation du nom spécifique de *Pycinaster magnificus* Spencer, 1913, appliqué à une très grande étoile de mer de la craie campanienne, par la suppression d'un synonyme subjectif plus ancien, *Pentetagonaster dutemplei* d'Orbigny, 1850 (inemployé depuis 1887 et dont la série-type est composite).

---

1. Le nom *Pentetagonaster dutemplei* est proposé par d'Orbigny en 1850 (p. 274) pour une espèce commune dans la craie de Chavot (près d'Epernay, Marne, France) et de Sens. La diagnose dit simplement 'Espèce à très larges plaques oblongues'. (Beaucoup des espèces de la liste de d'Orbigny sont publiées avec la date de 1847. Il a expliqué (Introduction, Plan de l'ouvrage, p. 59) que, bien que le manuscrit était complet en 1847, l'ouvrage n'a été publié qu'en janvier 1850 à cause de la situation politique en France à ce moment).

2. Dans la collection d'Orbigny (Institut de Paléontologie, Muséum National d'Histoire Naturelle, Paris) sont conservées sous l'index B16851 trois marginales étiquetées 'Collection d'Orbigny: Sénonien 8503 *Comptonia Dutemplei* d'Orbigny. Sénonien-Sens'. Parmi ces trois marginales se trouvent:

(a) une inféromarginale de *Metopaster* sp. (genre distinct mais espèce non identifiable), et

(b) deux supéromarginales médianes interradiales, compatibles avec la diagnose ci-dessus de *Pentetagonaster dutemplei* d'Orbigny, 1850, impossibles à distinguer des marginales de *Pycinaster magnificus* Spencer, 1913, ci-dessous.

Ces deux dernières peuvent être considérées comme les syntypes de *P. dutemplei*.

3. Péron (1887, p. 211) a décidé, à tort, que *dutemplei* et le nom d'une autre espèce, *dutempleana* d'Orbigny, 1850, étaient homonymes. Il a abandonné ce dernier nom et a conservé *dutemplei* pour l'espèce de la Craie supérieure d'Epernay.

4. Spencer (1907) a inclus des marginales très grandes d'un astéride de la craie avec des ossicules de *Pycinaster senonensis* Valette, 1902, un *Aspidaster*. Plus tard, ayant reconnu que les marginales n'étaient pas réellement associées, Spencer (1913, p. 125) établit un nom nouveau, *Pycinaster magnificus*. Le nom, supporté par une diagnose et un holotype (une supéromarginale de Hampshire, en Angleterre, conservée sous l'index

B.34647 (store G.20) dans le Sedgwick Museum, Cambridge (communiqué de Dr A. S. Gale, City of London Polytechnic): Spencer 1913, pl. 11, fig. 15), est disponible. Spencer a mentionné 'Marginalia of this species are often very large indeed, showing that the form was the giant amongst the chalk starfish'.

5. *Pycinaster magnificus* Spencer, 1913, qui est un synonyme subjectif plus récent de *Pentetagonaster dutemplei* d'Orbigny, 1850, inemployé depuis sa création à ceci près qu'il a été cité par Péron (1887), a été cité dans la littérature par différents auteurs, par exemple Valette (1915, p. 41), Mercier (1935, p. 9), Schulz & Weitschat (1971, p. 123, figs 8 et 9). De plus, dans les collections où cette espèce est représentée, elle a été étiquetée sous le nom de *Pycinaster magnificus*: British Museum (Natural History), Dijon, Le Havre, Hambourg (S.G.P.I.H.) et probablement Copenhague. Comme j'ai dit ci-dessus, la série-type de *P. dutemplei* est composite, et le retour au nom le plus ancien me semblerait source de confusion.

6. En conséquence, il est demandé à la Commission Internationale de Nomenclature Zoologique:

(1) d'user de ses pleins pouvoirs pour supprimer le nom spécifique *dutemplei* d'Orbigny, 1850, publié dans le binôme *Pentetagonaster dutemplei*, au regard du Principe de Priorité, mais pas au regard du Principe d'Homonymie;

(2) de placer sur la Liste Officielle des Noms Spécifiques en Zoologie le nom *magnificus* Spencer, 1913, publié dans le binôme *Pycinaster magnificus*;

(3) de placer sur l'Index Officiel des Noms Spécifiques Rejetés et Invalides en Zoologie le nom *dutemplei* d'Orbigny, 1850, publié dans le binôme *Pentetagonaster dutemplei*, et supprimé en application des pleins pouvoirs en (1) ci-dessus.

References

Mercier, J. 1935. Les Stellérides mésozoiques du Bassin de Paris (Bordure occidentale). *Mémoires de la Société Linnéenne de Normandie*, Nouvelle série — Section Géologique, **1**, fasc. 2, mém. no. 3, pp. 66, 3 pls.

Orbigny, A. d'. 1850. *Prodrome de paléontologie stratigraphique universelle des animaux mollusques et rayonnés*. Vol. 1, Introduction, Plan de l'ouvrage, p. 59; vol. 2, p. 274. Masson, Paris.

Péron, A. 1887. Notes pour servir à l'histoire du terrain de craie dans le sud-est du Bassin angloparisien. *Bulletin de la Société des Sciences Historiques et Naturelles de l'Yonne*, **41**: 145–428, pls. 1–8.

Schulz, M. G. & Weitschat, W. 1971. Asteroiden aus der Schreibkreide von Lägerdorf (Holstein) und Hemmoor (N. Niedersachsen). *Mitteilungen aus dem Geologische – Paläontologischen Institut der Universität Hamburg*, **40**: 107–130, pl. 23–26.

Spencer, W. K. 1907. *A Monograph on the British fossil Echinodermata from the Cretaceous Formations*. Vol. II, The Asteroidea and Ophiuroidea. Part IV. Palaeontographical Society (Monographs). London.

Spencer, W. K. 1913. The evolution of Cretaceous Asteroidea. *Philosophical Transactions of the Royal Society of London*. ser. B, vol. 204, 99–177, pl. 10–16.

Valette, dom. A. 1915. Nouvelle note sur les Stellérides de la Craie blanche du département de l'Yonne. *Bulletin de la Société des Sciences Historiques et Naturelles de l'Yonne*, **68**: 1–70 (2–72).

Case 2308

Cordylodus? dubius Rhodes, 1953 (currently *Distomodus? dubius*; Conodonta): proposed conservation of the specific name

Lennart Jeppsson
Department of Geology, Lunds Universitet, Sweden

Richard J. Aldridge
Department of Geology, University of Nottingham, England

Abstract. The purpose of this application is to conserve the specific name of the conodont *Cordylodus? dubius* Rhodes, 1953 by the suppression of the unused senior subjective synonym *Astacoderma spinosum* Harley, 1861.

---

1. The three species *Distomodus suberectus, Distomodus curvatus* and *Cordylodus? dubius* were simultaneously established by Rhodes (1953, pp. 290, 290 and 299 respectively) for morphologically distinct conodont elements found in upper Silurian strata. Individual conodont elements formed part of a mineralised feeding apparatus, and it has subsequently been recognised that specimens originally referred to these three species, including the holotypes, belong to a single apparatus-based taxon (Jeppsson, 1972). Rhodes applied the name *Cordylodus? dubius* only to specimens now regarded as representing hi (= Sc) and, possibly, tr (= Sa) elements, but Jeppsson (1972, p. 57), as first reviser, selected the specific name *dubius* from the three available for the species. Jeppsson placed the species *dubius* in the genus *Distomodus*, although alternative assignments have been discussed (e.g. *Rotundacodina* Carls & Gandl, 1969, and Mabillard & Aldridge, 1983, p. 35; *Dentacodina* Wang, 1980). Thus, both the circumscription of the species and its binomen have changed, but the specific name has remained the same and has been widely used in the literature (e.g. Aldridge, 1975, p. 615, 1985, p. 88; Barrick & Klapper, 1976, p. 71; Carls & Gandl, 1969, p. 208; Drygant, 1974, p. 65, 1984, p. 76; Jeppsson, 1974, p. 18, 1984, p. 105; Klapper & Murphy, 1974, p. 47; Link & Druce, 1972, p. 30; Savage, 1973, p. 328; Serpagli, 1983, p. 156; Viira, 1982, p. 81; Walliser, 1957, p. 31; Wang, 1980, p. 370). Geographically, the species has been reported from much of Europe, as well as from Australia, the U.S.S.R. and China.

2. The name *Astacoderma spinosum* was used by Harley (1861, p. 550) for a single specimen which he figured from the Ludlow Bone Bed of Shropshire, England. In his 1952 catalogue, Fay listed two other references to that name: a review of Harley (1861) in *'Neues Jahrbuch . . .'* (Anonymous, 1862, p. 748) and a listing in Bigsby's *'Thesaurus siluricus'* (1868, p. 72). Murchison (1867, p. 542) also commented on Harley's specimen in the fourth edition of *'Siluria'*. More recently, the name has been mentioned by Bergström & Hansen (1979). The type specimen is housed in the British Museum (Natural History), stored under a cover slip, probably in Canada Balsam. We have both examined the specimen and agree that, although it is broken basally, its morphology and white-matter distribution show that it is an element of *Distomodus? dubius*

(Rhodes) sensu Jeppsson, 1972. It is probably an hi (= Sc) element, but the doubt about its basal symmetry introduces some uncertainty about its exact position in the apparatus; this may explain why Rhodes (1953, p. 261) was only able to identify it as *Acodus* sp. in single-element nomenclature.

3. The holotype of *A. spinosum* is broken and could prove difficult to assign in any attempt to define subspecies. The holotype of *C? dubius* is in a better state of preservation and is associated with other elements from the same apparatus. Apart from the mentions by Fay (1952) and Bergström & Hansen (1979) the name *Astacoderma spinosum* has remained unused as a valid name for 115 years.

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

(1) to use its plenary powers to suppress the specific name *spinosum* Harley, 1861, as published in the binomen *Astacoderma spinosum*, 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 *dubius* Rhodes, 1953, as published in the binomen *Cordylodus? dubius*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *spinosum* Harley, 1861, as published in the binomen *Astacoderma spinosum* and as suppressed in (1) above.

References

Aldridge, R. J. 1975. The stratigraphic distribution of conodonts in the British Silurian. *Journal of the Geological Society of London*, **131**: 607–618.

Aldridge, R. J. 1985. Conodonts of the Silurian System from the British Isles. Pp. 68–92 *in* Higgins, A. C. & Austin, R. L. (eds.). *A stratigraphical index of conodonts*. 263 pp. Ellis Horwood, Chichester.

Anonymous. 1862. J. Harley: Über das Knochen-Bett von Ludlow und seine Kruster-Reste. *Neues Jahrbuch für Mineralogie, Geognosie und Petrefakten–Kunde*, **1862**: 746–748.

Barrick, J. E. & Klapper, G. 1976. Multielement Silurian (Late Llandoverian–Wenlockian) conodonts of the Clarita Formation, Arbuckle Mountains, Oklahoma, and phylogeny of *Kockelella*. *Geologica et Palaeontologica*, **10**: 59–90.

Bergström, S. M. & Hansen, M. C. 1979. *'Elictognathus' acuminatus* (St John and Worthen, 1875), the first named conodont species in America. *Journal of Paleontology*, **53**: 729–732.

Bigsby, J. J. 1868. *Thesaurus siluricus: the flora and fauna of the Silurian Period*. lii + 214 pp. Van Voorst, London.

Carls, P. & Gandl, J. 1969. Stratigraphie und Conodonten des Unter-Devons der Östlichen Iberischen Ketten (NE-Spanien). *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen*, **132**: 155–218.

Drygant, D. M. 1974. Simple conodonts from the Silurian and lowermost Devonian of the Volnyo–Podolian [in Russian with English summary]. *Paleontologicheskii Sbornik Lvov*, **10**: 64–70.

Drygant, D. M. 1984. *Korrelatziya i Konodonti Siluriiskikh Nijnedevonskikh Otlojenii Volino–Podolii. [Correlation and conodonts of the Silurian-Lower Devonian deposits of Volyno–Podolia]* 208 pp. Kiev Naukova Doomka.

Fay, R. O. 1952. Catalogue of conodonts. *University of Kansas Paleontological Contributions, Vertebrata*, **3**: 206 pp.

Harley, J. 1861. On the Ludlow Bone-Bed and its crustacean remains. *Quarterly Journal of the Geological Society of London*, **17**: 542–552.

Jeppsson, L. 1972. Some Silurian conodont apparatuses and possible conodont dimorphism. *Geologica et Palaeontologica*, **6**: 51–64.

Jeppsson, L. 1974. Aspects of Late Silurian conodonts. *Fossils and Strata*, No. 6, 1–54.

Jeppsson, L. 1984. Sudden appearances of Silurian conodont lineages: provincialism or special biofacies? Pp. 103–112 *in* Clark, D. L. (ed.): Conodont biofacies and provincialism. *Geological Society of America,* Special Paper 196, 340 pp.

Klapper, G. & Murphy, M. A. 1974. Silurian–Lower Devonian conodont sequence in the Roberts Mountains Formation of central Nevada. *University of California Publications in Geological Sciences,* **111**: 1–62.

Link, A. G. & Druce, E. C. 1972. Ludlovian and Gedinnian conodont stratigraphy of the Yass Basin, New South Wales. *Bulletin of Mineral Resources, Geology and Geophysics.* Canberra. 136 pp.

Mabillard, J. E. & Aldridge, R. J. 1983. Conodonts from the Coralliferous Group (Silurian) of Marloes Bay, South-West Dyfed, Wales. *Geologica et Palaeontologica,* **17**: 29–43.

Murchison, R. I. 1867. *Siluria.* 4th edition, vii + 566 pp. John Murray, London.

Rhodes, F. H. T. 1953. Some British Lower Palaeozoic conodont faunas. *Philosophical Transactions of the Royal Society of London,* (B), **237**: 261–334.

Savage, N. M. 1973. Lower Devonian conodonts from New South Wales. *Palaeontology,* **16**: 307–333.

Serpagli, E. 1983. The conodont apparatus of *Icriodus woschmidti woschmidti* Ziegler. *Fossils and Strata,* **15**: 155–161.

Viira, V. 1982. Late Silurian shallow and deep water conodonts of the East Baltic. Pp. 79–88 in *Ecostratigraphy of the East Baltic Silurian.* 109 pp. Academy of Sciences of the Estonian SSR, Institute of Geology, Tallinn, Valgus.

Walliser, O. H. 1957. Conodonten aus dem oberen Gotlandium Deutschlands und der Karnischen Alpen. *Notizblatt des Hessischen Landesamtes für Bodenforschung zu Wiesbaden,* **85**: 28–52.

Wang Cheng-yuan. 1980. Upper Silurian conodonts from Qujing district, Yunnan [in Chinese with English abstract]. *Acta Palaeontologica Sinica,* **19**: 369–378.

Case 2440

LIPARIDAE Gill, [30 September] 1861 (Osteichthyes, Scorpaeniformes): proposed confirmation of spelling

Kenneth D. Vogt
P. O. Box 230325, Anchorage, Alaska 99523–0325, U.S.A.

Abstract. The purpose of this application is to confirm the almost universal spelling of the fish family name LIPARIDAE although it is grammatically incorrect. The correct spelling, LIPARIDIDAE, has only been used about sixteen times up to and including 1983, whereas LIPARIDAE has been used some 900 times.

---

1. Günther ([14 December], 1861, p. 158) proposed the name LIPARIDINA for a subdivision of the DISCOBOLIDAE. The type genus is *Liparis* Scopoli, 1777 (p. 453; type species by absolute tautonymy *Cyclopterus liparis* Linnaeus, 1766, p. 414). The date of Günther's work is taken from the minutes of a meeting of the Trustees of the British Museum on 14 December 1861, authorising the release of the book for sale. This has been independently confirmed from the records of the printer, Richard Taylor (British Museum, pers. comm.). Gill (1861, p. 47) proposed the name LIPARIDAE. The date of Gill's publication can be fixed as prior to 30 September 1861, the date of notice of receipt of his book from the Boston Natural History Society (pers. comm. E. Böhlke, Academy of Sciences, Philadelphia, June 1987). Authorship of the name LIPARIDAE must therefore be attributed to Gill.

2. Steyskal (1980, p. 170) showed that the spelling LIPARIDAE was grammatically incorrect and should be replaced by the correct form LIPARIDIDAE. However, in the course of making a bibliography of approximately 900 references to the family up to and including 1983, I have found only 16 works which use the ending -IDIDAE. The *Zoological Record* continues to use the ending -IDAE.

3. The generic name *Liparis* has been used three times in zoology: by Scopoli (1777; Osteichthyes); by Bosc (1802; Crustacea) and by Ochsenheimer (1810; Lepidoptera). The last has also been used to form family-group names with the stems LIPAR- and LIPARID-, but these are invalid since *Liparis* Ochsenheimer (1810, p. 186) is a junior homonym. There are two additional generic names which have the stem Lipar- with respect to forming family group names. The first is *Lipara* Meigen (1830, p. 1) (Diptera), the second is *Liparus* Olivier (1807, p. 284) (Coleoptera), which has two junior homonyms. There is only one family group name based on *Lipara* Meigen: LIPARINI Nartshuk (1987, p. 224), and two based on *Liparus* Olivier: LIPARINI Marshall, 1932 (p. 346), and the sub-tribe 'Liparides' Latreille, 1829 (p. 70 in a footnote), which has not been used.

4. The precise derivation of the fish name remains obscure but there are several candidates. Most likely is from the Greek work *liparos* meaning fatty (cf. 'lipid'), sleek or shiny. It seems certain that although Scopoli was the author of the generic name, *Liparis* was in wide use by non-binominal authors. Although Mayr (1972, p. 99)

suggested that family-group names proposed before 1948 and incorrectly formed should not be corrected if they had come into almost universal use, this provision was never incorporated into the Code and therefore the familiar name LIPARIDAE should be replaced by the relatively unused LIPARIDIDAE. It is clearly in the interests of stability that this does not happen and existing usage be maintained.

5. To maintain existing usage the International Commission on Zoological Nomenclature is accordingly asked:

(1) to rule that for the purposes of Article 29 the stem of the generic name *Liparis* Scopoli, 1777, is LIPAR-;

(2) to place on the Official List of Generic Names in Zoology the name *Liparis* Scopoli, 1777 (gender: feminine) type species, by absolute tautonymy, *Cyclopterus liparis* Linnaeus, 1766;

(3) to place on the Official List of Specific Names in Zoology the name *liparis* Linnaeus, 1766, as published in the binomen *Cyclopterus liparis* (specific name of the type species of *Liparis* Scopoli, 1777);

(4) to place on the Official List of Family-Group Names in Zoology the name LIPARIDAE Gill [30 September] 1861 (type genus *Liparis* Scopoli, 1777), spelling confirmed in (1) above.

References

Bosc, L. A. G. 1802. Histoire naturelle des Crustacés **1**: 79. *In* Buffon, G. L. L. de, *Histoire Naturelle de Buffon, classée . . . d'après le systême de Linné . . . par R. R. Castel* . . . nouvelle édition (Suites).

Gill, T. N. 1861. *Catalogue of the fishes of the eastern coast of North America, from Greenland to Georgia.* 63 pp. Philadelphia.

Günther, A. C. L. G. 1861. *Catalogue of the fishes in the British Museum,* vol. 3, xxv + 586 pp. London.

Latreille, P. A. 1829. *In* Cuvier, G. *Le Règne Animal,* vol. 5. 2nd Ed. 556 pp.

Linnaeus, C. 1766. *Systema Naturae,* ed. 12, vol. 1(1), 532 pp. Holmiae.

Marshall, G. A. K. 1932. Notes on the Hylobiinae. *Annals and Magazine of Natural History* (10), **9**: 341–355.

Mayr, E. 1972. Six proposed amendments to the International Code. *Bulletin of Zoological Nomenclature,* **29**: 99–101.

Meigen, J. W. 1830. *Systematische Beschreibung der bekannten Europäischen zweiflügeligen Insekten,* vol. 6, 404 pp.

Nartshuk, E. P. 1987. *Akadademiya Nauk SSSR. Trudy Zoologicheskii Institut* **136**: 1–280.

Ochsenheimer, F. 1810. *Die Schmetterlinge von Europa,* vol. 3, p. 186.

Olivier, G. A. 1807. *Entomologie, histoire naturelle des insectes.* Vol. 5, Coléoptères. 612 pp. Paris.

Scopoli, G. A. 1777. *J. A. Scopoli . . . Introductio ad Historiam naturalem, sistens genera Lapidum, Plantarum et Animalium hactenus detecta, caracteribus essentialibus donata, in tribus divisa, subinde ad leges Naturae.* 506 pp. Pragae.

Steyskal, G. 1980. The grammar of family-group names as exemplified by those of fishes. *Proceedings of the Biological Society of Washington* **93**(1): 168–177.

Case 2619

Scorpaenichthys marmoratus Girard, 1854 (Osteichthyes, Scorpaeniformes): proposed conservation of the specific name and confirmation of authorship

Robert N. Lea

Marine Resources Division, California Department of Fish and Game, 2201 Garden Road, Monterey, California 93940, U.S.A.

William N. Eschmeyer

Department of Ichthyology, California Academy of Sciences, Golden Gate Park, San Francisco, California 94118, U.S.A.

Abstract. The purpose of this application is to fix the authorship of *Scorpaenichthys marmoratus*, a species of sculpin that was independently described twice with an identical name and in the same year. It is proposed to conserve *Scorpaenichthys marmoratus* Girard, 1854, and to suppress *Hemitripterus marmoratus* Ayres, 1854.

---

1. The eastern North Pacific marine fish species commonly known as the cabezon (family COTTIDAE) is commercially and recreationally important and occurs from central Baja California to southeastern Alaska. It has been known scientifically by the name *Scorpaenichthys marmoratus* for about 135 years, yet the authorship remains in doubt.

2. *Scorpaenichthys marmoratus* Girard, 1854, and *Hemitripterus marmoratus* Ayres, 1854, were independently described but are the same species. Furthermore, the names were published within weeks or perhaps days of each other.

3. The paper in which Girard described *Scorpaenichthys marmoratus* (new genus and species, type by monotypy) was read before the Academy of Natural Sciences of Philadelphia at the meeting of 1 August 1854, and published in the *Proceedings of the Academy of Natural Sciences of Philadelphia*, probably in September, but perhaps in early October or possibly in late August. Copies were acknowledged as received by the New York State Library in a letter dated 7 October 1854 (see 10 October meeting, in *Proceedings of the Academy of Natural Sciences*, **7**(4): 173) and receipt acknowledged by the American Philosophical Society in a letter dated 20 October (see Nolan, 1913, p. xi). No additional information on date of publication is available from the Philadelphia Academy (E. Böhlke, pers. comm.).

4. The paper in which Ayres described the new species *marmoratus* in the established genus *Hemitripterus* (misspelled *Hemitripteras* by Ayres) was read about one month later at the meeting of the California Academy of Natural Sciences on 4 September 1854. The account was published on 8 September in a San Francisco newspaper, *The Pacific*. Articles appearing in *The Pacific* were shortly thereafter incorporated verbatim into the *Proceedings of the California Academy of Natural Sciences* (Vol. 1, part 1,

containing Ayres' article, is dated 22 September), but the date for Ayres' *marmoratus* is clearly 8 September. This very possibly precedes Girard's published account of *marmoratus*, although there is insufficient information to establish a precise date of publication for Girard's description. Since neither author mentions the other, and since both describe the species as new and their descriptions differ in minor details, we assume that the descriptions and name selection were made independently (the marbled color pattern being characteristic of the species). Both have a type locality of San Francisco, California. Ayres' type was presumably lost in the fire of 1906 that destroyed the California Academy's collection. Girard (1854) did not list specimens, stating only (p. 129), 'collected by Dr A. L. Heermann' and (p. 131), 'several specimens were procured . . . from San Francisco.' Based on Girard (1858, p. 65), USNM (United States National Museum of Natural History) 314 contained 3 syntypes; USNM 314 (examined by us on 27 June 1987) now contains two specimens.

5. Although Ayres is most often listed as the author of the species in recent literature, a survey of several pertinent publications on North American fishes illustrates the confusion in the literature with regard to authorship, although all workers agree that there is but one species. The following attribute authorship to Ayres: Robins et al. (1980, p. 62), Hart (1973, p. 540), Jordan et al. (1930, p. 382), Jordan & Evermann (1898, p. 1889). The following regard Girard as the author: Hubbs et al. (1979, p. 20), Fitch & Lavenberg (1971, p. 59), Bolin (1944, p. 6).

6. There is only one species in Girard's genus *Scorpaenichthys* (type species *marmoratus* Girard). To attribute the species name *marmoratus* to Ayres, perhaps of slightly earlier date, therefore causes considerable confusion, especially in reference to the type species of *Scorpaenichthys*. Suppression of *marmoratus* Ayres would therefore lead to stability and eliminate problems in this unusual case of homonymy and synonymy.

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

(1) to use its plenary powers to suppress the specific name *marmoratus* Ayres, 1854 as published in the binomen *Hemitripteras* [sic] *marmoratus*, for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the name *Scorpaenichthys* Girard, 1854 (gender: masculine), type species, by monotypy, *Scorpaenichthys marmoratus* Girard, 1854;

(3) to place on the Official List of Specific Names in Zoology the name *marmoratus* Girard, 1854, as published in the binomen *Scorpaenichthys marmoratus*;

(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *marmoratus* Ayres, 1854, as published in the binomen *Hemitripteras* [sic] *marmoratus* and as suppressed in (1) above.

References

Ayres, W. O. 1854. [Description of new fishes from California.] *The Pacific*, **3**(44): 174 [8 Sept. 1854]. Also as: *Proceedings of the California Academy of Natural Sciences*, **1**: 3–6 [22 Sept. 1854].

Bolin, R. L. 1944. A review of the marine cottid fishes of California. *Stanford Ichthyological Bulletin*, **3**(1): 1–135.

Fitch, J. E. & Lavenberg, R. J. 1971. *Marine food and game fishes of California*. California Natural History Guides, **28**. Berkeley: University of California Press, 179 pp.

Girard, C. F. 1854. Descriptions of new fishes collected by Dr A. L. Heermann, naturalist attached to the survey of the Pacific railroad route, under Lieut. R. S. Williamson, U.S.A. *Proceedings of the Academy of Natural Sciences of Philadelphia,* **7**(4): 129–140.

Girard, C. F. 1858. Fishes. *In* Reports of explorations and surveys, to ascertain the most practicable and economical route for a railroad from the Mississippi River to the Pacific Ocean. *Senate Document no. 78, 33rd Congress, 2nd Session,* vol. 10, part 4, xiv + 400 pp.

Hart, J. L. 1973. *Pacific Fishes of Canada.* Fisheries Research Board of Canada, Bulletin 180, ix + 740 pp.

Hubbs, C. L., Follett, W. I. & Dempster, L. J. 1979. List of the fishes of California. *Occasional Papers of the California Academy of Sciences,* No. 133, 51 pp.

Jordan, D. S. & Evermann, B. W. 1898. The fishes of North and Middle America: a descriptive catalogue of the species of fish-like vertebrates found in the waters of North America, North of the Isthmus of Panama. Part 2. *Bulletin of the United States National Museum,* No. 47, i–xxx, pp. 1241–2183.

Jordan, D. S., Evermann, B. W. & Clark, H. W. 1930. Check list of the fishes and fishlike vertebrates of North and Middle America north of the northern boundary of Venezuela and Colombia. *Report of the U.S. Commission of Fisheries,* part 2, for 1928, 670 pp.

Nolan, E. J. (Ed.) 1913. Dates of Publication. (pp. vii–xiv), in *An index to the Scientific contents of the Journal and Proceedings of the Academy of Natural Sciences of Philadelphia.* Philadelphia: Academy of Natural Sciences.

Robins, C. R., Bailey, R. M., Bond, C. E., Brooker, J. R., Lachner, E. A., Lea, R. N. & Scott, W. B. 1980. A list of common and scientific names of fishes from the United States and Canada. 4th ed. *American Fisheries Society,* Special Publication 12, 174 pp.

Case 2631

Ameiurus Rafinesque, 1820 (Osteichthyes, Siluriformes): proposed designation of *Silurus lividus* Rafinesque, 1820 (= *Pimelodus natalis* Lesueur, 1819) as the type species

Reeve M. Bailey
Museum of Zoology, University of Michigan, Ann Arbor, Michigan, 48109–1079 U.S.A.

C. Richard Robins
Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, Miami, Florida, 33149–1098 U.S.A.

Abstract. The purpose of this petition is the conservation of *Ameiurus* Rafinesque, 1820 as the generic or subgeneric name for the North American bullhead catfishes by designation of an appropriate type species; the present type species makes *Ameiurus* a junior subjective synonym of *Pylodictis* Rafinesque, 1819, the established name for the flathead catfish, *P. olivaris* (Rafinesque, 1818).

---

1. The name *Ameiurus* Rafinesque, 1820b (p. 65), or its unjustified emendation *Amiurus* Gill, 1861a (p. 44), has long been used as a genus-group name for the North American catfishes (family ICTALURIDAE Gill, 1861), commonly called bullheads. As proposed, *Ameiurus* was one of four 'sections' of the new subgenus *Ictalurus* of *Pimelodus* Lacepède, 1803. Until the publication of the third edition of the International Code of Zoological Nomenclature in 1985, only primary subdivisions of a genus (i.e., subgenera) had standing in nomenclature, and *Ameiurus* was replaced by *Amiurus* Gill (1861a, p. 44); e.g., Taylor (1954, p. 43) and Lundberg (1982, p. 2); the spelling had previously been emended by Agassiz (1846, p. 17).

2. *Ameiurus* Rafinesque, 1820b included four species (*cupreus, lividus, melas*, and *xanthocephalus*), all described previously (Rafinesque, 1820a, pp. 50–51) in *Silurus* Linnaeus, 1758. No type species was designated for *Ameiurus*. For *Amiurus*, Gill (1861b, p. 50) stated 'Type *Amiurus catus* Gill, Syn. *Pimelodus catus* Lac.', but since *Silurus catus* Linnaeus, 1758 was not originally included in *Ameiurus* it is ineligible (*S. catus* was mentioned by Rafinesque under *Ictalurus* (p. 62), but not in the 'section' *Ameiurus* (pp. 65–66). Bleeker (1862, p. 12) followed Gill in regarding *catus* as the type species of *Ameiurus*.

3. Jordan & Copeland (1877, p. 159) listed '*Amiurus cupreus* (Raf.) Gill' first among the 21 species of *Amiurus* admitted by them; this was their method of designating the type species (op. cit., p. 134). About the same time, Jordan & Gilbert (1877, p. 87) also specified *Silurus cupreus* as type of *Ameiurus*; this is the first valid designation for the genus. In subsequent publications (e.g., Jordan & Gilbert, 1883, p. 102; Jordan & Evermann, 1896, p. 135; Jordan, 1917, p. 112, and Fowler, 1945, p. 12) *cupreus* (variously assigned to *Silurus* or *Pimelodus*) is given as type species of *Ameiurus*.

4. In the publications listed in the previous paragraph *Silurus cupreus* is indicated as being a junior synonym of *Pimelodus natalis* Lesueur (1819, p. 154). However, since Rafinesque did not preserve type specimens, the identity of *S. cupreus* depends on the interpretation of his original description (Rafinesque, 1820a, p. 51). This placed *cupreus* in the category 'Silures with an entire tail'. The rest of the description is as follows:

> '*Silurus cupreus*. Yellow cat-fish. Body of an uniform coppered yellowish colour, upper jaw longer, lateral barb half the length of the head, lateral line straight, eyes elliptic, spinous rays short and smooth, anal fin with fifteen rays, tail rounded.
>
> It is a large species, often weighing 20 lbs and sometimes 100 lbs; the fins are thick, the spinous ray of the dorsal is nearly concealed in the fleshy membrane. D.1 and 7. P.1 and 17. Abd.8. A.15. C.20.'

Taken together the three statements 'tail entire, anal fin with 15 rays, often weighing 20 lbs and sometimes 100 pounds' [45·4 kg] can apply only to *Silurus olivaris* Rafinesque, 1818 (p. 355; = *Pylodictis limosus* Rafinesque, 1819, the type species of *Pylodictis* by monotypy). No other ictalurid with a truncate tail weighs more than about 3·6 kg, but *Pylodictis olivaris* commonly exceeds 50 pounds, occasionally surpasses 100, and reaches 125 lbs. (56·7 kg). The coppery yellow color, short barbels, and especially the short anal fin apply best to this species. Rafinesque's pectoral fin ray count (1 and 17) is an obvious error (one spine and 11 soft rays is usual in *P. olivaris*, one spine and 8 or 9 rays in *S. lividus* (= *Pimelodus natalis*). Rafinesque characterized the last species as having 25 anal rays, a credible count. The sole character given for *cupreus* that fits *natalis* better than *olivaris* is 'upper jaw longer'; *olivaris* usually has the lower jaw somewhat projecting (except in young), as Rafinesque noted for his *Pylodictis limosus*. Association of the name *cupreus* with *natalis* by Jordan and his associates presumably stems from the yellow color, but this applies to individuals of both *natalis* and *olivaris*, and the latter is commonly termed 'yellow catfish'. In view of the carelessness of many of Rafinesque's descriptions, the identification of *Silurus cupreus* as *S. olivaris* (= *Pylodictis limosus*) seems fully warranted. Unfortunately this makes *Ameiurus* (1820) a junior subjective synonym of *Pylodictis* (1819), the established generic name for the flathead catfish.

5. A change in the familiar name for the bullheads (*Ameiurus* auct.) would cause confusion. Bullheads have a known fossil history going back at least to the Oligocene, and include several fossil and seven Recent species, most of which are widespread geographically, are important in sport fisheries, and are well regarded as food.

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

(1) to use its plenary powers to set aside all previous designations of type species for the genus *Ameiurus* Rafinesque, 1820, and to designate as type *Silurus lividus* Rafinesque, 1820 (= *Pimelodus natalis* Lesueur, 1819);

(2) to place on the Official List of Generic Names in Zoology the names:

(a) *Ameiurus* Rafinesque, 1820 (gender: masculine), type species by designation in (1) above, *Silurus lividus* Rafinesque, 1820 (a junior subjective synonym of *Pimelodus natalis* Lesueur, 1819);

(b) *Pylodictis* Rafinesque, 1819 (gender: masculine), type species by monotypy *Pylodictis limosus* Rafinesque, 1819 (a junior subjective synonym of *Silurus olivaris* Rafinesque, 1818);

(3) to place on the Official List of Specific Names in Zoology the names:

(a) *natalis* Lesueur, 1819, as published in the binomen *Pimelodus natalis* (valid specific name at the time of this application for the type species of *Ameiurus* Rafinesque, 1820, as a senior subjective synonym of *Silurus lividus* Rafinesque, 1820);

(b) *olivaris* Rafinesque, 1818, as published in the binomen *Silurus olivaris* (valid specific name at the time of this application of the type species of *Pylodictis* Rafinesque, 1819, as a senior subjective synonym of *Pylodictis limosus* Rafinesque, 1819).

References

Agassiz, L. 1846. *Nomenclatoris zoologici. Index universalis*. viii + 393 pp. Soloduri.

Bleeker, M. P. 1862. *Atlas Ichthyologique des Indes Orientales Néerlandaises*. Tome II. 112 pp. Amsterdam.

Cope, E. D. 1864. On a blind silurid (*Gronias nigrilabris*) from Pennsylvania. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **1864**: 231–233.

Fowler, H. W. 1945. A study of the fishes of the southern Piedmont and Coastal Plain. *Academy of Natural Sciences of Philadelphia*, Monograph 7. vi + 408 pp.

Gill, T. 1861a. Descriptions of new species of Pimelodinae. *Proceedings of the Boston Society of Natural History*, **8**(1862): 42–46.

Gill, T. 1861b. Synopsis of the genera of the sub-family of Pimelodinae. *Proceedings of the Boston Society of Natural History*, **8**(1862): 46–55.

International Code of Zoological Nomenclature (3rd ed.). 1985. xx + 338 pp. International Trust for Zoological Nomenclature, London, and University of California Press, Berkeley and Los Angeles.

Jordan, D. S. 1917. The genera of fishes, pt. 1, from Linnaeus to Cuvier, 1758–1833, seventy-five years, with the accepted type of each. *Leland Stanford Junior Publications, University Series*, **27**: 1–161.

Jordan, D. S. & Copeland, H. E. 1877 (perhaps late 1876). Check list of the fishes of the fresh waters of North America. *Bulletin of the Buffalo Society of Natural Sciences*, **3**: 133–164.

Jordan, D. S. & Evermann, B. W. 1896. The fishes of North and Middle America. *Bulletin of the United States National Museum* No. 47, Pt. 1: lx + 1240 pp.

Jordan, D. S. & Gilbert, C. H. 1877. On the genera of North American fresh-water fishes. *Proceedings of the Academy of Natural Sciences of Philadelphia*. **1877**: 83–104.

Jordan, D. S. & Gilbert, C. H. 1883. Synopsis of the fishes of North America. *Bulletin of the United States National Museum*, No. 16(1882): lvi + 1018 pp.

Lesueur, C. A. 1819. Notice sur quelques poissons découverts dans les lacs du haut Canada, durant l'été de 1816. *Mémoires du Muséum d' Histoire naturelle*, Paris, **5**: 148–161.

Lundberg, J. G. 1982. The comparative anatomy of the toothless blindcat, *Trogloglanis pattersoni* Eigenmann, with a phylogenetic analysis of the ictalurid catfishes. *Miscellaneous Publications, Museum of Zoology, University of Michigan*, No. 163. 85 pp.

Rafinesque, C. S. 1818 (Sept.). Discoveries in natural history made during a journey through the western region of the United States. *American Monthly Magazine and Critical Review*, New York, **3**(5): 354–356.

Rafinesque, C. S. 1820a. Description of the Silures or Catfishes of the River Ohio. *The Quarterly Journal of Science, Literature, and the Arts*, The Royal Institution of Great Britain, London, **9**: 48–52.

Rafinesque, C. S. 1820b. *Ichthyologia Ohiensis, or natural history of the fishes inhabiting the River Ohio and its tributary streams*. 90 pp. Lexington, Kentucky.

Taylor, W. R. 1954. Records of fishes in the John N. Lowe collection from the Upper Peninsula of Michigan. *Miscellaneous Publications, Museum of Zoology, University of Michigan*, No. 87. 50 pp.

Case 2366

Hyla chrysoscelis Johnson, 1961 (Amphibia, Anura): proposed conservation and designation of a neotype

Hobart M. Smith
Department of EPO Biology, University of Colorado, Boulder, Colorado 80309–0334, U.S.A.

Kevin T. Fitzgerald
Alameda East Veterinary Hospital, 9870 East Alameda, Denver, Colorado 80231, U.S.A.

Louis J. Guillette, Jr.
Department of Zoology, University of Florida, Gainesville, Florida 32611, U.S.A.

Abstract. The purpose of this application is to stabilise the modern usage of the names *Hyla versicolor* and *H. chrysoscelis* for two cryptic species (the former tetraploid, the latter diploid) of tree frogs occurring in the south-eastern United States.

---

1. An application by us to deal with the nomenclatural problems posed by the recognition (Johnson, 1961) of two very similar but distinct species of treefrog in the eastern United States was published in 1983 (BZN **40**: 165–166). This was voted upon by the Commission in September 1985.

2. That application sought, inter alia, to place the specific name *chrysoscelis* Cope, 1880 (published with the generic name *Hyla*) on the Official List and to designate a neotype for that species.

3. Johnson (1959; 1961; 1963; 1966) reported that one of the frog species concerned had a faster call rate than the other. The former species is diploid (Bogart & Wasserman, 1972) while the slower-calling species is tetraploid (Wasserman, 1970). Johnson found minor morphological differences, and by means of cross-breeding experiments demonstrated genetic incompatibility and differentiation at the specific level. On geographical grounds Johnson (1961) used the name *Hyla versicolor* Le Conte, 1825 for the tetraploid slow-calling species and adopted *H. chrysoscelis* Cope, 1880 (originally published as *H. femoralis chrysoscelis*) for the diploid fast-caller.

4. The name *chrysoscelis* had remained unused from 1880 until 1947, when it was revived by Smith & Brown (p. 49) for a subspecies of *H. versicolor*, which had been an established name for many years. Examination by Fitzgerald, Smith & Guillette (1981) of the holotype of *H. femoralis chrysoscelis* Cope, 1880 (preserved in the Academy of Natural Sciences of Philadelphia as specimen ANSP 13672) showed that it is in fact tetraploid, contrary to the usage of *chrysoscelis* by Johnson mentioned above. No original type of *H. versicolor* Le Conte (1825, p. 281) exists.

5. Only one synonym is known for *H. chrysoscelis* sensu Johnson (1961), namely *H. versicolor sandersi* Smith & Brown, 1947 (p. 48). Since Johnson's work *H. chrysoscelis* has been used for the diploid species in a very large number of publications (a representative list is held by the Commission Secretariat), while *sandersi* has been used only by Schmidt (1953, p. 73) and Conant (1958, p. 282); further details were published in our earlier application (BZN **40**: 165–166). It is therefore highly desirable to conserve *chrysoscelis* sensu Johnson rather than to revive the name *sandersi*.

6. In our earlier application we proposed that the Commission set aside the type status of the holotype of *H. chrysoscelis* Cope, 1880 (specimen ANSP 13672 mentioned in para. 4) and substitute as neotype the holotype of *H. versicolor sandersi*, which is in the United States National Museum (specimen USNM 123978). This would have made *H. sandersi* Smith & Brown, 1947 a junior objective synonym of *chrysoscelis* Cope, 1880, and would attach the latter name to the diploid species.

7. During the voting on our earlier application it was pointed out that it was inappropriate to quote 'Cope, 1880' as the author of *chrysoscelis* in the modern sense, when Cope had no knowledge of that taxon and especially as his holotype (ANSP 13672) had now been shown to belong to the species known in recent years as *versicolor*. For this reason no ruling was published.

8. Accordingly, we now ask the International Commission on Zoological Nomenclature:

(1) to use its plenary powers to suppress for the purposes of both the Principle of Priority and the Principle of Homonymy all uses of the name *chrysoscelis* published in combination with the generic name *Hyla* Laurenti, 1768 (p. 32) prior to that by Johnson (1961);

(2) to use its plenary powers to suppress the name *sandersi* Smith & Brown, 1947, as published in the trinomen *Hyla versicolor sandersi*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(3) to designate as neotype of *Hyla chrysoscelis* Johnson, 1961 the specimen USNM 123978 mentioned in para. 6 above;

(4) to place on the Official List of Specific Names in Zoology the names:
   (a) *versicolor* Le Conte, 1825, as published in the binomen *Hyla versicolor*, and
   (b) *chrysoscelis* Johnson, 1961, as published in the binomen *Hyla chrysoscelis* and as interpreted by the neotype USNM 123978 designated in (3) above;

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the names:
   (a) *chrysoscelis*: all uses published in combination with the generic name *Hyla* Laurenti, 1768 prior to that by Johnson (1961), as suppressed in (1) above, and
   (b) *sandersi* Smith & Brown, 1947, as published in the trinomen *Hyla versicolor sandersi* and as suppressed in (2) above.

References

Bogart, J. P. & Wasserman, A. O. 1972. Diploid–polyploid cryptic species pairs: a possible clue to evolution by polyploidization in anuran amphibians. *Cytogenetics*, **11**: 7–24.

Conant, R. 1958. *A field guide to reptiles and amphibians of the United States and Canada east of the 100th meridian*. 366 pp. and 40 pls. Houghton Mifflin, Boston.

Cope, E. D. 1880. On the zoological position of Texas. *Bulletin of the U.S. National Museum*, **17**: 1–51.

Fitzgerald, K. T., Smith, H. M. & Guillette, Jr, L. J. 1981. Nomenclature of the diploid species of the diploid–tetraploid *Hyla versicolor* complex. *Journal of Herpetology*, **15**: 356–360.

Johnson, F. C. 1959. Generic incompatibility of the call races of *Hyla versicolor* Le Conte in Texas. *Copeia*, **1959**: 327–335.

Johnson, F. C. 1961. Cryptic speciation in the *Hyla versicolor* complex. *Dissertation Abstracts*, **21**: 3896.

Johnson, F. C. 1963. Additional evidence of sterility between call-types in the *Hyla versicolor* complex. *Copeia*, **1963**: 139–143.

Johnson, F. C. 1966. Species recognition in the *Hyla versicolor* complex. *Texas Journal of Science*, **18**: 361–364.

Laurenti, J. N. 1768. *Specimen medicum, exhibens synopsin Reptilium* . . . 214 pp. Viennae.

Le Conte, J. 1825. Remarks on the American species of the genera *Hyla* and *Rana*. *Annals of the Lyceum of Natural History of New York*, **1**: 278–282.

Schmidt, K. P. 1953. *A check list of North American amphibians and reptiles*. 280 pp. University of Chicago Press.

Smith, H. M. & Brown, B. C. 1947. The Texas subspecies of the treefrog, *Hyla versicolor*. *Proceedings of the Biological Society of Washington*, **60**: 47–50.

Wasserman, A. O. 1970. Polyploidy in the common tree toad, *Hyla versicolor* Le Conte. *Science*, **167**: 385–386.

Case 275

Camelus Linnaeus, 1758 (Mammalia, Artiodactyla): proposed designation of *Camelus bactrianus* Linnaeus, 1758 as type species

N. Erridge

Formerly of the Secretariat, International Commission on Zoological Nomenclature

Abstract. The purpose of this application is the designation of *Camelus bactrianus* Linnaeus, 1758 as the type species of the camel genus *Camelus* Linnaeus, 1758, to accord with modern usage; a 1902 designation of *C. dromedarius* Linnaeus, 1758 has never been adopted.

---

1. Linnaeus (1758, p. 65) erected the genus *Camelus* with four included species: *C. dromedarius, C. bactrianus, C. glama* and *C. pacos*. Hay (1902, p. 680) designated *C. dromedarius* Linnaeus, 1758 as the type species.

2. In 1910 (*Opinions and Declarations rendered by the International Commission on Zoological Nomenclature* (facsimile issue), **1B**: 31–39) the Commission introduced fixation of type species by 'Linnaean tautonymy' in Opinion 16. This Opinion contained a misleading statement suggesting that the type species of *Camelus* was in fact *C. bactrianus* (p. 37). However, Hay's (1902) designation was not formally set aside and no other designation was made by the Commission.

3. In 1947 Francis Hemming (the then Secretary of the Commission) issued editorial notes on Opinion 16 (*Opinions and Declarations*. . . **1A**: 272–302) in which he explained (pp. 282–283) that the previous arguments concerning the type species designation for *Camelus* Linnaeus, 1758 were incorrect since the pre-Linnaean word '*Camelus*' was applied in the *Systema Naturae* to both *bactrianus* and *dromedarius* (see Art. 68e(i)). He recommended that a formal type designation should be made. Despite this, subsequent workers (e.g. Ellerman & Morrison-Scott (1951, p. 348)) have interpreted Opinion 16 as constituting a valid type designation of *bactrianus* Linnaeus, 1758 for *Camelus*, and this has since become the accepted type species, ignoring Hay's (1902) designation of *C. dromedarius*.

4. To preserve current usage the International Commission on Zoological Nomenclature is accordingly asked:

(1) to use its plenary powers to set aside all previous designations of type species for the nominal genus *Camelus* Linnaeus, 1758 and to designate *Camelus bactrianus* Linnaeus, 1758 as the type species;

(2) to place on the Official List of Generic names in Zoology the name *Camelus* Linnaeus, 1758 (gender: masculine), type species by designation in (1) above, *Camelus bactrianus* Linnaeus, 1758;

(3) to place on the Official List of Specific Names in Zoology the name *bactrianus* Linnaeus, 1758, as published in the binomen *Camelus bactrianus* (specific name of the type species of *Camelus* Linnaeus, 1758).

References

Ellerman, J. R. & Morrison-Scott, T. C. S. 1951. *Checklist of Palaearctic and Indian Mammals, 1758 to 1946*. 810 pp. Trustees of the British Museum (Natural History), London.

Hay, O. P. 1902. Bibliography and Catalogue of the fossil Vertebrata of North America. *Bulletin of the United States Geological Survey*, **179**: 1–868.

Linnaeus, C. 1758. *Systema Naturae*, ed. 10, vol. 1. 824 pp. Salvii, Holmiae.

Comment on the proposed conservation of the name *Ctenopoma oxyrhynchum* Boulenger, 1902 (Osteichthyes, Perciformes) by the suppression of *C. weeksii* Boulenger, 1896
(Case 2595: see BZN **44**: 192–193)

Carl J. Ferraris, Jr
Department of Herpetology and Ichthyology, American Museum of Natural History, New York, N.Y. 10024, U.S.A.

I offer the following observations:

(1) The name *Ctenopoma weeksii* Boulenger appears to have been proposed in a fashion that conforms to the requirements of availability;
(2) the author of the proposal indicates that the holotype of *C. weeksii* can be assigned unambiguously to a species for which *weeksii* is the oldest available name;
(3) the genus *Ctenopoma* was last reviewed in 1916, as part of a broad study of the fishes of Africa, and has never been subjected to a critical revision;
(4) the name *C. weeksii* was published in an article that contains three other new specific names, all of which are considered as valid by current systematic workers;
(5) the species is not exceptionally well known. It has not been the focus of scientific study. It is not a species of great commercial importance and its biology is poorly known at present; and
(6) the author of the proposal is in the process of a revision of the genus *Ctenopoma*.

From these observations, I draw the following conclusions:

(a) current confusion regarding the name of the species which has *C. weeksii* as its oldest available name is, in part, the result of the absence of a critical review of the genus;
(b) virtually all confusion resulting from the correct use of the name *weeksii* can be eliminated by a single statement: 'All accounts of *Ctenopoma* (or *Anabas*) *oxyrhynchum* refer to the species here called *C. weeksii*';
(c) there are no exceptional circumstances that warrant the suppression of the name *weeksii* for purposes of nomenclatural stability;
(d) the long term interests of a stable nomenclature would be better served by adhering to the spirit of priority in all but the most exceptional cases. In this case, correcting an error in a forthcoming revision seems simple and appropriate.

Reply by Steven M. Norris
Department of Zoology, Arizona State University, Tempe, Arizona 85287–1501, U.S.A.

(1) I am in agreement with much of what Mr Ferraris states in his comment. The final conclusion depends on how rigidly the Commission wishes to adhere to the Principle of Priority.

(2) In defence of the rejection of the senior name, let me again state that *weeksii* (the name with priority) has *rarely been used correctly* (see original proposal) and has

not been used in any meaningful way since Boulenger's (1916) review in which he incorrectly listed *C. weeksii* (without comment) in his synonymy of *C. maculatum* Thominot, 1886.

(3) With regard to point (5) of the comment: *C. oxyrhynchum/weeksii* is not an uncommon species either in the wild or in museum collections. While it has been the focus of little published work, it is widely listed as *C. oxyrhynchum* in faunal lists and surveys.

(4) Given the early misuse of the name *C. weeksii*, the later incorrect synonymization and the great length of time the name has been out of use, I feel rejection of *C. weeksii* is warranted.

Comment on the suggested introduction of 'Protected Works'
(see BZN **44**: 79–85; **45**: 45–46, 47)

(1) R. L. Manuel
Department of Zoology, University of Oxford, South Parks Road, Oxford OX1 3PS, U.K.

I should like to endorse the ideas and sentiments so lucidly expounded by Cornelius (BZN **44**: 79–85). It seems to me that the Code, in its strictest application, has become largely self-defeating in its presumed aim of producing nomenclatural stability. Far too many names that have for long been established in the minds and literature of scientists and naturalists are being assassinated in the name of priority, a practice condoned (perhaps even encouraged) by the present rules.

Cornelius's suggestion (p. 82) of Protected Works is a sensible, worthwhile idea but does not, to my mind, go far enough; it also suffers from one practical drawback — accessibility. The sort of publications suggested as Protected Works are not always readily available, especially to freelance or non-professional scientists and naturalists (who have always held a position of importance in the field of taxonomy), and obtaining copies through various library and copying services can become downright expensive. This notwithstanding, Protected Works must surely offer a sane pathway to stability.

As a possible solution to the problem of accessibility I would like to propose an extension to the concept: an Official Register of Protected Names, derived from Protected Works. Such a Register *need not be published* in the conventional manner, but merely be stored in a computer at some convenient place, such as a national museum; a duplicate Register could be maintained in any country. Copies of pages or sections could be printed out on demand to anyone on payment of a minimal cover charge. Parallel usage of Protected Names in *Zoological Record* would enhance the system. Perhaps international 'group conferences' (such as, in my own field, the International Cnidarian Conference, 1989) could be persuaded to stage a nomenclatural discussion session in order to suggest/adopt Protected Works and haggle over those contentious name changes which crop up in any major group.

I also support the idea (BZN **44**: 83; **45**: 46) of effectively reversing the current procedure when applying to the Commission in order to conserve names — surely a

discouragement to conservation. If potential nomenclatural pedants who have disinterred some archaic, unnecessary senior synonym had to justify its resurrection through the rigmarole of publishing a proposal in the BZN, then having to wait some time for comments and, finally, a decision from the Commission, they might be more inclined to leave well enough alone. It seems to me that any ancient synonym (say prior to this century) which has not by now been resurrected is unlikely to be of any consequence.

Surely it is time to call a halt to the runaway use of nomenclature for-its-own-sake, and to recognise and administer it for what it should be: a simple and reliable tool for those who wish to describe a species in little more than two words.

(2) G. A. Boxshall
British Museum (Natural History), London SW7 5BD, U.K.

The proposal by Cornelius is, in my opinion, a recipe for taxonomic chaos. It seeks to reintroduce a major element of subjectivity into zoological nomenclature.

There exists in the libraries of the world a finite number of old publications containing items relevant to the names of animals. Given the finite nature of this database the Principle of Priority will, in due course, be brought to bear on all these publications and a stable nomenclature will be arrived at. This process will take decades, probably centuries, but it is a realistic end point. Interference with this process, by the designation of 'Protected Works', will merely delay the attainment of the ultimate goal and be a great disservice to future generations of zoologists.

Comments on the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington
(Case 2531: see BZN **44**: 116–121; 257–261 and **45**: 52–54).

(1) Mark N. Hutchinson
School of Biological Sciences, La Trobe University, Bundoora, Victoria 3083, Australia

I strongly support the proposal to suppress, for nomenclatural purposes, three works by R. W. Wells and C. R. Wellington. My own recent area of study has concerned the scincid lizards and the inadequacy of the Wells & Wellington approach (well stated in the application by the Australian Society of Herpetologists) is very obvious in this group.

One justification which has been presented to me as a reason to oppose suppression is that such an action would contravene principles of free speech. I disagree. The application does not oppose the right of Wells and Wellington to say or publish what they want. Rather, it sets out to relieve the rest of the herpetological community from the obligation of having to use the names in these publications. In this sense I feel that failure to suppress the works will infringe the freedom of expression of the rest of the scientific community.

(2) Alain Dubois, Roger Bour, Edouard-Raoul Brygoo & Jean Lescure
Laboratoire des Reptiles et Amphibiens, Muséum national d'Histoire naturelle, 25 rue Cuvier, 75005 Paris, France

Philippe Bouchet & Simon Tillier
Laboratoire de Biologie des Invertébrés Marins et Malacologie, Muséum national d'Histoire naturelle, 55 rue Buffon, 75005, Paris, France

1. We have so far been unable to obtain copies of the Wells & Wellington works described in the application submitted by the President of the Australian Society of Herpetologists, and we have therefore been unable to form our own detailed opinion about them. However, we are perfectly confident that the analysis presented in this application, as well as in other papers (Shine, 1984; King & Miller, 1985; Heatwole, 1985; Gans, 1985; Tyler, 1985; Grigg & Shine, 1985), is correct, i.e. that the Wells & Wellington works are taxonomic papers of very low quality.

2. Nevertheless, we contend that the application should *not* be accepted by the Commission, because it is contradictory to what Ride (p. xiii of the Introduction to the 1985 edition of the Code) calls one of the 'key elements basic to the structure of the Code', namely 'The Code refrains from infringing upon taxonomic judgement, which must not be made subject to regulation or restraint'. The same idea is repeated in the Preamble (p. 3): 'The object of the Code is to promote stability and universality in the scientific names of animals and to ensure that the name of each taxon is unique and distinct. All its provisions and recommendations are subservient to these ends and none restricts the freedom of taxonomic thought or action.'

3. Even if, as seems extremely likely, the bad quality of the Wells & Wellington taxonomic works will be universally acknowledged by zoologists who have the opportunity to study and use them, this will be a *taxonomic judgement*, and this has nothing to do with the Code or with the duty of the Commission. Taxonomic works of bad quality have always been produced, and will always be, but their rejection should not be regulated by any Code or Commission: the rejection of wrong taxonomic actions is a matter for the scientific community as a whole, in a process which may take time but which ultimately leads to a consensus. Dozens of such bad quality works are certainly known to any taxonomist in his own field of research, and many examples could be given here. The existence of these works certainly causes problems to the taxonomists working on the same groups of animals as their authors, but these problems are not insuperable.

4. It is important always to make a clear-cut distinction between *taxonomic* and *nomenclatural* problems. While it is clear that all zoologists need clear, unequivocal *rules* for the nomenclature of animal taxa, we contend that taxonomic activity itself must remain free of any kind of 'regulation or restraint'. Any attack against the freedom of taxonomic action is likely to introduce disparities between zoologists worldwide, in relation to their nationality, language, institute, financial resources (of individuals, institutions or countries) and sociological position or 'weight'.

5. Some of the wording of the application indeed raises anxiety in this respect. While most of the criticisms it provides concerning Wells & Wellington's works are useful, in that they show that these works have been prepared much too quickly and carelessly and are not based on 'sound taxonomic research', some others are more open to

question, in that they (indirectly but clearly) imply that taxonomic action should be submitted to some kind of regulation.

6. Thus, in para. 1, the application implies that, to be acceptable, a taxonomic work must have been 'subject to some form of independent referee or editorial consideration': many examples could be produced, in both directions (excellent works published without such consideration, or rejected for publication as a result of it; bad works published despite such consideration), to prove that this assertion is wrong.

7. Similarly, it is implied that taxonomic action should always be based on examination of specimens or on phylogenetic research (paras. 7, 10, 11, 14). While this may appear to many taxonomists to be an obvious truth, it is not. Good taxonomic work may be carried out without examining specimens, and conversely bad work may be the result of the examination of specimens, of taxonomic revisions or phylogenetic research: in fact, most poor taxonomic works are the results of such studies!

8. To be available (in the sense of the Code) a name must be accompanied by a description, definition or indication, *but this description or definition need not be 'correct'*. While this may appear strange at first sight, the principle is in fact extremely sound. Many diagnoses which were perfectly correct at the time when they were written, later proved, in the light of the progress of science, to be incorrect, and had to be modified, in part or totally. This is perfectly understandable as far as *taxonomic* practice is concerned. As far as *nomenclature* is concerned, the only acceptable rule is that which appears in the Code: that some definition be given which 'purports to differentiate the taxon'. Any other rule would infringe upon taxonomic judgement.

9. We do not wish to give the impression that we are 'defending' the Wells & Wellington works: as we have said, we have never seen them, and nor have we met the authors or corresponded with them by letters or orally. What we are defending here is a *general principle*, that of the *clear and total separation between nomenclatural rules on one hand, and taxonomic practice on the other*. It is to be feared that if the Commission decides to depart from this general principle in the present case (extreme though it may be) the departure could become a precedent and open the door to a flow of similar cases: the International Commission on Zoological Nomenclature would tend to be used by zoologists as a court for *taxonomic* problems, which is completely outside its responsibilities.

10. We also want to stress that the application is misleading in stating that Wells & Wellington's works represent 'destabilisation of nomenclature on a massive scale'. Such a destabilisation would indeed occur if the works were uncritically accepted by zoologists. However, these works have been strongly criticised and it is now certain that batrachologists and herpetologists worldwide will be extremely reluctant to follow Wells & Wellington in their proposed taxonomic changes.

11. As pointed out in the application, these changes are of three kinds: (1) change of status of existing names (subspecific names elevated to species rank, names withdrawn from synonymy or placed in synonymy); (2) new names (new taxa, new replacement names); (3) designations of lectotypes for nominal species.

12. As for changes of kind (1), they would be a cause of confusion or destabilisation of nomenclature and taxonomy only if they were accepted by the international zoological community, which is extremely unlikely to occur.

13. As for changes of kind (2): according to the application, many of the new names proposed by Wells & Wellington are not available since they are not associated with

descriptions or diagnoses: these names are therefore nomina nuda and, as such, cannot be a cause of disruption of nomenclatural stability. We suggest it would be useful to prepare a list of these nomina nuda and publish it in a zoological journal: the status of these names would thus be settled without intervention by the Commission. As for the other names proposed by Wells & Wellington, they are the only important changes of kind (2) above. In the short run these changes can simply be ignored by the zoological community by sinking these new names in the synonymies of existing ones: they will therefore immediately disappear as junior synonyms and will not be a cause of disruption of stability. It is true that some of the names proposed by Wells & Wellington may be available for taxa which will be recognised by future 'sound taxonomic research', but this situation is similar in hundreds of cases in the history of taxonomy and nomenclature! While the frustration of the taxonomists who may have in the future to resurrect some of the names proposed by Wells & Wellington may be understandable, such a situation often arises in taxonomic practice.

14. A few of the new names, but more generally and seriously the designations of lectotypes (i.e. changes of kind (3) in para. 11 above), may be real causes of confusion. In these cases we consider that decisions by the Commission are necessary, and the sooner the better. Therefore, we suggest that those having access to Wells & Wellington's works should prepare a list of particular cases and submit them to the Commission for *specific votes*: rather than a suppression of the entire works, which would be in violation of the fundamental spirit of the Code, the Commission could then suppress individual names or type designations. This would naturally involve additional work, but we believe it to be the only appropriate course.

15. We wish to emphasise that zoological nomenclature must be governed primarily by simple and automatic adherence to the Code, and that appeals to the Commission to suppress names or actions should be exceptional, and should be made only in cases of *actual* confusion. We think that too many works and names have been suppressed by the Commission in recent years. From an ethical point of view suppression of early names, 'forgotten' simply because later authors have not done their work properly, is at least as unsatisfactory and important as a potential threat posed by the Wells & Wellington publications to future authors of future taxa. We note also that various authors have already used some of the new names in ways which would make them the 'authors' if the three works were suppressed. This is another reason why the works should not be suppressed in their entirety; even if some of the new names are rejected this should not be for the purposes of the Principle of Homonymy. At the present moment the Wells & Wellington works, considered as a whole, are *not* a cause of nomenclatural instability and therefore they should not be suppressed by the Commission if the latter is to follow one of the most basic principles of the Code.

References

Gans, C. 1985. Comment on two checklists. *Herpetological Review*, **16**: 6–7.

Grigg, G. C. & Shine, R. 1985. An open letter to all herpetologists. *Herpetological Review*, **16**: 96–97.

Heatwole, H. 1985. Letter to the editor. *Herpetological Review*, **16**: 6.

King, M. & Miller, J. 1985. Letter to the editor. *Herpetological Review*, **16**: 4–5.

Shine, R. 1984. Report on the 1984 Australasian herpetological conference, and 1984 annual general meeting of the Australian Society of Herpetologists held at Sydney and Springwood, 28 August to 2 September 1984. *Herpetological Review*, **15**: 103–104.

Tyler, M. J. 1985. Nomenclature of the Australian herpetofauna. Anarchy rules O.K. *Herpetological Review*, **16**: 69.

(3) V. B. Meyer-Rochow
University of Waikato, Private Bag, Hamilton, New Zealand

As a New Zealand herpetologist I should like to add a word of caution to the debate on whether the entirety of the three works of Wells & Wellington on Australian herpetology should be suppressed. The Commission must find a just solution; it will have to consider the workability of any solution and it must pass justice on any aspiring and reforming mind amongst us. The solution ought not to threaten young, enthusiastic, thinking scientists, who very often are not in agreement with an established system and suggest radical changes that keep us older ones on our toes and provide a stimulus to rethink unquestioned doctrine. From what I know of the works of Wells & Wellington, the two provide an explanation for their overhaul of Australian herpetology, and a large number of newly described species and relegations of older ones will, in my view, have to be accepted. What has to be paramount, however, is the scientific method, and where inadequate descriptions are given or where specimens have not been examined, a newly suggested taxon (or scientific conclusion) will have to be considered invalid. Where accepted scientific conventions for species descriptions and taxonomic revisions have been used, I cannot see a justification for suppression. The famous American palaeontologist Bakker made (what seemed to many) outrageous taxonomic suggestions, but nobody thought of suppressing his works. Instead, they alarmed, provoked, encouraged, and stimulated, and in the end the scientific community accepted from his theories and phylogenetic tree what was most thoroughly documented. Should this line of thought not be applied to Australian herpetology as well?

(4) The following letter was received from seven signatories in New South Wales (C. J. Birrel, L. Dodds, P. Evans, E. J. Nield, R. Peters, D. Sell, D. Shannon).

As a biologist, I am writing to appeal against the proposed suppression of three works by R. W. Wells and C. R. Wellington.

The anonymous proposal fails to offer any justification for suppressing an entire work. It also sets in motion a very dangerous precedent where people in powerful positions can manipulate bodies such as the Australian Society of Herpetologists, Sydney University and the ICZN for their own ends. It also raises several questions if suppression is successful — what, for instance, happens to the status of the many species described in Wells & Wellington's papers which have now been recognised as valid and are thus part of common usage, including their appearance in popular and scientific literature? What happens if, in the future, it is objectively and independently shown that genera and species named in Wells & Wellington's papers are taxonomically correct? (This has occurred with some of them already.) Will the proponents of suppression become the recognised authorities when they immediately redescribe Wells & Wellington's work the moment suppression has occurred?

Surely the only reasonable (i.e., scientific) way of dealing with this issue is for these papers to be allowed the test of objective analysis. Each statement made by Wells & Wellington should be considered on its merit and be proven or refuted in a scientific manner. Any act which departs from this method of analysis must surely be viewed with scepticism and will only bring into disrepute a body that must for its own survival be considered impartial, and beyond the petty use of influential individuals bent on misusing its powers for their own motives.

(5) Max King
Museums of Arts and Sciences, P.O. Box 4646, Darwin, N.T., Australia

I very strongly support the proposed suppression of three works by R. W. Wells and C. R. Wellington. These articles cause extreme destabilization of Australian herpetological taxonomy. Indeed, systematists unfamiliar with the Australian herpetofauna may be unaware of the extent of this destabilization and of the deliberate techniques which have been used to effect it.

The most common form of destabilization perpetrated by Wells and Wellington comes from their practice of constricting the geographic distribution of a species, and then resurrecting a previous synonym as a new nominal species to contain animals in the vacant portion of that previous distribution, and doing so by statement alone. This creates nomenclatural uncertainty, for the different 'species' produced are indistinguishable.

In some cases there are not even any stated geographical criteria for the revival of synonyms. For example, on p. 12 of their second paper (1985: *Australian Journal of Herpetology*, Supplementary Series (1): 1–61) Wells & Wellington state: '*Diplodactylus woodwardi* Fry, 1914. We herein formerly [sic] resurrect this species from the synonymy of *D. stenodactylus*' [Boulenger, 1896]. The holotype of *D. stenodactylus* is from Roebuck Bay, Western Australia, and that of *D. woodwardi* is also from Western Australia, so that both species may have the same type locality, and they are not distinguished by any characteristics.

Another example of the Wells & Wellington methodology is the proposal of a new species of crocodile, *Crocodylus pethericki* (op. cit., p. 7). The holotype is said to be on display in the lower vertebrate gallery in the Northern Territory Museum, Darwin. In fact, the crocodile on display is not a part of the scientific collection and is composite: it is made up of two separate animals of similar size, one from the cited type locality and one from the lower reaches of the Mary River, N.T. The latter is presumably the 'typical salt water crocodile of the lowlands' which Wells & Wellington distinguish from *C. pethericki* in their description. In this diagnosis the lowlands form is referred to as *C. porosus*, and is distinguished from *C. pethericki* of the headwaters by colouring, scalation, body proportions, 'eye shine' (reflection of eyes in lights at night), juvenile call and behaviour. However, in their final paragraph Wells & Wellington state '. . . we consider that . . . the Australian population of *Crocodylus porosus* represents a distinctive species (herein regarded as *Crocodylus pethericki*)'. They thus create considerable uncertainty by at one stage of their diagnosis recognising both *C. porosus* and *C. pethericki* in Australia, and at another regarding the Australian *porosus* as *pethericki*.

The Wells & Wellington papers contain a very large number of destabilizing actions, and would have a massive effect on the nomenclature of the Australian herpetofauna in general. To me there is no doubt that the publications should be suppressed. The International Commission on Zoological Nomenclature is clearly placed in a less than enviable position. However, if they are to retain any credibility they must act to suppress the Wells & Wellington publications. If they fail to do so they will jeopardise the survival of the system of nomenclature which we all use.

[Editorial note: this is an abridged version of Dr King's comments, the full text of which may be obtained from the Secretariat.]

(6) L. B. Holthuis
Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

The Commission is asked here to suppress three works because 'in many respects they are not based on sound taxonomic research' although 'some (but by no means all) of their names are nomenclaturally available'.

As the Commission is in no position to judge soundness of taxonomic work, it cannot act on such a judgement from others. One of the main principles in the work of the Commission is that under no circumstances should it interfere with the freedom of taxonomic thought or action (Preamble to the Code). Therefore it is totally unthinkable that the Commission should ever reject a work because it is 'not based on sound taxonomic research', and for that simple reason the Commission should not accept the proposal made in Case 2531.

It is entirely up to taxonomists to solve the problems that the three publications cause. The seven criticised actions listed in para. 6 (BZN **44**: 117) of the application are of kinds that every taxonomist is free to make. Taxonomists who do not agree with the actions mentioned there can in the respective cases: (1) reduce the species back to subspecies; (2) place the species back in synonymy; (3) examine the descriptions and types of the 13 new species and then treat them as either (a) good species, (b) synonyms of existing species or (c) dubious species; (4) if the substitute names are correctly given under the Code adopt them, or if they are not relegate them to the synonymy either of the names which they are said to replace or to older synonyms; (5) and (6) treat the generic names like the specific names in (2) and (3) above; (7) decide by their own taxonomic judgements whether or not to treat genera as distinct — this is a matter that every systematist has to solve for himself.

All the actions criticised by the applicants are done also by reputable scientists, but usually not in such large numbers, and it evidently is mainly the quantity of the changes that shocked the applicants.

If the changes are proposed unnecessarily (as most of them are, in the opinion of the authors of the proposal) they can be easily refuted in appropriate publications. The actions by Wells & Wellington that are correctly proposed, namely those that introduce names that 'will often be senior synonyms . . . of names proposed as a result of future proper scientific work' (para 5 of the application), evidently are positive contributions to science.

I see no reason whatever to suppress these works. Such a suppression by the Commission would be highly inadvisable, if not 'illegal', and would severely damage the image of the Commission as an impartial body. Of course individual items of a purely nomenclatural nature in these three publications can be studied and judged by the Commission on their nomenclatural merits.

(7) Michael J. Tyler
Department of Zoology, University of Adelaide, Box 498, GPO, Adelaide, SA 5001, Australia

1. I support the application for the nomenclatural suppression of three works by R. W. Wells and C. R. Wellington; however, I remain concerned about aspects of the application itself and also about its long-term effectiveness.

2. I urge the Commission to consider additional means of effecting the intent of the application, and to address the fundamental issue of acceptable as opposed to unacceptable publications.

3. My principal concern with the application itself is that it fails to distinguish the nomenclatural issue from that of the taxonomic judgements of the authors, the latter of course not being a matter upon which the Commission has any jurisdiction.

4. As the application observes, widespread anxiety about the Wells & Wellington actions exists because of their magnitude. It is fair to comment that had these two authors confined themselves to making perhaps half a dozen nomenclatural changes it is most unlikely that their publications would have attracted attention on the present scale. However, the principles involved should be considered in addition to the specific case.

5. It is apparent that, if the Commission decides to suppress these three publications for nomenclatural purposes, their republication by simple copying or with slight changes would require the issue to be addressed for a second time: clearly the Commission cannot suppress works in advance.

6. At the present time the Code's treatment of the criteria of publication (Articles 7–9) concerns the physical form of the works, their accessibility and, specifically, what does not constitute publication.

7. The thrust of the present application is that publication in a journal controlled by an author and not subject to the normal refereeing process permits expression of nomenclatural acts in a manner which would not be acceptable to an established journal.

8. Possible solutions to the problem are to compile a 'Register of Approved Journals' (those which have an independent refereeing system), or to preclude those that do not properly referee papers. The former may be the most appropriate; I recognise the difficulties in maintaining such a Register, but there is a need to protect those who adhere to the spirit and letter of the Code from those who flaunt their 'independence'. In the present case the existence of a Register would mean that Wells and Wellington would remain free to publish any nomenclatural acts they wish in the *Australian Journal of Herpetology*. But, if that journal did not gain approval for inclusion in the Register, other workers would not be obliged to follow nomenclatural actions published in it.

(8) Letters have been received from the following 81 persons supporting the proposed suppression of three works by R. W. Wells and C. R. Wellington, on the ground that failure to do so would cause massive and long-lasting instability and confusion in the nomenclature of the Australasian herpetofauna:

M. Adams; L. D. Ahern; P. Alderslade; T. Annable; C. B. Banks; B. I. P. Barratt; R. Bennett; P. Bird; B. J. Blanchard; S. D. Bradshaw; F. W. Braestrup; R. W. Braithwaite; B. H. Brattstrom; M. Braysher; A. J. Bruce; C. M. Bull; T. C. Burton; E. Cameron; J. Caughly; K. Christian; G. W. Connell; A. Cree; A. Cuff; C. B. Daniels; J. Dell; S. Donnellan; H. Ehmann; G. Friend; C. Gans; D. F. Gartside; A. Georges; R. H. Green; G. C. Grigg; L. J. Guillette; P. J. Gullan; G. S. Hardy; A. Harwood; L. Heaphy; K. Henle; R. Henzell; R. A. Hitchmough; J. N. A. Hooper; P. G. Horner; P. Horton; R. A. How; P. Kendrick; D. King; H. K. Larson; M. J. Littlejohn; R. Longman; K. R. McDonald; C. McPhee; M. Mahony; A. A. Martin; L. Maxson; L. A. Moffatt; S. R. Morton; D. G. Newman; W. S. Osborne; C. J. Parmenter; B. H. Patrick; G. B. Patterson; J. B. Rasmussen; J. Robertson; P. Robertson; R. P. V. Rowlands; A. Schiøtz; R. Schodde; R. Shine; A. M. A. Smith; I. Southey; G. M. Storr; L. E. Taplin; J. A. Taylor; M. B. Thompson; K. L. Walker; G. Webb; A. H. Whitaker; J. White; G. J. Witten; J. C. Wombey

Comment on the proposed conservation of *Platanista* Wagler, 1830 (Mammalia, Cetacea)

(Case 321; see BZN **44**: 253–254)

John E. Heyning & Lawrence G. Barnes
Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California 90007, U.S.A.

We support the conservation of the generic name *Platanista* for the blind Ganges river dolphin. In examining a rather thorough bibliographic reference on dolphins (Truitt, 1974) we could find approximately 200 references using *Platanista* and only 11 references mentioning *Susu*. Of these 11, two were the references of Hershkovitz cited in BZN **44**: 253 and the other nine were published in the late 1960s by G. Pilleri. Subsequent publications by Pilleri utilise *Platanista*. It is clear that *Susu* has had virtually no usage since its original description and that *Platanista* has been used consistently for 150 years, so that to introduce the name *Susu* could potentially confuse the current nomenclatural stability.

Reference

Truitt, D. 1974. *Dolphins and Porpoises: A comprehensive, annotated bibliography of the smaller Cetacea*. 582 pp. Gale Research Company, Detroit, Michigan.

Support for the conservation of *Platanista* has also been received from Dr P. J. H. van Bree (*Mauritskade 61, Postbus 4766, 1009 AT, Amsterdam, The Netherlands*).

OPINION 1484

Trypanosoma brucei Plimmer & Bradford, 1899 (Protista, Mastigophora): spelling of specific name confirmed

Ruling

(1) Under the plenary powers it is ruled that the correct original spelling of the specific name *brucii* Plimmer & Bradford, 1899, as published in the binomen *Trypanosoma brucii*, is deemed to be *brucei*.

(2) The name *brucei* Plimmer & Bradford, 1899, as published in the binomen *Trypanosoma brucii*, spelling confirmed as in (1) above, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *brucii* Plimmer & Bradford, 1899, as published in the binomen *Trypanosoma brucii*, correct original spelling deemed to be *brucei*, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2580

An application for confirmation of the usual spelling of the specific name of *Trypanosoma brucei* was received from Mr M. E. Tollitt (*then in the ICZN Secretariat*) on 13 July 1986. The case was published in BZN **43**: 348–349 (December 1986). Notice of the case was given to one specialist and ten general serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 349. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 23: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi and Gruchy.

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:

brucei, Trypanosoma, Plimmer & Bradford, 1899, *Proceedings of the Royal Society of London,* **65**: 280.

brucii, Trypanosoma, Plimmer & Bradford, 1899, *Proceedings of the Royal Society of London,* **65**: 280.

OPINION 1485

Filellum serpens Hassall, 1848 (Cnidaria, Hydrozoa): specific and generic names conserved

Ruling

(1) Under the plenary powers:

(a) the following generic names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(i) *Coppinia* Hassall, 1848;

(ii) *Conchella* Gray, 1848;

(b) the following specific names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(i) *arcta* Dalyell, 1847, as published in the binomen *Sertularia arcta*;

(ii) *intertexta* Couch, 1844, as published in the binomen *Campanularia intertexta*.

(2) The name *Filellum* Hincks, 1868, (gender: neuter), type species by monotypy *Campanularia serpens* Hassall, 1848, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *serpens* Hassall, 1848, as published in the binomen *Campanularia serpens* (specific name of the type species of *Filellum* Hincks, 1868) is hereby placed on the Official List of Specific Names in Zoology.

(4) The following names, as suppressed in (1) (a) above, are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Coppinia*, Hassall, 1848;

(b) *Conchella* Gray, 1848.

(5) The following names, as suppressed in (1) (b) above, are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *arcta* Dalyell, 1847, as published in the binomen *Sertularia arcta*;

(b) *intertexta* Couch, 1844, as published in the binomen *Campanularia intertexta*.

History of Case 2508

An application for the conservation of *Filellum serpens* Hassall, 1848 was received from Dr P. F. S. Cornelius (*British Museum (Natural History), London, U.K.*) and Dr D. R. Calder (*Royal Ontario Museum, Ontario, Canada*) on 13 February 1985. After correspondence the case was published in BZN **43**: 335–341 (December 1986). Notice of the case was given to ten general and eleven specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 338–339. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn (in part), Halvorsen, Heppell, Holthuis, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Kabata.

No votes were returned by Bernardi and Gruchy.

Hahn agreed with the suppression of *Coppinia*, but considered that *F. serpens* should be given precedence over *C. intertexta* rather than the latter name being suppressed.

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:

arcta, Sertularia, Dalyell, 1847, *Rare and remarkable animals of Scotland, represented from living subjects: with practical observations on their nature,* vol. 1, p. 224.

Conchella Gray, 1848, *List of the specimens of British animals in the collection of the British Museum. Part 1. Centroniae or radiated animals,* p. 88.

Coppinia Hassall, 1848, *Zoologist,* **6**: 2223.

Filellum Hincks, 1868, *A history of the British hydroid zoophytes,* vol. 1, p. 214.

intertexta, Campanularia, Couch, 1844, *A Cornish fauna* . . . part 3, p. 41.

serpens, Campanularia, Hassall, 1848, *Zoologist,* **6**: 2223.

OPINION 1486

Tubulanus Renier, [1804] and *T. polymorphus* Renier, [1804] (Nemertea): reinstated and made available

Ruling

(1) Under the plenary powers it is ruled that the generic name *Tubulanus* and the specific name *polymorphus*, as published in the binomen *Tubulanus polymorphus*, are deemed to be published and available from their use by Renier (S.A.), [1804], *Prospetto della Classe dei Vermi*, a work rejected in Opinion 316 as not properly published, and placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature.

(2) The name *Tubulanus* Renier, [1804] (gender: masculine); type species, by monotypy, *Tubulanus polymorphus* Renier, [1804], as deemed in (1) above to be published and available, is hereby placed on the Official List of Generic Names in Zoology and removed from the Official Index of Rejected and Invalid Generic Names in Zoology.

(3) The name *polymorphus* Renier, [1804], as published in the binomen *Tubulanus polymorphus* (specific name of the type species of *Tubulanus* Renier, [1804], as deemed in (1) above to be published and available, is hereby placed on the Official List of Specific Names in Zoology.

(4) The name TUBULANIDAE Bürger, 1905 (1874) (type genus *Tubulanus* Renier, [1804]) (under Article 40b a name having precedence over, but taking the date of, its senior subjective synonym CARINELLIDAE McIntosh, 1874 (type genus *Carinella* Johnston, 1833)), is hereby placed on the Official List of Family-Group Names in Zoology.

History of Case 1094

An application for the reinstatement of a number of Renier's names, including *Tubulanus* Renier, [1804] and *T. polymorphus* Renier, [1804], was received from the late Dr Henning Lemche on 13 April 1956. Mr R. V. Melville (*formerly Secretary, International Commission on Zoological Nomenclature*) reformulated the present case dealing with the last of the names not dealt with before Dr Lemche's death in 1977. After correspondence the case was published in BZN **43**: 112–114 (April 1986). Notice of the case was given to thirteen general and eleven specialist serials. A comment was received from Dr R. Gianuzzi-Savelli (*Palermo, Italy*) questioning the authorship of *Tubulanus polymorphus* as Renier, [1804] had been suppressed and *Tubulanus* put on the Official Index in 1956 by Opinion 427. However, it was wrongly stated on p. 296 of that Opinion to be a nomen nudum, so the name can be treated like *Cerebratulus* and *Polycitor*, both of Renier [1804], which were put on the Official List by Opinions 477 and 478.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 114, together with a proposal to delete *Tubulanus* Renier, [1804] from the Official Index. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative vote — 1: Lehtinen.

No votes were returned by Bernardi and Gruchy.

Original references

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

polymorphus, Tubulanus Renier, [1804], *Prospetto della Classe dei Vermi,* p. 20.

TUBULANIDAE Bürger, 1905 (1874), *in* Bronn's *Thier–Reich, vol. 4, Suppl. Nemertini, Lfg 23–26,* p. 405.

Tubulanus Renier, [1804], *Prospetto della Classe dei Vermi,* p. 20.

OPINION 1487

Megalonaias Utterback, 1915 (Mollusca, Bivalvia): conserved

Ruling

(1) Under the plenary powers the name *Magnonaias* Utterback, 1915 is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Megalonaias* Utterback, 1915 (gender: feminine), type species by original designation *Unio heros* Say, 1829 (a junior subjective synonym of *Unio giganteus* Barnes, 1823), is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *giganteus* Barnes, 1823, as published in the binomen *Unio giganteus* (valid specific name at the time of this ruling of the type species of *Megalonaias* Utterback, 1915), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Magnonaias* Utterback, 1915, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2512

An application for the conservation of *Megalonaias* Utterback, 1915 was received from Dr A. E. Bogan (*Academy of Natural Sciences, Philadelphia, U.S.A*) and Dr J. D. Williams (*U.S. Fish and Wildlife Service, Washington, U.S.A.*) on 26 March 1985. After correspondence the case was published in BZN **43**: 273–275 (October 1986). Notice of the case was given to eleven general and eight specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 274–275. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 23: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi and Gruchy.

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:

giganteus, Unio, Barnes, 1823, *American Journal of Science and Arts,* **6**: 119.

Magnonaias Utterback, 1915, *American Midland Naturalist,* vol. 4 (3), p. 47.

Megalonaias Utterback, 1915, *American Midland Naturalist,* vol. 4 (4), p. 123.

OPINION 1488

Heriaeus Simon, 1875 (Arachnida, Araneae): *Thomisus hirtus* Latreille, 1819 confirmed as type species

Ruling

(1) It is hereby confirmed that the type species of the nominal genus *Heriaeus* Simon, 1875 is *Thomisus hirtus* Latreille, 1819, by the subsequent designation of Simon (1895).

(2) The name *Heriaeus* Simon, 1875 (gender: masculine), type species by subsequent designation *Thomisus hirsutus* Walckenaer, 1824 (= *Thomisus hirtus* Latreille, 1819) is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *hirtus* Latreille, 1819, as published in the binomen *Thomisus hirtus* (specific name of the type species of *Heriaeus* Simon, 1875) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *hirsutus* Walckenaer, 1824, as published in the binomen *Thomisus hirsutus* (an incorrect subsequent spelling of *Thomisus hirtus* Latreille, 1819) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2447

An application for the confirmation of *Thomisus hirtus* Latreille, 1819 as the type species of *Heriaeus* Simon, 1875 was received from Drs O. Kraus & A. Loerbroks (*Universität Hamburg, German Federal Republic*) on 4 July 1983. After correspondence the case was published in BZN **43**: 346–347 (December 1986). Notice of the case was given to ten general and six specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 346–347, with a note that *Thomisus hirsutus* Walckenaer, 1824 is not an unjustified emendation of *T. hirtus* Latreille, 1819, as stated in para. 3 of the application, but an incorrect subsequent spelling, since Walckenaer had altered the spelling without comment. This was designated type species of *Heriaeus* by the subsequent, not original, action of Simon (BZN **43**: 346, para. 2). At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Willink

Negative votes — 1: Uéno.

No votes were returned by Bernardi and Gruchy.

Uéno considered that '*Thomisus hirsutus*' sensu Simon, 1875 (= *Heriaeus oblongus* Simon, 1918) ought to be designated as the type of *Heriaeus*, since this was the species actually before Simon.

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:

Heriaeus Simon, 1875, *Les Arachnides de France*, vol. 2, p. 203.

hirsutus, Thomisus, Walckenaer, 1824, *Faune française,* vol. 4, p. 85.
hirtus, Thomisus, Latreille, 1819, *Nouveau Dictionnaire d'Histoire Naturelle,* ed. 2, p. 41.

The reference for the designation of *Thomisus hirsutus* (= *T. hirtus* Latreille, 1819) as the type species of *Heriaeus* is:
Simon, 1895, *Histoire naturelle des Araignées,* ed. 2, **1** (4) p. 1034.

OPINION 1489

Biformalia vittata Sjöstedt, 1920 (currently *Phaulacridium vittatum*; Insecta, Orthoptera): specific name conserved

Ruling

(1) Under the plenary powers 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) *ambulans* Erichson, 1842, as published in the binomen *Acridium ambulans*;

(b) *manca* Bolívar, 1898, as published in the binomen *Trigoniza manca*;

(c) *australiensis* Bolívar, 1898, as published in the binomen *Trigoniza australiensis*.

(2) The name *vittata* Sjöstedt, 1920, as published in the binomen *Biformalia vittata*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The following names, as suppressed in (1) above, are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *ambulans* Erichson, 1842, as published in the binomen *Acridium ambulans*;

(b) *manca* Bolívar, 1898, as published in the binomen *Trigoniza manca*;

(c) *australiensis* Bolívar, 1898, as published in the binomen *Trigoniza australiensis*.

History of Case 2524

An application for the conservation of *Phaulacridium vittatum* (Sjöstedt, 1920) was received from Dr K. H. L. Key (*CSIRO, Canberra, Australia*) on 4 June 1985. After correspondence the case was published in BZN **43**: 303–305 (October 1986). Notice of the case was given to twelve general and ten specialist serials. A supportive comment was received from Dr P. B. McQuillan (*Hobart, Tasmania*). Dr D. K. McE. Kevan (*McGill University, Canada*) commented that he hoped this case would not establish a precedent for undermining the Principle of Priority.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 304. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 17: Bayer, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kraus, Melville, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 6: Alvarado, Cogger, Holthuis, Kabata, Lehtinen and Mroczkowski.

No votes were returned by Bernardi and Gruchy.

Kabata did not agree that 'at least 21 papers in the last fifty years' (BZN **43**: 304, para. 6) using *vittatum* justified suppression of the senior synonyms. Alvarado, Cogger and Mroczkowski thought that only the relative precedence procedure should be applied, as the four names are only subjective synonyms, and Key's synonymisation could be challenged in the future.

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:

ambulans, Acridium, Erichson, 1842, *Archiv für Naturgeschichte* **8**(1): 251.

australiensis, Trigoniza, Bolívar, 1898, *Annali del Museo Civico di Storia Naturale Giacomo Doria,* **39**: 95.

manca, Trigoniza, Bolívar, 1898, *Annali del Museo Civico di Storia Naturale Giacomo Doria,* **39**: 96.

vittata, Biformalia, Sjöstedt, 1920, *Arkiv för Zoologi,* **12**(20): 49.

OPINION 1490

Phisis Stål, 1861 and *Teuthras* Stål, 1874 (Insecta, Orthoptera (Grylloptera)): *Listroscelis pectinata* Guérin, 1831 confirmed as type species

Ruling

(1) The original designations of the nominal species *Listroscelis pectinata* Guérin, 1831 as type species of the genera *Phisis* Stål, 1861 and *Teuthras* Stål, 1874 are hereby confirmed.

(2) The name *Phisis* Stål, 1861 (gender: feminine), type species by original designation and as confirmed in (1) above, *Listroscelis pectinata* Guérin, 1831, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *pectinata* Guérin, 1831, as published in the binomen *Listroscelis pectinata* (specific name of the type species of *Phisis* Stål, 1861) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Teuthras* Stål, 1874, a junior objective synonym of *Phisis* Stål, 1861, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

History of Case 2528

An application for the confirmation of *Listroscelis pectinata* Guérin, 1831 as the type species of *Phisis* Stål, 1861 and *Teuthras* Stål, 1874 was received from Dr D. K. McE. Kevan (*McGill University, Québec, Canada*) on 23 July 1985. After correspondence the case was published in BZN **43**: 306–307 (October 1986). Notice of the case was given to twelve general and ten specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 307. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Dupuis.

No votes were returned by Bernardi and Gruchy. Mroczkowski abstained. Dupuis said that in a case of a doubtfully identified type species, it was preferable to base the name on material seen by the author of the genus.

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:

pectinata, Listroscelis, Guérin, 1831, *in* Lesson, R. P., *Histoire naturelle des Crustacés, Arachnides et Insectes, . . . Voyage autour du Monde sur la Corvette 'La Coquille' du Capitaine Duperrey. Zoologie*, **2**(2), Division 1, pl. 10 (see also p. 153 (1838)).

Phisis Stål, 1861, *Kongliga svenska Fregattens Eugenies Resa omkring Iorden, Vetenskapliga Iakttagelser, vol. 2 Zoologi (1) Insecta*, p. 324.

Teuthras Stål, 1874, *Recensio Orthopterorum. Revue critique des Orthoptères décrits par Linné, De Geer et Thunberg*, vol. 2, p. 102.

OPINION 1491

Micronecta griseola Horváth, 1899 (Insecta, Heteroptera): specific name conserved

Ruling

(1) Under the plenary powers 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) *minuta* Fabricius, 1794, as published in the binomen *Sigara minuta*;

(b) *lemana* Fieber, 1860, as published in the binomen *Sigara lemana*.

(2) The name *griseola* Horváth, 1899, as published in the binomen *Micronecta griseola* and as interpreted by the lectotype designated by Jansson (1986), is hereby placed on the Official List of Specific Names in Zoology.

(3) The following names as suppressed in (1) above are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *minuta* Fabricius, 1794, as published in the binomen *Sigara minuta*;

(b) *lemana* Fieber, 1860, as published in the binomen *Sigara lemana*.

History of Case 2519

An application for the conservation of *Micronecta griseola* Horváth, 1899, was received from Dr A. Jansson (*Zoological Museum, University of Helsinki, Finland*) on 29 April 1985. After correspondence the case was published in BZN **43**: 178–180 (July 1986). Notice of the case was given to ten general and nine specialist serials. No comments were received. It should be noted that in the application the date of Fabricius was wrongly given in paras. 6(1)a and 6(3)a as 1744; in both cases it should have read 1794.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 179. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 19: Alvarado, Bayer, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Kabata, Kraus, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 4: Cogger, Heppell, Holthuis and Lehtinen.

No votes were returned by Bernardi and Gruchy.

Holthuis considered that, as the species involved seemed to be of no importance in applied science or general biology, the normal rule of priority ought to apply. Cogger favoured precedence of *griseola* over *minuta* and *lemana*, but not the suppression of the latter names.

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:

griseola, Micronecta, Horváth, 1899, *Revue d'Entomologie,* **18**(12): 103.

lemana, Sigara, Fieber, 1860, *Die europäischen Hemiptera,* p. 89.

minuta, Sigara, Fabricius, 1794, *Entomologia systematica, emendata et aucta, secundum classes, ordines, genera, species,* p. 60.

The reference for the designation of the lectotype of *Micronecta griseola* is:
Jansson, 1986, *Acta Entomologica Fennica,* **47**: 14.

OPINION 1492

Corixa albifrons Motschulsky, 1863 (currently *Micronecta albifrons*; Insecta, Heteroptera): neotype designation confirmed

Ruling

(1) Under Article 75h of the Code it is hereby ruled that the name-bearing type of *Corixa albifrons* Motschulsky, 1863 is the neotype designated by Wroblewski (1968).

(2) The name *albifrons* Motschulsky, 1863, as published in the binomen *Corixa albifrons*, 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 2520

An application for the confirmation of the neotype designation by Wroblewski (1968) for *Corixa albifrons* was received from Dr A. Jansson (*Zoological Museum, Helsinki, Finland*) and Dr I. M. Kerzhner (*Zoological Institute, Leningrad, U.S.S.R.*) on 29 April 1985. After correspondence the case was published in BZN **43**: 279–281 (October 1986). Notice of the case was given to twelve general and ten specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 280. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 23: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi and Gruchy.

Original references

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

albifrons, Corixa, Motschulsky, 1863, *Bulletin de la Société Impériale des Naturalistes de Moscou*, **36**(2): 94.

The reference for the designation of the neotype of *Corixa albifrons* is:

Wroblewski, 1968, *Polskie Pismo Entomologiczne*, **38**: 764.

OPINION 1493

Geonemus Schoenherr, 1833 (Insecta, Coleoptera): *Curculio flabellipes* Olivier, 1807 designated as type species

Ruling

(1) Under the plenary powers all previous designations of the type species for the nominal genus *Geonemus* Schoenherr, 1833 are hereby set aside and *Curculio flabellipes* Olivier, 1807 is hereby designated as type species.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Geonemus* Schoenherr, 1833 (gender: masculine), type species by designation in (1) above, *Curculio flabellipes* Olivier, 1807;

(b) *Brachyomus* Lacordaire, 1863 (gender: masculine), type species by subsequent designation by Wibmer & O'Brien (1986) *Curculio octotuberculatus* Fabricius, 1787.

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *flabellipes* Olivier, 1807, as published in the binomen *Curculio flabellipes* (specific name of the type species of *Geonemus* Schoenherr, 1833);

(b) *octotuberculatus* Fabricius, 1787, as published in the binomen *Curculio octotuberculatus* (specific name of the type species of *Brachyomus* Lacordaire, 1863).

History of Case 2565

An application for the designation of a type species for *Geonemus* Schoenherr, 1833 to remove its objective synonymy with *Brachyomus* Lacordaire, 1863, was received from Drs G. J. Wibmer & C. W. O'Brien (*Florida A & M University, Florida, U.S.A.*) on 24 March 1986. After correspondence the case was published in BZN **43**: 300–302 (October 1986). Notice of the case was given to twelve general and twelve specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 301. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

No votes were returned by Bernardi and Gruchy. Thompson considered that insufficient usage of the names in question was documented.

Original references

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

Brachyomus Lacordaire, 1863, *Histoire naturelle des insectes. Genera des Coléoptères. . .*, p. 130.

flabellipes, Curculio, Olivier, 1807, *Entomologie, ou histoire naturelle des insectes . . . Coléoptères,* p. 374.

Geonemus Schoenherr, 1833, *Synonymia Insectorum, Genera et species curculionidum, cum synonymia hujus familiae,* vol. 1, p. 13.

octotuberculatus, Curculio, Fabricius, 1787, *Mantissa insectorum . . .,* vol. 1, p. 112.

OPINION 1494

Leptura marginata Fabricius, 1781 (currently *Acmaeops marginata*; Insecta, Coleoptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *marginata* O. F. Müller, 1766, as published in the binomen *Leptura marginata,* and all uses of that name prior to the publication of *Leptura marginata* Fabricius, 1781, are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *marginata* Fabricius, 1781, as published in the binomen *Leptura marginata*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *marginata* O. F. Müller, 1766, as published in the binomen *Leptura marginata* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2572

An application for the conservation of *Leptura marginata* Fabricius, 1781 was received from Dr M. Mroczkowski (*Instytut Zoologii, Warsaw, Poland*) on 29 May 1986. After correspondence the case was published in BZN **43**: 372 (December 1986). Notice of the case was given to ten general and nine specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 372. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Trjapitzin, Uéno, Willink

Negative votes — 1: Thompson.

No votes were returned by Bernardi and Gruchy.

Despite the fact that he voted for the application, Kabata said he would have preferred a stronger case on which to base his decision. Thompson voted against the case because it did not include details of the usage of *marginata* Fabricius, nor mention any possible 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:

marginata, Leptura, Fabricius, 1781, *Species Insectorum eorum differentias specificas, synonyma auctorum, loca natalia, metamorphosin adiectis observationibus, descriptionibus,* **1**: 247.

marginata, Leptura, Müller, 1766, *in* Allioni, *Mélanges de Philosophie et de mathématique de la Société Royale de Turin,* **3**: 188.

OPINION 1495

Colydium castaneum Herbst, 1797 (currently *Tribolium castaneum*; Insecta, Coleoptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *navalis* Fabricius, 1775, as published in the binomen *Dermestes navalis*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Tribolium* MacLeay, 1825 (gender: neuter), type species by monotypy *Colydium castaneum* Herbst, 1797, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *castaneum* Herbst, 1797, as published in the binomen *Colydium castaneum* (specific name of the type species of *Tribolium* MacLeay, 1825) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *navalis* Fabricius, 1775, as published in the binomen *Dermestes navalis* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2575

An application for the conservation of *Tribolium castaneum* Herbst, 1797 was received from Mr R. D. Pope (*British Museum (Natural History), London*) and Dr J. C. Watt (*Department of Scientific and Industrial Research, Auckland, New Zealand*) on 26 June 1986. After correspondence the case was published in BZN **43**: 363–365 (December 1986). Notice of the case was given to ten general and nine specialist serials.

Dr L. B. Holthuis raised two questions:

(i) why did the applicant select an incorrectly labelled specimen from the Banks collection in the British Museum (Natural History) as lectotype of *Dermestes navalis* when clearly labelled specimens are in the Fabrician collection in Copenhagen (cf. para. 5 of the application)?

(ii) why did Champion (1896) 'assert' that *D. navalis* was not a synonym of *Colydium castaneum* (cf. para. 4)?

In reply, Mr R. D. Pope said:

(i) Fabricius (1775, and in later works) stated that his type material of *D. navalis* belonged to Banks, so that anyone consulting the original literature would be directed to the Banks collection.

(ii) Champion (1896) noticed that in 1792 Fabricius had stated that *D. navalis* had the last two antennal segments forming a club, unlike the three-segmented club of what was in 1896 (before Waterhouse) called '*Tribolium ferrugineum*' (including *C. castaneum*). However, Champion overlooked the fact that in 1801 Fabricius, after further examination, synonymised *navalis* with *ferrugineum*.

The above questions and replies were circulated on the Commission voting papers.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 364. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 2: Hahn and Savage.

No votes were returned by Bernardi and Gruchy.

Hahn considered that the synonymy between *navalis* and *castaneum* is not proved adequately, and that although *castaneum* could be given precedence over *navalis* the latter should not be suppressed. Savage favoured the proposal but voted against because he objected to the selected lectotype of *Dermestes navalis* and its lack of data. Holthuis also objected to the selection of this lectotype, and pointed out that it was unnecessary since the name *navalis* was being suppressed.

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:

castaneum, Colydium, Herbst, 1797, *Natursystem aller Insecten: die Käfer,* vol. 7, p. 282.

navalis, Dermestes, Fabricius, 1775, *Systema entomologiae,* p. 56.

Tribolium MacLeay, 1825, *Annulosa Javanica,* p. 47.

OPINION 1496

Simulia ferruginea Wahlberg, 1844 (currently *Helodon ferrugineus*; Insecta, Diptera): given precedence over *Simulia rufa* Meigen, 1838 and *Simulia borealis* Zetterstedt, 1842

Ruling

(1) Under the plenary powers the specific name *ferruginea* Wahlberg, 1844, as published in the binomen *Simulia ferruginea*, is hereby given precedence over the specific names *rufa* Meigen, 1838, as published in the binomen *Simulia rufa*, and *borealis* Zetterstedt, 1842, as published in the binomen *Simulia borealis*, whenever these names are considered synonyms of *ferruginea*.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *ferruginea* Wahlberg, 1844, as published in the binomen *Simulia ferruginea*, with an endorsement that it is to be given precedence over *rufa* Meigen, 1838, as published in the binomen *Simulia rufa*, and *borealis* Zetterstedt, 1842, as published in the binomen *Simulia borealis*, whenever these names are considered synonyms of *ferruginea*;

(b) *rufa* Meigen, 1838, as published in the binomen *Simulia rufa*, with an endorsement that it is not to be given priority over *ferruginea* Wahlberg, 1844, as published in the binomen *Simulia ferruginea*, whenever the two names are considered synonyms;

(c) *borealis* Zetterstedt, 1842, as published in the binomen *Simulia borealis*, with an endorsement that it is not to be given priority over *ferruginea* Wahlberg, 1844, as published in the binomen *Simulia ferruginea*, whenever the two names are considered synonyms.

History of Case 2394

An application for *Simulia ferruginea* Wahlberg, 1844 to be given precedence over two senior subjective synonyms was received from Prof Dr I. A. Rubtsov (*Zoological Institute, Academy of Sciences of the U.S.S.R., Leningrad*) on 19 October 1981. After correspondence the case was published in BZN **43**: 352–354 (December 1986). Notice of the case was given to nine general and nine specialist serials. In an unpublished comment, Dr J. E. Raastad (*University of Oslo, Norway*) supported the importance of conserving the name *Helodon ferrugineus* (Wahlberg, 1844). He further pointed out there is no certainty that this species and *Simulia rufa*, Meigen, 1838 are the same.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 352–353. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 18: Alvarado, Bayer, Cocks, Cogger, Corliss, Hahn, Halvorsen, Kabata, Kraus, Melville, Mroczkowski, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 5: Dupuis, Heppell, Holthuis, Lehtinen and Ride.

No votes were returned by Bernardi and Gruchy.

Voting against the application, Ride said that it would have been better to suppress the names *rufa* Meigen and *borealis* Zetterstedt, rather than merely giving *ferruginea* precedence over them.

Original references

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

borealis, Simulia, Zetterstedt, 1842, *Arsberättelse om Botaniska Arbeten och Upptäckter för ar 1838,* p. 515.

ferruginea, Simulia, Wahlberg, 1844. *Ofversigt at Kongl. Vetenskaps-Akademiens Förhandlingar,* vol. 1, p. 110.

rufa, Simulia, Meigen, 1838, *Systematische Beschreibung der bekannten Europäischen zweiflügeligen Insecten,* vol. 7, p. 54.

OPINION 1497

Opius Wesmael, 1835 (Insecta, Hymenoptera): *Opius pallipes* Wesmael, 1835 designated as type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Opius* Wesmael, 1835 are hereby set aside and *Opius pallipes* Wesmael, 1835 is designated as type species.

(2) The name *Opius* Wesmael, 1835 (gender: masculine), type species *Opius pallipes* Wesmael, 1835, by designation under the plenary powers in (1) above, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *pallipes* Wesmael, 1835, as published in the binomen *Opius pallipes* (specific name of the type species of *Opius* Wesmael, 1835), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2561

An application for the designation of *Opius pallipes* Wesmael, 1835 as type species of *Opius* Wesmael, 1835 was received from Dr R. A. Wharton (*Texas A & M University, Texas, U.S.A.*) on 17 March 1986. After correspondence the case was published in BZN **43**: 369–371 (December 1986). Notice of the case was given to ten general and ten specialist serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 370. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — 1: Lehtinen.

No votes were returned by Bernardi and Gruchy.

Dupuis abstained because the application gave no information about the proposed type species of *Opius, O. pallipes*. In reply to this point, Dr R. A. Wharton has said that he (see reference below) has designated a female specimen in the Institut Royal des Sciences Naturelles de Belgique, Brussels, as lectotype.

Original references

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

Opius Wesmael, 1835, *Nouveaux Mémoires de l'Académie Royale des Sciences et Belles-Lettres de Bruxelles*, **9**: 115.

pallipes, Opius, Wesmael, 1835, *Nouveaux Mémoires de l'Académie Royale des Sciences et Belles-Lettres de Bruxelles*, **9**: 118.

The reference for the designation of the lectotype of *Opius pallipes* is:

Wharton, R. A., 1987, *Proceedings of the Entomological Society of Washington*, **89**: 66.

OPINION 1498

Cornalatus Attems, 1931 (Diplopoda, Polydesmida): *Cornalatus permutatus* Attems, 1938 designated as type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Cornalatus* Attems, 1931 are hereby set aside and *Cornalatus permutatus* Attems, 1938 is designated as type species.

(2) The name *Cornalatus* Attems, 1931 (gender: masculine), type species, by designation under the plenary powers in (1) above, *Cornalatus permutatus* 1938 is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *permutatus*, as published in the binomen *Cornalatus permutatus* (specific name of the type species of *Cornalatus* Attems, 1931), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2438

An application for the designation of *Cornalatus permutatus* Attems, 1938 as type species of *Cornalatus* Attems, 1931 was received from Dr R. L. Hoffman (*Radford University, Virginia, U.S.A.*) on 5 April 1983. After correspondence the case was published in BZN **43**: 366–368 (December 1986). Notice of the case was given to ten serials. No comments were received.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 367. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 23: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi and Gruchy.

Original references

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

Cornalatus Attems, 1931, *Zoologica Stuttgart*, **30** (79): 40.

permutatus, Cornalatus, Attems, 1938. *Tierreich*, **69**: 61.

OPINION 1499

Lepralia punctata Hassall, 1841 (currently *Cribrilina punctata*; Bryozoa, Cheilostomata): replacement neotype designated

Ruling

(1) (a) Under the plenary powers the neotype designated in Opinion 1016 for *Lepralia punctata* Hassall, 1841, is hereby set aside;

(b) A replacement neotype, specimen number BMNH 1985.11.20.1, is hereby designated for *Lepralia punctata* Hassall, 1841.

(2) The entry on the Official List of Specific Names in Zoology arising from Opinion 1016 is hereby amended to read: *punctata* Hassall, 1841, as published in the binomen *Lepralia punctata*, as defined by the neotype designated in (1)(b) above.

History of Case 2562

An application for a replacement neotype to be designated for *Lepralia punctata* (currently *Cribrilina punctata*) was received from Dr J. D. D. Bishop (*British Museum (Natural History), London*) on 14 March 1986. After correspondence the case was published in BZN **43**: 288–296 (October 1986). Notice of the case was given to twelve general and twelve specialist serials. No comments were received, but in para. 27 of the application it was stated that a number of specialists agreed with the proposals.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 294–295. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes—20: Alvarado, Bayer, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes—3: Holthuis, Lehtinen and Cogger.

No votes were returned by Bernardi and Gruchy.

Holthuis considered that the taxonomy was too unsettled and that Opinion 1016 should not be revoked until the taxonomy of the group was more settled. Cogger believed that the objectives of the application could be met by setting aside the previous neotype designation so that the original lectotype designation could stand. Hahn also thought this, but nevertheless voted for the proposals.

Original references

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

punctata, Lepralia, Hassall, 1841, *Annals and Magazine of Natural History*, **7**: 368.

The replacement neotype of *Lepralia punctata* is illustrated on BZN **43**: 289 (Fig. D) and discussed on BZN **43**: 293–294.

OPINION 1500

Cobitis Linnaeus, 1758 (Osteichthyes, Cypriniformes): *Cobitis taenia* Linnaeus, 1758 designated as the type species, and the original spelling of the family-group name COBITIDAE Swainson, 1839 confirmed

Ruling

(1) Under the plenary powers:

(a) all previous designations of type species for the nominal genus *Cobitis* Linnaeus, 1758 are hereby set aside and *Cobitis taenia* Linnaeus, 1758 is designated as type species;

(b) the stem of the generic name *Cobitis* Linnaeus, 1758 is, for the purpose of Article 29a, ruled to be *Cobit-*.

(2) The name *Cobitis* Linnaeus, 1758 (gender: feminine), type species by designation under the plenary powers in (1) above *Cobitis taenia* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *taenia* Linnaeus, 1758, as published in the binomen *Cobitis taenia* (specific name of the type species of *Cobitis* Linnaeus, 1758), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name COBITIDAE Swainson, 1839 (type genus *Cobitis* Linnaeus, 1758) is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The name *Acantophthalmus* van Hasselt, 1823 is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Cobitis* Linnaeus, 1758).

History of Case 2566

An application for the designation of *Cobitis taenia* Linnaeus, 1758 as type species of *Cobitis* Linnaeus, 1758 and a ruling on the spelling of the family-group name COBITIDAE Swainson, 1839 was received from Mr M. Kottelat (*Laboratoire d'Ichthyologie, Guéret, Switzerland*) on 9 April 1986. After correspondence the case was published in BZN **43**: 360–362 (December 1986). Notice of the case was given to ten general and eleven specialist serials. A supportive comment was received from Dr P. G. Bianco (*L'Aquila, Italy*).

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 361–362, with an additional proposal to place *Acantophthalmus* van Hasselt, 1823 on the Official Index of Rejected and Invalid Generic Names in Zoology. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes—22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn (in part), Halvorsen, Heppell, Holthuis (in part), Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes—1: Savage.

No votes were returned by Bernardi and Gruchy.

Savage considered that the arguments for changing the grammatically correct spelling of the family-group name were inadequate. Hahn and Holthuis voted for the

proposed designation of type species, but did not agree with COBITIDAE instead of COBITIDIDAE. On the other hand, Cocks made the following comment: 'This case revives a wider issue, that of the "correct" formation of family names. I was pleased to see that the petitioner seeks to conserve COBITIDAE rather than COBITIDIDAE—it is just the sort of pedantry which introduced the latter form which gives nomenclature a bad name amongst many of our less taxonomically inclined colleagues. I would favour a much less aggressive attitude to well-established family names than appears to be prevalent in the current Code. Alleged Greek roots are the main culprits. Thus in brachiopods the family ATHYRIDAE (from the genus *Athyris*) was stable for more than a century until an ill-advised systematist was told that it should be ATHYRIDIDAE, since when the situation has been anything but stable, with some subsequent authors following one pattern and others the variant. Surely the Commission should reconsider this issue?' Heppell also suggested that this question should be considered.

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:

Acantophthalmus van Hasselt, 1823, *Algemeene Konst– en Letter–Bode voor het jaar 1823*, II deel, no. 35, p. 133.

COBITIDAE Swainson, 1839, *in* Lardner, D., *The Cabinet Cyclopedia*, vol. 2, p. 190.

Cobitis Linnaeus, 1758, *Systema Naturae*, ed. 10, p. 303.

taenia, Cobitis, Linnaeus, 1758, *Systema Naturae*, ed. 10, p. 303.

DIRECTION 123

The Sowerbys' *Mineral Conchology of Great Britain*: Official List entry authorized

Ruling

(1) The work *Mineral Conchology of Great Britain* by J. and J. de C. Sowerby is hereby placed on the Official List of Works Approved as Available for Zoological Nomenclature, the entry to read:

Sowerby, (J. & J. de C.), 1812–1845, *Mineral Conchology of Great Britain*, 7 volumes (the authorship and dates for this work to be taken as set out in the Appendix to Opinion 1429, published in BZN **44**: 65–67).

History of Case 2483

An application for a ruling on the authorship and dates of Sowerbys' *Mineral Conchology of Great Britain* was published in BZN **42**: 64–72 (April 1985). Opinion 1429, published in BZN **44**: 64–67, gave the ruling on this case, but no authority had been requested for an appropriate entry to be made in the Official List of Works. Under Article 78d of the Code the present Direction completes the ruling of Opinion 1429.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote to complete the ruling in Opinion 1429 (BZN **44**: 64–67). At the close of the voting period the votes were as follows:

Affirmative votes—22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes—1: Kabata.

No votes were returned by Bernardi and Gruchy.

Reference

The following is the title of the work placed on the Official List of Works Approved as Available for Zoological Nomenclature by the ruling given in the present Direction:
Sowerby, J. & J. de C., 1812–1845, *Mineral Conchology of Great Britain.*

Contents—*continued*

Rulings of the Commission

Opinion 1484. *Trypanosoma brucei* Plimmer & Bradford, 1899 (Protista, Mastigophora) 154
Opinion 1485. *Filellum serpens* Hassall, 1848 (Cnidaria, Hydrozoa) 155
Opinion 1486. *Tubulanus* Renier, [1804] and *T. polymorphus* Renier, [1804] (Nemertea) 157
Opinion 1487. *Megalonaias* Utterback, 1915 (Mollusca, Bivalvia) 159
Opinion 1488. *Heriaeus* Simon, 1875 (Arachnida, Araneae) 160
Opinion 1489. *Biformalia vittata* Sjöstedt, 1920 (currently *Phaulacridium vittatum*; Insecta, Orthoptera) 162
Opinion 1490. *Phisis* Stål, 1861 and *Teuthras* Stål, 1874 (Insecta, Orthoptera, Gryllotera) 164
Opinion 1491. *Micronecta griseola* Horváth, 1899 (Insecta, Heteroptera) 165
Opinion 1492. *Corixa albifrons* Motschulsky, 1863 (currently *Micronecta albifrons*; Insecta, Heteroptera) 167
Opinion 1493. *Geonemus* Schoenherr, 1833 (Insecta, Coleoptera) 168
Opinion 1494. *Leptura marginata* Fabricius, 1781 (currently *Acmaeops marginata*; Insecta, Coleoptera) 170
Opinion 1495. *Colydium castaneum* Herbst, 1797 (currently *Tribolium castaneum*; Insecta, Coleoptera) 171
Opinion 1496. *Simulia ferruginea* Wahlberg, 1844 (currently *Helodon ferrugineus*; Insecta, Diptera) 173
Opinion 1497. *Opius* Wesmael, 1835 (Insecta, Hymenoptera) 175
Opinion 1498. *Cornalatus* Attems, 1931 (Diplopoda, Polydesmida) 176
Opinion 1499. *Lepralia punctata* Hassall, 1841 (currently *Cribrilina punctata*; Bryozoa, Cheilostomata) 177
Opinion 1500. *Cobitis* Linnaeus, 1758 (Osteichthyes, Cypriniformes) 178
Direction 123. The Sowerbys' *Mineral Conchology of Great Britain*: Official List entry authorised 180

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Parts of the Bulletin since 44 (1) should be consulted as examples.

Title. This should be written in lower case letters and include the names to be conserved. A specific name should be cited in the original binomen, with the current binomen in parentheses.

Author's name. Full postal address should be given.

Abstract. This will be prepared by the Commission Secretariat.

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. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . . '.

References. These should be given for all authors cited. The titles of periodicals should be *in full* and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and the place of publication.

Submission of application. Two copies should be sent to the address on the inside front cover. The Secretariat is willing to offer additional advice at an early stage in the preparation of manuscripts.

CONTENTS

Page

Notices 89
The International Code of Zoological Nomenclature 90
Official Lists and Indexes of Names and Works in Zoology 90

General Article

Changes in North American Fish Names, especially as related to the International Code of Zoological Nomenclature. R. M. Bailey & C. R. Robins 92
Note by P. K. Tubbs (Executive Secretary, I.C.Z.N.) 103

Applications

Nonion de Montfort, 1808 (Foraminiferida): proposed designation of *Nautilus faba* Fichtel & Moll, 1798 as type species. H. J. Hansen & F. Rögl 104
Hanzawaia Asano, 1944 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 106
Calcarina d'Orbigny, 1826 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 109
Dendritina d'Orbigny, 1826 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 112
Planularia Defrance, 1826 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 114
Borelis de Montfort, 1808 (Foraminiferida): proposed conservation. H. J. Hansen & F. Rögl 116
Nautilus repandus Fichtel & Moll, 1798 (currently *Eponides repandus*; Foraminiferida): proposed replacement of the neotype. H. J. Hansen & F. Rögl 118
Palaemon longirostris H. Milne Edwards, 1837 (Crustacea, Decapoda): proposed conservation of the specific name. L. B. Holthuis 120
Pycinaster magnificus Spencer, 1913 (Echinodermata, Asteroidea): conservation proposée pour le nom spécifique. G. Breton 125
Cordylodus? dubius Rhodes, 1953 (currently *Distomodus? dubius*; Conodonta): proposed conservation of the specific name. L. Jeppsson & R. J. Aldridge 127
LIPARIDAE Gill, [30 September] 1861 (Osteichthyes, Scorpaeniformes); proposed confirmation of spelling. K. D. Vogt 130
Scorpaenichthys marmoratus Girard, 1854 (Osteichthyes, Scorpaeniformes): proposed conservation of the specific name and confirmation of authorship. R. N. Lea & W. N. Eschmeyer 132
Ameiurus Rafinesque, 1820 (Osteichthyes, Siluriformes): proposed designation of *Silurus lividus* Rafinesque, 1820 (= *Pimelodus natalis* Lesueur, 1819) as the type species. R. M. Bailey & C. R. Robins 135
Hyla chrysoscelis Johnson, 1961 (Amphibia, Anura): proposed conservation and designation of a neotype. H. M. Smith, K. T. Fitzgerald & L. J. Guillette, Jr . . . 138
Camelus Linnaeus, 1758 (Mammalia, Artiodactyla): proposed designation of *Camelus bactrianus* Linnaeus, 1758 as type species. N. Erridge 141

Comments

On the proposed conservation of the name *Ctenopoma oxyrhynchum* Boulenger, 1902 (Osteichthyes, Perciformes) by the suppression of *C. weeksii* Boulenger, 1896. C. J. Ferraris, Jr; S. M. Morris 143
On the suggested introduction of 'Protected Works' (P. F. S. Cornelius). R. L. Manuel; G. A. Boxshall 144
On the proposed suppression for nomenclature of three works by R. W. Wells and C. R. Wellington. M. N. Hutchinson; A. Dubois, R. Bour, E.-R. Brygoo, J. Lescure, P. Bouchet & S. Tillier; V. B. Meyer-Rochow; C. J. Birrel, L. Dodds, P. Evans, E. J. Nield, R. Peters, D. Sell, D. Shannon; M. King; L. B. Holthuis; M. J. Tyler; supporting letters from 81 persons 145
On the proposed conservation of *Platanista* Wagler, 1830 (Mammalia, Cetacea). J. E. Heyning & L. G. Barnes 153

Continued on Inside Back Cover

Printed in Great Britain by Henry Ling Ltd., at the Dorset Press, Dorchester, Dorset

S 2702

Volume 45, Part 3, 23 September 1988 pp. 181–248 ISSN 0007–5167

The Bulletin of Zoological Nomenclature

BRITISH MUSEUM
23 SEP 1988
ZOOLOGY

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 1988 is £57 or $110, postage included; the rates for 1989 will be £60 or $115. All manuscripts, letters and orders should be sent to:

The Executive Secretary,
International Commission on Zoological Nomenclature,
c/o British Museum (Natural History),
Cromwell Road,
London, SW7 5BD, U.K. (Tel. 01-938 9387)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Officers

President	Dr W. D. L. Ride (*Australia*)
Vice-President	Prof Dr R. Alvarado (*Spain*)
Secretary-General	Dr L. B. Holthuis (*The Netherlands*)
Executive Secretary	Dr P. K. Tubbs (*United Kingdom*)

Members

Prof Dr R. Alvarado (*Spain*)
Dr F. M. Bayer (*U.S.A.*)
Dr G. Bernardi (*France*)
Dr L. R. M. Cocks (*U.K.*)
Dr H. G. Cogger (*Australia*)
Prof J. O. Corliss (*U.S.A.*)
Prof C. Dupuis (*France*)
Dr G. C. Gruchy (*Canada*)
Prof Dr G. Hahn (*Fed. Rep. Germany*)
Prof Dr O. Halvorsen (*Norway*)
Mr D. Heppell (*U.K.*)
Dr L. B. Holthuis (*The Netherlands*)
Dr Z. Kabata (*Canada*)
Prof Dr O. Kraus (*Fed. Rep. Germany*)
Dr P. T. Lehtinen (*Finland*)
Mr R. V. Melville (*U.K.*)
Dr M. Mroczkowski (*Poland*)
Dr W. D. L. Ride (*Australia*)
Prof J. M. Savage (*U.S.A.*)
Prof Dr R. Schuster (*Austria*)
Dr Y. I. Starobogatov (*U.S.S.R.*)
Dr F. C. Thompson (*U.S.A.*)
Dr V. A. Trjapitzin (*U.S.S.R.*)
Dr Shun-Ichi Uéno (*Japan*)
Prof A. Willink (*Argentina*)

Secretariat

Dr P. K. Tubbs (*Executive Secretary and Editor*)
Mr J. D. D. Smith, B.Sc., B.A. (*Scientific Administrator*)
Miss R. A. Cooper, B.Sc. (*Zoologist*)
Mrs A. Gentry, B.Sc. (*Zoologist*)

Officers of the International Trust for Zoological Nomenclature

Prof H. B. Whittington, F.R.S. (*Chairman*)
Dr M. K. Howarth (*Secretary and Managing Director*)

© International Trust for Zoological Nomenclature 1988

BRITISH MUSEUM
(NATURAL HISTORY)
23 SEP 1988
PURCHASED
ZOOLOGY

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 45, part 3 (pp. 181–248) 23 September 1988

Notices

(a) *Invitation to comment*. The Commission is entitled to start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. 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, in duplicate, to the Secretary of the Commission as quickly as possible, and in any case in time to reach the Secretary within twelve months of the date of publication of the application.

(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 45, part 2 (published on 24 June 1988):

(1) *Protocalliphora* Hough, 1899 (Insecta, Diptera) and its type species *P. azurea* (Fallén, 1817): proposed conservation of usage by the designation of a replacement lectotype. (Case 2658). C. W. Sabrosky.

(2) *Ichnosoma bicirrhosum* Cuvier, 1829 (currently *Osteoglossum bicirrhosum*; Osteichthyes, Osteoglossiformes): proposed conservation of the specific name. (Case 2659). M. Kottelat.

(3) *Phractocephalus* Agassiz, 1829 (Osteichthyes, Siluriformes): proposed conservation. (Case 2660). M. Kottelat.

(4) *Aphonopelma* Pocock, 1901 (Arachnida, Araneae): proposed conservation. (Case 2662). H. W. Levi & O. Kraus.

(5) *Orbitolina* d'Orbigny, 1850 (Foraminiferida): proposed designation of *Orbulites concava* Lamarck, 1816 as the type species. (Case 2663). R. Schroeder & M. D. Simmons.

(6) *Nectoneanthes* Imajima, 1972 (Annelida, Polychaeta): proposed conservation of *Nereis (Alitta) oxypoda* Marenzeller, 1879 as the type species. (Case 2664). R. S. Wilson.

(7) *Rosema* Walker, 1855 (Insecta, Lepidoptera): proposed conservation. (Case 2665). P. Thiaucourt.

(8) *Lucicutia* Giesbrecht, 1898: proposed conservation, and *Pseudaugaptilus longiremis* Sars, 1907; proposed conservation of the specific name (both Crustacea, Copepoda). (Case 2666). K. Hulsemann.

(9) *Drepanites* Mojsisovics, 1893 (Mollusca, Cephalopoda): proposed conservation. (Case 2668). E. E. Spamer & A. E. Bogan.

(10) *Banksiana* Claasen, 1936 (Insecta, Plecoptera): proposed designation of *Paragnetina immarginata* (Say, 1823) as the type species. (Case 2669). B. P. Stark & P. Zwick.

(11) *Kobeltia* Seibert, 1873 (Mollusca, Gastropoda): proposed designation of *Arion distinctus* Mabile, 1868 as the type species. (Case 2670). T. Backeljau.

(12) J. C. Megerle's catalogues of insects (1801–1805): proposed suppression for nomenclatural purposes. (Case 2671). I. M. Kerzhner.

(13) *Castiarina* Gory & Laporte 1837 (Insecta, Coleoptera): proposed conservation. (Case 2672). J. A. Gardner.

(14) *Micropterus patachonicus* King, 1831 and *Anas pteneres* Forster, 1844 (both currently in *Tachyeres* Owen, 1875; Aves, Anseriformes): proposed conservation of the specific names. (Case 2673). B. C. Livezey.

The International Code of Zoological Nomenclature

The Third Edition (1985) supersedes all earlier versions, and incorporates many changes.

Copies may be obtained from:
Natural History Publications, British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K. Price £17.50 plus £1.50 postage.

Orders from North America should be sent to:
University of California Press, Berkeley 94720, California, U.S.A.

Classical Adviser to the Commission

Dr C. W. Wright has for many years given the Commission's Secretariat valuable advice on the formation and use of Latin and Greek words, and will be happy to assist any zoologist who would like such help.

Dr Wright's address is c/o the Executive Secretary.

Increased nomenclatural stability through Lists of Names in Current Use

The International Union of Biological Sciences sponsored a meeting at Kew (U.K.) on 22–23 April 1988 to consider the desirability and feasibility of preparing internationally recognised lists of botanical names in current use, and of according such names a protected nomenclatural status. Although the meeting was concerned with plant names the subject is relevant to biology as a whole, and the participants included the President and the Executive Secretary of the International Commission on Zoological Nomenclature.

The following is the text of a letter which the meeting agreed to distribute to appropriate journals. Comments on the application of the proposals to zoological nomenclature are welcome, and should be sent to the Commission Secretariat.

Sir,

The pressure from the users of names of organisms on taxonomists to produce more stable systems of names is increasing[1–4]. Names change for one of two reasons: the strict application of the rule of priority or other nomenclatural caveats of the appropriate International Code, or new knowledge on the circumscription, rank or position of a taxon. Changes of the latter kind relate to the advancement of scientific knowledge, and are of value to users in indicating not only relationships but also physiological and biochemical attributes. Changes for nomenclatural reasons alone, in contrast, benefit no-one.

In perpetuating the present system, taxonomists are failing to satisfy a key requirement of their consumers[5] and it is therefore not surprising that support for taxonomic research and services is meagre and only grudgingly obtained. The problems of the instability of names have become accentuated by the needs of the information service industry for data retrieval, and the requirements of health, trade, conservation, and quarantine authorities for stable names to use in legislation, regulations, and property rights protection. Action is long overdue and urgently needed not only to satisfy the demands of users of names, but further to restore something of the lost credit of taxonomists in the sight of their consumers.

Bacteriologists overcame this problem in 1980 by the adoption of a new starting date for nomenclature and the publication of an 'Approved List' of names[6–7]; only 2,500 of 30,000 species names were listed. In the case of groups covered by the International Code of Botanical Nomenclature (ICBN) there are about 36,500 generic and 400,000 species names in use, out of about 79,000 generic and 1,700,000 species names published. It has been suggested that approved lists of names are issued at five-yearly intervals[8], that a list of currently accepted names of the world's flora be produced which could be accorded some specially protected nomenclatural status[9], and in zoology that particular works be granted a protected status[10–11].

Proposals to introduce formal procedures for the registration of newly published names[12] were debated during the XIV International Botanical Congress in Berlin in July 1987. A Special Committee on Registration was established, which is to report to the next Congress in Tokyo in 1993. However, such a process would not overcome the instability caused by the repeated re-introduction of long-forgotten names. The Inter-

national Union of Biological Sciences (IUBS), with the support of the International Association for Plant Taxonomy (IAPT), sponsored an international meeting at Kew on 22–23 April 1988 to consider the feasibility of the production of lists of names in current use for all groups of organisms covered by the ICBN; i.e. living and fossil flowering plants, ferns, mosses, hepatics, algae, cyanobacteria, fungi (including lichens), and certain protoctists. The meeting was attended by 23 specialists, including key personnel associated with the current cataloguing of names (i.e. the *Index Algarum, Index of Fungi, Index Kewensis, Index Muscorum, Index Nominum Genericorum*), together with representatives of selected user groups. The key conclusions of this meeting, a full report of which will appear in both *Biology International* and *Taxon*, were:

(1) The preparation of lists of names in current use is in itself a worthwhile objective. Moreover, it would, if such lists were accorded specially protected nomenclatural status over all names not on the list by a future International Botanical Congress, promote stability in names by almost entirely eliminating the majority of name changes due to nomenclatural reasons.

(2) It is now technically feasible, in the light of machine-readable card files which have already been compiled, to produce lists of the approximately 36,500 generic names in current use for all groups covered by the ICBN, given the necessary international support. The starting point for such a list is the IAPT *Index Nominum Genericorum* database held at the Smithsonian Institution, and publication is to be realised in 1991.

(3) The situation with respect to the approximately 400,000 species names in current use varies markedly from group to group, and such lists will have to be prepared on a group by group basis; pilot studies can now feasibly be carried out (e.g. legumes, mosses, yeasts) provided that the necessary resources are made available.

(4) IUBS, through its Commission on the Nomenclature of Plants (General Committee), should be encouraged to establish a Special Committee on Names in Current Use charged to make formal and detailed proposals to the next International Botanical Congress with respect to granting special status to the lists of generic names, to consider appropriate mechanisms for updating them, and to define procedures for the preparation and adoption of species names lists.

(5) The newly appointed Special Committee shall work in collaboration with that on Registration already established, which is considering the question of the registration of newly published names. The work of the two Committees is entirely complementary.

(6) The proposals developed at the Kew meeting need to be widely publicised to promote discussion amongst users of names, not only systematists.

(7) The IUBS should be encouraged to adopt this task as a part of its forthcoming Scientific Programme for 1988–91, and to secure international funding to assist in the preparation and publication of the generic and sample species names lists.

If the necessary resources can be made available, there is now a scenario available which, if accepted by the biological community at large, would materially improve the stability of names of all organisms covered by the International Code of Botanical Nomenclature. The participants in the Kew meeting wish to encourage a lively in-depth debate on this matter, and invite comments from both users and taxonomists, which

will be made available to the proposed Special Committee which will be responsible for both the production of the generic and pilot species lists, and the preparation of detailed proposals for decision at the 1993 International Botanical Congress.

Assistance towards the costs of the meeting received from the International Union of Biological Sciences, the Royal Society of London, and CAB International is gratefully acknowledged.

D. L. HAWKSWORTH

CAB International Mycological Institute,
Ferry Lane, Kew, Surrey TW9 3AF, U.K.

References

1. **Erzinclioglu, Y. Z. & Unwin, D. M.** 1986. The stability of zoological nomenclature. *Nature*, **320**: 687.
2. **Barnett, J. A.** 1986. The stability of biological nomenclature: yeasts. *Nature*, **322**: 599.
3. **Bruce-Chwatt, L. J.** 1987. Vagaries of nomenclature and the rigidity of the Code. *Nature*, **325**: 114.
4. **Rosmoore, H. W.** 1988. A rose by any other name. *International Biodeterioration*, **23**: 325–327.
5. **Hawksworth, D. L. & Bisby, F. A.** 1988. Systematics: the keystone of biology. Pp. 3–30. *in* Hawksworth, D. L. (Ed.), *Prospects in Systematics*. 420 pp. Clarendon Press, Oxford.
6. **Anonymous.** 1980. Debugging systematic bacteriology. *Nature*, **283**: 511.
7. **Sneath, P. H. A.** 1986. Nomenclature of bacteria. Pp. 36–48 *in* Ride, W. D. L. & Younès, T. (Eds), *Biological Nomenclature Today*. 70 pp. IRL Press, Oxford.
8. **Barnett, J. A.** 1987. Classification. *Nature*, **325**: 384.
9. **Brummitt, R. K.** 1987. Will we ever achieve stability of nomenclature? *Taxon*, **36**: 78–81.
10. **Cornelius, P. F. S.** 1987. Use versus priority in zoological nomenclature: a solution for an old problem. *Bulletin of Zoological Nomenclature*, **44**: 79–85.
11. **Manuel, R. L.** 1988. Comment on the suggested introduction of 'Protected Works'. *Bulletin of Zoological Nomenclature*, **45**: 144–145.
12. **Greuter, W.** 1986. Proposals on registration of plant names, a new concept for the nomenclature of the future. *Taxon*, **35:** 816–819.

Case 2449

Septotrochammina Zheng, 1979 (Foraminiferida): proposed designation of *Remaneica gonzalezi* Seiglie, 1964 as the type species

Alfred R. Loeblich, Jr & Helen Tappan Loeblich

Department of Earth and Space Sciences, University of California, Los Angeles, California 90024, U.S.A.

Abstract. The purpose of this application is the designation of *Remaneica gonzalezi* as the type species of *Septotrochammina* Zheng; specimens of Zheng's material are clearly not congeneric with the neotype of *Patellina plicata* Terquem, 1876, the originally designated type species, but are indistinguishable from the holotype of *R. gonzalezi*. This designation will make *Remaneicella* Brönnimann, Zaninetti & Whittaker, 1983 a junior objective synonym of *Septotrochammina*.

---

1. The remaneicid genus *Septotrochammina* was described by Zheng (1979, pp. 118–203) from Holocene specimens from the Xisha Islands (Guangdong Province, China) that she considered to be *Patellina plicata* Terquem, 1876 (p. 72). *P. plicata* was originally described from the beach sands of Dunkerque, France, where it is relatively common. The original figures by Terquem are somewhat diagrammatic, and his type specimens are no longer extant. For this reason Levy et al. (1975, p. 171) selected a neotype, now deposited as specimen FG445 in the Institut de Paléontologie du Muséum National d'Histoire Naturelle, Paris.

2. Illustrations of the *P. plicata* neotype (Levy et al., 1975, pl. 1, figs. 6 and 7) convincingly show that it is not conspecific nor even congeneric with the specimen from China that was illustrated by Zheng as representing the type species of *Septotrochammina*. In this case of a misidentified type species stability of nomenclature would be best served by the course given in Article 70b(i) of the Code, namely the designation of the species actually before Zheng when she proposed *Septotrochammina*.

3. In 1982 Dr Zheng sent us a specimen of her material from the Xisha Islands which she had identified as *Septotrochammina plicata* (Terquem). We have figured this (Loeblich & Tappan, 1985, pl. 1, figs 1–3) and deposited it in the U.S. National Museum (specimen USNM 383153). Comparison of this specimen with that of *Remaneica gonzalezi* Seiglie, 1964 (p. 500) illustrated by Brönnimann & Maisonneuve (1980, pl. 6) shows the two to be conspecific, and different from the true *Patellina plicata* Terquem, which is also shown by Brönnimann & Maisonneuve (1980, pl. 3).

4. Brönnimann & Maisonneuve (1980), in their revision of the genus *Remaneica* Rhumbler, 1938 (type species *R. helgolandica* Rhumbler, 1938), questioned the generic assignment of *R. gonzalezi* Seiglie. Brönnimann, Zaninetti & Whittaker (1983, p. 208) proposed the new genus *Remaneicella* with *R. gonzalezi* as the type (and only) species.

5. Zheng (1979) was unaware that Levy et al. (1975) had designated a neotype for *Patellina plicata*, and similarly Brönnimann et al. (1983) were unaware of Zheng's 1979 paper when they proposed *Remaneicella*.

6. As stated above, we consider *Septotrochammina* Zheng, 1979 and *Remaneicella* Brönnimann et al., 1983 to be synonyms and based upon the same taxonomic species, and hence we have recognised the former as the valid name (Loeblich & Tappan, 1985, pp. 195, 197; 1987, p. 129).

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

(1) to use its plenary powers to set aside the original type species designation, of *Patellina plicata* Terquem, 1876, for the nominal genus *Septotrochammina* Zheng, 1979, and to designate *Remaneica gonzalezi* Seiglie, 1964 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Septotrochammina* Zheng, 1979 (gender: feminine), type species by designation in (1) above *Remaneica gonzalezi* Seiglie, 1964;

(3) to place on the Official List of Specific Names in Zoology the name *gonzalezi* Seiglie, 1964, as published in the binomen *Remaneica gonzalezi* (specific name of the type species of *Septotrochammina* Zheng, 1979);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Remaneicella* Brönnimann, Zaninetti & Whittaker, 1983, a junior objective synonym of *Septotrochammina* Zheng, 1979 by the proposal in (1) above.

References

Brönnimann, P. & Maisonneuve, E. 1980. Revision of the trochamminid genus *Remaneica* Rhumbler, 1938 (Foraminiferida). *Notes du Laboratoire de Paléontologie, Université de Genève*, **6**: 1–14.

Brönnimann, P., Zaninetti, L. & Whittaker, J. E. 1983. On the classification of the Trochamminacea (Foraminiferida). *Journal of Foraminiferal Research*, **13**: 202–218.

Levy, A., Mathieu, R., Poignant, A., Rosset-Moulinier, M. & Rouillois, A. 1975. Sur quelques foraminifères actuels des plages de Dunkerque et des environs: néotypes et espèce nouvelle. *Revue de Micropaléontologie*, **17**: 171–181.

Loeblich, A. R., Jr & Tappan, H. 1985. Some new and redefined genera and families of agglutinated foraminifera II. *Journal of Foraminiferal Research*, **15**: 175–217.

Loeblich, A. R., Jr & Tappan, H. 1987. *Foraminiferal Genera and their Classification*. Two vols., 1182 pp., 847 pls. Van Nostrand Reinhold, New York.

Seiglie, G. A. 1964. New and rare foraminifers from Los Testigos reefs, Venezuela. *Caribbean Journal of Science*, **4**: 497–512.

Terquem, O. 1876. *Essai sur le classement des animaux qui vivent sur la plage et dans les environs de Dunkerque*, 152 pp. Paris.

Zheng, S. 1979. The Recent foraminifera of the Xisha Islands, Guangdong Province, China. II. *Studia Marina Sinica*, **15**: 101–232.

Case 2622

Pleuromma princeps Scott, 1894 (currently *Gaussia princeps*; Crustacea, Copepoda): proposed conservation of the specific name

Kuni Hulsemann

Biologische Anstalt Helgoland, Notkestrasse 31, D-2000 Hamburg 52, Federal Republic of Germany

Abstract. The purpose of this application is the conservation of the widely used copepod specific name *princeps* Scott, 1894, by ruling that it is not invalid, despite having been rejected before 1961 as a former junior secondary homonym of *Metridia princeps* Giesbrecht, 1889.

---

1. *Pleuromma princeps* was established by Scott (1894, p. 42) for a single male specimen. Giesbrecht (1897, p. 254) transferred the species to *Metridia* Boeck, 1865 solely on the grounds of Scott's information on the swimming legs.

2. The genus *Metridia* already contained *M. princeps* Giesbrecht, 1889, so that by transfer *M. princeps* (Scott) became a junior secondary homonym and therefore invalid (Art. 41 of the 1895 Règles, Art. 59b of the present Code). Giesbrecht proposed *M. scotti* as a replacement name for *M. princeps* (Scott); *M. princeps* Giesbrecht has remained in use for a species found in the deep waters of all oceans.

3. Wolfenden (1905, p. 5) erected the genus *Gaussia* to receive his new species *G. melanotica*, in Part I of his privately printed *Plankton Studies*. After the printing of his work, however, Wolfenden considered that *G. melanotica* was a junior synonym of *M. scotti*, and by means of printed adhesive labels he changed *melanotica* to *scotti* in the text (although he omitted to do so in the legend to Plate II); some 'uncorrected' copies exist. The name *melanotica* has not been used since 1905.

4. Sewell (1932, p. 270) introduced the combination *Gaussia princeps* (Scott) in accord with a then common interpretation of the rules (e.g. Richter, 1948, p. 196: 'A junior subjective (secondary) homonym ... enters validity again as soon as reassignment to different genera terminates the homonymy' [translation]); for a discussion of the early treatment of secondary homonyms see BZN **4**: 112–116 (1950). Following Sewell, after 1932 *Gaussia princeps* became the accepted name (see para. 6).

5. Article 59c of the 1964 Code (Article 59b of the 1985 edition) limited reinstatement of rejected junior secondary homonyms to those rejected after 1960. Accordingly, Saraswathy (1973b, p. 191) properly adopted *G. scotti* (Giesbrecht, 1897) as the valid name, even though earlier the same year (1973a, p. 335) she had used *G. princeps* (Scott, 1894) as valid.

6. However, a very large number of authors have used *G. princeps* (Scott) as valid: a list of 40 references between 1947 and 1986 (fifteen of them after Saraswathy, 1973b) has been given to the Commission Secretariat. *G. scotti* has been used only four times (apart from Saraswathy, only by Bowman, 1978, p. 114 and by Rao, 1979, p. 275) in the past half-century. The species has never been considered congeneric with *M. princeps*

Giesbrecht since 1905, and adoption now of the name *scotti* would cause quite unnecessary confusion.

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

(1) to use its plenary powers:
  (a) to rule that the specific name *princeps* Scott, 1894, as published in the binomen *Pleuromma princeps*, is not invalid by reason of its having been rejected before 1961 as a former secondary homonym of *Metridia princeps* Giesbrecht, 1889;
  (b) to suppress the specific name *melanotica* Wolfenden, 1905, as published in the binomen *Gaussia melanotica*, 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 *Gaussia* Wolfenden, 1905 (gender: feminine), type species by monotypy *Gaussia melanotica* Wolfenden, 1905 (a subjective synonym of *Pleuromma princeps* Scott, 1894 and of *Metridia scotti* Giesbrecht, 1897);

(3) to place on the Official List of Specific Names in Zoology the name *princeps* Scott, 1894, as published in the binomen *Pleuromma princeps* (by virtue of the proposal in (1)(a) above the present valid specific name of the type species of *Gaussia* Wolfenden, 1905);

(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the following names:
  (a) *melanotica* Wolfenden, 1905, as published in the binomen *Gaussia melanotica* and as suppressed in (1)(b) above;
  (b) *scotti* Giesbrecht, 1897, as published in the binomen *Metridia scotti*, a junior objective synonym of *princeps* Scott, 1894, as published in the binomen *Pleuromma princeps*, by effect of the proposed ruling in (1)(a) above.

Acknowledgement

I thank A. F. Campaner for his interest and help.

References

Bowman, T. E. 1978. The modified suture between segments 8 and 9 on the first antenna of some calanoid copepods. *Crustaceana*, **35**: 113–118.

Giesbrecht, W. 1897. Notizen zur Systematik der Copepoden. *Zoologischer Anzeiger*, **20**: 253–255.

Rao, T. S. S. 1979. Zoogeography of the Indian Ocean. Pp. 254–292 *in* van der Spoel, S. & Pierrot-Bults, A. C. (Eds.), *Zoogeography and diversity of plankton*. Edward Arnold, London, and Bunge Scientific Publishers, Utrecht.

Richter, R. 1948. *Einführung in die zoologische Nomenklatur durch Erläuterungen der internationalen Regeln*. 252 pp. Waldemar Kramer, Frankfurt.

Saraswathy, M. 1973a. Distribution of *Gaussia* (Copepoda, Metridiidae) in the upper 200 m in the Indian Ocean. Pp. 335–338 *in* Zeitzschel, B. (Ed.), *The biology of the Indian Ocean* (Ecological Studies 3). Springer, New York.

Saraswathy, M. 1973b. The genus *Gaussia* (Copepoda-Calanoida), with a description of *G. sewelli* sp. nov. from the Indian Ocean. Pp. 190–195 *in Handbook to the International Zooplankton Collections curated and processed at the Indian Ocean Biological Centre, Cochin, India*, vol. 5.

Scott, T. 1894. Report on the Entomostraca from the Gulf of Guinea collected by John Rattray, B.Sc. *Transactions of the Linnean Society of London*, Zoological Series, **6**: 1–161.

Sewell, R. B. S. 1932. The Copepods of Indian Seas. Calanoida. Part II. *Memoirs of the Indian Museum*, **10**: 223–407.

Wolfenden, R. N. 1905. *Plankton Studies*. Copepoda. Part 1. 24 pp. Rebman, London & New York.

Case 2568

ACRIDIDAE Karny, 1907, OEDIPODIDAE Walker, 1870 and LOCUSTIDAE Latreille, 1802 (Insecta, Orthoptera): proposed order of precedence

K. H. L. Key
Division of Entomology, CSIRO, G.P.O. Box 1700, Canberra 2601, Australia

Abstract. The purpose of this application is to conserve usage of the subfamily name of certain grasshoppers, OEDIPODINAE Walker, 1870 by giving it precedence over LOCUSTINAE Latreille, 1802 whenever the two are considered synonyms. Both subfamilies are normally placed in the family ACRIDIDAE Karny, 1907, and it is proposed that this name be given precedence over both senior names.

---

1. The first use of a name for the family groups in question was by Latreille (1802, p. 277) ('LOCUSTARIAE'). Its last use prior to that of Harz (1975, p. 440) was apparently that by Kirby (1910, p. 194) (as LOCUSTINAE). The name OEDIPODINAE was published by Walker (1870, p. 721) (as OEDIPODIDAE) and has been used subsequently by many authors up to the present time.

2. The period between the use of LOCUSTINAE by Kirby (1910) and its resurrection by Harz (1975) is 65 years. It is difficult to understand how Harz could have failed to see that its resurrection would have a greatly destabilizing effect and thus would require action under Article 23b. Even before 1910, the name based on *Oedipoda* had been the one predominantly used ever since its introduction by Walker in 1870, notably in the monographic works of Stål (1873, p. 129), de Saussure (1884, p. 39; 1888, p. 14) and Brunner von Wattenwyl (1893, p. 128). From 1910 until 1975, during which time OEDIPODINAE had held the field exclusively, it was used in very many papers, involving such major reference works as those of Blatchley (1920), Sjöstedt (1921, 1936), Bei-Bienko & Mishchenko (1951), Brues, Melander & Carpenter (1954), Borror & DeLong (1954), Richards & Davies (1957), Uvarov (1966), CSIRO (1970) and Dirsh (1975). The full references are held by the Secretariat.

3. In resurrecting LOCUSTINAE, Harz (1975) made the fundamental error of placing its type genus, *Locusta* Linnaeus, 1758, in the tribe OEDIPODINI together with *Oedipoda* Latreille, 1829. This must raise the question as to whether he was really alert to the implications of his use of 'LOCUSTINAE'.

4. The genera *Acrida* Linnaeus, 1758 (p. 427), *Locusta* Linnaeus, 1758 (p. 431) and *Oedipoda* Latreille, 1825 (p. 415) have for many years been placed in the family ACRIDIDAE. This family name based on *Acrida* was introduced by Karny (1907, p. 276), and so is junior to OEDIPODIDAE Walker, 1870 (p. 721) and to LOCUSTIDAE Latreille, 1802 (p. 277). It is unfortunate that the established usage of these names is in an order of precedence which is the opposite of their date priorities. The history is extremely confused due to the existence of the generic names *Acrydium* and *Acridium*; both names are junior to *Acrida* Linnaeus, 1758. *Acrydium* was made available by Müller (1764, p.

24) and the spelling *Acridium* was given by Müller in 1776 (p. 100), and subsequently family-group names were based on both words. Neither of these names has been used as valid for very many years. Both have been confused with *Acrida* and its derivatives, and future stability would be helped by their suppression.

5. The first description of the genus *Oedipoda* was by Latreille (1825, p. 415) where he proposed the name in the French form *Oedipode*. This is valid under Article 11b (ii) of the present (1985) Code. In 1829, in Cuvier's *Règne Animal* (vol. 5, p. 188), Latreille used the spelling *Oedipoda* ('Elles appartiennent au genre que j'ai nommé Oedipode (Oedipoda)'). The spelling of the name as *Oedipode* has not been used since its proposal and the name *Oedipoda* Latreille, 1829 was placed on the Official List of Generic Names by Opinion 149 of 1943. *Acrida* and *Locusta* were placed on the Official List by Opinions 299 (1954) and 158 (1945) respectively.

6. It seems very clear that, in the interests of stability, precedence for OEDIPODINAE as the name of a taxon containing both *Locusta* Linnaeus, 1758 and *Oedipoda* Latreille, 1829 (but not *Acrida* Linnaeus, 1758) is desirable. Such precedence, of course, leaves open the option of employing LOCUSTINAE or its tribal equivalent for a taxon containing *Locusta* but not *Oedipoda*. Meanwhile, in conformity with Article 80a of the Code, existing usage is to be maintained, with the order of precedence of the family-group names in question to be as proposed below.

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

(1) to use its plenary powers to rule that the order of precedence of the following family-group names is, whenever any of them are considered to be synonyms, to be:
   (a) ACRIDIDAE Karny, 1907;
   (b) OEDIPODIDAE Walker, 1870;
   (c) LOCUSTIDAE Latreille, 1802;

(2) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
   (a) *Acridium* Müller, 1776;
   (b) *Acrydium* Müller, 1764;
   (c) any family-group names based on *Acridium* Müller, 1776 or *Acrydium* Müller, 1764;

(3) to place on the Official List of Family–Group Names in Zoology the following names:
   (a) ACRIDIDAE Karny, 1907 (type genus *Acrida* Linnaeus, 1758), with the endorsement that it is to be given precedence over OEDIPODIDAE Walker, 1870 and LOCUSTIDAE Latreille, 1802 whenever any of these names are considered synonyms;
   (b) OEDIPODIDAE Walker, 1870 (type genus *Oedipoda* Latreille, 1829), with the endorsement that it is to be given precedence over LOCUSTIDAE Latreille, 1802, but not to be given priority over ACRIDIDAE Karny, 1907, whenever any of these names are considered synonyms;
   (c) LOCUSTIDAE Latreille, 1802 (type genus *Locusta* Linnaeus, 1758), with the endorsement that it is not to be given priority over OEDIPODIDAE Walker, 1870 or ACRIDIDAE Karny, 1907, whenever any of these names are considered synonyms;

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
   (a) *Acridium* Müller, 1776, as suppressed in (2)(a) above;
   (b) *Acrydium* Müller, 1764, as suppressed in (2)(b) above.

References

Brunner von Wattenwyl, C. 1893. Révision du système des Orthoptères et description des espèces rapportées par M. Leonardo Fea de Birmanie. *Annali del Museo Civico di Storia Naturale di Genova*, (2) **13**: 1–230.

Harz, K. 1975. *Die Orthopteren Europas/The Orthoptera of Europe*. Vol. II. (Series Entomologica 11). 939 pp. Junk, The Hague.

Karny, H. 1907. Orthopteranfauna des Sudans. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften*, **116**(1A): 267–378.

Kirby, W. F. 1910. *A Synonymic Catalogue of Orthoptera*. Vol. 3. Part 2 (*Locustidae vel Acridiidae*). 674 pp. British Museum (Natural History), London.

Latreille, P. A. 1802. *Histoire naturelle générale et particulière des Crustacés et des Insectes*. Vol. 3. 467 pp. Dufart, Paris.

Latreille, P. A. 1825. *Familles naturelles du règne animal, exposées succintement et dans un ordre analytique, avec l'indication de leurs genres*. 570 pp. Baillière, Paris.

Latreille, P. A. 1829. *In* Cuvier, G. 1829–1830, *Le Règne Animal distribué après son organisation*. Ed. 2, Vol. 5. 556 pp., 20 pls. Paris.

Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.

Müller, O. F. 1764. *Fauna Insectorum Fridrichsdalina* . . . 96 pp. Hafniae et Lipsiae.

Müller, O. F. 1776. *Zoologiae Danicae Prodromus* . . . 282 pp. Havniae.

Saussure, H. de, 1884. Prodromus Oedipodiorum, insectorum ex ordine Orthopterorum. *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève*, **28**(9): 1–254.

Saussure, H. de, 1888. Additamenta ad Prodromum Oedipodiorum. *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève*, **30**(1): 1–180.

Stål, C. 1873. *Recensio Orthopterorum. Revue Critique des Orthoptères décrit par Linné, de Geer et Thunberg*. Vol. 1. 154 pp. Norstedt & Söner, Stockholm.

Walker, F. 1870. *Catalogue of the specimens of Dermaptera Saltatoria in the Collection of the British Museum*. Part 4, pp. 605–809. British Museum, London.

Case 2618

Bruchus Linnaeus, 1767, *Ptinus* Linnaeus, 1767 and *Mylabris* Fabricius, 1775 (Insecta, Coleoptera): proposed conservation

L. Borowiec

Department of Zoology, Agricultural University, Cybulskiego 20, 50–205 Wrocław, Poland

Abstract. The purpose of this application is to conserve the generic names *Bruchus* Linnaeus, 1767, *Ptinus* Linnaeus, 1767 and *Mylabris* Fabricius, 1775 by the suppression of *Bruchus* Müller, 1764 and *Mylabris* Müller, 1764. *Bruchus* Linnaeus is the type genus of the BRUCHIDAE Latreille, 1802, which includes a number of important seed-eating beetles; *Ptinus* also includes species of economic importance.

---

1. Linnaeus (1758, p. 356) proposed the name *Dermestes pisorum* for a seed beetle. In 1767 (p. 604), he used the name *Bruchus* and listed seven species in the genus, including *B. pisi* (= *D. pisorum*). Latreille (1810, p. 430) designated *B. pisi* 'Fab.' (i.e. Linnaeus, 1767) as the type species of *Bruchus*. *Bruchus* Linnaeus, 1767 is the type genus of the family BRUCHIDAE Latreille, 1802 (p. 192).

2. *Bruchus* Linnaeus, 1767 is currently in use for the main genus of seed beetles, encompassing several commonly-known pests of leguminous plants and of great economic importance, but the name is threatened by the senior homonym *Bruchus* Müller, 1764 (p. xv) (redescribing *Bruchus* Geoffroy, 1762, proposed in a work that has been placed on the Official Index of Rejected and Invalid Works in Zoology (Opinion 228; BZN **4**: 209)), and by the senior objective synonym *Mylabris* Müller, 1764 (see paragraph 5 below).

3. Scopoli (1763, p. 22) described the genus *Laria* with four species, one of which, *L. salicis*, was listed by Linnaeus (1767, p. 604) as a synonym of *Bruchus pisi*. Following Bedel (1901, p. 341), *Laria* was used for some years by authors as the name for the seed beetles (family LARIIDAE Bedel, 1901). However, the genus had no designated type species until Bridwell (1932, p. 104) selected *L. dulcamarae*, thereby fixing the genus in the NITIDULIDAE and removing its subjective synonymy with *Bruchus* Linnaeus, 1767 (Pope, 1956, p. 45).

4. *Ptinus* Linnaeus, 1767 has been in general use for over 100 years for the spider beetles, significant storehouse pests. Latreille (1810, p. 427) designated *Ptinus fur* 'Fab.' (i.e. *Cerambyx fur* Linnaeus, 1758, p. 393) as the type species, and *Ptinus* is the type genus of the family PTINIDAE Latreille, 1802 (p. 112). The name is threatened by the senior objective synonym *Bruchus* Müller, 1764, for which Müller (1776) listed three species, including *B. fur*. Bridwell (1932, p. 104) designated *Cerambyx fur* as the type species of *Bruchus* Müller, 1764.

5. *Mylabris* Fabricius, 1775 (p. 261) is the generic name in current use for some oil beetles (family MELOIDAE Gyllenhal, 1810); Latreille (1810, p. 430) designated *Mylabris cichorii* 'Fab.' (i.e. *Meloe cichorii* Linnaeus, 1758, p. 419) as the type species. Bridwell (1932, p. 104) designated *Bruchus pisi* Linnaeus, 1767 as the type species of *Mylabris*

Müller, 1764 (p. xiv). *Mylabris* Fabricius, 1775 is threatened by the senior homonym *Mylabris* Müller, 1764 (a senior subjective synonym of *Bruchus* Linnaeus, 1767).

6. It has been said (Crotch, 1870, pp. 43 and 44) that Linnaeus treated Geoffroy's work in a dismissive fashion and reused many of his names in a different sense, including *Bruchus* and *Mylabris*, simply out of rivalry and that the 'ill-concealed jealousy of Linnaeus is only too evident in his 12th edition'.

7. The names *Bruchus* Müller, 1764 and *Mylabris* Müller, 1764 (both originating from Geoffroy, 1762) have remained unused.

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

(1) to use its plenary powers to suppress the following generic names for the purposes of both the Principle of Priority and the Principle of Homonymy:
  (a) *Bruchus* Müller, 1764 and all other uses of this name before the publication of *Bruchus* Linnaeus, 1767;
  (b) *Mylabris* Müller, 1764 and all other uses of this name before the publication of *Mylabris* Fabricius, 1775;

(2) to place on the Official List of Generic Names in Zoology the following names:
  (a) *Bruchus* Linnaeus, 1767 (gender: masculine), type species by designation by Latreille (1810) *Bruchus pisi* 'Fab.' (i.e. Linnaeus, 1767, = *Dermestes pisorum* Linnaeus, 1758);
  (b) *Ptinus* Linnaeus, 1767 (gender: masculine), type species by designation by Latreille (1810) *Ptinus fur* 'Fab.' (= *Cerambyx fur* Linnaeus, 1758);
  (c) *Mylabris* Fabricius, 1775 (gender: feminine), type species by designation by Latreille (1810) *Mylabris cichorii* 'Fab.' (= *Meloe cichorii* Linnaeus, 1758);

(3) to place on the Official List of Specific Names in Zoology the following names:
  (a) *pisorum* Linnaeus, 1758, as published in the binomen *Dermestes pisorum* (valid specific name of the type species of *Bruchus* Linnaeus, 1767);
  (b) *fur* Linnaeus, 1758, as published in the binomen *Cerambyx fur* (specific name of the type species of *Ptinus* Linnaeus, 1767);
  (c) *cichorii* Linnaeus, 1758, as published in the binomen *Meloe cichorii* (specific name of the type species of *Mylabris* Fabricius, 1775);

(4) to place on the Official List of Family-Group Names in Zoology the following names:
  (a) BRUCHIDAE Latreille, 1802 (type genus *Bruchus* Linnaeus, 1767);
  (b) PTINIDAE Latreille, 1802 (type genus *Ptinus* Linnaeus, 1767);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
  (a) *Bruchus* Müller, 1764, as suppressed in (1) (a) above;
  (b) *Mylabris* Müller, 1764, as suppressed in (1) (b) above.

References

Bedel, L. 1901. Faune des Coléoptères du Bassin de la Seine. *Annales de la Société Entomologique de France (Hors Série)*, Paris. Phytophaga. [Family LARIIDAE: **69** (3–4, 1900): 341–356; **70** (1, 1901): 357–366]. (Reprinted as *Société Entomologique de France (Publications Hors Série)*. vol. 5, pp. 341–366).

Bridwell, J. C. 1932. The subfamilies of the Bruchidae (Coleoptera). *Proceedings of the Entomological Society of Washington*, **34**(6): 100–106.

Crotch, C. R. 1870. The genera of Coleoptera studied chronologically (1735–1801). *The Transactions of the Entomological Society of London.* **1870**(1): 41–52.

Fabricius, J. C. 1775. *Systema Entomologiae* . . . , xxxii, 832 pp. Flensburg and Lipsiae.

Geoffroy, E. L. 1762. *Histoire abrégée des Insectes qui se trouvent aux environs de Paris,* vol. 1, 523 pp. Durand, Paris.

Gyllenhal, L. 1810. *Insecta Suecica,* vol. 1, pars II. Scaris.

Latreille, P. A. 1802. *Histoire Naturelle, générale et particulière, des Crustacés et des Insectes,* vol. III. xii, 468 pp. F. Dufart, Paris.

Latreille, P. A. 1810. *Considérations générales sur l'ordre naturel des Animaux composant les classes des Crustacés, des Arachnides et des Insectes; avec un Tableau méthodique de leurs genres, disposés en familles.* 444 pp. F. Schoell, Paris.

Linnaeus, C. 1758. *Systema Naturae,* Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.

Linnaeus, C. 1767. *Systema Naturae,* Ed. 12, vol. 1(2): 533–1327. Salvii, Holmiae.

Müller, O. F. 1764. *Fauna Insectorum Fridrichsdalina* . . . xxiv, 96 pp. Hafniae et Lipsiae.

Pope, R. D. 1956. The family name Bruchidae (Col.). *The Entomologist's Monthly Magazine,* **92**: 45–46.

Scopoli, J. A. 1763. *Entomologia Carniolica* . . . . 423 pp. Joannis Thomae Trattner, Vindobonae.

Case 2627

Coryphium angusticolle Stephens, 1834 (Insecta, Coleoptera): proposed conservation of both the generic and specific names

L. Zerche

Institut für Pflanzenschutzforschung Kleinmachnow der Akademie der Landwirtschaftswissenschaften der DDR, Bereich Eberswalde, Schicklerstrasse 5, Eberswalde–Finow 1, DDR 1300.

Abstract. The purpose of this application is the conservation of both the rove beetle generic name *Coryphium* Stephens, 1834 (OMALIINAE, STAPHYLINIDAE), by suppression of its senior synonym *Harpognatus* Wesmael, 1833, and the specific name *angusticolle* Stephens, 1834, by suppression of its senior synonym *robynsii* Wesmael, 1833.

---

1. Wesmael (1833) described *Harpognatus* with its type species *robynsii* by monotypy. These descriptions have been overlooked because of their unusual place in a universal encyclopedia. In 1834 the generic name was incorrectly spelt *Harpognathus* in an article indexed under Wesmael, although the text referred to Westmael [sic]. The incorrectly spelt form has since been used only by Lacordaire (1854, p. xix), although many authors, including Campbell (1978, p. 26), have quoted it as a synonym of *Coryphium*. The binomen *Harpognatus robynsii* has never been used.

2. In 1834 (p. 344) Stephens described *Coryphium* with its type species *angusticolle* by monotypy. *Coryphium angusticolle* has been used by all subsequent authors except Wesmael (1834) and Lacordaire (1854). At least 13 different authors have applied this binomen during the last 10 years; a list has been given to the Commission Secretariat.

3. The lectotypes for both *Harpognatus robynsii* and *Coryphium angusticolle*, here designated, are conspecific. The former, a female, is labelled "coll. Wesmael/ H. Robynsii Wesm./Harpognathus Robynsii Wesm/Type/Coryphium angusticolle Steph./Lectotypus Harpognatus robynsii Wesmael, 1833 Zerche desg. 1986/ Coryphium angusticolle STEPH. Zerche det. 1987". The latter, a male, is labelled "6/Coryphium angusticolle/Lectotype/Lectotypus Coryphium angusticolle Stephens, 1834 Zerche desg. 1987". The former is in the Institut Royal des Sciences Naturelles de Belgique, Bruxelles, and the latter is in the British Museum (Natural History).

4. According to the Principle of Priority the completely unknown binomen *Harpognatus robynsii* would have to be applied instead of *Coryphium angusticolle*.

5. *Coryphium* is the basis of the family-group name CORYPHIINI Portevin (1929, p. 430) in which 21 nominal taxa of the species group have been described.

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

(1) to use its plenary powers to suppress the generic and specific names *Harpognatus* Wesmael, 1833 and *robynsii* Wesmael, 1833, as published in the binomen *Harpognatus robynsii*, 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 *Coryphium* Stephens, 1834 (gender: neuter), type species by monotypy *Coryphium angusticolle* Stephens, 1834;
(3) to place on the Official List of Specific Names in Zoology the name *angusticolle* Stephens, 1834, as published in the binomen *Coryphium angusticolle* (specific name of the type species of *Coryphium* Stephens, 1834);
(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Harpognatus* Wesmael, 1833, as suppressed in (1) above;
(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Harpognathus* Wesmael, 1834, an incorrect spelling of *Harpognatus* Wesmael, 1833;
(6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *robynsii* Wesmael, 1833, as published in the binomen *Harpognatus robynsii* and as suppressed in (1) above.

Acknowledgements
I wish to thank Dr L. Baert of the Institut Royal des Sciences Naturelles de Belgique, Bruxelles, and Mr P. Hammond, of the British Museum (Natural History), London, for lending the type material.

References

Campbell, J. M. 1978. A Revision of the North American Omaliinae (Coleoptera, Staphylinidae). *In* Morrison, P. E. (Ed.), *Memoirs of the Entomological Society of Canada,* no. 106.
Lacordaire, M. T. 1854. Séance du 8 mars 1854. *Annales de la Société Entomologique de France,* Ser. 3.**2,** xviii–xix.
Portevin, G. 1929. *Histoire naturelle des Coléoptères de France.* I. Adephaga, Polyphaga: Staphylinoidea. 649 pp. Lechevalier, Paris.
Stephens, J. F. 1834. *Illustrations of British Entomology . . ., Mandibulata.* Vol. 5. 1832–1835 (pp. 30–308: 1834). 448 pp. Baldwin & Cradock, London.
Wesmael, C. 1833. Description d'un nouveau genre d'Insecte Coléoptère. *Recueil Encyclopédique Belge,* Bruxelles, pp. 119–123.
Wesmael, C. 1834. Nouveau genre d'insecte Coléoptère. *L'Institut (Journal général des Sociétés et Travaux scientifiques de la France et de l'Etranger),* **2** (42): 76.

Case 2632

Tachina orbata Wiedemann, 1830 (currently *Peribaea orbata*; Insecta, Diptera): proposed confirmation of neotype designation

R. W. Crosskey
Department of Entomology, British Museum (Natural History), London SW7 5BD, U.K.

H. Shima
Biological Laboratory, College of General Education, Kyushu University, Ropponmatsu, Fukuoka 810, Japan

Abstract. The purpose of this application is to request validation of an existing neotype designation for *Tachina orbata* Wiedemann, 1830, and so protect the use of this name in its current sense for a well known species of TACHINIDAE (SIPHONINI).

---

1. Wiedemann (1830, pp. 336–337) described *Tachina orbata* from 'Ostindien', a vague locality recorded for many of his Diptera that either indicates eastern India or the East Indies. He had at least two specimens, because 'Im Königlichen Museum und in meiner Sammlung' (both depositories in Copenhagen) appeared in the original description.

2. Zimsen (1954) reported in her list of Wiedemann's types in Copenhagen that those of *Tachina orbata* are lost. They have not been discovered since, and it remains impossible to be sure of the identity of this nominal species from original material.

3. Brauer & Bergenstamm (1891, p. 355) studied a specimen in the von Winthem collection (Naturhistorisches Museum, Vienna) which they recorded (p. 435) as the 'Type'. Although this specimen was almost certainly identified by Wiedemann it is assumed to lack type status (Crosskey, 1966, p. 107 [101]). Wiedemann was usually careful to record specimens of his new species as 'In v. Winthem's Sammlung' whenever this applied, but did not do so for *orbata* (see 1 above).

4. In 1965 an examination of the von Winthem specimen (by R.W.C.) showed that it belongs to a species of TACHINIDAE, tribe SIPHONINI, that is widespread in the Old World tropical and subtropical areas. At that time several names were known to apply to this species, although the synonymies had not been formally established. In the absence of any syntype it was decided to apply the name *orbata* to this familiar species because the specimen of *orbata* in Vienna was probably seen (and perhaps labelled) by Wiedemann and it fitted most of the brief original description. The new combination *Strobliomyia orbata* (Wiedemann, 1830) was published, and several twentieth century names for the same species listed as new synonyms (Crosskey, 1966, p. 107 [101], 110 [104]). The present combination *Peribaea orbata* (Wiedemann) was established later (Crosskey, 1973, p. 81, p. 138), after it had been found that Mesnil (1963, p. 803) had been in error to treat *Peribaea* Robineau-Desvoidy, 1863 as preoccupied — on which mistaken ground he used the junior synonym *Strobliomyia* Townsend, 1926 as the valid generic name.

5. Following the decision to apply the name to the common siphonine represented by the von Winthem specimen a neotype was designated by one of us (Crosskey, 1967, p. 106) for *Tachina orbata* Wiedemann, so permitting it to be distinguished from superficially similar congeneric species by objective comparison of types. Because of its imperfect condition and incomplete data the von Winthem specimen was unsuitable for designation, and a recently collected specimen from eastern India was chosen as neotype instead. The specimen bears handwritten labels reading 'Azra Assam Dec 63' and 'Ex caterpillar feeding on *Fossia* sp.', a collection registration number of the Commonwealth Institute of Entomology reading 'C.I.E. COLL. No. 19661', a circular red-bordered 'NEOTYPE' label, and a designation label reading 'Tachina orbata Wied. NEOTYPE ♀ designated by R. W. Crosskey 1967 (Proc. R. ent. Soc. Lond. (B)36:106)'. It is in the British Museum (Natural History), and is accompanied by its puparium. The designation is valid under the Code and conforms to Article 75; the characters used to differentiate the species had been given previously in the discussion of the von Winthem specimen (Crosskey, 1966) and so were not repeated in the 1967 paper.

6. Since 1967 the name *orbata* has been applied to the species represented by the neotype. This species has not been redescribed, however, under the name *orbata* because an excellent description by Mesnil (1963, pp. 804–806) has been available using the name *Strobliomyia aegyptia* (Villeneuve, 1912); the latter name was synonymised with *orbata* after a lectotype had been designated for it and compared with the *orbata* neotype (Crosskey, 1966, pp. 108, 110). For the past twenty years the siphonine species concerned has been universally called *orbata*. This name has been widely disseminated as the result of routine identification and used as the valid name for the siphonine in published literature, notably in major regional catalogues (Crosskey, 1973, 1977, 1980; Herting, 1984) and other faunal works (e.g. Crosskey, 1976; Dear & Crosskey, 1982; Shima, 1981).

7. In the opinion of the late Dr L. P. Mesnil (unpublished and expressed in correspondence to R.W.C. and H.S.) the neotype designation for *orbata* was improper because of a discrepancy in the wing venation of the species represented by the neotype and Wiedemann's description. In *orbata* as interpreted by the neotype the hind cross-vein is present (figure in Crosskey, 1984) whereas the original description implies that it is absent — "Spitzenqueerader einen stumpfen und abgerundeten Winkel bildend, die gewöhnliche Queerader ungewöhnlich hoch liegend, die mittlere [presumably the hind cross-vein] gar nicht vorhanden". If this is taken as unambiguous evidence that Wiedemann's *orbata* lacked the hind cross-vein (a point that by oversight was not noted when the neotype was designated) then it is likely that the species he described belonged to the NEAERINI rather than the SIPHONINI; loss of the hind cross-vein is common in NEAERINI but very rare (though known in at least one species) in SIPHONINI.

8. The discrepancy to which Mesnil called our attention casts doubt on whether Wiedemann's nominal species was correctly identified. Quite likely it was not. But if the name is rejected from the SIPHONINI because of the discrepancy it has then to be left in taxonomic limbo, as a nomen dubium in NEAERINI. We see no advantage in this, and think it preferable in the interests of stability to keep the name *orbata* Wiedemann for the common and widespread species of SIPHONINI to which it has been applied since the neotype was designated.

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

(1) to rule that the specific name *orbata* Wiedemann, 1830, as published in the binomen *Tachina orbata*, is to be interpreted by reference to the specimen designated as neotype by Crosskey (1967);

(2) to place on the Official List of Specific Names in Zoology the name *orbata* Wiedemann, 1830, as published in the binomen *Tachina orbata*, and as designated by the neotype designated by Crosskey (1967).

References

Brauer, F. & Bergenstamm, J. E. von, 1891. Die Zweiflügler des Kaiserlichen Museums zu Wien. V. Vorarbeiten zu einer Monographie der Muscaria schizometopa (exclusive Anthomyidae). Pars II. *Denkschriften der Mathematisch-Naturwissenschaftlichen Classe der Kaiserlichen Akademie der Wissenschaften*, **58**: 305–446.

Crosskey, R. W. 1966. New generic and specific synonymy in Australian Tachinidae (Diptera). *Proceedings of the Royal Entomological Society of London*, (B) **35**: 101–110 (pagination erroneously printed as 95–104 in periodical part and reprints).

Crosskey, R. W. 1967. New generic and specific synonymy in Oriental Tachinidae (Diptera). *Proceedings of the Royal Entomological Society of London*, (B) **36**: 95–108.

Crosskey, R. W. 1973. A conspectus of the Tachinidae (Diptera) of Australia, including keys to the supraspecific taxa and taxonomic and host catalogues. *Bulletin of the British Museum (Natural History)* (Entomology), Supplement **21**: 1–221.

Crosskey, R. W. 1976. A taxonomic conspectus of the Tachinidae (Diptera) of the Oriental Region. *Bulletin of the British Museum (Natural History)* (Entomology), Supplement **26**: 1–357.

Crosskey, R. W. 1977. Family Tachinidae. Pp. 586–697, *in* Delfinado, M. D. & Hardy, D. E. (Eds.), *A catalog of the Diptera of the Oriental Region*. Volume III. Suborder Cyclorrhapha (excluding Division Aschiza). x, 854 pp. University Press of Hawaii, Honolulu.

Crosskey, R. W. 1980. Family Tachinidae. Pp. 822–882, *in* Crosskey, R. W. (Ed.), *Catalogue of the Diptera of the Afrotropical Region*. 1437 pp. British Museum (Natural History), London.

Crosskey, R. W. 1984. Annotated keys to the genera of Tachinidae (Diptera) found in tropical and southern Africa. *Annals of the Natal Museum*, **26**: 189–337.

Dear, J. P. & Crosskey, R. W. 1982. A taxonomic review of the Tachinidae (Insecta, Diptera) of the Philippines. *Steenstrupia*, **8**: 105–155.

Herting, B. 1984. Catalogue of Palearctic Tachinidae (Diptera). *Stuttgarter Beiträge zur Naturkunde*, Serie A (Biologie), **369:** 1–228.

Mesnil, L. P. 1963. Larvaevorinae (Tachininae) [part]. *Die Fliegen der Palaearktischen Region*, **64g**: 801–848.

Shima, H. 1981. Description of a new species of *Peribaea* from New Guinea, with notes on *Peribaea orbata* (Diptera: Tachinidae). *Pacific Insects*, **23**: 445–450.

Wiedemann, C. R. W. 1830. *Aussereuropäische zweiflügelige Insekten*, **2**, xii, 684 pp. Hamm.

Zimsen, E. 1954. The insect types of C. R. W. Wiedemann in the Zoological Museum in Copenhagen. *Spolia Zoologica Musei Hauniensis*, **14**: 1–43.

Case 2628

Tenthredo zonula Klug, 1817 (Insecta, Hymenoptera): proposed conservation of the specific name

Andreas Taeger

Institut für Pflanzenschutzforschung Kleinmachnow der Akademie der Landwirtschaftswissenschaften der DDR, Bereich Eberswalde, Schicklerstrasse 5, Eberswalde–Finow 1, DDR 1300.

Abstract. The purpose of this application is the conservation of the sawfly name *Tenthredo zonula* Klug, 1817 by suppression of its senior synonym *Tenthredo bicinctaflava* Christ, 1791. A lectotype is designated for *T. zonula*.

---

1. In 1791 (pp. 442–443) Christ described *Tenthredo bicincta flava*, which is properly written *T. bicinctaflava* (Art. 11h(v) of the Code). Dalla Torre (1894, p. 69) and Muche (1968, p. 29) are the only subsequent authors who have listed this name (in its original spelling). Dalla Torre listed the name as a junior subjective synonym of *Tenthredo fasciata* Scopoli, 1763 (a junior primary homonym of *Tenthredo fasciata* Linnaeus, 1758). Muche considered both *T. bicinctaflava* Christ and *T. fasciata* Scopoli as senior synonyms of *Tenthredo zonula* Klug, 1817.

2. The types of *T. bicinctaflava* are lost. The lectotype of *T. zonula* (here designated and selected from three male and three female syntypes) is labelled, (red label): 'Type'. Deutschland Klug S.' and (red label): 'Lectotypus *Tenthredo zonula* Klug ♂ design. A. Taeger 87'. It is in the collection of the Zoologisches Museum der Humboldt-Universität zu Berlin. Comparing the description of *T. bicinctaflava* with the lectotype of *T. zonula*, there is no doubt that both names refer to the same species, so that *bicinctaflava* is a senior subjective synonym of *T. zonula*.

3. Christ (1791) included the names *T. bicincta* Linnaeus and *T. flava* 'Scopoli' (recte Poda) as well as his new name *T. bicinctaflava*.

4. According to Sherborn (1922: Bibliography, p. xxiii) Klug first published the name *T. zonula* in 1817.

5. Instead of *T. bicinctaflava*, Konow (1905) and Enslin (1910) used the name '*T. bicincta* Christ', which is a junior primary homonym of *Tenthredo bicincta* Linnaeus, 1767. Konow placed it as a junior subjective synonym of *T. fasciata* Scopoli, and Enslin as a senior subjective synonym of *T. zonula*.

6. Since 1910 (Enslin, 1910) the name *T. zonula* has been used by all subsequent authors, while the name *T. bicinctaflava* has never been treated as a valid species since its description. Because the species is one of the most common sawflies in Europe, the name *T. zonula* is firmly established in taxonomic publications treating European TENTHREDINIDAE, and in regional lists and catalogues. This name has been applied by more than 10 different authors during the last 10 years, and a representative list has been given to the Commission Secretariat.

7. According to the Principle of Priority (Art. 23a of the Code) the older name *T. bicinctaflava* would have to be applied instead of *T. zonula*.

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

(1) to use its plenary powers to suppress the specific name *bicinctaflava* Christ, 1791, as published in the binomen *Tenthredo bicinctaflava*, 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 *zonula* Klug, 1817, as published in the binomen *Tenthredo zonula*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *bicinctaflava* Christ, 1791, as published in the binomen *Tenthredo bicinctaflava* and as suppressed in (1) above.

References

Christ, J. L. 1791. *Naturgeschichte, Klassification und Nomenclatur der Insekten vom Bienen, Wespen und Ameisengeschlecht*. 535 pp., 60 pl. Frankfurt.

Dalla Torre, C. G. de, 1894. *Catalogus Hymenopterorum I, Tenthredinidae incl. Uroceridae*. 459 pp. Lipsiae.

Enslin, E. 1910. Das Tenthrediniden-Genus Allantus Jur. *Revue Russe d'Entomologie*, **10**: 335–372.

Klug, F. 1817. Die Blattwespen nach ihren Gattungen und Arten zusammengestellt (Fortsetzung). *Der Gesellschaft Naturforschender Freunde zu Berlin Magazin für die neuesten Entdeckungen in der gesammten Naturkunde*, Berlin, **8** (1814): 110–144.

Konow, Fr. W. 1905. Hymenoptera, Fam. Tenthredinidae. *In* Wytsman, P. (Ed.). *Genera Insectorum* **29**: 1–176, 3 pl. Bruxelles.

Muche, W. H. 1968. Die Blattwespen Deutschlands–I. Tenthredininae (Hymenoptera). *Entomologische Abhandlungen aus dem Staatlichen Museum für Tierkunde in Dresden*, **36** (Suppl. 1967–1970): 1–60.

Scopoli, J. A. 1763. *Entomologia Carniolica*. 423 pp. Vindobonae.

Sherborn, C. D. 1922. *Index Animalium* 1801–1850. Sect. II (Introduction, Bibliography): cxxxi pp.

Case 2625

Saccopharynx Mitchill, 1824 (Osteichthyes, Saccopharyngiformes): proposed conservation

William N. Eschmeyer

Department of Ichthyology, California Academy of Sciences, Golden Gate Park, San Francisco, California 94118, U.S.A.

C. Richard Robins

Institute of Marine and Atmospheric Sciences, University of Miami, 4800 Rickenbacker Causeway, Miami, Florida 33149, U.S.A.

Abstract. The purpose of this application is to conserve the generic name *Saccopharynx* Mitchill, 1824, for a widely-known genus of gulper eels. It was technically proposed as a replacement name for *Stylephorus* Shaw, 1791, but has been recognised as valid and distinct from *Stylephorus* for more than 150 years.

---

1. Mitchill (1824, p. 82) provided a lengthy description of an unusual deep sea fish which he did not name. He compared it with a bizarre species described by Shaw (1791, p. 90) as *Stylephorus chordatus*. Mitchill indicated that his specimen agreed with Shaw's specimen in many major features, but Mitchill dismissed portions of Shaw's account as inaccurate. For example, Shaw reported that his specimen had eyes on stalks (hence the genus name *Stylephorus*), but Mitchill (p. 86) states: 'The circumstance of their [eyes] standing on peduncles or footstalls is so much at variance with what occurs in other animals, that I should hesitate little in declaring their unusual form to have been the result of accident or disease.'

2. At the end of his description, Mitchill concludes by stating (p. 86): 'As the generic name proposed by Shaw is probably derived from an accidental character, I venture to substitute for it the name *Saccopharynx* in allusion to the pouch-like form of its throat.' Richardson (1836, p. 272) recognised the problem and concluded that 'Dr. Mitchill, believing his fish to be the *stylephorus chordatus* of Shaw, appears to have intended to retain the specific appellation, and merely to change the generic name to *saccopharynx*, which having the priority of *ophiognathus* must be adopted.' Mitchill's *Saccopharynx* is technically a replacement name for *Stylephorus* Shaw, although not recognised as such by current workers.

3. Mitchill's fish was in fact different from Shaw's and his genus is now placed in a separate order, the Saccopharyngiformes, in an entirely different division of fishes (the Elopomorpha) from the STYLEPHORIDAE (Robins, in press). *Stylephorus* has long been treated as a valid genus in a monotypic family STYLEPHORIDAE (see Hulley, 1986, p. 404).

4. Cuvier (1829, p. 355) provided a species name, *flagellum*, for Mitchill's specimen and *Saccopharynx flagellum* Cuvier has been continuously (but erroneously) regarded as the valid type species of *Saccopharynx* auctorum. The genus has been treated as valid since Cuvier and is the nominotypical genus of the family SACCOPHARYNGIDAE Bleeker, 1859 (p. xxxiii). The most recent review of the group is by Nielsen & Bertelsen (1985).

5. *Ophiognathus* Harwood, 1827 (p. 51; type species, by monotypy, *Ophiognathus ampullaceus*), described two years after Mitchill's account and two years before Cuvier's addition of a specific name, is available for *Saccopharynx* auctorum but is not in current use.

6. Although gulpers or gulper eels generally, and *Saccopharynx* specifically, are rather rarely caught and little known biologically, their bizarre appearance and numerous adaptations for bathypelagic life have attracted seemingly inordinate attention. Thus, they are written about in unabridged dictionaries and encyclopedias, and all general works on life in the deep ocean include an account of them. The popular literature which includes mention of *Saccopharynx* is extensive and includes books for children. *Saccopharynx* has been uniformly used for that genus of gulper eels. We are unaware of any primary use of *Ophiognathus* for these eels in this century and this probably holds true for the last half of the 19th century as well. The use of SACCOPHARYNGIDAE is similarly entrenched.

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

(1) to use its plenary powers to suppress the specific name *ampullaceus* Harwood, 1827, as published in the binomen *Ophiognathus ampullaceus*, for the purposes of the Principle of Priority but not for those of the Principle of Homonymy;

(2) to use its plenary powers to rule that Cuvier's designation of *Saccopharynx flagellum* Cuvier, 1829 as type species of *Saccopharynx* Mitchill, 1824 is valid;

(3) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Saccopharynx* Mitchill, 1824 (gender: masculine), type species by subsequent monotypy confirmed in (2) above, *Saccopharynx flagellum* Cuvier, 1829;
   (b) *Stylephorus* Shaw, 1791 (gender: masculine), type species by monotypy, *Stylephorus chordatus* Shaw, 1791;

(4) to place on the Official List of Specific Names in Zoology the following names:
   (a) *flagellum* Cuvier, 1829, as published in the binomen *Saccopharynx flagellum* (specific name of the type species of *Saccopharynx* Mitchill, 1824);
   (b) *chordatus* Shaw, 1791, as published in the binomen *Stylephorus chordatus* (specific name of the type species of *Stylephorus* Shaw, 1791);

(5) to place on the Official List of Family-Group Names in Zoology the following names:
   (a) SACCOPHARYNGIDAE Bleeker, 1859 (type genus *Saccopharynx* Mitchill, 1824);
   (b) STYLEPHORIDAE Swainson, 1839 (type genus *Stylephorus* Shaw, 1791);

(6) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *ampullaceus* Harwood, 1827 as published in the binomen *Ophiognathus ampullaceus* and as suppressed in (1) above.

References

Bleeker, P. 1859. Enumeratio specierum piscium hucusque in Archipelago Indico observatarum, adjectis habitationibus citationibusque, ubi descriptiones earum recentiores reperiuntur, nec non speciebus Musei Bleekeriani Bengalensibus, Japonicis, Capensibus Tasmanicisque. *Acta Societatis Scientiarum Indo Neerlandicae*, **6**: xxxvi, 276 pp.

Cuvier, G. 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*. Edition 2, vol. 2. xv, 406 pp. Paris.

Harwood, J. 1827. On a newly discovered genus of serpentiform fishes. *Philosophical Transactions of the Royal Society of London*, **1827**: 49–57.

Hulley, P. A. 1986. Family No. 123. Stylephoridae. *In Smith's Sea Fishes*. Smith, M. M. & Heemstra, P. C. (Eds.). xx, 1047 pp. Macmillan South Africa Ltd, Johannesburg.

Mitchill, S. L. 1824. Description of an extraordinary fish, resembling *Stylephorus* of Shaw. *Annals of the Lyceum of Natural History of New York*, **1**(1): 82–86.

Nielsen, J. G. & Bertelsen, E. 1985. The gulper-eel family Saccopharyngidae (Pisces, Anguilliformes). *Steenstrupia*, **11**(6): 157–206.

Richardson, J. 1836. *Fauna Boreali-Americana . . .*, Part 3, The Fish. xv, 327 pp. Bentley, London.

Robins, C. R. (In press). The Phylogenetic Relationships of the Anguilliform Fishes. *Fishes of the Western North Atlantic*. Part 9. Order Anguilliformes. Collette, B. B. & Bohlke, E. B. (Eds.).

Shaw, G. 1791. Description of the *Stylephorus chordatus*, a new fish. *Philosophical Transactions of the Royal Society of London*, **1**: 90–92.

Swainson, W. 1839. *On the Natural History and Classification of Fishes, Amphibians and Reptiles or Monocardian Animals*. Vol. 2. 448 pp. London.

Case 2616

ICHTHYOPHIIDAE Taylor, 1968 (Amphibia, Gymnophiona): proposed conservation

Mark Wilkinson & Ronald A. Nussbaum

Museum of Zoology, University of Michigan, Ann Arbor, Michigan 48109, U.S.A.

Abstract. The purpose of this application is the conservation of the caecilian family-group name ICHTHYOPHIIDAE Taylor, 1968, which is threatened by the unused senior objective synonym EPICRIIDAE Fitzinger, 1843.

---

1. Fitzinger (1826, p. 36) erected the genus *Ichthyophis*, containing *Caecilia glutinosa* Linnaeus, 1758 (p. 299) and a new species from Java. His later (p. 63) description of the Javanese species, there named *I. hasseltii*, stated 'M. Hasselt's I. Ex Asia, Insula Java'. *I. hasseltii* is a nomen nudum (see Taylor, 1960, pp. 39–40), so that *C. glutinosa* is by monotypy the type species of *Ichthyophis*. The following year Boie (1827, col. 565) described the species *Coecilia* [sic] *hypocyana* and attributed this species name to Van Hasselt, who had collected the type material in Java. It is clear that Fitzinger's *I. hasseltii* was based on this same material, but that Boie's description gives the available name (see Taylor, 1968, pp. 94–97).

2. Wagler (1828, col. 742) erected and described the genus *Epicrium* as a replacement name for *Ichthyophis*, which he erroneously considered to be a nomen nudum. He listed *C. hypocyana* Boie, 1827 and included a description of the species *Epicrium hasseltii*. Both Cantor (1847, p. 1058) and Gray (1850, p. 60), apparently independently, correctly treated *Epicrium* Wagler, 1828, as a junior synonym of *Ichthyophis* Fitzinger, 1826 and considered the species names *hasseltii* and *hypocyana* to be junior subjective synonyms of *glutinosus*. *Epicrium* has not been used as a valid name since 1864 (Günther, 1864, p. 441), and by Article 67h of the Code has the same type species as *Ichthyophis*, namely *C. glutinosa*.

3. Taylor (1965, p. 261) resurrected *Ichthyophis hypocyaneus* [sic] (Van Hasselt) from the synonymy of *I. glutinosus* (Linnaeus, 1758). Hoogmoed (in Frost, 1985, p. 634) pointed out that authorship of the species name *hypocyaneus* (correctly *hypocyana*) must be attributed to Boie (1827) because he was the first to describe it. Taylor (1968, pp. 47–48) curiously listed both *'Caecilia glutinosus* Linnaeus' and then *'Ichthyophis hasseltii* (= *Coecilia hypocyanea* van Hasselt)' as the type species of *Ichthyophis*. Wake (in Frost, 1985, p. 632) wrongly listed *Coecilia hypocyanea* as the type of the genus *Ichthyophis*. However, as already stated, because *C. glutinosa* was the only valid species name listed in Fitzinger's description of *Ichthyophis*, it must be the type species by original monotypy.

4. The family EPICRIA was listed by Fitzinger (1843, p. 34) in his *Systema Reptilium*, founded on *Epicrium* Wagler, 1828. This family-group name, like *Epicrium*, has until recently been uniformly ignored by all workers on caecilians, and, until 1968, only a

single family CAECILIIDAE Gray, 1825 (now emended to CAECILIAIDAE Rafinesque Schmaltz, 1814 in Opinion 1462; BZN **44**: 263–264) was recognised.

5. The family ICHTHYOPHIIDAE was described by Taylor (1968, p. 46–47) founded on *Ichthyophis* Fitzinger, 1826. Since 1968 Taylor's classification has been widely accepted and referred to in the literature. An incomplete survey shows that this family-group name has been referenced in at least 50 works, including the two most important recent treatises on amphibian biology and systematics (Duellman & Trueb (1986) and Frost (1985)).

6. Dubois (1984, p. 113) claimed that EPICRIIDAE Fitzinger, 1843 is a senior synonym of ICHTHYOPHIIDAE Taylor, 1968 and, following the Principle of Priority, must replace the latter name.

7. We strongly believe that the replacement of ICHTHYOPHIIDAE with EPICRIIDAE should be suppressed, primarily because we think it desirable and in the spirit of the Code that family-group names should, where possible, be based on valid generic names, and secondarily because of the confusion that would result from the replacement of a name that has gained general acceptance by an unused one, despite Article 40a(i) of the Code. In order to eradicate EPICRIIDAE it is necessary to suppress *Epicrium*, even though it is a junior objective synonym.

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

(1) to use its plenary powers to suppress the name *Epicrium* Wagler, 1828 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 *Ichthyophis* Fitzinger, 1826 (gender: masculine), type species by monotypy *Caecilia glutinosa* Linnaeus, 1758;

(3) to place on the Official List of Specific Names in Zoology the name *glutinosa* Linnaeus, 1758, as published in the binomen *Caecilia glutinosa* (specific name of the type species of *Ichthyophis* Fitzinger, 1826);

(4) to place on the Official List of Family-Group Names in Zoology the name ICHTHYOPHIIDAE Taylor, 1968 (type genus *Ichthyophis* Fitzinger, 1826);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Epicrium* Wagler, 1828, as suppressed in (1) above;

(6) to place on the Official Index of Rejected and Invalid Family–Group Names in Zoology the name EPICRIIDAE (published as 'Epicria') Fitzinger, 1843 (type genus *Epicrium* Wagler, 1828), (invalid because the name of the type genus has been suppressed in (1) above).

References

Boie, F. 1827. Bemerkungen über Merrem's versuch eines systems der Amphibia. *Isis, von Oken*, **20**: 565.

Cantor, T. E. 1847. Catalogue of the reptiles inhabiting the Malay Peninsula and islands. *Journal of the Asiatic Society of Bengal*, **16**: 1026–1078.

Dubois, A. 1984. Miscellanea nomenclatorica batrachologica (V). *Alytes*, **3**(3): 111–116.

Duellman, W. E. & Trueb, T. 1986. *Biology of Amphibians*. 670 pp. McGraw-Hill, New York.

Fitzinger, L. J. 1826. *Neue Classification der Reptilien nach ihren natürlichen verwandtschaften nebst einer Verwandtschaftstafel und einem Verzeichnisse der Reptiliensammlung des KK. zoologischen Museums zu Wien*. 66 pp. Zoologische Museum, Wien.

Fitzinger, L. J. 1843. *Systema Reptilium . . . fasciculus primus: Amblyglossae (Conspectus geographicus)*. 106 pp.

Frost, D. R. 1985. *Amphibian species of the world*. 732 pp. Allen Press and the Association of Systematics Collections, Lawrence, Kansas.

Gray, J. E. 1825. A synopsis of the genera of Reptiles and Amphibia, with a description of some new species. *Annals of Philosophy*, **10**(7): 193–217.

Gray, J. E. 1850. *Catalogue of the specimens of Amphibia in the collection of the British Museum*, part 2. *Batrachia Gradientia*. 72 pp. British Museum, London.

Günther, A. C. L. G. 1864. *The reptiles of British India*. 444 pp. R. Hardwicke, London.

Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, Vol. 1. 824 pp. Salvii, Holmiae.

Taylor, E. H. 1960. On the caecilian species *Ichthyophis monochrous* and *Ichthyophis glutinosus*, with descriptions of related species. *University of Kansas Scientific Bulletin*, **40**(4): 37–120.

Taylor, E. H. 1965. New Asiatic and African caecilians with redescriptions of certain species. *University of Kansas Scientific Bulletin*, **46**(6): 253–302.

Taylor, E. H. 1968. *The caecilians of the world: a taxonomic review*. 848 pp. University of Kansas Press, Lawrence.

Wagler, J. 1828. Auszuge aus seinem systema amphibiorum. *Isis, von Oken*, **21**(7): 740–744.

Case 2650

Thorius pennatulus Cope, 1869 (Amphibia, Caudata): proposed conservation of the specific name

Hobart M. Smith & James Hanken
Department of Environmental, Population and Organismic Biology, University of Colorado, Boulder, Colorado 80309–0334, U.S.A.

David Chiszar
Department of Psychology, University of Colorado, Boulder, Colorado 80309–0345, U.S.A.

Abstract. The purpose of this application is to conserve the specific name *pennatulus* Cope, 1869 for the Mexican salamander *Thorius pennatulus*. The name first appeared (about one month earlier) as *pennatribus*, probably due to a spelling error.

---

1. Although herpetologists have consistently agreed to credit the name *Thorius pennatulus* to Cope's formal description which appeared in an article in the *Proceedings of the Academy of Natural Sciences of Philadelphia* (Cope, 1869b (June), p. 111), in reality the species was described a few weeks earlier in the *American Naturalist* (Cope, 1869a (May), p. 222) in a note by the editors from information supplied by Cope. The earlier description is nomenclaturally acceptable and poses the question whether the name should be as given there, *Thorius pennatribus*.

2. The description appearing in the *American Naturalist* is as follows: 'Prof. E. D. Cope informs us that he has just discovered an interesting genus of Salamanders from Mexico. It differs from *Sperlerpes* [typographical error for *Spelerpes*] in having the parietal and palatine bones unossified, and the inner nares opening into the orbits. The phenygoid [typographical error for pterygoid; termed sphenoid in Cope, 1869b] teeth are in one patch. Toes, four on the front feet and five on the hind, rudimentary. The tail is as long as the head and body together. The total length is only two inches. It has a pale dorsal band and black sides. A female specimen contained eggs one line in diameter. He has called the species, which is a new generic type, *Thorius pennatribus*'. This name was also listed in the index (p. 692). Since there are two other obvious mistakes in the article it seems likely that the spelling of the name was a copyist's error.

3. The description which appeared in the *Proceedings of the Academy of Natural Sciences of Philadelphia* (1869b, p. 111) is considerably longer. A holotype was designated (a female, the largest of six specimens numbered 6341, from Orizava, Mexico) and its measurements were given. A new family name was established: THORIIDAE Cope, 1869. The description includes a reference to the earlier publication ('*American Naturalist*, 1869, 222'); this was probably added in proof as both publications would have been in press at the same time. The specific name was spelt differently without comment.

4. Brame (in Frost, 1985, p. 605) has noted that the original specimens have since been lost from the collections of the National Museum of Natural History,

Washington (a neotype has been designated by Taylor: USNM No. 111017 (1941, p. 107)), and that Malnate (1971, p. 348) 'provisionally regarded' a specimen (no. 1269) in the Academy of Natural Sciences, Philadelphia as possibly one of the surviving paratypes.

5. The name *pennatulus* is the one which herpetologists have consistently used and we are not aware that the spelling *pennatribus* was ever accepted as valid.

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

(1) to use its plenary powers to suppress the specific name *pennatribus* Cope, 1869 (May), as published in the binomen *Thorius pennatribus* Cope, 1869, 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 *Thorius* Cope, 1869 (May), (gender: masculine), type species by monotypy *Thorius pennatribus* Cope, 1869 (= *pennatulus* Cope, 1869);

(3) to place on the Official List of Specific Names in Zoology the name *pennatulus* Cope, 1869 (June), as published in the binomen *Thorius pennatulus* (name of the type species of *Thorius* Cope, 1869, by virtue of the proposal in (1) above);

(4) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *pennatribus* Cope, 1869, as published in the binomen *Thorius pennatribus* and as suppressed in (1) above.

References

Brame, Arden H., Jr. II. 1985. Order Caudata. *In* Frost, Darrel R. (Ed.), *Amphibian Species of the World. A Taxonomic and Geographical Reference*. Allen Press, Inc. & The Association of Systematics Collections, Lawrence, Kansas, U.S.A.

Cope, E. D. 1869a. New salamander. *American Naturalist*, **3**(4): 222.

Cope, E. D. 1869b. A review of the species of the Plethodontidae and Desmognathidae. *Proceedings of the Academy of Natural Sciences of Philadelphia*, **21**: 93–118.

Malnate, E. V. 1971. A catalog of primary types in the herpetological collections of the Academy of Natural Sciences, Philadelphia (ANSP). *Proceedings of the Academy of Natural Sciences of Philadelphia*, **123**: 348.

Taylor, E. H. 1941. Herpetological Miscellany, No. II. *University of Kansas Science Bulletin*, **27**(7): 105–139.

Case 2441

Semioptera wallacii Gray, 1859 (Aves, Paradisaeidae): proposed confirmation as the correct spelling

Mary LeCroy

Department of Ornithology, American Museum of Natural History, Central Park West at 79th Street, New York, NY 10024, U.S.A.

Abstract. The purpose of this application is the confirmation of the spelling of both the generic and specific names in the binomen *Semioptera wallacii* Gray, 1859 (Wallace's Standard Wing Bird of Paradise), although the name was first given (in an account of a meeting) in the form *Semeioptera wallacei* Gray, 1859.

---

1. The name *Semioptera wallacii* Gray, 1859 was based on a specimen described by G. R. Gray at a meeting of the Zoological Society of London on 22 March 1859.

2. McAlpine (1979, p. 109) has presented evidence that an article in the *Literary Gazette* for the 26 March 1859 (Gray, 1859a) [not seen by me] included Gray's description from the meeting and was published before the proceedings of the meeting. McAlpine gives the spelling in the *Literary Gazette* as *Semeioptera* for the subgenus (it was originally described in the genus *Paradisaea*) and *Wallacei* for the species.

3. In *Ibis* for April 1859 (Gray, 1859b) the naming at the Zoological Society meeting is referred to and the *Literary Gazette* article is quoted. Here, in both cases, the spelling is *Semioptera wallacii*.

4. As far as I have been able to determine, the spelling *Semeioptera* has been used only once (by Wood, 1862, p. 72) in the zoological literature in the 129 years since it appeared in the *Literary Gazette*. The spellings *wallacei*, *wallacii* and *wallaceii* have all been used in various publications. I recommend that *Semioptera wallacii* be conserved in accordance with established usage and with Gray's original intent, as he published this name in the *Proceedings of the Zoological Society of London* (1859c, p. 130).

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

(1) to use its plenary powers to confirm that the spelling of the name *Semioptera wallacii* Gray, 1859, is correct, despite the prior publication of the spelling *Semeioptera Wallacei*;

(2) to place on the Official List of Generic Names in Zoology the name *Semioptera* Gray, 1859 (gender: feminine), type species by monotypy *Semioptera wallacii* Gray, 1859, spelling confirmed in (1) above;

(3) to place on the Official List of Specific Names in Zoology the name *wallacii* Gray, 1859, as published in the binomen *Paradisaea (Semioptera) wallacii* (specific name of the type species of *Semioptera* Gray, 1859), spelling confirmed in (1) above;

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Semeioptera* Gray, 1859 ruled in (1) above to be an incorrect original spelling of *Semioptera* Gray, 1859;

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *wallacei* Gray, 1859, as published in the binomen *Paradisaea (Semeioptera) wallacei* and as ruled in (1) above to be an incorrect original spelling of *wallacii*.

Acknowledgements

I particularly appreciate the encouragement and expert advice given me by the late Eugene Eisenmann. Thanks are also due to Drs Bruce Beehler and Lester Short for their comments.

References

Gray, G. R. 1859a. Zoological Society (report of meeting). *Literary Gazette* (new series), **39**: 406 [not seen].

Gray, G. R. 1859b. Letters, extracts . . . *Ibis*, (1) **1**: 210.

Gray, G. R. 1859c. [Report of meeting on March 22, 1859]. *Proceedings of the Zoological Society of London*, **27**: 128–130.

McAlpine, D. K. 1979. The correct name and authorship for Wallace's Standard Wing (Passeriformes, Paradiseidae). *Bulletin of the British Ornithologists' Club*, **99**: 108–110.

Wood, T. W. 1862. *Intellectual Observer*, **2**: 69–73.

Case 2640

Mus musculus domesticus Schwarz & Schwarz, 1943 (Mammalia, Rodentia): proposed conservation

G. B. Corbet

British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K.

Abstract. The purpose of this application is the conservation of the name of the western European house mouse *Mus musculus domesticus* as used by Schwarz & Schwarz (1943) although attributed by them to Rutty (1772), in which it is a nomen nudum. This taxon is the principal ancestor of laboratory and other domesticated mice.

---

1. The name *Mus musculus* Linnaeus, 1758 (p. 62) was used consistently for the house mouse, including its domesticated forms, from 1758 until the 1960s, with Uppsala, Sweden, accepted as the type locality.

2. The name *Mus domesticus* was used by Rutty (1772, p. 281) in an account of the mammals of County Dublin, Ireland, accompanied only by the words 'The house mouse'. This name was listed as the next available synonym of *Mus musculus* Linnaeus, 1758 by Barrett-Hamilton & Hinton (1916, p. 634) and in the influential checklist of Ellerman & Morrison-Scott (1951, p. 605), in each case without noting that it was a nomen nudum, as has been pointed out by Dr J. T. Marshall (in lit.). There are also several pre-Linnean uses of *Mus domesticus*, as listed by Barrett-Hamilton & Hinton (1916, p. 634).

3. Schwarz & Schwarz (1943), in a taxonomic review of *Mus musculus*, recognised that populations in western Europe, including Britain and Ireland, were clearly different from the nominate form in Sweden and northeastern Europe. They (p. 65) used the name *Mus musculus domesticus* Rutty, 1772 for the western subspecies, with the type locality Dublin, Ireland.

4. This taxonomic distinction has been recognised by all subsequent authors. Later studies of karyology and biochemical taxonomy have reinforced the distinction and have led some authors, e.g. Marshall & Sage (1981, p. 19), Berry (1984, p. 277) and Kratochvil (1986, p. 1), to give the western form specific rank as *Mus domesticus*. Others, e.g. Marshall (1986, p. 14), have retained it as a subspecies, *Mus musculus domesticus*. All recent authors are agreed that this western form is the principal ancestor of laboratory and other domesticated mice — see Berry (1984) for a detailed review.

5. Although Schwarz & Schwarz (1943, p. 65) listed 25 synonyms of *M. m. domesticus*, none of these has been used for the taxon as a whole, having been based upon colour varieties of domesticated mice of doubtful provenance, e.g. *Mus musculus albus* Bechstein, 1801 (p. 955) or upon insular or other localised variants of doubtful relationship to the well-known and intensively studied *M. m. domesticus* sensu Schwarz & Schwarz, 1943. Examples are *Mus islandicus* Thienemann & Günther, 1827 (p. 153) (Iceland), likely to be a synonym of *Apodemus sylvaticus* (Linnaeus, 1758) (Ellerman & Morrison-Scott, 1951, p. 569); *Mus adelaidensis* Gray, 1841 (p. 404) (South Australia); *Mus muralis* Barrett-Hamilton, 1899 (p. 81) (island of St. Kilda, Scotland), a large extinct form.

6. The interests of stability, in a species of major importance in biological and medical research and as a pest, would be best served by the conservation of the name *domesticus* as from Schwarz & Schwarz (1943). This name would then be available for application at subspecific rank, *Mus musculus domesticus*, or at specific rank, *Mus domesticus*, according to taxonomic judgement.

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

(1) noting that the specific name *domesticus* Rutty, 1772, as published in the binomen *Mus domesticus*, is a nomen nudum, to use its plenary powers:
  (a) to suppress all other uses of the name *Mus domesticus* prior to its use by Schwarz & Schwarz, 1943, for the purposes of both the Principle of Priority and the Principle of Homonymy;
  (b) to rule that the name *domesticus* Schwarz & Schwarz, 1943, as published in the trinomen *Mus musculus domesticus*, is to be given precedence over all names that are considered to be synonyms with the exception of *musculus* Linnaeus, 1758;

(2) to place on the Official List of Specific Names in Zoology the name *domesticus* Schwarz & Schwarz, 1943, as published in the trinomen *Mus musculus domesticus*, with the endorsement that it is to be given precedence over all names that are considered to be synonyms with the exception of *musculus* Linnaeus, 1758;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *domesticus* Rutty, 1772, as published in the binomen *Mus domesticus* (a nomen nudum).

References

Barrett-Hamilton, G. E. H. 1899. On the species of the genus *Mus* inhabiting St. Kilda. *Proceedings of the Zoological Society of London*, **1899**: 77–88.

Barrett-Hamilton, G. E. H. & Hinton, M. A. C. 1916. *A history of British mammals*, part 19, pp. 601–648. Gurney & Jackson, London.

Bechstein, J. M. 1801. *Gemeinnützige Naturgeschichte Deutschlands* . . . 2nd Ed., vol. 1, 1355 pp. Leipzig.

Berry, R. J. 1984. House mouse. Pp. 273–284, *in* Mason, I. L. (Ed.), *Evolution of domesticated animals*. 452 pp. Longman, London.

Ellerman, J. R. & Morrison-Scott, T. C. S. 1951. *Checklist of Palaearctic and Indian mammals 1758 to 1946*. 810 pp. British Museum (Natural History), London.

Gray, J. E. 1841. Contribution towards the geographical distribution of the Mammalia of Australia. Pp. 397–414, *in* Grey, G. *Journals of two expeditions in north-west and western Australia*. . . . Boone, London.

Kratochvil, J. 1986. Die intraspezifische Evolution der Art *Mus domesticus*. *Acta Scientiarum Naturalium Academiae Scientiarum Bohemoslovacae, Brno*, **20**(1): 1–49.

Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.

Marshall, J. T. 1986. Systematics of the genus *Mus*. *Current Topics in Microbiology and Immunology*, **127**: 12–18.

Marshall, J. T. & Sage, R. D. 1981. Taxonomy of the house mouse. *Symposia of the Zoological Society of London*, **47**: 15–25.

Rutty, J. 1772. *An essay towards a natural history of the county of Dublin* . . . Vol. 1, 392 pp. Printed by W. Sleater for the author, Dublin.

Schwarz, E. & Schwarz, H. K. 1943. The wild and commensal stocks of the house mouse, *Mus musculus*. *Journal of Mammalogy*, **24**: 59–72.

Thienemann, F. A. L. & Günther, G. B. 1827. *Reise im Norden Europa's vorzüglich in Island*. Vol. 2, 160 pp. Leipzig.

Amendment to a published comment on the proposed suppression of three works by R. W. Wells and C. R. Wellington

A. E. Greer
Australian Museum, 6–8 College Street, Sydney, N.S.W. 2000, Australia

I wish to correct a minor but potentially misleading point in my comment (BZN **45**: 53) against the suppression of three works by R. W. Wells and C. R. Wellington (Case 2531). In my comment the Australian Museum is identified as '. . . the museum with the largest reptile and amphibian collection in the world'. I should, of course, have said '. . . the museum with the largest collection of Australian reptiles and amphibians in the world'. While this point is not germane to my argument, it might well create a false impression amongst those not familiar with the relative sizes of reptile and amphibian collections around the world.

Pragmatypes: a reply to Dr G. Hahn
(See BZN **44**: 156–157, 158–159; **45**: 48, 48–49)

R. H. L. Disney & Y. Z. Erzincliogluu
University Department of Zoology, Downing Street, Cambridge CB2 3EJ, U.K.

Dr Hahn (BZN **45**: 48) has misunderstood the circumstances in which pragmatypes are required. One does not designate a pragmatype when a better specimen turns up. One only considers designating a pragmatype when the original type (holotype, lectotype or neotype) cannot be confidently assigned to a particular species in a group of sibling species, which had, at the time the original type specimen had been designated, not been distinguished from each other.

Our experience of palaeontology is minimal. However, we can envisage the situation when an original type specimen is so incomplete that discovery of subsequent fossils indicates it could belong to one of two species, the second of which was not known at the time of the designation of the type specimen in question. In such circumstances a pragmatype could resolve the problem. Our palaeontological colleagues assure us that such problems are not unknown in palaeontology.

With regard to the 'authority' of the ICZN: we are not prepared to accept *rules* from a body that is not democratically accountable. We concede there is a case, some would say a strong case, for winding up the Commission. However, on balance, we believe it has a useful role to perform in providing an *advisory* service on nomenclature for zoology.

Comment on the proposed conservation of *Borelis* de Montfort, 1808 (Foraminiferida), and on the neotype of its type species
(Case 2225/6: see BZN **45**: 116–117)

F. T. Banner
British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K.

1. It has been noted by Loeblich & Tappan (1988, p. 362) that the first designation of a neotype for *Nautilus melo* Fichtel & Moll, 1798, was by Smout (1963, pp. 265–266). This is the designation which is valid by Article 75e. Smout selected as neotype the specimen sectioned and figured by Reichel (1937, pp. 105–108, pl. 10, fig. 8) which was deposited in the Schlumberger collection, Sorbonne, Paris (specimen number 2405–3). This specimen had been collected by Schlumberger from the Leitha–kalk (Middle Miocene, 'Tortonian') exposed 3 km north of Bujtur in Transylvania (Romania). This locality becomes, by this designation, the restricted type locality of *N. melo* by Article 75f; broad localities ('vaterlanden') in Transylvania were included by Fichtel & Moll (1798, p. 121, sources 'd' and 'e') for '*N. melo* varietas α'.

2. Reichel (1937) had named his specimen *Neoalveolina melo* (Fichtel & Moll) because he believed that *Nautilus melo* Fichtel & Moll was a senior synonym of *Neoalveolina bradyi* (Silvestri) (*Alveolina bradyi* Silvestri, 1927), which had been correctly designated (by Bakx, 1932, p. 208) as type species of *Neoalveolina* Silvestri, 1927. Reichel chose to use *Neoalveolina* because its more modern morphological description 'exclut toute erreur d'interprétation', but, because he also believed that *melo* was a species which could be firmly identified, he should have used the name *Borelis*.

3. In his text, Reichel (1937, p. 107) divided the species *melo* into three subspecies (*melo* Fichtel & Moll, *haueri* d'Orbigny, 1846, and *curdica* n.subsp.) based upon deviation of the gross test from a spherical shape. On this basis, Reichel morphologically distinguished between Fichtel & Moll's *melo* var. α ('forme ovoïde, indice du type 1·25') and *melo* var. β ('indice 0·85–1·1, forme sphérique ou aplatie aux pôles'). Reichel thought that var. α was the same as *haueri* d'Orbigny, while var. β was *melo* sensu stricto. Consequently he (1937, pp. 106–107) provisionally ('provisoirement') identified his figured specimens (1937, pl. 10, figs. 8, 9) as *melo* var. β Fichtel & Moll. Smout (1963) was in agreement with this, and designated one of these specimens (2405–3, illustrated by Reichel, 1937, pl. 10, fig. 8) as neotype for *N. melo*. However, Rögl & Hansen (1984, pp 71–72) reached a different conclusion regarding the identity of the 'varieties' recognised by Fichtel & Moll (1798).

4. Although 'no material of *Nautilus melo* is recorded in the acquisition catalogue of 1812' (which recorded the acquisition by the Naturhistorischen Museum in Vienna of the rest of the Fichtel & Moll collection) (Rögl & Hansen, 1984, p. 71), Rögl and Hansen found specimens which had been labelled '*Nautilus melo* var. β' by E. Flügel at some unknown date (but probably about 1960). It is correct to say that 'the origin and identity of the preserved material of *Nautilus melo* var. β remains questionable' (Rögl & Hansen, 1984, p. 72).

The collections of the Naturhistorischen Museum in Vienna contain no authentic specimens of *melo* var. β, just as they contain no original specimens of *melo* var. α. The fact that Rögl & Hansen (1984) believed the specimens labelled '*melo* var. β' to be

referable to *Nonionina bulloides* d'Orbigny, 1846 (the type species of *Pullenia* Parker & Jones, 1862) is not relevant to the status of *N. bulloides*, *Pullenia* or *Nautilus melo* (*Borelis melo*), except that it provides the reason for the designation by Rögl & Hansen (1984) of a neotype for *N. melo* which corresponds to var. α Fichtel & Moll. Rögl & Hansen were unaware of Smout's earlier designation of a neotype which corresponds to var. β.

5. Among the localities cited for *Nautilus melo* var. α by Fichtel & Moll (1798) were two in Transylvania: one ('vaterland d') was that of a whitish, biogenic limestone for which no precise locality in Transylvania was given, and the other was described as being '$\frac{1}{2}$ stunde' from Unter-Pestisch (al Pestis) ('vaterland e'). The latter was believed by Reichel (1937, p. 106) to be undoubtedly of Miocene age and to be the same as the outcrop 3 km north of Bujtur, which had been collected by Schlumberger (see para 1). 'Al Pestis' is now known as Pestesu d.j., and it lies about 4–5 km from Bujtur, south of Deva in Transylvania; both localities have outcrops of the same Middle Miocene age (Badenian, according to Rögl, personal communication).

6. The specimens from which Rögl & Hansen (1984, pp. 71–72, pl. 29, figs. 5–6, pl. 30, figs 1–4) subsequently chose their neotype came from the Badenian of the brickyard Baden-Sooss, Vienna Basin. This was not a locality cited by Fichtel & Moll (1798, 1803); the only locality ('vaterland a') cited from the Vienna Basin by Fichtel & Moll (1798, p. 120–121) was that of 'ganz weiss zu Brunn am Steinfeld in Unterösterreich' ('colore albo ad Brunn am Steinfeld Austriae inferioris'), about 10 km north-east of Baden, which was not collected by Rögl & Hansen (1984). Therefore, the specimens described and illustrated as *Nautilus melo* var. α Fichtel & Moll by Rögl & Hansen (1984) are not topotypic.

7. D'Orbigny (1846) had obtained specimens, which he identified as *Alveolina melo* from Steinfeld, Vienna Basin, and others, which became the types of *A. haueri* d'Orbigny, from Baden, Vienna Basin. These specimens were redescribed in the revision of the d'Orbigny collections (given to d'Orbigny by von Hauer), present in Vienna, by Papp & Schmid (1985). These authors distinguished between *melo* and *haueri* in the same manner as that developed by Reichel (1937) (i.e., *melo* was subglobular while *haueri* was overall or fusiform). However, Papp & Schmid (1985) did not cite the work of Rögl & Hansen (1984) in the proposal of a neotype for *Nautilus melo*, but they (Papp & Schmid, 1985) did consider both *melo* and *haueri* to be synonymously conspecific.

8. In summary, the application by Hansen & Rögl (BZN **45**: 116–117) to validate by ICZN agreement their designation (Rögl & Hansen, 1984) of a neotype for *Borelis melo* (Fichtel & Moll) (*Nautilus melo* Fichtel & Moll, 1798) is not appropriate because:

(a) the specimen selected is not topotypic for *Nautilus melo* Fichtel & Moll, and, more importantly,

(b) a neotype (preserved in a well curated collection) had already been designated by Smout (1963).

9. Drs Rögl and Hansen have accepted (personal communication, letters of 13 June 1988) that Smout's designation of a neotype for *Nautilus melo* Fichtel & Moll, 1798, is valid because of its priority.

10. With the exception of the designation of the neotype, the remainder of the proposals made by Hansen & Rögl (BZN **45**: 117) are fully justified and should be supported.

References

Bakx, L. A. J. 1932. De genera *Fasciolites* en *Neoalveolina* in het Indo-Pacifische gebied. *Verhandelingen van het Geologisch–Mijnbouwkundig Genootschap voor Nederland en Kolonien*, **9**: 205–266.

Fichtel, L. & Moll, J. P. C. 1798. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam delineata et descripta*. xii + 123 pp., 24 pls. Anton Pichler, Vienna.

Fichtel, L. & Moll, J. P. C. 1803. *Testacea microscopica aliaque minuta ex generibus* Argonauta *et* Nautilus *ad naturam delineata et descripta*. 2nd edition, xii + 123 pp. (unaltered), 24 pls. (re-engraved), Camesinaische Buchhandlung, Vienna.

Loeblich, A. R. Jr & Tappan, H. 1988. *Foraminiferal genera and their classification*. Vol. 1, 970 pp. Van Nostrand Reinhold Co., New York.

Orbigny, A. d' 1846. *Foraminifères fossiles du Bassin tertiare de Vienne, Autriche*. 303 pp. Gide et Comp., Paris.

Papp, A. & Schmid, M. E. 1985. Die Fossilien Foraminiferen des Tertiären Beckens von Wien. Revision der Monographie von Alcide d'Orbigny (1846). *Abhandlungen der Geologischen Bundesanstalt*, **37**: 1–311.

Reichel, M. 1937. Etude sur les Alvéolines. *Mémoires de la Société Paléontologique Suisse*, **57**: 93–147.

Rögl, F. & Hansen, H. J. 1984. Foraminifera described by Fichtel & Moll in 1798. A revision of *Testacea microscopica. Neue Denkschriften des Naturhistorischen Museums in Wien*. Vol. 3, 143 pp., 30 pls. Berger & Söhne, Horn, Austria.

Smout, A. H. 1963. The genus *Pseudedomia* and its phyletic relationships, with remarks on *Orbitolites* and other complex foraminifera. Pp. 224–281 *in* Koenigswald, G. H. R. von, et al. (Eds), *Evolutionary Trends in Foraminifera*. 355 pp. Elsevier, Amsterdam.

Comment on the proposal to set aside the status of the putative type specimen of *Siluris felis* Linnaeus, 1766 (currently *Ariopsis felis*; Osteichthyes, Siluriformes)

(Case 2533; see BZN **44**: 31–35)

Alwyne Wheeler
Department of Zoology, British Museum (Natural History), London SW7 5BD, U.K.

1. The application to set aside the putative type specimen of *Silurus felis* Linnaeus, 1766 on the grounds that the specimen is referable to the taxon currently known as *Bagre marinus* (Mitchill, 1815) would have the effect of conserving two well-known names for fishes which have economic importance. As such it is desirable in the interest of taxonomic stability, and merits support. However, the application is flawed by its reliance on inferences which are unsupported by evidence and does not give the most probable explanation for the cause of the confusion. To redress this imbalance the following comments are offered.

2. There is no evidence that Linnaeus had more than one specimen of *Silurus felis*. In other cases where he had more than one specimen of a fish he gave two sets of meristic data (for example, *Chloroscombrus chrysurus* (Linnaeus, 1766) of which he had four examples (Wheeler, 1985, p. 55)). However, this practice was not invariable. In the case of *Silurus felis* Linnaeus gave only the single set of data. Despite this the application (para. 1) refers to 'one or more specimens' and (para. 6) that it 'seems probable' that 'Linnaeus based his description on two or more specimens'. These conjectures later become authoritative (para. 13): 'there is no reason to believe that it was the sole type',

eventually to hint at even more specimens (para. 14): 'was likely based on at least two specimens'. The existence of a second, or later, specimen is conjecture as there is no evidence that there was more than the single specimen.

3. The putative Linnaean type specimen, which is of the gafftopsail catfish, is mounted on a standard sheet of Linnaean herbarium paper and is named in Linnaeus's characteristic handwriting 'S. Felis' on Garden's original label. It was because it was labelled in Linnaeus's hand with the name S. Felis that I regarded this specimen as the type of that species (Wheeler, 1985). There is no question of the authenticity of the label or the handwriting.

4. With the help of Dr Lars Wallin I have examined all the Linnaean material in Uppsala; it does not contain a specimen referable to *Silurus*. There is no evidence that a specimen existed in Uppsala; no entry exists in Thunberg's manuscript catalogue of the collection of 1828, or in Lönnberg's (1896) or Holm's (1957) published catalogues. There are no specimens in the Linnaean collection in Stockholm (Fernholm & Wheeler, 1983).

5. The discrepancy between Linnaeus's description of *Siluris felis* and the putative type specimen can be accounted for most economically by postulating that Garden sent to Linnaeus both the skin and a written description of a catfish. The skin was sent in Garden's consignment of 1761 (Wheeler, 1985) together with descriptions of the specimens (Garden frequently referred to these as 'their characters'). Garden regarded himself in the light of a student of Linnaeus and in attempting to master the techniques of taxonomic description submitted draft descriptions of both animals and plants. Unfortunately only the first set of such characters of fishes, of January 1760, has survived in the Linnaean correspondence. The confusion between the gafftopsail catfish and the hardhead catfish may have occurred when Garden preserved the skin of the former but made his description from a whole specimen of the latter. Then when he sent the description and skin to Linnaeus as simply the 'Cat Fish' (as he called the latter) Linnaeus might have simply assumed they were conspecific, and took his data from Garden's description of the hardhead catfish but wrote *S. felis* on the label of the specimen. As Linnaeus was not strongly interested in fishes it would be likely that he would use an existing description rather than examine a rather poorly preserved skin. This explanation, while never capable of proof, fits in better with the known working methods of Linnaeus and the practice of Garden, than an hypothesis involving a specimen preserved in liquid which had disappeared before 1828. This possibility is in fact mentioned by Taylor (para. 15).

6. Despite these reservations in recreating the history of the confusion between these taxa, I support the application to suppress the type status of the Linnaean specimen labelled *Silurus felis* (number 125 in the collection of the Linnean Society of London) on the grounds that:

i. either this specimen was not examined by Linnaeus at the time he compiled his description, or if it was examined, then the taxon *Silurus felis* is composite, as other data were derived from a description of a specimen of another species,

ii. it is in the interest of nomenclatural stability to do so, since both *Silurus felis* Linnaeus, 1766 and *Silurus marinus* Mitchill, 1815 will continue to be available for use in the sense in which they have been widely used in current literature.

References

Fernholm, B. & Wheeler, A. 1983. Linnaean fish specimens in the Swedish Museum of Natural History, Stockholm. *Zoological Journal of the Linnean Society*, **78**: 199–286.

Holm, Å. 1957. Specimina Linnaeana. I Uppsala bevarade Zoologiska samlingar från Linne's tid. *Uppsala Universitets Årsskrift*, **6**: 1–68.

Lönnberg, E. 1896. Linnean type-specimens of birds, reptiles, batrachians and fishes in the Zoological Museum of the R. University in Uppsala. *Bihang till Kongliga Svenska Vetenskaps- Akademiens Handlingar, Stockholm* 22, AIV (1): 3–45.

Wheeler, A. 1985. The Linnaean fish collection in the Linnean Society of London. *Zoological Journal of the Linnean Society*, **84**: 1–76.

Comment on the family name for the storm petrels (Aves)

(Case 2024: see BZN **42**: 398–400; **44**, 44–45)

W. R. P. Bourne
Department of Zoology, University of Aberdeen, Tillydrone Avenue, Aberdeen AB9 2TN, Scotland

In view of the debate over the family name for the storm-petrels it may be timely to recall a previous discussion of the nomenclature of the petrels. In 1964 several people working on the group, who had become concerned at the confusion which then prevailed, decided to consult the fifteen people thought to know most about the Procellariiformes to try and agree on a more consistent classification and nomenclature. While some at least were aware that Brodkorb (1963) had recently revived the long-forgotten name OCEANITIDAE Forbes, 1881, but had not yet been followed by anyone else, nobody raised this issue in either the preliminary discussions or after the publication of the unanimous conclusions (Alexander et al., 1965, p. 145). In consequence the family name HYDROBATIDAE Mathews, 1912 has remained in almost universal use ever since; the innumerable publications using it include recent World, Holarctic, British and American Ornithologists' Unions, Chinese, South American and New Zealand check-lists, Western Palearctic, North American, African, Indian and Australian (seabird) handbooks, two out of three international seabird guides, two major anatomical and one major parasitological works. As a result of this agreement I also used it in the 'Petrel' sections of successive editions of the British Ornithologists' Union's *Dictionary of Birds* (Thomson, 1964; Campbell & Lack, 1985).

It is interesting to observe the composition of the dissentients who favour OCEANITIDAE, most of whom, with one important exception, have already been listed by Olson (BZN **44**: 44–45). Apart from palaeontologists, who with the exception of Olson himself have not made much other contribution to the study of the petrels, they start with a colleague at the Smithsonian Institution whom he does not mention, Dr G. E. Watson, who first introduced the name OCEANITIDAE to a wider audience in a guide to the birds of the Southern Ocean (Watson, 1975) which has been followed first by the authors of the Australian and South African check-lists (Condon, 1975; Clancey, 1980) and then by Harrison (1983) in an international seabird guide. It seems a pity that if Watson preferred this name he did not raise the matter when he subscribed to the statement (Alexander et al., 1965) recommending the use of HYDROBATIDAE, instead of

subsequently introducing OCEANITIDAE unilaterally at a time when it seems doubtful whether anyone could have produced a reasoned exposition of the truth of the matter before it was clarified so lucidly by Melville (1985).

My personal view (Bourne, 1987) is that most of the people directly concerned have already made one attempt to reach a consensus on the higher classification and nomenclature of the petrels, and that this has been undermined by one participant over an issue which he had ample opportunity to raise at the time, but failed to do so, subsequently taking independent action (Watson, 1975) which has helped precipitate the present situation. It seems unacceptable to now impose a change from the well-established name HYDROBATIDAE without some guarantee that this will at least lead to more stability of nomenclature than might have resulted from (for example) following first Mathews' 1934 use of the name THALASSODROMIDAE and then Brodkorb's 1963 reintroduction of OCEANITIDAE. If it were likely to lead rapidly to permanent stability either name might form an acceptable alternative to HYDROBATIDAE, but any alteration in usage now seems much more likely to lead to many years of confusion and protest before even the present hard-won level of consistency in the use of HYDROBATIDAE is regained, and personally I regard that prospect with infinite misgivings. I therefore support Melville's proposals (BZN **42**: 399, para. 9).

I am grateful to Mr V. G. Harper for help with the literature.

References

Alexander, W. B., et al. 1965. The families and genera of the petrels and their names. *Ibis*, **109**: 145–149.

Bourne, W. R. P. 1987. The classification and nomenclature of the petrels. *Ibis*, **129**: 404.

Brodkorb, P. 1963. Catalogue of fossil birds. Part 1. *Bulletin of the Florida State Museum, Biological Sciences*, **7**(4): 179–293.

Campbell, B. & Lack, E. (Eds) 1985. *A Dictionary of Birds*, 700 pp. Poyser, Calton.

Clancey, P. A. 1980 (Ed.) *Checklist of Southern African Birds*, 325 pp. Southern African Ornithological Society.

Condon, H. T. 1975. *Checklist of the birds of Australia*, part 1, 311 pp. Royal Australasian Ornithologists' Union, Melbourne.

Harrison, P. 1983. *Seabirds, an identification guide*. 448 pp. Croom Helm, Beckenham, U.K.

Mathews, G. M. 1934. A check-list of the order Procellariiformes. *Novitates Zoologicae*, **34**: 151–206.

Melville, R. V. 1985. The family names for the storm petrels and the dippers. *Bulletin of Zoological Nomenclature*, **42**: 398–400.

Thomson, A. L. (Ed.) 1964. *A New Dictionary of Birds*. 928 pp. Nelson, London.

Watson, G. E. 1975. *Birds of the Antarctic and Subantarctic*. 390 pp. American Geophysical Union, Washington.

Comment on the proposed conservation of the specific name of *Euryotis brantsii* A. Smith, 1834 (Mammalia, Rodentia)
(Case 2605; see BZN **45**: 43–44)

Dieter Kock
Forschungsinstitut Senckenberg, Senckenbergenlage 25, 6000 Frankfurt 1, Federal Republic of Germany

The characters of *Arctomys vigil* Thunberg, 1811 cited in the application do not convincingly show that this is a senior synonym of *Parotomys brantsii* (Smith, 1834). The characters and distribution maps provided by Smithers (1983; *The mammals of the South African subregion*, University of Pretoria, xxii, 736 pp.) and by Meester et al. (1986; *Classification of southern African mammals*, Transvaal Museum Monograph no. 5, Pretoria, x, 359 pp.) show that Thunberg's 1811 description of *A. vigil* might have applied to *Euryotis irrorata* Brants, 1827, *Otomys unisulcatus* F. Cuvier, 1829 and *Parotomys littledalei* Thomas, 1918 as well as to *P. brantsii*. However, because it is disused and a nomen dubium I support the suppression of *Arctomys vigil*.

Editorial note: support for the proposed suppression of *Arctomys vigil* Thunberg, 1811 has also been received from Sarah B. George (*Los Angeles County Museum of Natural History, 900 Exposition Boulevard, Los Angeles, California 90007, U.S.A.*) and from V. F. H. Ansell (*Trendrine, Zennor, St Ives, Cornwall, TR26 3BV, U.K.*)

Comment on the proposed conservation of *Platanista* Wagler, 1830 (Mammalia, Cetacea)
(Case 321: see BZN **44**: 253–254)

John E. Heyning & Lawrence G. Barnes
Natural History Museum of Los Angeles County, 900 Exposition Boulevard, Los Angeles, California 90007, U.S.A.

We support the conservation of the generic name *Platanista* for the blind Ganges river dolphin. In examining a rather thorough bibliographic reference on dolphins (Truitt, 1974) we could find approximately 200 references using the generic name *Platanista* and only 11 references using *Susu*. Of these 11, two were the references of Hershkovitz cited in BZN **44**: 253 and the other nine were published in the late 1960s by G. Pilleri. Subsequent publications by Pilleri utilise *Platanista*. It is clear that *Susu* has had virtually no usage since its original description and that *Platanista* has been used consistently for 150 years, so that not to suppress the name *Susu* could potentially confuse the current nomenclatural stability.

Reference

Truitt, D. 1974. *Dolphins and Porpoises: A comprehensive, annotated bibliography of the smaller Cetacea*. 582 pp. Gale Research Company, Detroit.

Editorial note: Support for the conservation of *Platanista* has also been received from Dr P. J. H. van Bree (*Mauritskade 61, Postbus 4766, 1009 AT, Amsterdam, The Netherlands*)

OPINION 1501

Alveolina d'Orbigny, 1826 (Foraminiferida): *Oryzaria boscii* Defrance in Bronn, 1825 designated as the type species

Ruling

(1) Under the plenary powers:

(a) all previous designations of type species for the nominal genus *Alveolina* d'Orbigny, 1826 are hereby set aside and *Oryzaria boscii* Defrance in Bronn, 1825 is designated as type species;

(b) the following generic names are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:

(i) *Fasciolites* Parkinson, 1811;

(ii) *Oryzaria* Defrance in Bronn, 1825;

(c) the specific name *sabulosus* de Montfort, 1808, as published in the binomen *Miliolites sabulosus*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Alveolina* d'Orbigny, 1826 (gender: feminine), type species by designation under the plenary powers in (1) (a) above, *Oryzaria boscii* Defrance in Bronn, 1825, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *boscii* Defrance in Bronn, 1825, as published in the binomen *Oryzaria boscii* (specific name of the type species of *Alveolina* d'Orbigny, 1826) is hereby placed on the Official List of Specific Names in Zoology.

(4) The name ALVEOLINIDAE Ehrenberg, 1839, type genus *Alveolina* d'Orbigny, 1826, is hereby placed on the Official List of Family-Group Names in Zoology.

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Fasciolites* Parkinson, 1811 as suppressed in (1) (b) (i) above;

(b) *Oryzaria* Defrance in Bronn, 1825 as suppressed in (1) (b) (ii) above;

(c) *Microfasciolites* Gaemers, 1978 (a junior objective synonym of *Alveolina* d'Orbigny, 1826).

(6) The name *sabulosus* de Montfort, 1808, as published in the binomen *Miliolites sabulosus* and as suppressed in (1) (c) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2356

An application for the designation of *Oryzaria boscii* Defrance in Bronn, 1825 as the type species of *Alveolina* d'Orbigny, 1826 was received from Drs A. R. Loeblich & H. Tappan (*University of California, Los Angeles, U.S.A.*) on 5 August 1980. After correspondence the case was published in BZN **44**: 36–40 (March 1987). [Note: the last line of para. 3 on p. 36, concerning the neotype of *Borelis melo* (Fichtel & Moll, 1798) is in error (see BZN **45**: 217–219)]. Notice of the case was sent to appropriate journals.

Mr R. V. Melville commented that particulars of the type specimen (if any) of *Oryzaria boscii* should be published, in order to clarify the identity of the type species of *Alveolina*; he mentioned that Defrance's material had probably been destroyed at Caen in 1944. No lectotype or neotype has been designated.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **44**: 38–39, and also to designate the specimen figured by Bosc (1802; reference below) as the lectotype of *Oryzaria boscii* Defrance in Bronn, 1825. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — 1: Melville.

No votes were returned by Bernardi, Gruchy and Trjapitzin. Melville voted against because he considered it inappropriate for the Commission to designate a lectotype in this case, and this part of the vote is withdrawn. The specimen which had been proposed as lectotype is that illustrated by Bosc (1802) as the 'alvéolite grain de festuque' and collected from 'sablon calcaire' near the village of Auvers, near Pontoise, France. Bosc's 'alvéolite' is the basis of Defrance's 'Oryzaire–Bosc' of 1820, latinised in 1825 to *Oryzaria boscii*.

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:

Alveolina d'Orbigny, 1826, *Annales des Sciences Naturelles*, (1)**7**: 306.

ALVEOLINIDAE Ehrenberg, 1839, *Physikalische Mathematische Abhandlungen der Königlichen Akademie der Wissenschaften zu Berlin*, **1838**: table facing p. 20.

boscii, Oryzaria, Defrance in Bronn, 1825, *System der urweltlichen Pflanzenthiere*, p. 44.

Fasciolites Parkinson, 1811, *Organic remains of a former world*, p. 158.

Microfasciolites Gaemers, 1978, *Leidse Geologische Mededelingen*, **51**: 106.

Oryzaria Defrance in Bronn, 1825, *System der urweltlichen Pflanzenthiere*, p. 31.

sabulosus, Miliolites, de Montfort, 1808, *Conchyliologie systématique et classification méthodique des coquilles*, vol. 1, p. 175.

The reference for Bosc's 'alvéolite grain de festuque' mentioned above is:

Bosc, L. A. G. 1802. Sur deux nouvelles Alvéolites. *Bulletin des Sciences, par la Société Philomatique de Paris*, **3**(61): 99; pl. 5, fig. 3, A–C.

OPINION 1502

Conus fergusoni G. B. Sowerby III, 1873 (Mollusca, Gastropoda): specific name conserved

Ruling

(1) Under the plenary powers it is hereby ruled that the specific name *fergusoni* G. B. Sowerby III, 1873, as published in the binomen *Conus fergusoni,* is to be given precedence over the specific name *fulvocinctus* Crosse, 1872, as published in the binomen *Conus fulvocinctus*, whenever the two names are considered synonyms.

(2) The name *fergusoni* G. B. Sowerby III, 1873, as published in the binomen *Conus fergusoni*, is hereby placed on the Official List of Specific Names in Zoology with the endorsement that it is to be given precedence over *fulvocinctus* Crosse, 1872, as published in the binomen *Conus fulvocinctus*, whenever the two names are considered synonyms.

(3) The name *fulvocinctus* Crosse, 1872, as published in the binomen *Conus fulvocinctus*, is hereby placed on the Official List of Specific Names in Zoology with the endorsement that it is not to be given priority over *fergusoni* G. B. Sowerby III, 1873, as published in the binomen *Conus fergusoni*, whenever the two names are considered synonyms.

History of Case 2239

An application for the conservation of *Conus fergusoni* G. B. Sowerby III, 1873 was received from Dr J. K. Tucker (*105 E. Fayette, Effingham, Illinois 62401, U.S.A.*) on 22 November 1977. After correspondence the case was published in BZN **35**: 189–191 (February 1979). Notice of the case was sent to appropriate journals. A supportive comment was received from Dr W. O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*) and published in BZN **36**: 147–148 (October 1979).

Decision of the Commission

On 22 November 1982 the members of the Commission were invited to vote on the proposals published in BZN **35**: 189–191. At the close of the voting period on 22 February 1983 the votes were as follows:

Affirmative votes — 18: Alvarado, Bayer, Brinck, Cocks, Corliss, Hahn, Halvorsen, Holthuis, Kraus, Melville, Mroczkowski, Ride, Schuster, Starobogatov, Trjapitzin, Uéno, Welch, Willink

Negative votes — 4: Dupuis, Heppell, Sabrosky, Savage.

Bernardi was on leave of absence. No votes were returned by Binder and Lehtinen.

Cogger abstained because the case presented for use of the plenary powers was inadequate, in that it failed to address fully the question of usage and stability.

While supporting the application, Ride questioned the need to conserve the name *Conus fulvocinctus*, Crosse, 1872 and also asked that the author should consider selecting a neotype for *Conus fergusoni* G. B. Sowerby III, 1873. This suggestion was put to the author but no reply has been obtained. In the absence of a reply and on advice that the application approved by the Commission is still timely, the Opinion is now published.

Original references

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

fergusoni, Conus, G. B. Sowerby III, 1873, *Proceedings of the Zoological Society of London*, **1873**: 145.

fulvocinctus, Conus, Crosse, 1872, *Journal de Conchyliologie*, **20**: 214.

OPINION 1503

PSEUDOCALANIDAE Sars, 1901 (Crustacea, Copepoda): not to be given precedence over CLAUSOCALANIDAE Giesbrecht, 1892

Ruling

(1) It is hereby confirmed that the Principle of Priority is to apply whenever the following family-group names are considered synonyms:

(a) CLAUSOCALANIDAE Giesbrecht, 1892;

(b) PSEUDOCALANIDAE Sars, 1901.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Clausocalanus* Giesbrecht, 1888 (gender: masculine), type species by monotypy *Calanus mastigophorus* Claus, 1863;

(b) *Pseudocalanus* Boeck, 1873 (gender: masculine), type species by monotypy *Clausia elongata* Boeck, 1865 (a junior subjective synonym of *Calanus minutus* Krøyer, 1845).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *mastigophorus* Claus, 1863, as published in the binomen *Calanus mastigophorus* (specific name of the type species of *Clausocalanus* Giesbrecht, 1888);

(b) *minutus* Krøyer, 1845, as published in the binomen *Calanus minutus* (valid specific name at the time of this ruling of the type species of *Pseudocalanus* Boeck, 1873).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

(a) CLAUSOCALANIDAE Giesbrecht, 1892 (type genus *Clausocalanus* Giesbrecht, 1888);

(b) PSEUDOCALANIDAE Sars, 1901 (type genus *Pseudocalanus* Boeck, 1873).

History of Case 2557

An application for precedence to be given to PSEUDOCALANIDAE Sars, 1901 over CLAUSOCALANIDAE Giesbrecht, 1892 was received from Drs V. N. Andronov (*Atlantic Research Institute of Fisheries and Oceanography, Kaliningrad, U.S.S.R.*) and N. V. Vyshkvartzeva (*Zoological Institute, Academy of Sciences, Leningrad, U.S.S.R.*) on 12 February 1986. After correspondence the case was published in BZN **43**: 297–299 (October 1986). Notice of the case was sent to appropriate journals. Dr T. E. Bowman (*National Museum of Natural History, Washington, U.S.A.*) commented (BZN **44**: 129) that CLAUSOCALANIDAE had gained considerable usage since its priority over PSEUDOCALANIDAE was pointed out; similar comments were received from others.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **43**: 297–298. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 3: Alvarado, Schuster, Kraus

Negative votes — 19: Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Lehtinen, Melville, Mroczkowski, Ride, Savage, Starobogatov, Thompson, Uéno, Willink.

No votes were returned by Bernardi, Gruchy and Trjapitzin.

The proposal to give precedence to the name PSEUDOCALANIDAE Sars, 1901 over the name CLAUSOCALANIDAE Giesbrecht, 1892 was thus not carried.

Original references

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

CLAUSOCALANIDAE Giesbrecht, 1892, *Fauna und Flora des Golfes von Neapel*, vol. 19, p. 185.

Clausocalanus Giesbrecht, 1888, *Atti della Accademia Nazionale dei Lincei, Rendiconti*, (4)**4**(2): 334.

mastigophorus, Calanus, Claus, 1863, *Die frei lebenden Copepoden mit besonderer Berücksichtigung der Fauna Deutschlands, der Nordsee und des Mittelmeeres*, p. 173.

minutus, Calanus, Krøyer, 1845, *In* Gaimard, J. P., *Voyages . . . en Scandanavie . . . pendant . . . 1838, 1839 et 1840 sur la Corvette La Recherche*, Zoologie (Crustacés), Atlas, pl. 41, fig. 4.

PSEUDOCALANIDAE Sars, 1901, *An Account of the Crustacea of Norway*, vol. 4, p. 19.

Pseudocalanus Boeck, 1873, *Förhandlinger i Videnskabsselskabet i Kristiania*, **1872**: 37.

OPINION 1504

BERYTIDAE Fieber, [1851] and *Berytinus* Kirkaldy, 1900 (Insecta, Heteroptera): conserved

Ruling

(1) Under the plenary powers it is hereby ruled that:

(a) the generic name *Berytinus* Kirkaldy, 1900 is to be given precedence over the names *Lizinus* Mulsant & Rey, 1870 and *Melorus* Mulsant & Rey, 1870;

(b) the generic name *Lizinus* Mulsant & Rey, 1870 is to be given precedence over *Melorus* Mulsant & Rey, 1870.

(2) *Neides hirticornis* Brullé, 1835 is hereby designated as type species of the nominal genus *Melorus* Mulsant & Rey, 1870.

(3) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Berytinus* Kirkaldy, 1900 (gender: masculine), type species by original designation *Cimex clavipes* Fabricius, 1775, with the endorsement that it is to be given precedence over *Lizinus* Mulsant & Rey, 1870 and *Melorus* Mulsant & Rey, 1870;

(b) *Lizinus* Mulsant & Rey, 1870 (gender: masculine), type species by designation by Péricart (1984) *Berytus montivagus* Meyer–Dür, 1841, with the endorsement that it is to be given precedence over *Melorus* Mulsant & Rey, 1870, but not to be given priority over *Berytinus* Kirkaldy, 1900;

(c) *Melorus* Mulsant & Rey, 1870 (gender: masculine), type species by designation in (2) above, *Neides hirticornis* Brullé, 1835, with the endorsement that it is not to be given priority over *Berytinus* Kirkaldy, 1900 or *Lizinus* Mulsant & Rey, 1870;

(d) *Neides* Latreille, 1802 (gender: masculine), type species by subsequent designation by Latreille (1810), *Cimex tipularius* Linnaeus, 1758 (valid name at the date of this ruling of the type genus of BERYTIDAE Fieber, [1851].

(4) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *clavipes* Fabricius, 1775, as published in the binomen *Cimex clavipes* (specific name of the type species of *Berytinus* Kirkaldy, 1900);

(b) *montivagus* Meyer–Dür, 1841, as published in the binomen *Berytus montivagus* (specific name of the type species of *Lizinus* Mulsant & Rey, 1870);

(c) *hirticornis* Brullé, 1835, as published in the binomen *Neides hirticornis* (specific name of the type species of *Melorus* Mulsant & Rey, 1870);

(d) *tipularius* Linnaeus, 1758, as published in the binomen *Cimex tipularius* (specific name of the type species of *Neides* Latreille, 1802).

(5) The name BERYTIDAE Fieber, [1851], type genus *Berytus* Fabricius, 1803 (a junior objective synonym of *Neides* Latreille, 1802) is hereby placed on the Official List of Family-Group Names in Zoology.

(6) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) *Berytus* Fabricius, 1803 (a junior objective synonym of *Neides* Latreille, 1802);

(b) *Berytinellus* Stichel, 1957 (a junior objective synonym of *Lizinus* Mulsant & Rey, 1870).

History of Case 2464

An application for the designation of *Cimex clavipes* Fabricius, 1775 as the type species of *Berytus* Fabricius, 1803 was received from Mr W. R. Dolling (*British Museum (Natural History), London, U.K.*) on 18 January 1984. After correspondence the case was published in BZN **42**: 293–295 (September 1985). Notice of the case was sent to appropriate journals.

A comment was received from Drs R. C. Froeschner and T. J. Henry (*National Museum of Natural History, Smithsonian Institution, Washington, U.S.A.*) in favour of continuity of the well known name *Berytinus*, which has had 85 years of established usage, and of BERYTIDAE.

After the publication of his application Mr Dolling became aware of the publication of a monograph by J. Péricart on the Western Palaearctic BERYTIDAE. Since this would become the standard work Mr Dolling withdrew his proposals (see BZN **43**: 120) because they differed from Péricart's usage. Alternative proposals by Péricart were published in BZN **43**: 119. As a result of correspondence with Dolling and with Péricart, modified proposals were sent for voting on 1 March 1988; approval of these resulted in the above ruling. The proposals conserved the family name BERYTIDAE Fieber, [1851] and the generic name *Berytinus* Kirkaldy, 1900, but left *Berytus* Fabricius, 1803 as a junior objective synonym of *Neides* Latreille, 1802 (see BZN **42**: 293).

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the modified proposals as described above. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 19: Alvarado, Bayer, Cogger, Corliss, Hahn, Halvorsen, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — 2: Dupuis and Cocks.

No votes were returned by Bernardi, Gruchy, Heppell and Trjapitzin.

Cocks voted against the proposals on the voting paper because he considered they should have been published in the *Bulletin*. Dupuis voted against because he considered that it was appropriate to conserve the name *Berytus* if BERYTIDAE were to be maintained.

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:

BERYTIDAE Fieber, [1851], *Abhandlungen der Königlichen Böhmischen Gesellschaft der Wissenschaften*, **5**(7): 189.

Berytinellus Stichel, 1957, *Illustrierte Bestimmungstabellen der Wanzen. II. Europa. (Hemiptera–Heteroptera Europae)*. Vol. 4, Heft 2. *Pentatomomorpha Lygaeoidea Piesmidae, Berytidae, Lygaeidae* part 1, p. 44.

Berytinus Kirkaldy, 1900, *Entomologist*, **33**: 241.

Berytus Fabricius, 1803, *Systema Rhyngotorum*, p. 264.

clavipes, Cimex, Fabricius, 1775, *Systema Entomologiae*, p. 729.

hirticornis, Neides, Brullé, 1835, *In* Audouin et Brullé, *Histoire naturelle des Insectes, traitant de leur organisation et de leurs moeurs en général, par M. V. Audouin . . . . et comprenant leur classification et la description des espèces, par M. A. Brullé*, vol. 9, *Orthoptères et Hémiptères*, p. 355.

Lizinus Mulsant & Rey, 1870, *Histoire naturelle des punaises de France. Coréides, Alydides, Bérytides, Sténocéphalides*, p. 212.

Melorus Mulsant & Rey, 1870, *Histoire naturelle des punaises de France. Coréides, Alydides, Bérytides, Sténocéphalides*, p. 212.

montivagus, Berytus, Meyer–Dür, 1841, *Stettiner Entomologische Zeitung*, **2**(6): 89.

Neides Latreille, 1802, *Histoire naturelle, générale et particulière des crustacés et des insectes*, vol. 3, p. 246.

tipularius, Cimex, Linnaeus, 1758, *Systema Naturae*, Ed. 10, vol. 1, p. 451.

OPINION 1505

Sigara scholtzi Fieber, [1860] (currently *Micronecta (Dichaetonecta) scholtzi*; Insecta, Heteroptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *scholtzii* Scholtz, [1847], as published in the binomen *Sigara scholtzii*, is hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy.

(2) The name *scholtzi* Fieber, [1860], as published in the binomen *Sigara scholtzi* and as interpreted by the lectotype designated by Jansson (1986), is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *scholtzii* Scholtz, [1847], as published in the binomen *Sigara scholtzii* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2494

An application for the conservation of *Sigara scholtzi* Fieber, [1860] was received from Dr A. Jansson (*Zoological Museum, University of Helsinki, Finland*) on 26 September 1984. After correspondence the case was published in BZN **43**: 175–177 (July 1986). Notice of the case was sent to appropriate journals. Dr A. Jansson and Mr W.R. Dolling have recently found internal evidence to show that the work cited as 'Scholtz (1846)', although commonly cited as 1846, was not in fact published until 1847, but this does not affect the substance of the ruling.

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 176. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi and Gruchy.

Dupuis said that the designation of a lectotype of *Sigara scholtzi* Fieber, [1860] by Jansson (1986: see reference below) was inappropriate for several reasons. Among these were that the specimen was not collected by Scholtz from the true type locality of Breslau, but by Meyer–Dür from a vaguely stated locality ('Spain'), and was therefore not a syntype. Dupuis further commented that the lectotype was not suited for species differentiation because it was a female, and that in any case the name *S. scholtzii* Scholtz, [1847] (the probable date of publication, rather than 1846) is available. In reply, Dr A. Jansson said that Fieber's [1860] description of *S. scholtzi* was based upon both the Scholtz collection (from Breslau) and that of Meyer–Dür (from Spain), and that the former collection was destroyed in 1945. The Meyer–Dür specimen was the only extant syntype, and *S. scholtzi* could be differentiated from its close relatives by examination of females. Dr Jansson reiterated his view that the Scholtz [1847] description was inadequate to make the name available.

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:

scholtzi, Sigara, Fieber, [1860], *Die europäischen Hemiptera*, p. 89.

scholtzii, Sigara, Scholtz, [1847], *Uebersicht der Arbeiten und Veränderungen der Schlesischen Gesellschaft für Vaterländische Kultur*, p. 106

The reference for the designation of a lectotype for *Sigara scholtzi* Fieber, [1860] (currently *Micronecta* (*Dichaetonecta*) *scholtzi*) is:

Jansson, A. 1986. *Acta Entomologica Fennica*, **47**: 12.

OPINION 1506

Oncomera Stephens, 1829 (Insecta, Coleoptera): *Dryops femorata* Fabricius, 1792 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Oncomera* Stephens, 1829 are hereby set aside and *Dryops femorata* Fabricius, 1792 is designated as type species.

(2) The name *Oncomera* Stephens, 1829 (gender: feminine), type species by designation under the plenary powers in (1) above, *Dryops femorata* Fabricius, 1792, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *femorata* Fabricius, 1792, as published in the binomen *Dryops femorata* (specific name of the type species of *Oncomera* Stephens, 1829), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2523

An application for the designation of *Dryops femorata* Fabricius, 1792 as the type species of *Oncomera* Stephens, 1829 was received from Dr V. Švihla (*Národní muzeum, Kunratice 1, 148 00 Praha 4, Czechoslovakia*) on 28 May 1985. After correspondence the case was published in BZN **44**: 11–12 (March 1987). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **44**: 11. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi, Gruchy and Trjapitzin.

Original references

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

Oncomera Stephens, 1829, *The Nomenclature of British Insects*, p. 20.

femorata, Dryops, Fabricius, 1792, *Entomologia systematica*, vol. 1(2), p. 74.

OPINION 1507

Musca marginalis Wiedemann, 1830 (currently *Chrysomya marginalis*; Insecta, Diptera): specific name conserved

Ruling

(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of both the Principle of Priority and the Principle of Homonymy:

(a) *marginalis* Fourcroy, 1785, as published in the binomen *Musca marginalis*;

(b) *marginalis* Fallén, 1824, as published in the binomen *Musca marginalis*;

(c) any usage, prior to the publication of *marginalis* Wiedemann, 1830, as published in the binomen *Musca marginalis*, of the specific names suppressed in (1) (a) and (1) (b) above.

(2) The name *marginalis* Wiedemann, 1830, as published in the binomen *Musca marginalis*, 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) *marginalis* Fourcroy, 1785, as published in the binomen *Musca marginalis* and as suppressed in (1) (a) above;

(b) *marginalis* Fallén, 1824, as published in the binomen *Musca marginalis* and as suppressed in (1) (b) above.

History of Case 2553

An application for the conservation of *Musca marginalis* Wiedemann, 1830 was received from Dr L. E. O. Braack (*Kruger National Park, Skukuza 1350, South Africa*) on 23 December 1985. After correspondence the case was published in BZN **44**: 13–14 (March 1987). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **44**: 13–14. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — 1: Holthuis.

No votes were returned by Bernardi, Gruchy, and Trjapitzin.

Thompson commented that, although he supported the application, it was inevitable that there would be confusion in the future since the *Catalogue of the Diptera of the Afro-tropical Region* (cf. BZN **44**: 13, para. 4) had used the name *Chrysomya regalis* Robineau–Desvoidy, 1830, and it would be a standard work. (Note: the page reference for *C. regalis* should be p. 449, not p. 395 as given in BZN **44**: 13).

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:

marginalis, Musca, Fourcroy, 1785, *Entomologia Parisiensis*, **2**(5): 497.

marginalis, Musca, Fallén, 1824, *Monographia Muscidium Sueciae*, vol. 7, p. 66.

marginalis, Musca, Wiedemann, 1830, *Aussereuropäische zweiflügelige Insekten*, vol. 2, p. 395.

OPINION 1508

Simulium austeni Edwards, 1915 (Insecta, Diptera): not to be given precedence over *Simulium posticatum* Meigen, 1838

Ruling

(1) It is hereby confirmed that the Principle of Priority is to apply whenever the following specific names are considered synonyms:

(a) *austeni* Edwards, 1915, as published in the binomen *Simulium austeni*;

(b) *posticatum* Meigen, 1838, as published in the binomen *Simulia* [sic] *posticata*.

(2) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *austeni* Edwards, 1915, as published in the binomen *Simulium austeni*;

(b) *posticatum* Meigen, 1838, as published in the binomen *Simulia* [sic] *posticata*.

History of Case 2560

An application for precedence to be given to *Simulium austeni* Edwards, 1915 over *Simulium posticatum* Meigen, 1838 was received from Dr I. A. Rubtsov (*Zoological Institute, Academy of Sciences of the U.S.S.R., Leningrad*) on 6 March 1986. After correspondence the case was published in BZN **43**: 350–351 (December 1986). Notice of the case was sent to appropriate journals. Opposing comments were received from Drs R. W. Crosskey (*British Museum (Natural History), London*) and H. Zwick (*Max-Planck Institut für Limnologie, Schlitz, Fed. Rep. Germany*), published in BZN **44**: 129–131 (June 1987), and from Dr M. Ladle and Mr J. A. B. Bass (*Freshwater Biological Association, Wareham, Dorset, U.K.*), published in BZN **44**: 257 (December 1987). An opposing comment was also received from Mr D. C. Currie (*Department of Entomology, University of Alberta, Canada*) who pointed out that the senior name *posticatum* had been in general use for the pest species known as the 'Blandford fly' since the synonymy with *austeni* was published in 1981.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **43**: 350. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 1: Dupuis

Negative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen. Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink.

No votes were returned by Bernardi, Gruchy and Trjapitzin.

The proposal to give precedence to the name *austeni* Edwards, 1915 over the name *posticatum* Meigen, 1838 was thus not carried.

Original references

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

austeni, Simulium, Edwards, 1915, *Bulletin of Entomological Research*, **6**: 33.

posticatum, Simulium, Meigen, 1838, *Systematische Beschreibung der bekannten europäischen zweiflügeligen Insecten*, vol. 7 (Suppl. vol.), p. 52.

OPINION 1509

Paraphytomyza Enderlein, 1936 (Insecta, Diptera): *Phytagromyza luteoscutellata* de Meijere, 1924 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Paraphytomyza* Enderlein, 1936 are hereby set aside and *Phytagromyza luteoscutellata* de Meijere, 1924 is designated as type species.

(2) The name *Paraphytomyza* Enderlein, 1936 (gender: feminine), type species by designation under the plenary powers in (1) above, *Phytagromyza luteoscutellata* de Meijere, 1924, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *luteoscutellata* de Meijere, 1924, as published in the binomen *Phytagromyza luteoscutellata* (specific name of the type species of *Paraphytomyza* Enderlein, 1936) is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2574

An application for the designation of *Phytagromyza luteoscutellata* de Meijere, 1924 as the type species of *Paraphytomyza* Enderlein, 1936 was received from Mr K. A. Spencer (*Exwell Farm, Callington, Cornwall, U.K.*) on 17 June 1986. After correspondence the case was published in BZN **43**: 344–345 (December 1986). Notice of the case was sent to appropriate journals. No comments were received.

The genus *Paraphytomyza* was described by Enderlein (1936a, p. 180, with a list of included species on p. 182), but the name did not become available until Enderlein later (1936b, p. 42) designated a type species.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **43**: 344–345. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 20: Alvarado, Bayer, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen. Melville, Mroczkowski, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi, Cogger, Gruchy and Trjapitzin. Ride abstained, because he considered that the case as published did not demonstrate whether less confusion would be caused by remaining with the nominal species (*Phytomyza xylostei* Robineau-Desvoidy, 1851) originally designated as type, or by adopting *Phytagromyza luteoscutellata* de Meijere as proposed.

Original references

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

Paraphytomyza Enderlein, 1936(b), *Mitteilungen der Deutschen Entomologischen Gesellschaft*, **7**: 42.

luteoscutellata, Phytagromyza, de Meijere, 1924, *Tijdschrift voor Entomologie*, **67**: 145.

The reference for the first, but unavailable, description of *Paraphytomyza* (unavailable, as no type species is fixed in it) is:

Enderlein, G. 1936a. *In* Brohmer, P., Ehrmann, P. & Ulmer, G. (Eds.) *Die Tierwelt Mitteleuropas*, Band 6, Insekten, Teil 3, p. 180.

OPINION 1510

Microgaster Latreille, 1804 (Insecta, Hymenoptera): *Microgaster australis* Thomson, 1895 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Microgaster* Latreille, 1804 are hereby set aside and *Microgaster australis* Thomson, 1895 is designated as type species.

(2) The name *Microgaster* Latreille, 1804 (gender: masculine), type species by designation under the plenary powers in (1) above, *Microgaster australis* Thomson, 1895, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *australis* Thomson, 1895, as published in the binomen *Microgaster australis* (specific name of the type species of *Microgaster* Latreille, 1804) is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2397

An application for the designation of *Microgaster australis* Thomson, 1895 as the type species of *Microgaster* Latreille, 1804 was received from Dr W. R. M. Mason (*Biosystematics Research Institute, Ottawa, Ontario, Canada*) on 10 November 1981. After correspondence the case was published in BZN **43**: 173–174 (July 1986). Notice of the case was sent to appropriate journals. A supportive comment was received from Dr J. B. Whitfield (*Ohio State University, Ohio, U.S.A.*) and published in BZN **44**: 47. A further supportive comment was received from Dr R. A. Wharton (*Texas A and M University, Texas, U.S.A.*).

Decision of the Commission

On 1 December 1987 the members of the Commission were invited to vote on the proposals published in BZN **43**: 174. At the close of the voting period on 1 March 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Trjapitzin, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi and Gruchy. Cogger abstained as he thought there was insufficient information on which to base a vote.

A letter was received from Dr C. van Achterberg (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) after the voting period had ended, although Dr van Achterberg was unaware of this. Dr van Achterberg said that, as the taxonomy of the BRACONIDAE is still far from settled and is under active study, long-term stability would best be served by adhering to the Principle of Priority and by accepting original type specimens; as stated in BZN **44**: 47, this would result in the use of *Microgaster* for the genus normally known as *Microplitis* Foester, 1862, and the use of *Lissogaster* Bengtsson, 1926 for *Microgaster* auct. Dr van Achterberg further pointed out that not only Papp (1984; see BZN **44**: 47) but also Tobias et al. (1986; *Opredelitel Faune SSSR*, **147**: 1–308, figs 1–189) have recently followed this course, so that *Microgaster* is now being used in two senses.

Drs Mason, Wharton and Whitfield were consulted about Dr van Achterberg's comments. All reiterated their previous position, i.e. that in the present case strict adherence to priority would cause confusion, since a large number of species of *Microplitis* auct. have an applied literature, often extensive. Dr van Achterberg has pointed out that the ultimate aim is stability of nomenclature, and has agreed that acceptance of the Commission's vote is a means of achieving this.

Original references

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

australis, Microgaster, Thomson, 1895, *Opuscula Entomologica,* p. 2241.

Microgaster Latreille, 1804, *Nouveau Dictionnaire d'Histoire Naturelle,* vol. 24, p. 175.

OPINION 1511

Halictus costulatus Kriechbaumer, 1873 (currently *Lasioglossum costulatum*; Insecta, Hymenoptera): specific name conserved

Ruling

(1) Under the plenary powers the specific name *campestris* Eversmann, 1852, as published in the binomen *Andrena campestris*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *costulatus* Kriechbaumer, 1873, as published in the binomen *Halictus costulatus*, is hereby placed on the Official List of Specific Names in Zoology.

(3) The name *campestris* Eversmann, 1852, as published in the binomen *Andrena campestris* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2573

An application for the conservation of *Halictus costulatus* Kriechbaumer, 1873 (currently *Lasioglossum costulatum*) was received from Dr Yu. A. Pesenko (*Zoological Institute, Academy of Sciences of the U.S.S.R., Leningrad*) on 11 June 1986. After correspondence the case was published in BZN **44**: 17–18 (March 1987). Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **44**: 17. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen. Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Willink

Negative votes — 1: Uéno.

No votes were returned by Bernardi, Gruchy and Trjapitzin.

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:

campestris, Andrena, Eversmann, 1852, *Bulletin de la Société Impériale des Naturalistes de Moscou*, **25**(2) no. 3: 20.

costulatus, Halictus, Kriechbaumer, 1873, *Verhandlungen der Zoologisch-botanischen Gesellschaft in Wien*, **23**: 59.

The reference for the designation of a lectotype for *Andrena campestris* (cf. BZN **44**: 17, para. 3) is:

Pesenko, Yu. A. 1986. *Proceedings of the Zoological Institute, Leningrad*, **159**: 137.

OPINION 1512

Desorella Cotteau, 1855 (Echinodermata, Echinoidea): confirmation of *Hyboclypus elatus* Desor, 1847 as the type species

Ruling

(1) Under the plenary powers all designations of type species for the nominal genus *Desorella* Cotteau, 1855 prior to that by Cotteau (1873) of *Hyboclypus elatus* Desor, 1847 are hereby set aside.

(2) The name *Desorella* Cotteau, 1855 (gender: feminine), type species by subsequent designation by Cotteau (1873), *Hyboclypus elatus* Desor, 1847, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *elatus* Desor, 1847, as published in the binomen *Hyboclypus elatus*, (specific name of the type species of *Desorella* Cotteau, 1855) is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2579

An application for the confirmation of *Hyboclypus elatus* Desor, 1847 as the type species of *Desorella* Cotteau, 1855 was received from Dr E. P. F. Rose and Jane Olver (*Royal Holloway and Bedford New College, Surrey, U.K.*) on 28 July 1986. After correspondence the case was published in BZN **44**: 27–30 (March 1987). Notice of the case was sent to appropriate journals. Supportive comments were received from Dr J. Roman (*Muséum National d'Histoire Naturelle, Paris, France*) and Dr J. Thierry (*Université de Dijon, France*) and were published in BZN **44**: 195. Further supportive comments were received from Mr R. V. Melville (*Richmond, U.K.*) and Dr A. M. Clark (*formerly of the British Museum (Natural History), London*) who both said that the originally fixed type species of *Desoria* and *Desorella* was clearly *D. icaunensis* Cotteau, 1855. Para. 12(1) of BZN **44**: 29 was accordingly replaced by the proposal that the Commission set aside all designations of type species for *Desorella* before that by Cotteau (1873) (cf. BZN **44**: 28, para. 8).

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **44**: 29, with proposal (1) amended as above. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi, Gruchy and Trjapitzin.

Original references

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

Desorella Cotteau, 1855, *Bulletin de la Société géologique de France*, (2)**12**: 710.

elatus, Hyboclypus, Desor, 1847, *In* Agassiz & Desor, *Annales des Sciences naturelles, Paris, (Zoologie)*, (3)**7**: 152.

The reference for the designation of *Hyboclypus elatus* Desor, 1847 as the type species of *Desorella* Cotteau, 1855 is:

Cotteau, G. H. 1873. Terrain Jurassique, Echinides Irréguliers, *In* d'Orbigny, A., *Paléontologie Française*, Vol. 9, p. 333.

OPINION 1513

Synapturanus Carvalho, 1954 (Amphibia, Anura): *Synapturanus mirandaribeiroi* Nelson & Lescure, 1975 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Synapturanus* Carvalho, 1954 are hereby set aside and *Synapturanus mirandaribeiroi* Nelson & Lescure, 1975 is designated as type species.

(2) The name *Synapturanus* Carvalho, 1954 (gender: masculine), type species by designation under the plenary powers in (1) above, *Synapturanus mirandaribeiroi* Nelson & Lescure, 1975, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *mirandaribeiroi* Nelson & Lescure, 1975, as published in the binomen *Synapturanus mirandaribeiroi* (specific name of the type species of *Synapturanus* Carvalho, 1954), is hereby placed on the Official List of Specific Names in Zoology.

History of Case 2163

An application for the designation of *Synapturanus mirandaribeiroi* Nelson & Lescure, 1975 as the type species of the microhylid frog genus *Synapturanus* Carvalho, 1954 was received from Dr J. Lescure (*Muséum National d'Histoire Naturelle, Paris*) and Dr C. E. Nelson (*Indiana University, Bloomington, Indiana, U.S.A.*) on 28 January 1976. After correspondence the case was published in BZN **34**: 63–64 (July 1977), and was considered by a working party of the American Society of Ichthyologists and Herpetologists. Members of this working party raised various points and correspondence difficulties caused the case to be delayed. Dr Lescure clarified the points raised, and this enabled the Commission to vote on the case. Notice of the case was sent to appropriate journals. No comments were received.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **34**: 64. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi, Gruchy and Trjapitzin.

Original references

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

mirandaribeiroi, Synapturanus, Nelson & Lescure, 1975, *Herpetologica*, **31**: 394.

Synapturanus Carvalho, 1954, *Occasional Papers of the Museum of Zoology, University of Michigan*, **555**: 17.

OPINION 1514

Liasis Gray, 1842 (Reptilia, Serpentes): *Liasis mackloti* Duméril & Bibron, 1844 designated as the type species

Ruling

(1) Under the plenary powers all previous designations of type species for the nominal genus *Liasis* Gray, 1842 are hereby set aside and *Liasis mackloti* Duméril & Bibron, 1844 is designated as type species.

(2) The name *Liasis* Gray, 1842 (gender: masculine), type species by designation under the plenary powers in (1) above, *Liasis mackloti* Duméril & Bibron, 1844, is hereby placed on the Official List of Generic Names in Zoology.

(3) The entry on the Official List of Specific Names in Zoology for the name *mackloti* Duméril & Bibron, 1844, as published in the binomen *Liasis mackloti*, is to record that it is the type species of *Liasis* Gray, 1842 by designation in (1) above.

History of Case 2439

An application for the designation of *Liasis mackloti* Duméril & Bibron, 1844 as the type species of *Liasis* Gray, 1842 was received from Mr A. F. Stimpson (*British Museum (Natural History), London*) and Dr S. B. McDowell (*Rutgers University, New Jersey, U.S.A.*) on 22 April 1983. After correspondence the case was published in BZN **43**: 330–334 (December 1986). Notice of the case was sent to appropriate journals. No comments were received. Further information concerning *Liasis mackloti* Duméril & Bibron may be found in the application by Dr L. D. Brongersma (1968; BZN **25**: 55–59), including (p. 57) the designation of a lectotype.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **43**: 332. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 20: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — 2: Hahn and Holthuis.

No votes were returned by Bernardi, Gruchy, and Trjapitzin.

Original reference

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

Liasis Gray, 1842, *Zoological Miscellany*, p. 44.

OPINION 1515

LARIDAE Rafinesque Schmaltz, 1815 (Aves) and LARINI LeConte, 1861 (Insecta, Coleoptera): homonymy removed

Ruling

(1) Under the plenary powers the stem of the generic name *Lara* LeConte, 1852, for the purposes of Article 29, is hereby ruled to be LARA–.

(2) The following names are hereby placed on the Official List of Generic Names in Zoology:

(a) *Lara* LeConte, 1852 (gender: feminine), type species by monotypy *Lara avara* LeConte, 1852, (Insecta);

(b) *Larus* Linnaeus, 1758 (gender: masculine), type species by subsequent designation by Selby (1840), *Larus marinus* Linnaeus, 1758 (Aves).

(3) The following names are hereby placed on the Official List of Specific Names in Zoology:

(a) *avara* LeConte, 1852, as published in the binomen *Lara avara* (specific name of the type species of *Lara* LeConte, 1852);

(b) *marinus* Linnaeus, 1758, as published in the binomen *Larus marinus* (specific name of the type species of *Larus* Linnaeus, 1758).

(4) The following names are hereby placed on the Official List of Family-Group Names in Zoology:

(a) LARAINI LeConte, 1861 (emendation, through the ruling in (1) above, of LARINI LeConte, 1861) (type genus *Lara* LeConte, 1852);

(b) LARIDAE Rafinesque Schmaltz, 1815 (type genus *Larus* Linnaeus, 1758).

(5) The name LARINI LeConte, 1861 (a junior homonym of LARIDAE Rafinesque Schmaltz, 1815; emended to LARAINI by the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

History of Case 2581

An application to remove the homonymy between LARIDAE Rafinesque Schmaltz, 1815 and LARINI LeConte, 1861 was received from Dr P. J. Spangler (*Smithsonian Institution, Washington, U.S.A.*) on 9 September 1986. After correspondence the case was published in BZN **44**: 25–26 (March 1987). Notice of the case was sent to appropriate journals. Dr M. Mroczkowski pointed out that the family-group name LARAINAE LeConte should have the date 1861, as in para. 2 of the application (BZN **44**: 25–26), not 1852 as in para. 5.

After voting, Dr Hotthuis pointed out that Rafinesque based a family-group name on *Larus* ten years before Vigors, and the ruling has been changed accordingly.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **44**: 25–26. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 22: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell (in part), Holthuis, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — none.

No votes were returned by Bernardi, Gruchy and Trjapitzin. Heppell said the names of the type species of *Larus* and *Lara* should not be placed on the Official List, since they were irrelevant to the case.

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:

avara, Lara, LeConte, 1852, *Proceedings of the Academy of Natural Sciences of Philadelphia,* **6**: 42.

Lara LeConte, 1852, *Proceedings of the Academy of Natural Sciences of Philadelphia,* **6**: 42.

LARAINI LeConte, 1861, *Smithsonian Miscellaneous Collections,* **3**: 116.

LARIDAE Rafinesque Schmaltz, 1815, *Analyse de la Nature ou Tableau de l'Univers et des Corps organisés,* p. 72.

LARINI LeConte, 1861, *Smithsonian Miscellaneous Collections,* **3**: 116.

Larus Linnaeus, 1758, *Systema Naturae,* Ed. 10, p. 136.

marinus, Larus, Linnaeus, 1758, *Systema Naturae,* Ed. 10, p. 136.

OPINION 1516

Taeniolabis Cope, 1882 (Mammalia, Multituberculata): *Polymastodon taoensis* Cope, 1882 designated as the type species

Ruling

(1) Under the plenary powers:

(a) all previous designations of type species for the nominal genus *Taeniolabis* Cope, 1882 are hereby set aside and *Polymastodon taoensis* Cope, 1882 is designated as type species;

(b) the specific name *sulcatus* Cope, 1882, as published in the binomen *Taeniolabis sulcatus*, is hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Taeniolabis* Cope, 1882 (gender: masculine), type species by designation under the plenary powers in (1) (a) above, *Polymastodon taoensis* Cope, 1882, is hereby placed on the Official List of Generic Names in Zoology.

(3) The name *taoensis* Cope, 1882, as published in the binomen *Polymastodon taoensis* (specific name of the type species of *Taeniolabis* Cope, 1882), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *sulcatus* Cope, 1882, as published in the binomen *Taeniolabis sulcatus* and as suppressed in (1) (b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 2529

An application for the designation of *Polymastodon taoensis* Cope, 1882 as the type species of *Taeniolabis* Cope, 1882 was received from Dr N. B. Simmons (*Department of Paleontology, University of California, Berkeley, U.S.A.*) on 23 July 1985. After correspondence the case was published in BZN **43**: 310–314 (October 1986). Notice of the case was sent to appropriate journals. A supportive comment was received from Professor Dr G. Hahn (*Marburg, Fed. Rep. Germany*), who pointed out that the holotype of *Taeniolabis sulcatus* was too fragmentary to be of use.

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **43**: 312–313. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 19: Alvarado, Bayer, Cocks, Cogger, Corliss, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Uéno, Willink

Negative votes — 2: Holthuis and Thompson.

No votes were returned by Bernardi, Gruchy and Trjapitzin. Dupuis abstained.

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:

sulcatus, Taeniolabis, Cope, 1882, *American Naturalist*, **16**: 604.

Taeniolabis Cope, 1882, *American Naturalist*, **16**: 604.

taoensis, Polymastodon, Cope, 1882, *American Naturalist*, **16**: 684.

OPINION 1517

Viverravus gracilis Marsh, 1872 (Mammalia, Carnivora): generic and specific names conserved

Ruling

(1) Under the plenary powers the generic name *Triacodon* Marsh, 1871 and the specific name *fallax* Marsh, 1871, as published in the binomen *Triacodon fallax*, are hereby suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy.

(2) The name *Viverravus* Marsh, 1872 (gender: masculine), type species by monotypy *Viverravus gracilis* Marsh, 1872, is hereby placed on on the Official List of Generic Names in Zoology.

(3) The name *gracilis* Marsh, 1872, as published in the binomen *Viverravus gracilis* (specific name of the type species of *Viverravus* Marsh, 1872), is hereby placed on the Official List of Specific Names in Zoology.

(4) The name *Triacodon* Marsh, 1871, as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

(5) The name *fallax* Marsh, 1871, as published in the binomen *Triacodon fallax* and as suppressed in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology.

History of Case 1594

An application for the suppression of *Triacodon* Marsh, 1871 was received from Dr L. Van Valen (*University of Chicago, Illinois, U.S.A.*) on 31 January 1963. Due to pending amendments to the Code, this case was held in abeyance. A further application for the conservation of *Viverravus gracilis* Marsh, 1872 was received from Dr R. M. Schoch (*College of Basic Studies, Boston University, Massachusetts, U.S.A.*) on 12 September 1982. After correspondence the case was published in BZN **44**: 7–8 (March 1987). Notice of the case was sent to appropriate journals. Supportive comments were received from three members of the Committee on Mammal Names of the International Theriological Congress (Drs S. B. George, D. Kock and J. Meester).

Decision of the Commission

On 1 March 1988 the members of the Commission were invited to vote on the proposals published in BZN **44**: 7–8. At the close of the voting period on 1 June 1988 the votes were as follows:

Affirmative votes — 21: Alvarado, Bayer, Cocks, Cogger, Corliss, Dupuis, Hahn, Halvorsen, Heppell, Kabata, Kraus, Lehtinen, Melville, Mroczkowski, Ride, Savage, Schuster, Starobogatov, Thompson, Uéno, Willink

Negative votes — 1: Holthuis.

No votes were returned by Bernardi, Gruchy and Trjapitzin.

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:

fallax, Triacodon, Marsh, 1871, *American Journal of Science,* (3)**2**: 123.

gracilis, Viverravus, Marsh, 1872, *American Journal of Science,* (3)**4**: 127.

Triacodon Marsh, 1871, *American Journal of Science,* (3)**2**: 123.

Viverravus Marsh, 1872, *American Journal of Science,* (3)**4**: 127.

Contents—*continued*

Opinion 1505. *Sigara scholtzi* Fieber, [1860] (currently *Micronecta* (*Dichaetonecta*) *scholtzi;* Insecta, Heteroptera): specific name conserved. 233
Opinion 1506. *Oncomera* Stephens, 1829 (Insecta, Coleoptera): *Dryops femorata* Fabricius, 1792 designated as the type species 235
Opinion 1507. *Musca marginalis* Wiedemann, 1830 (currently *Chrysomya marginalis*; Insecta, Diptera): specific name conserved 236
Opinion 1508. *Simulium austeni* Edwards, 1915 (Insecta, Diptera): not to be given precedence over *Simulium posticatum* Meigen, 1838 237
Opinion 1509. *Paraphytomyza* Enderlein, 1936 (Insecta, Diptera): *Phytagromyza luteoscutellata* de Meijere, 1924 designated as the type species. 238
Opinion 1510. *Microgaster* Latreille, 1804 (Insecta, Hymenoptera): *Microgaster australis* Thomson, 1895 designated as the type species 239
Opinion 1511. *Halictus costulatus* Kriechbaumer, 1873 (currently *Lasioglossum costulatum*; Insecta, Hymenoptera): specific name conserved 241
Opinion 1512. *Desorella* Cotteau, 1855 (Echinodermata, Echinoidea): confirmation of *Hyboclypus elatus* Desor, 1847 as the type species. 242
Opinion 1513. *Synapturanus* Carvalho, 1954 (Amphibia, Anura): *Synapturanus mirandaribeiroi* Nelson & Lescure, 1975 designated as the type species 243
Opinion 1514. *Liasis* Gray, 1842 (Reptilia, Serpentes): *Liasis mackloti* Duméril & Bibron, 1844 designated as the type species. 244
Opinion 1515. LARIDAE Rafinesque Schmaltz, 1815 (Aves) and LARINI LeConte, 1861 (Insecta, Coleoptera): homonymy removed. 245
Opinion 1516. *Taeniolabis* Cope, 1882 (Mammalia, Multituberculata): *Polymastodon taoensis* Cope, 1882 designated as the type species 247
Opinion 1517. *Viverravus gracilis* Marsh, 1872 (Mammalia, Carnivora); generic and specific names conserved. 248

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Parts of the Bulletin since 44 (1) should be consulted as examples.

Title. This should be written in lower case letters and include the names to be conserved. A specific name should be cited in the original binomen, with the current binomen in parentheses.

Author's name. Full postal address should be given.

Abstract. This will be prepared by the Commission Secretariat.

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. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . . '.

References. These should be given for all authors cited. The titles of periodicals should be *in full* and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and the place of publication.

Submission of application. Two copies should be sent to the address on the inside front cover. The Secretariat is willing to offer additional advice at an early stage in the preparation of manuscripts.

CONTENTS

Page

Notices 181
The International Code of Zoological Nomenclature 182
Classical Adviser to the Commission 182
Letter: Increased nomenclatural stability through Lists of Names in Current Use. D. L. Hawksworth. 183

Applications

Septotrochammina Zheng, 1979 (Foraminiferida): proposed designation of *Remaneica gonzalezi* Seiglie, 1964 as the type species. A. R. Loeblich, Jr & H. Tappan Loeblich 186
Pleuromma princeps Scott, 1894 (currently *Gaussia princeps*; Crustacea, Copepoda): proposed conservation of the specific name. K. Hulsemann 188
ACRIDIDAE Karny, 1907, OEDIPODIDAE Walker, 1870 and LOCUSTIDAE Latreille, 1802 (Insecta, Orthoptera): proposed order of precedence. K. H. L. Key 191
Bruchus Linnaeus, 1767, *Ptinus* Linnaeus, 1767 and *Mylabris* Fabricius, 1775 (Insecta, Coleoptera): proposed conservation. L. Borowiec 194
Coryphium angusticolle Stephens, 1834 (Insecta, Coleoptera): proposed conservation of both the generic and specific names. L. Zerche 197
Tachina orbata Wiedemann, 1830 (currently *Peribaea orbata*; Insecta, Diptera): proposed confirmation of neotype designation. R. W. Crosskey & H. Shima . . . 199
Tenthredo zonula Klug, 1817 (Insecta, Hymenoptera): proposed conservation of the specific name. A. Taeger 202
Saccopharynx Mitchill, 1824 (Osteichthyes, Saccopharyngiformes): proposed conservation. W. N. Eschmeyer & C. R. Robins 204
ICHTHYOPHIIDAE Taylor, 1968 (Amphibia, Gymnophiona): proposed conservation. M. Wilkinson & R. A. Nussbaum 207
Thorius pennatulus Cope, 1869 (Amphibia, Caudata): proposed conservation of the specific name. H. M. Smith, J. Hanken & D. Chiszar. 210
Semioptera wallacii Gray, 1859 (Aves, Paradisaeidae): proposed confirmation as the correct spelling. M. LeCroy 212
Mus musculus domesticus Schwarz & Schwarz, 1943 (Mammalia, Rodentia): proposed conservation. G. B. Corbet 214

Comments

Amendment to a published comment on the proposed suppression of three works by R. W. Wells and C. R. Wellington. A. E. Greer 216
On Pragmatypes: a reply to Dr G. Hahn. R. H. L. Disney & Y. Z. Erzinclioglu . . . 216
On the proposed conservation of *Borelis* de Montfort, 1808 (Foraminiferida), and on the neotype of its type species. F. T. Banner 217
On the proposal to set aside the status of the putative type specimen of *Silurus felis* Linnaeus, 1766 (currently *Ariopsis felis*; Osteichthyes, Siluriformes). A. Wheeler . 219
On the family name for the storm petrels (Aves). W. R. P. Bourne 221
On the proposed conservation of the specific name of *Euryotis brantsii* A. Smith, 1834 (Mammalia, Rodentia). D. Kock 223
On the proposed conservation of *Platanista* Wagler, 1830 (Mammalia, Cetacea). J. E. Heyning & L. G. Barnes 223

Rulings of the Commission

Opinion 1501. *Alveolina* d'Orbigny, 1826 (Foraminiferida): *Oryzaria boscii* Defrance in Bronn, 1825 designated as the type species 224
Opinion 1502. *Conus fergusoni* G. B. Sowerby III, 1873 (Mollusca, Gastropoda): specific name conserved 226
Opinion 1503. PSEUDOCALANIDAE Sars, 1901 (Crustacea, Copepoda): not to be given precedence over CLAUSOCALANIDAE Giesbrecht, 1892 228
Opinion 1504. BERYTIDAE Fieber, [1851] and *Berytinus* Kirkaldy, 1900 (Insecta, Heteroptera): conserved 230

Continued on Inside Back Cover

Printed in Great Britain by Henry Ling Ltd., at the Dorset Press, Dorchester, Dorset

Volume 45, Part 4, 16 December 1988 pp. 249–304 ISSN 0007–5167

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 1988 is £57 or $110, postage included; the rates for 1989 will be £60 or $115. All manuscripts, letters and orders should be sent to:

The Executive Secretary,
International Commission on Zoological Nomenclature,
c/o British Museum (Natural History),
Cromwell Road,
London, SW7 5BD, U.K. (Tel. 01-938 9387)

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Officers

President	Dr W. D. L. Ride (*Australia*)
Vice-President	(*Vacant*)
Secretary-General	Dr L. B. Holthuis (*The Netherlands*)
Executive Secretary	Dr P. K. Tubbs (*United Kingdom*)

Members

Dr F. M. Bayer (*U.S.A.*)
Prof W. J. Bock (*U.S.A.*)
Dr L. R. M. Cocks (*U.K.*)
Dr H. G. Cogger (*Australia*)
Prof J. O. Corliss (*U.S.A.*)
Prof C. Dupuis (*France*)
Dr G. C. Gruchy (*Canada*)
Prof Dr G. Hahn (*Fed. Rep. Germany*)
Prof Dr O. Halvorsen (*Norway*)
Mr D. Heppell (*U.K.*)
Dr L. B. Holthuis (*The Netherlands*)
Dr Z. Kabata (*Canada*)
Prof Dr O. Kraus (*Fed. Rep. Germany*)
Dr P. T. Lehtinen (*Finland*)
Prof U. R. Martins de Souza (*Brazil*)
Mr R. V. Melville (*U.K.*)
Dr M. Mroczkowski (*Poland*)
Dr C. Nielsen (*Denmark*)
Dr W. D. L. Ride (*Australia*)
Prof J. M. Savage (*U.S.A.*)
Prof Dr R. Schuster (*Austria*)
Dr Y. I. Starobogatov (*U.S.S.R.*)
Dr F. C. Thompson (*U.S.A.*)
Dr V. A. Trjapitzin (*U.S.S.R.*)
Dr Shun-Ichi Uéno (*Japan*)
Prof A. Willink (*Argentina*)

Secretariat

Dr P. K. Tubbs (*Executive Secretary and Editor*)
Mr J. D. D. Smith, B.Sc., B.A. (*Scientific Administrator*)
Miss R. A. Cooper, B.Sc. (*Zoologist*)
Mrs A. Gentry, B.Sc. (*Zoologist*)

Officers of the International Trust for Zoological Nomenclature

Prof H. B. Whittington, F.R.S. (*Chairman*)
Dr M. K. Howarth (*Secretary and Managing Director*)

© International Trust for Zoological Nomenclature 1988

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 45, part 4 (pp. 249–304) 16 December 1988

Notices

(a) *Invitation to comment*. The Commission is entitled to start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. 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, in duplicate, to the Secretary of the Commission as quickly as possible, and in any case in time to reach the Secretary within twelve months of the date of publication of the application.

(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 45, part 3 (published on 23 September 1988):

(1) *Apis terrestris* Linnaeus, 1758 (currently *Bombus terrestris*; Insecta, Hymenoptera): proposed stabilisation by replacement of the lectotype by a neotype. (Case 2638). A. Løken, A. Pekkannen & P. Rasmont.

(2) *Marssonopora* Lang, 1914 (Bryozoa): proposed designation of *Membranipora densispina* Levinson, 1925 as the type species. (Case 2657). P. D. Taylor & E. Voigt.

(3) *Monograptus exiguus* (Graptolithina): proposed conservation of accepted usage by the citation of Lapworth (1876) and not Nicholson (1868) as author. (Case 2674). D. K. Loydell.

(4) *Coluber gemonensis* (Bedriaga, 1882), *C. viridiflavus* (Lacépède, 1789), *Elaphe quatuorlineata* (Lacépède, 1789) and *Natrix natrix helvetica* (Lacépède, 1789) (Reptilia, Serpentes): proposed conservation of the specific names. (Case 2675). B. Schätti & A. F. Stimson.

(5) *Octhebius* Leach, 1815 (Insecta, Coleoptera): proposed confirmation of *Elophorus marinus* Paykull, 1798 as the type species. (Case 2676). M. Hansen.

(6) *Saissetia* Cockerell, 1899 (Insecta, Homoptera): proposed conservation with adoption of Cockerell as author in place of Deplanche (1859). (Case 2677). Y. Ben-Dov.

(7) *Curculio viridicollis* Fabricius, 1792 (currently *Phyllobius viridicollis*; Insecta, Coleoptera): proposed conservation of the specific name. (Case 2678). R. T. Thompson.

(8) *Ctenarytaina* Ferris & Klyver, 1932 (Insecta, Hemiptera): proposed conservation. (Case 2679). K. L. Taylor.

(9) *Euribia jaceana* Hering, 1935 (currently *Urophora jaceana*; Insecta, Diptera): proposed precedence over *Euribia conyzae* Hering, 1933. (Case 2680). I. M. White & P. Harris.

(10) *Heliastes ovalis* F. Steindachner, 1900 (currently *Chromis ovalis*; Osteichthyes, Perciformes): proposed conservation of the specific name. (Case 2681). W. I. Follett & J. E. Randall.

(11) *Fryeria* Gray, 1853 and *Fryeria rueppellii* Bergh, 1869 (Mollusca, Gastropoda): proposed conservation. (Case 2682). D. J. Brunkhorst, W. B. Rudman & R. C. Willan.

(d) *Rulings of the Commission*. Each Opinion, Declaration and Direction 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*.

Election of members of the Commission

The Section of Zoological Nomenclature of the International Union of Biological Sciences held a ballot in Canberra on 17–18 October 1988, during the 23rd General Assembly of the Union, to fill five vacancies on the Commission.

The Council of the Commission had previously ruled four retiring members to be eligible for re-election, and seventeen additional nominations had been received.

The Section re-elected Prof C. DUPUIS (France; Heteroptera) and Prof L. B. HOLTHUIS (The Netherlands; Crustacea) as members of the Commission, and elected the following three new members:

Prof WALTER J. BOCK (*Department of Biological Sciences, Columbia University, New York, NY 10027, U.S.A.*). Prof Bock is the Permanent Secretary of the International Ornithological Committee.

Prof UBIRAJARA R. MARTINS DE SOUZA (*Museu de Zoologia da Universidade de São Paulo, Caixa Postal 7172, 04263 São Paulo, Brazil*). Prof Martins de Souza specializes in Coleoptera, and is the Editor of *Revista Brasileira de Entomologia*.

Dr CLAUS NIELSEN (*Zoologisk Museum, Universitetsparken 15, DK-2100 Kobenhavn ø, Denmark*). Dr Nielsen is chief editor of *Acta Zoologica*, Stockholm, and specializes in bryozoa and marine invertebrate larvae.

The Commission intends to fill three new vacancies, and also that caused by the retirement of Mr R. V. Melville on 14 February 1989. Any nominations additional to those already received must reach the Secretariat by 28 February 1989.

P. K. TUBBS
Executive Secretary

International Trust for Zoological Nomenclature

Financial Report for the year 1987

The financial affairs of the Trust were affected by four major factors during 1987: the decision to publish the Bulletin of Zoological Nomenclature at the Commission's offices in the British Museum (Natural History), the continuing high levels of sales of the 3rd edition of the International Code of Zoological Nomenclature, the publication of the Official Lists and Indexes of Names and Works in Zoology, and the re-allocation of the major part of the Trust's funds to wider ranging investments.

The Bulletin was once again published entirely by the Trust after a gap of four years of publication by CAB International, from whom the Trust received £5,000 in 1986. The net sum from sales of the Bulletin increased to £10,843 in 1987, this being the difference between £18,592 received in subscriptions for the 1987 volume and the £7,749 costs of printing and distributing. Sales of the 3rd edition of the Code yielded £9,778 during 1987, and there was no expenditure on printing. The cost of printing and distributing the Official Lists and Indexes in 1987 was £15,947, but nearly half that amount had been recouped by sales receipts of £7,661 up to the end of the year.

Money received from the other main sources of income — grants, donations, deeds of covenant, and interest — was similar to that for the previous year, and expenditure on salaries and office supplies was slightly higher. When all income and expenditure is accounted for, the Trust's funds were in surplus by the small amount of £123 in 1987. It demonstrates the extent to which the Trust relies on the continuation of grants and donations from the Royal Society, the four British research councils, the American Association for Zoological Nomenclature, and others, whom we thank for their generosity and continuing support.

At the Annual General Meeting on 17 June 1987 it was decided to adopt a wider investment policy for the £128,000 of the Trust's money that was then in National Savings Income Bonds. Accordingly 11,148 units of M & G Equities Investment Fund for Charities were purchased for £64,000 on 23 June 1987 at 547.1p per unit and 12,512.22 income shares of Charities Official Investment Fund were purchased on 30 June 1987 at a price of 511.5p per share. It is expected that this will lead to increases in both the annual income and the capital value of the Trust's funds in the long term.

M. K. HOWARTH
Secretary and Managing Director
12 June 1988

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 DECEMBER, 1987

Income		
SALE OF PUBLICATIONS		
Bulletin of Zoological Nomenclature	21,969	
International Code of Zoological Nomenclature	9,778	
Official Lists and Indexes	7,661	
		39,408
GRANTS	9,000	
DONATIONS AND COVENANTS	9,139	
BANK AND INVESTMENT INTEREST	13,208	
		31,347
		£70,755
Expenditure		
SALARIES AND FEES	43,257	
OFFICE EXPENSES	3,195	
AUDIT FEE	190	
PRINTING AND DISTRIBUTION OF PUBLICATIONS		
Bulletin of Zoological Nomenclature	7,749	
Official Lists and Indexes	15,947	
DEPRECIATION OF OFFICE EQUIPMENT	294	
		£70,632
Surplus for the year		£123

Case 2663

Orbitolina d'Orbigny, 1850 (Foraminiferida): proposed confirmation of *Orbulites concava* Lamarck, 1816 as the type species

R. Schroeder
Geologisch-Paläontologisches Institut, Universität Frankfurt, Senckenberganlage 32–34, Postfach 11 19 32, D–6000 Frankfurt a. M. 11, Fed. Rep. Germany

M. D. Simmons
Stratigraphy Branch, BP Research Centre, Sunbury-on-Thames, TW16 7LN, U.K.

Abstract. The purpose of this application is the confirmation of the nominal species *Orbulites concava* Lamarck, 1816 as type species of *Orbitolina* d'Orbigny, 1850. The first type species designated is now known to be a coral, but the designation supported here maintains the Tethyan, Cretaceous foraminiferal genus *Orbitolina* in its established meaning.

---

1. *Orbitolina* is first mentioned on p. 143 of volume 2 of d'Orbigny's *Prodrome de Paléontologie*. . . . There is no mention of *Orbitolina* in either volume 1 or 3 of this book. In total, six species are listed under the genus, in stratigraphic order. He listed them as follows: (i) (p. 143) *lenticulata* d'Orbigny, 1847; (ii) (p. 184) *plana* d'Archiac, 1837; (iii) (p. 184) *mamillata* d'Archiac, 1837; (iv) (p. 185) *concava* Lamarck, 1816; (v) (p. 279) *gigantea* d'Orbigny, 1847 and (vi) (p. 280) *radiata* d'Orbigny 1847. D'Orbigny does not indicate any particular species to be the type. It must be noted here that in the text of the *Prodrome* the date 1847 refers to the date of the manuscript, which was actually published in 1850.

2. All six species recorded by d'Orbigny (1850) under *Orbitolina* have equal claim as type species. According to Article 69a of the Code, the first published designation of a type species subsequent to the original publication of the genus should be regarded as the only valid one. There are several subsequent quotations which could be regarded as designations of a type species for *Orbitolina*, and these are discussed in paragraphs 3–8 below.

3. According to Parker & Jones (1860, p. 35) 'the conical, hemispherical and flattened forms of *Orbitolina* so common in the Cretaceous deposits, and known under twelve or more different names, are referable to one specific type, namely the *O. concava*, Lamarck, sp. and to this type not only these large . . .'. However, neither this quotation, nor any that follow it in the text, are valid as a type designation, as these authors were not using 'type' in the sense of 'type species of a genus', but rather as an indication of the 'typical form of a species'. Indeed on p. 38 we read 'we regard it [*O. concava*] as the type of a species including numerous varietys'. In their recent monograph of foraminifera genera, Loeblich & Tappan (1988, p. 166) cited this reference by Parker & Jones as a valid designation of a type species, and thus regarded *Orbulites concava* Lamarck, 1816 (p. 197) as the correct type species of *Orbitolina*. As noted above, we cannot agree with their opinion that the Parker & Jones reference is a

valid designation, although for different reasons, as will be shown, we suggest that *O. concava* be recognised as the type species.

4. Ellis & Messina (1940 et seq.) reported that *Orbitolina lenticularis* (Blumenbach, 1805) was designated as type species by Dollfus (1905, p. 232). They regarded this designation as invalid because a species named *lenticularis* was 'not among the species originally included under the generic name by d'Orbigny'. In fact d'Orbigny (1850, p. 143) mentioned *Orbitolites lenticulata* Lamarck, 1816, which Schroeder (1963) noted is synonymous with *Madreporites lenticularis* Blumenbach, 1805. The Dollfus reference relates to a review by that author of a paper published by Prever (in Prever & Silvestri, 1905). In this review Dollfus pointed out: 'Il [Prever] considère que le Genre *Dictyocornis* [he means *Dictyoconus*] Blanckenhorn, fondé pour quelques espèces d'Egypte, est bien rigoureusement synonyme [with *Orbitolina*]; il le compare aux Genres voisins et commence par établir que le type du G. *Orbitolina* est *O. lenticularis* Blum. sp. (*Madreporites*) 1796, espèce de la Perte du Rhône'. However, the second half of this statement made by Dollfus is wrong; Prever never designated *O. lenticularis* as type species of *Orbitolina*. On the contrary, *O. lenticularis* belongs to the species which were eliminated by this latter author (1905, p. 469): 'Il lavoro di revisione compiuto, mi ha obbligato a distruggere parecchie delle specie già istitiute ed anche di quelle or nominate, ed in cambio a crearne delle nuove' [As a result of this revision, I have been obliged to destroy quite a lot of species already established and also quite a lot of those just mentioned and to create new ones instead]. It is clear that neither Dollfus nor Prever designated a type species.

5. Cushman (1928, p. 182) designated *Orbitolina gigantea* d'Orbigny as type species of *Orbitolina*. Subsequently Douvillé (1933, p. 199) demonstrated that this species is a coral belonging to the genus *Cyclolites* Lamarck, 1801.

6. Davies (1939, p. 786) pointed out that '*O. concava* seems to be the form best indicated in the *Prodrome* itself. It is also the best for studying the genus, being usually better preserved as well as much larger than *O. lenticularis*. It should obviously, in my opinion, be taken as the type of *Orbitolina*'. Davies therefore selected *O. concava* as type species. By doing so he hoped to alleviate the taxonomic problems caused by Cushman's designation of the coral *O. gigantea* [= *Cyclolites*] as type species, and in fact Cushman in the 1950 edition of his text named *O. concava* as the type species. A number of other workers have also agreed with Davies' opinion that *O. concava* should be regarded as the type species of *Orbitolina*. These include Henson (1948) and Sahni & Sastri (1957), and we also suggest that this designation be accepted.

7. Thalmann (1950, p. 509) proposed '*Orbitolina texana* Roemer, 1849' [*Orbitulites texanus* Roemer, 1849] as a substitute type species in place of *Orbitolina concava*. However, this species is not among those originally included under the generic name by d'Orbigny.

8. Douglass (1960a, p. 28) and Douglass, Loeblich & Tappan (1964, p. C309) considered *Orbitolina lenticularis* to be the type species of the genus. Douglass [op. cit.] is of the opinion that 'only one species is referred to the genus in this, the original description. The genus as described is therefore monotypic, even though five other species are referred to it in later sections of the volume'. However, as pointed out in para. 1 above, six species were included in d'Orbigny (1850), and so the arguments of Douglass (1960a,b) and of Douglass et al. [op. cit.], which were also followed by Hofker (1963, p. 220; 1966a, p. 204; 1966b, p. 9), are invalid (see also Schroeder, 1963, p. 351).

9. *Madreporites lenticularis* Blumenbach, 1805 (Heft 8 [80]) (= *Orbitolina lenticulata*) is the type species by monotypy of *Palorbitolina* Schroeder, 1963 (p. 348). This genus was shown by Schroeder (1964a,b; 1975) to be morphologically and phylogenetically distinct from *Orbitolina*.

10. As there was no type by original designation, nor was the genus monotypic in the original description, Cushman's 1928 designation of *Orbitolina gigantea* d'Orbigny makes *Orbitolina* d'Orbigny, 1850 a junior objective synonym of the coral genus *Cyclolites* Lamarck, 1801 (see Wells, 1956, p. F386). If one were to accept this situation, the numerous species regarded as belonging to *Orbitolina* would have to be assigned to a new genus. Therefore we request the suppression of *Orbitolina gigantea* as type species of *Orbitolina* and the recognition of *Orbitolina concava* as type species, as originally suggested by Davies (1939). This solution negates the need for a major revision of orbitolinid taxonomy, and allows the genus *Palorbitolina* Schroeder, 1963 to remain valid, with *Madreporites lenticularis* as its type species by monotypy. *Palorbitolina* and *Orbitolina* are often abundant in Early and Middle Cretaceous platform carbonates of the Tethyan realm and recognition of their constituent species is extremely valuable in biostratigraphic studies of such sediments. As biozonation schemes can be developed using these taxa (e.g. Schroeder, 1975), it is important that their names be conserved in their accustomed usage.

11. Parker & Jones (1860) and Schroeder (1962) pointed out that *Orbitolina concava* [= *Orbulites concava* Lamarck, 1816] is not the same taxon as *Orbitolites concava* Lamarck, 1801; the earlier named species is now referred to the bryozoan genus *Lunulites*.

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

(1) to use its plenary powers to set aside all designations of type species for the nominal genus *Orbitolina* d'Orbigny, 1850 prior to that of *Orbulites concava*, Lamarck, 1816 by Davies (1939);

(2) to place on the Official List of Generic Names in Zoology the following names:
   (i) *Orbitolina* d'Orbigny, 1850 (gender: feminine), type species by designation by Davies (1939) *Orbulites concava* Lamarck, 1816;
   (ii) *Palorbitolina* Schroeder, 1963 (gender: feminine), type species by monotypy *Madreporites lenticularis* Blumenbach, 1805;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (i) *concava* Lamarck, 1816, as published in the binomen *Orbulites concava* (specific name of the type species of *Orbitolina* d'Orbigny, 1850);
   (ii) *lenticularis* Blumenbach, 1805, as published in the binomen *Madreporites lenticularis* (specific name of the type species of *Palorbitolina* Schroeder, 1963).

References

Archiac, E. J. A. d', 1837. Mémoire sur la formation Crétacé du Sud-Ouest de la France. *Mémoires de la Société Géologique de France*, **2**: 157–192.

Blumenbach, J. F. 1805. *Abbildungen naturhistorischer Gegenstände*, Heft 8 [80], pl. 80+[i–ii]. H. Dieterich, Göttingen.

Cushman, J. A. 1928. Foraminifera, their classification and economic use. *Cushman Laboratory for Foraminifera Research*. Special Publication No. 1, 401 pp.

Cushman, J. A. 1950. *Foraminifera, their classification and economic use*. 4th edition (revised and enlarged). 605 pp., 55 pl., 31 fig. Harvard University Press, Cambridge, Mass.

Davies, L. M. 1939. An early *Dictyoconus* and the genus *Orbitolina*: Their contemporaneity, structural distinction and representative natural allies. *Transactions of the Royal Society of Edinburgh*, **59**: 773–790.

Dollfus, G. F. 1905. Contributo allo studio delle Orbitolininae per M. M. Prever e Silvestri. *Revue Critique de Paléozoologie*, **9**(4): 232.

Douglass, R. C. 1960a. The Foraminiferal Genus *Orbitolina* in North America. *U.S. Geological Survey, Professional Paper* no. 333, 52 pp., 14 pl., 32 fig.

Douglass, R. C. 1960b. Revision of the family Orbitolinidae. *Micropaleontology*, **6**(3): 249–270.

Douglass, R. C., Loeblich Jr., A. R. & Tappan, H. 1964. ORBITOLINIDAE. *In* Loeblich Jr, A. R. & Tappan, H. *Treatise on Invertebrate Paleontology*; Part C — Protista 2, Sarcodina, chiefly 'Thecamoebians' and Foraminiferida; vol. 1, pp. C308–C313. The Geological Society of America and the University of Kansas Press, Lawrence.

Douvillé, H. 1933. A propos de l'*Orbitolina gigantea*. *Compte Rendu Sommaire des Séances de la Société Géologique de France*, **1933**(13): 198–199.

Ellis, B. F. & Messina, A. 1940 et seq. *Catalogue of Foraminifera*. American Museum of Natural History.

Henson, F. R. S. 1948. *Larger imperforate foraminifera of Southwest Asia*, 127 pp., 16 pl. British Museum (Natural History), London.

Hofker Jr., J. 1963. Studies on the genus *Orbitolina* (Foraminiferida). *Leidsche Geologische Mededelingen*, **29**: 181–254.

Hofker Jr., J. 1966a. Zur Evolution der Cenoman–Orbitolinen. Eine Entgegnung an R. Schroeder. *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte*, **1966**: 193–207.

Hofker Jr., J. 1966b. Studies on the family Orbitolinidae. *Palaeontographica*, (A) **126**: 1–34.

Lamarck, J. B. 1801. *Système des animaux sans vertèbres, ou tableau général des classes, des ordres et des genres de ces animaux*, 432 pp. Deterville, Paris.

Lamarck, J. B. 1816. *Histoire naturelle des animaux sans vertèbres*, vol. 2. 568 pp. Verdière, Paris.

Loeblich, A. R. & Tappan, H. 1988. *Foraminiferal genera and their classification*, vol. 1. 970 pp. Van Nostrand Reinhold Co., New York.

Orbigny, A. D. d', 1850. *Prodrome de Paléontologie stratigraphique universelle des animaux mollusques & rayonnés faisant suite au cours élémentaire de Paléontologie et de Géologie stratigraphiques*, vol. 2. 427 pp. Masson, Paris.

Parker, W. K. & Jones, T. R. 1860. On the Nomenclature of the Foraminifera. *Annals and Magazine of Natural History*, **6**: 29–40.

Prever, P. L. 1905. Considerazioni sulla sottofamiglia delle ORBITOLININAE. *In* Prever, P. L. & Silvestri, A., Contributo allo studio delle ORBITOLININAE. *Bollettino della Società Geologica Italiana*, **23**: 467–477.

Roemer, F. 1849. *Texas, mit besonderer Rücksicht auf Deutsche Auswanderung und die physischen Verhältnisse des Landes*. xiv, 464 pp., 1 map. Bonn.

Sahni, M. R. & Sastri, V. V. 1957. A Monograph of the Orbitolines found in the Indian Continent (Chitral, Gilgit, Kashmir), Tibet and Burma. *Memoirs of the Geological Survey of India, Palaeontologica Indica*. **33**(3): 1–50.

Schroeder, R. 1962. Orbitolinen des Cenomas Südwesteuropas. *Paläontologische Zeitschrift*, **36**: 171–202.

Schroeder, R. 1963. *Palorbitolina*, ein neues Subgenus der Gattung *Orbitolina* (Foraminifera). *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen*, **117**: 346–359.

Schroeder, R. 1964a. Communication préalable sur l'origine des Orbitolines. *Compte Rendu Sommaire des Séances de la Société Géologique de France*, **1964**: 411–413.

Schroeder, R. 1964b. Orbitoliniden—Biostratigraphie des Urgons nordöstlich von Teruel (Spanien). *Neues Jahrbuch für Geologie und Paläontologie, Monatshefte*, **1964**: 462–474.

Schroeder, R. 1975. General evolutionary trends in Orbitolinas. *Revista Espanola de Micropaleontologia*, Numero Especial (enero 1975), pp. 117–128.

Thalmann, H. E. 1950. Mitteilungen über Foraminiferen VIII (37). Gehäuse-Grösse bei den Foraminiferen. *Eclogae Geologicae Helvetiae*, **42**(2): 509–510.

Wells, J. W. 1956. *Scleractinia*. *In* Bayer, F. M., Boschma, H., et al. (Eds.) *Treatise on Invertebrate Paleontology*; Part F — Coelenterata, pp. 328–444. The Geological Society of America and The University of Kansas Press, Lawrence.

Case 2653

Hapalorhynchus beadlei Goodman, 1987 (Trematoda, Digenea): proposed replacement of the holotype by a lectotype

Thomas R. Platt

Department of Biology, Saint Mary's College, Notre Dame, Indiana 46556, U.S.A.

Abstract. The purpose of this application is the suppression of the type status of the specimen designated as the holotype of *Hapalorhynchus beadlei* Goodman, 1987, a blood fluke (family SPIRORCHIIDAE). This specimen does not conform to the original description or figure, and is an example of *H. tchalimi* Bourgat & Kulo, 1987. The specimen in the original illustration is proposed as the lectotype.

---

1. Goodman (1987) reported the new spirorchiid blood fluke *Hapalorhynchus beadlei* (p. 80) from freshwater turtles (*Pelusios*) from Uganda. The description of the adult parasite and its illustration (Fig. 1) were based on specimens obtained from *Pelusios* sp. from near Kampala, eastern Uganda, whereas the tricornuate eggs (text, and Fig. 2) were described from material (which included adult parasites) collected from *P. lutescens williamsi* from Queen Elizabeth Park, western Uganda. All the original specimens were subsequently lost (J. D. Goodman, pers. comm.).

2. On a later visit to Uganda Dr Goodman obtained further specimens of *Hapalorhynchus* sp. from Queen Elizabeth Park, but due to a lack of facilities these specimens were not studied in detail before four of them were deposited, at the request of the journal concerned, in the U.S. National Museum, Washington. A specimen on slide USNM Helm. Coll. No. 79375 was designated as the holotype of *H. beadlei* and the type locality was given as Queen Elizabeth Park (Goodman, 1987, p. 81).

3. Examination of the deposited specimens has shown numerous discrepancies between them and the description and figure published by Goodman (1987); at least three of the specimens (including the holotype) appear to be of *H. tchalimi* Bourgat & Kulo, 1987. It may also be noted that the eggs described (and illustrated in Fig. 2) by Goodman (1987) are not those of *H. beadlei.*

4. Since it was Goodman's intention to apply the name *H. beadlei* to the species from eastern Uganda described in his paper, I propose that the specimen illustrated in Fig. 1 of Goodman (1987) be designated as the lectotype. The type locality should be 'near Kampala, Uganda', and the type host '*Pelusios* sp.'. This action will also avoid subjective synonymy between *H. beadlei* and the clearly distinct *H. tchalimi* Bourgat & Kulo, 1987.

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

(1) to use its plenary powers to set aside the holotype of *Hapalorhynchus beadlei* Goodman, 1987;

(2) to designate the specimen illustrated in Fig. 1 of Goodman (1987) as the lectotype of *H. beadlei*, with the type locality 'near Kampala, Uganda' and the host '*Pelusios* sp.';
(3) to place on the Official List of Specific Names in Zoology the name *beadlei* Goodman, 1987, as published in the binomen *Hapalorhynchus beadlei* and as interpreted by the lectotype designated in (2) above.

Acknowledgements

I wish to thank Dr J. D. Goodman for providing his field notes and additional information necessary to resolve this issue, and Dr P. K. Tubbs for his advice.

References

Bourgat, R. & Kulo, S.-D. 1987. *Hapalorhynchus tchalimi* sp.n. (Digenea), premier Spirorchiidae de tortue d'eau douce en Afrique. *Revue de Zoologie Africaine*, **100**: 435–441.

Goodman, J. D. 1987. A new blood fluke, *Hapalorhynchus beadlei* n.sp. (Spirorchiidae), and a note on *Allossostomoides* [sic] (Paramphistomidae), in *Pelusios williamsi lutescens* from Uganda. *Transactions of the American Microscopical Society*, **106**: 80–84.

Case 2633

Phyllodoce (Carobia) rubiginosa Saint-Joseph, 1888 (currently also *Nereiphylla rubiginosa*; Annelida, Polychaeta): proposed conservation of the specific name

Fredrik Pleijel
Department of Zoology, University of Stockholm, S-106 91 Stockholm, Sweden

Abstract. The purpose of this application is to conserve the specific name *rubiginosa* Saint-Joseph, 1888, as published in the combination *Phyllodoce (Carobia) rubiginosa*, for a member of the family PHYLLODOCIDAE (marine paddle worms), by suppression of the unused senior synonym *breviremis* de Quatrefages, 1865.

---

1. De Quatrefages (1865, p. 132) described the species *Phyllodoce breviremis* as being from Guettary [probably Guéthary, south of Biarritz, France] but did not designate a holotype. The species has since been mentioned only twice, by Fauvel (1923, p. 200) who included it under PHYLLODOCIDAE 'incertae sedis', and by Hartman (1959, p. 160) who included it in a list of species of *Phyllodoce* Savigny, 1818 as 'Doubtful'.

2. Saint-Joseph (1888, p. 282, pl. 11, figs. 141–143) described the species *Phyllodoce (Carobia) rubiginosa* (currently also *Nereiphylla rubiginosa*) from Brittany, France. No holotype was designated but the original description is detailed enough, leaving no doubt regarding the identity. The specific name has been, and still is, regarded as valid and is in use in the literature, e.g. Southern (1914, p. 69), Fauvel (1923, p. 155), Campoy (1982, p. 143); a representative list of 15 additional works is held by the Commission Secretariat.

3. I consider *Phyllodoce breviremis* and *Phyllodoce (Carobia) rubiginosa* to be conspecific. In the Muséum National d'Histoire Naturelle in Paris I have examined a specimen (not numbered) labelled *Phyllodoce breviremis* from de Quatrefages' collection. This specimen is from the type locality (Guéthary) and may be regarded as type material. It corresponds well to Saint Joseph's *Phyllodoce (Carobia) rubiginosa*. The latter normally should be regarded as a junior synonym but since the older name is completely out of use, to revert to its employment is not in the interest of stability, and conservation of *rubiginosa* Saint-Joseph, 1888 is therefore desirable.

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

(1) to use its plenary powers to suppress the specific name *breviremis* de Quatrefages, 1865, as published in the binomen *Phyllodoce breviremis*, 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 *rubiginosa* Saint-Joseph, 1888, as published in the combination *Phyllodoce (Carobia) rubiginosa*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *breviremis* de Quatrefages, 1865, as suppressed in (1) above.

References

Campoy, A. 1982. Fauna de Anelidos Poliquetos de la Península Ibérica. *Fauna de España*, **7**: 1–781.

Fauvel, P. 1923. Polychètes errantes. *Faune de France*, **5**: 1–488.

Hartman, O. 1959. Catalogue of the polychaetous annelids of the world. *Occasional Papers of the Allan Hancock Foundation Publications*, **23**: 1–628.

Quatrefages, A. de, 1865. *Histoire Naturelle des Annelés Marins et d'Eau Douce*. Vol. 2, 336 pp. Libraire Encyclopédique de Roret, Paris.

Saint-Joseph, A. 1888. Les Annélides polychètes des côtes de Dinard. *Annales des Sciences Naturelles (Zoologie)*, (7)**5**: 141–388.

Southern, R. 1914. Archiannelida and Polychaeta. *Proceedings of the Royal Irish Academy*, **31**(47): 1–160.

Case 2636

Fizesereneia Takeda & Tamura, 1980 (Crustacea, Decapoda): proposed confirmation of *Troglocarcinus heimi* Fize & Serène, 1956 as the type species

Roy K. Kropp

Battelle, Ocean Sciences–Ventura Operations, 1431 Spinnaker Drive, Ventura, CA 93001, U.S.A.

Abstract. The purpose of this application is to confirm the designation of *Troglocarcinus heimi* Fize & Serène, 1956 as the type species of the gall crab genus *Fizesereneia* Takeda & Tamura, 1980, despite a misidentification by Takeda & Tamura.

---

1. As a part of a series of reports on the gall crab fauna of Japanese waters, Takeda & Tamura established the genus *Fizesereneia* (1980, p. 137) to include two species formerly placed in *Troglocarcinus* Verrill (1908, p. 427) and a new species. These were *T. heimi* Fize & Serène, 1956a, *T. stimpsoni* Fize & Serène, 1956b, and *F. ishikawai* Takeda & Tamura, 1980 respectively. Takeda & Tamura (p. 138) designated *T. heimi* as the type species of *Fizesereneia*.

2. Examination of the detailed description (pp. 111–115) and figures of *T. heimi* (of which pp. 111–113 and figs. 29A and B are of the lectotype, a female specimen numbered E.34.403) published by Fize & Serène in 1957 indicated that the figure and description of '*T. heimi*' as published by Takeda & Tamura did not correspond to *T. heimi*, but to an undescribed species of *Fizesereneia*.

3. Thus, the genus *Fizesereneia* Takeda & Tamura, 1980 is based on a misidentified type species, and under Article 70b of the Code, the Commission should now select the type species for that genus. To maintain usage and prevent confusion the Commission is asked to confirm the designation of *Troglocarcinus heimi* Fize & Serène, 1956 (1956a, p. 375) as the type species of *Fizesereneia* Takeda & Tamura, 1980.

4. Dr Takeda (personal communication, 1988) does not object to this proposal.

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

(1) to confirm that the type species of the genus *Fizesereneia* Takeda & Tamura, 1980 is *Troglocarcinus heimi* Fize & Serène, 1956;

(2) to place on the Official List of Generic Names in Zoology the name *Fizesereneia* Takeda & Tamura, 1980 (gender: feminine), type species by original designation *Troglocarcinus heimi* Fize & Serène, 1956;

(3) to place on the Official List of Specific Names in Zoology the name *heimi* Fize & Serène, 1956, as published in the binomen *Troglocarcinus heimi* (specific name of the type species of *Fizesereneia* Takeda & Tamura, 1980).

References

Fize, A. & Serène, R. 1956a. Note Préliminaire sur huit espèces nouvelles, dont une d'un genre nouveau, d' *Hapalocarcinidae*. *Bulletin de la Société Zoologique de France*, **80** (5,6): 375–378.

Fize, A. & Serène, R. 1956b. Note Préliminaire sur quatre espèces nouvelles d'Hapalocarcinidés avec quelques remarques au sujet du *Cryptochirus rugosus* Edmonson. *Bulletin de la Société Zoologique de France*, **80** (5,6): 379–382.

Fize, A. & Serène, R. 1957. Les Hapalocarcinidés du Viet-Nam. *Archives du Muséum National d'Histoire Naturelle*, (7) **5**: 1–202, 43 figs., 18 pls.

Takeda, M. & Tamura, Y. 1980. Coral-inhabiting crabs of the Family Hapalocarcinidae from Japan, no. 3. New Genus *Fizesereneia*. *Bulletin of the National Science Museum, Tokyo*, (A) **6**: 137–146.

Verrill, A. E. 1908. Decapod crustacea of Bermuda; 1 – Brachyura and Anomura, their distribution, variations, and habits. *Transactions of the Connecticut Academy of Arts and Sciences*, **13**: 299–474, pls. 9–28.

Case 2645

Bodotria Goodsir, 1843 (Crustacea, Cumacea): proposed conservation

M. Bacescu

Muzeul National de Istorie Naturala 'Grigore Antipa', Sos. Kisselef 1, Bucuresti 79744, Romania

L. B. Holthuis

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is the conservation of the generic name *Bodotria* Goodsir, 1843, of cumacean crustaceans by the suppression of the senior synonym *Cuma* H. Milne Edwards, 1828.

---

1. During the preparation of the volume on the order Cumacea for the series *Crustaceorum Catalogus*, several nomenclatural problems came to light that can only be solved through the use of the plenary powers by the International Commission on Zoological Nomenclature.

2. This case concerns the generic name *Cuma* H. Milne Edwards, 1828, which for the last seventy-five years has been rejected as a junior homonym, but which now proves to be the valid name for the genus in question.

3. In 1828 H. Milne Edwards (1828, p. 287) described a new genus of Crustacea which he named *Cuma* and to which he assigned a single new species, *Cuma audouinii*. Agassiz (1846, p. 112) amended the name to *Cyma*.

4. The name *Cuma* was soon accepted and in 1846 was made type of a family which Krøyer (1846, p. 203) spelt Cumacea. This family name has since been spelt CUMIDAE and the name Cumacea used for the order to which the family belongs. This ordinal name is still in current use.

5. Stebbing (1900, p. 610) discovered the existence of an older name *Cuma*, viz. *Cuma* Humphrey, 1797, published in *Museum Calonnianum* (p. 35) for a genus of molluscs. Stebbing then rejected the generic name *Cuma* H. Milne Edwards, 1828, as a junior homonym of *Cuma* Humphrey, 1797, and substituted the oldest junior (subjective) synonym *Bodotria* Goodsir, 1843 (p. 128), type species *Bodotria arenosa* Goodsir, 1843 (p. 128). For the group name Cumacea, Stebbing (1900) proposed the new replacement name Sympoda.

6. In the years immediately following publication of Stebbing's discovery, there was much opposition to these changes. As a compromise, G. O. Sars (1914, p. 1) proposed the new name *Cumaea* as a substitute for *Cuma* H. Milne Edwards; this was spelled *Cumoa* in the Russian translation (1914, p. 2) of his article which appeared simultaneously with the English original. Neither name has subsequently been treated as valid.

7. After Stebbing's revision of the entire order Sympoda (=Cumacea) was published in 1913, the name *Bodotria* was generally accepted and the name *Cuma* disappeared entirely from carcinological literature. However, the name Sympoda did not gain acceptance and the order is currently still called Cumacea by all workers.

8. *Museum Calonnianum,* in which the name *Cuma* Humphrey, 1797 was first published, was rejected for nomenclatural purposes by the International Commission on Zoological Nomenclature in Opinion 51 (Stiles, 1912). *Cuma* Humphrey, 1797 is therefore not an available name and does not preoccupy *Cuma* H. Milne Edwards, 1828, which thereby becomes the valid name for the genus. Stebbing wrote his monograph before Opinion 51 existed and neither he nor other Cumacea specialists subsequently noticed that *Cuma* H. Milne Edwards was a valid name. The names Cumacea and *Bodotria* have been used side by side to the almost total exclusion of Sympoda and *Cuma* in the literature since 1913 (a representative list of papers is held by the Secretariat). The family-group name BODOTRIIDAE was established by Scott (1901, p. 273).

9. It could be argued that usage of the oldest name, *Cuma* H. Milne Edwards, 1828, would have the advantage of providing a sound basis for the name Cumacea for the order and that its reintroduction would not result in the switch of a well known name from one genus to another, since the name *Cuma* has never been used for another genus of Crustacea and practically never for any other taxon in the Animal Kingdom. Nevertheless, considerable confusion would result from switching back to the name *Cuma* and abandoning the widely accepted name *Bodotria,* one of the best known generic names in Cumacean literature and the only one used for this genus for at least the last 75 years. The genus *Bodotria* Goodsir, 1843 (=*Cuma* H. Milne Edwards, 1828) has a practically world-wide distribution and at present has 46 species and two subspecies. Several of these species are very common and have formed the basis of biological, ecological and anatomical studies.

10. Hence, this application is submitted to conserve the name *Bodotria* Goodsir, 1843. Meanwhile, in conformity with Article 80 (a) of the Code, the name *Bodotria* has been adopted in the *Crustaceorum Catalogus.*

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

(1) to use its plenary powers to suppress the generic name *Cuma* H. Milne Edwards, 1828 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 *Bodotria* Goodsir, 1843 (gender: feminine), type species by monotypy *Bodotria arenosa* Goodsir, 1843;

(3) to place on the Official List of Specific Names in Zoology the name *arenosa* Goodsir, 1843, as published in the binomen *Bodotria arenosa* (specific name of the type species of *Bodotria* Goodsir, 1843);

(4) to place on the Official List of Family-Group Names in Zoology the name BODOTRIIDAE Scott, 1901 (type genus *Bodotria* Goodsir, 1843);

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

  (a) *Cuma* H. Milne Edwards, 1828, as suppressed in (1) above;

  (b) *Cuma* Humphrey, 1797 (included in a work rejected for nomenclatural purposes).

References

Agassiz, J. L. R. 1846. *Nomenclatoris Zoologici Index Universalis*, viii, 393 pp. Soloduri.

Goodsir, H. D. S. 1843. Description of the genus *Cuma*, and of two new genera nearly allied to it. *Edinburgh New Philosophical Journal*, **34**: 119–130.

Humphrey, G. 1797. *Museum Calonnianum*, viii, 84 pp. London.

Krøyer, H. 1846. Karcinologiske Bidrag (Fortsaettelse). *Naturhistorisk Tidsskrift*, n. ser., **2**: 1–211.

Milne Edwards, H. 1828. Mémoires sur quelques Crustacés nouveaux. *Annales des Sciences Naturelles*, Paris (1) **13**: 287–301.

Sars, G. O. 1914. Cumacea Kaspiskoi Ekspeditii 1904 goda. Report on the Cumacea of the Caspian Expedition 1904. *Trudy Kaspiskoi Expeditii 1904 goda*, **4**: 1–34 (Russian text), 1–32 (English text).

Scott, T. 1901. Notes on gatherings of Crustacea, collected for the most part by the fishery steamer 'Garland' and the steam trawler 'St. Andrew' of Aberdeen, and examined during the year 1900. *Annual Report of the Fishery Board for Scotland*, **19**: 235–281.

Stebbing, T. R. R. 1900. On Crustacea brought by Dr Willey from the South Seas. [Pp. 605–690 *in* Willey, A.] *Zoological results based on material from New Britain, New Guinea, Loyalty Islands and elsewhere*, 830 pp. Cambridge.

Stebbing, T. R. R. 1913. Cumacea (Sympoda). *Das Tierreich*, **39**: i–xvi, 1–210.

Stiles, C. W. 1912. Opinion 51. Shall the names of *Museum Calonnianum*, 1797, be accepted? *Opinions rendered by the International Commission on Zoological Nomenclature. Smithsonian Institution Publication* no. 2060, pp. 116–117. (Republished in 1958 in *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*, **1**(B): 116–117).

Case 2643

Iphinoe Bate, 1856 (Crustacea, Cumacea): proposed conservation

M. Bacescu

Muzeul National de Istorie Naturala 'Grigore Antipa', Sos. Kisselef 1, Bucuresti 79744, Romania

L. B. Holthuis

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is the conservation of the generic name *Iphinoe* Bate, 1856, of cumacean crustaceans by the suppression of the unused senior homonym *Iphinoe* Rafinesque, 1815 (Arachnoidea) and also the senior homonym *Iphinoe* H. & A. Adams, 1854, which is in occasional use for a restricted genus of gastropods.

---

1. The name *Iphinoe* Bate, 1856, for a genus of Cumacea belonging to the family BODOTRIIDAE, is widely used and for more than 120 years has been the only name used for the genus. However, it is a junior homonym of two older names and is therefore invalid.

2. In June 1856, Bate established two new genera, *Halia* (1856a, p. 458) and *Venilia* (1856a, p. 460). *Halia* had as its only species *Cuma trispinosa* Goodsir, 1843 (p. 126) which is its type by monotypy. The type species of *Venilia*, also by monotypy, is *Venilia gracilis* Bate, 1856 (1856a, p. 460). Later in the same year Bate found that both *Halia* and *Venilia* were preoccupied: the first by *Halia* Risso, 1826 (Mollusca), *Halia* Duponchel, 1829 (Lepidoptera) and *Halia* Hincks, 1855 (Bryozoa); the second by *Venilia* Duponchel, 1829 (Lepidoptera), *Venilia* Morton, 1833 (Mollusca), *Venilia* Alder & Hancock, 1844 (Mollusca) and *Venilia* Bonaparte, 1850 (Aves). In August 1856, Bate (1856b, p. 187) published the new replacement names *Iphinoe* (as *Iphinoë*) for *Halia*, and *Cyrianassa* for *Venilia*.

3. Norman (1869, p. 272) suspected that the name *Iphinoe (=Halia) trispinosa* (Goodsir, 1843) represented the males and the name *Cyrianassa (=Venilia) gracilis* (Bate, 1856) the females of Goodsir's species; this synonymy is now accepted. Norman synonymised the two genera *Iphinoe* and *Cyrianassa* and used the name *Iphinoe* for the combined genus. Norman's choice of the name *Iphinoe* was accepted by almost all zoologists and the name *Cyrianassa* disappeared from use.

4. However, *Iphinoe* Bate, 1856 is itself a junior homonym, namely of *Iphinoe* Rafinesque, 1815 (p. 107) (Arachnoidea) and also of *Iphinoe* H. & A. Adams, 1854 (p. 280) (Mollusca). So far as we can see *Cyrianassa* Bate, 1856 is the nomenclaturally correct name for the genus, but we have not been able to find any use of this name after 1865 (Norman, 1865, pp. 24, 27).

5. *Iphinoe* Rafinesque, 1815, published in a rather obscure work, has been almost entirely overlooked. It was proposed as a replacement name for *Clotho* Latreille, 1809

(Arachnoidea), which is a junior homonym of *Clotho* Faujas de St Fond, 1808 (Mollusca), but was generally overlooked by arachnologists, who used the generic name *Uroctea* Dufour, 1820 (p. 198), type species by monotypy *Uroctea quinquemaculata* Dufour, 1820 (p. 200), for the genus, notwithstanding that that name is a junior synonym of Rafinesque's name. Bonnet (1957, p. 2298) in his *Bibliographia Araneorum* noted that *Iphinoe* has 'resté inconnu jusqu'à notre époque, et bien qu'il ait priorité sur *Uroctea*, il ne peut être question aujourd'hui de faire ce changement; la prescription joue en faveur d'*Uroctea*'. Later authors also continued to use *Uroctea*.

6. *Iphinoe* H. & A. Adams, 1854 was published in part ix (or x) of volume 1 of Adams & Adams' *The Genera of Recent Mollusca*, a work published in 36 parts and finished in 1858. The exact dates of publication of Adams & Adams' work were not known until Newton (1891, p. 303) published a table of parts and dates. As Adams & Adams' work was completed in 1858 and carried that date on the title pages, *Iphinoe* H. & A. Adams was for a long time considered to have been published in 1858 and thus would have been a junior homonym of Bate's generic name. Even when the date of publication of *Iphinoe* H. & A. Adams was shown to have been 1854, no carcinologist realised that it predated *Iphinoe* Bate. Even Stebbing (1913, p. 42) in his revision of the Cumacea retained the name *Iphinoe* Bate and all later Cumacean workers have followed him.

7. In gastropod literature (e.g. Wenz, 1938, p. 891) the name *Iphinoe* H. & A. Adams (type species *Trichotropis unicarinata* Broderip & Sowerby, 1834) is accepted as the name of a genus (or a subgenus of *Trichotropis*), a taxon with very few species and of restricted distribution. On the other hand, the crustacean genus *Iphinoe* contains 36 known species widely distributed in the Eastern Atlantic and Indo-West Pacific regions; several of these species have been used in biological, ecological and population studies. It would, therefore, be in the interest of stability to conserve the name *Iphinoe* for the crustacean genus, thereby avoiding the considerable confusion that would arise from replacing that name by *Cyrianassa* Bate, 1856. However, the views of malacologists would clearly be of great value to the International Commission on Zoological Nomenclature in reaching a decision and are invited.

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

(1) to use its plenary powers to suppress the following generic names for the purposes of both the Principle of Priority and the Principle of Homonymy:
   (a) *Iphinoe* Rafinesque, 1815;
   (b) *Iphinoe* H. & A. Adams, 1854; and any use of the name *Iphinoe* prior to its use by Bate, 1856;

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Iphinoe* Bate, 1856 (gender: feminine), type species by monotypy *Cuma trispinosa* Goodsir, 1843;
   (b) *Uroctea* Dufour, 1820 (gender: feminine), type species by monotypy *Uroctea quinquemaculata* Dufour, 1820;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *quinquemaculata* Dufour, 1820, as published in the binomen *Uroctea quinquemaculata* (specific name of the type species of *Uroctea* Dufour, 1820);
   (b) *trispinosa* Goodsir, 1843, as published in the binomen *Cuma trispinosa* (specific name of the type species of *Iphinoe* Bate, 1856);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the following names:
   (a) *Iphinoe* Rafinesque, 1815, as suppressed in (1) (a) above;
   (b) *Iphinoe* H. & A. Adams, 1854, as suppressed in (1) (b) above;
   (c) *Halia* Bate, 1856 (a junior homonym of *Halia* Risso, 1826);
   (d) *Venilia* Bate, 1856 (a junior homonym of *Venilia* Duponchel, 1829).

References

Adams, H. & A. 1853–1858. *The genera of recent Mollusca arranged according to their organization*, vol. 1, 484 pp; vol. 2, 660 pp. Van Voorst, London.

Bate, C. S. 1856a. (June). On the British Diastylidae. *Annals and Magazine of Natural History*, (2) **17**: 449–465.

Bate, C. S. 1856b. (August). On the British Diastylidae. *Annals and Magazine of Natural History*, (2) **18**: 187.

Bonnet, P. 1957. *Bibliographia Araneorum*, vol. 2, part 3. Pp. 1927–3026. Douladoure, Toulouse.

Dufour, L. 1820. Description de cinq Arachnides nouvelles. *Annales générales des Sciences Physiques, Bruxelles*, **5**: 198–209.

Goodsir, H. D. S. 1843. Description of the genus *Cuma*, and of two new genera nearly allied to it. *Edinburgh New Philosophical Journal*, **34**: 119–130.

Latreille, P. A. 1809. *Genera Crustaceorum et Insectorum*, vol. 4. 399 pp. Koenig, Paris and Strasbourg.

Newton, R. B. 1891. *Systematic list of the Frederick E. Edwards collection of British Oligocene and Eocene Mollusca in the British Museum (Natural History)*, xxviii, 365 pp. British Museum, London.

Norman, A. M. 1865. Report on the Crustacea. *In* Brady, G. S., Reports of deep sea dredging on the coasts of Northumberland and Durham, 1862–1864. *Natural History Transactions of Northumberland and Durham*, **1**: 12–29.

Norman, A. M. 1869. On the Crustacea, Tunicata, Polyzoa, Echinodermata, Actinozoa, Hydrozoa, and Porifera. Shetland final dredging report. *Report of the thirty-eighth meeting of the British Association for the Advancement of Science:* 247–336.

Rafinesque, C. S. 1815. *Analyse de la Nature*, 224 pp. Palermo.

Stebbing, T. R. R. 1913. Cumacea (Sympoda). *Das Tierreich*, **39**: i–xvi, 1–210.

Wenz, W. 1938. Gastropoda. *In* Schindewolf, H. (Ed.), *Handbuch der Paläozoologie*, vol. 6, xii, 1639 pp. Borntraeger, Berlin.

Case 2644

Leucon Krøyer, 1846 (Crustacea, Cumacea): proposed conservation

M. Bacescu

Muzeul National de Istorie Naturala 'Grigore Antipa', Sos. Kisselef 1, Bucuresti 79744, Romania

L. B. Holthuis

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is the conservation of the generic name *Leucon* Krøyer, 1846, of cumacean crustaceans by the suppression of the virtually unused senior synonym *Leucon* Schoenherr, 1834.

---

1. The generic name *Leucon* Krøyer, 1846, is widely used in Crustacean literature for a genus of Cumacea and is the type genus of the universally adopted family name LEUCONIDAE Sars, 1878. However, *Leucon* Krøyer, 1846 is a junior homonym of *Leucon* Schoenherr, 1834, which is an unused name for a genus of Coleoptera.

2. Krøyer (1846, p. 208), in describing the new genus *Leucon*, included three species, but did not indicate a type species. The first author to do so was G. O. Sars (1879, p. 24) who selected *Cuma nasica* Krøyer (1841, p. 524), one of the species originally included in *Leucon* by Krøyer (1846).

3. Since 1846 the name *Leucon* has been in general use and at present more than 40 species are recognised. Walker (1897a, p. 419) described a new genus, *Leuconopsis*, with type species, by monotypy, *Leuconopsis ensifer* Walker, 1897 (p. 419). *Leuconopsis ensifer* has since been shown to be a junior subjective synonym of *Leucon nasica* and the name *Leuconopsis* has never since been used as a valid name except for a single usage by Walker (1897b, p. 227).

4. The family name LEUCONIDAE proposed by Sars (1878, p. 466) has been considered a valid name by all subsequent authors.

5. However, *Leucon* Krøyer, 1846, is preoccupied by *Leucon* Schoenherr, 1834 (pp. 285, 286). Schoenherr (1834, p. 285) mentioned the manuscript name *Leucon* Besser in the synonymy of the genus *Alophus* and also (p. 286) listed the manuscript name '*Leucon Boeberi*: Dom. Besser *in Litteris*' in the synonymy of *Alophus leucon* Schoenherr, 1834. *Leucon* Schoenherr has been completely ignored by entomologists; it is not mentioned, even as a synonym, in the Curculionid volumes of *Coleopterorum Catalogus* and has never been treated as a valid Curculionid genus. However, before 1961 it has been cited at least once (by Hale, 1945, see below) as a senior homonym of *Leucon* Krøyer, and thus, under Article 11 (e) of the Code, it has been made an available name invalidating *Leucon* Krøyer.

6. Most Cumacean workers were unaware that *Leucon* Krøyer was a junior homonym and continued to use that name. The few who noticed the homonymy ignored it. Hale (1945, p. 86) remarked: 'Krøyer's name has been long quoted for this

widely distributed Cumacean genus and the discarding of *Leucon* because it has been used in Besser MS. (Schoenherr, 1834, *Gen. Curc.*, 2, (1), pp. 285, 286) for the Coleoptera would serve no useful purpose'. Cumacean workers did not contest this incorrect interpretation of the Rules. The present situation is that *Leucon* Schoenherr is an unused senior homonym of *Leucon* Krøyer, which is a much used and important name in Cumacea.

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

(1) to use its plenary powers to suppress the generic name *Leucon* Schoenherr, 1834, and any use of that name prior to *Leucon* Krøyer, 1846 for the purposes of both the Principle of Priority and the Principle of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the name *Leucon* Krøyer, 1846 (gender: masculine), type species by subsequent designation by Sars (1879) *Cuma nasica* Krøyer, 1841;

(3) to place on the Official List of Specific Names in Zoology the name *nasica* Krøyer, 1841, as published in the binomen *Cuma nasica* (specific name of the type species of *Leucon* Krøyer, 1846);

(4) to place on the Official List of Family-Group Names in Zoology the name LEUCONIDAE Sars, 1878 (type genus *Leucon* Krøyer, 1846);

(5) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Leucon* Schoenherr, 1834, as suppressed in (1) above.

References

Hale, H. M. 1945. The family Leuconidae. Australian Cumacea, No. 10. *Transactions of the Royal Society of South Australia*, **69**: 86–95.

Krøyer, H. 1841. Fire nye Arter af Slaegten *Cuma* Edw. *Naturhistorisk Tidsskrift*, (1) **3**: 503–534.

Krøyer, H. 1846. Karcinologiske Bidrag (Fortsaettelse). *Naturhistorisk Tidsskrift*, n. ser., **2**: 1–211.

Sars, G. O. 1878. Middelhavets Cumaceer. Nye Bidrag til Kundskaben om Middelhavets Invertebratfauna II. *Archiv for Mathematik og Naturvidenskab*, **3**: 461–512.

Sars, G. O. 1879. Middelhavets Cumaceer. Nye Bidrag til Kundskaben om Middelhavets Invertebratfauna II. (Fortsaettelse). *Archiv for Mathematik og Naturvidenskab*, **4**: 1–144.

Schoenherr, G. J. 1834. *Genera et species Curculionidum cum synonymia hujus familiae*, vol. 2, part 1, 326 pp., Roret, Parisiis and Fleischer, Lipsiae.

Walker, A. O. 1897a. Crustacea Malacostraca of the Isle of Man. *Report of the British Association for the Advancement of Science*, **66**: 419–420.

Walker, A. O. 1897b. On some new species of Edriophthalma from the Irish seas. *Journal of the Linnean Society, London (Zoology)*, **26**: 226–232.

Case 2651

Aleuropteryx Löw, 1885 (Insecta, Neuroptera): proposed designation of *Aleuropteryx loewii* Klapálek, 1894 as the type species

John D. Oswald
Department of Entomology, Comstock Hall, Cornell University, Ithaca, NY 14853–0999, U.S.A.

Martin Meinander
Zoologiska Institutionen, Helsingfors Universitet, N. Järnvägsgatan 13, SF–00100, Helsingfors, Finland

Abstract. The purpose of this application is the designation of the nominal species *Aleuropteryx loewii* Klapálek, 1894 as the type species of the 'dustywing' genus *Aleuropteryx* Löw, 1885, since the original type (by monotypy), *Coniopteryx lutea* Wallengren, 1871, was based on misidentified material. The proposed designation is in accordance with the usage of the last 80 years.

---

1. The coniopterygid genus *Aleuropteryx* was erected by Löw in 1885 (p. 74), and based on specimens of a single species from 'Nieder-Österreich' which Löw misidentified as *Coniopteryx lutea* Wallengren, 1871 (p. 55). Under a strict interpretation of Article 68d of the Code, *C. lutea* Wallengren, 1871, the incorrectly identified but only included nominal species, was thereby fixed as the type species.

2. Klapálek (1894, p. 121) was the first to recognize that Löw had misidentified his specimens and (p. 122) proposed the new name *Aleuropteryx löwii* (specific name later 'corrected' to *loewii*) for *Aleuropteryx lutea* sensu Löw, 1885. Comprehensive revisions of the family CONIOPTERYGIDAE (Burmeister, 1839; type genus *Coniopteryx* Curtis, 1834) by Enderlein (1906) and Meinander (1972) have subsequently confirmed Klapálek's actions, and the type species of *Aleuropteryx* requires action by the Commission under Article 70b.

3. Enderlein (1905) made *Aleuropteryx* the type genus of the subfamily ALEUROPTERYGINAE (p. 225) and the tribe ALEUROPTERYGINI (p. 226) and incorrectly cited (p. 226) '*A. Löwi* [sic] Klap.' as the type species of *Aleuropteryx*. *Aleuropteryx loewii* (as *A. löwi, lowii, loewi* or *loewii*) has subsequently been uniformly adopted as the type species of *Aleuropteryx* (for several important recent citations see Meinander, 1972, p. 37; Aspöck, Aspöck & Hölzel, 1980, p. 139; and Johnson, [1981], p. 267).

4. Enderlein (1905, p. 226) also erected the genus *Helicoconis*, designating *Coniopteryx lutea* Wallengren, 1871 as its type species and thus rendering it an objective synonym of *Aleuropteryx* under Article 67k of the Code. *Fontenellea maroccana* Carpentier & Lestage, 1928 (p. 156) is currently considered to be in the genus *Helicoconis*. *F. maroccana* is the type species of the now invalid genus *Fontenellea* Carpentier

& Lestage, 1928 (a subjective synonym of *Helicoconis*), which is the basis of the presently valid tribe FONTENELLEINI Carpentier & Lestage, 1928 (p. 153, as FONTENELLEINAE).

5. In the interest of stability in coniopterygid nomenclature we strongly recommend the conservation of *A. loewii* as the type species of *Aleuropteryx* in order to remove the objective synonymy of *Aleuropteryx* Löw, 1885 with *Helicoconis* Enderlein, 1905. In adopting this position we find the following facts compelling: (1) for the past 80 years *A. loewii* has been universally accepted as the type species of *Aleuropteryx*; (2) the coniopterygid family-group names ALEUROPTERYGINAE and ALEUROPTERYGINI were both founded on *Aleuropteryx* with the assumed type species *A. loewii*; (3) *A. loewii* is conspecific with the original specimen used by Löw as the basis of the genus *Aleuropteryx*, while *Coniopteryx lutea* Wallengren is currently not considered even congeneric with *A. loewii*; (4) most importantly, failure to conserve *A. loewii* as the type species of *Aleuropteryx* would require it to be replaced with *Coniopteryx lutea* Wallengren and result in the following disruptive changes in coniopterygid nomenclature:

(a) *Aleuropteryx* Löw, 1885 would become a senior objective synonym of *Helicoconis* Enderlein, 1905, requiring new combinations for the 24 valid species presently placed in *Helicoconis* (only 2 of these species were originally described in, or have subsequently been placed in combination with, *Aleuropteryx*);

(b) a new replacement generic name would be required for the existing concept of *Aleuropteryx* (based on *A. loewii*) since this concept has no synonyms; this would necessitate new combinations for each of the 30 valid species currently placed in *Aleuropteryx*;

(c) the now valid tribal name ALEUROPTERYGINI Enderlein, 1905 would become a senior subjective synonym of the valid tribal name FONTENELLEINI Carpentier & Lestage, 1928;

(d) a new replacement family-group name would be required for the existing concept of the ALEUROPTERYGINI (based on *Aleuropteryx* with *A. loewii* as the type) since this concept has no synonyms.

6. Since, as shown in para. 5 (4) (c) and (d) above, the original misidentification of the type threatens the stability of family-group names, this case also requires action under Article 41.

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

(1) to use its plenary powers to set aside all designations of type species for the nominal genus *Aleuropteryx* Löw, 1885 and to designate *Aleuropteryx loewii* Klapálek, 1894 as the type species;

(2) to place on the Official List of Generic Names in Zoology the name *Aleuropteryx* Löw, 1885 (gender: feminine), type species by designation in (1) above *Aleuropteryx loewii* Klapálek, 1894;

(3) to place on the Official List of Specific Names in Zoology the name *loewii* Klapálek, 1894, as published in the binomen *Aleuropteryx loewii* (mandatory correction of *Löwii*; specific name of the type species of *Aleuropteryx* Löw, 1885);

(4) to place on the Official List of Family-Group Names in Zoology the name ALEUROPTERYGINAE Enderlein, 1905, type genus *Aleuropteryx* Löw, 1885.

References

Aspöck, H., Aspöck, U. & Hölzel, H. 1980. *Die Neuropteren Europas*, vol. 1. 495 pp. Goecke & Evers, Krefeld.

Burmeister, C. H. C. 1839. *Handbuch der Entomologie*, vol. 2, 1050 pp. + [iv]. Enslin, Berlin.

Carpentier, F. & Lestage, J. A. 1928. Une sous-famille nouvelle (Fontenelleinae) du groupe des Coniopterygoidea Till. *Recueil de l'Institut Zoologique Torley–Rousseau*, **1**: 153–172.

Curtis, J. 1834. *British Entomology*, vol. 11. 529 pls. + descriptions. Taylor, London.

Enderlein, G. 1905. Klassifikation der Neuropteren-Familie Coniopterygidae. *Zoologischer Anzeiger*, **29**: 225–227.

Enderlein, G. 1906. Monographie der Coniopterygiden. *Zoologische Jahrbücher* (Abt. Systematik, Geographie und Biologie der Tiere), **23**: 173–242.

Johnson, V. [1981] 1980. Review of the Coniopterygidae (Neuroptera) of North America with a revision of the genus *Aleuropteryx*. *Psyche*, **87**: 259–298. [*Psyche* volume 87 (for 1980), no. 3–4, was mailed 31 August 1981, see inside front cover of vol. 88, no. 1–2].

Klapálek, F. 1894. Is *Aleuropteryx lutea*, Löw, identical with *Coniopteryx lutea* Wallg.? *Entomologist's Monthly Magazine*, **30**: 121–122.

Löw, F. 1885. Beitrag zur Kenntniss der Coniopterygiden. *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften, Wien*. Mathematische-Naturwissenschaftlichen Klasse (Abt. 1), **91**: 73–89.

Meinander, M. 1972. A revision of the family Coniopterygidae (Planipennia). *Acta Zoologica Fennica*, **136**: 1–357.

Wallengren, H. D. J. 1871. Skandinaviens Neuroptera. *Kongliga Svenska Vetenskaps-Akademiens Handlingar*, (N.F.) **9**(8): 1–76.

Case 2655

Sialis Latreille, 1802 (Insecta, Megaloptera): proposed conservation by the confirmation of *Phryganea phalaenoides* Linnaeus, 1758 as the type species of *Semblis* Fabricius, 1775 (Insecta, Trichoptera)

John D. Oswald

Department of Entomology, Comstock Hall, Cornell University, Ithaca, New York 14853–0999, U.S.A.

Abstract. The purpose of this application is the conservation of the well-established megalopteran generic name *Sialis* Latreille, 1802, by the suppression of an early but overlooked type species designation for *Semblis* Fabricius, 1775, currently placed in Trichoptera but which would otherwise be a senior objective synonym of *Sialis*.

---

1. The nominal genus *Semblis* was proposed by Fabricius, 1775 (p. 305) for four Linnaean species now placed in three insect orders (see Table 1). No type species was fixed.

Table 1. Species originally placed in *Semblis* and their current dispositions

Original name	Current name	Order	Reference
Phryganea phalaenoides Linnaeus, 1758 (p. 547)	*Semblis phalaenoides*	Trichoptera	Fischer (1964, p. 78)
Phryganea bicaudata Linnaeus, 1758 (p. 548)	*Diura bicaudata*	Plecoptera	Illies (1966, p. 381)
Phryganea nebulosa Linnaeus, 1758 (p. 549)	*Taeniopteryx nebulosa*	Plecoptera	Illies (1966, p. 73)
Hemerobius lutarius Linnaeus, 1758 (p. 550)	*Sialis lutaria*	Megaloptera	Vshivkova (1985, p. 87)

2. Until recently the oldest known type species designation for *Semblis* was that of Van der Weele (1910, p. 55), who designated the first species listed by Fabricius in *Semblis*, i.e. *Phryganea phalaenoides* Linnaeus, 1758 (as '*Neuronia phalaenoides* L.'). This designation places *Semblis* in the order Trichoptera, and was independently repeated by Milne (1934, p. 8). Fischer (1964, p. 73) treated *Semblis* as a valid trichopteran genus with three species. Neave (1940, p. 169), without indicating a type species, incorrectly attributed *Semblis* to the order Plecoptera.

3. Recently it was discovered that Blanchard ([1848], p. 539) had much earlier designated *Hemerobius lutarius* Linnaeus, 1758, as the type species of *Semblis* ('SEMBLIS . . . Le type du genre est commun dans notre pays; c'est le SEMBLIS DE LA BOUE, *Semblis lutarius* (*Hemerobius lutarius* Lin.)'). Blanchard's designation clearly has priority over that of Van der Weele and, if allowed to remain valid, will render *Semblis* a senior objective synonym of the megalopteran genus *Sialis* Latreille, 1802 (p. 290; type species *Hemerobius lutarius* Linnaeus, 1758, by monotypy). This circumstance is very undesirable for the reasons given below.

4. *Sialis* is one of the oldest generic names in the order Megaloptera, and is probably the most universally known. The genus *Sialis* currently contains approximately 45 species which are widely distributed throughout North America, Europe, Asia and northern Africa. For more than 150 years *Sialis* has been considered a valid generic name in all taxonomic and morphological literature pertaining to the Megaloptera. In addition, because the aquatic larvae of species of this genus are common components of many freshwater biotas, the name *Sialis* has become deeply entrenched in the diverse and voluminous literature on aquatic entomology. Further contributing to the ubiquity of the name *Sialis* has been its use as the root of most later generic names (i.e., *Austrosialis, Haplosialis, Indosialis, Leptosialis, Nipponosialis, Protosialis* and *Stenosialis*) proposed in the family SIALIDAE, of which *Sialis* is the type genus. Allowing Blanchard's long-overlooked type species designation to force the replacement of the old and universally accepted Megalopteran name *Sialis* will not promote nomenclatural stability. On the contrary, its replacement would meet strong resistance and initiate a protracted and needless period of nomenclatural confusion concerning its use. For all these reasons, conservation of the name *Sialis* is here recommended in the strongest possible terms.

5. Acceptance of Blanchard's designation of *Hemerobius lutarius* Linnaeus as the type species of *Semblis* would also require this name to be replaced in the Trichoptera.

6. I propose that the Commission use its plenary powers to adopt *Phryganea phalaenoides* Linnaeus, 1758 as the type species of *Semblis*. This would allow the continuity of both *Semblis* and *Sialis* as valid names.

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

(1) to use its plenary powers to set aside all designations of type species for the nominal genus *Semblis* Fabricius, 1775 prior to that of *Phryganea phalaenoides* Linnaeus, 1758 by Van der Weele (1910);

(2) to place on the Official List of Generic Names in Zoology the following names:
   (a) *Semblis* Fabricius, 1775 (gender: feminine), type species by designation by Van der Weele (1910), *Phryganea phalaenoides* Linnaeus, 1758;
   (b) *Sialis* Latreille, 1802 (gender: feminine), type species by monotypy *Hemerobius lutarius* Linnaeus, 1758;

(3) to place on the Official List of Specific Names in Zoology the following names:
   (a) *phalaenoides* Linnaeus, 1758, as published in the binomen *Phryganea phalaenoides* (specific name of the type species of *Semblis* Fabricius, 1775);
   (b) *lutarius* Linnaeus, 1758, as published in the binomen *Hemerobius lutarius* (specific name of the type species of *Sialis* Latreille, 1802).

Acknowledgements

I thank Drs O. S. Flint, Jr, J. K. Liebherr, N. D. Penny and C. W. Sabrosky for offering comments on an earlier draft of this application.

References

Blanchard, E. [1848]. *Semblis*. *In* d'Orbigny, C. (Ed.), *Dictionnaire universel d'Histoire Naturelle*, vol. 11, 816 pp. Renard, Martinet et Cie., Paris. [For dates of publication of the *Dictionnaire* see Sherborn, C. D. & Palmer, T. S. 1899. *Annals and Magazine of Natural History*, (7)**3**: 350–352].

Fabricius, J. C. 1775. *Systema Entomologiae* . . . xxxii, 832 pp. Libraria Koltii, Flensburgi et Lipsiae.

Fischer, F. C. J. 1964. *Trichopterorum Catalogus*, vol. 5, 214 pp. Nederlandsche Entomologische Vereeniging, Amsterdam.

Illies, J. 1966. Katalog der rezenten Plecoptera. *Das Tierreich*, Lief. 82, 631 pp. Walter de Gruyter & Co., Berlin.

Latreille, P. A. 1802. *Histoire naturelle, générale et particulière des Crustacés et des Insectes*, vol. 3, 467 pp. Dufart, Paris.

Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salviae, Holmiae.

Milne, L. J. 1934. *Studies in North American Trichoptera*, 1, 19 pp. Privately printed, Cambridge, Massachusetts.

Neave, S. A. 1940. (Ed.) *Nomenclator Zoologicus*, vol. 4, 758 pp. Zoological Society of London.

Van der Weele, H. W. 1910. Megaloptera. *Collections Zoologiques du Baron Edm. de Selys Longchamps. Catalogue Systématique et Descriptif*, fasc. 5, pp. 1–93.

Vshivkova, T. S. 1985. Sialidae (Megaloptera) of Europe and the Caucasus. [In Russian]. *Entomologicheskoe Obozreni*, **64**: 146–157. [English translation: Entomological Review, **64**(2): 86–98.]

Case 2585

Ophonus Dejean, 1821 and *Tachys* Dejean, 1821 (Insecta, Coleoptera): proposed designation of type species

Hans Silfverberg

Universitetets Zoologiska Museum, Entomologiska Avdelningen, N. Järnvägsgatan 13, SF–00100 Helsingfors 10, Finland

Abstract. The purpose of this application is to retain the names for the ground beetle genera *Ophonus* Dejean, 1821 and *Tachys* Dejean, 1821 in their accustomed usage by designation of *Carabus sabulicola* Panzer, 1796 and *Tachys scutellaris* Stephens, 1828 as their respective type species.

---

1. Dejean (1821) introduced a number of generic names in the CARABIDAE. These names were recently reviewed (Silfverberg, 1983), and in most cases no nomenclatural problems arise. *Ophonus* (p. 13) and *Tachys* (p. 16) are however exceptions.

2. The first valid designation of type species for *Ophonus* was *Carabus germanus* Linnaeus, 1758 (p. 415), designated by Curtis (1827, table 191). Unfortunately this type designation makes *Ophonus* a senior objective synonym of *Diachromus* Erichson, 1837 (p. 43). Noonan (1976) suggested that *Carabus sabulicola* Panzer, 1796 (p. 4) be accepted as type species of *Ophonus* but he made no formal application.

3. For *Tachys* the generally accepted type species is *Tachys scutellaris* Stephens, 1828 (p. 5) by subsequent designation by Hope, 1838 (p. 61). This species was not originally included, but all those available species that were listed by Dejean are now included in other genera and any choice among them would lead to confusion (cf. Erwin, 1974).

4. Current use of *Ophonus* and *Tachys* is, since Jeannel (1941–42), consistent with *Carabus sabulicola* and *Tachys scutellaris* respectively as type species. A list of references is held by the Commission Secretariat. To upset this long standing usage would not serve stability but merely create confusion.

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

(1) to use its plenary powers:
   (a) to set aside all previous type designations made for the nominal genus *Ophonus* Dejean, 1821, and to designate *Carabus sabulicola* Panzer, 1796 as type species;
   (b) to set aside all previous type designations made for the nominal genus *Tachys* Dejean, 1821, and to designate *Tachys scutellaris* Stephens, 1828 as type species;

(2) to place the following names on the Official List of Generic Names in Zoology:
   (a) *Ophonus* Dejean, 1821 (gender: masculine), type species by designation in (1) (a) above, *Carabus sabulicola* Panzer, 1796;
   (b) *Tachys* Dejean, 1821 (gender: masculine), type species by designation in (1) (b) above, *Tachys scutellaris* Stephens, 1828;

(3) to place the following names on the Official List of Specific Names in Zoology:
(a) *sabulicola* Panzer, 1796, as published in the binomen *Carabus sabulicola* (specific name of the type species of *Ophonus* Dejean, 1821);
(b) *scutellaris* Stephens, 1828, as published in the binomen *Tachys scutellaris* (specific name of the type species of *Tachys* Dejean, 1821).

References

Curtis, J. 1827. *British Entomology*, vol. 4, tabs. 147–192. London.
Dejean, P. F. M. A. 1821. *Catalogue de la collection de Coléoptères de M. le Baron Dejean*. 136 pp. Paris.
Erichson, W. F. 1837. *Die Käfer der Mark Brandenburg*, vol. 1, part 1. 384 pp. Morin, Berlin.
Erwin, T. L. 1974. Studies of the subtribe Tachyini (Coleoptera: Carabidae: Bembidiini). Supplement A: Lectotype designation for New World species, two new genera, and notes on generic concepts. *Proceedings of the Entomological Society of Washington*, **76**: 123–155.
Hope, F. W. 1838. *The Coleopterist's Manual*, part 2. xvi, 168 pp. Bohn, London.
Jeannel, R. 1941–42. *Coléoptères Carabiques. Faune de France*, vol. 39: pp. 1–571; vol. 40: pp. 573–1173. Lechevalier, Paris.
Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.
Noonan, G. R. 1976. Synopsis of the supra-specific taxa of the tribe Harpalini (Coleoptera: Carabidae). *Quaestiones Entomologicae*, **12**: 3–87.
Panzer, G. W. F. 1796. *Fauna Insectorum Germaniae initia*. Pars 30. 24 pp. Nürnberg.
Silfverberg, H. 1983. Coleopteran genera of Dejean, 1821. I. Carabidae. *Annales Entomologici Fennici*, **49**: 115–116.
Stephens, J. F. 1828–29. *Illustrations of British Entomology*. Mandibulata, vol. 2. 200 pp. Baldwin & Cradock, London.

Case 2623

Papilio carthami Hübner, [1813] and *Syrichthus serratulae major* Staudinger, 1879 (currently both in *Pyrgus*; Insecta, Lepidoptera): proposed conservation of the names *carthami* and *major*

R. de Jong

Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 RA Leiden, The Netherlands

Abstract. The purpose of this application is to conserve the Skipper butterfly specific names *carthami* Hübner, [1813] and *major* Staudinger, 1879 by suppression of the senior name *maior*.

---

1. In 1787 (p. 91) Fabricius described a Skipper butterfly which he considered a variety of *Papilio fritillum* Denis & Schiffermüller, 1775 under the name *'Papilio Maluae maior'*. Possibly he did not use the combination *'Papilio fritillum maior'* because he wanted to contrast his variety with *Papilio malvae minor* Esper, 1777, which he listed as a synonym of *Papilio fritillum*. The type of Fabricius' *maior* appears to be lost; it is not mentioned by Zimsen (1964).

2. Apparently Denis & Schiffermüller (1775, p. 159) united several species under the name *Papilio fritillum*. This was already known by Ochsenheimer (1808, p. 203), who had seen that about four different species were placed under this name in the Schiffermüller collection. Because Fabricius listed *Papilio malvae minor* Esper as a synonym of *Papilio fritillum*, he used the latter name in the sense of *Papilio* (now *Pyrgus*) *malvae* Linnaeus, 1758, which name refers without doubt to the same species as *Papilio malvae minor*. Thus Fabricius' description must be compared with *Pyrgus malvae* (known in English as the Grizzled Skipper). I have shown (De Jong, 1987, pp. 376–377) that Fabricius' description of *maior* and his reference to Esper (1777, pl. 23, fig. 2) can only relate to the species that was named *Papilio carthami* by Hübner ([1813], pl. 143).

3. After the original description of *maior* the name has merely been mentioned, by the following authors: Fabricius (1793: copy of the original description); Ochsenheimer (1808, p. 202: name attributed to Esper and synonymised with '*Papilio tessellum* Hübner' (p. 70) which in the sense of Ochsenheimer is the same as *Papilio carthami* Hübner); Evans (1949, p. 199: as a junior synonym of *Papilio fritillarius* Poda, 1761, which he considered a synonym of *Papilio carthami* Hübner, see below); De Jong (1972, p. 70: as a synonym of *Papilio carthami* Hübner); and Leraut (1980: in the same sense as Evans). So far *maior* Fabricius has never been used as a valid specific name.

4. The species described by Fabricius as *Papilio malvae maior* has been known as *Papilio* (now *Pyrgus*) *carthami* Hübner, ever since the publication of Hübner's [1813] good figure of it. Since Hemming (1943, p. 69) the name *Papilio fritillarius* Poda, 1761 (a nomen dubium) also came into use for this species. I have shown (De Jong, 1987, pp. 372–376) this to be incorrect. Thus the valid name for the species is *Pyrgus maior* (Fabricius, 1787), a name never used as such in literature.

5. Staudinger (1879, p. 292) described a geographic form of *Pyrgus serratulae* Rambur, 1839 (p. 318, pl. 8, fig 9m) from Asia Minor under the name *Syrichthus serratulae major*. This form belongs to a group of geographical forms occupying the eastern part of the range of the species. Six or seven subspecies can be distinguished in this group (De Jong, 1972, pp. 67–73). Of the available names within the group, *major* Staudinger is the oldest one, so lumping of the eastern forms into a single subspecies would not cause the name to disappear into synonymy. Staudinger's name has been used for the Turkish form of *Pyrgus serratulae* by all subsequent authors on *Pyrgus serratulae* from Turkey (Alberti, 1969, p. 141; De Jong, 1972, p. 71; Higgins, 1966, p. 220; Warren, 1926, p. 164), but Evans (1949, p. 197) used the name *uralensis* Warren, 1926 for the whole of the eastern group because Staudinger's *major* is a junior secondary homonym of the *maior* of Fabricius.

6. The acceptance of *maior* Fabricius as a specific name would (a) invalidate the generally accepted name *Pyrgus carthami* (Hübner) by sinking it into synonymy, and (b) for reasons of homonymy (Article 58 of the Code) necessitate a replacement name for *major* Staudinger for the Turkish form of this species.

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

(1) to use its plenary powers to suppress the specific name *maior* Fabricius, 1787, as published in the trinomen *Papilio malvae maior*, for the purposes of both the Principle of Priority and the Principal of Homonymy;

(2) to place on the Official List of Specific Names in Zoology the following names:
   (a) *carthami* Hübner, [1813], as published in the binomen *Papilio carthami*;
   (b) *major* Staudinger, 1879, as published in the trinomen *Syrichthus serratulae major*;

(3) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *maior* Fabricius, 1787, as published in the trinomen *Papilio malvae maior* and as suppressed in (1) above.

References

Alberti, B. 1969. Zur Kenntnis der Hesperiiden-Fauna des Kaukasus-Raumes und Armeniens (Lepidoptera, Hesperiidae). *Faunistische Abhandlungen Staatliches Museum für Tierkunde in Dresden*, **2**: 129–147.

De Jong, R. 1972. Systematics and Geographic History of the Genus *Pyrgus* in the palaearctic Region (Lepidoptera, Hesperiidae). *Tijdschrift voor Entomologie*, **115**: 1–121.

De Jong, R. 1987. Cutting the Nomenclatural Gordian Knot around *Pyrgus carthami* (Hübner) (Lepidoptera, Hesperiidae). *Zoologische Mededelingen Leiden*, **61**: 371–385.

Denis, M. & Schiffermüller, I. 1775. *Systematisches Verzeichniss der Schmetterlinge der Wiener Gegend*. 322 pp., 2 pls. Bernardi, Wien.

Esper, E. J. C. 1777. *Die Schmetterlinge in Abbildungen nach der natur mit Beschreibungen*. 1. Theil. Europäische Gattungen. 384 pp., 48 pls. Walthers, Erlangen.

Evans, W. H. 1949. *A Catalogue of the Hesperiidae from Europe, Asia and Australia in the British Museum (Natural History)*. xix, 502 pp., 52 pls. British Museum (Natural History), London.

Fabricius, J. C. 1787. *Mantissa insectorum*, vol. 2. 382 pp. Proft, Hafniae.

Fabricius, J. C. 1793. *Entomologia systematica*, vol. 3. 487 pp. Proft, Hafniae.

Hemming, F. 1943. On certain minor corrections made in the report submitted by the International Commission on Zoological Nomenclature to the Twelfth International Congress of Zoology, Lisbon, September 1935. *Bulletin of Zoological Nomenclature*, **1**: 64–69.

Higgins, L. G. 1966. Checklist of Turkish Butterflies. *The Entomologist*, **99**: 209–222.

Hübner, J. [1808–1813]. *Sammlung europäischer Schmetterlinge*. Papiliones, pls. 129–144. Augsburg.

Léraut, P. 1980. Liste systématique et synonymique des Lépidoptères de France, Belgique et Corse. *Alexanor*, **11**: suppl. 1–334.

Linnaeus, C. 1758. *Systema Naturae*, Ed. 10, vol. 1. 824 pp. Salvii, Holmiae.

Ochsenheimer, F. 1808. *Die Schmetterlinge von Europa*, vol. 1(2), xxx, 240 pp. Fleischer Jr., Leipzig.

Poda, N. 1761. *Insecta Musei Graecensis*. 139 pp. Widmanstad, Graz.

Rambur, P. 1839. *Faune entomologique de l'Andalousie*, vol. 3, pp. 213–336, pl. 8–18. Bertrand, Paris.

Staudinger, O. 1879. Lepidopteren–Fauna Kleinasien's. *Horae Societatis Entomologicae Rossicae*, **14**: 176–482.

Warren, B. C. S. 1926. Monograph of the tribe Hesperiidi (European species) with revised classification of the subfamily Hesperiinae (Palaearctic species) based on the genital armature of the males. *Transactions of the Entomological Society of London*, **74**: 1–170, 60 pls.

Zimsen, E. 1964. *The type material of J. C. Fabricius*. 656 pp. Munksgaard, Copenhagen.

Case 2654

Rapport sur les Myodaires du Docteur Robineau Desvoidy, (1826): proposed nomenclatural suppression

Curtis W. Sabrosky

Systematic Entomology Laboratory, Agricultural Research Service, USDA, c/o U.S. National Museum, Washington, DC 20560, U.S.A.

Abstract. The purpose of this application is the maintenance of stability in the nomenclature of Muscoid (higher) flies by the suppression of a report to the Académie Royale des Sciences (Paris) on the manuscript of J. B. Robineau-Desvoidy's 1830 *Essai sur les Myodaires*. At present the availability of names in the 1826 *Rapport* is uncertain.

---

1. It is desirable to clarify the nomenclatural status of the work entitled *Rapport sur les Myodaires du Docteur Robineau Desvoidy** (1826), which was written by a commission of the Académie Royale des Sciences consisting of Latreille, Duméril, and de Blainville (Rapporteur). The *Rapport* was read in the meeting of the Académie of 2 October 1826, as stated in the small printed version of 24 pages. It has been referred to only rarely in the published literature, and questions have arisen as to whether it was published in the meaning of the Code. The *Rapport* is printed, but at that period printing was the means of making numerous copies. On the face of it, this is an 'in-house' report for the members of the Académie on the suitability of the manuscript of Robineau-Desvoidy's *Essai sur les Myodaires* (1830) for publication by the Académie, and was not intended as a separate publication for permanent scientific record. Indeed, it contains suggestions for changes that should be made. To remove the uncertainty and to avoid confusion and serious problems, I propose that the Commission place it on the Official Index of Rejected and Invalid Works in Zoological Nomenclature.

2. Robineau-Desvoidy's great work *Essai sur les Myodaires* was published in 1830 by the Académie Royale des Sciences. The manuscript was submitted to the Académie at its meeting of 28 August 1826, and the commission referred to was charged with examining it and rendering judgment on it. The *Rapport* is their report, in some detail. In reviewing the manuscript they discussed by name, both vernacular and scientific, the various families and tribes, mentioning some included genera and species and noting types in a few instances, and these items give rise to some nomenclatural problems. The commission also made suggestions, such as changing some of the names, and obviously some revisions were made before the publication of the book in 1830. Some of the names of 1826 do not appear again, and the author considerably reduced the number of tribes recognized. The commission closed the *Rapport* by recommending that the work be published 'dans le recueil des Savans étrangers' and further proposed to the Académie 'd'en faciliter et d'en accélérer la publication par tous les moyens qui sont à votre disposition.'

*In the *Rapport* Robineau-Desvoidy is written without a hyphen.

3. The numerous and important generic names proposed by Robineau-Desvoidy in his *Essai* have always been credited to the 1830 work. The names are so cited in the generic nomenclators of Agassiz, Scudder, Schulze, and in the *Index Animalium* of Sherborn, and the 1826 work is not mentioned. I know of no family or generic name or type designation credited to it, and its recognition now, over a century and a half later, would involve some difficult or potentially serious problems. The following paragraphs analyse the names and what would be involved if the *Rapport* were to be considered published in the meaning of the Code.

4. *Authorship and date.* If dated from 1826, the names might arguably be credited to de Blainville, or with the awkward citations de Blainville, Duméril and Latreille, or Robineau-Desvoidy *in* de Blainville et al. If the *Rapport* were suppressed, authorship and date would remain Robineau-Desvoidy, 1830, which agrees with universal usage.

5. *Family-group names.* These might date from the 1826 work, because for that time they required only formation from 'the name then valid for a contained genus' (Code, Article 11f). In what he called the 'ordre' Myodariae, Robineau-Desvoidy (1826, as quoted in the *Rapport*) included 10 families and 41 tribes, with both vernacular and latinized spelling given.

(a) Thirty-five of the 51 family-group names are not based on generic names and thus have no standing whatever in nomenclature. They are often descriptive terms plus a group ending, e.g. Aciphoreae for those with horny pointed ovipositors. Most of these names were also used in the 1830 work.

(b) Eleven family-group names are based on generic names, judging from included species that can be associated with generic names by comparison with the 1830 work. However, the 11 generic names are not mentioned in the 1826 work and were not established until the 1830 *Essai*. Thus these group names have no nomenclatural standing as of 1826. For the record, these are Aricinae, Macromydae, Pherbelliaeae, Limosellae, Hylemydae, Pegomydae, Terhenidae, Napeellae, Myodinae, Theliodomyae, and Hydrellideae.

(c) Two family-group names are based on older generic names and hence would have standing from 1826, but they are antedated by earlier versions of the same names and thus cause no problem. Muscidae is antedated by Muscides Latreille, 1802, and Phytomydae by Phytomyzides Fallén, 1823.

(d) One family-group name, Scatophaginae, was obviously (from a cited species) based on *Scatophaga* Meigen, 1803 (actually *Scathophaga*; the error or emendation *Scatophaga* by Fabricius (1805) has been commonly used). The generic name was not mentioned in 1826 but the group name could be dated from the 1826 work rather than from 1830 because of the 'inference in context' to *Scatophaga* (Code, Article 11f(i)1).

(e) Finally, for two family-group names the type genus is mentioned, and these names would date from the 1826 *Rapport* if it were considered published; if not they will date from Robineau-Desvoidy (1830) as customarily credited. Both could cause upsets in established usage:

Ocypteratae: Robineau-Desvoidy noted that his group corresponded to *Ocyptera* of Fabricius, but the genus was actually published by Latreille in 1804. In both Latreille and Fabricius it was a mixture of two quite different groups now placed in TACHINIDAE Robineau-Desvoidy, 1830, and later type designation restricted the name to a genus now known as *Eriothrix* Meigen,

1803, with *Ocyptera* in synonymy, in a tribe ERIOTHRIXINI which dates from the 20th century. If the 1826 work were considered published, Ocypteratae (as OCYPTERIDIDAE) would antedate not only ERIOTHRIXINI (although the latter could be valid under Article 40b) but also TACHINIDAE itself.

Phasianae: The genus *Phasia* dates from Latreille (1804), although Robineau-Desvoidy said his group was based on *Phasia* of Fabricius, adopted by Meigen. In any event, the same genus is involved. The 1826 work has the oldest name for the group, which has been variously called tribe, subfamily, or family; it is currently a subfamily of TACHINIDAE. If dated from 1826, PHASIIDAE would have priority over the important family name TACHINIDAE Robineau-Desvoidy, 1830, for the parasitic higher Diptera. In the *Essai*, the spelling was Phasianeae, only slightly different from 1826.

6. *Generic names* are used only sparingly in the *Rapport*, and many of those are older names such as *Echinomya*, *Musca*, *Ocyptera*, and *Tachina*. Some hitherto unpublished names are mentioned but without description or included species; these are nomina nuda and need not concern us further. In a few cases, however, older species are associated with the generic name, either as designated type species or the only included species, and such association would either make the generic name available or cause possible trouble from the type designation, if the 1826 work were considered published. These are as follows:

(a) *Tachina* (p. 11): 'G. *Tachina* de Fabricius, ayant le *Musca rotundata* pour type'. This is no problem. *Tachina* dates from Meigen, 1803, and *rotundata* was not one of the three originally included nominal species.

(b) *Myophore* (p. 11) was associated with three older nominal species, and also with a description, which might have been that of the tribe Theramydae. *Myophore* may have been intended as a vernacular, even though italicized. The genus appeared as *Myophora* in the 1830 work, perhaps a correction recommended by the commission, and recognition of the 1826 work would require a slight but annoying change in the spelling. It is currently a synonym of *Sarcophaga* Meigen, 1826, and there would be a question of priority between Meigen (1826) and Robineau-Desvoidy (1826), which conceivably might threaten the long-used and important name *Sarcophaga*. The date of the preface in Meigen, which is two months earlier than the meeting of the Académie, suggests that Meigen's work could have appeared earlier, but that is not certain.

(c) *Stygia* (p. 11) is based on the Linnaean species *Musca meridiana*. There is no problem here. *Stygia* is preoccupied (in Lepidoptera, by *Stygia* Latreille, 1803), and Meigen in 1826 had proposed the well-known name *Mesembrina* to include the same species. Apparently Robineau-Desvoidy recognised or was told of the homonymy; at least in the 1830 *Essai* he adopted Meigen's generic name *Mesembrina*. *Stygia* does not appear again.

(d) *Pollenia* (p. 11): 'Le *Musca alteralibis* est le type de son G. *Pollenia*.' In 1830, Robineau-Desvoidy designated *Musca rudis* Fabricius as type species of *Pollenia*, and this has long been recognised. The name *Musca alteralibis* has not been found anywhere else, and it does not appear in the 1830 *Essai*. It might have been a lapsus for *Musca alterabilis* Gmelin, 1790. Except for a listing of the latter in Sherborn's *Index Animalium*, and a mention of it in

1802, neither name has been found in the literature. If the 1826 work were accepted as published, the status of *Pollenia* might be a serious problem. If *alteralibis* were considered a manuscript name of Robineau-Desvoidy, then it and *Pollenia* are nomina nuda in 1826, and there would be no threat. But, if *alteralibis* were considered merely a lapsus for *alterabilis* Gmelin, which is possible, even probable, then *Pollenia* would be an available name in 1826 but based on a nomen dubium. Suppression of the 1826 paper would remove all doubts and uncertainties, thus dating *Pollenia* from the 1830 work in conformity with universal and long-standing usage. The name *Pollenia* is widely recognised for the common cluster flies and as the basis for tribal and subfamily names in the blow fly family CALLIPHORIDAE.

(e) *Calliphora* (p. 11): 'Le *Musca vomitoria* constitue le G. *Calliphora*.' Recognition of the 1826 paper would give availability to *Calliphora* as of that date, by indication, with type species by monotypy. This would cause no problem, because in the *Essai* Robineau-Desvoidy designated *M. vomitoria* as type species.

(f) *Chrysomya* (p. 11): "Dans celui qu'il nomme *Chrysomya* se trouvent la brillante Mouche César." In 1830 Robineau-Desvoidy proposed *Chrysomya* and *Lucilia* as neighboring genera, with *Musca caesar* Linnaeus as type species of *Lucilia*, and these widespread and important genera have been so recognised ever since. If the *Rapport* were construed as associating *caesar* with *Chrysomya*, then *Chrysomya* would have availability from 1826 and this would seriously confuse the genera in CALLIPHORIDAE. *Chrysomya* was neither described nor diagnosed in 1826, but before 1931 a generic name might have been made available by indication. Fortunately, the Code requires for indication by inclusion of species that 'one or more available species-group names' must be included (Code, Article 12b(5)), and Article 12c specifically excludes vernacular names. A question might still be raised whether 'la brillante' is acceptable—however marginally—as descriptive matter, or even whether the vernacular reference to an existing specific name could be construed as a reference to an existing description. Marginal and suspect as these considerations admittedly are, any uncertainty would be removed by suppression of the *Rapport*.

(g) *Biomye* (p. 11) was said to contain a fly that annoyed large quadrupeds and that Robineau-Desvoidy named *B. stimulans*. The generic name, although italicised, might have been intended as a vernacular, but like *Myophore* one cannot be sure. It was published as *Biomya* in 1830. There is no problem, however, because *B. stimulans* was not described until 1830, and both *Biomya* and *stimulans* are nomina nuda in 1826. On the face of it, Robineau-Desvoidy does not appear to be referring to *Stomoxys stimulans* Meigen, 1824, as he does not cite this species, either in 1826 or 1830.

7. Three generic names appear to be associated with descriptive matter in the 1826 *Rapport*, and thus they would be available names, even though no nominal species are mentioned with them.

(a) *Voidia* (p. 10: '. . . les espèces du G. *Voidia* paraissent propres à Paris.') Then the following sentence contains a description of the antennae, calypteres, and body. This description appears from its position to be a description of *Voidia*, although comparison with other entries suggests that it is actually a descript-

ion of the tribe Lepidomydae. This generic name was not used in the 1830 work, but laborious comparison might show what name was adopted there, and what name might be upset if the 1826 work were considered published.

(b) *Phorophylla* (p. 10). There is a brief descriptive statement associated with the name: 'que M. Desvoidy a admis deux paires de palpes inférieurs.' This is brief but sufficient, weak as it is, to make the name available if the work were considered published. *Phorophylla* would thus antedate the 1830 publication of the name and would have priority over the currently used name *Phyllomya* Robineau-Desvoidy, 1830, for a genus of TACHINIDAE.

(c) *Elaïmya* (p. 17): The genus itself is not described but it is the only generic name mentioned with the description of the tribe: 'Les Myodines [MYODINAE] ne diffèrent de la tribu précédente, que par la plus grande longueur du troisième article antennaire, et par la soie ordinairement nue. C'est décidément cette tribu qui comprend la mouche d'olivier [the olive fruit fly, *Dacus oleae* (Gmelin)], dont M. Robineau fait le G. *Elaïmya*.' The citation of a vernacular species name does not confer availability on the generic name *Elaimya* but association with descriptive material can do so. *Elaimya* was not mentioned in the 1830 *Essai*.

8. There are enough problems and uncertainties in connection with the 1826 *Rapport*, involving some very important genera in the calyptrate Diptera, that the simplest and most direct solution is to suppress it or to declare it a work unpublished in the meaning of the Code. Otherwise, individual applications would have to be prepared on various genera. Robineau-Desvoidy's reputation rests justly on his great work of 1830 and should not be affected and confused by the 'in-house' report of a publications committee.

9. Although I believe that the *Rapport* could reasonably be interpreted as unpublished in the meaning of the Code (Article 8a), its formal suppression for nomenclatural purposes would be better if there exists any uncertainty or difference of opinion about the availability of the names published in it.

10. This application is supported by R. W. Crosskey, Neal L. Evenhuis, Wayne N. Mathis, A. C. Pont and F. C. Thompson.

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

(1) to use its plenary powers to suppress for nomenclatural purposes the following work:

Rapport sur les Myodaires du Docteur Robineau Desvoidy (H. M. D. de Blainville, Rapporteur), Académie Royale des Sciences de l'Institut de France, Paris, 1826.

(2) to place the above work, as suppressed in (1), on the Official Index of Rejected and Invalid Works in Zoological Nomenclature.

References

Académie Royale des Sciences de l'Institut de France. 1826. *Rapport sur les Myodaires du Docteur Robineau Desvoidy* (H. M. D. de Blainville, Rapporteur), 24 pp. Paris.

Robineau-Desvoidy, J. B. 1830. Essai sur les Myodaires. *Mémoires présentés par divers savans à l'Académie Royale des Sciences de l'Institut de France*, sér 2, vol. 2, 813 pp. Imprimerie Royale, Paris.

Case 2629

Physcus Howard, 1895 (Insecta, Hymenoptera): proposed conservation

David Rosen & Tova Rivnay
The Hebrew University, Faculty of Agriculture, Rehovot 76100, Israel

Gennaro Viggiani
Istituto di Entomologia Agraria 'Filippo Silvestri', 80055 Portici, Italy

Abstract. The purpose of this application is the conservation of the chalcid fly name *Physcus* Howard, 1895 (APHELINIDAE) by the suppression of the possible senior subjective synonym *Coccobius* Ratzeburg, 1852.

---

1. Ratzeburg (1852, pp. 195–196) described *Coccobius* (p. 195) with five new species, *annulicornis* (p. 195), *pallidus, circumscriptus, luteus* and *notatus,* all of which were regarded by subsequent authors as belonging to various other aphelinid genera.

2. Howard (1895, p. 10) transferred *notatus* to *Coccophagus* Westwood, 1833 and *pallidus* to *Aphelinus* Dalman, 1820 and stated that 'The position of the remaining three is doubtful, but I should not be surprised if it were eventually ascertained that *annulicornis* belongs to *Physcus, circumscriptus* to *Prospalta* [= *Encarsia* Förster] and *luteus* to *Ablerus* [Howard].'

3. In the same paper Howard (1895, p. 43) described the genus *Physcus,* with *Coccophagus varicornis* Howard, 1881 (p. 360) as type species. More than 50 species have since been described in this genus, which 'is rather distinctive and is not likely to be confused with any other aphelinid genus' (Hayat, 1984, p. 291).

4. Ashmead (1900, p. 408) made the following statement: 'Ratzeburg, in his original description of this genus [*Coccobius*], as has been shown by Dr Howard, confused with it a number of species belonging to *Aphelinus* or allied genera; but, nevertheless, he must have had before him at least one genuine Encyrtine, as his figure, both of venation and antenna, clearly shows; and I here restore the name for a species agreeing in all particulars with his brief diagnosis and his figure. No Aphelinine has a wing-venation as figured by Ratzeburg.' He then described *Coccobius diaspidis* Ashmead. Subsequently, Girault (1917, p. 6) synonymized *Arrhenophagus albipes* Girault, an encyrtid, with Ashmead's species. *Coccobius diaspidis* is currently recognised as a junior synonym of *Arrhenophagus chionaspidis* Aurivillius, 1888 (see Gordh, 1979, p. 929).

5. Both Dalla Torre (1898, p. 219) and Schmiedeknecht (1909, p. 451), on the other hand, regarded *Coccobius* Ratzeburg as a synonym of *Aphelinus* Dalman, and included all five of Ratzeburg's species under that generic name. Schmiedeknecht (1909, pp. 258–259) disagreed with Ashmead's interpretation of *Coccobius* as an encyrtid, but retained *diaspidis* as the only species under that generic name. Mercet (1912, p. 50), too, regarded *Coccobius* ('in part') as a synonym of *Aphelinus*. However, he disagreed

with Howard's suggestion as to the position of *annulicornis*, stating that 'Ratzeburg's description does not permit to determine with certainty to which genus this insect belongs.' (Mercet, 1912, p. 93).

6. Gahan & Fagan (1923, p. 37) inexplicably resurrected Ratzeburg's original *Coccobius*, disregarded Ashmead's species, and designated *annulicornis* as type species, because this '... is the first species named by Ratzeburg and has not been definitely transferred....' In doing so they chose to disregard the actions taken by Dalla Torre and Schmiedeknecht, who placed this species in *Aphelinus*, as well as Mercet's opinion that it was generically unassignable. In retrospect, this was a rather unfortunate decision.

7. For the next half-century or so, *Coccobius* remained virtually unrecognised, and no additional species were referred to it. Most authors on the CHALCIDOIDEA either ignored it or regarded it as a synonym of one genus or another (e.g., De Santis, 1948, pp. 101, 162; Nikol'skaya, 1952, p. 304 (p. 310 in the English translation); Ferrière, 1965, p. 58; Nikol'skaya & Yasnosh, 1966, pp. 166, 212). As long as this remained the case, its ambiguous taxonomic position did not cause any nomenclatural problems.

8. Recently, however, Graham (1976, p. 144) made the following peculiar statement: 'Dr S. Novitzky informed me a few years ago that he had seen Ratzeburg's type of *annulicornis* before it was destroyed in 1945, and that it belonged to the genus *Physcus*. This appears to settle the identity of the genus *Coccobius*. Whether the earlier name *Coccobius* Ratzeburg should be adopted in preference to *Physcus* Howard is a debatable point, and I retain the latter meanwhile as it is a well known name, until the matter can be considered further by other specialists.' We cannot accept Graham's opinion, that Novitzky's recollection of a specimen seen more than 30 years earlier, unsupported by any written redescription, figures, etc., is sufficient evidence 'to settle the identity of the genus *Coccobius*'. However, we do concur with his conclusion, that the obscure *Coccobius* Ratzeburg should not replace the well-known name *Physcus* Howard.

9. Unfortunately, Hayat (1983, pp. 78–81) took up Graham's account of Novitzky's opinion, to which he added the following: '... I have seen a specimen (it is on a card with the antennae missing and the head partly eaten by psocids) in the BMNH coming from S. Novitzky's collection and determined by him as *Coccobius annulicornis* Ratz., which appears to be conspecific with the palaearctic *Physcus testaceus*....' He therefore proposed to synonymize *Physcus* under *Coccobius*.

10. We cannot accept Hayat's circumstantial evidence as sufficient grounds for synonymizing a well-known generic name. Firstly, Ratzeburg's type of *annulicornis* was destroyed in World War II, and we do not have any first-hand evidence that Novitzky's specimen was indeed conspecific — or even congeneric — with it. And, secondly, to the best of our knowledge an aphelinid specimen mounted on a card, without antennae and with part of the head eaten, cannot be identified to genus — let alone to species — with any degree of certainty. In a subsequent paper, Hayat (1984, p. 294) himself noted that *annulicornis* 'should remain unrecognisable' until a neotype is designated.

11. The generic name *Physcus* Howard has been in constant and frequent use in zoological literature. In addition to the description of numerous species, the name was used by Yasnosh (1976, pp. 115, 117) to establish the aphelinid subfamily PHYSCINAE. Even more significantly, several species of *Physcus* have been used in biological control

of armored scale insect pests, and this generic name is well known to economic entomologists. A few examples are DeBach & Rosen (1976, p. 142); Rosen & DeBach (1978, pp. 84, 107, 109–111); and Furuhashi & Nishino (1983). A representative list of usage of *Physcus* is held by the Secretariat.

12. Thus, even if the subjective synonymy of *Physcus* with *Coccobius* were clear, preservation of nomenclatural stability would favour the suppression of the senior synonym in this case. All the more so, when the synonymy itself is at best doubtful and has been the cause of unnecessary confusion.

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

(1) to use its plenary powers to suppress the following names for the purposes of the Principle of Priority but not for those of the Principle of Homonymy:
  (a) the generic name *Coccobius* Ratzeburg, 1852;
  (b) the specific name *annulicornis* Ratzeburg, 1852, as published in the binomen *Coccobius annulicornis*;

(2) to place on the Official List of Generic Names in Zoology the name *Physcus* Howard, 1895 (gender: masculine), type-species *Coccophagus varicornis* Howard, 1881, by original designation;

(3) to place on the Official List of Specific Names in Zoology the name *varicornis* Howard, 1881, as published in the binomen *Coccophagus varicornis* (specific name of the type-species of *Physcus* Howard, 1895);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Coccobius* Ratzeburg, 1852, as suppressed in (1) (a) above;

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *annulicornis* Ratzeburg, 1852 as published in the binomen *Coccobius annulicornis* and as suppressed in (1) (b) above.

References

Ashmead, W. H. 1900. On the genera of the chalcid-flies belonging to the subfamily Encyrtinae. *Proceedings of the United States National Museum*, **22**: 323–412.

Dalla Torre, G. C. De, 1898. *Catalogus hymenopterorum hucusque descriptorum systematicus et synonymicus*. Vol. V: *Chalcididae et Proctotrupidae*. 598 pp. Engelmann, Lipsiae.

DeBach, P. & Rosen, D. 1976. Armoured scale insects. Chapter 6. *In* Delucchi, V. L. (Ed.) *Studies in Biological Control*. International Biological Programme, vol. 9, pp. 139–178. Cambridge University Press.

De Santis, L. 1948. Estudio monografico de los Afelinidos de la Republica Argentina (Hymenoptera, Chalcidoidea). *Seperado de la Revista del Museo de la Plata (N.S.)*, vol. 5, pp. 23–280.

Ferrière, C. 1965. *Hymenoptera Aphelinidae d'Europe et du Bassin Méditerranéen. Faune d'Europe et du Bassin Méditerranéen*, vol. 1. 206 pp. Masson, Paris.

Furuhashi, K. & Nishino, M. 1983. Biological control of arrowhead scale, *Unaspis yanonensis*, by parasitic wasps introduced from the People's Republic of China. *Entomophaga*, **28**(3): 277–286.

Gahan, A. B. & Fagan, M. M. 1923. The type species of the genera of Chalcidoidea or Chalcid–Flies. *United States National Museum Bulletin*, 124, iii, 173 pp.

Girault, A. A. 1917. *Descriptiones hymenopterorum chalcidoidicarum variorum cum observationibus. V*. Privately published, Glendale, Md, 16 pp. (Reprinted in: *Memoirs of the American Entomological Institute*, **28**: 116–131).

Gordh, G. 1979. Family Encyrtidae. *In* Krombein, K. V., Hurd, P. D., Smith, D. R. & Burks, B. D., *Catalog of Hymenoptera in America North of Mexico*, Vol. 1: Symphyta and Apocrita (Parasitica), pp. 890–967.

Graham, M. W. R. de V. 1976. The British species of *Aphelinus* with notes and descriptions of other European Aphelinidae (Hymenoptera). *Systematic Entomology*, **1**: 123–146.

Hayat, M. 1983. The genera of Aphelinidae (Hymenoptera) of the world. *Systematic Entomology*, **8**: 63–102.

Hayat, M. 1984. Notes on some species of *Coccobius* and *Prophyscus* (Hymenoptera: Aphelinidae), with special reference to Girault and Howard types. *Oriental Insects*, **18**: 289–334.

Howard, L. O. 1881. Report on the parasites of the Coccidae in the collection of this department. Report of the Entomologist, Part III. *In* Comstock, J. H., *Annual Report of the Department of Agriculture for 1880*, pp. 350–371. Washington, D.C.

Howard, L. O. 1895. Revision of the Aphelininae of North America. *U.S. Department of Agriculture. Division of Entomology*. Technical Series no. 1, 44 pp.

Mercet, R. G. 1912. Los Enemigos de los Parasitos de las Plantas. Los Afelininos. Trabajos del Museo de Ciencias Naturales, No. 10. 306 pp. Madrid.

Nikol'skaya, M. N. 1952. The Chalcid Fauna of the USSR. *Opredeliteli po Faune SSSR*, **44**: 1–575. (in Russian; English translation: *Israel Program for Scientific Translations*, 1963, 593 pp.).

Nikol'skaya, M. N. & Yasnosh, V. A. 1966. Aphelinidae of the European part of the USSR and Caucasus. *Opredeliteli po Faune SSSR*, **91**: 1–296. (In Russian).

Ratzeburg, J. T. C. 1852. *Die Ichneumonen der Forstinsecten in forstlicher und entomologischer Beziehung*. Dritter Band. xviii, 272 pp. Nicolai'schen, Berlin.

Rosen, D. & DeBach, P. 1978. Diaspididae. pp. 78–128. *In* Clausen, C. P. (Ed.), *Introduced Parasites and Predators of Arthropod Pests and Weeds: a World Review*. Agricultural Handbook 480, U.S. Department of Agriculture, Washington, D.C.

Schmiedeknecht, O. 1909. Hymenoptera, Family Chalcididae. *In* Wytsman, P., *Genera Insectorum*, Fasc. 97. 550 pp. Verteneuil & Desmet, Bruxelles.

Yasnosh (=Jasnosh) V. A. 1976. Classification of the Parasitic Hymenoptera of the family Aphelinidae (Chalcidoidea). *Entomologicheskoye Obozreniye*, Moskva, **55** (1): 159–168 (in Russian; English translation: *Entomological Review*, Washington, **55**: 114–120).

Comments on the proposed confirmation of the spelling of LIPARIDAE Gill, 1861 (Osteichthyes, Scorpaeniformes)
(Case 2440; see BZN **45**: 130–131)

(1) L. B. Holthuis
Rijksmuseum van Natuurlijke Historie, Postbus 9517, 2300 R A Leiden, The Netherlands

It seems most illogical in the present case not to use the grammatically correct LIPARIDIDAE for the family containing the genus *Liparis*, the more so as there are (see BZN **45**: 130, para. 3) already two family-group (tribe) names of which the stem is LIPAR-, namely those based on *Lipara* (Diptera) and *Liparus* (Coleoptera). At family rank these become LIPARIDAE.

It is much better to now use the correct spelling LIPARIDIDAE for the fish family based on *Liparis*, rather than to do it later when the incorrect name has become still more accepted. The change of LIPARIDAE to LIPARIDIDAE is not so great that it will cause confusion, and I strongly advise the rejection of the request made in Case 2440.

(2) Alwyne Wheeler
British Museum (Natural History), Cromwell Road, London SW7 5BD, U.K.

I strongly support the proposed conservation of the family name LIPARIDAE on the grounds of its wide usage in this spelling in ichthyological literature.

Amendation, solely for grammatical reasons, of widely used family names is to be deplored. If nomenclature is to retain its credibility among working zoologists then previous usage is the only significant criterion which should influence the Commission in its decision. The attempt to persuade ichthyologists to change familiar family names such as LIPARIDAE (and COBITIDAE – see Opinion 1500) to secure allegedly correct grammar has caused considerable confusion already and has been aptly categorized by Cocks (1988) as pedantry.

Reference

Cocks, L. R. M. 1988. [Quoted in Opinion 1500], *Bulletin of Zoological Nomenclature*, **45**(2): 178–179.

AUTHORS IN PRESENT VOLUME

	Page
Achterberg, C. van	33
Adams, M. *et al.*	153
Aldridge, R. J.	127
Bacescu, M.	264, 267, 270
Bailey, R. M.	36, 92, 135
Banner, F. T.	217
Barnes, L. G.	153, 223
Best, M. B.	47
Birrel, C. J. *et al.*	149
Borowiec, L.	194
Bouchet, P.	146
Bour, R.	146
Bourne, W. R. P.	221
Boxshall, G. A.	145
Breton, G.	125
Brygoo, E.-R.	146
Chiszar, D.	210
Corbet, G. B.	214
Covacevich, J.	52
Crosskey, R. W.	199
De Jong, R.	280
Disney, R. H. L.	48, 216
Dubois, A.	146
Erridge, N. A.	141
Eschmeyer, W. N.	36, 132, 204
Erzincliogluy, Y. Z.	48, 216
Ferraris, C. J., Jr.	143
Fitzgerald, K. T.	138
Fortuner, R.	55
Geiger, H.	29
Géry, J.	38
Greer, A. E.	53, 216
Guillette, L. J., Jr.	138
Hahn, G.	48, 50
Hanken, J.	210
Hansen, H. J.	104, 106, 109, 112, 114, 116, 118
Hansen, M.	25
Harasewych, M. G.	51
Hawksworth, D. L.	185
Heyning, J. E.	153, 223
Hoeksema, B. W.	13, 47
Holthuis, L. B.	18, 21, 120, 151, 264, 267, 270, 292
Howarth, M. K.	50
Hulsemann, K.	188
Hunt, D. J.	55
Hutchinson, M. N.	145
Ingram, G. J.	52
Jacobs, B. J. M.	21
Jeppsson, L.	127
Kerzhner, I. M.	49
Key, K. H. L.	45, 191
King, M.	150
Kock, D.	223
Kropp, R. K.	262
Lea, R. N.	132
LeCroy, M.	212
Lescure, J.	146
Leoblich, A. R., Jr.	186
Loeblich, H. Tappan	186
Loof, P. A. A.	55
Maggenti, A. R.	55
Mahnert, V.	38
Manuel, R. L.	144
Meester, J.	43
Meinander, M.	272
Meyer-Rochow, V. B.	149
Morgan, G. J.	18
Nal'nyaeva, T. I.	50
Nielsen, E. S.	27
Norris, S. M.	143
Nussbaum, R. A.	207
Nye, I. W. B.	27
Oswald, J. D.	272, 275
Petit, R. E.	51
Platt, T. R.	258
Pleijel, F.	260
Pulawski, W. J.	34
Rezbanyai-Reser, L.	29
Rivnay, T.	288
Robins, C. R.	92, 135, 204
Rögl, F.	104, 106, 109, 112, 114, 116, 118
Rookmaaker, L. C.	43
Rosen, D.	288
Sabrosky, C. W.	283
Schleich, H. H.	41

Schroeder, R. 254
Shima, H. 199
Siddiqi, M. R. 55
Silfverberg, H. 278
Simmons, M. D. 254
Smith, H. M. . . . 138, 210
Stone, J. 53

Taeger, A. 202
Tillier, S. 146
Tubbs, P. K. (Executive Secretary) 103
Tyler, M. J. 152

Viggiani, G. 288
Vogt, K. D. 130

Wheeler, A. . . . 6, 219, 292
Whitebread, S. E. 29
Wilkinson, M. 207

Zerche, L. 197

NAMES PLACED ON OFFICIAL LISTS AND INDEXES IN RULINGS OF THE COMMISSION PUBLISHED IN VOLUME 45 (1988)

Names, and the title of a work, placed on the Official Lists and Indexes in Volume 45 are listed below under four headings: Family-Group Names, Generic Names, Specific Names and Titles of Works. Entries on the Official Lists are in bold type and those on the Official Indexes are in non-bold type. The systematic groups to which names on the Official Lists belong are given but, following past practice, names on the Official Indexes have not been allocated to systematic groups. The Opinion or Direction number is given for each entry.

Family-Group Names

ALVEOLINIDAE Ehrenberg, 1839 (Rhizopoda) Op. 1501
BERYTIDAE Fieber, [1851] (Insecta, Heteroptera) Op. 1504
CLAUSOCALANIDAE Giesbrecht, 1892 (Crustacea, Copepoda) Op. 1503
COBITIDAE Swainson, 1839 (Osteichthyes) Op. 1500
EUOMPHALIDAE de Koninck, 1881 (Gastropoda) Op. 1470
LARAINI LeConte, 1861 (Insecta, Coleoptera) Op. 1515
LARIDAE Rafinesque Schmaltz, 1815 (Aves) Op. 1515
LARINI LeConte 1861 Op. 1515
MACLURITIDAE Carpenter, 1861 (Gastropoda) Op. 1470
PROTOWARTHIIDAE Ulrich & Schofield, 1897 Op. 1470
PSEUDOCALANIDAE Sars, 1901 (Crustacea, Copepoda) Op. 1503
SCHIZOSTOMATIDAE Eichwald, 1871 Op. 1470
SINUITIDAE Dall, 1913 (Gastropoda) Op. 1470
TUBULANIDAE Bürger, 1905 (1874) (Nemertea) Op. 1486

Generic Names

Acantophthalmus van Hasselt, 1823 Op. 1500
Agromyza Fallén, 1810 (Insecta, Diptera) Op. 1476
Alveolina d'Orbigny, 1826 (Rhizopoda) Op. 1501
Antispila Hübner, [1825] (Insecta, Lepidoptera) Op. 1479
Beanea Steindachner, 1902 Op. 1481
Berytinellus Stichel, 1957 Op. 1504
Berytinus Kirkaldy, 1900 (Insecta, Heteroptera) Op. 1504
Berytus Fabricius, 1803 Op. 1504
Brachyomus Lacordaire, 1863 (Insecta, Coleoptera) Op. 1493
Brius Dejean, 1821 Op. 1474
Bubo Duméril, 1806 (Aves) Direction 122
Clausocalanus Giesbrecht, 1888 (Crustacea, Copepoda) Op. 1503
Cobitis Linnaeus, 1758 (Osteichthyes) Op. 1500
Conchella Gray, 1848 Op. 1485
Coppinia Hassall, 1848 Op. 1485
Cornalatus Attems, 1931 (Diplopoda) Op. 1498
Craniolites Schlotheim, 1820 Op. 1469
Criomorphus Mulsant, 1839 Op. 1473
Criopoderma Poli, 1795 Op. 1467
Criopododerma Agassiz, 1848 Op. 1467
Criopus Poli, 1791 Op. 1467
Cryopus Deshayes, 1836 Op. 1467
Cyclaxyra Broun, 1893 (Insecta, Coleoptera) Op. 1472
Desorella Cotteau, 1855 (Echinoidea) Op. 1512
Dexia Meigen, 1826 (Insecta, Diptera) Op. 1475
Dexilla Westwood, 1840 Op. 1475
Euomphalus Sowerby, 1814 (Gastropoda) Op. 1470
Fasciolites Parkinson, 1811 Op. 1501
Filellum Hincks, 1868 (Hydrozoa) Op. 1485
Geonemus Schoenherr, 1833 (Insecta, Coleoptera) Op. 1493
Heriaeus Simon, 1875 (Arachnida) Op. 1488
Isarthron Dejean, 1835 Op. 1473

Laplisia Lamarck, 1801 Op. 1471
Lara LeConte, 1852 (Insecta, Coleoptera) Op. 1515
Larus Linnaeus, 1758 (Aves) Op. 1515
Liasis Gray, 1842 (Reptilia) Op. 1514
Lizinus Mulsant & Rey, 1870 (Insecta, Heteroptera) Op. 1504
Maclurea Emmons, 1842 Op. 1470
Maclurita Blainville, 1823 Op. 1470
Maclurite Lesueur, 1818 Op. 1470
Maclurites Lesueur, 1818 (Gastropoda) Op. 1470
Magnonaias Utterback, 1915 Op. 1487
Megalonaias Utterback, 1915 (Bivalvia) Op. 1487
Melanochroa Broun, 1882 Op. 1472
Melanochroa Roeder, 1886 (Insecta, Coleoptera) Op. 1472
Melorus Mulsant & Rey, 1870 (Insecta, Heteroptera) Op. 1504
Microfasciolites Gaemers, 1978 Op. 1501
Microgaster Latreille, 1804 (Insecta, Hymenoptera) Op. 1510
Napomyza Curtis, 1837 Op. 1477
Napomyza Westwood, 1840 (Insecta, Diptera) Op. 1477
Neides Latreille, 1802 (Insecta, Heteroptera) Op. 1504
Oncomera Stephens, 1829 (Insecta, Coleoptera) Op. 1506
Opius Wesmael, 1835 (Insecta, Hymenoptera) Op. 1497
Orbicula Cuvier, 1798 Op. 1468
Oryzaria Defrance *in* Bronn, 1825 Op. 1501
Paraphytomyza Enderlein, 1936 (Insecta, Diptera) Op. 1509
Phisis Stål, 1861 (Insecta, Orthoptera) Op. 1490
Pholetesor Mason, 1981 (Insecta, Hymenoptera) Op. 1480
Phyllomya Robineau-Desvoidy, 1830 (Insecta, Diptera) Op. 1475
Protowarthia Ulrich & Schofield, 1897 Op. 1470
Pseudocalanus Boeck, 1873 (Crustacea, Copepoda) Op. 1503
Rhabdodon Fleischmann, 1831 Op. 1483
Rhabdodon Matheron, 1869 (Reptilia) Op. 1483
Schizostoma Bronn, [1834] Op. 1470
Sinuites Koken, 1896 (Gastropoda) Op. 1470
Siphamia Weber, 1909 (Osteichthyes) Op. 1481
Surnia Duméril, 1806 (Aves) Direction 122
Synapturanus Carvalho, 1954 (Amphibia) Op. 1513
Taeniolabis Cope, 1882 (Mammalia) Op. 1516
Tetropium Kirby, 1837 (Insecta, Coleoptera) Op. 1473
Teuthras Stål, 1874 Op. 1490
Triacodon Marsh, 1871 Op. 1517
Tribolium MacLeay, 1825 (Insecta, Coleoptera) Op. 1495
Tropiphorus Schoenherr, 1842 (Insecta, Coleoptera) Op. 1474
Tubulanus Renier, [1804] (Nemertea) Op. 1486
Viverravus Marsh, 1872 (Mammalia) Op. 1517

Specific Names

albifrons, Corixa, Motschulsky, 1863 (Insecta, Heteroptera) Op. 1492
ambulans, Acridium, Erichson, 1842 Op. 1489
antinomia, Terebratula, Catullo, 1827 Op. 1466
arcta, Sertularia, Dalyell, 1847 Op. 1485
austeni, Simulium, Edwards, 1915 (Insecta, Diptera) Op. 1508
australiensis, Trigoniza, Bolívar, 1898 Op. 1489
australis, Microgaster, Thomson, 1895 (Insecta, Hymenoptera) Op. 1510
avara, Lara, LeConte, 1852 (Insecta, Coleoptera) Op. 1515
bicolor, Heteroclonium, Cope, 1896 (Reptilia) Op. 1482
bilobatus, Bellerophon, Sowerby, 1839 (Gastropoda) Op. 1470
borealis, Simulia, Zetterstedt, 1842 (Insecta, Diptera) Op. 1496
boscii, Oryzaria, Defrance *in* Bronn, 1825 (Rhizopoda) Op. 1501
brattenburgicus, Craniolites, Schlotheim, 1820 Op. 1469
brucei, Trypanosoma, Plimmer & Bradford, 1899 (Mastigophora) Op. 1484
brucii, Trypanosoma, Plimmer & Bradford, 1899 Op. 1484
bubo, Strix, Linnaeus, 1758 (Aves) Direction 122

calcar, Calcarina, d'Orbigny, 1839 (Rhizopoda) Op. 1464
campestris, Andrena, Eversmann, 1852 Op. 1511
caparoch, Strix, Müller, 1766 (Aves) Direction 122
castaneum, Colydium, Herbst, 1797 (Insecta, Coleoptera) Op. 1495
catulloi, Terebratula, Pictet, 1867 (Brachiopoda) Op. 1466
cinnamopterum, Tetropium, Kirby, 1837 (Insecta, Coleoptera) Op. 1473
clavipes, Cimex, Fabricius, 1775 (Insecta, Heteroptera) Op. 1504
cor, Terebratula, Bruguière, 1792 Op. 1466
costulatus, Halictus, Kriechbaumer, 1873 (Insecta, Hymenoptera) Op. 1511
diglossis, Chirotes, Saenz, 1869 Op. 1482
dilatata, Antinomia, Catullo, 1851 Op. 1466
dubia, Melanochroa, Roeder, 1886 (Insecta, Coleoptera) Op. 1472
duvallii, Terebratula, Newman, 1844 Op. 1466
elatus, Hyboclypus, Desor, 1847 (Echinoidea) Op. 1512
elegans, Phytomyza, Meigen, 1830 (Insecta, Diptera) Op. 1477
fallax, Triacodon, Marsh, 1871 Op. 1517
femorata, Dryops, Fabricius, 1792 (Insecta, Coleoptera) Op. 1506
fergusoni, Conus, Sowerby, 1873 (Gastropoda) Op. 1502
ferruginea, Simulia, Wahlberg, 1844 (Insecta, Diptera) Op. 1496
flabellipes, Curculio, Olivier, 1807 (Insecta, Coleoptera) Op. 1493
fulvocinctus, Conus, Crosse, 1872 (Gastropoda) Op. 1502
giganteus, Unio, Barnes, 1823 (Bivalvia) Op. 1487
gracilis, Laomedea, Sars, 1850 (Hydrozoa) Op. 1465
gracilis, Lomodea, Dana, 1846 Op. 1465
gracilis, Viverravus, Marsh, 1872 (Mammalia) Op. 1517
griseola, Micronecta, Horváth, 1899 (Insecta, Heteroptera) Op. 1491
hirsutus, Thomisus, Walckenaer, 1824 Op. 1488
hirticornis, Neides, Brullé, 1835 (Insecta, Heteroptera) Op. 1504
hirtus, Thomisus, Latreille, 1819 (Arachnida) Op. 1488
inconspicua, Thaumantias, Forbes, 1848 Op. 1465
intertexta, Campanularia, Couch, 1844 Op. 1485
janitor, Terebratula, Pictet, 1867 (Brachiopoda) Op. 1466
lemana, Sigara, Fieber, 1860 Op. 1491
lineata, Thaumantias, Forbes, 1848 Op. 1465
luteoscutellata, Phytagromyza, de Meijere, 1924 (Insecta, Diptera) Op. 1509
mackloti, Liasis, Duméril & Bibron, 1844 (Reptilia) Op. 1514
magna, Maclurites, Lesueur, 1818 (Gastropoda) Op. 1470
manca, Trigoniza, Bolívar, 1898 Op. 1489
marginalis, Musca, Fallén, 1824 Op. 1507
marginalis, Musca, Fourcroy, 1785 Op. 1507
marginalis, Musca, Wiedemann, 1830 (Insecta, Diptera) Op. 1507
marginata, Leptura, Fabricius, 1781 (Insecta, Coleoptera) Op. 1494
marginata, Leptura, Müller, 1766 Op. 1494
marinus, Larus, Linnaeus, 1758 (Aves) Op. 1515
mastigophorus, Calanus, Claus, 1863 (Crustacea, Copepoda) Op. 1503
mercurialis, Curculio, Fabricius, 1801 (Insecta, Coleoptera) Op. 1474
metallella, Tinea, [Denis & Schiffermüller], 1775 (Insecta, Lepidoptera) Op. 1479
minuta, Sigara, Fabricius, 1794 Op. 1491
minutus, Calanus, Krøyer, 1845 (Crustacea, Copepoda) Op. 1503
mirandaribeiroi, Synapturanus, Nelson & Lescure, 1975 (Amphibia) Op. 1513
mirza, Lycaena, Plotz, 1880 (Insecta, Lepidoptera) Op. 1478
mirza, Lycaena, Staudinger, 1874 Op. 1478
mirzaellus, Azanus, Koçak, 1980 Op. 1478
montivagus, Berytus, Meyer-Dür, 1841 (Insecta, Heteroptera) Op. 1504
navalis, Dermestes, Fabricius, 1775 Op. 1495
octotuberculatus, Curculio, Fabricius, 1787 (Insecta, Coleoptera) Op. 1493
ornigis, Apanteles, Weed, 1887 (Insecta, Hymenoptera) Op. 1480
pallipes, Opius, Wesmael, 1835 (Insecta, Hymenoptera) Op. 1497
pectinata, Listroscelis, Guérin, 1831 (Insecta, Orthoptera) Op. 1490
pentangulatus, Euomphalus, Sowerby, 1814 (Gastropoda) Op. 1470
permutata, Siphamia, Klausewitz, 1966 (Osteichthyes) Op. 1481

permutatus, Cornalatus, Attems, 1938 (Diplopoda) Op. 1498
pileata, Thaumantias, Forbes, 1841 Op. 1465
pileus, Terebratula, Bruguière, 1792 Op. 1466
politula, Cyclomorpha, Broun, 1881 (Insecta, Coleoptera) Op. 1472
polymorphus, Tubulanus, Renier, [1804] (Nemertea) Op. 1486
posticatum, Simulia, Meigen, 1838 (Insecta, Diptera) Op. 1508
priscus, Rhabdodon, Matheron, 1869 (Reptilia) Op. 1483
punctata, Thaumantias, Forbes, 1841 Op. 1465
reptans, Agromyza, Fallén, 1823 (Insecta, Diptera) Op. 1476
robiniae, Microgaster, Fitch, 1859 (Insecta, Hymenoptera) Op. 1480
rufa, Simulia, Meigen, 1838 (Insecta, Diptera) Op. 1496
rustica, Musca, Fabricius, 1775 (Insecta, Diptera) Op. 1475
sabulosus, Miliolites, de Montfort, 1808 Op. 1501
sarnica, Thaumantias, Forbes, 1841 Op. 1465
scholtzi, Sigara, Fieber, [1860] (Insecta, Heteroptera) Op. 1505
scholtzii, Sigara, Scholtz, [1847] Op. 1505
serpens, Campanularia, Hassall, 1848 (Hydrozoa) Op. 1485
stellata, Calcarina, de Férussac, 1827 Op. 1464
sulcatus, Taeniolabis, Cope, 1882 Op. 1516
taenia, Cobitis, Linnaeus, 1758 (Osteichthyes) Op. 1500
taoensis, Polymastodon, Cope, 1882 (Mammalia) Op. 1516
thompsoni, Thaumantias, Forbes, 1841 Op. 1465
tipularius, Cimex, Linnaeus, 1758 (Insecta, Heteroptera) Op. 1504
triangulus, Terebratula, Valenciennes, 1819 (Brachiopoda) Op. 1466
triquetrus, Terebratulites, Parkinson, 1811 Op. 1466
trivittata, Beanea, Steindachner, 1902 Op. 1481
tuberculata, Crania, Nilsson, 1826 (Brachiopoda) Op. 1469
tubifer, Siphamia, Weber, 1909 (Osteichthyes) Op. 1481
viridis, Laplisia, Bosc, 1801 Op. 1471
viridis, Laplysia, Montagu, 1804 (Gastropoda) Op. 1471
vittata, Biformalia, Sjöstedt, 1920 (Insecta, Orthoptera) Op. 1489
volvulus, Musca, Fabricius, 1794 (Insecta, Diptera) Op. 1475

Titles of Works

Sowerby, J. & J. de C., 1812–1845, Mineral Conchology of Great Britain, 7 vols. Direction 123

KEY NAMES IN APPLICATIONS AND COMMENTS

(for names in Rulings of the Commission see pages 295–298)

	Page
ACRIDIDAE Karny, 1907 (Insecta, Orthoptera)	192
Acridium Müller, 1776 (Insecta, Orthoptera)	193
Acrydium Müller, 1764 (Insecta, Orthoptera)	193
albescens, Astacus, Pennant, 1812 (Crustacea, Decapoda)	123
alfacariensis, Colias hyale, Ribbe, 1905 (Insecta, Lepidoptera)	31
ALEUROPTERYGINAE Enderlein, 1905 (Insecta, Neuroptera)	273
Aleuropteryx Löw, 1885 (Insecta, Neuroptera)	273
Amblodon Rafinesque, 1819 (Osteichthyes, Cypriniformes)	37
Ameiurus Rafinesque, 1820 (Osteichthyes, Siluriformes)	136
ampullaceus, Ophiognathus, Harwood, 1827 (Osteichthyes, Saccopharyngiformes)	205
angusticolle, Coryphium, Stephens, 1834 (Insecta, Coleoptera)	198
annulicornis, Coccobius, Ratzeburg, 1852 (Insecta, Hymenoptera)	290
arbuscula, Dendritina, d'Orbigny, 1826 (Foraminiferida)	112
arenosa, Bodotria, Goodsir, 1843 (Crustacea, Cumacea)	265
auris, Peneroplis, Defrance, 1824 (Foraminiferida)	115
australis, Colias hyale hyale, Verity, 1911 (Insecta, Lepidoptera)	31
bactrianus, Camelus, Linnaeus, 1758 (Mammalia, Artiodactyla)	141
baculatus, Tinoporus, de Montfort, 1808 (Foraminiferida)	110
beadlei, Hapalorhynchus, Goodman, 1987 (Trematoda, Digenea)	259
Belemnites Lamarck, 1799 (Mollusca, Coleoidea)	50
BELEMNITIDAE d'Orbigny, 1845 (Mollusca, Coleoidea)	50
Berosus Leach, 1817 (Insecta, Coleoptera)	26
bicinctaflava, Tenthredo, Christ, 1791 (Insecta, Hymenoptera)	203
bifasciella, Elachista, Treitschke, 1833 (Insecta, Lepidoptera)	28
Bodotria Goodsir, 1843 (Crustacea, Cumacea)	265
BODOTRIIDAE Scott, 1901 (Crustacea, Cumacea)	265
Borelis de Montfort, 1808 (Foraminiferida)	117, 217
borneensis, Tarentola, Gray, 1845 (Reptilia, Squamata)	41
brantsii, Euryotis, A. Smith, 1834 (currently *Parotomys brantsii*; Mammalia, Rodentia)	43, 223
breviremis, Phyllodoce, de Quatrefages, 1865 (Annelida, Polychaeta)	260
BRUCHIDAE Latreille, 1802 (Insecta, Coleoptera)	195
Bruchus Müller, 1764 (Insecta, Coleoptera)	195
Bruchus Linnaeus, 1767 (Insecta, Coleoptera)	195
bubalus, Catostomus, Rafinesque, 1818 (Osteichthyes, Cypriniformes)	37
bulloides, Nonionina, d'Orbigny, 1846 (Foraminiferida)	117
Calcarina d'Orbigny, 1826 (Foraminiferida)	110
Camelus Linnaeus, 1758 (Mammalia, Artiodactyla)	141
Carcinion Jarocki, 1825 (Crustacea, Decapoda)	20
carthami, Papilio, Hübner, [1813] (Insecta, Lepidoptera)	281
Cenobita H. Milne Edwards, 1837 (Crustacea, Decapoda)	20
Cenobites Berthold, 1827 (Crustacea, Decapoda)	20
CENOBITIDAE Dana, 1851 (Crustacea, Decapoda)	20
Chelifer Geoffroy, 1762 (Arachnida, Pseudoscorpionida)	49
chordatus, Stylephorus, Shaw, 1791 (Osteichthyes, Saccopharyngiformes)	205
chrysoscelis, Hyla, Laurenti, 1768 (Amphibia, Anura)	139
chrysoscelis, Hyla, Johnson, 1961 (Amphibia, Anura)	139
cichorii, Meloe, Linnaeus, 1758 (Insecta, Coleoptera)	195
Clausulus de Montfort, 1808 (Foraminiferida)	117

clypeatus, Pagurus, Fabricius, 1787 (Crustacea, Decapoda) 20
Coccobius Ratzeburg, 1852 (Insecta, Hymenoptera) 290
Coenobita Latreille, 1829 (Crustacea, Decapoda) 20
COENOBITIDAE Dana, 1851 (Crustacea, Decapoda) 20
concava, Orbulites, Lamarck, 1816 (Foraminiferida) 256
conglobator, Oniscus, Pallas, 1766 (Crustacea, Isopoda) 23
Coryphium Stephens, 1834 (Insecta, Coleoptera) 198
Cuma Humphrey, 1797 (Crustacea, Cumacea) 265
Cuma H. Milne Edwards, 1828 (Crustacea, Cumacea) 265

Dendritina d'Orbigny, 1826 (Foraminiferida) 112
domesticus, Mus, Rutty, 1772 (Mammalia, Rodentia) 215
domesticus, Mus musculus, Schwarz & Schwarz, 1943 (Mammalia, Rodentia) . . 215
dubius, Cordylodus?, Rhodes, 1953 (currently *Distomodus? dubius*; Conodonta) . 128
dutemplei, Pentetagonaster, d'Orbigny, 1850 (Echinodermata, Asteroidea) . . . 126

edwardsii, Palaemon, Heller, 1863 (Crustacea, Decapoda) 123
Elachista Kollar, 1832 (Insecta, Lepidoptera) 28
Elachista Treitschke, 1833 (Insecta, Lepidoptera) 28
ELACHISTIDAE Bruand, 1850 (Insecta, Lepidoptera) 28
EPICRIIDAE Fitzinger, 1843 (Amphibia, Gymnophiona) 208
Epicrium Wagler, 1828 (Amphibia, Gymnophiona) 208
Eponides de Montfort, 1808 (Foraminiferida) 118
Eremita Osbeck, 1765 (Crustacea, Decapoda) 20
Europosphaera Verhoeff, 1943 (Crustacea, Isopoda) 23

faba, Nautilus, Fichtel & Moll, 1798 (Foraminiferida) 105
felis, Siluris, Linnaeus, 1766 (currently *Ariopsis felis*; Osteichthyes, Siluriformes) . 219
Filenchus Andrássy, 1954 (Nematoda) 55
Fizesereneia Takeda & Tamura, 1980 (Crustacea, Decapoda) 262
flagellum, Saccopharynx, Cuvier, 1829 (Osteichthyes, Saccopharyngiformes) . . 205
floridanus, Conus, Gabb, 1869 (Mollusca, Gastropoda) 51
Florilus de Montfort, 1808 (Foraminiferida) 107
fur, Cerambyx, Linnaeus, 1758 (Insecta, Coleoptera) 195
fuscipes, Dytiscus, Linnaeus, 1758 (Insecta, Coleoptera) 26

Gaussia, Wolfenden, 1905 (Crustacea, Copepoda) 189
gigas, Ascalabotes, Bocage, 1875 (currently *Tarentola gigas*; Reptilia, Squamata) . 41
globator, Oniscus, Pallas, 1772 (Crustacea, Isopoda) 23
glutinosa, Caecilia, Linnaeus, 1758 (Amphibia, Gymnophiona) 208
gonzalezi, Remaneica, Seiglie, 1964 (Foraminiferida) 187

Halia Bate, 1856 (Crustacea, Cumacea) 269
Hanzawaia Asano, 1944 (Foraminiferida) 107
Harpognathus Wesmael, 1834 (Insecta, Coleoptera) 198
Harpognatus Wesmael, 1833 (Insecta, Coleoptera) 198
heimi, Troglocarcinus, Fize & Serène, 1956 (Crustacea, Decapoda) 262
hookeri, Sphaeroma, Leach, 1814 (currently *Lekanesphaera hookeri*; Crustacea, Isopoda) 23
HYDROBATIDAE Mathews, 1912 (Aves) 221
Hydrobius Leach, 1815 (Insecta, Coleoptera) 26
Hydrolycus Müller & Troschel, 1844 (Osteichthyes, Cypriniformes) 39

ICHTHYOPHIIDAE Taylor, 1968 (Amphibia, Gymnophiona) 208
Ichthyophis Fitzinger, 1826 (Amphibia, Gymnophiona) 208
Ictiobus Rafinesque, 1820 (Osteichthyes, Cypriniformes) 37

indicator, Clausulus, de Montfort, 1808 (Foraminiferida) 117
Iphinoe H. & A. Adams, 1854 (Crustacea, Cumacea) 269
Iphinoe Bate, 1856 (Crustacea, Cumacea) 268
Iphinoe Rafinesque, 1815 (Crustacea, Cumacea) 269

javanica, Eremita, Osbeck, 1765 (Crustacea, Decapoda) 20

Lekanesphaera Verhoeff, 1943 (Crustacea, Isopoda) 23
lenticularis, Madreporites, Blumenbach, 1805 (Foraminiferida) 256
Leucon Krøyer, 1846 (Crustacea, Cumacea) 271
Leucon Schoenherr, 1834 (Crustacea, Cumacea) 271
LEUCONIDAE Sars, 1878 (Crustacea, Cumacea) 271
limax, Madrepora, Esper, 1797 (currently *Herpolitha limax*; Cnidaria, Anthozoa) 15
limax, Madrepora, Houttuyn, 1772 (Cnidaria, Anthozoa) 15
Linthuris de Montfort, 1808 (Foraminiferida) 115
LIPARIDAE Gill, [30 September] 1861 (Osteichthyes, Scorpaeniformes) 131, 292
liparis, Cyclopterus, Linnaeus, 1766 (Osteichthyes, Scorpaeniformes) 131
Liparis Scopoli, 1777 (Osteichthyes, Scorpaeniformes) 131
LOCUSTIDAE Latreille, 1802 (Insecta, Orthoptera) 192
loewii, Aleuropteryx, Klapálek, 1894 (Insecta, Neuroptera) 273
longirostris, Palaemon, H. Milne Edwards, 1837 (Crustacea, Decapoda) . . . 123
Ludita Nagy, 1967 (Insecta, Hymenoptera) 33
luridus, Dytiscus, Linnaeus, 1761 (Insecta, Coleoptera) 26
lutarius, Hemerobius, Linnaeus, 1758 (Insecta, Megaloptera) 276

magnificus, Pycinaster, Spencer, 1913 (Echinodermata, Asteroidea) 126
maior, Papilio malvae, Fabricius, 1787 (Insecta, Lepidoptera) 281
major, Syrichthus serratulae, Staudinger, 1879 (Insecta, Lepidoptera) 281
marmoratus, Hemitripteras (sic), Ayres, 1854 (Osteichthyes, Scorpaeniformes) . 133
marmoratus, Scorpaenichthys, Girard, 1854 (Osteichthyes, Scorpaeniformes) . . 133
melanotica, Gaussia, Wolfenden, 1905 (Crustacea, Copepoda) 189
melo, Nautilus, Fichtel & Moll, 1798 (Foraminiferida) 117
melonoides, Borelis, de Montfort, 1808 (Foraminiferida) 117
monodi, Sphaeroma, Arcangeli, 1934 (Crustacea, Isopoda) 23
Mylabris Müller, 1764 (Insecta, Coleoptera) 195
Mylabris Fabricius, 1775 (Insecta, Coleoptera) 195

nasica, Cuma, Krøyer, 1841 (Crustacea, Cumacea) 271
natalis, Pimelodus, Lesueur, 1819 (Osteichthyes, Siluriformes) 137
nipponica, Hanzawaia, Asano, 1944 (Foraminiferida) 107
Nonion de Montfort, 1808 (Foraminiferida) 105
Nonionina d'Orbigny, 1826 (Foraminiferida) 107

OCEANITIDAE Forbes, 1881 (Aves) 221
OEDIPODIDAE Walker, 1870 (Insecta, Orthoptera) 192
olivaris, Silurus, Rafinesque, 1818 (Osteichthyes, Siluriformes) 137
Ophonus Dejean, 1821 (Insecta, Coleoptera) 278
orbata, Tachina, Wiedemann, 1830 (currently *Peribaea orbata*; Insecta, Diptera) . 201
Orbitolina d'Orbigny, 1850 (Foraminiferida) 256
oxyrhynchum, Ctenopoma, Boulenger, 1902 (Osteichthyes, Perciformes) 143

Palorbitolina Schroeder, 1963 (Foraminiferida) 256
Pelorus de Montfort, 1808 (Foraminiferida) 112
pennatribus, Thorius, Cope, 1869 (Amphibia, Caudata) 211
pennatulus, Thorius, Cope, 1869 (June) (Amphibia, Caudata) 211
phalaenoides, Phryganea, Linnaeus, 1758 (Insecta, Trichoptera) 276

Physcus Howard, 1895 (Insecta, Hymenoptera) 290
pisorum, Dermestes, Linnaeus, 1758 (Insecta, Coleoptera) 195
Planularia Defrance, 1826 (Foraminiferida) 115
Planularia Nilsson, 1826 (Foraminiferida) 115
Platanista Wagler, 1830 (Mammalia, Cetacea) 153, 223
princeps, Pleuromma, Scott, 1894 (currently *Gaussia princeps*; Crustacea, Copepoda) 189
PTINIDAE Latreille, 1802 (Insecta, Coleoptera) 195
Ptinus Linnaeus, 1767 (Insecta, Coleoptera) 195
Pullenia Parker & Jones, 1862 (Foraminiferida) 117
punctata, Lepralia, Hassall, 1841 (currently *Cribrilina punctata*; Bryozoa, Cheilostomata) 177
Pylodictis Rafinesque, 1819 (Osteichthyes, Siluriformes) 136

quinquemaculata, Uroctea, Dufour, 1820 (Crustacea, Cumacea) 268

Rapport sur les Myodaires du Docteur Robineau Desvoidy (H. M. D. de Blainville, Rapporteur), Académie Royale des Sciences de l'Institut de France, Paris, 1826 287
Remaneicella Brönnimann, Zaninetti & Whittaker, 1983 (Foraminiferida) . . . 187
repandus, Nautilus, Fichtel & Moll, 1798 (currently *Eponides repandus*; Foraminiferida) 118
robynsii, Harpognatus, Wesmael, 1833 (Insecta, Coleoptera) 198
rubiginosa, Phyllodoce (Carobia) Saint-Joseph, 1888 (currently *Nereiphylla rubiginosa*; Annelida, Polychaeta) 260
ruspatrix, Vespa, Linnaeus, 1767 (Insecta, Hymenoptera) 35

sabulicola, Carabus, Panzer, 1796 (Insecta, Coleoptera) 279
SACCOPHARYNGIDAE Bleeker, 1859 (Osteichthyes, Saccopharyngiformes) . . . 205
Saccopharynx Mitchill, 1824 (Osteichthyes, Saccopharyngiformes) 205
sandersi, Hyla versicolor, Smith & Brown, 1947 (Amphibia, Anura) 139
scomberoides, Hydrocyon, Cuvier, 1819 (Osteichthyes, Cypriniformes) 39
Scorpaenichthys Girard, 1854 (Osteichthyes, Scorpaeniformes) 133
scotti, Metridia, Giesbrecht, 1897 (Crustacea, Copepoda) 189
scutellaris, Tachys, Stephens, 1828 (Insecta, Coleoptera) 279
Semblis Fabricius, 1775 (Insecta, Trichoptera) 276
Semeioptera Gray, 1859 (Aves, Paradisaeidae) 212
Semioptera Gray, 1859 (Aves, Paradisaeidae) 212
Septotrochammina Zheng, 1979 (Foraminiferida) 187
serratus, Astacus, Pennant, 1777 (Crustacea, Decapoda) 123
serratus, Oniscus, Fabricius, 1787 (Crustacea, Isopoda) 23
Sialis Latreille, 1802 (Insecta, Megaloptera) 276
spengleri, Nautilus, Gmelin, 1791 (Foraminiferida) 110
Sphaeroma Bosc, 1802 (Crustacea, Isopoda) 23
SPHAEROMATIDAE Latreille, 1825 (Crustacea, Isopoda) 23
styliferus, Palaemon, H. Milne Edwards, 1840 (Crustacea, Decapoda) 123
spinosum, Astacoderma, Harley, 1861 (Conodonta) 128
STYLEPHORIDAE Swainson, 1839 (Osteichthyes, Saccopharyngiformes) 205
Stylephorus Shaw, 1791 (Osteichthyes, Saccopharyngiformes) 205

Tachys Dejean, 1821 (Insecta, Coleoptera) 278
talpa, Madrepora, Houttuyn, 1772 (Cnidaria, Anthozoa) 15
talpina, Fungia, Lamarck, 1801 (currently *Polyphyllia talpina*; Cnidaria, Anthozoa) 15
Thorius Cope, 1869 (May) (Amphibia, Caudata) 211
Tinoporus de Montfort, 1808 (Foraminiferida) 110

triangulum, Vespa, Fabricius, 1775 (currently *Philanthus triangulum*; Insecta, Hymenoptera) 34
trilinguis, Madrepora, Boddaert, 1768 (Cnidaria, Anthozoa) 15
trispinosa, Cuma, Goodsir, 1843 (Crustacea, Cumacea) 268

Uroctea Dufour, 1820 (Crustacea, Cumacea) 268

varicornis, Coccophagus, Howard, 1881 (Insecta, Hymenoptera) 290
Venilia Bate, 1856 (Crustacea, Cumacea) 269
versicolor, Hyla, Le Conte, 1825 (Amphibia, Anura) 139
vigil, Arctomys, Thunberg, 1811 (Mammalia, Rodentia) 43
villosa, Tiphia, Fabricius, 1793 (Insecta, Hymenoptera) 33
vulgaris, Tylenchus, Brzeski, 1963 (Nematoda) 55

wallacei, Paradisaea (Semeioptera), Gray, 1859 (Aves, Paradisaeidae) 213
wallacii, Paradisaea (Semioptera), Gray, 1859 (Aves, Paradisaeidae) 212

zonula, Tenthredo, Klug, 1817 (Insecta, Hymenoptera) 203

CORRIGENDA

Vol. 42, part 4
pages 365–370

In this Opinion 1368 the date for *Simia troglodytes* Blumenbach (type species of *Pan* Oken, 1816) was wrongly given as 1779. The name in fact dates from Blumenbach, 1775 (re-issued in 1776), and the original reference is:

troglodytes, Simia, Blumenbach, 1775, *De generis humani varietate nativa*, p. 37.

The reference on the Official Lists for *Pan* and *troglodytes* should be changed accordingly.

Vol. 44, part 4
page 249, para. 8, line 2

For 'Schutz' read 'Schultz'

Vol. 45, part 2
page 133, para 7, line 5

For 'Specific' read 'Generic'

PUBLICATION DATES AND PAGINATION OF THE PRESENT VOLUME

Part No	*Contents of Part (pages)*	*Date of Publication*
1	1–88	25 March 1988
2	89–180	24 June 1988
3	181–248	23 September 1988
4	249–304	16 December 1988

INSTRUCTIONS TO BINDER

The present volume should be bound up as follows:
Title page, Table of Contents (I–VI), 1–304

Note: The covers of the four parts should be bound with the volume

INSTRUCTIONS TO AUTHORS

The following notes are primarily for those preparing applications to the Commission; other authors should comply with the relevant sections. Parts of the Bulletin since 44 (1) should be consulted as examples.

Title. This should be written in lower case letters and include the names to be conserved. A specific name should be cited in the original binomen, with the current binomen in parentheses.

Author's name. Full postal address should be given.

Abstract. This will be prepared by the Commission Secretariat.

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. Text references should give dates and page numbers in parentheses, e.g. 'Daudin (1800, p. 39) described . . . '.

References. These should be given for all authors cited. The titles of periodicals should be *in full* and be underlined; numbers of volumes, parts, etc. should be in arabic figures, separated by a colon from page numbers. Book titles should be underlined and followed by the number of pages, the publisher and the place of publication.

Submission of application. Two copies should be sent to the address on the inside front cover. The Secretariat is willing to offer additional advice at an early stage in the preparation of manuscripts.

CONTENTS

Page

Notices 249
Appointment of new Commissioners 251
Financial Report for 1987 252

Applications

Orbitolina d'Orbigny, 1850 (Foraminiferida): proposed confirmation of *Orbulites concava* Lamarck, 1816 as the type species. R. Schroeder & M. D. Simmons . . . 254
Hapalorhynchus beadlei Goodman, 1987 (Trematoda, Digenea): proposed replacement of the holotype by a lectotype. T. R. Platt 258
Phyllodoce (Carobia) rubiginosa Saint-Joseph, 1888 (currently also *Nereiphylla rubiginosa*; Annelida, Polychaeta): proposed conservation of the specific name. F. Pleijel 260
Fizesereneia Takeda & Tamura, 1980 (Crustacea, Decapoda): proposed confirmation of *Troglocarcinus heimi* Fize & Serène, 1956 as the type species. R. K. Kropp. . . 262
Bodotria Goodsir, 1843 (Crustacea, Cumacea) : proposed conservation. M. Bacescu & L. B. Holthuis 264
Iphinoe Bate, 1856 (Crustacea, Cumacea): proposed conservation. M. Bacescu & L. B. Holthuis 267
Leucon Krøyer, 1846 (Crustacea, Cumacea): proposed conservation. M. Bacescu & L. B. Holthuis 270
Aleuropteryx Löw, 1885 (Insecta, Neuroptera): proposed designation of *Aleuropteryx loewii* Klapálek, 1894 as the type species. J. D. Oswald & M. Meinander 272
Sialis Latreille, 1802 (Insecta, Megaloptera): proposed conservation by the confirmation of *Phryganea phalaenoides* Linnaeus, 1758 as the type species of *Semblis* Fabricius, 1775 (Insecta, Trichoptera). J. D. Oswald. 275
Ophonus Dejean, 1821 and *Tachys* Dejean, 1821 (Insecta, Coleoptera): proposed designation of type species. H. Silfverberg 278
Papilio carthami Hübner, [1813] and *Syrichthus serratulae major* Staudinger, 1879 (currently both in *Pyrgus*; Insecta, Lepidoptera): proposed conservation of the names *carthami* and *major*. R. de Jong 280
Rapport sur les Myodaires du Docteur Robineau Desvoidy, (1826): proposed nomenclatural suppression. C. W. Sabrosky. 283
Physcus Howard, 1895 (Insecta, Hymenoptera): proposed conservation. D. Rosen, T. Rivnay & G. Viggiani 288

Comments

On the proposed confirmation of the spelling of LIPARIDAE Gill, 1861 (Osteichthyes, Scorpaeniformes). L. B. Holthuis; A. Wheeler. 292

Indexes

Authors in present volume 45 (1988). 293
Names placed on Official Lists and Indexes in rulings of the Commission published in volume 45 (1988) 295
Key names in Applications and Comments published in volume 45 (1988) 299
Corrigenda 304
Publication dates and pagination of present volume 45 (1988) 304
Instructions to Binder 304
Table of Contents of present volume 45 (1988) I

Printed in Great Britain by Henry Ling Ltd., at the Dorset Press, Dorchester, Dorset