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- 1 APR 1971

TABLE OF CONTENTS

Page

Opionion 905. *Polyxenus* Latreille, [1802–1803] (Diplopoda): Validation of emendation from *Pollyxenus* 6

Opinion 906. *Nematus leachii* Dahlbom, 1835 (Insecta, Hymenoptera): Suppressed under the plenary powers 8

Opionon 907. *Bicornes* Schuchert & LeVene, 1929 (Brachiopoda): Suppressed under the plenary powers 10

Opinion 908. *Crioceris* Müller, 1764, and *Lema* Fabricius, 1798 (Insecta, Coleoptera): Designation of type-species under the plenary powers 12

Opinion 909. *Receptaculites* Deshayes, 1828 (Receptaculitids): Validated under the plenary powers 14

Opinion 910. *Tellina gari* Linnaeus, 1758 (Bivalvia): Suppressed under the plenary powers 16

Opinion 911. Six misidentified type-species in the superfamily Muricacea (Gastropoda) 20

Opinion 912. *Gracillaria* Haworth, 1828 (Insecta, Lepidoptera): Added to the Official List of Generic Names in Zoology 27

Opinion 913. *Crobylophorus chimaerae* Krøyer, 1852 (Cestoda): Both generic and specific names suppressed under the plenary powers ... 29

Opinion 914. *Holothuria monacaria* Lesson, 1830, and *Holothuria umbrina* Rüppell & Leuckardt, 1828 (Holothuroidea): Suppressed under the plenary powers 31

Opinion 915. *Tetrahymena* Furgason, 1940 (Ciliophora): Preserved under the plenary powers and related matters 33

Opinion 916. *Fusulina gracilis* Meek, 1864 (Foraminiferida): Designation of a type-specimen 39

Application to fix the name of the type-species of the genus *Ampulla* Röding, 1798 (Gastropoda). By Harald A. Rehder (*Smithsonian Institution, Washington, D.C., U.S.A.*) 41

Page

Ametistina Schinz, 1825 (Gastropoda): Request for suppression under the plenary powers. By A. G. Beu (*New Zealand Geological Survey, P.O. Box* 30368, *Lower Hutt, New Zealand*) 44

Maoritellina Finlay, 1927 (Bivalvia): Request for designation of a type-species. By A. G. Beu, C. A. Fleming and P. A. Maxwell (*New Zealand Geological Survey, P.O. Box* 30368, *Lower Hutt, New Zealand*) 47

Gammarus aequicauda (Martynov, 1931) (Crustacea, Amphipoda): A request for preservation under the plenary powers. By Jan H. Stock (*Zoölogisch Museum, Amsterdam, The Netherlands*) 49

Littorina Férussac, 1822 (Gastropoda): Proposed designation of a type-species under the plenary powers. By Dietrich Kadolsky (*Geological and Paleontological Institute of the University of Bonn, W. Germany*) 51

Proposed use of the plenary powers to vary the neotype designated by Wind (1959) for *Echinocorys scutata* Leske, 1778 (Echinoidea). By N. B. Peake (30 *St. Benedict's St., Norwich, England*) and R. V. Melville (*Institute of Geological Sciences, London*) 55

Phalaena Tinea xylostella Linnaeus, 1758 (Insecta, Lepidoptera): Designation of a neotype under the plenary powers. By Niels S. Wolff (*Zoological Museum, Copenhagen*) 60

Tatura Butler, [1888] (Insecta, Lepidoptera): Request for a Ruling on the type-species. By C. F. Cowan (*Little Gaddesden House, Berkhamsted, Herts., England*) 63

Opinion 917. *Cyathocrinites* Miller, 1821 (Crinoidea): Designation of a type-species under the plenary powers 70

Opinion 918. Three Editions of a work by O. F. Müller: Suppressed under the plenary powers 73

Opinion 919. *Lyrodon kefersteini* Münster, 1837 (Pelecypoda): Validated under the plenary powers 75

Opinion 920. *Inuus fuscatus* Blyth, 1875 (Mammalia): Validated under the plenary powers 77

Opinion 921. PLETHODONTIDAE in Pisces and Amphibia: Removal of homonymy under the plenary powers 79

Page

Opinion 922. *Charaxes iocaste* Butler, 1865 (Insecta, Lepidoptera): Rejected as an unavailable name 81

Opinion 923. *Argynnis chlorodippe* Villiers & Guenée, 1835 (Insecta, Lepidoptera): Suppressed under the plenary powers 83

Opinion 924. *Terebratulina* d'Orbigny, 1847 (Brachiopoda): Designation of a type-species under the plenary powers 85

Opinion 925. Three Linnaean specific names in Brachiopoda: Suppressed under the plenary powers 87

Opinion 926. *Tintinnidium* Kent, 1881, and *Leprotintinnus* Jörgensen, 1900 (Ciliophora): Designation of type-species under the plenary powers 89

Opinion 927. *Cystidea* Barrande, 1868 (Cystoidea): Suppressed under the plenary powers 91

Opinion 928. *Pachyrhynchus* Germar, 1824 (Insecta, Coleoptera): Validated under the plenary powers 93

Opinion 929. *Lasioptera* Meigen, 1818 (Insecta, Diptera): Preservation under the plenary powers in its accustomed usage 95

Opinion 930. *Megalichthys* Agassiz, 1835, and *Rhizodus* Owen, 1840 (Pisces): Preserved under the plenary powers in their accustomed usage 97

Opinion 931. *Attus obscurus* Taczanowski, 1872 (Araneae): Refusal to suppress under the plenary powers 100

Psoidos, Psodos or *Psolos* Treitsche? (Insecta, Lepidoptera): A request for use of the plenary powers. By Charles F. Cowan (*Little Gaddesden House, Berkhamsted, Herts., England*) 101

Attus audax Hentz, 1845 (Araneae): Proposed preservation under the plenary powers and designation as type-species of *Phidippus* Koch, 1846. By Herbert W. Levi and Lawrence J. Pinter... 103

Antilope zebra Gray, 1838 (Mammalia): Proposed addition to the Official List as the name of the Zebra Duiker. By W. F. H. Ansell (*Department of Wildlife, Fisheries and National Parks, P.O. Box* 109, *Kalomo, Zambia*)... 104

Page

Acanthopleuroceras Hyatt, 1900 (Cephalopoda, Ammonoidea): Proposed use of the plenary powers to designate the type-species (Jurassic). By T. A. Getty (*University College, London*) 105

Plautus or *Plotus* Gunnerus, 1761, *Plautus* Klein, 1760, *Plotus* Linnaeus, *Plautus* Brunnich, 1772 (Aves): Proposed rejection or suppression under the plenary powers. By Dean Amadon (*Chairman, Department of Ornithology, American Museum of Natural History*), Eugene Eisenmann (*Chairman, American Ornithologists' Union Committee on Classification and Nomenclature*), George E. Watson III (*Chairman, Department of Vertebrate Zoology, U.S. National Museum*), Alexander Wetmore (*Smithsonian Institution*) 110

Hyocephalus aprugnus Bergroth, 1906 (Insecta, Hemiptera): Request for retention of the neotype specimen in preference to the rediscovered holotype. By J. A. Grant (*Birkbeck College, University of London*) and P. Štys (*Charles University, Prague*) 113

Mimecomutilla Ashmead, 1903 (Insecta, Hymenoptera): Request for the designation under the plenary powers of a type-species in harmony with the intention of its author. By D. J. Brothers 115

Zelandobates Hopkins, 1966 and *Zealandobates* Hammer, 1967 (Acari): Request for a ruling on the virtual homonymy of the two names. By A. Spain (*Department of Forestry, The Australian National University, Canberra, A.C.T.*) and M. Luxton (*Jordbundsbiologisk Institut, Molslaboratoriet,* 8443 *Femmøller, Danmark*) 119

Clavicera Latreille, April 1802 (Insecta, Hymenoptera): Proposed suppression under the plenary powers in favour of *Ceratina* Latreille, [October 1802–September 1803]. By Howell V. Daly (*University of California, Berkeley, U.S.A.*) and O. W. Richards (*University of London, England*) 121

Saperda inornata Say, 1824 (Insecta, Coleoptera): Proposed use of the plenary powers to designate a neotype to stabilize the nomenclature. By John C. Nord (*Southeastern Forest Experiment Station, Athens, Georgia, U.S.A.*) and Fred B. Knight (*Department of Forestry, University of Michigan, Ann Arbor, U.S.A.*) 123

Declaration 43. Repeal of Article 23(b) 135

Opinion 932. *Polygnathus* Hinde, 1879 (Conodonta): Refusal to use the plenary powers 164

Page

Opinion 933. *Liphistius* Schiødte, 1849 (Araneae): Emendation from *Lipistius* validated under the plenary powers 167

Opinion 934. *Bollia* Jones & Holl, 1886 (Ostracoda): Designation of a type-species under the plenary powers 169

Opinion 935. *Simia leucophaea* F. Cuvier, 1807 (Mammalia): Validated under the plenary powers 171

Opinion 936. *Julus pallipes* Olivier, 1792 (Diplopoda): Suppressed under the plenary powers 173

Opinion 937. *Helix hammonis* Strøm, 1765 (Gastropoda): Added to the Official List 175

Opinion 938. *Larius* Boddaert, 1783 (Aves): Suppressed under the plenary powers 176

Opinion 939. *Python timorensis* Müller, 1844 (Reptilia): Specific name suppressed under the plenary powers 178

The generic name *Orthoceras* Bruguière, 1789 (Class Cephalopoda). By R. V. Melville (*Secretary, International Commission on Zoological Nomenclature*) 180

Types in the species-group. By R. V. Melville (*Secretary, International Commission on Zoological Nomenclature*) 194

Trypeta Meigen, 1803 (Insecta, Diptera); *Trypetes* Schoenherr, 1836 (Insecta, Coleoptera); *Trypetesa* Norman, 1903 (Crustacea, Cirripedia). A case of triple homonymy in family-group names. By R. V. Melville (*Secretary, International Commission on Zoological Nomenclature*) 198

Proposed fixation of neotype of *Poteriocrinus hemisphericus* Schumard, 1858, type-species of *Delocrinus* Miller and Gurley, 1890 (Crinoidea). By Raymond C. Moore (*University of Kansas, Lawrence, Kansas, U.S.A.*) and Harrell L. Strimple (*University of Iowa, Iowa City, Iowa, U.S.A.*) 202

Donax variabilis Say, 1822 (Bivalvia): Proposed validation under the plenary powers. By Kenneth J. Boss (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass.* 02138, *U.S.A.*) ... 205

Page

Coscinocyathus Bornemann, 1884 (Archaeocyatha): Proposed designation of a type-species under the plenary powers. By Françoise Debrenne (*Institut de Paléontologie, 8 Rue de Buffon, Paris Ve, France*) 207

Opinion 940. *Gelasimus macrodactylus* H. Milne Edwards & Lucas, 1843 (Crustacea, Decapoda): Suppressed under the plenary powers 214

Opinion 941. *Pinuca* Hupé, 1854 (Echiuroidea): Suppressed under the plenary powers 216

Opinion 942. *Oligolophus* C. Koch, 1872 (Arachnida): Designation of a type-species under the plenary powers 218

Opinion 943. *Caligus appendiculatus* F. Müller, 1852 (Crustacea, Copepoda): Suppressed under the plenary powers 220

Opinion 944. *Giraffa camelopardalis reticulata* de Winton, 1899 (Mammalia): Validated under the plenary powers 222

Opinion 945. *Sciurus ebii* Pel, 1851 (Mammalia): Suppressed under the plenary powers 224

Opinion 946. Ludwig (R.), 1865–1866, "Corallen aus Paläolithischen Formationen" (*Palaeontographica* **14**): Suppressed under the plenary powers 226

Opinion 947. *Protomomys* Teilhard de Chardin, 1927 (Mammalia): Suppressed under the plenary powers 227

Opinion 948. *Tellina obliqua* J. Sowerby, 1817 (Bivalvia): Validated under the plenary powers 229

Opinion 949. *Cellaria* Ellis & Solander, 1786 (Bryozoa): Use of the plenary powers to stabilize the generic name and three species ... 231

The type-species of *Siphona* Meigen, 1803, and *Haematobia* Lepeletier & Serville, 1828 (Insecta, Diptera). By Curtis W. Sabrosky (*Systematic Entomology Laboratory, U.S. Dept. of Agriculture, c/o U.S. National Museum, Washington, D.C.* 20560) 234

The question of the generic name *Vanikoro* Quoy & Gaimard, 1832 (Gastropoda). By R. V. Melville (*Secretary, International Commission on Zoological Nomenclature*) 238

Page

Callopanchax Myers, 1933 (Pisces): Request for a Ruling as to type-species. By G. S. Myers (*Museum of Comparative Zoology, Cambridge, Mass., U.S.A.*) 246

Request for revision of the 1964 Code to permit valid emendation of certain *-ii* endings of patronyms. By Hobart M. Smith, L. C. Stuart and Roger Conant 250

Cypselus abessynicus Streubel, 1848 (Aves): Proposed suppression under the plenary powers. By Constantine Walter Benson (*Department of Zoology, Cambridge University, England*) and Richard Kendall Brooke (*Salisbury, Rhodesia*) 253

Terebra variegata Gray, 1834 (Gastropoda): Proposed preservation under the plenary powers. By Twila Bratcher (*Research Assistant, Los Angeles County Museum of Natural History*) and Robert Burch (*Research Assistant, Los Angeles County Museum of Natural History*) [posthumous work] 255

Thalascaris Bate, 1878 (Crustacea, Decapoda): Request for suppression under the plenary powers. By L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*) 257

Loxia cyanea Linnaeus, 1758 (Aves): Proposed invalidation under the plenary powers, in order to conserve *Tanagra cyanea* Linnaeus, 1766. By Eugene Eisenmann (*American Museum of Natural History; Chairman, American Ornithologists' Union Committee on Classification and Nomenclature*), Raymond A. Paynter, Jr. (*Museum of Comparative Zoology, Harvard University; Editor, "Check-lists of Birds of the World"*), and Charles Vaurie (*American Museum of Natural History; Chairman, Standing Committee on Ornithological Nomenclature of the International Ornithological Congress*) 259

Dendrobates Wagler, 1830 (Amphibia): Proposed designation of a type-species under the plenary powers. By Philip A. Silverstone (*Dept. of Biological Sciences, University of Southern California, Los Angeles, California* 90007, *U.S.A.*) 262

Okenia Menke, 1830, and *Idaliella* Bergh, 1881 (Mollusca, Opisthobranchia): Proposed addition to the Official List. By Henning Lemche (*Universitetets zoologiske Museum, Universitetsparken* 15, *2100 Copenhagen, Denmark*) 265

Page

Priapus humanus Linnaeus, 1758, and *Holothuria priapus* Linnaeus, 1767 (Priapulida): Proposed suppression under the plenary powers. By J. van der Land (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*) 267

Request for a Declaration modifying Article 1 so as to exclude names proposed for domestic animals from zoological nomenclature. By C. P. Groves (*Faculty of Archaeology and Anthropology, Cambridge, England*) 269

Index to Authors 273

List of Decisions in this volume 274

Index to Key Names 276

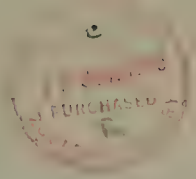
Names placed on Official Lists and Indexes in Decisions published in volume 27 284

Corrigenda 288

Particulars of dates of publication of the several parts in which the present volume was published 289

Instructions to Binder 290

Volume 27, Part 1
pp. 1–64, 2 pls.



5th June, 1970

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

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CONTENTS

Page

Notices prescribed by the International Congress of Zoology:

Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature* 64

Notices of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases 64

(*continued inside back wrapper*)

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 27, Part 1 (pp. 1–64, 2 pls.) *5th June*, 1970

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Suppression of *Mecocerus* Billberg, 1820, *Panaphilis* Dejean, 1821, and *Loborhynchus* Schönherr, 1823 (Insecta, Coleoptera). Z.N.(S.) 1819

(2) Suppression of *Ametistina* Schinz, 1825 (Gastropoda). Z.N.(S.) 1894

(3) Suppression of *Gammarus plumicornis* Costa, 1853, and *Gammarus tunetanus* Simon, 1885 (Crustacea, Amphipoda). Z.N.(S.) 1900

(4) Designation of a neotype for *Echinocorys scutata* Leske, 1778 (Echinoidea). Z.N.(S.) 1903

(5) Designation of a neotype for *Phalaena Tinea zylostella* Linnaeus, 1758 (Insecta, Lepidoptera). Z.N.(S.) 1906

(6) Designation of a type-species for *Tatura* Butler, [1888] (Insecta, Lepidoptera). Z.N.(S.) 1912

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England
March 1970

W. E. CHINA
Assistant Secretary
International Commission on
Zoological Nomenclature

COMMENTS ON THE EFFECT ON SHARK NOMENCLATURE IF CERTAIN PRINTED PLATES BY HEMPRICH AND EHRENBERG ARE ACCEPTED AS BEING PUBLISHED IN 1828. Z.N.(S.) 1807

(see volume 24, pages 291–293, volume 25, pages 195–196)

By J. A. F. Garrick (*Department of Zoology, Victoria University of Wellington, Wellington, New Zealand*)

Roellig (1969 *Bull. zool. Nomencl.* **25** : 194–195) has proposed that the presence in the library of the American Museum of Natural History of a folio of 10 plates, dated 1828, comprising the *Descriptiones Piscium* of Hemprich and Ehrenberg, constitutes evidence of publication in 1828 of that material. Virtually all other ichthyologists have regarded the 1899 version of *Symbolae Physicae* (see Roellig, p. 195) as the first publication of *Descriptiones Piscium*. Roellig's proposal considers the effect of the 1828 date only in regard to the generic name *Heterotis*. Roellig did not comment on how other names might be affected. The table below lists the names of shark species in *Descriptiones Piscium* together with what I believe to be their current equivalents.

Names in DESCRIPTIONES PISCIUM		*Current Names*
plate 4, fig. 1	*Carcharias albomarginatus*	? *Loxodon macrorhinus* Müller and Henle, 1841.
plate 4, fig. 2	*Carcharias elegans*	*Carcharhinus melanopterus* (Quoy and Gaimard, 1824).
plate 4, fig. 3	*Carcharias taeniatus*	*Carcharhinus sorrah* (Valenciennes, 1841).
plate 5, fig. 1	*Carcharias Aaronis*	*Rhizoprionodon acutus* (Rüppell, 1835).
plate 5, fig. 2	*Carcharias Forskalii*	*Negaprion acutidens* (Rüppell, 1835).
plate 5, fig. 3	*Carcharias Hemprichii*	*Galeocerdo cuvieri* (Peron and Lesueur, 1822).
plate 6, fig. 1	*Lamna ecarinata*	*Odontaspis taurus* (Rafinesque, 1810).
plate 6, fig. 2	*Zygaena erythraea*	*Sphyrna lewini* (Griffith and Smith, 1834).
plate 6, fig. 3	*Scymnus porosus*	*Ginglymostoma ferrugineum* (Lesson, 1830).
plate 7, fig. 1	*Gymnorrhinus Pharaonis*	*Carcharhinus falciformis* (Bibron, 1841).
plate 7, fig. 2	*Gymnorrhinus abbreviatus*	*Carcharhinus limbatus* (Valenciennes, 1841).
plate 7, fig. 3	*Mustelus mosis*	*Mustelus* sp.

If my identifications are correct, at least 8 of the 12 current names could be jeopardised by Hemprich and Ehrenberg names should 1828 be accepted as the date of publication of *Descriptiones Piscium*. This, of course, is the situation in respect to the shark names only—I cannot comment on the nomenclatural sequelae for the other 14 fish species dealt with in *Descriptiones Piscium*.

Leaving aside the question of the validity of Rolleig's proposal for accepting the 1828 date (which must be suspect since only one copy with that date is known) and the possible implications of this in regard to the name *Heterotis*, one is left with the conclusion that nomenclature would be much better served—in terms of stability—by retaining the *status quo* of the date of 1899 for *Descriptiones Piscium*. To proceed otherwise, by pressing for the date 1828, means giving a highly disproportionate weighting to the desirability of achieving priority in the case of only one name while neglecting the possible consequences of such action on many other well-accepted names.

In the interest of stability in nomenclature I recommend that the International Commission on Zoological Nomenclature place the 1828 folio of *Descriptiones Piscium* and the accompanying 1828 folio of *Descriptiones Zootomicrorum* as described by Roellig (1969, p. 105) on the Official Index of Rejected and Invalid Works in Zoology.

2 JUN 1971

FURTHER COMMENT ON *OTIORHYNCHUS versus BRACHYRHINUS* Z.N.(S.) 1819

(see volume 25, pages 29–35)

By R. T. Thompson (*British Museum (Natural History), London*)

In order to conserve *Otiorhynchus* it will be necessary to suppress three generic names in addition to *Brachyrhinus*. They are: *Mecocerus* Billberg, 1820, *Panaphilis* Dejean, 1821 and *Loborhynchus* Schönherr, 1823. None has been used as a valid name for more than a century, and one is also a senior homonym of a well-established genus of Anthribidae (Coleoptera).

Mecocerus Billberg, 1820 : 44, includes seven available species-group names of which six are now included in *Otiorhynchus*. No other use of this name as a senior synonym has been found; it appears in the synonymy of *Otiorhynchus* in Gemminger and Harold, 1871 : 2250 but is incorrectly spelled (*Micocerus*). Suppression of this name will also conserve *Mecocerus* Schönherr, 1833 : 115.

Panaphilis Dejean, 1821 : 92, appears in Dahl, 1823 : 59 (a rejected work: Opinion 710, 1964), Sturm, 1826 : 181 and Villa and Villa, 1833 : 24. In each case the name is attributed to Megerle von Mühlfeld and the sole included species is *perdix* Olivier, a species now included in *Otiorhynchus*. It is listed as a synonym of *Otiorhynchus* by Stierlin, 1861 : 13 and Gemminger and Harold, 1871 : 2250.

Loborhynchus Schönherr, 1823 : 1145, first appeared in Dejean, 1821, as a junior synonym of *Pachygaster* Germar (= *Otiorhynchus*). It also appeared in Dahl, 1823 (rejected—see above). All three authors attribute the name to Megerle von Mühlfeld. Schönherr adopted *Loborhynchus* expressly as a replacement name for *Pachygaster* Germar, 1817 (*nec* Meigen, 1803) and cited *Curculio clavipes* Bonsdorff as type-species ("Typ.: *Curc. clavipes* Oliv. [ve]l. *tenebricosus* Gyll."). However, a new name, proposed expressly as a replacement name, must have the same type-species as the name it replaces (Code, Article 67 i) and this species must have been included in that genus when it was first described (Article 67 i (i)). *C. clavipes* Bonsdorff fulfills neither of these conditions; the type-species of *Pachygaster* (and hence of *Loborhynchus*) is *C. niger* Fabricius, cited by Samouelle, 1819 : 204. (Should Dahl be revalidated and held to be earlier than Schönherr (so that Article 67 i would no longer apply), the latter's type-citation would still be invalid, since neither *clavipes* Bonsdorff nor *tenebricosus* Gyllenhal occurs among the 86 names given under *Loborhynchus* in Dahl's catalogue.)

Loborhynchus was used by Hoppe and Hornschuch, 1825 : 489 and Sturm, 1826 : 33, 164, 6. Most later authors have followed Schönherr, 1826, in using *Otiorhynchus* Germar, 1824 but *Loborhynchus* (as *Loborynchus*) is used as the senior or valid name by Villa and Villa, 1833 : 24, 1835 : 44, 49, 1838 : 58; Comolli, 1837 : 33; Heur, 1838 : 97 and Grimmer, 1841 : 7, 22, 41, 42. Sturm and the Villas used *Otiorhynchus* in later works. At least five species have been described in *Loborhynchus*. The name is quoted in synonymy in numerous works, including Lona, 1936, *Coleoptm Cat.* **148** (text, not index).

Schönherr, 1823 : 1144, also proposed the family-group name LOBORHYNCHIDES for nine genera; no other use of this name has been found.

As all these names fell into disuse more than a century ago and now threaten well-known names, I ask that the following requests be added to, or considered in conjunction with, those of Dr. Zimmerman, namely that the International Commission on Zoological Nomenclature:

(1) use its plenary powers to suppress the following generic names:

(a) *Mecocerus* Billberg, 1820, for the purposes of both the Law of Priority and the Law of Homonymy;

(b) *Panaphilis* Dejean, 1821, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(c) *Loborhynchus* Schönherr, 1823, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) place the generic name *Mecocerus* Schönherr, 1833 (gender: masculine), type-species, by original designation, *Mecocerus gazella* Gyllenhal in Schönherr, 1833, on the Official List of Generic Names in Zoology;

(3) place the specific name *gazella* Gyllenhal in Schönherr, 1833, as published in the binomen *Mecocerus gazella* (type-species of *Mecocerus* Schönherr, 1833) on the Official List of Specific Names in Zoology;

(4) place the following generic names (as suppressed under the plenary powers in (1) above) on the Official Index of Rejected and Invalid Generic Names in Zoology:
(a) *Mecocerus* Billberg, 1820;
(b) *Panaphilis* Dejean, 1821;
(c) *Loborhynchus* Schönherr, 1823;

(5) place the family-group name LOBORHYNCHINAE Schönherr, 1823 (type-genus *Loborhynchus* Schönherr, 1823) (invalid because the name of its type-species has been suppressed under the plenary powers) on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

References

(Additional to those cited by Zimmerman)

COMOLLI, A. 1837. *De Coleopteris novis ac rarioribus minusve cognitis provinciae Novocomi.* 54 pp. Pavia

DAHL, G. 1823. *Coleoptera und Lepidoptera. Ein systematisches Verzeichniss, mit beygesetzten Preisen der Vorräthe.* vi + 105 pp. Vienna

DEJEAN, P. M. F. A. 1821. *Catalogue de la Collection de Coléoptères de M. le Baron Dejean.* viii + 136 pp. Paris

GRIMMER, K. H. B. 1841. *Steiermark's Coleoptern mit einhundert sechs neu beschriebenen Species.* 50 pp. Grätz

HEUR, F. 1838. *Das zweckmässige Fangen, Tödten und Aufbewahren der Käfer.* 116 pp., 6 pls. Neuhaldensleben

HOPPE, D. H., and HORNSCHUCH, F. 1825. Insecta Coleoptrata, quae in Itinereribus suis, praesertim alpinis, collegerunt. *Nova Acta physico-med.* **12** : 477–490, 1 pl.

SAMOUELLE, G. 1819. *The Entomologist's Useful Compendium.* 496 pp., 12 pls. London

SCHÖNHERR, C. J. 1823 (October). Curculionides. *Isis, Jena* **7** (10) : 1132–1152 (cols.)

STURM, J. 1826. *Catalog meiner Insecten-Sammlung.* **1.** *Käfer.* viii + 207 + 16 pp., 4 pls. Nuremburg

VILLA, G. B., and VILLA, A. 1833–1838. *Coleoptera Europae dupleta in Collectione Villa quae pro mutua commutatione offerri possunt.* (*Supplementum—Alterum Supplementum*). 66 pp. Milan

ZIMMERMAN, E. C. 1968. *Otiorhynchus versus Brachyrhinus* (Insecta, Coleoptera, family Curculionidae). Z.N.(S.) 1819. *Bull. zool. Nomencl.*, **25** : 29–35

HYPOSMOCOMA BUTLER, 1881 (INSECTA, LEPIDOPTERA): WITHDRAWAL OF OPPOSITION. Z.N.(S.) 1853

(see volume 25, pages 176–177; volume 26, page 118)

By C. F. Cowan (*Little Gaddesden House, Berkhamsted, Herts., England*)

In *Bull. zool. Nomencl.*, **26** (3) : 118 I recently opposed Professor Zimmerman's case for acceptance of the emendation *Hyposmocoma* Butler, 1881 (*ibid.*, **25** (4/5) : 176–177).

2. I would like to withdraw that opposition, with apologies for waste of time and space. The emendation, as Zimmerman showed, is in full use, and his application was submitted in accord with the International Code.

3. Zimmerman's application is in marked contrast to that of Professor Bonnet (*ibid.*, **26** (3) : 160–163), who seeks to change the Code to admit emendations wholesale. That would be disastrous for stability, for workers would never know whether to adopt an emendation or not.

4. The present Code is ideal. The original spelling of a name is the correct one unless emended by the Commission. This assures its author of the first principle, priority. Only if it is obvious from the original text that a misprint has thwarted his intention may there be automatic emendation. This ensures stability; later workers need only examine the original, and the Official Lists, to be sure that they have the correct name.

5. Under Bonnet's code there would be no finality. The later literature, and the classical dictionaries, would have to be searched and there would be no certainty in the result.

6. It is most strongly urged that the present Code be fixed, and the International Commission insist that they be presented properly with any ensuing anomalies requiring decision. Any change in the Code, however slight, has enormous repercussions throughout Nomenclature. Professor Bonnet's change would be disastrous for stability.

SUPPORT FOR SUPPRESSION UNDER THE PLENARY POWERS OF WORKS BY MÜLLER, 1826 AND 1828. Z.N.(S.) 1870

(see volume, 26, pages 54–56)

By K. H. L. Key (*Division of Entomology, CSIRO, Canberra, A.C.T., Australia*)

I wish to support the application of D. K. McE. Kevan (*Bull. zool. Nomencl.*, **26** : 54–56) for the suppression under the plenary powers of the two works by Müller cited in that application.

Contrary to Kevan's view, there are in fact grounds for rejecting the name *Gryllus hieroglyphicus* Müller, 1828 (or 1826) as a *nomen oblitum* under Article 23(b) of the Code. Assuming that Kevan's list of references employing this name is complete, the name remained unused, as a senior synonym of *Decticus bufonius* Klug, 1832, from 1881 to 1961, a period of 80 years; Dumortier's use of it in 1966 was invalid under Article 23(b) and must be disregarded. However, in view of the uncertain future of Article 23(b), and of the considerations advanced by Kevan in his paragraphs 7 and especially 8, action under the plenary powers, directed against both of Müller's works *in toto*, is in my view unquestionably the best solution.

OPINION 905

POLYXENUS LATREILLE, [1802–1803] (DIPLOPODA): VALIDATION OF EMENDATION FROM *POLLYXENUS*

RULING—(1) Under the plenary powers the emendation to *Polyxenus* of the generic name *Pollyxenus* Latreille, [1802–1803], is hereby validated.

(2) The generic name *Polyxenus* (emend. of *Pollyxenus*) Latreille [1802–1803] (gender: masculine), type-species, by monotypy, *Scolopendra lagura* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1889.

(3) The specific name *lagura* Linnaeus, 1758, as published in the binomen *Scolopendra lagura* (type-species of *Polyxenus* Latreille [1802–1803]) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2365.

(4) The family-group name POLYXENIDAE (correction of POLLYXÉNITES) Lucas, 1840 (type-genus *Polyxenus* Latreille [1802–1803]) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 445.

(5) The generic name *Pollyxenus* Latreille [1802–1803] (an incorrect original spelling of *Polyxenus* Latreille [1802–1803]) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1963.

(6) The name POLLYXÉNITES Lucas, 1840 (an incorrect original spelling for POLYXENIDAE) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 448.

HISTORY OF THE CASE (Z.N.(S.) 1785)

The present case was submitted to the office of the Commission in November 1966 by Dr. O. Kraus. Dr. Kraus's application was sent to the printer on 10 January 1967 and was published on 6 March 1967 in *Bull. zool. Nomencl.* **24** : 63–64. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). Comments supporting the application were received from Dr. K. Strassner, Prof. A. Kaestner, Dr. B. Condé, Dr. J. P. Mauriés, Dr. U. Haacker, Dr. J. A. L. Cooke, Dr. St. Negrea, Prof. J. Lang, Dr. R. E. Crabhill and Dr. H. W. Levi. A counter application was received from Dr. C. A. W. Jeekel which was published in *Bull. zool. Nomencl.* **24** : 276–277.

DECISION OF THE COMMISSION

On 3 April, 1969 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)16 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 64, with a note which stated that a negative vote would be taken as a vote in favour of Dr. Jeekel's proposals as set out in *Bull. zool. Nomencl.* **24** : 277. At the close of the prescribed voting period on 3 July 1969 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: Holthuis, China, Evans, Lemche, Simpson, Vokes, Obruchev, Mayr, Melville, Brinck, Bonnet, Jaczewski, do Amaral, Sabrosky, Forest, Eisenmann, Starobogatov, Mertens, Binder.

Negative votes—two (2): Uchida, Ride.

On Leave of Absence—two (2): Munroe, Tortonese.

Commissioners Alvarado and Kraus returned late affirmative votes.

Original References

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

lagura, *Scolopendra*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 637

POLLYXÉNITES Lucas, 1840, an incorrect original spelling for POLYXENIDAE, *q.v.*

Pollyxenus Latreille [1802–1803], an incorrect original spelling for *Polyxenus*, *q.v.*

POLYXENIDAE Lucas, 1840, *Hist. nat. Crust. Arachn. Myriap.* : 518

Polyxenus Latreille [1802–1803] *Hist. nat. gén. partic. Crust. Ins.* **3** : 45.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)16 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 905.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
12 *August* 1969

OPINION 906

NEMATUS LEACHII DAHLBOM, 1835 (INSECTA, HYMENOPTERA): SUPPRESSED UNDER THE PLENARY POWERS

RULING—(1) Under the plenary powers the specific name *leachii* Dahlbom, 1835, as published in the binomen *Nematus leachii*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *leachii* Dahlbom, 1835, as published in the binomen *Nematus leachii* (suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 923.

HISTORY OF THE CASE (Z.N.(S.) 1778)

The present case was submitted to the office of the Commission in October 1966 by Mr. R. B. Benson and Dr. H. R. Wong. The application was sent to the printer on 8 November 1966 and was printed on 27 April 1967 in *Bull. zool. Nomencl.* **24** : 95. Public Notice of the possible use of the plenary powers was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **81** : 184). Comments in support of the application were received from Mr. J. Muldrew, *et al.*, Dr. H. Pschorn-Walcher and Dr. O. Eichhorn (*Bull. zool. Nomencl.* **24** : 322), Dr. A. T. Drooz and Prof. H. C. Coppell.

DECISION OF THE COMMISSION

On 3 April 1969 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)18 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 95. At the close of the prescribed voting period on 3 July 1969 the state of the Voting was as follows:

Affirmative Votes—twenty-one (21), received in the following order: Holthuis, China, Evans, Lemche, Simpson, Vokes, Obruchev, Mayr, Melville, Brinck, Bonnet, do Amaral, Jaczewski, Sabrosky, Forest, Uchida, Eisenmann, Starobogatov, Ride, Mertens, Binder.

Negative votes—none (0).

On Leave of Absence—two (2): Munroe, Tortonese.

Commissioners Alvarado and Kraus returned late affirmative votes.

Original Reference

The following is the original reference for the name placed on the Official Index by the Ruling given in the present Opinion:

leachii, *Nematus*, Dahlbom, 1835, *Clavis Hymenopt.* : 27.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)18 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted

under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 906.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
12 *August* 1969

OPINION 907

BICORNES SCHUCHERT & LeVENE, 1929 (BRACHIOPODA): SUPPRESSED UNDER THE PLENARY POWERS

RULING—(1) Under the plenary powers the generic name *Bicornes* Schuchert & LeVene, 1929, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Bicornes* Schuchert & LeVene, 1929, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1964.

(3) The generic name *Ripidiorhynchus* Sartenaer, 1966 (gender: masculine), type-species, by original designation *Terebratula livonica* von Buch, 1834, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1890.

(4) The specific name *livonica* von Buch, 1834, as published in the binomen *Terebratula livonica* (type-species of *Ripidorhynchus* Sartenaer, 1966) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2366.

HISTORY OF THE CASE (Z.N.(S.) 1781)

The present case was submitted to the office of the Commission by Dr. D. V. Ager and Dr. P. Sartenaer in November 1966. A revised application was sent to the printer on 22 February 1967 and was published on 27 April 1967 in *Bull. zool. Nomencl.* **24** : 96–97. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 3 April 1969 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)19 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 97. At the close of the prescribed voting period on 3 July 1969 the state of the voting was as follows:

Affirmative votes—seventeen (17), received in the following order: China, Evans, Lemche, Simpson, Vokes, Obruchev, Mayr, Melville, Brinck, Bonnet, do Amaral, Jaczewski, Forest, Uchida, Starobogatov, Mertens, Binder.

Negative votes—three (3): Holthuis, Sabrosky, Ride.

On Leave of Absence—two (2): Munroe, Tortonese.

Commissioner Eisenmann abstained from voting.

Commissioners Alvarado and Kraus returned late affirmative votes.

Original References

The following are the original references for the names placed on the Official Lists and Index by the Ruling given in the present Opinion:

Bicornes Schuchert & LeVene, 1929, Brachiopoda *in* Pompecki (ed.) *Fossilium Catalogus* **1** (Animalia) : 34

livonica, *Terebratula*, von Buch, 1834, *Abh. Kön. Ak. Wiss. zu Berlin* : 57
Ripidiorhynchus Sartenaer, 1966, *Bull. Inst. roy. Sci. nat. Belg.* **42** (30) : 2

CERTIFICATE

We certify that the votes cast on Voting Paper (69)19 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 907.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
13 *August* 1969

OPINION 908

CRIOCERIS MÜLLER, 1764, AND *LEMA* FABRICIUS, 1798 (INSECTA, COLEOPTERA): DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers:

(a) all designations of type-species for the nominal genus *Crioceris* Müller, 1764, made prior to the present Ruling, are hereby set aside, and the nominal species *Chrysomela asparagi* Linnaeus, 1758, is hereby designated to be the type-species of that genus;

(b) all designations of type-species for the nominal genus *Lema* Fabricius, 1798, made prior to the present Ruling, are hereby set aside, and the nominal species *Lema cyanea* Fabricius, 1798, is hereby designated to be the type-species of that genus.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Crioceris* Müller, 1764 (gender : masculine), type-species, by designation under the plenary powers in (1) (a) above, *Chrysomela asparagi* Linnaeus, 1758 (Name No. 1891);

(b) *Lema* Fabricius, 1798 (gender : feminine), type-species, by designation under the plenary powers in (1) (b) above, *Lema cyanea* Fabricius, 1798 (Name No. 1892);

(c) *Lilioceris* Reitter, 1912 (gender : masculine), type-species, by designation by Chûjô, 1951, *Attelabus lilii* Scopoli, 1763 (Name No. 1893).

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

(a) *asparagi* Linnaeus, 1758, as published in the binomen *Chrysomela asparagi* (type-species of *Crioceris* Müller, 1764) (Name No. 2367);

(b) *cyanea* Fabricius, 1798, as published in the binomen *Lema cyanea* (type-species of *Lema* Fabricius, 1798) (Name No. 2368);

(c) *lilii* Scopoli, 1763, as published in the binomen *Attelabus lilii* (type-species of *Lilioceris* Reitter, 1912) (Name No. 2369).

HISTORY OF THE CASE (Z.N.(S.) 1786)

The present case was submitted to the office of the Commission in December 1966 by Dr. B. J. Selman and Prof. R. F. Smith. The application was sent to the printer on 10 January 1967 and was published on 27 April 1967 in *Bull. zool. Nomencl.* **24** : 116–118. An emendation to the proposal submitted by Selman and Smith was published on 27 September 1968 in *Bull. zool. Nomencl.* **25** : 73. Public notice of the possible use of the plenary powers was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). A comment in support of the application was received from Dr. R. A. Crowson and was published in *Bull. zool. Nomencl.* **24** : 207. Comments in support of the application were also received from Dr. J. L. Gressitt and Dr. R. E. White.

DECISION OF THE COMMISSION

On 3 April 1969 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)20 either for or against proposals (1) (a), (2) (a) and (c), (3) (a) and (c) as set out in *Bull. zool. Nomencl.* **24** : 118 and proposals (1) to (3) as set out in *Bull. zool. Nomencl.* **25** : 73. At the close of the prescribed voting period on 3 July 1969 the state of the voting was as follows:

Affirmative Votes—twenty-one (21), received in the following order, Holthuis, China, Evans, Lemche, Simpson, Vokes, Obruchev, Mayr, Melville, Brinck, Bonnet, do Amaral, Jaczewski, Sabrosky, Forest, Uchida, Eisenmann, Starobogatov, Ride, Mertens, Binder.

Negative votes—none (0).

On Leave of Absence—two (2): Munroe, Tortonese.

Commissioners Kraus and Alvarado returned late affirmative votes.

Original References

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

asparagi, *Chrysomela*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 376

Crioceris Müller, 1764, *Fauna insecta Fridrich* : xiii.

cyanea, *Lema*, Fabricius, 1798, *Suppl. Ent. syst.* : 92

Lema Fabricius, 1798, *Suppl. Ent. syst.* : 4, 90

lilii, *Attelabus*, Scopoli, 1763, *Ent. Carniolica* : 36

Lilioceris Reitter, 1912, *Fauna Germ.* **4** : 79.

The following is the original reference for the designation of a type-species for a genus concerned in the Ruling given in the present Opinion:

For *Lilioceris* Reitter, 1912 : Chûjô, 1951, *Kagawa Agr. Coll., Techn. Bull.* **2** (2) : 80.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)20 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 908.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
13 *August* 1969

OPINION 909

RECEPTACULITES DESHAYES, 1828 (RECEPTACULITIDS): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Receptacules* Defrance, 1827, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Receptaculites* Deshayes, 1828 (gender: masculine), type-species, by subsequent monotypy (Blainville, 1830), *Receptacules neptuni* Defrance, 1827, is hereby placed on the Official List of Generic Names in Zoology with the Name No. 1894.

(3) The specific name *neptuni* Defrance, 1827, as published in the binomen *Receptacules neptuni* (type-species of *Receptaculites* Deshayes, 1828) is hereby placed on the Official List of Specific Names in Zoology with the Name No. 2370.

(4) The generic name *Receptacules* Defrance, 1827 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name No. 1965.

HISTORY OF THE CASE (Z.N.(S.) 1787)

The present case was submitted to the office of the Commission in December 1966, by Dr. M. H. Nitecki. The application was sent to the printer on 10 January 1967 and was published on 27 April 1967 in *Bull. zool. Nomencl.* **24** : 119–120. Public Notice of the possible use of the plenary powers was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 3 April 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)21 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 120. At the close of the prescribed Voting Period on 3 July 1969 the state of the voting was as follows:

Affirmative Votes—nineteen (19), received in the following order: Holthuis, China, Evans, Simpson, Vokes, Obruchev, Mayr, Melville, Brinck, Bonnet, do Amaral, Jaczewski, Sabrosky, Forest, Uchida, Starobogatov, Ride, Mertens, Binder.

Negative Votes—one (1): Lemche.

On Leave of Absence—two (2): Munroe, Tortonese.

Commissioners Kraus and Alvarado returned late affirmative votes.

Commissioner Eisenmann abstained from voting.

In returning his vote, Commissioner Obruchev made the following comment: "Although voting for this proposal, I still consider that it would be preferable to validate *Receptaculites* as a justified emendation of *Receptacules*, and to cite it, like *Polyxenus*, with the original author and date, Defrance, 1827, as many authors are doing."

ORIGINAL REFERENCES

The following are the original references for the names placed on the Official Lists and Index by the Ruling given in the present Opinion:
neptuni, Receptacules, Defrance, 1827, *Dict. Sci. nat.* **45** : 7
Receptaculites Deshayes, 1828, *Dict. class. Hist. nat.* **14** : 486
Receptacules Defrance, 1827, *Dict. Sci. nat.* **45** : 7.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)21 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 909.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
13 *August* 1969

OPINION 910

TELLINA GARI LINNAEUS, 1758 (BIVALVIA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers:

(a) The generic name *Gari* Schumacher, 1817, is not to be corrected to the nominative singular form *Garum*;

(b) the specific name *gari* Linnaeus, 1758, as published in the binomen *Tellina gari*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(c) the consequence of tautonymy in the case of *Tellina gari* Linnaeus, 1758, is hereby set aside, and the nominal species *Gari vulgaris* Schumacher, 1817, is hereby designated to be the type-species of *Gari* Schumacher, 1817.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Gari* Schumacher, 1817 (gender: feminine), type-species, by designation under the plenary powers in (1)(c) above, *Gari vulgaris* Schumacher, 1817, as defined by the lectotype designated by Lemche herein (Name No. 1895);

(b) *Psammobia* Lamarck, 1818 (gender: feminine), type-species, by designation by Children, 1823, *Tellina fervensis* Gmelin, 1791 (Name No. 1896);

(c) *Garum* Dall, 1900 (gender: neuter), type-species, by monotypy, *Psammobia filosa* Conrad, 1833 (Name No. 1897).

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

(a) *truncata* Linnaeus, 1767, as published in the binomen *Tellina truncata* (Name No. 2371);

(b) *amethystus* Wood, 1815, as published in the binomen *Solen amethystus* (Name No. 2372);

(c) *fervensis* Gmelin, 1791, as published in the binomen *Tellina fervensis* (type-species of *Psammobia* Lamarck, 1818) (Name No. 2373);

(d) *filosa* Conrad, 1833, as published in the binomen *Psammobia filosa* (type-species of *Garum* Dall, 1900) (Name No. 2374).

(4) The family-group name PSAMMOBIIDAE (correction of PSAMMOBIADAE) Fleming, 1828 (type-genus *Psammobia* Lamarck, 1818) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 446.

(5) The family-group name PSAMMOBIADAE Fleming, 1828 (type-genus *Psammobia* Lamarck, 1818) (an incorrect original spelling for PSAMMOBIIDAE) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 449.

(6) The specific name *gari* Linnaeus, 1758, as published in the binomen *Tellina gari* (as suppressed under the plenary powers in (1)(b) above) is hereby

placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 924.

HISTORY OF THE CASE (Z.N.(S.) 1461)

The present case was first submitted to the office of the Commission by the late Dr. L. R. Cox in June 1960. Dr. Cox's application was sent to the printer on 27 June 1960 and was published on 5 December 1960 in *Bull. zool. Nomencl.* **18** : 90–96. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184).

Dr. Cox made a correction to his proposals in *Bull. zool. Nomencl.* **18** : 226. The proposals were supported by Dr. C. A. Fleming, Prof. Myra Keen, Dr. S. W. Muller, Mr. R. Stohler, Dr. K. V. W. Palmer, Dr. L. G. Hertlein, Mr. K. L. Edwards, *et al.* and Dr. H. Lemche. The following workers also supported the application but objected to the designation of a neotype for *Tellina gari* Linnaeus: Dr. R. Robertson, Prof. R. Tucker Abbott, Dr. J. Rosewater, Dr. H. A. Rehder and Dr. J. P. E. Morrison. Objections were received from Miss R. D. Turner, Dr. K. J. Boss, Prof. Ernst Mayr and Dr. J. L. Baily, Jr. All these comments were published in *Bull. zool. Nomencl.* **18** : 213, 297–303; **22** : 136.

Many of those supporting the application proposed that the family-group name GARIDAE be validated under the plenary powers, and Dr. Cox amended his application in this way in *Bull. zool. Nomencl.* **18** : 304–305.

A further objection by Dr. H. Lemche and Dr. R. H. Parker (*Bull. zool. Nomencl.* **19** : 375–377) was answered by Dr. Cox (*ibid.* **20** : 278). A final summary and restatement of the case was made by Dr. Lemche (*ibid.* **21** : 323–325) and amended by Dr. Cox (*ibid.* **22** : 144–145). Dr. Lemche's proposals were supported by Mr. D. Heppell and Dr. C. O. van Regteren Altena.

DECISION OF THE COMMISSION

On 3 April 1969 Commissioners were requested to vote under the Three-Month Rule on Voting Paper (69)14, in part 1 either for or against the use of the plenary powers in the present case, and in part 2, for either Alternative A (as set out by Lemche in *Bull. zool. Nomencl.* **21** : 324–325) or for Alternative B (as set out by Lemche in *Bull. zool. Nomencl.* **21** : 324–325, and amended by Cox in *Bull. zool. Nomencl.* **22** : 145). At the close of the prescribed voting period on 3 July 1969 the state of the voting was as follows:

Part 1. Affirmative votes—eighteen (18), received in the following order: Holthuis, China, Evans, Lemche, Simpson, Vokes, Obruchev, Mayr, Melville, Brinck, Bonnet, do Amaral, Jaczewski, Forest, Uchida, Starobogatov, Mertens, Binder.

Negative votes—none (0).

Part 2. For Alternative A—three (3): Lemche, Mayr, Bonnet.

For Alternative B—fifteen (15): Holthuis, China, Evans, Simpson, Vokes, Obruchev, Melville, Brinck, do Amaral, Jaczewski, Forest, Uchida, Starobogatov, Mertens, Binder.

On Leave of Absence—two (2): Munroe, Tortonese.

Voting Papers not returned—one (1): Ride.

Commissioners Sabrosky and Eisenmann declined to vote. Commissioners Kraus and Alvarado returned late votes for Alternative B and Alternative A respectively.

Dr. Lemche has shown that figure 92 of Chemnitz (1782, *Conch. Cab.* **6**, pl. 10) was based on at least two specimens. Dr. Cox's designation (*Bull. zool. Nomencl.* **18** : 304) of the specimen represented by fig. 92 of Chemnitz as lectotype of *Gari vulgaris* Schumacher is therefore no longer satisfactory. In consequence Dr. Lemche (in the note below) has chosen one of these specimens as the lectotype.

DESIGNATION OF A LECTOTYPE FOR *GARI VULGARIS* SCHUMACHER, 1817

By Henning Lemche (*Copenhagen*)

The two specimens have now been put into two separate vials, the slightly larger one being accompanied by two new labels. One has the word "TYPE" printed on it in the manner customary in our museum. The other contains the following particulars. (1) on one side "*Gari vulgaris* Schumacher, 1817, lectotype selected under protest by Henning Lemche 20/8–1969 under obedience to a decision of the Int. Comm. Zool. Nomencl.". (2) on the other side a necessary statement: "This is *not* the same species as that figured by Schumacher himself (which figure is based on the specimen also figured in Chemnitz VI fig. 93)".

The two vials have been placed in a small paper box into which have been placed all of the five older labels hitherto attached to this sample, as none of them can be assigned to any one of the two specimens in hand. Their common labels are rather incongruent, running as follows:

(1) (Spengler's handwriting) "48. Tellina gari L. Ostindien."

(2) (probably also an original from Spengler's hand) "– – – bareus" (three first letters not easily interpreted), and on the opposite side "1b".

(3) (slightly younger label) "Trqrb. I" (= Tranquebar. India).

(4) label probably from before 1850, but in neither Beck's nor Mørch's handwriting "Psammobia obliqua nob. C VI f. 92! Java?".

(5) (Mørch's handwriting—from his younger days) "Orig. Ch. VI f. 92. Tellina Gari Linnaei Ch. var. T. amethystea Ch. var. T. gari b Spgl. N.S.4.2. p. 72. Sp. Niquebar". The "Sp." means "Spengler collection".

Please note that Chemnitz himself gives the locality for fig. 92 as the Molluccan Islands, which does not fit with labels 3, 4 or 5. It is therefore impossible to indicate a type locality, or even a zoogeographical region for the type specimen. Either of the two specimens may have come from any of the localities Java, the Molluccans, the Nicobar Islands or Tranquebar.

ORIGINAL REFERENCES

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

amethystus, *Solen*, Wood, 1815, *Gen. Conch.*: 138

fervensis, *Tellina*, Gmelin, 1791, *in* Linnaeus, *Syst. Nat.* (ed. 13) **1** : 3235

filosa, *Psammobia*, Conrad, 1833, *Fossil Shells Tert. N. Amer.* **4** : 42

Gari Schumacher, 1817, *Essai nouv. Syst. Habitations Vers test.*: 44, 131

gari, *Tellina*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 674

Garum Dall, 1900, *Trans. Wagner free Inst. Sci. Philad.* **3** : 975

Psammobia Lamarck, 1818, *Hist. nat. Anim. sans Vertèbr.* **5** : 511

PSAMMOBIADAE Fleming, 1828, an incorrect original spelling for PSAMMOBIIDAE q.v.

PSAMMOBIIDAE Fleming, 1828, *Hist. brit. Anim.*: 437

truncata, *Tellina*, Linnaeus, 1767, *Syst. Nat.* (ed. 12) **1** : 1118.

The following is the original reference for the designation of a type-species for a genus concerned in the present Ruling:

For *Psammobia* Lamarck, 1818; Children, 1823, *Quart. J. Sci.* **14** : 304.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)14 were cast as set out above, that the proposal contained on that Voting Paper as Alternative B of Part 2 has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 910.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
23 *September* 1969

OPINION 911

SIX MISIDENTIFIED TYPE-SPECIES IN THE SUPERFAMILY MURICACEA (GASTROPODA)

RULING.—(1) Under the plenary powers:

(a) the generic name *Kalydon* Hutton, 1884, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(b) the following specific names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(i) *mancinella* Linnaeus, 1758, as published in the binomen *Murex mancinella*;

(ii) *foliatus* Perry, 1810, as published in the binomen *Triplex foliatus*;

(iii) *duodecimus* Gray, 1843, as published in the binomen *Fusus duodecimus*;

(iv) *hippocastanum* Linnaeus, 1758, as published in the binomen *Murex hippocastanum*;

(c) all designations of type-species for the nominal genus *Polyplex* Perry, 1810, made prior to the present Ruling, are hereby set aside, and the nominal species *Polyplex bulbosa* Perry, 1811, is hereby designated to be the type-species of that genus;

(d) all designations of type-species for the nominal genus *Tolema* Iredale, 1929, made prior to the present Ruling, are hereby set aside, and the nominal species *Tolema australis* Laseron, 1955, is hereby designated to be the type-species of that genus.

(2) The designation by F. C. Baker, 1895, of *Murex hippocastanum* Linnaeus, 1758, to be the type-species of *Thalessa* H. & A. Adams, 1853, is hereby confirmed.

(3) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Mancinella* Link, 1807 (gender: feminine), type-species, by absolute tautonymy, through its cited synonym *Murex mancinella* Linnaeus, 1758, *Mancinella aculeata* Link, 1807 (Name No. 1898);

(b) *Chicoreus* Montfort, 1810 (gender: masculine), type-species, by original designation, *Murex ramosus* Linnaeus, 1758 (Name No. 1899);

(c) *Trunculariopsis* Cossmann, 1921 (gender: feminine), type-species, by monotypy, *Murex trunculus* Linnaeus, 1758 (Name No. 1900);

(d) *Xymene* Iredale, 1915 (gender: masculine), type-species, by original designation, *Trophon plebejus* Hutton, 1873 (Name No. 1901);

(e) *Trophon* Montfort, 1810 (gender: masculine), type-species, by original designation, *Murex magellanicus* Gmelin, 1791 (Name No. 1902);

(f) *Tolema* Iredale, 1929 (gender: feminine), type-species, by designation under the plenary powers in (1)(d) above, *Tolema australis* Laseron, 1955 (Name No. 1903).

(4) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *alouina* [Röding], 1798, as published in the binomen *Volema alouina* (Name No. 2375);

(b) *ramosus* Linnaeus, 1758, as published in the binomen *Murex ramosus* (type-species of *Chicoreus* Montfort, 1810) (Name No. 2376);

(c) *trunculus* Linnaeus, 1758, as published in the binomen *Murex trunculus* (type-species of *Trunculariopsis* Cossmann, 1921) (Name No. 2377);

(d) *plebejus* Hutton, 1873, as published in the binomen *Trophon plebejus* (type-species of *Xymene* Iredale, 1915) (Name No. 2378);

(e) *geversianum* Pallas, 1774, as published in the binomen *Buccinum geversianum* (Name No. 2379);

(f) *palmarosae* Lamarck, 1822, as published in the binomen *Murex palmarosae* (Name No. 2380);

(g) *australis* Laseron, 1955, as published in the binomen *Tolema australis* (type-species of *Tolema* Iredale, 1929) (Name No. 2381).

(5) The generic name *Kalydon* Hutton, 1884 (as suppressed under the plenary powers in (1)(a) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1966.

(6) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *mancinella* Linnaeus, 1758, as published in the binomen *Murex mancinella* (as suppressed under the plenary powers in (1)(b) above) (Name No. 925);

(b) *foliatus* Perry, 1810, as published in the binomen *Triplex foliatus* (as suppressed under the plenary powers in (1)(b) above) (Name No. 926);

(c) *duodecimus* Gray, 1843, as published in the binomen *Fusus duodecimus* (as suppressed under the plenary powers in (1)(b) above) (Name No. 927);

(d) *hippocastanum* Linnaeus, 1758, as published in the binomen *Murex hippocastanum* (as suppressed under the plenary powers in (1)(b) above) (Name No. 928).

HISTORY OF THE CASE (Z.N.(S.) 1623)

The present case was submitted to the office of the Commission by Professor A. Myra Keen in December 1963. Prof. Keen's application was sent to the printer on 2 September 1964 and was published on 31 December 1964 in *Bull. zool. Nomencl.* **21** : 422–428. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184).

The application was supported by Dr. Allyn G. Smith. Dr. C. O. van Regteren Altena supported the proposals concerning *Mancinella* Link, *Chicoreus* Montfort, *Polyplex* Perry and *Thalessa* H. & A. Adams but wrote "With the other taxa dealt with by Miss Keen I am less familiar and, therefore, prefer to abstain from commenting upon them".

Dr. D. F. McMichael (*Bull. zool. Nomencl.* **22** : 146–147) criticised certain of the proposals. Dr. Keen's reply, a further correction, and an objection by Dr. W. J. Clench are reproduced below. These, together with the revised proposals, were circulated to Commissioners at the time of voting.

"*Dr. W. J. Clench*: I am in complete disagreement with Dr. Keen's statement that the type figure in Montfort for *Chicoreus* is *Murex ramosus* Linnaeus (page 423). The figure given by Montfort is that of *Murex brevifrons* Lamarck, 1822, a smaller and much narrower shell than *M. ramosus* Linnaeus.

"This change of type-species in no way affects the genus as both *ramosus* Linn. and *brevifrons* Lam. are congeneric. It seems to me, however, to be poor taxonomy to have a type designation based upon a misidentification."

"*Dr. Myra Keen* (5.iv.66, in reply to McMichael): Dr. McMichael's point about the correct name of the type-species of *Mancinella* seems well taken—an oversight on my part. As to the other items on which he takes exception, I offer no argument. My own first impulse was to petition in the direction he has indicated as most desirable, and if this proves to be the consensus among Australian and other workers, I would raise no objection to the altered request. My intention was to place the problems before the other systematists, and I had no strong feelings either way on any of the proposals that I made. The important thing is that a firm decision must be made one way or the other."

"*Dr. Myra Keen* (a further letter 4.vi.65): Dr. R. Tucker Abbott, who has compiled an analytical catalogue of the names by later authors based upon figures of the non-binominal work 'Conchylien Cabinet' by Martini and Chemnitz, has pointed out to me two hitherto overlooked names that are based upon the same set of figures as *Mancinella aculeata* Link, which, under Part I of my petition (as corrected by Dr. Don McMichael) is the type-species of the genus *Mancinella*. These prior names are: *Volema alouina* Röding, 1798 (*Museum Boltenianum*, p. 58) and *Volema glacialis* Röding, 1798 (same reference), cited by him as a variant, both referring to the plate 101, figs. 967–968.

"It is doubtful whether either of these names has been adopted by authors. They could therefore be suppressed as *nomina oblita*. However, because of the possible confusion of *Mancinella aculeata* with the later *Purpura aculeata* Deshayes, 1844, cited in Part IV of my petition, it might be preferable to accept priority and to declare the earliest valid specific name of the taxon to be *Mancinella alouina* (Röding, 1798), proposed in the combination *Volema alouina*.

"*Revised proposals.* Taking into account the comments by McMichael, and the correction made by Keen, the Commission is asked to make the following changes in the proposals published in *Bull. zool. Nomencl.* **21** : 427–428:

(1) (a) (b) (d): no change.

(1) (c): delete;

(1) (e): replace by: 'to set aside all designations of type-species for the genus *Tolema* Iredale, 1929, and having done so to designate *Tolema australis* Laseron, 1955, to be the type-species of that genus;'

(2A): new proposal: 'to confirm the designation by F. C. Baker, 1895 of *Murex hippocastanum* Linnaeus, 1758, to be the type-species of *Thalessa* H. & A. Adams, 1853;'

(2) (a): replace by: '*Mancinella* Link, 1807 (gender: feminine), type-species, by absolute tautonymy, *Mancinella aculeata* Link, 1807;'
(2) (b) (c) (e) (g): no change;
(2) (d): delete;
(2) (f): replace by: '*Tolema* Iredale, 1929 (gender: feminine), type-species, by designation under the plenary powers in (1)(e) above, *Tolema australis* Laseron, 1955;'
(3) (a): replace by: '*alouina* [Röding], 1798, as published in the binomen *Volema alouina*;'
(3) (b) (c) (e) (g) (h): no change;
(3) (d): delete;
(3) (f): replace by: '*australis* Laseron, 1955, as published in the binomen *Tolema australis* (type-species of *Tolema* Iredale, 1929);'
(4) and (5): no change."

DECISION OF THE COMMISSION

On 19 September 1966 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (66)52 either for or against the proposals set out in *Bull. zool. Nomencl.* **21** : 427–428, as revised in a note accompanying the Voting Paper (see above). At the close of the prescribed voting period on 19 December 1966 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: Boschma, Holthuis*, Simpson, Mayr, Vokes, Obruchev, China, Bonnet, Lemche, Uchida, Jaczewski, Binder, Munroe, Sabrosky, Tortonese, Alvarado, Ride, Stoll, Kraus, Mertens, Forest, Evans, Brinck.

Negative votes—none (0).

Voting Papers not returned—one (1): Hubbs.

Prof. do Amaral returned a late affirmative vote. The following reservation was made by Commissioner Holthuis in returning his votes: "(a) In my opinion it would be far more sensible to suppress *Polyplex* entirely instead of trying to rule it out by assigning to it as type-species a species which some authors evidently consider of doubtful status. (b) If *Xymene* Iredale, 1915, is a replacement name for *Kalydon* Hutton 1884, it takes the same type-species. In order to make *Trophon plebejus* Hutton the type-species of the genus *Xymene*, action under the plenary powers of the Commission is necessary. As no such action has been requested by Dr. Keen, I feel that the Commission cannot legally grant 2(e) and 3(e) of her proposal."

On investigation of Dr. Holthuis' objection concerning *Xymene*, it was discovered that that generic name was not proposed by Iredale expressly as a replacement name for *Kalydon*. Dr. Keen's proposal to place *Xymene* on the Official List with *Trophon plebejus* as type may therefore stand without further action by the Commission.

After the close of the prescribed voting period on Voting Paper (66)52, the following communication was received from Mr. W. O. Cernohorsky:

*An affirmative vote in part only—see note below.

"I have recently studied the Linnean collection of molluscs in London. In the family Muricidae, I intend to select a lectotype for one of Linnaeus' species, i.e. *Murex mancinella*; the present type series consists of 3 specimens representing 2 different species in 2 different genera. My action, however, may clash with Dr. Myra Keen's petition for designation of *Purpura gemmulata* Lamarck, 1816, as the type of *Mancinella* Link, 1807.

"Since Linnaean specimens are extant for *Murex mancinella*, we cannot ignore this taxon and only have to select a lectotype as unit of reference; it is further obvious that only one species agrees with his 1758 description and that is the *Murex mancinella* of authors, which is a prior name of *Purpura gemmulata* Lamarck. This *Murex mancinella* would become in fact the type of *Mancinella* Link by tautonymy.

"It would have the same effect actually as Dr. Keen's petition, except that we would not ignore one of Linnaeus' species names, and would continue the usage of *mancinella* of authors."

As a result of Dr. Cernohorsky's letter Commissioners were asked to vote under the One-Month Rule on Voting Paper (O.M.) (69)5 either for or against "the cancellation of the portion of V.P. (66)52 concerned with suppression of *Murex mancinella* Linnaeus, and the substitution of that name on the Official List for *Volema alouina* Roding."

Voting Paper (O.M.) (69)5 was itself cancelled as a result of the following protest by a Commissioner, Prof. H. E. Vokes, who, in a letter circulated to Commissioners wrote:

"I am writing to protest in the strongest terms possible the issuance of the One-Month Voting Paper on the question of the type of *Murex mancinella* Linnaeus. The fact that there are three specimens in the Linnaean collection in London, as 'discovered' by Cernohorsky, has long been known (see E. A. Smith, 1913. Note on *Murex mancinella*, Linn., *Proc. Malac. Soc. London*, **10**. 287; Dodge, 1957, Historical Review of the Mollusks of Linnaeus. Part 5, the Genus *Murex* of the class Gastropoda: *Bull. Amer. Mus. Nat. Hist.*, **113** (2), 134–6), although Hanley, 1855, (*Ipsa Linnaei Conchylia*, p. 295), mentions but two. In any event, all authors agree that two of these specimens bear the Linnaean species number 544 of the *M. mancinella* of the Twelfth edition (one indeed bearing the notation: '544 (mancinella)' in Linnaeus' hand, and Smith and Dodge both state that the third specimen is unmarked. (See also communication to Dodge from Secretary of the Linnaean Society, cited by Dodge, 1957, p. 136, fft. 2.) All three authors and the Secretary of the Society agree that the two numbered specimens represent the *Drupa cornus* of Röding, 1798 (*Mus. Boltenianum*, p. 56) and the latter two state that the unmarked third specimen agrees with the form commonly known as *M. mancinella* of authors. Furthermore, both Smith and Dodge point out that the *M. mancinella* of authors *does not agree* with the original Linnaean description in that it has a smooth columella while the description states: 'columella transversim striata'.

"There is considerable reason to doubt that this third specimen was ever seen by Linnaeus. As noted by Hanley (supra cit., p. 2) 'The collection did not reach the Society direct, but was held for a while by the noted botanist Sir James Smith, during whose custody numerous other specimens were mingled with the

ancient ones. This ill-advised admixture . . . has too frequently proved fatal to any accurate decision.' Also Dodge (1952, *Bull. A.M.N.H.*, **100** (1), p. 8) 'It is certain that the collection was mishandled during the Smith period. Specimens were added by him, some without identification, although some bear a name and number inscribed in a handwriting vastly different from the almost illegible hand of Linnaeus.' And again (Dodge, 1959, *Jour. Linn. Soc. London*, Zoology, **44**, no. 296, 175): 'Smith was primarily a botanist and, as might be expected, was less interested in the zoological portion of the Linnaean Collections. It is admitted that during the many years [1784–1828] he held the collections the cabinet of molluscs, at least, was mishandled through the inadvertent replacement of specimens in the wrong receptacles as well as by the integration of Smith's own specimens. Many of the equivocal situations now encountered in connection with the undocumented specimens are the result of these unfortunate accessions . . .'.

"We are therefore faced with a situation in which the only two specimens in the Linnaean Collection that were certainly seen by Linnaeus, represent *Drupa cornus* Roeding a species which, as pointed out by Keen in her original application concerned with the genus *Mancinella* Link, 1807 (*Bull. Zool. Nomen.*, **21** (6), 422) is generically distinct from the forms referred to *Mancinella*, and probably represents a different subfamily. Only the third, unnumbered, specimen represents the species now known as *mancinella* 'Linné' of authors. It is this specimen that Cernohorsky now proposes to designate as the 'Lectotype' of *Murex mancinella*. I submit that this would be an apparent violation of Article 74(a) of the Code which requires that the designated Lectotype must be one of the syntypes, and 74(a)(i) which states that '. . . if it is proved that the designated specimen is not a syntype, the designation is invalid.' The reasons for rejecting this specimen as a syntype have been mentioned above; they may be summarized here as: (1) the specimen does not fit the Linnaean description, (2) was almost certainly not a part of the type lot, since it is not documented by Linnaeus as were the other two specimens both of which bear the species number in Linnaeus' handwriting—and both of which do fit the original illustration. Whether this third specimen was subsequently added by Linnaeus, or by his son, who had the collection from Linnaeus' death in 1778 until his death in 1783, or, and more probably, by Sir James Smith can not now be determined. An additional item to be noted, although not strictly germane to the present problem, is the fact that this third specimen lacks information as to locality.

"To sum up, I am of the opinion that the specimen cited in the note accompanying the voting paper [V.P.(O.M.) (69)5] is not eligible for selection as Lectotype of *M. mancinella*. It is not furthermore, available for selection as a Neotype, since it violates the provisions of Article 75(c)(3), the original type material being neither lost nor destroyed, and (4) since the specimen is not 'consistent with what is known of the original type material, from its description . . .'.

"This conclusion is not original with me. Dodge (1957, p. 136) having reached much the same decision: 'The systematists who follow the current practice of retaining well-known names whenever possible must, in the present

case, base their opinion on the presence in the collection of a single undocumented specimen of the *mancinella* of Lamarck and authors [not of Linnaeus] and thus retain the name *mancinella*, selecting that specimen out of the syntypic lot as the lectotype of *M. mancinella* Linne. This is not only a violation of the Law of Priority, but is the choice of a type unsupported by any evidence whatever, except its possible adventitious presence in the tray, and is a disregard of specimens that Linnaeus himself documented as type.' "

ORIGINAL REFERENCES

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

alouina, Volema, [Röding], 1798, *Mus. bolten.*: 58
australis, Tolema, Laseron, 1955, *Proc. R. zool. Soc. N.S.W.* 1953–54: 70–71, figs. 1, 2
bulbosa, Polyplex, Perry, 1811, *Conchology*: pl. 9
Chicoreus Montfort, 1810, *Conch. syst. Class. méth. Coquilles* **2** : 611
duodecimus, Fusus, J. E. Gray, 1843, *in* Dieffenbach, *Trav. N.Z.* **2** : 230
foliatus, Triplex, Perry, 1810, *Arcana*: sign. M
geversianum, Buccinum, Pallas, 1774, *Spicil. Zool.* (10) : 33
hippocastanum, Murex, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 751
Kalydon Hutton, 1884, *Trans. N.Z. Inst.* **16** : 220
Mancinella Link, 1807, *Beschr. nat.-Samml. Univ. Rostock* (3) : 115
mancinella, Murex, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 751
palmarosae, Murex, Lamarck, 1822, *Hist. nat. Anim. sans Vertèbr.* **7** : 161
plebejus, Trophon, Hutton, 1873, *Cat. marine Moll. N.Z.*: 9
Polyplex Perry, 1810, *Arcana*: sign. M
ramosus, Murex, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 747
Thalessa H. & A. Adams, 1853, *Gen. rec. Moll.* **1** : 127
Tolema Iredale, 1929, *Rec. Australian Mus.* **17** (4) : 186
Trophon Montfort, 1810, *Conch. syst. Class. méth. Coquilles*, **2** : 482
Trunculariopsis Cossman, 1921, *Revue crit. Paléozool.* **25** : 79
trunculus, Murex, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 747
Xymene Iredale, 1915, *Trans. N.Z. Inst.* **47** : 471.

CERTIFICATE

We certify that the votes cast on Voting Paper (66)52 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 911.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
9 *October* 1969

OPINION 912

GRACILLARIA HAWORTH, 1828 (INSECTA, LEPIDOPTERA): ADDED TO THE OFFICIAL LIST OF GENERIC NAMES IN ZOOLOGY

RULING.—(1) The generic name *Gracillaria* Haworth, 1828 (gender: feminine), type-species, by designation by Curtis, 1833, *Gracillaria anastomosis* Haworth, 1828, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1904.

(2) The specific name *anastomosis* Haworth, 1828, as published in the binomen *Gracillaria anastomosis* (type-species of *Gracillaria* Haworth, 1828) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2382.

(3) The family-group name GRACILLARIIDAE (correction of GRACILARIIDAE) Stainton, 1854 (type-genus *Gracillaria* Haworth, 1828) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 447.

(4) The family-group name GRACILARIIDAE Stainton, 1854 (an incorrect original spelling for GRACILLARIIDAE) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 450.

HISTORY OF THE CASE (Z.N.(S.) 1757)

The present case was submitted to the office of the Commission by Dr. E. C. Zimmerman and Mr. N. D. Riley in April 1966 as a proposal to place on the Official List the emended name *Gracilaria*. The application was sent to the printer on 13 June 1966 and was published on 16 October 1966 in *Bull. zool. Nomencl.* **23** : 186–187.

Comments opposing the proposal were received from P. Whalley *et al.* (*Bull. zool. Nomencl.* **24** : 78), I. F. B. Common and K. H. L. Key (*ibid.* **24** : 78–79, **25** : 115), J. F. Franclemont, J. F. Gates Clark and C. F. Cowan. Further remarks by Zimmerman and Riley were printed *ibid.* **24** : 267–268.

DECISION OF THE COMMISSION

On 15 May 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)22 either for or against the proposal set out in *Bull. zool. Nomencl.* **23** : 186. A note accompanying the Voting Paper stated that a vote against this proposal would be taken as a vote for the alternative proposal set out in *Bull. zool. Nomencl.* **24** : 78 (with the addition of the type-species of *Gracillaria* to the Official List of Specific Names in Zoology.) At the close of the prescribed voting period on 15 August 1969 the state of the voting was as follows:

Affirmative votes—six (6), received in the following order: Mayr, Bonnet, Uchida, do Amaral, Forest, Alvarado.

Negative votes—fifteen (15): China, Holthuis, Brinck, Lemche, Eisenmann, Vokes, Obruchev, Sabrosky, Evans, Jaczewski, Melville, Starobogatov, Ride, Mertens, Kraus.

Voting Papers not returned—two (2): Munroe, Tortonese.

Prof. Simpson abstained from voting, and Prof. Binder returned a late negative vote.

The following comments were made by commissioners when returning their Voting Papers:

Prof. Per Brinck (17.v.69): "I fully understand the reasons of Zimmerman and Riley when presenting the case. What seems important to me, however, is to reach uniformity in nomenclature and for this purpose I am ready to accept the spellings currently most used. As far as I understand from the presented data this is *Gracillaria* and Gracillariidae, so I vote against the proposal."

Mr. E. Eisenmann (19.v.69): "The code clearly forbids emendations of generic names simply to improve latinisation (Art. 32a(ii)). Except in cases where contrary usage is overwhelming, the original spelling of such names should be retained."

Dr. W. D. L. Ride (9.viii.69): "I vote against this proposal because I hold the opinion that improper knowledge of a classical language demonstrated by the author of a new name through the repeated misspelling of the latin word used in the name is neither a *lapsus calami*, nor a copyist's or printer's error. One is only free to assume that such evidence demonstrates intentional spelling (albeit misspelling) by the author; as such, such cases are not to be admitted as incorrect original spellings under Article 32(a)(ii)."

Original References

The following are the original references for the names placed on the Official Lists and Index by the Ruling given in the present Opinion:

anastomosis, *Gracillaria*, Haworth, 1828, *Lepidopt. Brit.* (4) : 530

Gracillaria Haworth, 1828, *Lepidopt. Brit.* (4) : 527

GRACILARIIDAE Stainton, 1854, an incorrect original spelling for GRACILLARIIDAE *q.v.*

GRACILLARIIDAE Stainton, 1854, *Ins. Brit.*, Lep. Tin.: 193.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)22 were cast as set out above, that the alternative proposal contained in that Voting Paper has been duly adopted, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 912.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
17 *September* 1969

OPINION 913

CROBYLOPHORUS CHIMAERAE KRØYER, 1852 (CESTODA): BOTH GENERIC AND SPECIFIC NAMES SUPPRESSED UNDER THE PLENARY POWERS

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

(a) the generic name *Crobylophorus* Krøyer, 1852;

(b) the specific name *chimaerae* Krøyer, 1852, as published in the binomen *Crobylophorus chimaerae*.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Gyrocotyle* Diesing, 1850 (gender: feminine), type-species, by monotypy, *Gyrocotyle rugosa* Diesing, 1850 (Name No. 1905);

(b) *Amphiptyches* Wagener, 1852 (gender: feminine), type-species by monotypy, *Amphiptyches urna* Grube & Wagener, 1852 (Name No. 1906).

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

(a) *rugosa* Diesing, 1850, as published in the binomen *Gyrocotyle rugosa* (type-species of *Gyrocotyle* Diesing, 1850) (Name No. 2383);

(b) *urna* Grube & Wagener, 1852, as published in the binomen *Amphiptyches urna* (type-species of *Amphiptyches* Wagener, 1852) (Name No. 2384);

(4) The generic name *Crobylophorus* Krøyer, 1852 (as suppressed under the plenary powers in (1)(a) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1967.

(5) The specific name *chimaerae* Krøyer, 1852, as published in the binomen *Crobylophorus chimaerae* (as suppressed under the plenary powers in (1)(b) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 929.

HISTORY OF THE CASE (Z.N.(S.) 1790)

The present case was submitted to the office of the Commission by Dr. J. van der Land in February 1967. The application was sent to the printer on 22 February 1967 and was published on 27 April 1967 in *Bull. zool. Nomencl.* **24** : 123–125. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 15 May 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)24 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 124–125. At the close of the prescribed voting period on 15 August 1969 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Holthuis, Brinck, Lemche, Mayr, Eisenmann, Bonnet, Vokes, Sabrosky, Uchida, Simpson, do Amaral, Evans, Jaczewski, Melville, Forest, Starobogatov, Alvarado, Ride, Mertens, Kraus.

Negative votes—none (0).

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—one (1): Munroe.

Commissioner Binder returned a late affirmative vote. In returning his vote, Dr. Jaczewski pointed out that the author of the specific name *urna* should be cited as Grube & Wagener *in* Wagener, 1852.

Original References

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

Amphiptyches Wagener, 1852, *Arch. Anat. Physiol. wiss. Med.* **1852** : 543–554, pls. 14, 15

chimaerae, *Crobylophorus*, Krøyer, 1852, *Danmarks fiske* **3** (2) : 813

Crobylophorus Krøyer, 1852, *Danmarks fiske* **3** (2) : 813

Gyrocotyle Diesing, 1850, *Systema Helminthum* **1** : 408

rugosa, *Gyrocotyle*, Diesing, 1850, *Systema Helminthum* **1** : 408

urna, *Amphiptyches*, Grube & Wagener, 1852, *in* Wagener, *Arch. Anat. Physiol. wiss. Med.* **1852** : 543–554, pls. 14, 15.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)24 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 913.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
14 *October* 1969

OPINION 914

HOLOTHURIA MONACARIA LESSON, 1830, AND *HOLOTHURIA UMBRINA* RÜPPELL & LEUCKARDT, 1828 (HOLOTHUROIDEA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *umbrina* Rüppell & Leuckardt, 1828, as published in the binomen *Holothuria umbrina*;

(b) *monacaria* Lesson, 1830, as published in the binomen *Holothuria monacaria*.

(2) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *umbrina* Rüppell & Leuckardt, 1828, as published in the binomen *Holothuria umbrina* (as suppressed under the plenary powers in (1)(a) above) (Name No. 930);

(b) *monacaria* Lesson, 1830, as published in the binomen *Holothuria monacaria* (as suppressed under the plenary powers in (1)(b) above) (Name No. 931).

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

(a) *hilla* Lesson, 1830, as published in the binomen *Holothuria hilla* (Name No. 2385);

(b) *mauritiana* Quoy & Gaimard, 1833, as published in the binomen *Holothuria mauritiana* (Name No. 2386);

(c) *difficilis* Semper, 1868, as published in the binomen *Holothuria difficilis* (Name No. 2387).

HISTORY OF THE CASE (Z.N.(S.) 1793)

The present case was submitted to the office of the Commission by Miss A. M. Clark and Mr. F. W. E. Rowe in February 1967. The application was sent to the printer on 3 March 1967 and was published on 27 April 1967 in *Bull. zool. Nomencl.* **24** : 126–128. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 15 May 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)25 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 127–128. At the close of the prescribed voting period on 15 August 1969 the state of the voting was as follows:

Affirmative votes—twenty (20), received in the following order: China, Holthuis, Lemche, Mayr, Eisenmann, Bonnet, Vokes, Sabrosky, Jaczewski,

Uchida, Simpson, do Amaral, Evans, Melville, Forest, Starobogatov, Alvarado, Ride*, Mertens, Kraus.

Negative votes—two (2): Brinck, Obruchev.

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—one (1): Munroe.

Commissioner Binder returned a late affirmative vote. The following comments were made by Commissioners in returning their votes:

Prof. P. Brinck (22.v.69): "Much of the trouble described in the application is taxonomic and not nomenclatorial. Would it not be possible for the 'three leading specialists of recent years who have put forward independent and differing solutions for the naming of the species' to come together, review the typical material and decide upon its position before considerations on the nomenclatorial status are presented?"

Prof. Ernst Mayr (22.v.69): "I vote for this, since this is what the specialists seem to want. To me, personally, it would have seemed preferable to designate a neotype for *H. monacaria* Lesson conforming with the universal application of this name."

Dr. W. D. L. Ride (13.viii.69): "The case concerning *H. monacaria* is one which involves the transfer of a name from one animal species to another; suppression of the name through the plenary powers is a justifiable means of settling such situations which otherwise act against universality. But the case of *H. umbrina* and *H. difficilis* seems only to be an insufficiently investigated case of probable subjective synonymy for which no argument is presented which would justify the use by the Commission of the plenary powers."

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

difficilis, *Holothuria*, Semper, 1868, *Reisen im Archipel der Philippinen* **1** : 92

hilla, *Holothuria*, Lesson, 1830, *Cent. Zool.* (13–16) : 226

mauritiana, *Holothuria*, Quoy & Gaimard, 1833, *in* d'Urville, *Voy.* "*Astrolabe*", Zool. **4** : 138

monacaria, *Holothuria*, Lesson, 1830, *Cent. Zool.* (13–16) : 225

umbrina, *Holothuria*, Rüppell & Leuckardt, 1828, *Atlas zu Rüppell*, (5), *Wirbellose Thiere*: 10

CERTIFICATE

We certify that the votes cast on Voting Paper (69)25 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 914.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
14 *October* 1969

*An affirmative vote in part only—see note below.

OPINION 915

TETRAHYMENA FURGASON, 1940 (CILIOPHORA, HYMENOSTOMATIDA): PRESERVED UNDER THE PLENARY POWERS AND RELATED MATTERS

RULING.—(1) Under the plenary powers:

(a) the following names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:
  (i) *Leptoglena* Grassé & de Boissezon, 1929;
  (ii) *Protobalantidium* Abé, 1927;
  (iii) *Ptyxidium* Perty, 1852;
  (iv) *Turchiniella* Grassé & de Boissezon, 1929;
  (v) *ovulum*, Müller, 1773, as published in the binomen *Enchelis ovulum*;
  (vi) *patula* Müller, 1786, as published in the binomen *Trichoda patula*;
  (vii) *pirum* Müller, 1786, as published in the binomen *Kolpoda pirum*;
  (viii) *pyrum* Ehrenberg, 1830, as published in the binomen *Trichoda pyrum*;
  (ix) LEUCOPHRYIDAE Mugard, 1949.

(b) the generic name *Tetrahymena* Furgason, 1940, is to be given precedence over the generic names *Lambornella* Keilin, 1921, *Leucophrydium* Roux, 1899, and *Paraglaucoma* Kahl, 1926, by any zoologist who considers the type-species of these genera to belong to the same genus-group taxon;

(c) the emendation to *Enchelys* of the generic name *Enchelis* Müller, 1773, is hereby validated;

(d) the emendation to *Colpoda* of the generic name *Kolpoda* Müller, 1773, is hereby validated;

(e) the specific name *patula* Ehrenberg, 1830, as published in the binomen *Leucophrys patula*, is hereby declared available despite the fact that Ehrenberg had no intention of publishing a new name;

(f) the emendation to *colpoda* of the specific name *kolpoda* (*Paramaecium*) Losana, 1829, is hereby validated;

(g) the specific name *pyriformis* Ehrenberg, 1830, as published in the binomen *Leucophrys pyriformis*, is to be given precedence over any earlier name published for the same species-group taxon.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Balantidium* Claparède & Lachmann, 1858 (gender: neuter), type-species, by monotypy, *Bursaria entozoon* Ehrenberg, 1838 (Name No. 1907);

(b) *Colpidium* Stein, 1860 (gender: neuter), type-species, by monotypy, *Paramecium colpoda* Losana, 1829 (Name No. 1908);

(c) *Colpoda* (emend. under the plenary powers of *Kolpoda*) Müller, 1773 (gender: feminine), type-species, by designation by Taylor & Furgason, 1938, *Kolpoda cucullus* Müller, 1773 (Name No. 1909);

(d) *Enchelys* (emend. under the plenary powers of *Enchelis*) Müller, 1773 (gender: feminine), type-species, by designation by Corliss & Dougherty, 1967, *Enchelis farcimen* Müller, 1773 (Name No. 1910);

(e) *Glaucoma* Ehrenberg, 1830 (gender: feminine), type-species, by monotypy, *Glaucoma scintillans* Ehrenberg, 1830 (Name No. 1911);

(f) *Tetrahymena* Furgason, 1940 (gender: feminine), type-species, by original designation, *Tetrahymena geleii* Furgason, 1940 (Name No. 1912).

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

(a) *entozoon* Ehrenberg, 1838, as published in the binomen *Bursaria entozoon* (type-species of *Balantidium* Claparède & Lachmann, 1858) (Name No. 2388);

(b) *colpoda* (emend. under the plenary powers of *kolpoda*) Losana, 1829, as published in the binomen *Paramaecium colpoda* (type-species of *Colpidium* Stein, 1860) (Name No. 2389);

(c) *cucullus* Müller, 1773, as published in the binomen *Kolpoda cucullus* (type-species of *Colpoda* Müller, 1773) (Name No. 2390);

(d) *farcimen* Müller, 1773, as published in the binomen *Enchelis farcimen* (type-species of *Enchelys* Müller, 1773) (Name No. 2391);

(e) *scintillans* Ehrenberg, 1830, as published in the binomen *Glaucoma scintillans* (type-species of *Glaucoma* Ehrenberg, 1830) (Name No. 2392);

(f) *pyriformis* Ehrenberg, 1830, as published in the binomen *Leucophrys pyriformis* (Name No. 2393);

(g) *patula* Ehrenberg, 1830, as published in the binomen *Leucophrys patula* (Name No. 2394).

(4) The family-group name TETRAHYMENIDAE Corliss, 1952 (type-genus *Tetrahymena* Furgason, 1940) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 448.

(5) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Enchelis* Müller, 1773 (Ruled under the plenary powers in (1)(c) above to be an incorrect original spelling for *Enchelys*) (Name No. 1968);

(b) *Kolpoda* Müller, 1773 (Ruled under the plenary powers in (1)(d) above to be an incorrect original spelling for *Colpoda*) (Name No. 1969);

(c) *Leptoglena* Grassé & de Boissezon, 1929 (as suppressed under the plenary powers in (1)(a) above) (Name No. 1970);

(d) *Leucopera* Gmelin, 1790 (an incorrect spelling for *Leucophra* Müller, 1780) (Name No. 1971);

(e) *Leucophrus* Ehrenberg, 1838 (an incorrect spelling for *Leucophra* Müller, 1780) (Name No. 1972);

(f) *Leucophrys* Ehrenberg, 1830 (an unjustified emendation of *Leucophra* Müller, 1780) (Name No. 1973);

(g) *Paraglaucoma* Warren, 1932 (a junior homonym of *Paraglaucoma* Kahl, 1926) (Name No. 1974);

(h) *Protobalantidium* Abé, 1927 (as suppressed under the plenary powers in (1)(a) above) (Name No. 1975);

(i) *Ptyxidium* Perty, 1852 (as suppressed under the plenary powers in (1)(a) above) (Name No. 1976);

(j) *Saprophilus* Stokes, 1887 (a junior homonym of *Saprophilus* Streubel, 1839) (Name No. 1977);

(k) *Tetrahymen* Mast & Pace, 1946 (an unjustified emendation of *Tetrahymena* Furgason, 1940) (Name No. 1978);

(l) *Tetrahymenia* Mugard, 1949 (an incorrect spelling for *Tetrahymena* Furgason, 1940) (Name No. 1979);

(m) *Turchiniella* Grassé & de Boissezon, 1929 (as suppressed under the plenary powers in (1)(a) above) (Name No. 1980).

(6) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *kolpoda* Losana, 1829, as published in the binomen *Paramaecium kolpoda* (Ruled under the plenary powers in (1)(f) above to be an incorrect original spelling for *colpoda*) (Name No. 932);

(b) *ovulum* Müller, 1773, as published in the binomen *Enchelis ovulum* (as suppressed under the plenary powers in (1)(a) above) (Name No. 933);

(c) *patula* Müller, 1786, as published in the binomen *Trichoda patula* (as suppressed under the plenary powers in (1)(a) above) (Name No. 934);

(d) *piriformis* of the literature (an incorrect spelling of "*pyriformis*" which has caused considerable confusion) (Name No. 935);

(e) *pirum* Müller, 1786, as published in the binomen *Kolpoda pirum* (as suppressed under the plenary powers in (1)(a) above) (Name No. 936);

(f) *pyrum* Ehrenberg, 1830, as published in the binomen *Trichoda pyrum* (as suppressed under the plenary powers in (1)(a) above) (Name No. 937).

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

(a) LEUCOPHRYIDAE Mugard, 1949 (type-genus *Leucophrys* Ehrenberg, 1830) (as suppressed under the plenary powers in (1)(a) above) (Name No. 451);

(b) LEUCOPHRYENS Dujardin, 1841 (type-genus *Leucophrys* Ehrenberg, 1830) (a vernacular name) (Name No. 452);

(c) LEUCOPHRYDAE Mugard, 1949 (type-genus *Leucophrys* Ehrenberg, 1830) (an incorrect original spelling for LEUCOPHRYIDAE) (Name No. 453).

HISTORY OF THE CASE (Z.N.(S.) 625)

The present case was submitted to the office of the Commission in a paper by Dr. John O. Corliss and the late Dr. Ellsworth C. Dougherty in February 1967. The application was sent to the printer on 3 March 1967 and was published on 30 June 1967 in *Bull. zool. Nomencl.* **24** : 155–185. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the

Bulletin as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 15 May 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)26 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 169–172. At the close of the prescribed voting period on 15 August 1969 the state of the voting was as follows:

Affirmative votes—twenty (20), received in the following order: China, Holthuis, Brinck, Lemche, Mayr, Eisenmann, Bonnet, Vokes, Obruchev, Uchida, Simpson, do Amaral, Evans, Jaczewski, Melville, Forest, Alvarado, Ride, Mertens, Kraus.

Negative votes—one (1): Starobogatov.

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—one (1): Munroe.

Commissioner Binder returned a late affirmative vote. Dr. Sabrosky did not vote. The following comments were made by Commissioners in returning their votes:

Dr. L. B. Holthuis (21.v.69): "This is one of the problems about which it is very difficult to get a good idea. The systematics of the group in question seem to be still in a state of confusion;

"I am afraid that if a name which is as recently proposed as *Tetrahymena* Furgason, 1940, is placed on the Official List, the Commission in the future will have to suppress still more names which—when the systematics of this group are straightened out—will prove to be senior synonyms of it.

"I wonder whether the name *Tetrahymena* is sufficiently commonly accepted that its replacement by an older name will really cause great confusion. This seems the more doubtful as several spellings have been used for it, and its usage is thus not uniform.

"Another thing that worries me is the fact that no reaction is received on this application. Other zoologists dealing with this group evidently are not interested in the problem at all.

"My first reaction therefore was to vote against the proposal in the hope that a strict application of the Code in this case would be simpler and in the end lead to a more stable solution than the very complicated procedure asked in the present application.

"On the other hand I know nothing about this group and Dr. Corliss seems to have very well considered all sides of the problem."

Prof. P. Brinck (22.v.69): "I agree that nomenclatorial stability is urgently needed among these ciliate protozoa and I vote for the proposal, but I question whether the type-species listed in 52(3) are all unequivocally characterized, i.e. definitely recognizable from the original descriptions. Therefore, definite references to the 'first revisers' or similar critical revisions would have been useful to avoid the names 'floating' from one taxonomic unit to another, as work on these ciliate species proceeds."

Dr. Y. Starobogatov (4.viii.69): "If we accept these proposals we shall have to emend them some years after. It is better to discuss each genus-group name separately."

Dr. W. D. L. Ride (14.viii.69): "This case is an unusual circumstance in which a group with little modern taxonomic literature has, nevertheless, a very large professional literature. Under usual circumstances the presentation by applicants of a poorly worked taxonomic situation to the Commission with a request that it suppress a whole host of available names because of their possible subjective synonymy would scarcely merit the use of the plenary powers. But the applicants have presented a convincing case that stability of nomenclature in this group would be well served by the Commission virtually giving to workers with the group a new starting date for nomenclature. In reaching a decision I find myself hampered by lack of specialist comment but, having accepted the assurance of the Secretary that he has verified the factual presentation, I vote in the affirmative. I am puzzled, though, why, in the midst of so many requests for suppression we are asked to agree to the disposal of the generic names *Acomia*, *Trichoda* and *Leucophra* (and the type-species associated with them) through introducing permanent instability by making them nomina dubia. I hope that sufficient Commissioners raise this to have the six names added to the list of names to be suppressed in para. 52 (1)(a)."

Original References

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

Balantidium Claparède & Lachmann, 1858, *Mem. Inst. nat. genevois* **5** (3) : 247

Colpidium Stein, 1860, *SitzBer. Königl.-Böhm. Ges. Wiss.* **1860** (1) : 47

Colpoda Müller, 1773, *Verm. terrestr. fluviat. Hist.* **1** : 56

colpoda, *Paramaecium*, Losana, 1829, *Mem. R. Accad. Sci. Torino* **29** (Class Sci. Fis. e Mat.) : 45

cucullus, *Kolpoda*, Müller, 1773, *Verm. terrestr. fluviat. Hist.* **1** : 58

Enchelis Müller, 1773, an incorrect original spelling for *Enchelys q.v.*

Enchelys Müller, 1773, *Verm. terrestr. fluviat. Hist.* **1** : 34

entozoon, *Bursaria*, Ehrenberg, 1838, *Die Infusionsth.*: 327

farcimen, *Enchelis*, Müller, 1773, *Verm. terrestr. fluviat. Hist.* **1** : 34

Glaucoma Ehrenberg, 1830, *Organization syst. geogr. Verhalt. Infusionsth.*: 96

Kolpoda Müller, 1773, an incorrect original spelling for *Colpoda q.v.*

kolpoda, *Paramaecium*, Losana, 1829, an incorrect original spelling for *colpoda q.v.*

Leptoglena Grassé & de Boissezon, 1929, *Bull. Soc. zool. France* **54** (3) : 187

Leucopera Gmelin, 1790, *in* Linnaeus, *Syst. Nat.* (ed. 13) **1** : 3028

Leucophrus Ehrenberg, 1838, *Die Infusionsth.*: 311

LEUCOPHRYDAE Mugard, 1949, an incorrect original spelling for LEUCOPHRYIDAE *q.v.*

LEUCOPHRYENS Dujardin, 1841, *Hist. nat. Zoophytes*: 456

LEUCOPHRYIDAE Mugard, 1949, *Ann. Sci. nat., Zool. Biol. animale* (3) **10** (2) : 171

Leucophrys Ehrenberg, 1830, *Organization syst. geogr. Verhalt. Infusionsth.*: 96
ovulum, Enchelis, Müller, 1773, *Verm. terrestr. fluviat. Hist.* **1** : 36
Paraglaucoma Warren, 1932, *Ann. Natal Mus.* **7** (1) : 11
patula, Leucophrys, Ehrenberg, 1830, *Organization syst. geogr. Verhalt. Infusionsth.*: 95
patula, Trichoda, Müller, 1786, *Anim. Infus. fluviat. marin.*: 181
pirum, Kolpoda, Müller, 1786, *Anim. Infus. fluviat. marin.*: 108
pyriformis, Leucophrys, 1830, *Organization syst. geogr. Verhalt. Infusionsth.*: 96
pyrum, Trichoda, Ehrenberg, 1830, *Organization syst. geogr. Verhalt. Infusionsth.*: 96
Protobalantidium Abé, 1927, *Dobutsugaku Zasshi* **39** (412) : 194
Ptyxidium Perty, 1852, *Kenntniss Kleinster Lebensformen*: 148
Saprophilus Stokes, 1887, *J. Trenton nat. Hist. Soc.* **1** (3) : 247
scintillans, Glaucoma, Ehrenberg, 1830, *Organization syst. geogr. Verhalt. Infusionsth.*: 98
Tetrahymen Mast & Pace, 1946, *Physiol. Zool.* **19** (3) : 232
Tetrahymena Furgason, 1940, *Arch. Protistenk.* **94** (2) : 258
Tetrahymenia Mugard, 1949, *Ann. Sci. nat., Zool. Biol. animale* (3) **10** (2) : 182
TETRAHYMENIDAE Corliss, 1952, *Proc. Soc. Protozool.* **3** : 3
Turchiniella Grassé & de Boissezon, 1929, *Bull. Soc. zool. France* **54** (3) : 187

The following are the original references for designations of type-species for genera concerned in the present Ruling:

For *Colpoda* Möller, 1773: Taylor & Furgason, 1938, *Arch. Protistenk*, **90** (2) : 321–322

For *Enchelys* Müller, 1773: Corliss & Dougherty, 1967, *Bull. zool. Nomencl.* **24** (3) : 161–162.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)26 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 915.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
16 *October* 1969

OPINION 916

FUSULINA GRACILIS MEEK, 1864 (FORAMINIFERIDA): DESIGNATION OF A TYPE-SPECIMEN

RULING.—(1) The neotype and "neoparatypes" designated by Thompson & Wheeler, 1946, for *Eoparafusulina gracilis* (Meek, 1864) are hereby set aside.

(2) *Fusulina gracilis* Meek, 1864, is hereby confirmed as type-species of *Eoparafusulina* Coogan, 1960.

(3) The generic name *Eoparafusulina* Coogan, 1960 (gender: feminine), type-species, by original designation, *Fusulina gracilis* Meek, 1864, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1913.

(4) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *gracilis* Meek, 1864, as published in the binomen *Fusulina gracilis*, as interpreted by the lectotype designated by Wilson, 1967 (type-species of *Eoparafusulina* Coogan, 1960) (Name No. 2395);

(b) *thompsoni* Skinner & Wilde, 1965, as published in the binomen *Eoparafusulina thompsoni*, as interpreted by the lectotype designated by Wilson, 1967 (Name No. 2396).

HISTORY OF THE CASE (Z.N.(S.) 1794)

The present case was submitted to the office of the Commission by Dr. Edward C. Wilson in March 1967. Dr. Wilson's application was sent to the printer on 3 May 1967 and was published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 234–236. The proposals were supported by Dr. John W. Skinner, Dr. Garner L. Wilde and Dr. James D. McLean, Jr.

DECISION OF THE COMMISSION

On 15 May 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)29 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 235. At the close of the prescribed voting period on 15 August 1969 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Brinck, Lemche, Mayr, Eisenmann, Bonnet, Vokes, Obruchev, Sabrosky, Uchida, Simpson, Jaczewski, do Amaral, Evans, Melville, Forest, Starobogatov, Alvarado, Ride, Mertens, Kraus.

Negative votes—none (0).

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—one (1): Munroe.

Commissioner Binder returned a late affirmative vote.

Original References

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

Eoparafusulina Coogan, 1960, *Univ. Calif. Publ. Geol. Sci.* **36** (5) : 262

gracilis, *Fusulina*, Meek, 1864, *in* Meek & Gabb, *Paleont. Calif.* **1** : 4, pl. 2, figs. 1, 1a–c

thompsoni, *Eoparafusulina*, Skinner & Wilde, 1965, *Mem. geol. Soc. Amer.* **17** : 74.

The following are the original references for the designation of lectotypes for two species concerned in the present Ruling:

For *Fusulina gracilis* Meek, 1864: E. C. Wilson, 1967, *Bull. zool. Nomencl.* **24** : 234

For *Eoparafusulina thompsoni* Skinner & Wilde, 1965: E. C. Wilson, 1967, *Bull. zool. Nomencl.* **24** : 235

CERTIFICATE

We certify that the votes cast on Voting Paper (69)29 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted, and that the decision so taken, being the decision of the International Commission is truly recorded in the present Opinion No. 916.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
10 *November* 1969

APPLICATION TO FIX THE NAME OF THE TYPE-SPECIES OF THE GENUS *AMPULLA* RÖDING, 1798 (OLIM *HALIA* RISSO, 1826) GASTROPODA: VOLUTIDAE). Z.N.(S.) 1804

By Harald A. Rehder (*Smithsonian Institution, Washington, D.C., U.S.A.*)

The genus *Halia* Risso, 1826, now quite generally placed in the family Volutidae, subfamily Haliinae or Scaphellinae, must take the prior name *Ampulla* Röding 1798, with the type *Ampulla priamus* Röding, designated by Pilsbry (*Nautilus* **22** : 83, 1908). This change, first put forth over sixty years ago but only recently generally adopted, has one fortunate consequence; the type-species of the genus becomes a recent species whose systematic position can be more accurately placed than could the type-species of *Halia*, which is the fossil species *Ampulla helicoides* (Brocchi), apparently more rare than the recent species. Winckworth (*Proc. Mal. Soc. London*, **26** : 137, 1945) accepted the genus *Ampulla* but designated another species as type, not aware of the fact that Pilsbry had designated a type 37 years earlier (see also Winckworth, *op. cit.*, **27** : 49, 1946).

2. The genus has as its only recent representative a mollusk that in recent years has gone under the name of either *Halia priamus* (Meuschen) or *Halia priamus* (Gmelin). Neither *priamus* (Meuschen) nor *priamus* (Gmelin), however, can be used at the present time.

3. The species was first made known by F. C. Meuschen in the *Museum Gronovianum*, p. 128, 1778, and in the Index and Explanation of plates (1781) to *Zoophylacium Gronovianum*, referring to fasc. 3, no. 1561 and pl. 2, fig. 10, 11, 1781 of the latter work. Although for many years, and even until very recently, the name *Halia priamus* was ascribed as a valid taxon to Meuschen, 1778 and/or 1781, both of these works have been rejected for nomenclatorial purposes by the I.C.Z.N., the former in Opinion 260 (*Ops. Decls. int. Comm. zool. Nomencl.* **5** : 265–280, 1954) and the latter in Opinion 261 (l.c.: 281–296, 1954). In the latter opinion both the whole of the *Zoophylacium Gronovianum* (1763–81) and its *Index* (1781) were placed on the Official Index of Rejected and Invalid Works. Meuschen's names are therefore unavailable for use.

4. The reason for using the specific name *priamus* has never to my knowledge been stated. *Priamus* is the Latin form of the name of the last king of Troy, and it is my belief that it was used because of the fancied resemblance of the shell to the Phrygian cap commonly considered to have been used by the people of Troy (see, for example, David's painting of Helen and Paris in the Louvre).

5. The name *Halia priamus* (Gmelin) has also been used recently (Weaver, *Provisional Species List of Living Volutidae*, p. 5, 1963; *op. cit.* ed. 2, p. 7, 1964; Wagner and Abbott, *Van Nostrand's Standard Catalog of Shells*, ed. 2 : 131, 1967), but Gmelin never used this specific name.

6. The next available names are two given by Gmelin in the *Systema Naturae*, ed. 13, 1791. *Bulla stercus pulicum* Gmelin (*op. cit.*, **1** : 3434) is based on the description and figure published in 1786 by J. H. Chemnitz (*Neues*

Syst. Conchylien-Cabinet, **9** (2) : 35, pl. 120, fig. 1026–1027); it has not been used as valid a senior synonym for over eighty years.

7. *Helix priapus* Gmelin (*Syst. Nat.*, Ed. 13, **1** : 3654) is based on the Meuschen 1781 reference (*Zoophylacium Gronovianum*, fasc. 3, pl. 19, fig. 10–11), and the diagnosis was apparently copied almost verbatim from that work. This name has never been used for a valid taxon, and Kobelt (*Iconographie schalentr. europ. Meeresconch.*, **2** : 7, 1901) considered the name to be an error and changed it to *priamus* Gmelin listing it as a synonym of *Halia priamus* (Meuschen). This viewpoint is somewhat strengthened by the fact that the two names differ by only one letter. There is, however, "in the original publication no clear evidence of an inadvertent error, such as a lapsus calami, or a . . . printer's error" (*Code Int. Nom. Zool.*, Article 32a (ii)), and although it might be argued that Gmelin changed the name purposely, there is no apparent reason for the use of such an allusive appelation.

8. I have been able to find no "first reviser" who can be shown to have cited both of Gmelin's names and chosen one of them as the name of the taxon. All authors have used either the species name *priamus* (Meuschen) or *priamus* (Gmelin) and listed both *stercuspulicum* Gmelin and *priapus* Gmelin as junior synonyms.

9. One year after the appearance of Gmelin's names Bruguière (*Encycl. Meth.*, Hist. Nat. Vers., **1** : 360, 1792) described the species in detail under the name "*Bulimus priamus* Nob." If Gmelin's two names, *Bulla stercus pulicum*, and *Helix priapus* dating from 1791 are to be considered nomina oblita, *Bulla priamus* Bruguière 1792 is the next available after Gmelin's names.

10. *Ampulla priamus* Röding, 1798 is validated by a reference to Gmelin's species *Bulla stercuspulicum* and the reference to Chemnitz (see above), the author obtaining his specific name from the Meuschen references cited by Chemnitz.

11. I have made an attempt to count the number of times each of the three names has been used in valid publications since their inception, with the following result:

stercuspulicum Gmelin	5
priamus	33
priapus	1

12. It is obvious that the trivial name *priamus* has been by far the most commonly used; for the last eighty years it has been the only one used, usually with Meuschen cited as author; the name *stercuspulicum* has not been used since 1888, and *priapus* has not been used since its original proposal.

13. The genus *Halia* (recte *Ampulla*) has been made sole representative of the subfamily Haliinae (= Ampullinae) in the Volutidae (Wenz, *Handb. Palaozool.*, **6**, Gastropoda, pt. 6 : 1353, 1943), and so the species has considerable systematic importance.

14. To preserve a name that has been in fairly continuous use for this unique and systematically important species, I see two possible actions that the Commission may take. One would be to declare the specific name *priapus* in the binomen *Helix priapus* Gmelin, 1791, to be a *lapsus* for *priamus*, and place this latter name on the Official List of Specific Names in Zoology.

15. The other alternative would be to place the specific name *priapus* Gmelin, 1791, on the Official Index of Rejected and Invalid Names and place the specific name *priamus* Bruguière, as published in binomen *Bulimus priamus*, on the Official List of Specific Names.

16. Of these two alternatives I favor the former as it would preserve the complete binomen as it has been used three times in the last five years, and would not introduce an author's name which has never been used since the original citation in 1792 as authority for the name *priamus*.

I therefore request the International Commission on Zoological Nomenclature:

(a) to rule that the specific name *priapus* Gmelin, 1791, as published in the binomen *Helix priapus*, is an error for *priamus* Gmelin, 1791;

(b) to place on the Official List of Specific Names in Zoology the specific name *priamus* Gmelin, 1791, as published in the corrected binomen *Helix priamus* (type-species of the genus *Ampulla* Röding, 1798);

(c) to place on the Official List of Generic Names in Zoology the generic name *Ampulla* Röding, 1798, type species by subsequent designation (Pilsbry, 1908), *Ampulla priamus* Röding (= *A.p.* Gmelin).

AMETISTINA SCHINZ, 1825 (GASTROPODA, FAMILY JANTHINIDAE): REQUEST FOR SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1894

A. G. Beu (*New Zealand Geological Survey, P.O. Box* 30368, *Lower Hutt, New Zealand*)

Schinz (1825 : 586), in a German edition of Cuvier's "Le Règne Animal", erected the genus-group name *Ametistina* in the bald statement "Ametistina Lam. Janthina", in a list of generic names that apparently represent the divisions (recognized at that time) of Linnaeus' genera of Mollusca; i.e. *Ametistina* is listed under *Helix*. Thus as first erected, the name must be interpreted as a *genus caelebs*, and if available may later have species placed in it.

2. There is doubt about the availability of the name *Ametistina* as first erected; it could be interpreted as erected in the synonymy of *Janthina*, and thus (following the Code, Article 11d) would not be available if Wenz (1940 : 816) had not placed a species in it and used it as a valid name (see Paragraph 8).

3. Herrmannsen (1852 : 6) listed the name as: "*Ametistina* 'Lamk.' Schinz 1825 Cuv. Thierr. IV 586, err. pro *Ianthina*", but such a markedly different spelling as *Ametistina* cannot be a simple error for *Janthina*. It is more likely that Schinz used a manuscript name of Lamarck's.

4. Mörch (1860 : 261) appears to have been the first subsequent taxonomist to mention the name *Ametistina*; he stated in the introduction to his review of the Janthinidae, "Plusieur auteurs ont cru devoir changer le nom générique et l'ont appelé *Amethistina* (Schintz [sic], 1825), *Iodes* (Leach) *Achates* (Gistel)." He thus introduced an incorrect subsequent spelling, which has no status in nomenclature (Code, Article 33b). He did not use the name in the body of the work, and it cannot be construed that any species were placed in *Ametistina* by this brief mention.

5. Schaufuss (1869 : 2) listed a second incorrect subsequent spelling, "*Amethystina*" Schinz, as a synonym of *Janthina* "Bolten" [Röding], and on p. 25 listed *Janthina communis* Lamarck, *J. exigua* Lamarck, *J. prolongata* Blainville, and *J. striolata* Carpenter as species of *Janthina* (i.e. the species present in the collection of Franz Paetel). The Code (Article 11d) states that names first published as synonyms are not nomenclaturally available, and further states (Article 16b) that citation of a name in synonymy does not constitute an indication. Thus, following the spirit of the Code expressed by these Articles, the placing of species in a genus (in this case *Janthina*) when other names are listed in its synonymy (in this case, "*Jodes* Leach" and "*Amethystina*" Schinz) should presumably not be considered to constitute the allocation of the species to the synonymised genus-group names, especially as *Ametistina* is wrongly spelled in this case.

6. The next mention of *Ametistina* was by Paetel (1875 : 8) who, in a catalogue of family- and genus-group names in the Mollusca, stated: "*Amethistina* Lm. ... ist *Janthina* Bolt." and "*Amethystina* Schinz ... ist *Amethistina* Lm.". He did not list any species. This was cited as the first intro-

duction of the incorrect subsequent spelling *Amethistina* by Neave (1939), but Mörch (1860) had used the spelling 15 years earlier (Paragraph 4).

7. Later Paetel (1888 : 1) listed "*Amethistina* Schinz" in his index of genera, and on p. 13 of the main work he listed "*Jodes* Leach", "*Amethistina*" Schinz, and *Achates* Gistl as synonyms of *Janthina* "Bolt." [Röding]. He further listed 31 valid species and varieties of *Janthina* and 18 names that he considered to be synonyms of valid ones. However, as with Schaufuss' catalogue, the spirit of the Code seems to imply that this should not be taken to constitute placing of species in "*Jodes*", "*Amethistina*", or *Achates*.

8. The most recent mention of *Ametistina* was by Wenz (1940 : 816), who listed "*Amethistina* Mörch, 1860" and designated *Janthina pallida* "Harvey" as its type species. *Amethistina* was listed among six subgenera of *Janthina*, of which Wenz (loc. cit.: 815) stated: "Die 'Subgenera' [sind] wohl ohne Wert, zumal die abgrenzung der Arten kaum feststeht" (i.e. the subgenera [are] probably of no value, particularly as the limits of the species are hardly defined). Thus although he did not synonymise the subgenera, Wenz obviously thought they were meaningless. Nevertheless, Wenz appears to have been the first person validly to place a species in *Ametistina*, and he designated a type-species for it and used it as the valid senior synonym for a "subgenus". His is the only citation that prevents the name from being available for designation by the Commission as a *nomen oblitum*, as the name does not otherwise appear in modern literature on the Janthinidae.

9. In view of the highly unsatisfactory nature of the erection of *Ametistina*, of the fact that it has been used validly only once since its erection, of the fact that it is not currently used in molluscan nomenclature, and of the fact that the name *Iodina* Mörch, 1860, is presently correctly used for the oviparous species of *Janthina* to which *Ametistina* would apply if it were valid, it seems best for the name to be suppressed.

10. Therefore, in the interests of stability of nomenclature, the Commission is asked:

(i) to use its plenary powers to suppress the genus-group name *Ametistina* Schinz, 1825 (type-species, by subsequent designation by Wenz, 1940, *Janthina pallida* "Harvey" = *Janthina pallida* Thomson, 1840) for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(ii) to place the genus-group name *Iodina* Mörch, 1860 (type-species, by subsequent designation by Wenz, 1940, *Janthina exigua* Lamarck, [1816] on the Official List of Generic Names in Zoology;

(iii) to place the following species-group names on the Official List of Specific Names in Zoology:

(a) *pallida* "Harvey MS" Thomson, 1840, (: 96) as published in the binomen *Janthina pallida*;

(b) *exigua* Lamarck, [1816], (pl. 456) as published in the binomen *Janthina exigua* (type-species of *Iodina* Mörch, 1860);

(iv) to place the generic name suppressed under the plenary powers in (i) above on the Official Index of Rejected and Invalid Generic Names in Zoology.

References

Herrmannsen, A. N. 1852. *Indicis Generum Malacozoorum. Supplementa et Corrigenda.* Cassellis.

Lamarck, J. B. P. A. de M. de. [1816]. *Ency. Méth.* (Vers).

Mörch, O.-A.-L. 1860. Matériaux pour servir à l'histoire de la famille des *Janthines*. *J. Conch. Paris*, **8** : 261–285

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MAORITELLINA FINLAY, 1927 (BIVALVIA): REQUEST FOR DESIGNATION OF A TYPE-SPECIES. Z.N.(S.) 1896)

By A. G. Beu, C. A. Fleming and P. A. Maxwell (*N.Z. Geological Survey, P.O. Box* 30368, *Lower Hutt, New Zealand*)

Finlay (1927, p. 466) erected the genus *Maoritellina* for a species he identified as *Tellina charlottae* E. A. Smith, 1885, a Recent species described from Queen Charlotte Sound, northern South Island, New Zealand. He described several unusual features of the hinge and pallial sinus of the species, and compared his new genus with *Eurytellina* Fischer and *Elliptotellina* Cossmann.

2. Marwick (1928b, p. 913; 1931, pp. 75–6) used the name *Maoritellina* for the group of small, smooth New Zealand Tellinidae that includes the Recent *Tellina huttoni* E. A. Smith, 1885, describing three Oligocene to Upper Miocene species that he included in *Maoritellina*. Subsequently Powell (e.g. 1937, p. 59), in early editions of his check-lists of New Zealand Mollusca, included *Tellina charlottae* Smith, *Tellina huttoni* Smith, and *Tellina huttoni* var. *sterrha* Suter, 1913, in *Maoritellina*.

3. Marwick (1928a, p. 467) erected the genus *Ascitellina* for a new species, *A. donaciformis*, from the Eocene of the Chatham Islands. Marwick (1931, p. 74) later referred the Recent *Tellina urinatoria* Suter, 1913, to *Ascitellina* (correctly, in the writers' opinion), and suggested that *Ascitellina* belonged in the Family Garidae. Later Powell (1935, p. 333) described a Lower Miocene species of *Ascitellina*. In recent check-lists *Ascitellina* has consistently been included in the Sanguinolariidae (Powell, 1962, p. 123) or the equivalent Garidae (Fleming, 1966, p. 32).

4. Marwick (1931, p. 74) suggested that *Tellina charlottae* Smith belonged in *Tellinella*, and that Finlay (1927) had wrongly identified *Ascitellina urinatoria* (Suter) as *Tellina charlottae*. Fleming (1951, p. 134) confirmed that *Tellina charlottae* is the large shell known until then as *Tellinella ferrari* Marwick (not of Marwick, 1931, a Miocene species), and agreed with Marwick (1931) that Finlay has misidentified *Ascitellina urinatoria* as *Tellina charlottae*. From Finlay's description of the hinge and pallial sinus of *Maoritellina*, and from his comparison of it with *Eurytellina* and *Elliptotellina* rather than with *Tellinella*, this conclusion seems inescapable. Fleming (1951) thus synonymised *Maoritellina* Finlay, 1927, with *Tellinella* Mörch, 1953; however, under the present Code (Article 70a) this action is of doubtful validity, and should be referred to the Commission for ratification.

5. Since 1951, *Maoritellina* has fallen out of use; Powell (1962, p. 123) placed the *huttoni* group in *Tellinella*, along with *charlottae* and similar species. *Tellina huttoni* lacks the prominent concentric lamellae of *Tellinella* but is otherwise very similar, and seems best included in *Tellinella* until the many genera of the Tellinidae are satisfactorily defined and its generic position can be reconsidered. Fleming (1966, p. 32) placed the *T. huttoni* group in *Tellina* sensu lato, preferring not to classify it formally.

6. Thus *Maoritellina* Finlay, 1927, has been of doubtful status for many years and its type-species could be either *T. charlottae* Smith, which Finlay named as type, or *T. urinatoria* Suter, on which Finlay based his diagnosis. Designation of the former as type-species would mean the name would become a junior subjective synonym of *Tellinella* Mörch, 1853, whereas designation of the latter as type-species would mean the name would become a senior subjective synonym of *Ascitellina* Marwick, 1928. As the name *Maoritellina* has not been used for 18 years, and as *Ascitellina* is now consistently used for the genus of Garidae to which *Maoritellina* would apply if *T. urinatoria* were its type-species, it seems best to reduce *Maoritellina* to a junior synonym of *Tellinella* by designating *Tellina charlottae* E. A. Smith as its type-species.

7. Therefore, in the interests of stability of nomenclature, the Commission is requested:

(1) to confirm the designation of *Tellina charlottae* E. A. Smith, 1885, as type-species of *Maoritellina* H. J. Finlay, 1927;

(2) to place the following generic names on the Official List of Generic Names in Zoology:

(i) *Ascitellina* J. Marwick, 1928, type-species (by original designation), *Ascitellina donaciformis* Marwick, 1927;

(ii) *Tellinella* O.-A.-L. Mörch, 1853, type-species (by subsequent designation by Stoliczka, 1870), *Tellina virgata* Linnaeus, 1758;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(i) *charlottae* E. A. Smith, 1885, as published in the binomen *Tellina charlottae*;

(ii) *donaciformis* J. Marwick, 1928, as published in the binomen *Ascitellina donaciformis*;

(iii) *virgata* C. Linnaeus, 1758, as published in the binomen *Tellina virgata*.

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GAMMARUS AEQUICAUDA (MARTYNOV, 1931) (CRUSTACEA, AMPHIPODA): A REQUEST FOR PRESERVATION UNDER THE PLENARY POWERS. Z.N.(S.) 1900

By Jan H. Stock (*Zoölogisch Museum, Amsterdam, The Netherlands*)

The crustacean, *Gammarus aequicauda* (Martynov, 1931) is the most common amphipod around the Mediterranean basin. It has an enormously wide chlorinity tolerance (0·81–21·3‰, Kant *et al.*, 1968, *Versl. zoöl. Werkexc. Banyuls-sur-Mer*: 3–21.–Zoöl. Mus. Amsterdam) and forms a very important part of the biomass in mixohaline waters, such as estuaries and lagoons. In the 38 years of its existence, the name is used in at least 19 publications (either as *Gammarus aequicauda* or as *G. locusta* ssp. *aequicauda*), written by at least 13 different authors (when publications have been written by more than one author, only the first one has been counted). Several of these publications are in the field of ecology.

2. Up to now, *G. aequicauda* was thought to be specifically different from *G. plumicornis* Costa, 1853, a name that during the 116 years following its description has been used correctly 3 times only (by 2 authors). Stock, 1969 (*Bull. zool. Mus. Univ. Amsterdam*, **1** (12) : 153) recently showed that *G. aequicauda* and *G. plumicornis* are interfertile and thus belong to one species.

3. There are also two erroneous records under the name of *G. plumicornis* (by two authors) that apply in reality to *G. crinicornis* (cf. Stock, 1967, *Zool. Verh. Leiden*, **90** : 8). In Stebbing's much used monograph (1906, *Tierreich*, 21 : 742) the name *plumicornis* is listed only, without any further qualifications. In Barnard's checklist (1958, *Allan Hancock Found. Publ.*, occ. Pap., 19 : 54), the name *plumicornis* is listed as a dubious name. It thus appears that there are more erroneous records, or citations as a dubious species, than pertinent records.

4. *Gammarus aequicauda* has still another senior synonym, almost unused, viz., *Gammarus tunetanus* Simon, 1885. This species is described in an unrecognizable way and unaccompanied by illustrations. It is listed only twice afterwards, viz., in the compilations of Stebbing and of Barnard. Stebbing (l.c.: 477) considers it a species inquirenda, Barnard (l.c.: 55) a species dubia. The type specimen is preserved, however, in the Muséum National d'Histoire Naturelle, Paris, and leaves no doubt as to its identity with *G. aequicauda*.

5. Since the name *Gammarus aequicauda* may be considered to be in current use (19 quotations in 38 years, both by taxonomists and by ecologists), it would cause unnecessary confusion to use the name *G. plumicornis* (which was always considered to be a different or doubtful species) or *G. tunetanus* (which has been cited only twice) through strict application of the Law of Priority. This confusion can be prevented by suppression of the two senior specific names.

6. The International Commission on Zoological Nomenclature is asked to take the following actions:

(a) to make use of its plenary powers to suppress for the purposes of the Law of Priority but not for those of the Law of Homonymy, the specific

names *plumicornis* Costa, 1853 (*Rendiconto Soc. R. Borbonica, Acad. Sci.*, (n.S.) 1853 : 176) and *tunetanus* Simon, 1885 (*Exploration sci. Tunésie*: 6—Imprimérie Nationale, Paris) as published in the binomina *Gammarus plumicornis* and *Gammarus tunetanus*;

(b) to place on the Official List of Specific Names in Zoology the name *aequicauda* Martynov, 1931 (*Zool. Jahrb.* (Syst.), **60** (3–4) : 593), as published in the binomen *Carinogammarus aequicauda*;

(c) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the names *plumicornis* Costa, 1853, and *tunetanus* Simon, 1885, as suppressed under (a) above.

Mr. S. Pinkster, M.Sc., and Mr. P. Kant, B.Sc., who both have published on *Gammarus aequicauda* and *G. plumicornis*, support this proposal.

LITTORINA FÉRUSSAC, 1822 (GASTROPODA): PROPOSED DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1901

By Dietrich Kadolsky (*Geological and Paleontological Institute of the University of Bonn (W. Germany)*)

In the literature three separate species are regarded as type-species of *Littorina*, two of these being:

Turbo littoreus Linnaeus, 1758, by Blainville 1828; Swainson 1840[1]; Deshayes in Lamarck 1843; Herrmannsen 1846; Gray 1847; Reeve 1857; Cossmann 1888 and 1915; Winckworth 1922 and 1932; Dall 1923; Gardner 1948; Palmer 1958.

Nerita littoralis Linnaeus, 1758, by Sander-Rang 1829? (see note below); Dall, 1909, 1918 and 1921; Iredale 1912; Thiele 1929; Wenz 1938; Anderson 1960; F. Nordsieck 1968.

2. All authors who regard one of these two species as the type regard Férussac's "Tableaux systématiques . . ." (1822) as the original publication. Kennard, 1942, and Winckworth, 1951, consider however that Férussac's name is a mere nomen nudum, and that the name was not validated until 1826, by Payraudeau (1826 : 114); the type-species in this case would have to be *Littorina basterotii* Payraudeau 1826 (: 115, pl. 5, fig. 18) (= *Turbo neritoides* Linnaeus, 1758) by monotypy.

3. Investigation of Férussac's publication has resulted thus: The name *Littorina* Férussac, 1822, is available. The parts of the text in question are as follows:

p. IX: "L'examen scrupuleux que nous avons fait des grands genres *Turbo* et *Trochus* de Linné, ainsi que la connaissance d'un assez grand nombre d'animaux de ces deux genres, nous ont convaincus que le premier ne pouvoit plus exister; un grand nombre des espèces qu'il comprend devant entrer dans le second, et toutes les autres appartenant aux genres Paludine, Hélix, Scalaire, Cyclostome, Turritelle, Mélanie, Planorbe, etc., ainsi qu'on voit par le tableau suivant, dressé d'après l'édition de Gmelin:

[The following species are attributed to "Paludine marine":]

Turbo obtusatus L., 1758
„ neritoides L., 1758
„ littoreus L., 1758
„ muricatus L., 1758
„ afer GM., 1791.

P. XI: "Quant aux paludines marines qui constituent le genre *Trochus* d'Adanson, comme nous n'avons pu adopter cette dénomination à cause des *trochus* de Linné (en général formés d'espèces réellement congénères, ce qui nous a empêché de les appeler *turbo* avec Adanson, en y rapportant tous les

[1] Swainson (: 206) restricted Linné's use of the name *Turbo* Linnaeus, 1758, to the group with the type-species *Turbo littoreus* L.: consequently he regarded the name *Littorina* as an absolute synonym of *Turbo*. The type-species of *Turbo* L. was already designated by Montfort, 1810: *Turbo petholatus* Linnaeus, 1758.

turbo de Linné que doivent s'en rapprocher), nous en formons un sous-genre sous le nom de littorine.

"Le genre Natice nous laisse quelque incertitude; il faut observer qu' Adanson, en décrivant le fossar, montre que ce mollusque ne diffère presque pas de son genre *trochus*; aussi nous présumons qu'on devra, peut-être, le réunir à notre sous-genre *littorina*, d'autant qu'il se rapproche assez, par la forme de sa coquille, du *turbo neritoides* de Linné, qui en fait partie."

P. XXXIV: "Genre *Paludina*. [. . .] cinqième sous-genre *Littorina* Féruss. *Turbo* Linn.; *Trochus* Adanson; Kruck, Ocken."

4. Thus Férussac does not describe his subgenus *Littorina* but refers to *Trochus* Adanson, 1757, *Turbo* Linnaeus, 1758 and Kruck Oken, 1815.

On P. XXXIV *Turbo* Linn. is referred to as a synonym for several different taxa. It is obvious that Férussac only wanted to include some species in his new subgenus; which species these are, can be seen from the list on p. IX; although it is true that the name *Littorina* is not cited there. Comparison with p. XXXIV shows that the only "Paludines marines" in Férussac's sense, belong to the subgenera *Rissoa* Desmarest 1814 and *Littorina*. In the list on p. IX he has not put these two together but has named those *Turbo* species which he regarded as *Rissoa* as such. In the section on p. XI he describes the "Paludines marines" as *Littorina* and expressly classifies *Turbo neritoides* L. in the subgenus *Littorina* which is unequivocal.

5. Thus the original publication includes the following species: *Turbo littoreus*, *obtusatus*, *neritoides* and *muricatus* from Linnaeus, 1758 and *Turbo afer* from Gmelin, 1791.

The type-species could be established according to recommendation 69B of the IRZN by virtual tautonomy: *Turbo littoreus* L. Blainville (1828 : 98) undertook the first categorical designation of a type, by calling *Turbo littoreus* L. the "type".

6. Sander-Rang's designation of the type is invalid, because it came about later, and because *Nerita littoralis* Linnaeus, 1758, was not included among *Littorina* in the original publication. Possibly Sander-Rang did not mean by his *L. littoralis* the species of Linnaeus, but meant *Turbo littoreus* L.; thus writes Herrmannsen about *Littorina* for example (1846 : 615):

"Subgenus Paludinae. Typus: *Turbo littoreus* Linn. Pariter Rang 1829. Man. p. 185."

Schröter too (1779, pl. 8, fig. 5) illustrates *Turbo littoreus* L. as *Turbo littoralis* L. According to Art. 70 of the IRZN Sander-Rang's species must be regarded as *Nerita littoralis* L.

7. Kennard, 1942, has given us the publication dates of Férussac's Tableaux. According to him pp. I–XXIV were published on 16.2.1822, pp. XXV–XLVII on 13.4.1822. Page XXXIV therefore, strictly-speaking, does not belong to the original publication. The particulars on pp. IX and XI are however sufficient for availability.

8. The fixation of *Turbo littoreus* L. as type of *Littorina* would mean that the genus which contains *Nerita littoralis* L. must be called *Neritoides* Brown,

1827[1] (type by monotypy: *Nerita littoralis* L.). On the other hand, if *Nerita littoralis* L. is made type of *Littorina*, the name *Algaroda* Dall, 1918 (type by original designation: *Turbo littoreus* L.) must be used for *Turbo littoreus* L. *Neritoides* Brown and *Algaroda* Dall have been used sometimes in literature, e.g. *Neritoides* Brown by H. & A. Adams 1853, Paetel 1875, P. Fischer 1885, Winckworth 1922 and 1932, Dall 1923; *Algaroda* Dall by Dall 1921, Thiele 1929, Wenz 1938, F. Nordsieck 1968. As these names were never wrongly identified and no doubt arises about their nomenclatorical status whatever the Commission decision about the type of *Littorina*, no Commission action about them is necessary.

For *Littorina* Férussac, *Turbo littoreus* L. and *Nerita littoralis* L. have been nearly equally often cited as type-species so that it is not easy to decide which type choice will be best in stabilizing zoological nomenclature. I prefer to keep *Turbo littoreus* L. as type-species of *Littorina* Férussac, as only this species was included amongst *Littorina* in the original publication, and was later validly designated as type by Blainville.

9. Therefore the Commission is called upon:

(1) to place the generic name *Littorina* Férussac 1822 (*Tabl. syst. Anim. moll. terrestr. fluviat.* (14): IX, XI (gender: feminine), type-species by designation by Blainville, 1828 (*Dict. Sci. nat.* **56** : 98), *Turbo littoreus* Linnaeus, 1758, on the Official List of Generic Names in Zoology;

(2) to place the specific name *littoreus* Linnaeus, 1758, as published in the binomen *Turbo littoreus* (type-species of *Littorina* Férussac, 1822) on the Official List of Specific Names in Zoology.

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[1] It must be noted that an earlier homonym, *Neritoides* Meuschen, 1779, exists. This seems to be a valid generic name, though Meuschen used no Latin names, but German polynominal expressions, to designate his species (e.g. : 79; "Die kleine netzartige gefederte Kornschaufel" etc.). Meuschen's *Neritoides* seems to be synonymous with the well-known Naticid genus *Polinices* Montfort, 1810. It will be necessary to suppress *Neritoides* Meuschen in favour of *Polinices* Montfort and *Neritoides* Brown, and I intend to submit a further application with this object.

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PROPOSED USE OF THE PLENARY POWERS TO VARY THE NEOTYPE DESIGNATED BY WIND (1959) FOR *ECHINOCORYS SCUTATA* LESKE, 1778 (CLASS ECHINOIDEA). Z.N.(S.) 1903

By N. B. Peake (30 *St. Benedict's St., Norwich, England*) and R. V. Melville (*Institute of Geological Sciences, London, England*)*

Wind (1959 : 124) designated a neotype for the species *Echinocorys scutata* Leske, 1778, which, if accepted, would radically alter the concept held currently and for over a century of one of the commonest and stratigraphically most significant of Upper Cretaceous fossils. We propose that a new neotype be designated under the plenary powers in accord with this concept. Wind was right in recognizing the need for a neotype, but injudicious in his choice of a specimen. Before dealing with this problem, however, the status of the generic name must be clarified.

2. Leske's work of 1778 consists of a revision of and additions to J. T. Klein's *Naturalis Dispositio Echinodermatum* (1734). The two together constituted the principal 18th century work of reference on echinoids. Leske issued his work in two editions, one as a separate work paged from p. 1 onwards, and the other bound with a re-issue of Klein and paged from p. 65 onwards. Klein had given each "genus" and "species" a paragraph number. In his *Additamenta*, under each such number Leske first gave a Linnean binomen to the "species" named polynominally by Klein and then inserted other forms, either as synonyms, or as valid species described since Klein's work, or as new species. Where he gives an available name to a Kleinian "species" we assume, in the absence of evidence to the contrary, that his species is based by indication on Klein's material, from which the type of the Leskean species must be chosen.

3. *Echinocorys* is proposed on p. 111 (175) of Leske's work and *E. scutatus* [sic] is the first species described under it. (The generic name was treated as masculine by Leske and subsequent authors until Hayward (1940) showed that it is feminine; and it is so determined by Article 30 (a) i.) It is immediately followed by *Echinocorytes ovatus*, *Echinocorytes pustulosus*, *Echinocorytes quaterradiatus* and *Echinocorytes minor*. In the corrigenda at the end of the work, Leske said "pro *Echinocorys* lege *Echinocorytes*", so that it is clear that *Echinocorys* was a slip. However, *Echinocorytes* has never been used as a valid name by any author in the extensive literature on the subject. This may well be because, throughout the nineteenth century, the name was attributed to Breynius, 1732, an accidentally binominal pre-Linnean author (except by those authors who used the subjective synonym *Ananchytes* Lamarck, 1801). To change the spelling of a name long familiar to palaeontologists and practical geologists and engineers would be legalistic and inimical to the stability of nomenclature. We propose to regard *Echinocorys* and *Echinocorytes* as two names published simultaneously for the same taxon and, as first revisers on this occasion, to select *Echinocorys* as the valid name.

*By permission of the Director, Institute of Geological Sciences.

4. *Echinocorys* is rare in the Turonian and common throughout the Coniacian, Santonian, Campanian and Maestrichtian stages of the Upper Cretaceous of Europe. Over fifty species and subspecies have been described, but until the work of Lambert (1903) on the continent and of Griffith and Brydone (1911) and Brydone (1912) in Britain, the whole complex was considered as a single highly variable species (see Forbes 1852; Wright 1882). Since those dates a large number of names has come into use, each with a particular stratigraphical implication for geologists. *E. scutata* is the type-species of the genus (designated by Lambert 1898 : 179) and it is clearly important that it be defined in a way that will not upset long-established usage and that will serve as a firm, central point of reference for the statistical studies now in progress.

5. If the view expressed in paragraph 2 above is correct, then the holotype of *E. scutata* is the single specimen figured in Klein's pl. xv, figs. a, b, and named on p. 27 as *Galea vertice scutato*. The original text and illustrations leave the identity of the species in no doubt, and this identity has been continuously confirmed by all the main works of reference on the subject. The holotype, however, like all Klein's echinoid types, is lost. According to [Dezallier d'Argenville] 1742 : 229, Klein's cabinet was bought by the Markgrave of Brandenburg Bayreuth. Lovén (1887 : 51, footnote 2) said that Klein sold his collections to the Markgrave of Brandenburg-Kulmbach in 1740, when they were moved to the palace at Bayreuth. From there they went to the University of Erlangen, but the collection is not preserved as such there, nor have any of Klein's types been recognized.

6. The only locality cited for his species by Klein is "Anglia" = England, and Leske gives no further information. Lambert (1901 : 164) cites a tradition that the Kleinian type of *Micraster coranguinum* (Leske) came from Gravesend, Kent, England i.e. (from the upper part of the Santonian zone of *M. coranguinum*), and there is at least a probability that his other Chalk echinoids came from the same neighbourhood. There are four such species. *M. coranguinum* and *Conulus albogalerus* Leske are particularly characteristic of the horizon exposed at Gravesend and *Phymosoma corollare* (Leske) is common at that horizon and rare at other levels. Klein's figure of *E. scutata* represents a form that is characteristic of that horizon (and of no other) in a style of preservation that is almost a signature of the Chalk of that horizon in that district.

7. Wind (1959) designated as neotype of *E. scutata* a specimen from the Maestrichtian Chalk of Trimingham, Norfolk, England. This locality is over 100 miles (160 km) N.N.E. of Gravesend. The horizon is separated from the *M. coranguinum* Zone by the Santonian zones of *Uintacrinus socialis* and *Marsupites testudinarius* and by the three zones of the Campanian stage, and each of these intervening zones yields one or several characteristic forms of *Echinocorys*. Wind's neotype differs in many morphological respects from the one figured by Klein, to the extent that, by modern taxonomic standards, it should be treated as belonging to a distinct species. It is not clear which, if any, of the existing available names is applicable to it, but if its designation as neotype of *E. scutata* is allowed to stand, then a new name or an unfamiliar synonym

would have to be adopted for the Santonian form for which the name *E. scutata* has been used for so long and with such a definite stratigraphical implication.

8. The Chalk of Trimingham comprises three glacially transported masses whose original form and extent can be deduced from their structural pattern as displayed in sea-cliffs and foreshore exposures and from descriptions dating back to Lyell (1840). From this evidence, and from the rate of marine erosion, which cuts the cliffs back by some 10 feet (3 metres) each year, it is highly unlikely that any of the masses was exposed as early as 1734. In addition, none of the hundreds of *Echinocorys* collected from Trimingham resembles Klein's figure at all closely. The district was not readily accessible in the 18th century and is not referred to by other naturalists of the period. On the other hand, Gravesend was the most important source of Chalk fossils to the early collectors.

9. We therefore propose that a specimen in the collections of the British Museum (Natural History), London, (registered number E.8721, see Plate 2) be designated as neotype under the plenary powers. It is accompanied by a label marked "*Echinocorys scutata* Leske, *Micraster coranguinum* Zone, Fletcher's Pit, Gravesend, Kent. Presented by G. E. Dibley, 12.12.05." Fletcher's Pit is one of a series of very old workings in the vicinity of Gravesend, all in the upper part of the *coranguinum* Zone. Dibley was well known as a collector of meticulous reliability. Full details of this specimen, of Klein's figure and of Wind's neotype are given in the Appendix.

10. We therefore ask the Commission:

(1) to use its plenary powers to suppress the neotype designated by Wind (1959) for the nominal species *Echinocorys scutata* Leske, 1778, and having done so to designate the specimen referred to in paragraph 9 above as neotype of that species;

(2) to place the generic name *Echinocorys* Leske, 1778 (gender: feminine), type-species *Echinocorys scutata* Leske, 1778, by subsequent designation by Lambert 1898: 179, on the Official List of Generic Names in Zoology;

(3) to place the specific name *scutata* Leske, 1778, as published in the binomen *Echinocorys scutatus* [sic], as defined by reference to the neotype designated above under the plenary powers, on the Official List of Specific Names in Zoology;

(4) to place the generic name *Echinocorytes* Leske, 1778, on the Official Index of Rejected and Invalid Generic Names in Zoology.

APPENDIX

The neotype now proposed is complete and in a very fine state of preservation. The small tuberculation is sharp and fresh: this is seen more often in Gravesend-district echinoids than in those from any other horizon or locality in the Chalk. It is partly filled with flint (Klein's specimen seems to have been wholly filled with flint). In Wind's neotype the test is partly decorticated and elsewhere deeply eroded. On the adapical surface it has been converted to a form of silica known as beekite. The beekitization has obscured the form and dimensions of the apical system, which are important distinguishing features in

Echinocorys. The dimensions of the two specimens and of Klein's figure (estimated: the views are slightly oblique) are:

	length mm	breadth mm	height mm
BM. E.8721	83	72	68
Klein's figure (estimated)	84	74	?
Wind's neotype (Sedgwick Museum, Cambridge, B.51702)	81	68	53

Hayward (1940) gave the following average dimensions of 230 specimens from the *coranguinum* Zone: length 67 mm, breadth 56 mm, height 47 mm. However, his sample was not homogeneous, for it covered 200 ft of chalk (specimens in the lower part of the zone are smaller) and included juveniles. The height of Klein's specimen cannot be accurately estimated, but seems to be similar in proportions to our specimen.

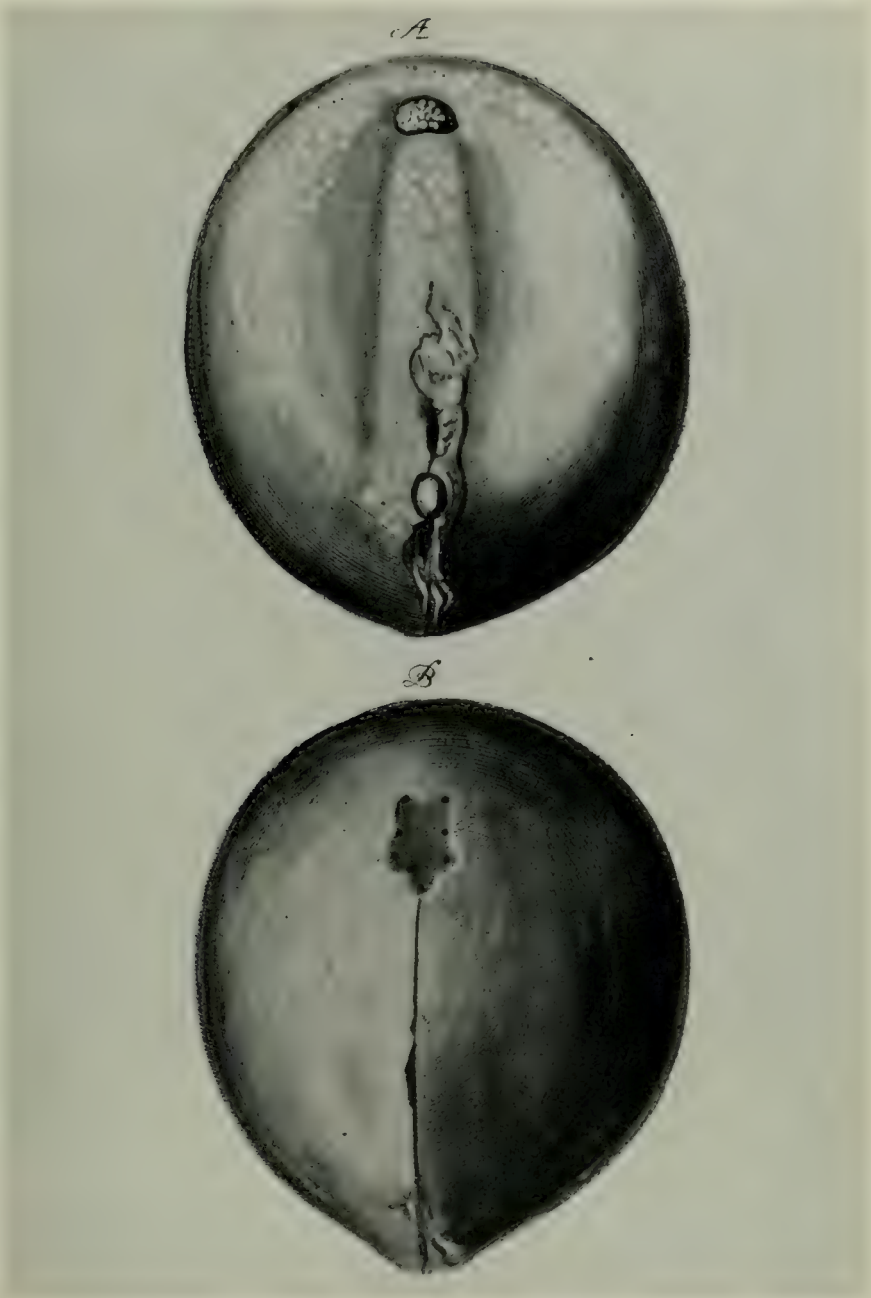
Willcox (1953) has shown that the ratio between the area of the apical system and the square of the length of the test in *Echinocorys* varies with horizon. The values for our specimen and Klein's figure (estimated) are compared below with Willcox's average for the *coranguinum* Zone (his sample, however, suffers from the same defects as Hayward's). It is unfortunately impossible to record these measurements on Wind's neotype because of beekitization. This is an additional reason for considering his specimen undesirable as a neotype.

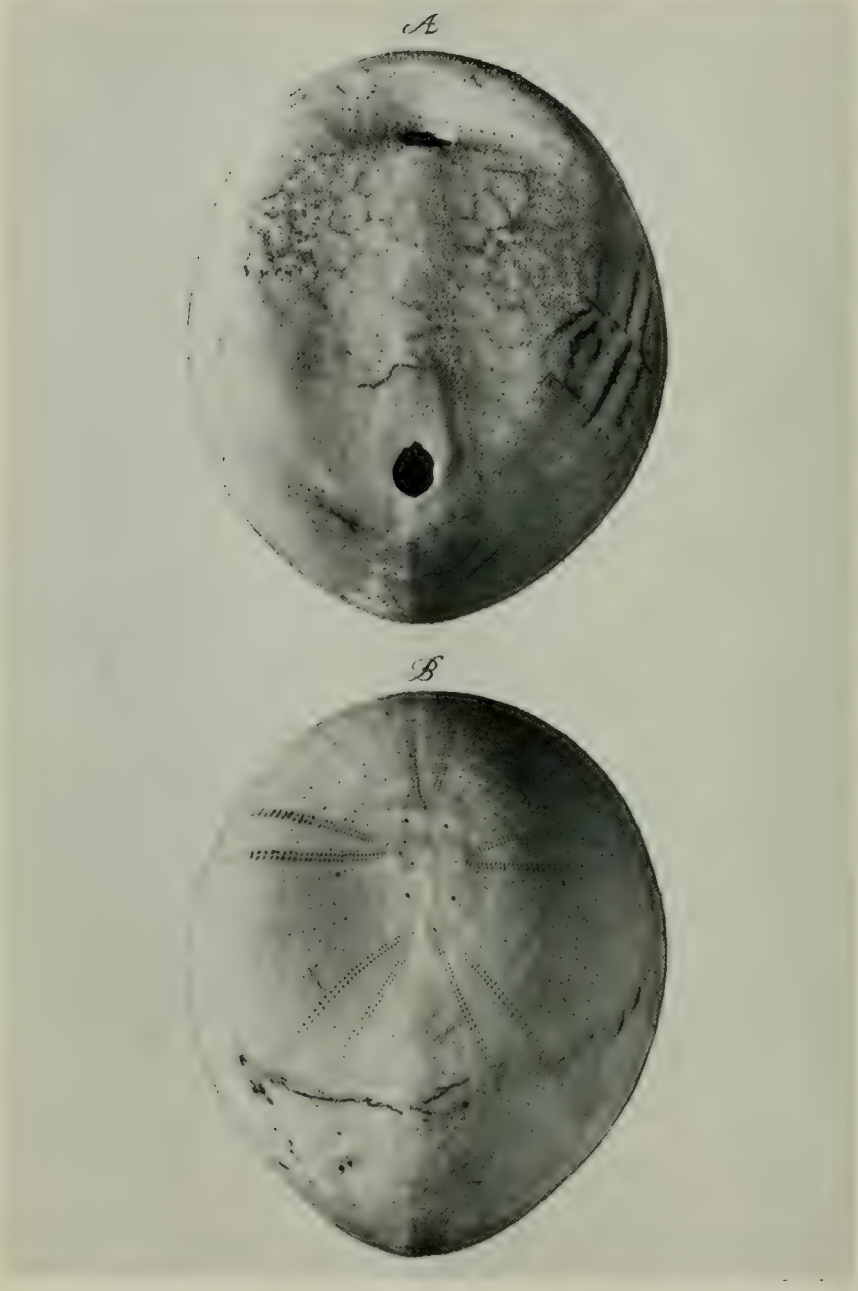
	length of apical system (l) mm	breadth of apical system (b) mm	total length mm	$\frac{l \times b}{L^2}$
BM. E.8721	18	14	83	3·5
Klein's figure (estimated)	22	12	84	3·1
Willcox average	14·5	8·7	59·1	3·54

BM. E.8721 has 40 ambulacral and 15 interambulacral plates above the ambitus in each area. Wind (1959 : 124) states that there are 40 ambulacral and 17 $\pm$ 2 interambulacral plates in *E. scutata*. Klein's figure shows about 50 ambulacral plates but cannot be depended on for fidelity.

The periproct of *Echinocorys* becomes progressively more inframarginal as one ascends the succession. In BM. E.8721 and in Santonian specimens generally it makes an angle of about 30° with the base; in Klein's figure it seems to be at a similar angle. In Wind's neotype it makes an angle of about 12° with the base.

The horizon of Wind's neotype is that which yields the largest known specimens of British *Echinocorys*. His specimen is rather on the small side as a representative of the population.


A
B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EXPLANATION OF PLATES

Plate 1

Copy of Klein, 1734, pl. xv (= Leske, 1778, pl. xv), original figures of *Echinocorys scutata* Leske, 1778. A, adoral view. B, adapical view, both slightly oblique.

Plate 2

Echinocorys scutata Leske, 1778, proposed neotype. BM. E.8721. A, adoral view. B, adapical view, with about the same obliquity as the original figures. Natural size.

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PHALAENA TINEA XYLOSTELLA LINNAEUS, 1758 (INSECTA, LEPIDOPTERA): DESIGNATION OF A NEOTYPE UNDER THE PLENARY POWERS. Z.N.(S.) 1906

By Niels L. Wolff (*Zoological Museum, Copenhagen*)

Bradley (1966 : 213, 219–220) has published the find in the Linnaean collection in London of an "authentic" specimen of "*Phalaena Tinea Xylostella* Linnaeus, 1758" bearing two labels, one inscribed "Xylostella" in Linnaeus' handwriting, the other "apparently added by someone else at a later date", stating "xylostella 890". This figure refers to the page number of Linnaeus (1767).

2. Consequently Bradley considers that the name *xylostella* is to be transferred from the species generally known as *Cerostoma xylostella* (Linnaeus, 1758) to the Diamond-Backed moth, known since the turn of the century as *Plutella maculipennis* Curtis, 1832.

3. As this change is unwarranted and against the Preamble of the Code, and furthermore involves an important and universally distributed agricultural pest, it is hereby proposed that the name *maculipennis* published in the combination *Plutella maculipennis* Curtis, 1832 (fol. 420) be placed on the Official List of Specific Names in Zoology.

4. The original citation by Linnaeus (1758 : 538) reads as follows:

(Phalaena. Tinea)

Xylostella. 265. *P. Tinea* alis cinereis: vitta dorsali communi alba dentata.
Fn. Svec. 909.
Habitat in Lonicera.
Simillima Roes. ins. 1. *phal.* 4.*t.*10. *in Brassica, Lactuca, sed minor.*

It thus appears that Linnaeus was well aware of the existence of two very similar species differing in size and feeding on different plants, one on *Lonicera*, the other on *Brassica* and *Lactuca*. The description and illustrations by Roesel (1746, N.X.: 22–23, Tab. X) to which Linnaeus refers clearly concern the Diamond-Backed moth but it appears as well that Linnaeus did *not* intend to name that species but the other one, feeding on *Lonicera*.

Regarding the size Linnaeus unfortunately makes a mistake. Roesel characterizes his species as: "Das sehr kleine Kohl- und Salat-Rauplein" but when comparing the size of his *Lonicera* feeding species, which is the larger, Linnaeus by confusion stated it as the smaller. Also the reference to Fn. Svec. 909 (Linnaeus 1746 : 279) which concerns an (unnamed) species having "Habitat in Hortis oleraceis" is serving to add confusion.

5. Regardless of the uncertain factors mentioned above it will appear that Linnaeus in his first valid description of *Xylostella* did *not* incorporate Roesel's species, the Diamond-Backed moth ("*simillima* Roes . . .") under his own but chose the name *Xylostella* to indicate that the food plant of the species described was *Lonicera*, and not *Brassica*. Later on Linnaeus (1761 : 359) sharpened his

reference to be: "Habitat in Lonicera Xylostei foliis"—although still maintaining the reference number 909.

6. The reliability of specimens found in the Linnaean collection in London has been adequately discussed by Lindroth (1957 : 326) who states that "the original specimen may later have been substituted by another, in better condition, by Linné himself" . . . "Originally the insect collection was apparently arranged according to the 10th edition of *Systema Naturae* (1758) by Linné himself. Of the species described in this work, if present, one or two specimens are pinned through a label in Linné's handwriting, containing not only the species name but also its number of 1758. These specimens, especially when single, are more likely to represent true Linnaean types than any others" . . . "If description and 'authentic specimen' disagree, however, the former is decisive".

7. The only extant specimen of "xylostella" is established by Bradley as a lectotype. He thereby admits that there has been more than one specimen in the type lot of Linnaeus. This is probable as at least one specimen of the *Lonicera* feeding species would be expected to have been included. The "lectotype" bears a label in Linnaeus' handwriting stating its name but not the number of 1758. The other label stating a number (of 1767) is apparently added by someone else at a later date. The specimen belongs to Roesel's species, feeding on *Brassica*, and not to that feeding on *Lonicera*. The "lectotype" has, therefore, been chosen in contradiction to the written text by Linnaeus.

8. In a case with so much at stake as regards confusion in nomenclature, there cannot be sufficient reason to accept the alleged "lectotype" chosen by Bradley with the unfortunate result that a well-known universal agricultural pest has to change its name to one in general use for another species. As the original type material of *xylostella* Linnaeus, 1758, must be considered lost a neotype has to be designated.

9. As neotype I propose a Swedish male specimen bred from *Lonicera*. The specimen is labelled: "807-Suecia-Vb. Degerfors e.l. 12.7.1952. Ingvar Svensson", and its genitalia are mounted on a slide marked: "Genit. 3629 ♂ Niels L. Wolff". Both are kept in the Zoological Museum of Copenhagen.

10. To reach the solution necessary in the present case, I propose that the Commission should:

(1) Under the plenary powers set aside all type material of the species *Phalaena Tinea xylostella* Linnaeus, 1758, and having done so accept as a neotype of the species *xylostella* Linnaeus 1758, a Swedish male specimen bred from *Lonicera*. The specimen is labelled: "807-Suecia-Vb. Degerfors e.l. 12.7.1952. Ingvar Svensson", and its genitalia are mounted on a slide marked: "Genit. 3629 ♂ Niels L. Wolff". Both are kept in the Zoological Museum of Copenhagen;

(2) place on the Official List of Names in Zoology the names:

(a) *xylostella* Linnaeus, 1758, as published in the combination *Phalaena Tinea xylostella*, and defined under (1) above;

(b) *maculipennis* Curtis, 1832, as published in the combination *Plutella maculipennis*.

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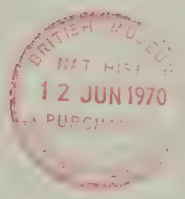

TATURA BUTLER [1888] (INSECTA, LEPIDOPTERA): REQUEST FOR A RULING ON THE TYPE-SPECIES. Z.N.(S.) 1912

By C. F. Cowan (*Little Gaddesden House, Berkhamsted, Herts., England*)

Godman & Salvin, 1887 (*Biol. Centr. Amer.*, Lepid., Rhop. **2** : 99), introduced the name *Theclopsis* for a new Neotropical genus with designated type-species *Thecla lebena* Hewitson, 1868, from Cayenne. These names are entirely valid and not here in question.

2. Butler [April, 1888] (*Proc. zool. Soc. Lond.* **1887** : 572), introduced the apparently new name *Tatura* when listing some African Lepidoptera, with no other data than the bare entry:

"*Tatura lebena* Hewitson, *Descr. Lyc.* p. 9, no. 21 (1868); *Ill. diurn. Lep.* p. 127, no. 202, pl. 51, figs. 266–7."

3. At first sight the monotypic *Tatura* Butler is a junior objective synonym of *Theclopsis* Godman & Salvin. But a lapsus has occurred. No collection from the Cameroons, as listed by Butler, could have contained a specimen of the Neotropical *Thecla lebena*.

4. Butler's *Tatura* was undoubtedly meant to apply to, and has since invariably been used for, the now well known *Hypolycaena lebona* Hewitson, 1865 [in 1863–1878], *Ill. diurn. Lep., Lyc.*: p. 51, pl. 23, from Old Calabar. Consulting Hewitson's Index (which is grouped by genera, not species), Butler must have failed to find *lebona* but noted *lebena* instead, given as page 127 and plate 51 (not p. 51 where *lebona* is), and, turning to that page, copied the references there given without checking either the appended description or the plates.

5. The name *Tatura* has been mentioned several times subsequently, each time as casually as the first, both by Butler and by Sharpe, in lists of African species published in the *Proc. zool. Soc. Lond.* (e.g. **1888** : 69, **1893** : 661, **1894** : 343, 569, **1898** : 370). On each occasion various species which are still classified as *Hypolycaena* were included, and the original lapsus naming *lebena* for *lebona* seems never to have been noted before now.

6. In the latest treatment of African Lycaenidae, Stempffer, 1967 (*Bull. Br. Mus. nat. Hist.* (Ent.) Suppl. 10 : 117), although not indexing the name, briefly mentions *Tatura* Butler, based on *H. lebona*, as a possible future subgeneric name under *Hypolycaena* sens. lat. The latter genus, typically Indo-Australian, will eventually require subdivision in Africa. Before then it is desirable to define *Tatura* Butler. No confusion has ever arisen over the name, which has been used exclusively for African species, and there is no present threat to stability.

7. The International Commission may consider that, in these circumstances, use of the plenary powers is not warranted; that *Tatura* Butler should stand with its accidental misnomer as type-species which makes it an invalid junior objective synonym of *Theclopsis* Godman & Salvin. No harm would result, and the field will be clear for future workers. The alternative, of correcting the lapsus, is requested formally below.

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

(1) to use its plenary powers to set aside all designations of type-species for the genus *Tatura* Butler [1888] and, having done so, to designate as the type-species of that genus the species *Hypolycaena lebona* Hewitson, [1865];

(2) to place on the Official List of Generic Names in Zoology the generic name *Tatura* Butler, [1888], *Proc. zool. Soc. Lond.* **1887** (4) : 572 (gender: feminine), type-species by designation under the plenary powers in (1) above, *Hypolycaena lebona* Hewitson [1865], *Ill. diurn. Lep., Lyc.* (2) : 51, pl. 23;

(3) to place on the Official List of Specific Names in Zoology the specific name *lebona* Hewitson [1865], as published in the binomen *Hypolycaena lebona* (type-species of *Tatura* Butler, 1888).

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CONTENTS

(*continued from front wrapper*)

Page

Opinions

Opinion 905 (*Polyxenus* Latreille, [1802–1803]) 6
Opinion 906 (*Nematus leachii* Dahlbom, 1835) 8
Opinion 907 (*Bicornes* Schuchert & LeVene, 1929) 10
Opinion 908 (*Crioceris* Müller, 1764, and *Lema* Fabricius, 1798) ... 12
Opinion 909 (*Receptaculites* Deshayes, 1828) 14
Opinion 910 (*Tellina gari* Linnaeus, 1758) 16
Opinion 911 (Six misidentified type-species in Muricacea) 20
Opinion 912 (*Gracillaria* Haworth, 1828) 27
Opinion 913 (*Crobylophorus chimaerae* Krøyer, 1852) 29
Opinion 914 (*Holothuria monacaria* Lesson, 1830, and *Holothuria umbrina* Rüppell & Leuckardt, 1828) 31
Opinion 915 (*Tetrahymena* Furgason, 1940) 33
Opinion 916 (*Fusulina gracilis* Meek, 1864) 39

New Cases

Application to fix the name of the type-species of the genus *Ampulla* Röding, 1798 (Gastropoda). (Harald A. Rehder) 41
Ametistina Schinz, 1825 (Gastropoda): Request for suppression under the plenary powers (A. G. Beu) 44
Maoritellina Finlay, 1927 (Bivalvia): Request for designation of a type-species (A. G. Beu, C. A. Fleming & P. A. Maxwell) 47
Gammarus aequicauda (Martynov, 1931) (Crustacea, Amphipoda): Request for preservation under the plenary powers (Jan. H. Stock) 49

CONTENTS

(*continued from inside back wrapper*)

Page

Littorina Férussac, 1822 (Gastropoda): Proposed designation of a type-species under the plenary powers (Dietrich Kadolsky) .. 51

Proposed use of the plenary powers to vary the neotype designated by Wind (1959) for *Echinocorys scutata* Leske, 1778 (Echinoidea) (N. B. Peake & R. V. Melville) 55

Phalaena Tinea xylostella Linnaeus, 1758 (Insecta, Lepidoptera): Designation of a neotype under the plenary powers (Niels L. Wolff) 60

Tatura Butler, [1888] (Insecta, Lepidoptera): Request for a Ruling on the type-species (C. F. Cowan) 63

Comments

Comments on the effect on Shark nomenclature if certain printed plates by Hemprich & Ehrenberg are accepted as being published in 1828 (J. A. F. Garrick) 2

Further comment on *Otiorhynchus* versus *Brachyrhinus* (R. T. Thompson) 3

Hyposmochoma Butler, 1881: Withdrawal of opposition (C. F. Cowan) 5

Support for suppression under the plenary powers of works by Müller, 1826, and 1828 (K. H. L. Key) 5

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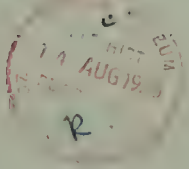

10*th August* 1970

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

Page

Notices prescribed by the International Congress of Zoology:

Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature* 65

Notices of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases 65

(*continued inside back wrapper*)

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BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 27, Part 2 (pp. 65–128, 1 pl.) 10*th August* 1970

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Suppression of *Salticus variegatus* Lucas, 1833; Designation of a type-species for *Phidippus* C. L. Koch, 1846 (Aranaea). Z.N.(S.) 1904
(2) Suppression of *Ammonites natrix* Schlotheim, 1820; Designation of a type-species for *Acanthopleuroceras* Hyatt, 1900 (Cephalopoda). Z.N.(S.) 1909
(3) Suppression of *Plautus* Brunnich, 1772 (Aves). Z.N.(S.) 1911
(4) Validation of neotype for *Hyocephalus aprugnus* Bergroth, 1906 (Insecta, Hemiptera). Z.N.(S.) 1916
(5) Designation of a type-species for *Mimecomutilla* Ashmead, 1903 (Insecta, Hymenoptera). Z.N.(S) 1917
(6) Suppression of *Zealandobates* Hammer, 1967 (Acari). Z.N.(S.) 1918
(7) Suppression of *Clavicera* Latreille, 1802 (Insecta, Hymenoptera). Z.N.(S.) 1919
(8) Designation of a neotype for *Saperda inornata* Say, 1824 (Insecta, Coleoptera). Z.N.(S.) 1921

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England
4 June 1970

MARGARET DOYLE
Scientific Assistant,
International Commission on
Zoological Nomenclature

ADDITIONAL COMMENT ON *RANA MACULATA Z.N.(S.) 1705*

By Hobart M. Smith (*Department of Biology, University of Colorado, Boulder*) and John D. Lynch (*Department of Zoology, University of Nebraska, Lincoln*)

The alternative (Sabrosky, 1969, *Bull. Zool. Nomencl.* **26** : 119–120) to the request (Smith, Lynch, and Reese, 1966, *Bull. Zool. Nomencl.* **23** : 169–173) for suppression of *Rana maculata* Daudin, 1801, for purposes of both the Law of Priority and the Law of Homonymy is predicated, apparently, on two premises: (1) assumption that there is indeed a significantly greater entrenchment of the name *Rana macroglossa* Brocchi, 1877, than of *Rana maculata* Brocchi, 1877, and that therefore *Rana macroglossa* Brocchi should be restored to usage despite the actions of Smith, Lynch and Reese (*loc. cit.*) to prevent it; and (2) perhaps, assumption that punitive measures are justified against those who use nomenclatural devices (*e.g.*, in this case, a prejudicial lectotype designation) that would limit the alternatives otherwise available to the Commission in dealing with any given case.

We object to both premises. There are very few uses of the name *Rana macroglossa* Brocchi; it was in fact not used after Brocchi at all until 1941 (Schmidt and Stuart, *Zool. Ser. Field Mus. Nat. Hist.* **24** : 239–241), and there had not been as many as ten usages as an accepted name by 1959 (it has been used about the same number of times since then). For that reason Smith (1959, *Herpetologica* **15** : 212–216) did not regard "stability of nomenclature" as a significant factor in weighing the pros and cons of choosing between the simultaneously-published names *Rana macroglossa* Brocchi, 1877, and *Rana maculata* Brocchi, 1877 (he was not then aware of the existence of *Rana maculata* Daudin, 1801, which as explained in Smith, Lynch and Reese, *loc. cit.*, is mentioned in none of the several standard, pertinent catalogs). In view of the difficult taxonomy of these frogs, the factors that were considered decisively significant in making the choice between *macroglossa* and *maculata* were: (1) that *maculata* was based upon three specimens from a relatively precise locality (Totonicapam, Guatemala), whereas *macroglossa* was based upon three syntypes from a grossly imprecise locality, "Plateau of Guatemala"; and (2) that there was unambiguous certainty of application of the name *maculata*, whereas there was ambiguous uncertainty of application of the name *macroglossa*, through multiple species-representation among the syntypes. Kellogg (1932, *Bull. U.S. Nat. Mus.* 160–206), in redescribing the types of both nominal species, was emphatic that at least some of the syntypes of *macroglossa* represented another species, *Rana pipiens* Schreber. Even Schmidt and Stuart (*loc. cit.*) stated, in reference to Brocchi's *macroglossa* and *maculata*, that "at the present, however, their status is uncertain, and it is only provisionally that we refer these specimens [of their own collection, from Guatemala] to *macroglossa*". Their criteria for selection of *macroglossa* rather than *maculata* were actually invalid (size and shape of tongue), also.

The surmise relative to multiple species-representation among the syntypes of *macroglossa* was upheld by Lynch's re-examination of them (Smith, Lynch and Reese, *loc. cit.*). Again influenced by the explicitly clear application and type-locality of Brocchi's *maculata*, the nomenclatural arrangement suggested by Smith (1959, *loc. cit.*) was endorsed, although elimination of *macroglossa* from the picture of nomenclatural confusion was effected by restriction of the name to a lectotype belonging to the species named long before as *Rana pipiens* Schreber, 1782. This step was taken to eliminate at once the confusion that might persist in weighing the relative merits of the names *macroglossa* and *maculata* of Brocchi, again acting in the interests of clarity and stability of nomenclature.

Since 1959 the name *Rana maculata* Brocchi has been used about a half dozen times; it was used twice (1884, 1904) prior to that date, after Brocchi, at least in the Mexican literature. *R. macroglossa* was not used at all, after Brocchi, so far as we are aware, until 1941, and since then has been used no more than about 20 times. An extensive unpublished review of the group by one of us (Lynch) does not support Stuart's contention (1963, *Misc. Publ. Mus. Zool. Univ. Michigan* **122** : 45) that certain subspecies recognized by Smith (1959, *loc. cit*) are invalid, or that Schmidt and Stuart (*loc. cit.*)

acted as first revisers (preceding Smith, 1959) in selecting *macroglossa* over *maculata*. Those authors (Schmidt and Stuart), as indicated above, did not assume *macroglossa* and *maculata* as synonymous, whereas Smith (1959) explicitly did.

The alternative proposed (Sabrosky, *loc. cit.*) to the request by Smith, Lynch and Reese (*loc. cit.*) requires a triple action by the Commission: (1) suppression of *Rana maculata* Daudin, 1801, for purposes of the Law only of Priority; (2) suppression of the lectotype designation by Smith, Lynch and Reese (*loc. cit.*) for *Rana macroglossa* Brocchi, 1877; and (3) designation of an alternate lectotype for the latter species. These actions will also substitute a name (*Rana macroglossa* Brocchi) imprecisely fixed by locality for a name (*Rana maculata* Brocchi) precisely fixed by locality.

Since the original Smith, Lynch and Reese request (*loc. cit.*) (1) achieves nomenclatural stability by a single action by the Commission (suppression of *Rana maculata* Daudin, 1801, for purposes of both the Law of Priority and the Law of Homonymy), (2) retains the preciseness of fixation by type locality of *Rana maculata* Brocchi,[1] (3) has reasonable supportive usage and (4) does not violate real "entrenchment" of any name, it seems clearly preferable to the alternative proposed, particularly since the only purported, non-punitive reason for suggestion of that alternative (significant entrenchment of the name *Rana macroglossa* Brocchi) is non-existent.

COMMENT ON THE REQUEST FOR VALIDATION OF *MUREX LOTORIUM* LINNAEUS, 1758 (GASTROPODA) IN ITS ACCUSTOMED SENSE. Z.N.(S.)1886

(see volume 26, pages 174–176)

By Harald A. Rehder (*Smithsonian Institution, Washington, D.C., U.S.A.*)

I support the request of Dr. A. G. Beu to validate the name *Murex lotorium* Linnaeus, 1758, in the sense in which it has been used by almost all recent workers.

2. To strengthen Dr. Beu's case I would like to point out two facts not mentioned by him in his application.

3. The first is that Linnaeus placed a question mark after his citation of Argenville's figure M of plate 13. This would indicate that Linnaeus himself was doubtful of the suitability of this figure which actually represents his *Murex pileare*, for the species he was describing as *lotorium*.

4. Secondly, it should be pointed out that in the twelfth edition of his *Systema Naturae* (1767) Linnaeus added as a figure citation Rumphius, pl. 26, figure B, again, however followed by a question mark: this figure unquestionably represents the *Murex lotorium* of authors. In Linnaeus' personal interleaved and annotated copy of his twelfth edition we find, according to Dodge (1957 : 114), that he substituted figure B for figure M in the Argenville reference, removed the question mark, and also removed the question mark from the Rumphius figure. Both of these now unquestioned figures depict the *Murex lotorium*, now *Cymatium lotorium* (Linnaeus, 1758).

5. I would suggest that Beu's statement, made in his paragraph 4, that *Murex lotorium* Linnaeus and *Murex pileare* Linnaeus should be regarded as synonyms, cannot be upheld if this premise is based solely on a figure whose applicability to the species in question (i.e. *lotorium*) Linnaeus himself doubted. It is moreover, in apposition to his request for the validation of *Murex lotorium* in its accustomed sense.

6. It is my feeling that the binomen (*Murex lotorium*) and the species to which it has been generally applied should be interpreted by the figures cited above that Linnaeus used in his annotated copy of the twelfth edition of the *Systema Naturae*.

7. It might be added that Emerson and Old (*American Museum Novitates*, 2137 : 5) have pointed out that *Cymatium rhinoceros* Röding, 1798, is the oldest junior synonym of *Murex lotorium* Linnaeus.

[1] There is no provision in the Code justifying the determination of the meaning of a species-group name by reference to a type-locality. Ed.

PAPILIO SEBRUS HUEBNER 1824/26 (LEPIDOPTERA, LYCAENIDAE): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.)1848. SUPPLEMENTARY NOTE

By N. D. Riley and L. G. Higgins

In a footnote to the above application (1969, *Bull. Zool. Nomen.* **26** : 37) we referred to certain evidence brought to our notice by Dr. Perkins as a result of his examination of various Huebnerian manuscripts. On further examination of these, jointly with him, we are convinced that our statement that the "type locality of Huebner's *Papilio sebrus* was Provence" is not justified.

This statement was questioned by Dr. Lemche in a letter to the Commission, in which he expressed the view that the type locality of a butterfly known in Europe only from the south-east could not possibly be Provence. Our statement derived from the examination of a small scrap of paper, in the Library of the Royal Entomological Society, on which Geyer had traced the four figures which were later published as figures 851 to 854 on plate 172 of Huebner's *Sammlung Europäischer Schmetterlinge*. Boldly written in ink above the four figures in Geyer's hand is the heading 'Lep. Pap. Gent. Agr. Adol. Acis', and below, the single work 'Provence'. In the margin on the left '*sebrus*' is written in pencil in a different hand.

The drawing for figure 851 shows a specimen with rays running from the margins inwards between the veins, a fairly wide marginal border (indicated by double lines) and a transverse mark at the cell end. These characters are specific to our species B (*decoloratus* of our Application) and are not found in species A (our *osiris*). The drawing for figure 854 (the underside) is that of an *Everes*, to which genus *decoloratus* belongs. The drawings which became figures 852 and 853 do not concern us. They were not named on the published plate. Whether they represent *acis* or not is a matter of opinion.

The next figures of importance are on Huebner's Pattern Plates now preserved in the Library of the British Museum (Natural History). Figure 851, so numbered in this set of coloured engravings, has the left wings light blue, the right wings darker, slightly violet (an attempt to differentiate between light effects), forewings with a cell-bar, both wings with definite dark margins and rays between the veins. These are the characters of species B (*decoloratus*). However, against this figure in Herrich-Schaeffer's writing there is a note in ink which reads: 'Unkenntlich. Etwas kleiner. Flügel schmäler, nicht so spitz. Blau rechts gar zu violet. Franzen zu lang weiss. Saum fein schwarz, kein schwarzen Stralen, noch ein Mm [Mittelmond]'. These instructions to the colourist must have been written by Herrich Schaeffer in about 1842 when he assumed publication and distribution of Huebner's works. They appear in print with very little alteration in his *Schmetterlinge von Europa* (1844, **1** : 116). Herrich Schaeffer's instructions in effect, therefore, ask the artist to convert species B into species A, which largely accounts for the practical impossibility of identifying figure 851 in most copies of Huebner's *Sammlung* with any degree of certainty. We have examined six copies of Huebner's *Sammlung* and found only two versions of the critical figure 851 recognisably the same as that of the pattern plate. The lack of rays between the veins and of the bar at the end of the cell are specific to our species A (*osiris*); their presence is characteristic of species B (*decoloratus*).

For these reasons we are convinced therefore that the species originally illustrated was our species B (*decoloratus*). We regret that we did not make this point clear in our original application.

Having established the identity of Huebner's *sebrus* (figure 851) we can revert to the question of its type locality. To us it seems evident that originally all four figures were thought by Geyer to represent *acis* (i.e. *semiargus*), which is widespread in France and for which Provence would be an appropriate type locality. Subsequently it was realised that figures 851 and 854 did not represent the same species as figures 852 and 853 whereupon they were named *sebrus*. This latter species is eastern in

distribution and not known to extend into Europe beyond Lower Austria and Fiume, whence it could well have been obtained by Escher who, as noted by Geyer on the slip of paper bearing his tracings, supplied him with these specimens. It is highly improbable that they came from Provence, where the species has never been taken. However, should the Commission accept our application, the question of the type locality of Huebner's *sebrus* becomes largely immaterial, as the name will become invalid. Our original application to the Commission needs no amendment, apart from the cancellation of the footnote.

THE CASE OF *PAPILIO AGLAJA* LINNAEUS. Z.N.(S.)1791

(see volume 24, pages 186–189; volume 25, pages 68–71; volume 26, pages 2–6, 186)

By Curtis W. Sabrosky (*Systematic Entomology Laboratory, Agr. Res. Serv., U.S. Dept. of Agriculture, Washington, D.C.*)

I cannot refrain from pointing out that much of the argument by dos Passos and Warren (*Bull. Zool. Nomencl.* **25** : 68–71) and by Cowan and by Riley and Higgins (*Bull. Zool. Nomencl.* **26** : 2–6) is unjustified and unnecessary. The "first reviser" rule does not require that such action take place in a work that is, taken as a whole, a revision, however that term may be defined. The rule, Article 24a(i), covers any instance where an author has noted simultaneous publication of two or more names that are either identical or synonymous, and has clearly chosen one over the other(s). With respect to those particular names, such author is a reviser, whether he published in a "revision" or in a two-line note. The question of whether Linnaeus' 12th edition is or is not a "revision" is totally irrelevant, but there is no question that Linnaeus in that 1767 work was a reviser—and apparently the first—of the *Papilio aglaja* situation.

DATES OF SEPARATA: A COMMENT ON FINLAY'S WORKS ON NEW ZEALAND MOLLUSCA. Z.N.(S.)1868

(see volume 26, pages 42–50, 184–185)

By Curtis W. Sabrosky (*Systematic Entomology Laboratory, Agr. Res. Serv., U.S. Dept. of Agriculture, Washington, D.C.*)

On occasion, it may be necessary or desirable for the Commission to rule arbitrarily on the relative priority to be accorded two or more works for which exact dates of publication cannot be determined. However, when evidence exists, as it does for the separata of Finlay's works, I favour letting the evidence prevail. There are innumerable instances of advance distribution of separata, and too many complications are possible, e.g., a considerable interval of time may elapse before publication of a complete volume, and works may even be cited by other authors between separata and complete volume, or the complete volume may never appear.

As far as I can determine, the difference in dates makes no difference in the molluscan problems presented in the applicant's part B. Let us leave the facts of publication as they are.

OPINION 917

CYATHOCRINITES MILLER, 1821 (CRINOIDEA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Cyathocrinites* Miller, 1821, made prior to the present Ruling, are hereby set aside, and the nominal species *Cyathocrinites planus* Miller, 1821, is hereby designated to be the type of that genus.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Cyathocrinites* Miller, 1821 (gender: masculine), type-species, by designation under the plenary powers in (1) above, *Cyathocrinites planus* Miller, 1821 (Name No. 1914);

(b) *Temnocrinus* Springer, 1902 (gender: masculine), type-species, by original designation, *Cyathocrinites tuberculatus* Miller, 1821 (Name No. 1915).

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

(a) *planus* Miller, 1821, as published in the binomen *Cyathocrinites planus* (type-species of *Cyathocrinites* Miller, 1821) (Name No. 2397);

(b) *tuberculatus* Miller, 1821, as published in the binomen *Cyathocrinites tuberculatus* (type-species of *Temnocrinus* Springer, 1902) (Name No. 2398).

HISTORY OF THE CASE (Z.N.(S.) 1795)

The present case was submitted to the office of the Commission by Prof. N. Gary Lane in March 1967. Prof. Lane's application was sent to the printer on 3 May 1967 and was published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 237–238. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The proposals were supported by Dr. Porter M. Kier and Dr. John W. Koenig. Dr. Henning Lemche commented as follows:

"It seems to me that there is no case at all concerning *Cyathocrinites*. The alleged type designation by Roemer does not state that he (Roemer) did consider *Cyathocrinus tuberculatus* as type. To do so, Roemer should have written '—indem ich—' (= '—since I—') and not have used the third person word 'man', which latter does not convey the necessary authority to the statement. So, I propose that the Commission simply confirms that Roemer's action did not constitute a type-selection—which would solve our immediate problem.

"If, however, Roemer did select many types in the same manner, and his actions have been accepted by others, it might perhaps become necessary some day for the Commission, under the plenary powers, to rule that his action is to be taken as valid in some specified cases. But that possibility does not affect the present case.

"The formal proposals, according to this viewpoint, would need correction as follows:

(1) Place the following names on the Official List of Generic Names in Zoology:

(a) *Cyathocrinites* Miller, 1821 (gender: masculine), type-species as designated by Wachsmuth & Springer, 1880, *Cyathocrinus planus* Miller, 1821;

(b) *Temnocrinus* Springer, 1902 (gender: masculine), type-species by original designation, *Cyathocrinites tuberculatus* Miller, 1821.

(2) Lane's proposal (3), unaltered."

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)30, in part 1 either for or against the proposition that Roemer validly designated the type-species of *Cyathocrinites*, and in part 2 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 238. At close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Part 1. Affirmative votes—nine (9), received in the following order: China, Holthuis, Obruchev, Melville, Alvarado, Sabrosky, Mertens, Kraus, Ride.

Negative votes—seven (7): Lemche, Vokes, Mayr, Starobogatov, Binder, do Amaral, Forest.

Part 2. Affirmative votes—fourteen (14): China, Holthuis, Lemche, Eisenmann, Vokes, Mayr, Obruchev, Melville, Alvarado, Binder, Sabrosky, Kraus, Forest, Ride.

Negative votes—two (2): Starobogatov, Mertens.

On Leave of absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioners Brinck and Jaczewski returned late affirmative votes in parts 1 and 2. Mr. Eisenmann abstained from voting in part 1. The following comments were made by Commissioners in returning their voting papers:

Mr. E. Eisenmann (1.vii.69): "Lane's translation of the German seems adequate, and were it English I would consider Roemer's phraseology a modest way of selecting a type. However Lemche may be right, for the overtones and subtleties of German usage are beyond my competence. Rather than make a decision that could affect other cases, I prefer to avoid voting on part 1, but favor use of the plenary powers under part 2".

Prof. Ernst Mayr (22.vii.69): "I vote for use of the plenary powers in part 2. The reason being that the Wachsmuth and Springer designation is not much better than Roemer's designation of 1851. All they said was 'ought to be the type of the genus'. No [Ashmolean] specimen can be the 'type of the genus'—it is better to eliminate all past uncertainty and set aside all previous designations in favor of *planus*."

Mr. R. V. Melville (29.vii.69): "I think Dr. Lemche will find that many designations of type-species have been made (and subsequently confirmed by usage) in impersonal English, French or German, and such forms of expression ought not to be criticized simply because the first personal pronoun has not been used."

Dr. C. W. Sabrosky (28.viii.69): "In my opinion, Roemer's action falls under Art. 69a(iii). He said 'since' not 'if', and his 'man . . . betrachtet' is merely a roundabout way of saying that *tuberculatus* was then being accepted as type-species of *Cyathocrinites*."

Prof. Per Brinck (22.ix.69): "It has been an act of humility not to write 'I' for centuries, and it is still so for many (people and languages), so I doubt whether it is wise to invalidate the type designation for such a semantic reason."

Original References

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

Cyathocrinites Miller, 1821, *Nat. Hist. Crinoidea*: 85
planus, *Cyathocrinites*, Miller, 1821, *Hist. Nat. Crinoidea*: 85
tuberculatus, *Cyathocrinites*, Miller, 1821, *Hist. Nat. Crinoidea*: 88
Temnocrinus Springer, 1902, *Am. Geol.* **30** : 94.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)30 were cast as set out above, that the proposal contained in part 2 of that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 917.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
4 *December* 1969

OPINION 918

THREE EDITIONS OF A WORK BY O. F. MÜLLER: SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following papers by O. F. Müller are hereby suppressed:

(a) Efterretning om ubekiendte Een-Øyer i vore færske Vande. *Kiøbenhavnske Efterretninger om lærde Sager*. II. Haefte No. 52, 28 Decbr. 1769;

(b) Efterretning om ubekiendte Een-Øyer i vore færske Vande. *Kritisk Journal*, Kiøbenhavn. Nr. 3, 1770;

(c) Monoculi Aquarum agri Fridrichsdalensis. *Gazette Littéraire de Berlin*, 1770.

(2) The following works, as suppressed under the plenary powers in (1) above, are hereby placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature with the Title Numbers specified:

(a) O. F. Müller, Efterretning om ubekiendte Een-Øyer i vore færske Vande. *Kiøbenhavnske Efterretninger om lærde Sager*. II. Haefte No. 52, 28 Decbr. 1769 (Title No. 76);

(b) O. F. Müller, Efterretning om ubekiendte Een-Øyer i vore færske Vande. *Kritisk Journal*, Kiøbenhavn. Nr. 3, 1770 (Title No. 77);

(c) O. F. Müller, Monoculi Aquarum agri Fridrichsdalensis. *Gazette Littéraire de Berlin*, 1770 (Title No. 78).

HISTORY OF THE CASE (Z.N.(S.) 1797)

The present case was submitted to the office of the Commission by Dr. Ulrik Røen in March 1967. Dr. Røen's application was sent to the printer on 3 May 1967 and was published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 244–245. Public Notice of the possible use of the plenary powers was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The application was supported by Dr. Torben Wolff (*Bull. zool. Nomencl.* **24** : 245).

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)32 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 244–245. At the close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Affirmative votes—sixteen (16), received in the following order: China, Lemche, Jaczewski, Vokes, Mayr, Obruchev, Melville, Alvarado, Starobogatov, Binder, Sabrosky, Mertens, do Amaral, Kraus, Forest, Ride.

Negative votes—one (1): Holthuis.

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioner Brinck returned a late affirmative vote and Commissioner Eisenmann abstained from voting. The following comments were made by Commissioners in returning their voting papers:

Dr. L. B. Holthuis (24.vi.69): "I can see no good reason to reject the names *Cythere* O. F. Müller, 1769, for *Cythere* O. F. Müller, 1785: *Lynceus* O. F. Müller, 1769, for *Lynceus* O. F. Müller, 1776 (not 1785 as Dr. Røen has it); *Cyclops* O. F. Müller, 1769, for *Cyclops* O. F. Müller, 1776, and *Polyphemus* O. F. Müller, 1769, for *Polyphemus* O. F. Müller, 1776.

"The change in only the date of these names cannot cause any nomenclatural confusion, and is only beneficial to their stability, as the chances that older synonyms will be found are diminished by it.

"Further, O. F. Müller (1785, *Entomostraca seu Insecta testacea*: 3, footnote) duly refers to the older (1769 and 1770) papers, and anybody using his 1785 work should know about these earlier works; so there is no good reason why they should be overlooked and ignored. In the same footnote Müller refers to a paper which he cited 'Act. Societ. Londinensis, vol. 61, 1772'*, which might therefore also contain the same descriptions as given in his 1769 and 1770 papers (I have not consulted this work so that I am not certain). Suppression of Müller's 1769 and 1770 works might still leave any eventual 1772 names valid.

"Dr. Røen's argument, that the descriptions given by Müller in 1769 are very poor, seems hardly adequate, since they hardly can be shorter than the diagnoses that Müller gave in his 1776 Prodromus, where the descriptions of *Cyclops* and *Lynceus* each consist of only four words. (I have not consulted any of the 1769 or 1770 papers, so that I may be wrong here.)

"All in all, I believe that there is no advantage in suppressing the 1769 and 1770 papers by Müller as requested by Dr. Røen."

Mr. E. Eisenmann (11.vii.69): "As the application fails to state what the effect of recognition of the earlier Müller works would be on current nomenclature, beyond the generalization that change of date would be 'disturbing', I prefer not to vote—considering the application inadequate."

CERTIFICATE

We certify that the votes cast on Voting Paper (69)31 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 918.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
4 *December* 1969

* The paper cited is *Philos. Trans. roy. Soc. London* **61** : 230–246, Tab. VII. The four generic names here concerned are not mentioned in that paper.—Assistant Secretary

OPINION 919

LYRODON KEFERSTEINI MÜNSTER, 1837 (PELECYPODA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *raibeliana* Boué, 1835, as published in the binomen *Cryptina raibeliana*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *raibeliana* Boué, 1835, as published in the binomen *Cryptina raibeliana* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 938.

(3) The specific name *kefersteini* Münster, 1837, as published in the binomen *Lyrodon kefersteini*, as interpreted by the lectotype designated by N. Fantini Sestini, 1967, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2399.

HISTORY OF THE CASE (Z.N.(S.) 1800)

The present case was submitted to the office of the Commission by Dr. N. Fantini Sestini in April 1967. The application was sent to the printer on 3 May 1967 and was published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 248–249. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)32 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 249. At the close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Affirmative votes—sixteen (16), received in the following order: China, Holthuis, Lemche, Eisenmann, Vokes, Jaczewski, Mayr, Obruchev, Melville, Alvarado, Binder, Mertens, do Amaral, Kraus, Forest, Ride.

Negative votes—two (2): Starobogatov, Sabrosky.

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioner Brinck returned a late affirmative vote. In returning his Voting Paper Dr. Sabrosky made the following comment: "I cannot bring myself to vote in favour of the flagrant disregard of Boué's perfectly acceptable name, backed up by Alberti (1864)."

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

kefersteini, *Lyrodon*, Münster, 1837, *in* Goldfuss, *Petref. German.* **2** : 199, pl. 136, figs. 2a, b

raibeliana, *Cryptina*, Boué, 1835, *Mem. Soc. géol. France* **2** : 47, pl. 4, figs. 8a–f.

The following is the original reference for the designation of a lectotype for a nominal species concerned in the present Ruling:

For *Lyrodon kefersteini* Münster, 1837: N. Fantini Sestini, 1967, *Bull. zool. Nomencl.* **24** : 249, pl. 2.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)32 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 919.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
8 *December* 1969

OPINION 920

INUUS FUSCATUS BLYTH, 1875 (MAMMALIA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *speciosus* I. Geoffroy, 1826, as published in the binomen *Macacus speciosus*;

(b) *japonicus* [Rennie], 1838, as published in the binomen *Papio japonicus*.

(2) The specific name *fuscatus* Blyth, 1875, as published in the binomen *I*[*nuus*] *fuscatus*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2400.

(3) The following specific names, as suppressed under the plenary powers in (1) above, are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *speciosus* I. Geoffroy, 1826, as published in the binomen *Macacus speciosus* (Name No. 939);

(b) *japonicus* [Rennie], 1838, as published in the binomen *Papio japonicus* (Name No. 940).

HISTORY OF THE CASE (Z.N.(S.) 1802)

The present case was submitted to the office of the Commission by Dr. Jack Fooden in May 1967. Dr. Fooden's application was sent to the printer on 6 July 1967 and was published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 250–251. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184).

The proposals were supported by Dr. John R. Napier, P. H. Napier, and Colin P. Groves (*Bull. zool. Nomencl.* **25** : 134), Dr. D. P. Erdbrink and Dr. C. J. Jolly.

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)33 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 250–251. At the close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Affirmative votes—eighteen (18), received in the following order: China, Holthuis, Lemche, Eisenmann, Vokes, Mayr, Obruchev, Melville, Alvarado, Starobogatov, Jaczewski, Binder, Sabrosky, do Amaral, Mertens, Kraus, Forest, Ride.

Negative votes—none (0).

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioner Brinck returned a late affirmative vote.

ORIGINAL REFERENCES

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

fuscatus, *I*[*nuus*], Blyth, 1875, *J. asiat. Soc. Bengal* **1875** (2) : 6

japonicus, *Papio*, [Rennie], 1838, *The Menageries. Nat. Hist. Monkeys, Oppossums and Lemurs* **1** : 364, 396

speciosus, *Macacus*, I. Geoffroy, 1826, *Dict. class. Hist. nat.* **9** : 589.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)33 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 920.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
8 *December* 1969

OPINION 921

PLETHODONTIDAE IN PISCES AND AMPHIBIA: REMOVAL OF HOMONYMY UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers it is hereby Ruled that PLETHODIDAE is to be accepted as the correct spelling of the family-group name based on *Plethodus* Dixon, 1850.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Plethodon* Tschudi, 1838 (gender: masculine), type-species, by designation by Bibron, 1839, *Salamandra glutinosa* Green, 1818 (Class Amphibia) (Name No. 1916);

(b) *Plethodus* Dixon, 1850 (gender: masculine), type-species, by designation by Woodward, 1899, *Plethodus expansus* Dixon, 1850 (Class Pisces) (Name No. 1917).

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

(a) *glutinosa* Green, 1818, as published in the binomen *Salamandra glutinosa* (type-species of *Plethodon* Tschudi, 1838) (Class Amphibia) (Name No. 2401);

(b) *expansus* Dixon, 1850, as published in the binomen *Plethodus expansus* (type-species of *Plethodus* Dixon, 1850) (Class Pisces) (Name No. 2402).

(4) The following family-group names are hereby placed on the Official List of Family-Group Names in Zoology with the Name Numbers specified:

(a) PLETHODONTIDAE J. E. Gray, 1850 (type-genus *Plethodon* Tschudi, 1838) (Class Amphibia) (Name No. 449);

(b) PLETHODIDAE Loomis, 1900 (type-genus *Plethodus* Dixon, 1850) (Class Pisces) (Name No. 450).

(5) The family-group name PLETHODONTIDAE Hay, 1929 (type-genus *Plethodus* Dixon, 1850) (Ruled under the plenary powers to be an incorrect spelling for PLETHODIDAE Loomis, 1900) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name No. 454).

HISTORY OF THE CASE (Z.N.(S.) 1803)

The present case was submitted to the office of the Commission by Dr. Bruce B. Collette and Dr. David B. Wake in May 1967. The application was sent to the printer on 6 July 1967 and was published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 252–254. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The proposals were supported by Prof. Hobart M. Smith and by the Nomenclature Committee of the American Society of Ichthyologists and Herpetologists.

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)34 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 253. At the close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Affirmative votes—eighteen (18), received in the following order: China, Holthuis, Lemche, Eisenmann, Vokes, Mayr, Obruchev, Alvarado, Starobogatov, Melville, Jaczewski, Binder, Sabrosky, Mertens, do Amaral, Kraus, Forest, Ride.

Negative votes—none (0).

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioner Brinck returned a late affirmative vote.

Original References

The following are the original references for names placed on the Official Lists and Index by the Ruling given in the present Opinion:

expansus, *Plethodus*, Dixon, 1850, *Geol. Foss. Tertiary & Cretaceous Sussex*: 394.

glutinosa, *Salamandra*, Green, 1818, *J. Acad. nat. Sci. Philad.* **1** (2) : 357

PLETHODIDAE Loomis, 1900, *Palaeontographica* **46** : 229

Plethodon Tschudi, 1838, *Classification der Batrachier* [*Mém. Soc. Sci. nat. Neuchâtel* **2** (1840)] : 92

PLETHODONTIDAE J. E. Gray, 1850, *Cat. Amphibia Brit. Mus.* II, Batrachia gradientia: 31

PLETHODONTIDAE Hay, 1929, *2nd. Bibliography & Cat. foss. Verts. N. Amer.* **1** : 736

Plethodus Dixon, 1850, *Geol. Foss. Tertiary & Cretaceous Sussex*: 394.

The following are the original references for the designation of type-species for genera concerning in the present Ruling:

For *Plethodon* Tschudi, 1838: Bibron, 1839, *in* Bonaparte, *Icon. Fauna Ital.* **2** (26), sign. 131**, *Euproctus platycephalus* [4]

For *Plethodus* Dixon, 1850: Woodward, 1899, *Ann. Mag. nat. Hist.* (7) **3** : 354.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)34 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 921.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
9 *December* 1969

OPINION 922

CHARAXES IOCASTE BUTLER, 1865 (INSECTA, LEPIDOPTERA): REJECTED AS AN UNAVAILABLE NAME

RULING.—(1) The specific name *iocaste* Butler, 1865, as published in the binomen *Charaxes iocaste*, is hereby rejected as unavailable, being based only on a type locality.

(2) The specific name *achaemenes* Felder, 1866, as published in the binomen *Charaxes achaemenes*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2403.

HISTORY OF THE CASE (Z.N.(S.) 1806)

The present case was submitted to the office of the Commission as a request for suppression under the plenary powers of *Charaxes iocaste* Butler, 1865, by Dr. V. G. L. van Someren in June 1967. Dr. van Someren's application was sent to the printer on 6 July 1967 and was published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 255–256. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The proposals were supported by Dr. T. H. E. Jackson. Dr. C. W. Sabrosky (*Bull. zool. Nomencl.* **24** : 332) argued that *Charaxes iocaste* Butler was not an available name.

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)35, in part 1 to decide whether *Charaxes iocaste* Butler, 1865, is or is not an available name, and in part 2, (in case a majority of the Commission decided that it is an available name) either for or against the plenary powers to suppress *Charaxes iocaste* Butler, 1865. At the close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Part 1. Affirmative votes—one (1): Alvarado.

Negative votes—seventeen (17), received in the following order: China, Holthuis, Lemche, Eisenmann, Vokes, Mayr, Obruchev, Melville, Starobogatov, Binder, Sabrosky, Mertens, do Amaral, Jaczewski, Kraus, Forest, Ride.

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioner Brinck returned a late negative vote in part 1. The result of voting in part 2 of Voting Paper (69)35 is irrelevant since the Commission decided by seventeen votes to one that the name *Charaxes iocaste* Butler is not available.

The following comments were made by Commissioners in returning their votes:

Prof. E. Mayr (22.vii.69): "Locality has never been considered as a qualifying indication (see Art. 16b(i))".

Prof. P. Brinck (22.ix.69): "It has been stated several times that localities and habitats are not 'indications', so why in this case? The group description is *per se* insufficient for validation of *iocaste*."

Original Reference

The following is the original reference for the name placed on the Official List by the Ruling given in the present Opinion:

achaemenes, Charaxes, Felder, 1866, *Reise ost. Freg. Novara*, Zool. Lepid. **2** : 446.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)35 were cast as set out above, that the proposal contained in part 1 of that Voting Paper has been duly adopted, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 922.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
9 *December* 1969

OPINION 923

ARGYNNIS CHLORODIPPE VILLIERS & GUENÉE, 1835 (INSECTA, LEPIDOPTERA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *chlorodippe* Villiers & Guenée, 1835, as published in the binomen *Argynnis chlorodippe*, is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy.

(2) The specific name *chlorodippe* Herrich-Schaeffer, 1851, as published in the binomen *Argynnis chlorodippe*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2404.

(3) The specific name *chlorodippe* Villiers & Guenée, 1835, as published in the binomen *Argynnis chlorodippe* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 941.

HISTORY OF THE CASE (Z.N.(S.) 1801)

The present case was submitted to the office of the Commission by Mr. N. D. Riley in May 1967. Mr. Riley's application was sent to the printer on 6 July 1967 and was published on 7 December 1967 in *Bull. zool. Nomencl.* **24** : 290. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to eight entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)36 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 290. At the close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Affirmative votes—sixteen (16), received in the following order: China, Holthuis, Lemche, Eisenmann, Vokes, Mayr, Obruchev, Melville, Alvarado, Binder, Mertens, do Amaral, Jaczewski, Kraus, Forest, Ride.

Negative votes—two (2): Starobogatov, Sabrosky.

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioner Brinck returned a late affirmative vote.

Original References

The following are the original references for the names placed on the Official List and Index by the Ruling given in the present Opinion:

chlorodippe, *Argynnis*, Herrich-Schaeffer, 1851, *Syst. Schmett. Europe* **6** : 5

chloridippe, *Argynnis*, Villiers & Guenée, 1835, *Tab. syn. Lep. Europe*: 56.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)36 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 923.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
10 *December* 1969

OPINION 924

TEREBRATULINA D'ORBIGNY, 1847 (BRACHIOPODA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Terebratulina* d'Orbigny, 1847, made prior to the present Ruling, are hereby set aside, and the nominal species *Anomia retusa* Linnaeus, 1758, is hereby designated to be the type-species of that genus.

(2) The generic name *Terebratulina* d'Orbigny, 1847 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Anomia retusa* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1918.

(3) The specific name *retusa* Linnaeus, 1758, as published in the binomen *Anomia retusa* (type-species of *Terebratulina* d'Orbigny, 1847) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2405.

HISTORY OF THE CASE (Z.N.(S.) 1809)

The present case was submitted to the office of the Commission by Dr. C. H. C. Brunton and Dr. L. R. M. Cocks in June 1967. The application was sent to the printer on 6 July 1967 and was published on 7 December 1967 in *Bull. zool. Nomencl.* **24** : 294–296. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to four specialist serials. No comment was received.

DECISION OF THE COMMISSION

On 16 June 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)37 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 295. At the close of the prescribed voting period on 16 September 1969 the state of the voting was as follows:

Affirmative votes—eighteen (18), received in the following order: China, Holthuis, Lemche, Eisenmann, Vokes, Mayr, Obruchev, Melville, Alvarado, Starobogatov, Binder, Sabrosky, Mertens, do Amaral, Jaczewski, Kraus, Forest, Ride.

Negative votes—none (0).

On Leave of Absence—one (1): Tortonese.

Voting Papers not returned—four (4): Bonnet, Evans, Munroe, Simpson.

Commissioner Brinck returned a late affirmative vote.

Original References

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

retusa, Anomia, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 701

Terebratulina d'Orbigny, 1847, *C.R. Acad. Sci.*, Paris **25** (Aug.): 268.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)37 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission is truly recorded in the present Opinion No. 924.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
15 *December* 1969

OPINION 925

THREE LINNAEAN SPECIFIC NAMES IN BRACHIOPODA: SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(a) *striatula* Linnaeus, 1758, as published in the binomen *Anomia striatula*;

(b) *lacunosa* Linnaeus, 1758, as published in the binomen *Anomia lacunosa*;

(c) *hysterita* Linnaeus, 1758, as published in the binomen *Anomia hysterita*.

(2) The following specific names, as suppressed under the plenary powers in (1) above, are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *striatula* Linnaeus, 1758, as published in the binomen *Anomia striatula* (Name No. 942);

(b) *lacunosa* Linnaeus, 1758, as published in the binomen *Anomia lacunosa* (Name No. 943);

(c) *hysterita* Linnaeus, 1758, as published in the binomen *Anomia hysterita* (Name No. 944).

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

(a) *wilsoni* J. Sowerby, 1816, as published in the binomen *Terebratula wilsoni* (Name No. 2406);

(b) *vulvarius* Schlotheim, 1820, as published in the binomen *Hysterolithes vulvarius* (Name No. 2407).

HISTORY OF THE CASE (Z.N.(S.) 1810)

The present application was submitted to the office of the Commission by Dr. C. H. C. Brunton and Dr. L. R. M. Cocks in June 1967. The application was sent to the printer on 6 July 1967 and published on 7 December 1967 in *Bull. zool. Nomencl.* **24** : 297–300. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to four specialist serials. No comment was received.

DECISION OF THE COMMISSION

On 28 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)40 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 299. At the close of the prescribed voting period on 28 November 1969 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Melville, Mayr, Vokes, Jaczewski, do Amaral, Simpson, Lemche, Obruchev, Eisenmann, Tortonese, Brinck, Mertens, Bonnet, Evans, Binder, Ride, Forest, Alvarado, Sabrosky, Kraus.

Negative votes—one (1): Starobogatov.

Voting Papers not returned—one (1): Munroe.

In returning his negative votes Dr. Starobogatov wrote, "It is very dangerous to suppress Linnaean names".

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

hysterita, *Anomia*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 703

lacunosa, *Anomia*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 702

striatula, *Anomia*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 702

wilsoni, *Terebratula*, J. Sowerby, 1816, *Min. Conch.* **2** : 38, pl. 118, fig. 3

vulvarius, *Hysterolithes*, Schlotheim, 1820, *Die Petrefactenk.* : 247

CERTIFICATE

We certify that the votes cast on Voting Paper (69)40 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 925.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
9 February 1970

OPINION 926

TINTINNIDIUM KENT, 1881, AND *LEPROTINTINNUS* JÖRGENSEN, 1900 (CILIOPHORA): DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers:

(a) all designations of type-species for the nominal genus *Tintinnidium* Kent, 1881, made prior to the present Ruling, are hereby set aside, and the nominal species *Tintinnus fluviatilis* Stein, 1863, is hereby designated to be the type-species of that genus;

(b) all designations of type-species for the nominal genus *Leprotintinnus* Jörgensen, 1900, made prior to the present Ruling, are hereby set aside, and the nominal species *Tintinnus pellucidus* Cleve, 1899, is hereby designated to be the type-species of that genus.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Tintinnus* Schrank, 1803 (gender: masculine), type-species, by designation by Brandt, 1907, *Trichoda inquilina* O. F. Müller, 1776 (Name No. 1919);

(b) *Tintinnidium* Kent, 1881 (gender : neuter), type-species, by designation under the plenary powers in (1) above, *Tintinnus fluviatilis* Stein, 1863 (Name No. 1920);

(c) *Leprotintinnus* Jörgensen, 1900 (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Tintinnus pellucidus* Cleve, 1899 (Name No. 1921);

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

(a) *inquilina* O. F. Müller, 1776, as published in the binomen *Trichoda inquilina* (type-species of *Tintinnus* Schrank, 1803) (Name No. 2408);

(b) *fluviatilis* Stein, 1863, as published in the binomen *Tintinnus fluviatilis* (type-species of *Tintinnidium* Kent, 1881) (Name No. 2409);

(c) *pellucidus* Cleve, 1899, as published in the binomen *Tintinnus pellucidus* (type-species of *Leprotintinnus* Jörgensen, 1900) (Name No. 2410).

(4) The following family-group names are hereby placed on the Official List of Family-Group Names in Zoology with the Name Numbers specified:

(a) TINTINNIDAE Claparède & Lachmann, 1858 (type-genus *Tintinnus* Schrank, 1803) (Name No. 451);

(b) TINTINNIDIIDAE Kofoid & Campbell, 1929 (type-genus *Tintinnidium* Kent, 1881) (Name No. 452).

HISTORY OF THE CASE (Z.N.(S.) 1811)

The present case was submitted to the office of the Commission by Dr. Helen Tappan and Dr. Alfred R. Loeblich, Jr., in June 1967. The application was sent to the printer on 6 July 1967 and was published on 7 December 1967 in *Bull. zool. Nomencl.* **24** : 301–303. Public Notice of the possible use of the

plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 28 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)41 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 302–303. At the close of the prescribed voting period on 28 November 1969 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Melville, Mayr, Vokes, do Amaral, Simpson, Starobogatov, Jaczewski, Lemche, Obruchev, Eisenmann, Tortonese, Brinck, Mertens, Bonnet, Evans, Binder, Ride, Forest, Alvarado, Sabrosky.

Negative votes—none (0).

Voting Papers not returned—two (2): Kraus, Munroe.

In returning his voting paper, Prof. Jaczewski commented as follows: "Whilst voting in the affirmative, I wish to express some doubts as to whether the matter is not premature in view of the rather confused state of taxonomy in the group in question."

Original References

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

fluviatilis, *Tintinnus*, Stein, 1863, *Amtl. Ber. Dt. Naturf. u. Aertze* : 161

inquilina, *Trichoda*, O. F. Müller, 1776, *Zool. Dan.*, appendix : 218

Leprotintinnus Jörgensen, 1900, *Bergens Mus. Årb.* **1899** (2) : 10

pellucidus, *Tintinnus*, Cleve, 1899, *K. svensk. Vetensk.-Akad. Handl.* **32** (3) : 24, Tab. 1, fig. 4

TINTINNIDAE Claparède & Lachmann, 1858, *Mém. Inst. natn. génev.* **5**(3) : 76, 192

TINTINNIDIIDAE Kofoid & Campbell, 1929, *Univ. Calif. Publ. Zool.* **34** : 6, 9

Tintinnidium Kent, 1881, *Man. Infusoria* : 611

Tintinnus Schrank, 1803, *Fauna Boica* **3**(1) : 317

The following is the original reference for the designation of a type-species for a genus concerned in the present Ruling:

For *Tintinnus* Schrank, 1803 : Brandt, 1907, *Ergebn. Plankton-Exped. Humboldt-Stiftung* III L.a. : 14

CERTIFICATE

We certify that the votes cast on Voting Paper (69) 41 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 926.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
13 *February* 1970

OPINION 927

CYSTIDEA BARRANDE, 1868 (CYSTOIDEA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Cystidea* Barrande, 1868, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Macrocystella* Callaway, 1877 (gender : feminine), type-species, by monotypy, *Macrocystella mariae* Callaway, 1877, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1922.

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

(a) *mariae* Callaway, 1877, as published in the binomen *Macrocystella mariae* (type-species of *Macrocystella* Callaway, 1877) (Name No. 2411);

(b) *bavarica* Barrande, 1868, as published in the binomen *Cystidea bavarica* (Name No. 2412).

(4) The family-group name MACROCYSTELLIDAE Bather, 1899 (type-genus *Macrocystella* Callaway, 1877) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 453.

(5) The generic name *Cystidea* Barrande, 1868 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1981.

HISTORY OF THE CASE (Z.N.(S.) 1813)

The present case was submitted to the office of the Commission by Dr. C. R. C. Paul in July 1967. Dr. Paul's application was sent to the printer on 6 July 1967 and was published on 7 December 1967 in *Bull. zool. Nomencl.* **24** : 304–307. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two palaeontological serials. No comment was received.

DECISION OF THE COMMISSION

On 28 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)42 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 306. At the close of the prescribed voting period on 28 November 1969 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Holthuis, Melville, Mayr, Vokes, Jaczewski, do Amaral, Simpson, Starobogatov, Lemche, Obruchev, Eisenmann, Tortonese, Mertens, Bonnet, Evans, Binder, Ride, Forest, Alvarado, Sabrosky, Kraus.

Negative votes—none (0).

Voting Papers not returned—one (1): Munroe.

Prof. Brinck did not vote, commenting: "I am not quite clear as to the full meaning of the request. Does it mean that we should suppress the basic name for the order, so commonly used that it has become a vernacular name?"

Original References

The following are the original references for names placed on the Official Lists and Index by the Ruling given in the present Opinion:

bavarica, *Cystidea*, Barrande, 1868, *Neues Jb. Miner. Geol. Paläont.* **1868** : 694
Cystidea Barrande, 1868, *Neues Jb. Miner. Geol. Paläont.* **1868** : 694
Macrocystella Callaway, 1877, *Q.J. geol. Soc. Lond.* **33** : 670
MACROCYSTELLIDAE Bather, 1899, *Rep. Br. Assoc. Advmt. Sci.* **68** : 920
mariae, *Macrocystella*, Callaway, 1877, *Q.J. geol. Soc. Lond.* **33** : 670

CERTIFICATE

We certify that the votes cast on Voting Paper (69)42 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 927.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
18 *February* 1970

OPINION 928

PACHYRHYNCHUS GERMAR, 1824 (INSECTA, COLEOPTERA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Pachyrhynchus* Wagler, 1822, is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy.

(2) The generic name *Pachyrhynchus* Germar, 1824 (gender : masculine), type-species, by monotypy, *Pachyrhynchus moniliferus* Germar, 1824, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1923.

(3) The specific name *moniliferus* Germar, 1824, as published in the binomen *Pachyrhynchus moniliferus* (type-species of *Pachyrhynchus* Germar, 1824) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2413.

(4) The family-group name PACHYRHYNCHINI (correction of PACHYRHYNCHIDES) Schoenherr, 1826 (type-genus *Pachyrhynchus* Germar, 1824) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 454.

(5) The generic name *Pachyrhynchus* Wagler, 1822 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1982.

HISTORY OF THE CASE (Z.N.(S.) 1815)

The present case was submitted to the office of the Commission by Dr. Elwood C. Zimmerman in July 1967. Dr. Zimmerman's application was sent to the printer on 4 October 1967 and was published on 7 December 1967 in *Bull. zool. Nomencl.* **24** : 308–309. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials. The proposals were supported by Dr. Patricia Vaurie and Dr. G. Kuschel.

DECISION OF THE COMMISSION

On 28 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)43 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 308–309. At the close of the prescribed voting period on 28 November 1969 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Holthuis, Melville, Mayr, Vokes, do Amaral, Simpson, Starobogatov, Lemche, Obruchev, Eisenmann, Jaczewski, Tortonese, Brinck, Mertens, Bonnet, Evans, Binder, Ride, Forest, Alvarado, Sabrosky, Kraus.

Negative votes—none (0).

Voting Papers not returned—(1): Munroe.

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

moniliferus, *Pachyrhynchus*, Germar, 1824, *Ins. Spec. nov.* : 336, pl. 1, fig. 2

PACHYRHYNCHINI Schoenherr, 1826, *Curc. Disp. meth.* : 88

Pachyrhynchus Germar, 1824, *Ins. Spec. nov.* : 336

Pachyrhynchus Wagler, 1822, *in* Hahn, *Vögel Aus Asien, Africa, America & Neuholland* (13) : col. 6, text to pl.

CERTIFICATE

We certify that the votes cast on Voting Paper (69)43 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 928.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
2 *March* 1970

OPINION 929

LASIOPTERA MEIGEN, 1818 (INSECTA, DIPTERA): PRESERVATION UNDER THE PLENARY POWERS IN ITS ACCUSTOMED MEANING

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Lasioptera* Meigen, 1818, prior to that by Karsch, 1878, are hereby set aside.

(2) The generic name *Lasioptera* Meigen, 1818 (gender : feminine), type-species, as Ruled under the plenary powers in (1) above, by designation by Karsch, 1878, *Lasioptera picta* Meigen, 1818, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1924.

(3) The specific name *picta* Meigen, 1818, as published in the binomen *Lasioptera picta* (type-species of *Lasioptera* Meigen, 1818) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2414.

HISTORY OF THE CASE (Z.N.(S.) 1822)

The present case was submitted to the office of the Commission by Dr. Curtis W. Sabrosky and Dr. Raymond J. Gagné in September 1967. The application was sent to the printer on 4 October 1967 and was published on 7 December 1967 in *Bull. zool. Nomencl.* **24** : 310–312. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to seven entomological serials. No comment was received.

DECISION OF THE COMMISSION

On 28 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)44 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 311. At the close of the prescribed voting period on 28 November 1969 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Holthuis, Melville, Mayr, Vokes, do Amaral, Simpson, Starobogatov, Jaczewski, Lemche, Obruchev, Eisenmann, Tortonese, Brinck, Mertens. Bonnet, Evans, Binder, Ride, Forest, Alvarado, Sabrosky, Kraus.

Negative votes—none (0).

Voting Papers not returned—one (1): Munroe

Original References

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

Lasioptera Meigen, 1818, *Syst. Beschr. zweifl. Ins.* **1** : 88

picta, Lasioptera, Meigen, 1818, *Syst. Beschr. zweifl. Ins.* **1** : 89

The following is the original reference for the designation of a type-species for the genus concerned in the present Ruling:

For *Lasioptera* Meigen, 1818; Karsch, 1878, *Revision der Gallmücken* : 14

CERTIFICATE

We certify that the votes cast on Voting Paper (69)44 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 929.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
2 *March* 1970

OPINION 930

MEGALICHTHYS AGASSIZ, 1835, AND *RHIZODUS* OWEN, 1840 (PISCES): PRESERVED UNDER THE PLENARY POWERS IN THEIR ACCUSTOMED USAGE

RULING.—(1) Under the plenary powers:

(a) all designations of type specimen for the nominal species *Megalichthys hibberti* Agassiz, 1835, made prior to the present Ruling, are hereby set aside, and the specimen described by K. S. Thomson, 1966, is hereby designated to be the neotype of that species:

(b) the specific name *hibberti* Owen, 1840, as published in the binomen *Rhizodus hibberti*, is hereby made available as a name distinct from *Megalichthys hibberti* Agassiz, 1835;

(c) the generic names *Holoptychius* Egerton, 1837, and *Holoptychus* Buckland, 1837, are hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy;

(d) the specific name *giganteus* Agassiz, 1835, as published in the binomen *Gyrolepis giganteus*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Megalichthys* Agassiz, 1835 (gender : masculine), type-species, by monotypy, *Megalichthys hibberti* Agassiz, 1835, as defined by the neotype designated under the plenary powers in (1)(a) above (Name No. 1925);

(b) *Rhizodus* Owen, 1840 (gender : masculine), type-species, by monotypy, *Rhizodus hibberti* Owen, 1840, as defined by the neotype designated by K. S. Thomson, 1966 (Name No. 1926);

(c) *Holoptychius* Agassiz, 1839 (gender : masculine), type-species, by monotypy, *Holoptychius nobilissimus* Agassiz, 1839 (Name No. 1927).

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

(a) *hibberti* Agassiz, 1835, as published in the binomen *Megalichthys hibberti*, as defined by the neotype designated under the plenary powers in (1)(a) above (type-species of *Megalichthys* Agassiz, 1835) (Name No. 2415);

(b) *hibberti* Owen, 1840, as published in the binomen *Rhizodus hibberti*, as defined by the neotype designated by Thomson, 1966 (type-species of *Rhizodus* Owen, 1840) (Name No. 2416);

(c) *nobilissimus* Agassiz, 1839, as published in the binomen *Holoptychius nobilissimus* (type-species of *Holoptychius* Agassiz, 1839) (Name No. 2417).

(4) The following generic names, as suppressed under the plenary powers in (1)(c) above, are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Holoptychius* Egerton, 1837 (Name No. 1983);

(b) *Holoptychus* Buckland, 1837 (Name No. 1984).

(5) The specific name *giganteus* Agassiz, 1835, as published in the binomen *Gyrolepis giganteus* (as suppressed under the plenary powers in (1)(d) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 945.

HISTORY OF THE CASE (Z.N.(S.) 1690)

The present case was submitted to the office of the Commission by Dr. Keith Stewart Thomson in January 1965. Dr. Thomson's application was sent to the printer on 22 November 1965 and was published on 29 July 1966 in *Bull. zool. Nomencl.* **23** : 117–120. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. Zool. Nomencl.* **21** : 184) and to two palaeontological serials. The proposals were supported by Dr. E. I. White and Dr. Donald Baird (*Bull. Zool. Nomencl.* **24** : 262). Dr. White additionally proposed the suppression for the purposes of the Law of Priority but not for those of the Law of Homonymy of *Gyrolepis giganteus* Agassiz, 1835, in order to validate *Holoptychius nobilissimus* Agassiz, 1839 (type of *Holoptychius*).

DECISION OF THE COMMISSION

On 28 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)47 either for or against the proposals set out in *Bull. zool. Nomencl.* **23** : 120 and *Bull. zool. Nomencl.* **24** : 262. At the close of the prescribed voting period on 28 November 1969 the state of the voting was as follows:

Affirmative votes—twenty-one (21), received in the following order: China, Melville, Mayr, Vokes, do Amaral, Simpson, Starobogatov, Lemche, Obruchev, Eisenmann, Tortonese, Jaczewski, Brinck, Mertens, Bonnet, Evans, Binder, Ride, Forest, Alvarado, Kraus.

Negative votes—one (1): Holthuis.

Voting Papers not returned—one (1): Munroe.

Commissioner Sabrosky did not vote.

Original References

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

giganteus, *Gyrolepis*, Agassiz, 1835, *Poiss. Foss.* **2** (1) : 175, pl. 19, fig. 13

hibberti, *Megalichthys*, Agassiz, 1835, *in* Hibbert, *Trans. roy. Soc. Edinb.* **13** : 202

hibberti, *Rhizodus*, Owen, 1840, *Odontography*, Expl. pls. : 12

Holoptychius Agassiz, 1839, *in* Murchison, *Silurian System* : 599

Holoptychius Egerton, 1837, *System. Stratig. Cat. foss. fish. Cab. Lord Cole & Sir Philip Grey Egerton* : 275, pl. 27

Holoptychus Buckland, 1837, *Geol. Min. Ref. nat. Theology* **2** : 43

Megalichthys Agassiz, 1835, *in* Hibbert, *Trans. roy. Soc. Edinb.* **13** : 202

nobilissimus, *Holoptychius*, Agassiz, 1839, *in* Murchison, *Silurian System* : 600, pl. 11 bis, figs. 1, 2

Rhizodus Owen, 1840, *Odontography* : 75

The following are the original references to the designation of neotypes for two species concerned in the present Ruling:

For *Megalichthys hibberti* Agassiz, 1835 : K. S. Thomson, 1966, *Bull. zool. Nomencl.* **23** : 119

For *Rhizodus hibberti* Owen, 1840 : K. S. Thomson, 1966, *Bull. zool. Nomencl.* **23** : 119

CERTIFICATE

We certify that the votes cast on Voting Paper (69)47 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 930.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
5 *March* 1970

OPINION 931

ATTUS OBSCURUS TACZANOWSKI, 1872 (ARANEAE): REFUSAL TO SUPPRESS UNDER THE PLENARY POWERS

RULING.—The use of the plenary powers to suppress the specific name *obscurus* Taczanowski, 1872, as published in the binomen *Attus obscurus*, is hereby refused.

HISTORY OF THE CASE (Z.N.(S.) 1770)

The present case was submitted to the office of the Commission by Dr. Maria Elena Galiano in July 1966. Dr. Galiano's application was sent to the printer on 16 August 1966 and was published on 20 December 1966 in *Bull. zool. Nomencl.* **23** : 255. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). An objection was received from Dr. J. Prószyński and Dr. W. Staręga (*Bull. zool. Nomencl.* **26** : 9).

DECISION OF THE COMMISSION

On 28 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)48 either for or against the proposals set out in *Bull. zool. Nomencl.* **23** : 255. At the close of the prescribed voting period on 28 November 1969 the state of the voting was as follows:

Affirmative votes—four (4), received in the following order: China, Bonnet, Evans, Forest.

Negative votes—nineteen (19): Holthuis, Melville, Mayr, Vokes, do Amaral, Simpson, Starobogatov, Lemche, Obruchev, Eisenmann, Tortonese, Jaczewski, Brinck, Mertens, Binder, Ride, Alvarado, Sabrosky, Kraus

Voting Papers not returned—one (1): Munroe

CERTIFICATE

We certify that the votes cast on Voting Paper (69)48 were cast as set out above, that the proposal contained in that Voting Paper has not been adopted, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 931.

R. V. MELVILLE
Secretary

W. E. CHINA
Assistant Secretary

International Commission on Zoological Nomenclature
London
6 *March* 1970

PSOIDOS, PSODOS OR *PSOLOS* TREITSCHE? (INSECTA, LEPIDOPTERA): A REQUEST FOR USE OF THE PLENARY POWERS. Z.N.(S.) 362

By Charles F. Cowan (*Little Gaddesden House, Berkhamsted, Herts., England*)

Treitsche, 1825 validly introduced the name *Psoidos* for a genus of ash-coloured moths, listing five included species of which the first was given as "*alpinata* W.V. [i.e. Denis & Schiffermüller, 1775], Hubn., 197 (*equestrata* Fabr., . .)". Treitsche did not explain the name, which has no evident meaning, and there are no grounds for considering it worthy of emendation under Article 32 and it cannot be rejected as inappropriate under Article 18a.

2. However, Treitsche, 1827 renamed the genus "*Psodos*", giving a brief generic diagnosis and full redescription of the same included species. This time he did insert the terse explanation; "Psodos, πσοδος, so viel wie σποδιος, aschfarbig". Three points are noteworthy in that cryptic remark. First, he used the separate Greek letters *pi* and *sigma* instead of the double consonant *psi* in the first word, showing that, for reasons of his own, he was deliberately transposing the single consonants. Such metathesis, although now unfashionable, was then by no means rare,[1] and in forming a name (as opposed to writing Greek) is perfectly legitimate. Second, it becomes evident that the name Treitsche originally meant to use was *Psodios*, not *Psoidos*; although that does not affect this case. Third, it is clear that Treitsche now chose the noun "spodos" rather than the less preferable "spodios" on which to base his name.

3. As author, Treitsche had every right to bestow whatever name he chose. Once published, he should not have changed it. But no doubt because the 1825 publication did not include a diagnosis, the name *Psodos* Treitsche, 1827 has been in use almost universally for over 140 years, and Duponchel designated a type-species for it as early as 1829. Although Sodoffsky, 1837 very reasonably but invalidly under our present Code, suggested the emendation "Spodos", he was not followed.

4. Then Berthet, 1938, 1950, first published and later submitted as an application to the International Commission, a case for emending the name *Psodos* to "*Psolos*", a different Greek word entirely meaning soot instead of ash, and having the adjective *psoleis*. Before that application had been published, the case had been debated twice by the Commission (1950a, b) and apparently approved, but there were obviously some doubts and no Opinion has been delivered nor entry made on the Official List. That whole case was abortive since the name *Psoidos* Treitsche, 1825 was never brought before the Commission. It is hoped that, at this late date, the case may be reviewed and *Psodos* Treitsche, the researched name and that in universal use, be preserved. The emendation *Psolos*, if finally accepted, apart from causing confusion, would sink the name *Psolos* Staundinger, 1889, currently valid for a genus of oriental

[1] Hübner, 1804 had already employed the name *psodea* for a dark Satyrid butterfly, presumably for like reasons. A close relative of it was later named *spodia* Staudinger, 1871.

butterflies; if not accepted it would date from Berthet, 1938 as a junior homonym of Staudinger's.

5. As to the type-species, Duponchel, 1829 (: 103–112) listed the 48 genera of Phalaenidae of which number 46 (: 112) was "*Psodos equestrata**". He explained (: 102) that the species name cited with it was the type-species and (: 101) that the asterisk denoted that Treitsche was author of the generic name. This designation was valid under Article 69a (1), the full citation of the name originally included as a synonym by Treitsche in 1825 being *Phalaena equestrata* Fabricius, 1777 (*Gen. Ins.*: 288). The oldest valid name subjectively applicable to the type-species is *P. quadrifaria* Sulzer, 1776 (an earlier subjective synonym *P. alpinata* Denis & Schiffermüller, 1775 being invalid as a junior primary homonym).

6. For these reasons it is requested that the International Commission on Zoological Nomenclature:

(1) validate under the plenary powers the emendation *Psodos* of the generic name *Psoidos* Treitsche, 1825;

(2) place on the Official List of Generic Names in Zoology the generic name *Psodos* Treitsche, 1825 (emendation of *Psoidos* under the plenary powers in (1) above) *Schmett. von Europa* **5** (2) : 434 (gender : feminine), type-species by designation by Duponchel, 1829 (*in* Godart, *Hist. nat. Lepid. France* **7** (2) : 112), *Phalaena equestrata* Fabricius, 1777, *Gen. Ins.* : 288;

(3) place on the Official List of Specific Names in Zoology the specific name *quadrifaria* Sulzer, 1776 (*Abgek. Gesch. Ins. Linn.* **1** : 162) as published in the binomen *Phalaena quadrifaria;*

(4) place on the Official Index of Rejected and Invalid Generic Names in Zoology the generic name *Psoidos* Treitsche, 1825, *Schmett. von Europa* **5** (2) : 434 (Ruled under the plenary powers in (1) above to be an incorrect original spelling for *Psodos*).

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ATTUS AUDAX HENTZ, 1845 (ARANAEA): PROPOSED PRESERVATION UNDER THE PLENARY POWERS AND DESIGNATION AS TYPE-SPECIES OF *PHIDIPPUS* KOCH, 1846. Z.N.(S.) 1904

By Herbert W. Levi and Lawrence J. Pinter

The name *Salticus variegatus* Lucas, 1833, threatens to upset the name of the most common North American jumping spider. The type of *S. variegatus* is lost. The description has at times been interpreted to be of a separate southern U.S. species. More recently, it has been considered a senior synonym of *Phidippus audax* (Hentz, 1845) and, on occasion, of *P. regius* C. L. Koch, 1846. All evidence we have indicates that it is a senior synonym of *P. audax*. The name *audax* has been in continuous use for over 100 years as *Attus audax*, *Dendryphantes audax* and, since 1890's, mostly as *Phidippus audax*.

2. A cursory survey of the literature indicates that since 1940 *P. audax* has been used by ecologists and textbook writers more than 115 times in the North American literature; *P. variegatus*, less than 30 times mostly in specialized taxonomic literature and checklists. Usually, *P. variegatus* has been used to denote a different species, *P. regius*.

3. *Salticus variegatus* Lucas, 1833, is the type of the genus *Phidippus* C. L. Koch, 1846, as subsequently designated by Peckham and Peckham 1901.

4. To preserve current usage the Commission is requested:

(1) to use its plenary powers:

(a) to suppress the specific name *variegatus* Lucas, 1833, as published in the binomen *Salticus variegatus*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(b) to set aside all designations of type-species for the nominal genus *Phidippus* C. L. Koch, 1846, made prior to the Ruling now requested and, having done so, to designate *Attus audax* Hentz, 1845, to be the type-species of that genus;

(2) to place the generic name *Phidippus* C. L. Koch, 1846 (gender: masculine), type-species, by designation under the plenary powers in (1)(b) above, *Attus audax* Hentz, 1845, on the Official List of Generic Names in Zoology;

(3) to place the specific name *audax* Hentz, 1845, as published in the binomen *Attus audax* (type-species of *Phidippus* C. L. Koch, 1846) on the Official List of Specific Names in Zoology;

(4) to place the specific name *variegatus* Lucas, 1833, as published in the binomen *Salticus variegatus* (as suppressed under the plenary powers in (1)(a) above) on the Official Index of Rejected and Invalid Specific Names in Zoology.

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ANTILOPE ZEBRA GRAY, 1838 (MAMMALIA): PROPOSED ADDITION TO THE OFFICIAL LIST AS THE NAME OF THE ZEBRA DUIKER. Z.N.(S.) 1908

By W. F. H. Ansell (*Department of Wildlife, Fisheries and National Parks, P.O. Box 109, Kalomo, Zambia*)

Although Allen (1939, *Bull. Mus. comp. Zool.*, Harvard **83** : 489), Ellerman, Morrison-Scott & Hayman (1953, *Southern African Mammals* : 178), and Haltenorth (1963, *Handbuch der Zoologie* **8**(32) : 70) had used the name *Cephalophus zebra* (Gray, 1838) for the Zebra Duiker, Kuhn (1966, *Z. Säugetierk.* **31**(4) : 282–293) revived the name *Cephalophus doria.* As *A.* (= *Antilope*) *Doria* this name was given by Ogilby (1837, *Proc. zool. Soc. Lond.* **1836** : 120–121) to ". . . the beautiful species mentioned by Mr. Bennett (*Proc. Zool. Soc.* 1833, pl 1) which is a real *Antelope* . . ." But, as maintained by Allen (op. cit.: 528), it is a synonym of *Antilope mhorr* Bennett, 1833, now known as *Gazella dama mhorr* (Bennett, 1833).

2. Kuhn (*op. cit.*: 284) argues that Ogilby must have meant the imperfect skin of a Zebra Duiker mentioned by Bennett (1832, *Proc zool. Soc. Lond.:* 122–123) because it would have been unnecessary to point out that a gazelle was a "real antelope"; "beautiful species" was clearly referable to the Zebra Duiker, not the gazelle; and there had been no need to give a new name to the Mhorr Antelope, already dealt with adequately by Bennett.

3. This is not unreasonable, and it may be admitted that Ogliby could well have meant the Zebra Zuiker, as Allen (op. cit.: 528) suggested. But, whatever he intended, Ogilby in fact applied his name *A. Doria* to *Antilope mhorr* Bennett —the reference is explicit, and the only specimen mentioned there is the Mhorr Antelope, formally named on the next page. If he meant "*Proc. Zool. Soc.* 1832 : 122–123" he should not have written "*Proc. Zool. Soc.* 1833, p. 1". Haltenorth (*loc. cit.*) considered *A. doria* a *nomen nudum*, but the page reference to *A. mhorr* prevents this, though it would be a *nomen nudum* otherwise.

4. It is not true, as Kuhn claims, that *doria* was always accepted for the Zebra Duiker before 1939, as over 100 years ago Sundevall (1847, *K. svensk. Vetensk.-Akad. Handl.* **1845** : 196) used *A. zebra* Gray, pointing out that Ogilby had named *A. doriae* (sic) without description and citing only the reference to *A. dama* and *A. mhorr.* By contrast, there is no ambiguity whatever about the name *Antilope zebra* Gray, 1838 (*Ann. nat. Hist.* **1** : 27) which is sufficiently described, and the type specimen is in the British Museum (Natural History), London, Reg. No. 38.4.16.237.

5. It is proposed that the International Commission should:

(a) place the specific name *zebra* Gray, 1838, as published in the binomen *Antilope zebra*, on the Official List of Specific Names in Zoology;

(b) place the specific name *doria* Ogilby, 1837, as published in the binomen *Antilope doria* (a junior objective synonym of *Antilope mhorr* Bennett, 1833) on the Official Index of Rejected and Invalid Specific Names in Zoology.

ACANTHOPLEUROCERAS HYATT, 1900 (CLASS CEPHALOPODA, ORDER AMMONOIDEA): PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE THE TYPE-SPECIES (JURASSIC). Z.N.(S.) 1909

By T. A. Getty, M.A., M.Sc. (*University College, London*)

1. The present application for the use by the I.C.Z.N. of its plenary powers to designate as type-species of *Acanthopleuroceras* Hyatt, 1900 (in Zittel, 1896–1900, p. 578) (Class Cephalopoda, Order Ammonoidea) a species other than that which would be the type-species under the International Code of Zoological Nomenclature adopted by the XV International Congress of Zoology, London, July 1958 (hereinafter referred to as the Code) is submitted under the procedure set out in Art. 70a of the Code as that to be followed in the case of a genus based on a misidentified type species.

2. Hyatt (1900, p. 578), when first publishing the name *Acanthopleuroceras*, stated that the type species was "*A.* (*Ammonites*) *natrix* Schlotheim sp." and that the name was a replacement for *Cycloceras* Hyatt, 1867 (non M'Coy, 1844). *Ammonites natrix* Schlotheim is, therefore, the type-species by original designation and is also the only species mentioned by Hyatt (1900).

3. *Ammonites natrix* was first described, but not figured, by Schlotheim (1820, p. 62) and the species was subsequently subjected to two very different interpretations:

(a) Zieten (1830, p. 5, pl. 4, fig. 5) was the first to figure an alleged example of the species as "*Ammonites natrix* Schlotheim (?)". This species was later renamed *Acanthopleuroceras pseudonatrix* Bremer (1965, p. 185). It was probably in the Hartmann Collection (Zieten, 1830, Preface), but can no longer be found and must be presumed lost.

(b) Quenstedt (1843, p. 167) claimed that the species figured by Zieten (1830) was not, in fact, the same as that described by Schlotheim (1820) and subsequently (1884, p. 185) declared that Schlotheim's description corresponded to a description of *Ammonites raricostatus* Zieten 1831, p. 18, pl. 13, fig. 4.

This interpretation was shown to be essentially correct by Jaworski (1931, p. 134, pl. 6, fig. 1), who figured the holotype of *Ammonites natrix* Schlotheim for the first time and identified it as *Echioceras* cf. *E. rhodanicum* Dumortier (sic) (*Echioceras rhodanicum* Buckman 1914, p. 96c, was proposed as a new name for *Ammonites raricostatus* Zieten; var. 2—Dumortier 1867, p. 173, pl. 25, fig. 4, 5 only, non Zieten, 1831).

Thus, if *Ammonites natrix* Schlotheim is interpreted correctly, with reference to the holotype, *Acanthopleuroceras* Hyatt, 1900, must be regarded as a junior synonym of *Echioceras* Bayle, 1878, and the specific name *natrix* Schlotheim should properly be attached to a species of *Echioceras*.

4. The difficulty in this case arises because the only representation of Schlotheim's species with which Hyatt was acquainted was that figured by Zieten (1830). The citation of "*Amm. natrix* Ziet." as a synonym of *Ammonites*

natrix Schlotheim (Hyatt, 1867, p. 92) is tantamount to proof of this. The genus *Acanthopleuroceras* Hyatt is, therefore, a genus based on a misidentified type species.

With the exception of Jaworski (1931), all later authors have followed Hyatt's interpretation and the species figured by Zieten has been cited as the type species of *Acanthopleuroceras* in, for example, the following standard references on ammonite systematics, as well as in Bremer (1965, p. 184):

(a) Roman, 1938, p. 106.

(b) Basse *in* Piveteau (ed.), 1952, p. 617.

(c) Arkell *in* Moore (ed.), 1957, p. L249.

(d) Krymgolts *in* Luppov and Druschchits (ed.), 1958, p. 68.

5. Since the genus *Acanthopleuroceras* Hyatt, as interpreted in (4) above, has been, and still is, widely employed for a distinct and characteristic group of Lower Pliensbachian (Carixian) ammonites, and is utilised in the subzonal scheme for that substage (Dean, Donovan and Howarth, 1961, pp. 441, 465), it is desirable that the name should be stabilised according to current nomenclatural usage, rather than be allowed to fall into synonymy with *Echioceras* Bayle, 1878.

6. In selecting a type-species of *Acanthopleuroceras* Hyatt, which would stabilise the current usage of the name, it is necessary to fall back on the originally included species of *Cycloceras* Hyatt, 1867 (non M'Coy, 1844) (for which *Acanthopleuroceras* was expressly stated to be a replacement at the time of its proposal), since there are no other originally included species of *Acanthopleuroceras* itself, as noted in (2) above.

Hyatt (1867, p. 92) mentions three species of '*Cycloceras*':

(a) *Cycloceras molare* Hyatt
(nom. nov. pro *Ammonites natrix oblongus* Quenstedt, 1845, p. 85, pl. 4, fig. 16) = *Ammonites submuticus* Oppel, 1856, p. 158 (nom. nov. pro *Amm. natrix oblongus* Quenstedt (loc. cit.) non *Ammonites oblonga* Risso, 1826, p. 13). The lectotype (here designated as the original of Quenstedt, 1845, pl. 4, fig. 16a, b only (non 16d)) comprises a septate ¾ whorl or so of a specimen which would have been c. 65 mm. in diameter. It is no longer in the Quenstedt collection at Tübingen and is believed to be lost. The absence of a keel, the presence of a complex suture-line and of ribs which seem to pass over the venter suggest that it may have been a *Platypleuroceras* Hyatt, 1867. The uncertainty of the interpretation of *Ammonites submuticus* Oppel renders this species unsuitable for designation as the type-species of *Acanthopleuroceras*.

(b) *Ammonites natrix* Schlotheim (1820) [*sensu* Zieten (1830)] = *Acanthopleuroceras pseudonatrix* Bremer (1965). (nom. nov. pro *Ammonites natrix* Schlotheim—Zieten, 1830, p. 5, pl. 4, fig. 5).

The specimen figured by Zieten (1830), together with any syntypes there may have been, are presumed lost (see 3a above). There is no suitable material extant from which a neotype might be selected and Zieten's figure, showing a small individual, is of doubtful accuracy and cannot be regarded as an objective basis for interpreting the species. For these reasons, *Acanthopleuroceras pseudonatrix* Bremer is not selected as the type-species of *Acanthopleuroceras*. Bremer (1965, p. 185) has already pointed out its unsuitability for this role.

(c) *Ammonites Valdani* d'Orbigny (1844, p. 255, pl. 71) = *Ammonites binotatus* Oppel, 1862, p. 133 (nom. nov. pro *Ammonites Valdani* d'Orbigny, 1844, non *Ammonites* ["*Turrilites*"] *Valdani* d'Orbigny sp., 1842).

The lectotype, here designated as the original of Pl. 3 herein (d'Orbigny coll. No. 1663/1), is the only entire syntype. It is 50 mm. in diameter and corresponds in size to the inner whorls of the specimen figured by d'Orbigny (1844, pl. 71) up to and including the penultimate whorl.

At corresponding diameter the figure and lectotype agree closely in umbilical width, while the whorl heights are also similar. In the text there are stated to be 26 to 27 ribs per whorl and this is shown in the figure, which has 26 ribs at c.27 mm. diam., increasing to 27 at 35 mm. diam. and thereafter remaining constant. The lectotype has 25 ribs at 28 mm. diam., increasing to 26 at c.50 mm. diam. This difference in the number of ribs is not large enough to be significant. The lectotype agrees with both the figure and description in the prominence of the inner row of tubercles on the inner whorls and the more or less equal prominence of the inner and outer rows of tubercles on the outer whorl, giving the ribs a concave profile; in the compressed whorls with fastigate venter and conspicuous keel and in the marked projection of the ribs on the venter.

The only difference of note is that the thickness of the whorl at the start of the outer whorl is much less in the lectotype than is suggested in the figure.

Ammonites binotatus Oppel is the only originally included species of "*Cycloceras*", which can be interpreted as an unequivocal *Acanthopleuroceras* and is cited as a characteristic species of the genus by Gürich, 1934, p. 295 and Roman, 1938, pl. 10, fig. 100. Moreover, it is the index species of the "Valdani" (recte : Binotatum) Subzone of the Ibex Zone, Lower Pliensbachian (Dean et al., loc. cit.). It is, therefore, here selected as the type-species of *Acanthopleuroceras* Hyatt, 1900 in conformity with current nomenclatural usage.

7. Since the specific name *natrix*, originally published in the binomen *Ammonites natrix* Schlotheim, should refer to a species of *Echioceras* Bayle, 1878 (as noted in 3b above), but has always been in general use as a species of *Acanthopleuroceras* Hyatt, 1900 (as noted in 4 above), strict application of the Code would lead to confusion. The holotype of *Ammonites natrix* Schlotheim is no longer in the Museum für Naturkunde, Berlin, and must be presumed lost (Dr. Hermann Jaeger, *in litt.*), so that the figure in Jaworski (1931) is now the only representation of the species. For this reason, there will always be an element of doubt as to what species of *Echioceras*, if any, is represented by *Echioceras natrix* (Schlotheim). It is therefore proposed that the specific name *natrix* be suppressed for the purposes of the law of priority, but not of the law of homonymy.

8. It is, therefore, submitted that the International Commission on Zoological Nomenclature should:

(1) under the procedure prescribed by the Code, Art. 70a, for determining the type species of a genus based on a misidentified type-species, use its plenary powers

(a) to set aside all selections of type-species for the genus *Acanthopleuroceras* Hyatt, 1900 made prior to the proposed decision and

(b) having done so, to designate *Ammonites binotatus* Oppel, 1862, to be the type-species of the said genus, in conformity with Art. 70a(ii) of the Code;

(2) use its plenary powers to suppress the specific name *natrix* Schlotheim, 1820, as published in the binomen *Ammonites natrix*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(3) place the generic name *Acanthopleuroceras* Hyatt, 1900, type-species as proposed in (1) above, to be designated under the plenary powers, *Ammonites binotatus* Oppel, 1862 (gender : neuter) on the Official List of Generic Names in Zoology;

(4) place the specific name *binotatus* Oppel, 1862, as published in the binomen *Ammonites binotatus*, and as defined by the lectotype designated in 6(c) above on the Official List of Specific Names in Zoology;

(5) place the specific name *natrix* Schlotheim, 1820, as published in the binomen *Ammonites natrix*, as suppressed under the plenary powers in (2) above, on the Official Index of Rejected and Invalid Specific Names in Zoology;

(6) place the specific name *valdani* d'Orbigny, 1844, as published in the binomen *Ammonites Valdani* (a junior primary homonym of *Ammonites Valdani* d'Orbigny, 1842) on the Official Index of Rejected and Invalid Specific Names in Zoology.

PLATE 3

Ammonites binotatus Oppel, 1862.
Lectotype, designation herein, p. 107.
Original (pars) of *Ammonites valdani* d'Orbigny, 1844, pl. 71.
(Muséum national d'Histoire naturelle, Paris. Collection d'Orbigny no. 1663/1) (natural size).
Photograph supplied through the courtesy of Dr. J. Sornay.
Fig. 1a. Lateral view, showing the characteristic tuberculation of the species.
Fig. 1b. Apertural view, showing the concave profile and the ventral projection of the ribs.

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PLAUTUS OR *PLOTUS* GUNNERUS, 1761, *PLAUTUS* KLEIN, 1760, *PLOTUS* LINNAEUS, *PLAUTUS* BRUNNICH, 1772 (AVES): PROPOSED REJECTION OR SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1911

By Dean Amadon (*Chairman, Department of Ornithology, American Museum of Natural History*), Eugene Eisenmann (*Chairman, American Ornithologists' Union Committee on Classification and Nomenclature*), George E. Watson III (*Chairman, Department of Vertebrate Zoology, U.S. National Museum*), Alexander Wetmore (*Smithsonian Institution*)

1. The name *Plautus* or *Plotus* has been applied to birds of at least four genera, belonging to three different families. Currently one or the other is used as the generic name for the Little Auk or Dovekie, an abundant Arctic species, which intermittently invades the Temperate Zone in numbers. Both spellings are credited to Gunnerus (1761, *Trondhiemske Selskabs Skrifter* **1** : 236–270). Gunnerus in his paper wrote "*Plotus* eller *Plautus*". In American publications the name is uniformly spelled *Plautus*, in European it is usually written *Plotus*. Richmond, who revived Gunnerus' name, and acted as first reviser (1917, *Proc. U.S. Natl. Mus.* **53** : 615). selected *Plautus*, presumably because that spelling was used on the plate or because it was employed by the earlier non-Linnaean author (Moehring, 1752) cited by Gunnerus. The usual European spelling follows Hartert (1921, *Die Vögel der paläarktischen Fauna*), who favoured the strictest positional anteriority, in disregard of the first reviser rule. Very recently Wetmore and Watson (1969, *Bull. Brit. Orn. Club*, **89** : 6–7) have pointed out that Gunnerus' name, in whatever form, must be rejected, because "Gunnerus was not consistently binomial in his 1761 paper, even in the sentence in which he cited the names".

2. Both *Plautus* and *Plotus* have been applied to other genera. Being already compromised, the preservation of either by resort to the plenary powers seems undesirable. Thus, before Gunnerus, *Plautus* was employed by Klein for a gull, now known as *Larus hyperboreus*, in a non-binominal translation of a pre-Linnaean Latin work (1760, *Historie der Vögel* : 154). Though Klein's name seems never to have been used again as the name of a gull, it has been cited in synonymy. *Plotus* was used by Linnaeus (1766, *Systema Naturae* (12th ed.) **1** : 218) for the genus currently called *Anhinga* Brisson, 1760, belonging to a different family. *Plautus* was employed by Brünnich (1772, *Zool. Praelect. Acad. Accom.* : 78) for the Great Auk, a species currently placed in the monotypic genus *Pinguinus* Bonnaterre (1791, *Tabl. Encycl. et Method. Orn.* : lxxxiii, 28).

3. The rejection of *Plautus* or *Plotus* of Gunnerus for the Little Auk should occasion little difficulty, because there is an early, well-known, name available: *Alle* Link (1807, *Beschreib, der Nat. Samml. Univer. Rostok* **2** : 46), which was used generally before Richmond's revival of Gunnerus' name. Moreover the current specific name of the Little Auk is *alle*. Link's name was employed at least as late as 1919 in America and 1921 in Europe. *Alle* has not been used for any other bird, so far as we are aware.

4. As pointed out by Wetmore and Watson (op. cit.), one troublesome problem appears, which is the reason for this application. With the elimination of *Plautus* Gunnerus, 1761, as non-binominal, the later *Plautus* Brünnich, 1772, ceases to be a junior homonym, and becomes available *for another genus*, as senior synonym of the currently used *Pinguinus* Bonnaterre, 1791. *Pinguinus* is today universally used for the famous, extinct, Great Auk (called "Pingouin" in French); general use of this generic name dates back some fifty years. Transferring the generic name of one well-known genus to another genus equally well-known is obviously undesirable. The birds involved are referred to constantly in the literature, which must run into hundreds of publications. The statute of limitations (Art. 23b) is not automatically applicable to preserve *Pinguinus*, for *Plautus* was used for the Great Auk by some authors at least to 1919, and probably for a few years later, when *Plautus* was shifted to the Little Auk, on the basis of Gunnerus' authorship. Another shift after fifty years would simply increase the confusion. It is best to get rid of *Plautus* altogether. *Pinguinus*, on the other hand, should be preserved, for it has been used only for the Great Auk genus.

5. The American Ornithologists' Union Committee on Classification and Nomenclature has in progress a new edition of the A.O.U. Check-list of North American Birds, in which both genera are involved. This committee has voted to recommend the present proposal and urges a prompt decision. Many other current publications are affected. The British Ornithologist' Union is preparing a new British Check-list and undoubtedly is also interested in an early decision.

6. Accordingly we urge that, to prevent confusion and to promote stability and universality, the names *Plautus* and *Plotus*, of whatever authorship, be suppressed, for purposes of the Law of Priority but not for those of the Law of Homonymy. This would leave *Alle* as the generic name for the Little Auk or Dovekie (now *Alle alle*), and *Pinguinus* as the generic name for the Great Auk (*Pinguinus impennis*).

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

(1) to use its plenary powers to suppress the generic name *Plautus* Brunnich, 1772, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the following generic names on the Official List of Generic Names in Zoology;

(a) *Alle* Link, 1807 (gender : feminine), type-species, by monotypy, *Alca alle* Linnaeus, 1758;

(b) *Pinguinus* Bonnaterre, 1791 (gender : feminine), type-species, by designation by Ogilvie-Grant, 1898 (*Cat. Birds Brit. Mus.* **26** : 562), *Alca impennis* Linnaeus, 1758;

(3) to place the following specific names on the Official List of Specific Names in Zoology;

(a) *alle* Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 131, as published in the binomen *Alca alle* (type-species of *Alle* Link, 1807);

(b) *impennis* Linnaeus, 1758, *Syst. Nat* (ed. 10) **1** : 130, as published in the binomen *Alca impennis* (type-species of *Pinguinus* Bonnaterre, 1791);

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

(a) *Plautus* Klein, 1760 (published in a non-binominal work);

(b) *Plautus* Gunnerus, 1761 (published in a non-binominal work);

(c) *Plotus* Gunnerus, 1761 (published in a non-binominal work);

(d) *Plautus* Brunnich, 1772 (as suppressed under the plenary powers in (1) above).

HYOCEPHALUS APRUGNUS BERGROTH, 1906 (INSECTA, HEMIPTERA-HETEROPTERA, HYOCEPHALIDAE): REQUEST FOR RETENTION OF THE NEOTYPE SPECIMEN IN PREFERENCE TO THE REDISCOVERED HOLOTYPE. Z.N.(S.) 1916

By J. A. Grant (*Birkbeck College, University of London*) and P. Štys (*Charles University, Prague*)

In 1906 the Finnish entomologist Ernst Evald Bergroth (1857–1925) described *Hyocephalus aprugnus* n. gen., n. sp. (locality—Yorketown, South Australia) and erected for it a new sub-family Hyocephalinae (in Coreidae, Heteroptera). It is clear from Bergroth's two papers on the group (1906, 1912) that his first description was based on a single specimen, a macropterous female included in a small sample of Australian Hemiptera sent to him by Brancsik (Trenčín, Slovakia). In his second paper Bergroth briefly refers back to this as the 'type', but again does not disclose where it was deposited. Nevertheless the holotype status of any such single specimen is valid (International Code of Zoological Nomenclature, Article 73a), and the information given contains enough individualities to identify it absolutely (vide infra para. 3).

2. At the time of the first revision (Štys 1964) the holotype could not be traced though enquiries were made of the several institutions (in Helsinki, Budapest and Paris) most likely to have received it. Furthermore Štys established with reasonable certainty that none of the 16 other workers referring to Hyocephalidae in the intervening 58 years ever had access to it. Since *H. aprugnus* provided the only foundation for what had become the family Hyocephalidae (Reuter, 1912), and since suitable material was available Štys (1964, p. 232, fig. 1) designated a neotype. The neotype, deposited in the Természettudományi Múzeum Állattára (Budapest) is a topotypic female macropter from the Brancsik collection which Štys had found to contain a capture series of 11 further specimens not seen by Bergroth: thus the designation is in fullest accordance with the provisions of the Int. Code Zool. Nomencl., Article 75.

3. In 1969 Mr. G. F. Gross (South Australian Museum, Adelaide) forwarded to the second reviser (Grant—revision in MS.) a hyocephalid which he had found in a box of undetermined Australian Heteroptera from the collections of the Universitetets Zoologiska Museum, Helsinki. All specimens found in Bergroth's home at Ekenäs after his death were removed to this museum: many of his types have been recognized from the unidentified material since incorporated with the general collection (Dr. M. Meinander *in litt.*). After careful examination the present writers are agreed that, although it bears no specific identification as such, this specimen is beyond doubt the missing holotype of *H. aprugnus*. In common with Bergroth's description it is female and macropterous; the printed data label is identical with those of the established Brancsik series and shows the locality as 'Austral. Yorketown'; the figure '34', manuscript on a second label, corresponds with numerals handwritten by Bergroth in letters to Prof. O. M. Reuter (Meinander *in litt.*); the body length is 14.01 mm. as against 14.0 mm. recorded (*cf.* the seven measured

by Štys 1964, p. 232, ranged from 14.6–15.4 mm.); the antennae lack segments III and IV; most importantly its right hemelytral membrane shows the same venational cellulation and dichotomies as illustrated by Bergroth (1906, fig. 4)—in *H. aprugnus* this feature varies even unilaterally, and the topotypic series studied by Štys (1964) possessed nothing comparable.

4. Rediscovery of the holotype of *H. aprugnus* raises no problems of nomenclature: the holotype and the neotype designation are to all practical taxonomic purposes identical. However only one can stand as type to the species and under the Int. Code Zool. Nomencl., Article 75f, this case is referred to the Commission. By current standards Bergroth's description has many inadequacies which, in view of published work on the neotype, it is not scientifically gainful to republish from his specimen: damage to the antennae and hindwings of the holotype anyway precludes a remedy in these areas. The neotype has been the subject of the more detailed study (Štys 1964) and is at least unilaterally entire should any future need arise to consult new characters. In the view of both writers, as first and second revisers of the family Hyocephalidae, the neotype specimen should continue to serve as the basis for taxonomic reference.

5. The International Commission of Zoological Nomenclature is therefore requested:

(a) to use its plenary powers to invalidate the original holotype specimen of *Hyocephalus aprugnus* Bergroth, 1906, rediscovered in the collections of the Universitetets Zoologiska Museum (Helsinki) and, having done so, to uphold the validity of the female neotype kept in the collections of the Természettudományi Múzeum Állattára (Budapest).

(b) to place on the Official List of Generic Names in Zoology the generic name *Hyocephalus* Bergroth, 1906 (gender : masculine), type species by monotypy, *Hyocephalus aprugnus* Bergroth, 1906.

(c) to place on the Official List of Specific Names in Zoology the specific name *aprugnus* Bergroth, 1906, as published in the binomen *Hyocephalus aprugnus*.

(d) to place on the Official List of Family-group names in Zoology the family-group name HYOCEPHALIDAE Bergroth, 1906 (type genus: *Hyocephalus* Bergroth, 1906).

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MIMECOMUTILLA ASHMEAD, 1903 (INSECTA, HYMENOPTERA MUTILLIDAE): REQUEST FOR THE DESIGNATION UNDER THE PLENARY POWERS OF A TYPE SPECIES IN HARMONY WITH THE INTENTION OF ITS AUTHOR.[1] Z.N.(S.) 1917

By D. J. Brothers

This application is a request to the International Commission on Zoological Nomenclature to use its plenary powers to designate as the type-species of the genus *Mimecomutilla* Ashmead, 1903 (Insecta, Hymenoptera, Mutillidae) the species intended by that author in place of the nominal species cited by him when establishing this nominal genus. The application is made under article 70(a)(i) of the *International Code of Zoological Nomenclature* (London, 1964), this being the procedure to be followed in the case of genera based upon misidentified type-species. The facts of this case are the following:

1. Frederick Smith in 1879 described *Mutilla purpurata*, a new species from Natal [South Africa], based on the male sex only. The description is not very detailed and could apply to a number of species in various genera.

2. In 1898 Péringuey described the female and in 1899 figured both sexes of a species which he believed to be *Mutilla purpurata* Smith. The description and figures were based on specimens captured *in copula* by Brauns. The only other reference to *Mutilla purpurata* before December 1903 was one by André in 1902 in which he gave supplementary information on specimens collected by Brauns. Evidence will be presented below that Péringuey misidentified his specimens. André followed Péringuey's usage of the name *Mutilla purpurata*.

3. Ashmead in December 1903 proposed the genus *Mimecomutilla*, with *Mutilla purpurata* Smith as type-species, in his key to the genera in the family MUTILLIDAE. Ashmead either was not familiar with this species, or he used misidentified specimens, because the characters given by him as defining *Mimecomutilla* do not wholly apply to *Mutilla purpurata* Smith, but do agree with *Mutilla purpurata* as figured by Péringuey.

4. Bischoff in 1920–1921, having studied a "metatopotype" (from Port Natal) of *Mutilla purpurata* Smith, recognized that the species identified by Péringuey as *Mutilla purpurata* had been misidentified. Bischoff (1921) therefore proposed a new name, *Mimecomutilla renominanda*, for "*purpurata* Péringuey nec Smith" and made this the type of Ashmead's genus *Mimecomutilla*. Unfortunately *M. purpurata* is a species for which there were two supposed "type" specimens, one in the British Museum (Natural History) and the other in the Oxford University Museum (Day, 1969, in litt.). The specimen in the British Museum has been designated the lectotype (Brothers, 1970). Bischoff also stated that *purpurata* Smith is a member of the genus *Mutilla* Linnaeus, 1758 (sensu stricto). This I can confirm, having seen a specimen from Port Natal which was determined and compared with Smith's type (in the British Museum) by Mickel (Collection University of Minnesota, St Paul).

[1] Contribution No. 1448 from the Department of Entomology, University of Kansas, Lawrence, Kansas 66044, USA.

5. In 1923 Bradley & Bequaert followed Bischoff in regarding *purpurata* as a true *Mutilla*, and proposed that "*Mimecomutilla* Ashmead based on it as genotype (even if misidentified) must therefore be reduced to a synonym of *Mutilla*". They considered it unnecessary to find an applicable name for the group which Bischoff called *Mimecomutilla*, typified by his *renominanda*, since they considered this group to fall within the genus *Smicromyrme* Thomson, 1860. They also stated that *renominanda* Bischoff does not agree with all the characters assigned to *Mimecomutilla* by Ashmead, since it has three instead of two submarginal cells. This is not entirely true, however, since I have found that one of the seven male specimens of *renominanda* (determined as *Mutilla purpurata* by Péringuey) in the United States National Museum has only two complete submarginal cells in each forewing; one has three on the left and two on the right and the other five have three complete cells on both sides. Bradley & Bequaert also synonymized many other genera with *Smicromyrme*, most of which have been, or should be, removed from synonymy (see Mickel, 1933, for a discussion of *Trogaspidia* Ashmead in this regard).

6. I have attempted to trace the material which Ashmead used for his diagnosis of *Mimecomutilla*, but have been unsuccessful. I now believe that Ashmead had no material, but instead relied on the description and figures of *Mutilla purpurata* (= *Mimecomutilla renominanda*) given by Péringuey. The reasons are as follows:

(a) The curators of the collections in the United States National Museum, the Philadelphia Academy of Natural Sciences and the British Museum (Natural History) were consulted. (These are the collections that Ashmead mainly used.) All stated that they had no material that could have been seen by Ashmead, or that there was no indication that he had seen their material (Menke, Jago, Day, 1969, in litt.).

(b) The female of the true *Mutilla purpurata* Smith has not been described as yet. Since Ashmead gave characters for the female in his description of *Mimecomutilla* he must have seen and used the papers in which Péringuey purported to describe and figure this female, or else he must have had specimens identified by Péringuey.

(c) The figures given by Péringuey, which are actually of *renominanda* Bischoff, display slight inaccuracies which apparently led Ashmead astray. The mesosoma (thorax plus propodeum) of the female is figured with the lateral margins exaggeratedly sinuate, an appearance obtained when the specimen is viewed obliquely from the rear. This led Ashmead erroneously to describe the mesosoma as "somewhat escutcheon-shaped, sinuately emarginated or contracted from about the apical one-fourth", The shape of the mesosoma is the main characteristic cited by Ashmead for the female. The male is figured with the appearance of two submarginal cells, only the right wing being shown. Dr. A. J. Hesse of the South African Museum (Natural History) has informed me (1969, in litt.) that in the specimen which he thinks is the one used for the illustration, the "right wing has only 2 submarginal cells, but the left wing has an incomplete 3rd cell". Another specimen in the South African Museum has three complete cells on the left and two on the right. Smith's description of *Mutilla purpurata* does not mention the wing venation, and Péringuey did not

give any description of the male, but provided only the figure. Ashmead must have been misled into thinking that this species invariably has two submarginal cells, since this is one of the main characters that he gives for the male. He apparently did not see André's (1902) reference to *Mutilla purpurata* (sensu Péringuey), since André stated that the male has three submarginal cells. Actually most specimens have three complete submarginal cells in at least one wing, something that Ashmead would most likely have noticed had he had specimens. Apart from those characters in which Ashmead was apparently misled by Péringuey's figures, Ashmead's description applies to *renominanda* Bischoff.

7. Ashmead thus apparently based his characterisation of *Mimecomutilla* on published material referring to a species which was originally misidentified by Péringuey. Bischoff recognized this and provided a new name for the species involved. Although Bradley & Bequaert suggested that *Mimecomutilla* should be synonymized with *Mutilla*, Bischoff's work is the only monographic treatment of the African Mutillidae. The name *Mimecomutilla* is thus used by many entomologists (specially in South Africa) when referring to the group typified by *renominanda* Bischoff. I further believe that this group of species is distinct from *Smicromyrme* Thomson (see Appendix 1). Since the name *Mimecomutilla* is available for this group of species, it would cause un-necessary confusion if it were necessary to sink the name *Mimecomutilla* Ashmead, 1903, as a junior synonym of *Mutilla* Linnaeus, 1758, and to provide a new name for the group of species for which the former name was proposed, and for which it has been used. I accordingly ask that the International Commission on Zoological Nomenclature designate, under its plenary powers, the type-species of *Mimecomutilla* Ashmead, 1903, as *Mimecomutilla renominanda* Bischoff, 1921. Such action would do justice to the evident intention of Ashmead and would avoid unnecessary nomenclatural changes.

8. For the reasons set forth above, the International Commission on Zoological Nomenclature is requested:

(1) to use its plenary powers

(a) to set aside all designations of type-species for the nominal genus *Mimecomutilla* Ashmead, 1903, and having done so

(b) to designate the nominal species *Mimecomutilla renominanda* Bischoff, 1921, to be the type-species of the above genus;

(2) to place the following generic name on the Official List of Generic Names in Zoology:

Mimecomutilla Ashmead, 1903 (gender : feminine) (type-species, by designation under the plenary powers, in (1)(b) above: *Mimecomutilla renominanda* Bischoff, 1921);

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *renominanda* Bischoff, 1921, as published in the binomen *Mimecomutilla renominanda* (type-species of *Mimecomutilla* Ashmead, 1903);

(b) *purpurata* Smith, 1879, as published in the binomen *Mutilla purpurata*.

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Appendix 1

Characters distinguishing *Mimecomutilla* Ashmead, 1903 (typified by *Mimecomutilla renominanda* Bischoff, 1921) from *Smicromyrme* Thomson, 1860 (type-species *Mutilla rufipes* Fabricius, 1787).

Mimecomutilla	*Smicromyrme*
♂♂: vertex rounded, not produced; head markedly transverse; prementum with a median, ventral protuberance; felt lines restricted to second tergum.	♂♂: vertex usually posteriorly produced, flattened, with smooth depressions postero-lateral to ocelli: head rounded, not markedly transverse; prementum simple; felt lines often present on second sternum as well as tergum.
♀♀: spots on second tergum paired or absent; pygidium granulate; prementum with a median, ventral protuberance; mesosoma wider posteriorly than anteriorly; first flagellar segment at least 1.5 times as long as second.	♀♀: spots on second tergum unpaired or absent; pygidium never granulate, usually striate; prementum simple; mesosoma subequal in width anteriorly and posteriorly, sometimes wide anteriorly; first flagellar segment less than 1.5 times as long as second.

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ZELANDOBATES HOPKINS, 1966 AND *ZEALANDOBATES* HAMMER, 1967 (ACARI): REQUEST FOR A RULING ON THE VIRTUAL HOMONYMY OF THE TWO NAMES. Z.N.(S.) 1918

By A. Spain (*Department of Forestry, The Australian National University, Canberra A.C.T., Australia*) and M. Luxton (*Jordbundsbiologisk Institut, Molslaboratoriet, 8443 Femmøller, Danmark*)

The purpose of the present application is to prevent future confusion that would otherwise seem certain to occur when two almost identical names are used side by side in a single group.

1. In 1966, Hopkins (*Trans. roy. Soc. N.Z., Zool.*, **8** (9) : 111) proposed the name *Zelandobates* for a new genus of water mite (Hydrachnellae, Hygrobatidae), type species *Zelandobates crinitus* Hopkins, 1966.

2. In 1966, Hammer (*Biol. Skr.*, **15** (2) : 5) cited the name *Zealandobates grandis* n. sp. in a list of species collected—but not yet published—by Ramsay.

3. Hammer (1967, *Biol. Skr.*, **15** (4) : 33) mentioned *Zealandobates grandis* Ramsay as an oribatid mite, giving a full description after having informed the reader that '*Zealandobates* has been established by Ramsay, but not yet published'. Evidently, the genus and species so proposed must be the responsibility of Hammer who first published both the names and the description (using her own words in the description). The correct name under the Rules is, therefore, *Zealandobates grandis* Hammer, 1967.

4. It is most unfortunate to have genera of these two names side by side in one and the same class of animals, and the best solution seems to be to reject the name *Zealandobates* Hammer (published by her under ignorance of the Rules). We propose the name *Ramsayellus* instead—to give credit to the scientist who produced the original material.

5. We have satisfied ourselves that *Zelandobates* is based on a species with apparently no older name than the one, *Zelandobates crinitus*, here cited, and that this species has not been made the type of any earlier genus. We therefore propose this generic and this specific name for the Official Lists.

6. We, therefore, ask the International Commission on Zoological Nomenclature:

(1) under the plenary powers to suppress the generic name *Zealandobates* Hammer, 1967, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place on the Official List of Generic Names in Zoology the names:

(a) *Ramsayellus* Spain and Luxton, 1970 (pro *Zealandobates* Hammer, 1967), type-species by monotypy, *Zealandobates grandis* Hammer, 1967 (gender : masculine);

(b) *Zelandobates* Hopkins, 1966, type-species, by monotypy, *Zelandobates crinitus* Hopkins, 1966 (gender : masculine);

(3) to place on the Official List of Specific Names in Zoology the names:

(a) *grandis* Hammer, 1967, as published in the binomen *Zealandobates grandis* (type of *Ramsayellus* Spain & Luxton, 1970).

(b) *crinitus* Hopkins, 1966, as published in the binomen *Zelandobates crinitus* (type of *Zelandobates* Hopkins, 1966);

(4) to place on the Index of Rejected and Invalid Generic Names in Zoology the name *Zealandobates* Hammer, 1967, as rejected under (1) above.

CLAVICERA LATREILLE, APRIL 1802 (INSECTA, HYMENOPTERA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS IN FAVOUR OF *CERATINA* LATREILLE, [OCTOBER 1802–SEPTEMBER 1803.] Z.N.(S.) 1919

By Howell V. Daly (*University of California, Berkeley, U.S.A.*) and O. W. Richards (*University of London, London, England*)

The purpose of this application is to resubmit a proposal to the International Commission on Zoological Nomenclature to use its plenary powers to suppress the generic name *Clavicera* Latreille, April 1802, and to place the generic name *Ceratina* Latreille, [October 1802–September 1803], on the Official List of Generic Names in Zoology. The original application by Benson, Ferrière, and Richards (1947, *Bull. zool. Nomencl.*, **1** : 205) proposed substantially the same action as requested here and was submitted to the Commission on the recommendation of the Committee on Generic Nomenclature of the Royal Entomological Society of London (Marshall, *et al.*, 1937, *The generic names of British insects*, Part 5 : 81, 83, 91, 138). The Commission considered the application (file Z.N.(S.) 133) and deferred taking a decision until supplementary statements were received setting out the nature and extent of the confusion which would result if the Règles were strictly applied (1950, *Bull. zool. Nomencl.*, **4** (13/15): 407–408). No supplementary statements were prepared and this reapplication became necessary following the statement of intention by the Acting Secretary in April 1963 to close all files in the back-log of applications submitted before October 1959 and uncompleted (1963, *Bull. zool. Nomencl.*, **20** : 81).

2. The details of the case are: Latreille (*Hist. nat. Fourmis* : 432) published the genus name *Clavicera* for *Hylaeus albilabris* Fabricius, 1793 [= *Apis cucurbitina* Rossi, 1792]. Later he rejected the name *Clavicera* (*Hist. nat. gén. partic. Crust. Ins.*, **3** : 380) because he believed the name improperly formed and substituted the genus name *Ceratina* for *Hylaeus albilabris* Fabricius. At this time he also indicated a family-group name: "sous-famille cinquiême. Apiaires cèratines; *ceratinae*." (Italics his.) Griffin (1938, *J. Soc. Bibl. nat. Hist.*, **1** : 157) has determined that the date of the first publication is April 1802 and that the date of the second publication is between October 1802 and September 1803. *Ceratina* is therefore a junior objective synonym of *Clavicera*.

3. The genus name *Clavicera* has been used only once for a definite zoological object (Walckenaer, July–September 1802, *Faune Parisienne* : 132); once in a list of genera and type-species by Sandhouse (1943, *Proc. U.S. Natl. Mus.*, **92** (3156) : 536, 539) who applied strict priority pending an opinion from the Commission; and in synonymy by Dalla Torre (1896, *Cat. Hymen.*, **10** : 195), Michener (1944, *Bull. Amer. Mus. Nat. Hist.*, **82** : 289), Muesebeck, *et al.* (1951, *Hymenoptera of America North of Mexico*, Synoptic Catalog, U.S. Dept. Agr. Monogr. No. 2, p. 1244), Mitchell (1962, *North Carolina Agr. Expt. Sta., Tech. Bull.* No. 152, p. 500), and Michener (1965, *Bull. Amer. Mus. Nat. Hist.*, **130** : 220). No species-group names have been described under the genus name *Clavicera*, no genus-group names have been formed as compounds

including roots from the genus name *Clavicera*, and no family-group names have been formed by the addition of appropriate stems to the genus name *Clavicera*. The name *Ceratina* was consistently used by Latreille in his later publications (1805, *Hist. nat. Insect.*, **14** : 50, 1809, *Gen. Crust. and Insect.*, **4** : 160) and subsequently so by all other authors. To date 459 species-group taxa have been described under the genus name *Ceratina*, 8 genus-group names have been formed as compounds including all of the name or roots from the genus name *Ceratina*, and a family-group name, Ceratinidae (Latreille, 1802–1803) Ashmead 1899 (*Amer. Ent. Soc.*, **26** : 69) has been formed by the addition of the appropriate stem to the genus name *Ceratina*. Therefore the name *Ceratina* has been the accepted name in the primary zoological literature for more than 150 years.

4. In the interests of stability and universality of nomenclature and to leave no doubt as to the official status of the names in question, the International Commission on Zoological Nomenclature is therefore asked:

(1) to use its plenary powers to suppress the generic name *Clavicera* Latreille, April 1802, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the generic name *Ceratina* Latreille [October 1802–September 1803] (gender: feminine), type-species, by monotypy, *Hylaeus albilabris* Fabricius, 1793 [= *Apis cucurbitina* Rossi, 1792], on the Official List of Generic Names in Zoology;

(3) to place the specific name *cucurbitina* Rossi, 1792, as published in the binomen *Apis cucurbitina*, on the Official List of Specific Names in Zoology;

(4) to place the generic name *Clavicera* Latreille, April 1802, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology;

(5) to place the family-group name CERATINIDAE (correction of "Apiaires cératines; ceratinae") Latreille, [1802–1803] (type-genus *Ceratina* Latreille [1802–1803]), on the Official List of Family-Group Names in Zoology.

SAPERDA INORNATA SAY, 1824, (INSECTA, COLEOPTERA): PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A NEOTYPE TO STABILIZE THE NOMENCLATURE. Z.N.(S.) 1921

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The purpose of this application is to stabilize the name of an increasingly important economic pest, *Saperda inornata* Say, 1824, which has been confused for over 100 years. This will be done by requesting that the International Commission on Zoological Nomenclature use its plenary powers to designate a neotype for this species, the type of which has either been lost or destroyed. The details of the case are set out below.

2. (a) Generic name: *Saperda* Fabricius, 1775.

(b) Specific and sub-specific names used for a species inhabiting *Populus* and *Salix* in North America: *Saperda inornata* Say, 1824; *S. concolor* Le Conte, 1852; *S. concolor* var. *unicolor* Felt and Joutel, 1904; *Mecas inornata* (Say) (Horn, 1878).

3. *Genus Saperda Fabricius.*—The genus *Saperda* was erected by Fabricius in 1775. He included 16 species living mostly in angiospermous trees in Europe, "America" and New Zealand. He characterized the genus as follows:

> "*Palpi* filiformes.
> *Maxilla* membranacea, bifida.
> *Labium* cordatum, truncatum.
> *Antennae* setaceae."

The type-species of the genus, *Cerambyx scalaris* Linnaeus, 1758, was first designated by Curtis (1829). The exact location of the type specimen of *S. scalaris*—if indeed it does exist—is unknown, but according to Usinger (1964) Linnaeus' main collection belongs to the Linnean Society of London; a small number of others are in the Zoological Institute of the University, Uppsala and possibly in the Swedish Riksmuseum, Stockholm. Most of Fabricius' type material for the genus *Saperda* is located in various European museums (Zimsen, 1964). Felt and Joutel's (1904) monograph on the genus dealt mainly with North American species. They discussed the morphology of these species and their relationships and made some comparisons with European species. Breuning's (1952) revision covered the tribe Saperdini and it included all described species of *Saperda.* He recognized 37 species and numerous subspecies and morphae from Europe, North Africa, northern and eastern Asia, and North America, including *Saperda inornata* Say from Nevada eastward in the United States.

4. *S. inornata Say.*—*S. inornata* was described in 1824 by Say as follows:

> "4. *S. inornata.* Black, covered with cinereous hair; antennae annulate; elytra entire.
> Inhabits Missouri.
> *Body* black, immaculate, cylindrical, covered with short, prostrate hair, which conceals the punctures: *palpi* black: *antennae*

rather shorter than the body, and, excepting the basal joints, annulate, with cinereous and black: *thorax* cylindric, diameters subequal: *elytra* entire and subacute at tip, which is equally attenuated from the suture and exterior margins.

Length less than nine-twentieths of an inch."

He also noted that "the thorax is entirely destitute of glabrous spots". Most of Say's type material has been destroyed or lost as explained below.

5. *S. concolor Le Conte.—S. concolor* was described in 1852 by Le Conte from one specimen (host unknown) collected in Santa Fe, New Mexico. The original description follows:

"*S. concolor*, nigra, dense cinereo-pubescens, thorace lineis tribus densius pubescentibus, elytris punctatis, breviter cinereo villosus, antennis nigro-annulatis, basi nigris, tarsis articulo ultimo brevissimo. Long. . 47."

The claws are simple according to his description of the genus. The type is in the Museum of Comparative Zoology, Harvard University. At this time Le Conte (1852) was aware of *S. inornata* for he included it in his paper, and said that "This is possibly the male of *S. concolor* Lec." Felt and Joutel (1904) recognized two geographic variants of *S. concolor*: var. *concolor*, the western form which included the type (Sante Fe, New Mexico) and other specimens from New Mexico, Arizona, and Idaho; and var. *unicolor*, the eastern form from midwestern and northeastern U.S. and Canada. The type of var. *unicolor* is from Dover, Massachusetts (Norfolk County), and it is in the American Museum of Natural History. Felt and Joutel described var. *concolor* as "black, finely punctulate, and with numerous small, shallow punctures; entirely covered by a dense gray or yellowish gray pubescence except at the top of the thorax, where it is less dense, this giving it a darker appearance and increasing the effect of the lateral band; a slight median line on the thorax; antennae black, annulated with gray." Variety *unicolor* was described as "like type, but pubescence uniformly dark gray and finer. The punctures are much more numerous than the type and are apt to be confluent." In their key, they state that the lateral stripe on the prothorax of var. *unicolor* is wanting or nearly so.

6. *Mecas inornata* (*Say*).—In 1878 Horn placed *Saperda inornata* Say in the Genus *Mecas*. He did not mention specifically why he put *inornata* in *Mecas*. Although he said that he had studied Le Conte's and Haldeman's types in preparing the paper, he did not mention seeing Say's type material of *inornata*. In his key, Horn (1878) described *M. inornata* as follows:

Body above concolorous.

Legs black. Thorax usually with two feeble callosities. Body above uniformly clothed with cinereous pubescence . . *inornata*.

In the text, Horn (1878) added, "The callosities of the thorax which are feeble at best may be wanting," and he placed *M. saturnina* Lec. as a synonym.

7. In 1924 Martin stated that Le Conte (1852) did not differentiate *concolor* from *inornata*. He emphasized the fact that Say (1824) said that there was no trace of thoracic callosities. Because of the latter statement and the fact that *concolor* otherwise agreed with Say's description, Martin thought that Say's *inornata* belonged in *Saperda*, not *Mecas*. On the basis of Le Conte's descrip-

tion, Martin called *concolor* a synonym of *inornata* Say. He proposed the name *Mecas bicallosa* for the species of *Mecas* which had been called *inornata* by Horn (1878). Breuning (1952), in his revision of the Saperdini, placed *inornata* Say in the Genus *Saperda* and called *concolor* Le Conte a synonym; *concolor* var. *unicolor* Felt and Joutel was listed as a subspecies. Despite Martin's (1924) suggestion and Breuning's (1952) revision, *S. concolor* is in common use today. However, a search of the literature produced evidence which substantiates Martin's claim that *inornata* must stand. For reasons stated below, it is believed that Say's specimen of *inornata* has been lost or destroyed and it is necessary to designate a neotype in order to stabilize the nomenclature.

8. Thomas Say collected *S. inornata* in "Missouri" on Long's expedition to the Rocky Mountains in 1819–20. In a letter to John F. Melsheimer in 1821 (Fox, 1901) Say stated that the insects collected on this expedition were ordered by John C. Calhoun, Secretary of War, to be deposited in Peale's Museum in Philadelphia. This was presumably done since Dr. T. W. Harris of Harvard (Weiss and Ziegler, 1931) found none of the "Rocky Mountain" specimens in Say's personal collection in 1836 when he catalogued it. The Peale's Museum collection was sold in 1842 to P. T. Barnum and Moses Kimball (Barnum, 1855). Half of it went to Barnum's American Museum in New York City and the other half went to Kimball's Boston Museum. Barnum's Museum burned to the ground in 1865 with everything in it (Barnum, 1883). The Boston Museum, which was a combination museum and stock theater, was presenting plays and apparently had displays until about 1900 (McGlinchee, 1940). The whereabouts of the Boston Museum collection after 1900 is unknown. To which museum the Say "Missouri" collection might have gone is also unknown. Le Conte in 1859 stated in the preface to his compilation of Say's writings (1859a), and in the preface to another paper (1859b), that Say's original specimens had been entirely destroyed. Say's personal collection was found to be almost entirely destroyed by dermestids in 1836 by T. W. Harris (Weiss and Ziegler, 1931). Fox (1892) stated that only one of Say's types remained in the collection of the Academy of Natural Sciences of Philadelphia where his personal collection was finally deposited in 1842 (Weiss and Ziegler, 1931). This was *Chionabas semidea* [=*Hipparchia semidea* Say]. The Melsheimer collection in the Museum of Comparative Zoology at Harvard University, which Le Conte said contained "the only authentic types of many of Mr. Say's species" (Weiss and Ziegler, 1931), did not contain the type of *inornata* or of *S. pergrata* Say, the species described by Say immediately following *inornata* (John F. Lawrence, in conversation). The collection of the Boston Society of Natural History did not contain the *inornata* type either (Prof. Arthur G. Humes, Boston University, in conversation). It is the conclusion of the author that the Say type has either been destroyed or lost.

9. Le Conte (1852) did not distinguish his *S. concolor* from *S. inornata* Say. In fact, he said that *inornata* might be the male of *concolor*. There is only one characteristic of Say's description that does not agree entirely with Le Conte's description of *concolor*: Say stated *inornata* was immaculate, or destitute of spots or marks; Le Conte's *concolor* had three dense pubescent lines on the

thorax (pronotum). Say may have been referring to the absence of spots or callosities which were present on the pronotum of the species he described after *S. inornata*, *S. pergrata* [=*Mecas pergrata* (Say)]. On the other hand, although these pronotal lines to which Le Conte referred are usually present in specimens collected in North America, they are also faint or absent on many specimens. Therefore, Say's one specimen could have been different from Le Conte's one specimen in this respect and still represent the same species. In the opinion of the author, Le Conte did not adequately distinguish *concolor* from *inornata* and the two names probably apply to the same species.

10. It is apparent that Horn, who collaborated with Le Conte and later carried on his work, did not see Say's types either; and therefore he had no justification for putting *inornata* in genus *Mecas* (Horn, 1878). In distinguishing *M. inornata* Say from *M. saturnina* Lec., Horn (1888) made the following statement: "The specimens which *served* [italics added] as the types of *Mecas inornata* Say and *M. saturnina* Lec. and which formed the basis of my study of that genus are identical." Although Horn made this statement in 1888, from which one might infer that he saw Say's specimen of *inornata*, there is evidence elsewhere that he did not. Blanchard (1887) pointed out to Horn the difference between the two specimens (*M. inornata* and *M. saturnina*) and mentioned that he and Dr. Horn looked at the *Le Conte* [italics added] specimens of *inornata*—not Say specimens. Furthermore, Blanchard gives the range of *inornata* as "Dak., Kans., Tex." not mentioning Missouri, the locality of the Say specimen. Therefore, one can conclude that a Le Conte specimen served as the "type" for *M. inornata* (Say) in Horn's (1878) study, not Say's specimen. This, together with Le Conte's comments on the destruction of the Say types (1859a, 1859b), seems to point to the fact that Horn never saw Say's types either. It follows then that not having seen Say's specimen of *inornata*, Horn had no justification whatsoever in putting *inornata* in the genus *Mecas*.

11. In summary, therefore, *Saperda inornata* Say should remain in *Saperda* and should stand, by reason of priority, as the name for our common eastern species on *Populus tremuloides*; *S. concolor* Le Conte is a synonym of *inornata*, if it actually applies to the same species.

12. It is highly probable that Say's type material has been destroyed or at least lost according to published accounts and the author's recent correspondence. Therefore, a neotype should be designated. The type of *S. concolor* var. *unicolor* Felt and Joutel is proposed as the neotype of *S. inornata*, thus also making this variety a synonym of *inornata* Say and clearing up one of the persisting nomenclatural problems. This specimen was selected for the following reasons: (1) The locality of the original type is impossible to determine, even to the state, and therefore it would not be possible to select a more western specimen with any more confidence—in fact, with less confidence—of conspecific identity. The published locality is Missouri, which was Missouri Territory in 1819–1820 (Paullin, 1932); and according to the map of Say's travels (Weiss and Ziegler, 1931), it could have been found in any one of the present states of Missouri, Iowa (southwestern), Nebraska, Colorado (eastern), Kansas, or Oklahoma (north central). Furthermore, most of Say's notebooks, which probably contained more precise locations, were stolen among other

belongings of the expedition by three soldiers on August 31, 1820, and never recovered (Weiss and Ziegler, 1931). (2) Most authors have felt this varietal name indicated the same species as *inornata* Say, although they did not designate a neotype, and therefore by usage *unicolor* has become a junior synonym. (3) The *unicolor* type is like most of the individuals examined by the author (Nord, 1968) which have been collected east of the Rocky Mountains (where Say's specimen of *inornata* was found) including some from eastern Colorado, eastern Wyoming, Kansas, Iowa and North Dakota, and it is the type of the eastern variety recognized by Felt and Joutel (1904). In particular, this type matches the light specimens reared from *P. tremuloides* by the author.

13. The type specimen of *S. concolor* var. *unicolor* is like Felt and Joutel's (1904) description. It is a female, 10.5 mm. long and 3.0 mm. across the bases of the elytra. It agrees with Say's description of *inornata* except that the pronotum has three faint longitudinal lines, and the elytra are not equally attenuated from the suture and exterior margins. Both of these latter characteristics were found to be variable among conspecific individuals raised from the same host species in the same area by the author (Nord, 1968). The pronotal lines may be pronounced, faint or absent, and the elytral tips vary from subequally attenuated to asymetrically attenuated.

14. Le Conte's type specimen of *concolor* from New Mexico is inappropriate because it differs from specimens found east of the Rocky Mountains in two respects and may represent yet another species: (1) specimens from Tempe, Arizona, which were very similar to the *concolor* type according to Dr. John F. Lawrence (in correspondence), have much denser and more lightly coloured pubescence distributed over more parts of the body such as legs, scapes of the antennae and mouth parts; and (2) the punctures on the elytra are smaller and shallower than in eastern specimens, and they are scattered instead of partly confluent and partly contiguous.

15. The International Commission of Zoological Nomenclature is therefore requested:

(1) to use its plenary powers to designate a neotype as follows: *Saperda inornata* Say, 1824, (*J. Acad. Nat. Sci. Phila.* **3** (II) : 407).

Neotype: the type of *S. concolor* var. *unicolor* Felt and Joutel, 1904 (*New York State Mus. Bull.* **74** : 74), a female preserved in the American Museum of Natural History, New York City, N.Y., U.S.A.; type number 147, bearing the labels: "Dovr. N. Co. Mass. 6-8-95" and "*Saperda concolor* var. *unicolor*, Type."

(2) to place the following specific name on the Official List of Specific Names in Zoology:

inornata Say, 1824, as published in the binomen *Saperda inornata*, as interpreted by the neotype designated under the plenary powers in (1) above.

(3) to place the following generic name on the Official List of Generic Names in Zoology:

Saperda Fabricius, 1775 (gender : masculine) type species, by designation by Curtis (1829), *Cerambyx scalaris* Linnaeus, 1758.

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CONTENTS

(*continued from front wrapper*)

Page

Opinions

Opinion 917 (*Cyathocrinites* Miller, 1821) 70
Opinion 918 (O. F. Müller works) 73
Opinion 919 (*Lyrodon kefersteini* Münster, 1837) 75
Opinion 920 (*Inuus fuscatus* Blyth, 1875) 77
Opinion 921 (PLETHODONTIDAE in Pisces & Amphibia) 79
Opinion 922 (*Charaxes iocaste* Butler, 1865) 81
Opinion 923 (*Argynnis chlorodippe* Villiers & Guenée, 1835) 83
Opinion 924 (*Terebratulina* d'Orbigny, 1847) 85
Opinion 925 (Three Linnaean Brachiopod species) 87
Opinion 926 (*Tintinnidium* Kent & *Leprotintinnus* Jörgensen) 89
Opinion 927 (*Cystidea* Barrande, 1868) 91
Opinion 928 (*Pachyrhynchus* Germar, 1824) 93
Opinion 929 (*Lasioptera* Meigen, 1818) 95
Opinion 930 (*Megalichthys* Agassiz & *Rhizodus* Owen) 97
Opinion 931 (*Attus obscurus* Taczanowski, 1872) 100

New Cases

Psoidos, *Psodos* or *Psolos* Treitsche ? (Insecta, Lepidoptera): A request for use of the plenary powers (Charles F. Cowan) 101
Attus audax Hentz, 1845 (Aranaea): Proposed preservation under the plenary powers and designation as type-species of *Phidippus* Koch, 1846 (Herbert W. Levi & Lawrence J. Pinter) 103
Antilope zebra Gray, 1838 (Mammalia): Proposed addition to the Official List as the name of the Zebra Duiker (W. F. H. Ansell) .. 104

CONTENTS

(*continued from inside back wrapper*) Page

Acanthopleuroceras Hyatt, 1900 (Cephalopoda): Proposed use of the plenary powers to designate the type-species (T. A. Getty) 105

Plautus or *Plotus* Gunnerus, 1761, *Plautus* Klein, 1860, *Plotus* Linnaeus, *Plautus* Brunnich, 1772 (Aves): Proposed rejection or suppression under the plenary powers (Dean Amadon, Eugene Eisenmann & George E. Watson) 110

Hyocephalus aprugnus Bergroth, 1906 (Insecta, Hemiptera): Request for retention of the neotype specimen in preference to the rediscovered holotype (J. A. Grant & P. Štys) 113

Mimecomutilla Ashmead, 1903 (Insecta, Hymenoptera): Request for the designation under the plenary powers of a type-species in harmony with the intention of its author (D. J. Brothers) 115

Zelandobates Hopkins, 1966, and *Zealandobates* Hammer, 1967 (Acari): Request for a Ruling on the virtual homonymy of the two names (A. Spain & M. Luxton) 119

Clavicera Latreille, 1802 (Insecta, Hymenoptera): Proposed suppression, under the plenary powers in favour of *Ceratina* Latreille, [1802–1803]. (Howell V. Daly & O. W. Richards) 121

Saperda inornata Say, 1824 (Insecta, Coleoptera): Proposed use of the plenary powers to designate a neotype to stabilize the nomenclature (John C. Nord and Fred B. Knight) 123

Comments

Additional comment on *Rana maculata* (Hobart M. Smith and J. D. Lynch) 66

Comment on the request for validation of *Murex lotorium* Linnaeus, 1758 (Gastropoda) in its accustomed sense (H. A. Rehder) .. 67

Papilio sebrus Huebner, 1822–26 (Lepidoptera): Proposed suppression under the plenary powers. Supplementary note (N. D. Riley & L. G. Higgins) 68

The case of *Papilio aglaja* Linnaeus (C. W. Sabrosky) 69

Dates of separata: A comment on Finlay's works on New Zealand Mollusca (C. W. Sabrosky) 69

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THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

Page

Notice of Vacancies 129

Notices prescribed by the International Congress of Zoology:

Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature* 129

Notices of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases 129

(*continued inside back wrapper*)

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INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

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JAN 1971

BULLETIN OF ZOOLOGICAL NOMENCLATURE

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NOTICE OF VACANCIES

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE has vacancies for not fewer than seven new Commissioners. These vacancies arise from the retirement or resignation of Commissioners from Brazil, Germany, Japan, the Netherlands, the United Kingdom and the United States. Nominations for election from other countries will, however, be considered.

Candidates, who should be eminent zoologists with a distinguished record of work in any branch of Zoology and with an interest in zoological nomenclature, should be nominated by academies or scientific societies concerned with zoology and nominating bodies should have regard to the qualifications rather than the nationality of the individuals concerned. Specialists in any field may be proposed, but the Commission is interested in recruiting members interested in Herpetology, Parasitology, Marine Biology, Protista and Coelenterata.

Nominations for election should be sent to The Secretary, International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London, S.W.7, U.K. by 31 December 1970.

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) Validation of, and designation of a type-species for, *Littorina* Férussac, 1822 (Gastropoda). Z.N.(S.) 1901

(2) Validation of, or suppression of, *Orthoceras* Bruguière, 1789; Validation of *Nodosaria* [Lamarck, 1816] (Cephalopoda). Z.N.(S.) 44

(3) Validation of TYPETID- as the stem of the generic name *Trypetes* in forming family-group names (Insecta, Coloptera). Z.N.(S.) 1733

(4) Emendation to *Argiope* of *Argyope* Audouin, 1826 (Aranaea). Z.N.(S.) 1798

(5) Designation of a neotype for *Poteriocrinus hemisphericus* Shumard, 1858 (Crinoidea). Z.N.(S.) 1905

(6) Validation of *Donax variabilis* Say, 1822 (Bivalvia). Z.N.(S.) 1923
(7) Designation of a type-species for *Cosinocyathus* Bornemann, 1884 (Archaeocyatha). Z.N.(S.) 1924

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England
5 *October* 1970

MARGARET DOYLE
Scientific Assistant
International Commission on
Zoological Nomenclature

COMMENT ON THE PROPOSED RECTIFICATION OF HOMONYMY BETWEEN SPHAERIIDAE IN MOLLUSCA AND INSECTA. Z.N.(S.) 1892

(see volume 26, pages 235—237)

By David Heppell (*The Royal Scottish Museum, Edinburgh*)

I should like to register my support for the proposal by Dr. A. H. Clarke concerning the competition in homonymy of the name Sphaeriidae in Mollusca and Insecta. This matter was briefly referred to in a recent revision of the names of the British Sphaeriidae (Mollusca) by Bowden & Heppell (*J. Conch.* **26** : 239, 253–254 (1968)). The authors agreed with Baker's findings that under the terms of Article 40 Sphaeriidae must take priority as of 1820. As the name cannot be maintained unemended in both Mollusca and Insecta it does seem logical to keep the original spelling for use in Mollusca both on the grounds of priority and frequency of use.

COMMENT ON THE PROPOSAL BY NIELS L. WOLFF TO DESIGNATE A NEOTYPE FOR *PHALAENA XYLOSTELLA* LINNAEUS, 1758. Z.N.(S.) 1906

(see present volume, pages 60—62)

By E. C. Pelham-Clinton (*The Royal Scottish Museum, Edinburgh*)

I wish to support Dr. Wolff's proposal which would result in the retention in their present usage of two extremely well-known names.

The following points need emphasis:

1. As pointed out by Wolff the insect at present known as *Plutella maculipennis* Curtis is a widespread pest and its extensive literature has almost all been published under that name.
2. The name *Phalaena xylostella* was never up till that time used in the sense suggested by Bradley.
3. The original description provides conclusive evidence of the species (i.e. the *Lonicera* species) intended by Linnaeus and any supposed type-material which contradicts this must be regarded with suspicion. Neither of the species concerned would ever feed on the foodplant of the other.
4. There is no reason at all for Bradley's suggested change other than the existence of the supposed "types".

COMMENT ON THE PROPOSED DESIGNATION OF A TYPE-SPECIES FOR *LITTORINA* FÉRUSSAC, 1822. Z.N.(S.) 1901

(see present volume, pages 51—54)

By David Heppell (*The Royal Scottish Museum, Edinburgh*)

The application of Dr. D. Kadolsky anent the generic name *Littorina* Férussac and its type-species is welcome, as a decision of the I.C.Z.N. is certainly required to remove all uncertainty concerning the correct nomenclature of this genus, but while I strongly support Kadolsky's application, I cannot accept that he has shown unequivocally either that the name *Littorina* is available from Férussac's publication, or that *Turbo littoreus* L. was validly designated as its type-species by Blainville, 1828.

I agree with the choice of *Turbo littoreus* L., 1758, as type-species because:

(a) it is the name of the edible periwinkle and is, therefore, a species of commercial importance;

(b) it is virtually tautonymous with the generic name;

(c) of the three contenders *littoreus*, *littoralis* and *neritoides*, it is the species best understood taxonomically;

(d) it is the only species with a good claim to have been validly designated as type by any of those authors who have regarded the name *Littorina* as available from Férussac. (Those authors who accepted Rang's selection of *L. littoralis* regarded this as an originally included *species* (synonymous with *L. obtusata*) but under Article 69(a) of the Code, only originally included *nominal* species are eligible for subsequent selection; moreover, these authors may have overlooked the earlier designation by Blainville.)

Although the plenary powers are referred to in the title of Kadolsky's application they are nowhere referred to in his text, nor does the Assistant Secretary of the I.C.Z.N. refer to the possible use of the plenary powers in relation to this case in his "Notices" on the first page of the *Bulletin* in which this application is published. It is, therefore, necessary carefully to examine the evidence presented and to determine those points at which opinions may differ and on which rulings (with the possible use of the plenary powers) will be required. These points are discussed below.

Is *Littorina* Férussac, 1822, available? Kadolsky (paragraph 3) believes it is and cites Férussac's text extensively in support of this. Férussac certainly leaves us in no doubt as to what he understood by his new subgenus, but before a name can be placed on the Official List we must consider whether it satisfies the Criteria of Availability as set out in the Code (Chapter IV). According to Article 12 "a name published before 1931 must have been accompanied by a description, definition, or indication". *Littorina* Férussac was not accompanied by a description; the word "definition" is not itself defined; the word "indication" is defined in Article 16 but none of the possible interpretations has any affinity with the circumstances of the introduction of this generic name. According to Kadolsky, the available specific name *Turbo neritoides* L. is mentioned by Férussac in association with (*not* "in combination with" as required under Article 16(a)(v)) the new genus-group name, but reference to Férussac (1822 : xi) reveals only the vernacular "littorine" not the latinized "*littorina*" as quoted by Kadolsky (paragraph 3). There are even less grounds for regarding any of the other four species accepted by Kadolsky (paragraph 5) as originally included nominal species. (I assume that by "the original publication" Kadolsky implies ". . . of the genus".) It may be argued that Férussac provided a "definition" of *Littorina*, but in the absence of any guidance in the Code as to what constitutes a definition, this can only be a matter of opinion and, therefore, requires a ruling by the I.C.Z.N. If the ruling is that *Littorina* as published by Férussac was not accompanied by a description, definition, or indication, then validation of *Littorina* Férussac, 1822, will require the use of the plenary powers.

Once the availability of the generic name *Littorina* Férussac has been established (by the use of the plenary powers if necessary) the question of the valid type-species remains to be agreed. If it is ruled that *Littorina* was published as a genus caelebs the type-species would be *Littorina basterotii* Payraudeau, 1826 (generally regarded as a junior subjective synonym of *L. neritoides*) by subsequent monotypy. (Bequaert (1943) cites Blainville, 1825 (*Faune Française*, Malacozoaires, p. 297), as the first subsequent usage of *Littorina* "with definition and species" but no designation of type. Bequaert's early dating of this work appears to be erroneous, however, as according to Sherborn & Woodward (1901) pp. 241–320 of Blainville's contribution "Malacozoaires" to the *Faune Française* were published in July 1830.) In this case all designations of a type-species would have to be set aside and *Turbo littoreus* L., 1758, designated as type under the plenary powers.

If it is ruled that *Littorina* Férussac was validly established with originally included species (or if *Littorina* Férussac is validated under the plenary powers but not as a genus caelebs) the first valid selection of one of these as type must be determined. The earliest selection noted by Kadolsky is that of Blainville, 1828, but Winckworth (1922) showed that Blainville referred only to the vernacular "genre Littorine", and this is confirmed by Bequaert (1943). Thus severe doubt is cast on the validity of this selection. The designation of available nominal species as types of vernacular generic names is not referred to in the Code. Again we are in no doubt as to the author's intention but this alone is not sufficient to allow us to cite this designation in the Official List without further consideration. The next designation mentioned by Kadolsky—that of Swainson, 1840—is also unsatisfactory. Swainson cites *Turbo littoreus* as type-species of *Turbo*. His action can in no way be regarded as constituting a type-designation for *Littorina*. The subsequent designation by Deshayes in Lamarck (1843 : 199–200), however, does appear to be acceptable, as Deshayes writes: "Le *Turbo littoreus*, étant devenu le type d'un nouveau genre, sous le nom de *Littorina* . . .". In view of the possibility of other acceptable type-designations, published between 1822 and 1843, having been overlooked, it would seem appropriate to ask the I.C.Z.N. to set aside all designations of a type for *Littorina* prior to the selection of *Turbo littoreus* by Deshayes, 1843.

To sum up, I am in full agreement with Kadolsky's request to place *Littorina* Férussac, 1822, on the Official List of Generic Names, with *Turbo littoreus* L., 1758, as its type-species, but I believe the I.C.Z.N. must first be asked to take the following additional action:

1. Either
   (a) to rule that the genus-group name *Littorina* is available from its publication by Férussac, 1822, or
   (b) to use the plenary powers to validate the genus-group name *Littorina* from its publication by Férussac, 1822;
2. To rule whether any (and if so which) species are to be considered originally included nominal species of *Littorina* Férussac, 1822;
3. To use the plenary powers either
   (a) to set aside all designations of type-species for *Littorina* Férussac, 1822, prior to the designation of *Turbo littoreus* L., 1758, by Deshayes, 1843, or
   (b) to set aside all previous designations of type-species for *Littorina* Férussac, 1822, and having done so to designate *Turbo littoreus* L., 1758, as type-species.

Additional References

Bequaert, J. C. 1943. The genus *Littorina* in the Western Atlantic. *Johnsonia* **1** (7) : 1–27

Sherborn, C. D., and Woodward, B. B. 1901. Dates of publication . . . of the "Faune Française". *Ann. Mag. nat. Hist.* (7) **8** : 491–494

FURTHER COMMENT ON *RANA MACULATA*. Z.N.(S.) 1750

(see volume 23, pages 169—173, volume 26, pages 119—120)

By James A. Peters (*Division of Reptiles and Amphibians, Smithsonian Institution, Washington, D.C.*)

The American Society of Ichthyologists and Herpetologists has a permanent committee charged with the review of problems in nomenclature. In past years, the committee was polled for opinions on proposals before the International Commission on Nomenclature, and the committee opinion was submitted as a unit. Recently, the Nomenclature Committee of the Society was reorganized to consist of one herpetologist and one ichthyologist. Each is charged with soliciting response from members he selects to serve on an *ad hoc* committee dealing with a specific proposal within his field. I have therefore gathered opinions from interested herpetologists concerning the remarks by Sabrosky (1969, *Bull. zool. Nomencl.* **26** : 119–120) on the various methods of handling the proposal concerning *Rana maculata* Daudin, 1801.

The following herpetologists indicated support for alternative D as presented by Sabrosky: Carl Gans, Robert F. Inger, Alan E. Leviton, Neil D. Richmond, Douglas A. Rossman, and Jay M. Savage.

The following herpetologist indicated support for alternative A as presented by Sabrosky: Ronald Heyer.

Although not directly submitted to me as a response to *ad hoc* committee action, an additional comment on the question has been seen, and it would indicate that the following herpetologists would support alternative C as presented by Sabrosky: John D. Lynch and Hobart M. Smith.

I think it legitimate to add that the tenor of the letters received in response to my request clearly indicate the desirability of following the rules in cases such as these. Smith and Lynch, in their rebuttal of Sabrosky's points, indicate that the name *Rana maculata* Brocchi was used twice before 1959 and about half a dozen times since, and that the name *Rana macroglossa* was not used at all before 1941 and has been used about 20 times since. I have no reason to challenge these figures, but I do challenge the wisdom in submitting such problems to the Commission in the first place. Since actions within the limits permitted by the Code could have been taken that would have obviated the need to submit the proposal to the Commission, I think they should have been taken. I also support Sabrosky's alternative D, an action which achieves that end.

A COMMENT ON THE VALIDATION OF *MUREX LOTORIUM* LINNAEUS, 1758 (MOLLUSCA, GASTROPODA) WITH AN ALTERNATIVE PROPOSAL. Z.N.(S.) 1886

By Walter O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*)

In the proposal for a validation of *Murex lotorium* Linnaeus by A. G. Beu (*Bull. zool. Nomencl.* **26** : 174–176), the author omitted pertinent information which has a direct bearing on the case and the identity of the Linnaean taxon under discussion.

The original solitary reference given by Linnaeus (1758, *Systema Naturae*, (ed. 10) : 749) for *Murex lotorium* was to a figure in d'Argenville (1742, *L'Histoire Naturelle . . . la Lithologie et la Conchyliologie*, Pl. 13, fig. M). It is agreed that this figure represents the species *Murex pileare* Linnaeus, 1758.

In 1767 (*Systema Naturae*, (ed. 12) : 1217) Linnaeus repeated the erroneous d'Argenville reference cited with a query, but also added another reference to Rumphius (*Amboinsche Rariteitkamer*, Pl. 26, fig. B); the cited figure represents the *Cymatium lotorium* of authors. According to Dodge (1957, *Bull. Amer. Mus. Mat. Hist.* **113** : 114), and verified by the writer, Linnaeus altered in his inter-leaved copy of

the 12th edition of the "*Systema Naturae*" the d'Argenville reference of figure "M" to figure "B", and deleted both question marks after the two 1767 references. Both corrected references represent the *Cymatium lotorium* of authors and have been acknowledged as delineations of the species by Deshayes & Edwards (1843, *Histoire naturelle animaux sans vertèbres* **9** : 631), Dodge (1957, op. cit., p. 114) and Emerson and Old (1963, *Amer. Mus. Novitates*, 2137 : 4).

A. G. Beu's statement that the only available name for *Cymatium lotorium* of authors is *Triton distortum* Lamarck, 1816, which is unavailable as a *nomen oblitum*, is incorrect. *Cymatium rhinoceros* Röding, 1798 (*Museum Boltenianum* : 129) is a prior synonym of *Cymatium lotorium* of authors, and has been based on a perfectly recognizable dorsal view figure in Knorr (1772, *Vergnuegen der Augen und des Gemüths* **3** : Pl. 26, fig. 2). *Triton distortum* Lamarck has been intermittently used in malacological literature till recent times, and has been synonymized with *Murex lotorium* by Deshayes & Edwards (1843, op. cit., p. 631), Tryon (1881, *Manual of Conchology* **3** : 248), Bayer (1933, *Zool. Mededel. Rijks Mus. Leiden* **16** : 48) Adam & Leloup (1938, *Mem. Mus. Roy. d'Hist. Nat. Belg.* **2** : 147), Dodge (1957, op. cit., p. 116) and Emerson & Old (1963, op. cit., p. 4). All mentioned authors, with the sole exception of Dodge, consider *Cymatium rhinoceros* to be a synonym of *Murex lotorium* Linnaeus. Mörch (1852, *Catalogus Conchyliorum*, p. 109) synonymizes *Triton distortum* Lamarck with *Cymatium rhinoceros* Röding.

Murex lotorium is firmly entrenched in malacological literature, and in order to maintain the taxon in its accustomed sense, and in the interest of nomenclatural stability, the interpretation of *Murex lotorium* sensu auctt. is essential. At the same time, however, it is undesirable to direct the Commission to base such an interpretation of the Linnaean *Murex lotorium* on a subsequent description of the species 86 years later by Reeve (*Conchologia Iconica*, *Triton*, pl. 6, fig. 196), as suggested by Beu. The selection of Reeve's figures and description as the first correct interpretation of the *Cymatium lotorium* of authors appears arbitrary. One could have selected an earlier and equally correct colour figure from Kiener (1842, *Spécies général et iconographie des coquilles vivantes* **7** : 11, Pl. 9, fig. 1, 1), which has the added advantage of being associated with the Linnaean taxon by an appended reference to Rumphius (1705, op. cit., Pl. 26, fig. B) as used by Linnaeus in 1767. It is my opinion that neither author's types qualify for type selection or interpretation of *Murex lotorium* Linnaeus.

The interpretation of Linnaean species should not be based solely on the 10th edition of the "*Systema Naturae*", but elucidation should be excercised in conjunction with subsequent works by Linnaeus where many earlier errors and misconceptions have been corrected. Linnaeus' additional reference in the 12th edition of the "*Systema Naturae*" and MS correction of the d'Argenville reference, clearly establish the Linnaean taxon as the *Cymatium lotorium* of authors. The additional reference to Rumphius is not strictly speaking original type material, figured or actual, but since it is a figure designated by the original author, it has a better claim for recognition than the subsequent figures published by either Reeve or Kiener.

Keeping within the concept of original type material (1) or subsequent type material (2), the Commission is requested to interpret the Linnaean taxon *Murex lotorium* through reference to either:

(1) the original 1758 reference in the 10th edition of the "*Systema Naturae*" to d'Argenville (1742, op. cit., Pl. 13, fig. M = error for Fig. B), conceding figure "M" to be a *lapsus* for figure "B" on the same plate, which represents the *Cymatium lotorium* of authors or

(2) accept the second reference to Rumphius (1705, op. cit., Pl. 26, fig. B) added by Linnaeus in 1767 in the 12th edition of the "*Systema Naturae*", which also is a recognizable figure of the *Cymatium lotorium* of authors.

DECLARATION 43

REPEAL OF ARTICLE 23(b)

DECLARATION.—1. Article 23(b) is hereby repealed.

2. For the period from 6 November 1961 to the date of publication of this present Declaration, Article 23(b) is to be read as follows:

(b) **Limitation.**—A name that is in general current use and has been available for at least 50 years shall not be displaced after 1960 by an unused senior synonym.

(i) A name is to be considered as in general current use when, in the immediately preceding 50 years, it has been applied to a particular taxon, as its presumably valid name, by at least five different authors and in at least ten publications.

(ii) A senior synonym is to be considered unused when, during the immediately preceding 50 years, it has not once been applied to a particular taxon as its presumably valid name. An unused senior synonym employed after 1960 in violation of the provisions of Article 23b, whether explicitly to replace the junior synonym or not, does not thereby lose its status as an unused name.

(iii) The mentioning of a name in a synonymy or its mere listing in an abstracting publication, or in a nomenclator or other index or list of names does not constitute usage in the sense of Article 23b.

(iv) Each citation of a name is to be considered on its own merits regardless of the nature or the title of the work in which the name appears.

(v) A zoologist who consideres the existence of an unused senior synonym in the literature a source of confusion may apply to the Commission to place the name on the appropriate Official Index.

(vi) A zoologist who considers that an unused senior synonym should displace a junior synonym that is in general current use, may apply to the Commission for a ruling under the plenary powers.

(vii) Nothing in Article 23b affects the operation of the Law of Homonymy. A name rejected under the provisions of Article 23b is rejected for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(viii) An unused senior synonym rejected under the provisions of Article 23b is termed a nomen oblitum.

3. The repeal of Article 23(b) involves ipso facto the repeal of Article 23(a)(i), and Article 23(a) is now to be read as follows:

(a) **Exceptions.**—A name that is not the oldest available name is nevertheless the valid name of the taxon in question if the Commission has expressly validated it.

ABROGATION DE L'ARTICLE 23(b)

DECLARATION.—1. Par la présente Déclaration l'Article 23(b) est abrogé.

2. Pour la période du 6 novembre 1961 jusqu'à la date de publication de la présente Déclaration, l'Article 23(b) doit être lu comme suit:

(b) **Limitation.**—Un nom qui est en usage courant et général, et a été utilisable pendant 50 ans au moins ne sera pas remplacé après 1960 par un synonyme plus ancien inemployé.

(i) Un nom doit être considéré comme en usage courant et général lorsque, au cours des 50 ans immédiatement précédents, il a été appliqué en tant que nom valide présumé, à un taxon particulier par cinq auteurs différents au moins et dans au moins dix publications.

(ii) Un synonyme plus ancien doit être considéré comme inemployé lorsque, au cours des 50 ans immédiatement précédents, il n'a pas été appliqué une seule fois, en tant que nom valide présumé, à un taxon particulier. Un synonyme plus ancien inemployé utilisé après 1960 en violation des dispositions de l'Article 23b pour remplacer, explicitement ou non, le synonyme plus récent, ne perd pas de ce fait son statut de nom inemployé.

(iii) La mention d'un nom dans une synonymie ou sa simple inclusion dans une publication signalétique, ou dans un nomenclateur ou autre index ou liste de noms, ne constituent pas des usages au sens de l'Article 23b.

(iv) Chaque citation d'un nom doit être considérée en elle-même, indépendamment de la nature ou du titre du travail dans lequel le nom apparaît.

(v) Un zoologiste qui estime que l'existence, dans la littérature, d'un synonyme plus ancien inemployé est une source de confusion peut demander à la Commission de le placer dans l'Index Officiel approprié.

(vi) Un zoologiste qui estime qu'un synonyme plus ancien inemployé devrait être substitué à un synonyme plus récent en usage courant et général peut s'adresser à la Commission afin qu'elle exerce ses Pleins Pouvoirs à cette fin.

(vii) Rien dans l'Article 23b n'affecte l'action de la Loi d'Homonymie. Un nom rejeté conformément aux dispositions de l'Article 23b est rejeté au regard de la Loi de Priorité, non de la Loi d'Homonymie.

(viii) Un synonyme plus ancien inemployé rejeté conformément aux dispositions de l'Article 23b est désigné comme un nomen oblitum.

3. L'abrogation de l'Article 23(b) entraine ipso facto celle de l'Article 23(a)(i), et l'Article 23(a) doit désormais être lu comme suit:

Exceptions.—Un nom qui n'est pas le plus ancien nom utilisable est nèanmoins le nom valide du taxon en question si la Commission l'a expressément validé.

HISTORY OF THE CASE (Z.N.(S.) 1543)

The conflict between the supporters of a simple Law of Priority and those who support a Law of Prescription is as old as the first attempts to regulate zoological nomenclature. After the publication of the *Règles internationales de la nomenclature zoologique* in 1905, the first important step towards the moderation of the Law of Priority was the adoption by the Monaco Congress in 1913 of the Plenary Powers Resolution. Attempts to restrict the Law of Priority yet further, by incorporating in the Code an explicit Law of Prescription, or Conservation, were made at the Paris (1948) Congress (*Bull. zool. Nomencl.* **3** : 159–61, 177); at the Copenhagen (1953) Congress (*ibid.* **7** : 154–188; **8** : 5–108; *Copenhagen Decisions* : 25–6, 119–22); and at the London (1958) Congress (*Bull. zool. Nomencl.* **14** : 42–6; **15B** : 621–42, 911–3, 1080–8, 1244–50). The end of this historical phase was marked by the inclusion of Article 23(b) in the International Code of Zoological Nomenclature published in 1961.

The wording of the Article in the 1961 Code was that which had been adopted by the London (1958) Congress. The Editorial Committee charged with preparing the Code for publication found the wording ambiguous and confusing, but clearly had no authority to alter it. Critical comments, directed at both the matter and the drafting of the Article, began to reach the Commission's office in January 1962, by which time preparations for the Washington (1963) Congress had already begun. The subject of Article 23(b) became "Case No. 3" of the Commission's agenda for that Congress and papers relating to it were published in *Bull. zool. Nomencl.* **19** : 345–52; **20** : 79–80.

At its meetings in Washington (see *Bull. zool. Nomencl.* **21** : 168–70), the Commission considered several proposals for the amendment of Article 23(b), none of which was adopted. A motion to ask the Secretariat to test the Article in terms of an explanation put forward by Dr. Key and refer proposals back to the Commission for its amendment by means of a Declaration was passed. A motion to delete the Article was defeated by 11 votes to 10.

The XII International Congress of Entomology, held at London in July 1964, adopted the following resolution proposed by its section on Taxonomy:

> "Whereas, priority, beginning with Jan. 1, 1758, is the basic principle of entomological nomenclature as it is of zoological nomenclature in general; and
>
> Whereas, the International Commission on Zoological Nomenclature has Plenary Powers to suspend the application of the International Code of Zoological Nomenclature for the purposes of promoting stability and universality, or of avoiding serious confusion; and
>
> Whereas, these Plenary Powers suffice for the truly serious cases of long usage of biologically important names; and
>
> Whereas, the new Code contains 'escape clauses', such as those concerned with family names, that are aimed at promoting stability in various aspects of nomenclature without either application of Article 23(b) (the so-called 50-year rule) or use of the Plenary Powers; but

Whereas, Article 23(b), the Limitation on the Law of Priority, is considered to have serious weaknesses and in its present form to be objectionable and unnecessary to entomology, and even actually detrimental to it, to a degree that could not be remedied by any mere interpretative declaration;

Therefore, be it resolved that the XII International Congress of Entomology directs the Permanent Committee of the International Congresses of Entomology to propose and strongly recommend to the International Commission on Zoological Nomenclature that the field of entomology, in the broad sense, be exempted from the provisions of paragraph (b) of Article 23 of the International Code of Zoological Nomenclature. For the purposes of this resolution, entomology in the broad sense is defined as the study of Hexapoda, Arachnida and Myriapoda."

Meanwhile, sustained attempts had been made to draft an interpretative Declaration on Article 23(b), but with inconclusive results: some votes against the draft expressed dissatisfaction with its wording rather than opposition to the principle embodied in it. Accordingly, the Secretary to the Commission (Dr. G. Owen Evans) proposed on 24 May 1965 that a small committee be set up "representing taxonomists working on different Classes of the Animal Kingdom to gather the opinions of their colleagues on Article 23(b), particularly to itemize objections to the Article, and to make suggestions as to how the Article could be modified so as to be acceptable to the majority in their special fields of study". This suggestion was accepted by the President of the Commission (Dr. Alden H. Miller) on 26 June 1965, but unfortunately the steps that he immediately took to set up such a committee were interrupted by his death in October 1965. Fortunately the Acting President of the Commission (Dr. L. B. Holthuis) was able to initiate steps in this direction shortly after his election in the following month.

In February 1966 the Commission considered a proposal to suspend Article 23(b) until the next International Congress of Zoology, when the President's subcommittee could be expected to present its report. In response to misgivings expressed by Commissioners as to the legality of this proposal, legal opinion was sought. The Commission was advised on 5 October 1966 that it has no power under the existing Code to suspend the general application of any article of the Code. This advice was expressed as follows:

"As requested, I have considered the question whether it is in order by the proposed Declaration 43, to suspend Article 23(b) of the International Code of Zoological Nomenclature. In this connection I have considered the Code, the Constitution and By-Laws of the International Commission on Zoological Nomenclature and the Memorandum and Articles of Association of the International Trust for Zoological Nomenclature. I have also had before me the draft of the proposed Declaration 43.

"In my view it is not in order to suspend Article 23(b) of the Code in the manner proposed. My reasons for this view are as follows:

"1. Article 79 of the Code, empowers the Commission to suspend the application of any provisions of the Code, subject to an exception, which does not affect the present question, if such application to a

particular case would in its judgment disturb stability or universality or cause confusion. I consider that the power of suspension may be used only in a particular case and that there cannot be a general suspension for all purposes of any provision of the Code.

"2. If there had been power under Article 79 to suspend Article 23(b), this would constitute an exercise of plenary powers. Article 12(b), of the Constitution of the International Commission prescribes that in cases involving the use of plenary powers an affirmative decision shall be deemed to have been taken only when two-thirds of the votes validly cast are in favour of the proposal. I understand that in this case two-thirds of the votes were not cast in favour of the proposal.

Moreover, it is necessary that not less than six months' notice of the impending vote be given in at least three zoological serials, one published in Europe and one in America, and I understand that in this case the Commissioners were invited to vote under the one month rule.

"To summarize, I feel that Article 79 does not confer the necessary power and, even if it had, I do not think the correct procedure was followed."

This advice was further explained in a letter dated 14 October 1966, which read:

"As I have said, I did consider Article 78 of the Code. Provisional amendments to the Code are also mentioned in Article 77 (3).

"In my view Article 78(a) would not apply to a suspension of any provision of the Code because the question of suspension is covered by Article 79. Moreover the power to issue 'a Declaration (a provisional amendment to the Code)' arises 'if a case before the Commission involves a situation that is not properly or completely covered by the Code'. As I understand the position, no such case has arisen. This seems a case of difficulty in, or dispute as to, interpretation of an Article."

(Events from the opening of the Washington meetings of the Commission to this point were reported in *Bull. zool. Nomencl.* **23** : 258–68.)

Later, in order to assist the work of the Committee on Article 23(b), legal advice was sought as to whether the Commission had power to delete Article 23(b) or to reduce it to the status of a Recommendation. The following answer was sent on 21 June 1967:

"I think that Article 23(b) can either be deleted from the Code or reduced to the status of a recommendation.

"Under Article 77(2) the Commission can submit to a Congress recommendations either for the clarification of the Code, in which case they will presumably appear below the text of the appropriate article of the Code in the Booklet, or for the modification of the Code either by the amendment of an article or by its deletion, or by the addition of a new article. Thus the Commission could prepare for submission to a Congress a recommendation for the modification of the Code by the deletion of Article 23(b). I understand there is likely to be no Congress in the foreseeable future and, if the Commission considered that the substance of this recommendation should have immediate effect, the Commission could, under Article 77(3) render a Declaration embodying the recommendation. This would consitute a provisional amendment to the Code.

"Article 23(b) could then be deleted. If wished, there could be a recommendation by way of clarification, to the same effect, but I do not think that this would be effective until approved by a Congress.

"You will have in mind that if Article 23(b) is deleted, then there will be a consequential amendment in Article 23(a)(i)."

The Committee on Article 23 (b), which consisted of Professor Ernst Mayr (Chairman), Mr. W. I. Follett, M. Jacques Forest, Dr. A. Kaestner, Dr. K. H. L. Key, Mr. R. V. Melville and Dr. P. E. S. Whalley, started work in May 1966. The work of the Committee, which was conducted by correspondence, involved protracted discussions and the consideration of several successive draft interpretative Declarations until, in March 1969, the Chairman of the Committee was able to circulate the final agreed draft to the Commission. This draft (in both English and French; the French text had been prepared by Dr. Forest) was accompanied by the Committee's report to the Commission and by a set of explanatory comments by Professor Mayr, both reproduced below.

REPORT OF THE COMMITTEE ON ARTICLE 23(b)

Mr. President,
Members of the Commission,

The Committee charged with the task to submit to the Commission the draft of a Declaration concerning Article 23(b) has completed its deliberations and believes that submitting the enclosed draft completes the task (except for a possible review of suggestions made by members of the Commission, see below under Recommendations on Procedure).

In order to facilitate the evaluation of the wording of this draft, the Committee and its Chairman (see separate document) offer the following comments:

The task of the Committee

Article 23(b), the " Statute of Limitation ", came into force in November, 1961, on the date of publication of the new International Code of Zoological Nomenclature. Several applications for revision of the Article were published in the *Bull. Zool. Nom.*, **19** : 345–352, 1962 and **20** : 79–80, 1963. These applications and additional criticisms were discussed at the International Congress of Zoology in Washington in August, 1963 (*Bull. Zool. Nom.*, **21** : 168–170, 1964). A motion to delete Article 23(b) from the Code was defeated by 11 votes to 10. Instead, the Congress adopted by 14 votes to 7 a motion by Dr. Lemche "that the Secretariat be charged to test Article 23(b), as explained by Dr. Key, and refer back to the Commission as to how the Article should be amended and modified by a Declaration ". After the Secretariat had determined the nature of the difficulties with Article 23(b) (see below), the Secretary asked the President of the Commission to appoint a Committee charged with the task of analysing all aspects of the Article and to submit to the Commission the draft of a suitable Declaration. Dr. A. H. Miller, just before his death in October, 1965, had started with the appointment of the Committee, and this task was completed by the Acting President, Dr. Holthuis, who officially

appointed the Committee on May 9, 1966 and charged it " to suggest to the Secretariat of the Commission how Article 23(b) should be amended and modified so that it becomes workable and at the same time acceptable to the great majority of zoologists (including the entomologists)".

The work of the Committee

As a first step, the Chairman asked the Secretariat to specify the difficulties encountered during attempts to apply Article 23(b). In reply to this inquiry Mrs. Margaret Doyle wrote on 8 November 1966: " It is certainly not true at the moment that we have cases on our files where application of an interpretation of Article 23(b) would cause difficulty—the difficulty lies in deciding which interpretation of Article 23(b) to apply". She then listed a series of specific questions to be made clear, for instance the meaning of usage, the status of homonyms, the definition of primary zoological literature, and the relation between usage and the listing of a name in synonymy. The Committee consequently attempted to arrive at a wording that is as free of ambiguities as is humanly possible.

On May 23, 1966, the Chairman asked the members of the Committee to make to him suggestions both as to procedure and to an improved text of the Article. The suggestions made during the autumn of 1966 by members of the Committee and by the Secretariat (8 November 1966) were incorporated by the Chairman in a detailed report which together with a first tentative Draft of the Declaration, was mailed to the Committee on 15 February 1967. This resulted in a voluminous correspondence and a quite radical redrafting of the Declaration. This second tentative draft was mailed to the Committee on 11 January 1968, together with a ballot on 12 questions, each offering two alternatives concerning certain principles or wordings of portions of the Declaration. The answers to these questions clarified some issues, but revealed, at the same time, unresolved ambiguities. Furthermore, in the endeavour to leave nothing to inference and implication but to specify in detail every eventuality, the Declaration became so elaborate that it threatened to be altogether unwieldy. A second ballot, dealing again with 12 alternatives, was mailed out on 10 July 1968. The last answers to this ballot were received by 15 October 1968 but some of the suggestions for improvement were again so drastic that still another, fortunately final, ballot in December 1968 became necessary.

There are two reasons why such a detailed history of the work of the Committee is here given. The first is to show why the Committee (which conducted all of its negotiations by mail) required more than two years to complete its assigned task. Secondly, to indicate the great care with which the exact wording of each individual statement in the draft Declaration was worked out.

The Chairman of the Committee (Professor Mayr) is submitting separately a set of personal comments in which he attempts to explain the nature of the difficulties which the Committee encountered in its deliberations.

Recommendations on procedure

The Committee recommends that the new Draft Declaration not be voted upon by the Commission, at this stage. Instead, we suggest that it be sub-

mitted to the members of the Commission for a two-months study period during which they may send their comments or suggestions to the Chairman of the Committee (Dr. E. Mayr, Museum of Comparative Zoology, Cambridge, Massachusetts 02138, USA) who, in turn, will submit these suggestions to the Committee for its decision. After the Committee has voted on such suggested modifications, the members of the Committee feel that they will then have discharged their obligations "to draft an interpretative Declaration on Article 23(b)", as they were instructed at the time when the Committee was appointed. That final draft should go to the Commission as a regular Voting Paper to be executed within a specified three month period.

Finally, some of the members of the Committee want it to be known that their participation in the work of the Committee does not in any way constitute a full endorsement of the principle of Limitation. Even though some members of the Committee feel strongly that the new Declaration on the Statute of Limitation is an enormously important contribution to stability and to the simplification of nomenclatural procedure, others still feel that in their taxonomic groups the Statute of Limitations is unnecessary and apt to produce considerable difficulties.

(Signed) W. I. Follett
J. Forest
A. Kaestner
K. H. L. Key
R. V. Melville
P. E. S. Whalley
Ernst Mayr, Chairman

Explanatory Comments

By Ernst Mayr (*Chairman, Committee for a Declaration on Article* 23(*b*))

This Committee has worked for a period of over two years to overcome various difficulties in the original wording of Article 23(b). In order to facilitate voting by the members of the Commission, it may be useful to pinpoint some of the difficulties encountered by this Committee and to explain how it attempted in the final wording to overcome these difficulties. This is a personal statement by the Chairman, which has not been voted upon by the Committee.

(1) Need for a statute of limitation.

Although this was not part of the mandate of the Committee, it nevertheless considered the question whether a Statute of Limitation is really necessary or whether Article 79 (Plenary Powers) would be able to handle the suppression of unused names equally well. A study of this question revealed very quickly that the needs in active and inactive areas of zoology are strikingly different. When there are only one to two specialists for a higher taxon, stability can be maintained through Article 79. The great weakness of Article 79, however, has been that it does not prevent irresponsible authors from introducing forgotten names into the literature and from placing the entire burden of saving

the well established name on some other zoologist. This means that someone has to drop his own work, prepare an application to the Commission, get it edited and accepted by the Secretariat (which often requires several years), have it published, and finally voted by the Commission. Even in vitally important cases, such as those of the names of the type genera of universally used families and subfamilies of birds, it has invariably taken more than three years before the issue was settled. When such names are used in hundreds, if not thousands, of publications annually which is, indeed, the case in the ornithological literature, confusion, if not chaos, will reign before Article 79 can take effect.

The strength of Article 23(b) is that an unused senior synonym cannot be re-introduced into the literature until this has been sanctioned by the Commission. This provision, therefore, prevents even a temporary disturbance of stability, and thus upholds the provisions of the Preamble more successfully than Article 79. The all-important difference between the two articles is the automatic prohibition in 23(b) of the revival of an unused name at the expense of a well established junior name. And only such a provision can prevent the inevitable confusion produced by the simultaneous use of two names for the same taxon.

(2) Potential conflict between Priority and Limitation.

A second point taken up by the Committee was whether or not there is a contradiction between the " Law of Priority " (Article 23) and its " Statute of Limitation " (Article 23b). This question is solved by the Preamble which specifies that " the object of the Code is to promote stability . . . etc." and states that the application of priority " under conditions specified in the Code may be moderated . . . etc." Article 23(b) is merely an executive provision of this principle of the Preamble and, therefore, entirely within the spirit of the Code. It is, of course, well-known that the provisions of many laws are restricted by special statutes of limitation. The Statute of Limitation of the Code is strictly within the traditions of law.

(3) The importance of upholding the stability principle of the Preamble.

More and more recent authors have pointed out that zoological nomenclature is part of an " information retrieval system ", and that stability is perhaps the most important property of any such system. This is presumably the principal reason for the many recent attacks on " name changing ". These attacks are often unjustified, since most taxonomists are as much interested in nomenclatural stability as are other zoologists. Yet, various publications in the last two years have strongly endorsed stability, as well as any provision (such as the Statute of Limitation) that would facilitate the maintenance of stability. (See for instance Long and Smith, *Bio-Science* May 1966, and for a more radical proposal Howden, Evans, and Wilson, *Systematic Zoology*, 1968, p. 188.)

(4) Major weaknesses of the current Article 23(b).

Correspondence among the members of the Committee revealed a series of

major weaknesses in the current wording of the Article. These will be taken up one by one.

a. *Misplaced emphasis.* The ultimate objective of the Article is the promotion of stability by protecting generally used junior names against the revival of unused senior synonyms. Unfortunately, as the Article is now phrased, this objective is achieved only indirectly because the Article concentrates on the suppression of the senior synonym. This ill advised emphasis on the rejection of the senior synonym instead of on the preservation of the well established name misled many zoologists and obscured many discussions. The original proposal of a Statute of Limitation (*Copenhagen Decisions*, p. 119–122) had avoided this weakness and so had the Bradley draft (1957, *Bull. Zool. Nomen.*, **14** : 43). The new Declaration emphatically and unequivocally concentrates on the preservation of the well established junior name.

b. *Burden on the Commission.* The criticism of Article 23(b) that was made most frequently is that it places too great a burden on zoologists as well as on the Commission by its provision that every zoologist who discovers a forgotten name " is to refer it to the Commission ". This provision was criticized almost unanimously by our correspondents. The present generation of animal taxonomists is trying to get away from the excessive pedantry and ritualism of many taxonomists of the past generation. The busy zoologist finds it extremely bothersome to have to go through all the motions of carrying an application to the Commission, and guiding it on its thorny path until final suppression is achieved. A formulation that would provide automatic protection of generally used names would greatly reduce the work load of the Commission. Considerations such as these induced the Committee to choose the proposed wording. The proposed automatic procedure has the advantage that it limits involvement of the Commission to difficult and controversial cases and frees it from the time consuming and expensive consideration of the numerous cases in which the ultimate decision of the Commission is a foregone conclusion.

The new automatic provision also eliminates the need for involvement of the Commission in the suppression of *nomina dubia*. It always seemed inefficient to have to go through the entire procedure of an application, ultimately culminating in an Opinion, in order to get rid of a dubious, usually unidentifiable name, merely to prevent that this name might some day be revived as the senior synonym of a universally used junior name.

c. *Needs of different fields of zoology.* It is evident that the needs are very different in those areas of taxonomy in which a given name may be used hundreds of thousands of times in a single year, and other areas of taxonomy where a name may not be used more often than a single time in 50 years. For this reason the Committee decided to define quite rigorously the term " in general current use ". The qualification that a name must be used by at least 5 authors in at least 10 publications during the specified period will automatically exclude the inactive areas of zoology. It is in these areas that most of the specialists work who had misgivings about the usefulness of Article 23(b). On the other hand, there is evident need for a statute of limitation in the more active branches of zoology. It is hoped the chosen wording will provide stability for these areas while allowing for the strict application of priority in the taxonomically

inactive areas.

In this connection the Committee gave very serious consideration to the vote adopted by the XIIth International Congress of Entomology, to exempt entomology from the application of Article 23(b). The members of the Committee were asked to cast their ballot on one of the two alternatives stated in the following question:

" In order to resolve the difficulty caused by the extremely different needs of very active and very inactive taxonomic groups, do you consider it preferable

" (1) to recast Article 23(b), as in the above Draft Declaration, so that the provision itself allows for the problems of very inactive groups, or

" (2) to adopt the solution proposed by the International Congress of Entomology, to exempt specified higher taxa from the application of Article 23(b) (as modified in the Draft Declaration)."

The Committee voted 6 to 1 in favour of alternative 1, evidently feeling that it would be unwise to have different rules of nomenclature for different taxa.

(5) Minor weaknesses in the current wording.

In addition to these major points, there were also some additional minor weaknesses in the 1961 wording of Article 23(b).

(a) *Forgotten versus unused*? The choice of the word " forgotten " was severely criticized because many of these senior synonyms had not been strictly forgotten. Although never applied to a taxon, they had nevertheless been listed in nomenclators and other compilations and lists of names. To meet this criticism, the proposed Declaration avoids the term forgotten and instead places strong emphasis on the question whether or not a name was truly " used," in other words applied to a taxon. With the new emphasis on the junior name, there is no longer any danger that somebody might mistakenly assume that a name would lose its validity merely because it was not used for a period of 50 years. The new wording of Article 23(b) completely precludes such an interpretation.

(b) *Definition of the 50-year period.* Many attempts were made by the Committee to define the 50-year period in such a way that it could not be misinterpreted. By adopting the word " *when* " it is now made quite clear that the 50-year period dates backward from the particular moment at which a zoologist considers the possibility of applying Article 23(b) to a given name. Keeping this in mind should preclude any possible misinterpretation of the 50-year period. In most cases the crucial moment is when a taxonomist recognizes that an older name applies to the same taxon as the generally used junior name, in other words when he realizes an older name is a senior synonym of the younger name. The question whether or not someone else might have previously recognized the synonymy (without using the senior name) becomes irrelevant under the new formulation.

(c) *Primary literature.* The task of defining the term " Primary Literature " unambigously proved to be the most difficult task of the Committee. Works in which all names are clearly attached to well described and well recognizable taxa cause no difficulties, they clearly qualify as primary literature. Other works which consists of mere lists of names likewise cause no difficulty, they

clearly do not qualify. Unfortunately, there are some publications, for instance certain catalogues, which are a mixture of an uncritical listing of names and of critical attachment of names to taxa. For this reason, the Committee in its final draft abandoned the attempt to define " primary literature " and to give examples of such literature, and instead, proposes to adopt the principle that " usage " of each name in each of its published occurrences be decided on the merits of the particular situation. A name qualifies as being " used " only if it is clearly applied to a taxon. There was great temptation to use the phrase " to a recognizable taxon ", but the Committee decided to avoid this subjective formulation.

The Committee was fully aware of the fact that it will remain doubtful in certain cases whether a name was truly " used ", that is " applied to one or another particular taxon as its presumably valid name" or merely "listed in a list of names". Such cases will have to be referred to the Commission. In the case of junior names in general current use, a few doubtful situations will often be irrelevant if the name has been used in many more than 10 publications. It is only in the comparatively few cases when a name has been used, let us say 10–15 times, that the precise determination of " used " becomes crucial.

(6) Time of coming into effect.

In its major provision, the protection of universally used junior names against the revival of unused senior synonyms, there is no change whatsoever between the original Article 23(b) of the Code and the provisions of the new Interpretative Declaration. Only this purpose is now expressed positively (protection of junior name) rather than negatively (suppression of the unused senior name). There is therefore no need in the Declaration to make reference to the coming into effect of Article 23(b). It came into effect with the Code on November 6, 1961, and has not since been repealed, some contrary claims or impressions notwithstanding. Only the Congress has the authority to repeal Articles in the Code.

The Declaration, however, does affect two matters of great importance in the application of Article 23(b), the interpretation of various terms (such as "universally used", "unused", "50 years", etc.) and the procedure of application. These new interpretations should not be adopted retroactively and the Committee suggests January 1, 1970, as the date on which the new interpretation is to come into effect. Any zoologist having doubts as to the application of Article 23(b) will have to turn to the Commission, in the same way as he would do to resolve doubt as to any other provision of the Code.

(7) Additional Provisions.

The provisions V, VI, and VII are in line with the usual practices of the Commission and are not apt to become a source of controversy.

(8) Only time can tell whether Article 23(b), as interpreted in the new Declaration, is workable. Unquestionably, some cases will turn up which will have to be referred to the Commission. Yet, the number of such cases is apt to be a small fraction of all the instances where the Statute of Limitation is invoked. There is good reason to believe, particularly in the more active branches of

zoology, that the availability of this Statute, now rigorously defined, will help stability and greatly ease the burden of the working taxonomist and of the Commission.

Members of the Commission were asked to comment on the draft by 19 May 1969. These comments fell into two groups: those that proposed changes in the wording of the Article were circulated to the members of the Committee and voted on—those that were accepted by a majority of the Committee being incorporated in the final draft of the Declaration. The other group of comments concerned the principle of the Article itself, and whether it should or should not be retained in the Code (a question that can, of course, only be finally settled by the next International Congress of Zoology).

The comments in this latter group were as follows.

Dr. Per Brinck (13 *March* 1969). "Among the insects there are still many families which have not been worked on for more than 50 years or which have been studied by only one or a few people during this time. Therefore, it is well known that several 'unused' names, placed in the catalogues on the opinions of 18th and 19th century authors, represent good species, to be interpreted by still existing syntypes—when somebody starts working on them. The same applies to some 'nomina dubia' which are dubious in that meaning only because there was no recent work done on them. Therefore, it is important that age and unuse do not *per se* disqualify a name. As far as I can see your Declaration fully meets this basic condition.

"Thus, it is most important and successful that the Declaration clearly distinguished between active ('general current use') and inactive fields in zoology. This should, I think, satisfy the entomologists who took the vote to exempt insects from the application of Article 23(b)."

Dr. L. B. Holthuis (9 *April* 1969). "After receiving the new version of Article 23(b), recently submitted by Professor Ernst Mayr's Committee, I have tried to formulate my views on this new wording. When I had finished I found, however, that a great part of my comments dealt not with the new wording but with the article itself and therefore were more appropriately directed to the Commissioners than to the Article 23(b) Committee. Actually only par. 13 of my comments deals with the wording of the new draft. Therefore I have thought it best to send a copy of my comments to both the Commissioners and the Committee members. I will be glad to give additional information on eventual obscure points in my statements. The new text of Article 23(b) as submitted by the Committee presided over by Dr. Mayr forms a considerable improvement over the old version, and many of the ambiguities and obscure expressions that have been cleared up. The Committee deserves all praise for the amount of time they have given to this project and for the conscientious way in which they have dealt with their task.

"2. The composition of the Committee is, in my opinion, a guarantee that the result is the best that can be expected under the circumstances. The members are not only specialists in widely differing groups of the Animal Kingdom, but also hold very diverse opinions about the feasibility of the Article itself, and have very critically examined all sides of the problem.

"3. I have the greatest admiration for the way in which the Committee

worked and how, after ample discussion, it arrived at a unanimously approved wording of the new text. The fact that those members who are not in favour of having Article 23(b) in the Code and would rather see it deleted entirely are of the opinion that, if it is to be retained in the Code, the present wording is the most acceptable (or the least unacceptable) one to them, is also of very great value.

"4. Unfortunately, after having carefully studied the text and after trying it out on some concrete examples, I do not believe that this article is necessary or even useful for maintaining stability of zoological nomenclature and in my opinion it may lead to endless difficulties and controversies if it is put to use. In my opinion, everything expected from Article 23(b) can be done far better, far more efficiently and far more definitely under Article 79 of the Code (the Plenary Powers article). I therefore take the side of those members of the Committee who prefer total deletion of Article 23(b).

"5. Apart from criticisms of the wording, my objections to Article 23(b) as it now stands are four in number, as follows: it is

(a) superficial, because it does not distinguish between beneficial, indifferent and harmful cases;

(b) inadequate, because it cannot deal with cases involving more than two names;

(c) ineffective, because easily evaded and incapable of ensuring final stability;

(d) misguided, because responsible zoologists are put to as much trouble as irresponsible ones.

"6. *Superficiality*.—Article 23(b) is based solely on usage and is not selective on the most important point, namely whether a change of name is (a) harmful, (b) indifferent, or (c) beneficial. The discovery of an unused name as defined in the new wording of the Article is not necessarily harmful. In many cases neither name has any strong advantage over the other and the name-change belongs to the second (indifferent) category. An example of such a case would be one in which the junior name, though frequently used, is based on a type of doubful identity, while there is no doubt as to the identity of the type of the senior nominal species. Other examples arise when the junior name has one or more doubtful senior synonyms that are younger than the "unused" name, and so on. Beneficial name changes may occur when the discovery of an "unused" senior synonym can be used to end a controversy over two junior synonyms. An example of this sort of situation is given by the case of *Alpheus ventrosus* H. Milne Edwards (1837), which was thought by some workers to be a junior synonym of *Alpheus lottini* Guérin (1829), while other workers either did not accept the synonymy or dated Guérin's species from 1838. The discovery that *Cancer sublucanus* Forskål, 1775, is a still older synonym solved the entire problem, for there is no doubt of either the identity or the date of publication of Forskål's species. In some cases the younger and currently used name has been applied to the wrong taxon or to several wrong taxa. Here the discovery of an older, unused synonym may serve to get rid of a severely compromised name, or to avoid the necessity of switching a well-known name from one taxon to another.

"7. Article 23(b) leads to the automatic rejection of the senior synonym in

both beneficial and indifferent cases, so that in such cases the Plenary Powers may have to be used to save names that are perfectly valid under Article 23(a). This is to me a highly unnecessary complication, caused solely by the introduction of Article 23(b).

"8. *Inadequacy.*—Article 23(b) deals only with cases in which two synonyms are involved and does not take more complicated situations into account. It must surely make an enormous difference whether a species has been known exclusively by a single binomen over the last fifty years, or whether a number of synonyms has been in use for it. The discovery of an unused synonym would generally be far less harmful in the second case than in the first. In the second case, such a discovery might be of indifferent or even beneficial effect. There are even cases in which the discovery of a third, intermediate, synonym validates an unused senior synonym, as illustrated by the following example: *A-us albus* White, 1775, has not been used for its taxon since 1900; *A-us niger* Black, 1900, has been used forty times since 1920. *A-us albus* White is, in consequence, an 'unused senior synonym'. But now it is found that *A-us cinereus* Gray, 1850, a name used three times since 1919 by one author, is a synonym of the other two names. It is not an 'unused senior synonym' and thus must replace Black's name. However, it follows that *A-us albus* White, 1775, is not an unused senior synonym in relation to *A-us cinereus* Gray, 1850, because *A-us cinereus* has not been used by five authors in the last 50 years. Thus *A-us albus* White, 1775, becomes the valid name even though it had at first been rejected. This shows that unused senior synonyms can never be permanently got rid of unless they are suppressed under Article 79. I fear that many such complications, not now foreseen, will arise in the application of Article 23(b).

9. *Ineffectiveness.*—Under Article 23(b) as now drafted, it remains possible for a zoologist (responsible or irresponsible) to revive a forgotten name. If the zoologist discovers the identity of a forgotten species, he may revive the name and redescribe the species without saying anything about its synonymy. In this way he validly re-introduces the name. If in a later publication, the same or another zoologist synonymizes the re-introduced name with others, even if they are in current use, the older name cannot be rejected, because it has been applied as the valid name of a taxon once in the last fifty years. If the author who re-introduces the name does not say that he thinks it to be a synonym of a name in general current use, he has not violated Article 23(b) and it can never be proved whether or not he acted in good faith. In addition, a name once rejected as an unused senior synonym can immediately be revived (unless suppressed under Article 79 for the purposes of the Law of Priority) by any author who claims that the name belongs to a different taxon from the one whose name was thought to be a threatened junior synonym. Such an author has a perfect right to use the 'unused' name; and his action obliges those who recognize the new synonymy (or the new meaning of the name) to follow him. By using the name in a different sense from that previously given to it, he has validly used it and it is no longer an unused name.

"10. Article 23(b) cannot by itself ensure final stability. If an unused name

is discovered and rejected under Article 23(b), it still remains a potential threat to stability, because the moment that a legal use of the name within the last 50 years is discovered, the name is re-introduced and must be used (unless Article 79 is resorted to). Under Article 79, on the other hand, once a name is suppressed it is definitely ruled out and cannot threaten stability thereafter.

"11. It has been said that Article 23(b) takes effect immediately, while under Article 79 an elaborate procedure has to be followed, and that so much time elapses before the decision of the Commission is known that confusion, if not chaos, will result before the Article can take effect. This also is untrue, since Article 80 of the Code rules that existing usage is to be maintained between the discovery of a harmful name and the publication of the decision of the Commission. Here too, I do not see that Article 23(b) has the slightest advantage over Article 79.

"12. *Misguidedness.*—One of the arguments that has been repeated ad nauseam is that Article 23(b) places the burden of proving that an older name must be used on the 'irresponsible authors introducing forgotten names'. This has very much the look of a piece of demagoguery to fool the general zoological public and is quite untrue. Any responsible author, whether he wishes to introduce or reject an old forgotten name, is in both cases obliged by Article 23(b) to go to the trouble of finding out whether or not this name has been used in the last 50 years, before it can be declared an 'unused name'. It is the author who states that a name is 'unused' without going to this trouble who is truly irresponsible. Here again, Article 23(b) has no advantages over Article 79.

"13. Now I should like to comment on the wording of Article 23(b):

"(1) First, a minor point: the word 'putatively' was entirely unfamiliar to me and I had to look it up in a dictionary. The same may well be true for many zoologists whose language is not English. Would it not be preferable to have a better known word of the same meaning here (such as 'supposedly'), if the new wording is to be incorporated into the Code?

"(2) In my opinion, a name that has been used by 5 authors in 10 publications within the last 50 years can hardly be termed 'in general current use', especially in view of the current fashion of publishing minor papers with long lists of co-authors. If the definition of general current use be used by at least 30 authors (exclusive of co-authors), regardless of the number of publications, I think we should be closer to the truth.

"(3) The definition of 'unused' will lead to endless controversies. The expression 'applied to a particular taxon' may also lead to difficulties. An author may list and discuss all the known species of a genus, including those that he has not seen, some of which he might consider dubious species. Is he to be considered as having applied the names of the species that he did not see to particular taxa? What is the position of the names of the species that he considers dubious, especially if he does not clearly state his opinion, but allows it to appear by implication? I foresee endless discussion about the

words 'applied to a particular taxon' and other expressions in the Article. What, for instance, is the position when an author places a name in synonymy and discusses the type at length in the text, perhaps with some such remark as 'Mr. Soandso considers this to be a subspecies, but I do not'?

"(4) Paragraph (viii) does not make it clear that the old wording of Article 23(b) is entirely cancelled. Some zoologists might conclude that the old wording is in force for names discovered between 1960 and 1970, which would be most confusing in view of the obscurity of the old wording and the number of different interpretations that have been placed upon it.

"14. I fear that the application of Article 23(b) will reveal more flaws, in addition to those discussed above, which cannot, so far as I can see, be avoided by any change in the wording. It is my sincere belief that stability and uniformity of nomenclature will be better served by deleting Article 23(b) and relying on Article 79. With Article 79 we can each use our own personal sound judgment as to whether or not a case needs to be dealt with. We do not have to count usages or define what constitutes usage, and we avoid endless disputes about the interpretation of the various definitions in Article 23(b).

"15. There need be no misunderstanding about whether the Commission has or has not the authority to propose the deletion of this Article. Mr. R. M. Buller, the legal adviser to the Commission, has been consulted on this point. In a letter to the Secretariat dated 21 June 1967 he said that in his opinion 'Article 23(b) can either be deleted from the Code or reduced to the status of a Recommendation'. I would advocate total deletion, because to reduce Article 23(b) to a Recommendation would require drastic re-drafting of the whole. I believe that the last paragraph of the Preamble, backed up by Article 79, is a sufficient guarantee of the stability of nomenclature."

Dr. H. Lemche (14 *April* 1969). "It was to me a simple idea when, in 1948, Professor Bonnet and I independently of each other proposed a limit to the duties of taxonomists to look up forgotten names. Likewise, it was good to see the result of the recent careful work by our Special Committee on this question (Article 23(b))—but the receipt of Dr. Holthuis' comments has made me feel uneasy. I consider it a great achievement to have an Article 23(b) if it is really acceptable to the general zoological public. But I am against introducing any rule tending to split up zoologists into opposing parties—which from Dr. Holthuis' comments appears a likely consequence if we do not find ourselves uniting into a common effort to reach unanimity. This letter, therefore, is prepared for showing that the dangers as described by Dr. Holthuis may be exaggerated, and that the advantages are still much more important than is generally realised. May I take Dr. Holthuis' four main points one by one.

"(a) *Superficial.* The 'harmful' cases are those to be ruled out, as done by Article 23(b). The 'indifferent' ones have little interest. The 'beneficial' ones are rare, but in order to be beneficial they must enter a situation that is already ripe for being presented to the Commission—and so they should be.

"(b) *Inadequate.* The described kind of complex cases are rare and can be remedied by continuing usage until it is demonstrated that the rule does not

apply. We might else as well rule that no taxonomist is to describe a new species until he has run through all the most rare books in the world to make absolutely sure that no senior name exists. Such a procedure is ideal, but no scientist can do more than his very best, and the Rules shall not ask for the impossible.

"(c) *Ineffective.* No one can prevent misuses by rules, but when misuses are discovered, they may be remedied by the Commission—in future as in the past. Authors in good faith should have their actions accepted.

"(d) *Misguided.* The time has gone where a taxonomist could afford also to be a bibliographer. Though older than Dr. Holthuis, I have gravely felt the enormous burden put on me as a taxonomist by the old literature to be studied for determining the correct name of each species treated. The continuous flow of new old and forgotten names that pop up is evidence that the task has not been mastered even in the past. Thus my experience has brought me to admire the enormous knowledge and skill exposed by Dr. Holthuis in mastering his vast field of crustacean taxonomy and literature—which means that I cannot consider Dr. Holthuis an average taxonomist. But the explosion in literature in present years will prohibit any thirty years younger 'Holthuis' from repeating the performance. I am saying this as a very serious warning. We *must* find means of making it more easy for the next generation. We must make it unnecessary for, say, an Indian zoologist to worry about whether or not there exists a 'Programm des Jahres 17—der Unterrealschule des Dorfes Kleinhof in Nieder-Hessen' where some small soil invertebrate was first vaguely described.

"Therefore, I do not consider Article 23(b) misguided. It aims towards those who have not realized that what they consider ideal for taxonomic work will become for the next generation a Fata Morgana in the sky—completely out of reach. Article 23(b) is to keep the trail free to those who want to do actual research without hollow formalities. We must find means to permit the next generation to start from a closer and cleaner platform than the rugged and unacceptable one of forgotten papers from more than two hundred years ago. I see Article 23(b) as a remedy to that end, and that is why I am interested in getting it through in the best possible formulation—whatever this one might be.

Dr. O. Kraus (12 *May* 1969). "The present discussion on a new version of Article 23(b), especially the 'Report of the Committee on Article 23(b)', has been carefully considered by the Deutsche Zoologische Gesellschaft.

"As one of the Vice-Presidents I am instructed and authorized (decision by the Council) to speak officially on behalf of this Society, so far as matters in the field of nomenclature are concerned.

"Therefore, I have to inform you that the present draft, as worked out by E. Mayr's Committee mentioned above, is *strongly supported* by the Zoologische Gesellschaft. This support especially concerns the spirit and the guiding principles of the draft."

Dr. do Amaral (6 *April* 1969). "I am glad to advise that, after having carefully read both documents, I feel that the Declaration represents a very welcome contribution to nomenclatural stability at least in my rather restricted taxonomic group, that is, Herpetology."

Dr. T. Jaczewski (10 May 1969). "Having received your circular letter of April 9, 1969, and your comments on the proposed next text of Article 23(b) of the Code, we reconsidered here the whole matter in consultation with a number of zoologists working on various taxonomic groups, in particular with members of the staff of the Institute of Zoology, Polish Academy of Sciences, as well as with fellows of the Polish Zoological Society and of the Polish Entomological Society. We arrived at the following conclusion:

"Although the new text of Article 23(b), proposed by the Committee headed by Professor Mayr represents an unquestionable improvement of the original wording, we are of the opinion that stability of zoological nomenclature would be served best by complete deletion of Article 23(b) from the Code. We share your criticism and your doubts concerning Article 23(b) and we support your proposition formulated in this connection in paragraph 15 of the comments enclosed in your letter of April 9 1969."

DECISION OF THE COMMISSION

On 18 August 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)39 either for or against the following proposals:

in *Part* 1, accepting the draft Declaration embodied in the Report of the Committee as a satisfactory new text of Article 23(b);

in *Part* 2, requesting the XVII International Congress of Zoology to delete the existing text of Article 23(b) and replace it by the text of the present Declaration;

in *Part* 3, the proposition that the present Declaration come into force as from 1 January, 1961;

in *Part* 4, requesting the XVII International Congress of Zoology to delete Article 23(b) from the Code.

The following Secretary's note accompanied Voting Paper (69)39.

"In March, 1969, members of the Commission received a draft Declaration incorporating a new draft of Article 23(b), prepared by the Committee appointed by the Acting President of the Commission (Dr. L. B. Holthuis) for the purpose. The draft Declaration was accompanied by a commentary and a report on the work of the Committee, both prepared by its Chairman, Professor Ernst Mayr. Commissioners were invited to send their comments on the draft to Professor Mayr within two months.

"2. At the beginning of June, 1969, Professor Mayr circulated the comments received from Commissioners to the members of his committee, calling for votes on the various points raised. As a result of this ballot he was able to prepare a final draft of the Declaration (in English) and asked the Secretary to put this draft formally to the Commission for a vote. It has not been considered necessary to seek the formal approval of the Acting President for this step, since he has been kept in touch with the work of the Committee at all stages. The vote is divided into four parts, explained below.

"3. The draft Delcaration circulated with this Voting Paper is in effect the final report of the Committee to the Commission. In *Part* 1 *of the Voting*

Paper you are therefore asked to indicate whether or not you accept this report as providing a satisfactory new text of Article 23(b).

"4. *Part* 2 *of the Voting Paper* deals with the status of the Declaration if it is accepted by the Commission. Under Article 78(a) a Declaration is a provisional amendment to the Code requiring ratification by an International Congress of Zoology before it can be incorporated into the Code. You are therefore invited to vote in this part for or against the proposition that the XVII International Congress of Zoology be requested to delete the existing Article 23(b) and replace it by the text of the Declaration.

"5. *Part* 3 *of the Voting Paper* deals with the date on which the Declaration comes into force. Since its purpose is to replace the existing text of Article 23(b) it ought to bear the same effective date as that text. Otherwise, the status of unused senior synonyms discovered between 1 January 1961 and 31 December 1969 will be different from that of those discovered after the latter date—and will, moreover, be uncertain because the text of the Article to be applied to them is of uncertain meaning. Much confusion would be caused by having one statute operative for the period 1961–1969 and another for the period after 1969. Thus, although the new text can only come into being on the date of its publication, its effect should be retroactive to 1 January, 1961. If this step, which is necessary for practical reasons and for reasons of simplicity, is not taken, the Commission will not have fulfilled its duty to provide an interpretation of Article 23(b) applicable to the whole lifetime of that Article.

"6. Fourthly, a number of Commissioners have expressed opposition in principle to any form of a " Law of Conservation ". These members, while perhaps ready to accept the Committee's report as an acceptable version of the article, ought to be allowed to show that this does not imply their acceptance of the principle behind it. Moreover, it may be important in the future to have a register of the extent of the opposition to the principle at this time. In *Part* 4 *of the Voting Paper* Commissioners are accordingly given an opportunity to vote for or against the proposition that the XVII International Congress of Zoology be requested to delete Article 23(b) from the Code.

"7. Finally, if the Declaration is to be published before 1 January 1970, it is essential that all votes be received in good time. Although the closing date is 18 November 1969, it would be greatly appreciated if you could return your vote before that date, and in any case as early as possible."

At the close of the prescribed voting period on 18 November 1969 the state of the voting was as follows:

Part 1. Affirmative votes—sixteen (16), received in the following order: Melville, Binder, Lemche, Mayr, Eisenmann, Vokes, Simpson, Obruchev, Forest, Evans, Brinck, Tortonese, Kraus, Ride, Bonnet, Alvarado.

Negative votes—seven (7): China, Holthuis, Munroe, Mertens, Jaczewski, Starobogatov, Sabrosky.

Part 2. Affirmative votes—fourteen (14): Melville, Binder, Lemche, Mayr, Eisenmann, Vokes, Simpson, Obruchev, Forest, Brinck, Tortonese, Kraus, Ride, Bonnet.

Negative votes—eight (8): China, Holthuis, Munroe, Mertens, Evans, Jaczewski, Starobogatov, Alvarado.

Part 3. Affirmative votes—sixteen (16): Melville, Binder, Lemche, Mayr, Eisenmann, Vokes, Simpson, Obruchev, Forest, Evans, Brinck, Tortonese, Kraus, Ride, Bonnet, Alvarado.

Negative votes—six (6): China, Holthuis, Munroe, Mertens, Jaczewski, Starobogatov.

Part 4. Affirmative votes—thirteen (13): Melville, China, Holthuis, Vokes, Munroe, Mertens, Forest, Evans, Jaczewski, Starobogatov, Brinck, Bonnet, Sabrosky.

Negative votes—ten (10): Binder, Lemche, Mayr, Eisenmann, Simpson, Obruchev, Tortonese, Kraus, Ride, Alvarado.

Voting Papers not returned—one (1) Do Amaral.

The following comments were provided by Commissioners with their returned voting papers.

Dr. Eisenmann. "My vote in favour of Parts 1 and 2 depends on a majority voting in favour of Part 3. If a majority were to vote against Part 3 too much confusion would result in having two differently worded statutes of limitation in effect, so I would prefer to keep the present Article 23(b) tentatively. I believe that if Part 3 is adopted the words in the first line of the [draft] Declaration 'As from 1 January 1970' should be deleted or better changed to '1961' for they would give the impression that the Declaration is not retrospective (even if the words 'after 1960' are included) despite an affirmative vote under Part 3 of the Voting Paper. The Commissioners understand that coming into being in 1970 is not to affect retrospectivity, because this is made clear in the Voting Paper, but zoologists reading the amended Code and seeing only the *language* adopted, will not know this. I therefore *strongly* urge that if retrospective effect is voted under Part 3, the word '1970' be replaced by '1961'. Keeping '1970' can add nothing but confusion if Part 3 is adopted and is useful *only* if the Declaration is *not* made retrospective."

Dr. Evans. "I consider the new text of Article 23(b) to be a marked improvement on the existing text and I support making the Declaration retroactive to 1 January 1961 and operative until the meeting of the XVII International Congress of Zoology. I am opposed, in principle, to any form of a 'Law of Conservation' and I would strongly support a request to the XVII International Congress of Zoology to delete Article 23(b) from the Code—hence my vote against Part 2 of the Voting Paper."

Dr. Starobogatov. "I agree completely with Dr. Holthuis's comments. The new text of Article 23(b) causes new difficulties. For example, does the mentioning of a name without comments in a faunistic list, based on the original material, constitute usage in the sense of Article 23(b)? The presence of Article 79 makes Article 23(b) unnecessary."

Dr. Ride. "I am of the opinion that Article 23(b)(ii) will need redrafting in due course but agree that the proposed text should be adopted in its entirety and put to a period of usage before the next Congress."

Dr. Munroe sent the following comment on 29 August 1969, after the close of the Voting Period. "I wish to place the following comments on record in

connection with my negative vote on the proposals relating to Article 23(b).

"I cast a negative vote on these proposals with real regret for two reasons: first, I have been a supporter of the principle of conservation since the Copenhagen colloquium; and, second, I am satisfied that the majority of the Canadian zoologists with whom I have corresponded are in favour of some workable expression of the principle of conservation.

"However, I consider that the present proposals will not only fail to be accepted in practice but that they will prove very difficult and inconvenient to work under, for the following reasons:

"1. The period of 50 years mentioned in item ii is too short in many zoological groups. In Lepidoptera, for example, many names go uncited for substantially more than 50 years even though their application is understood and they have in no sense been forgotten. The safeguard provided by item i is only partial because usages might vary in different geographical areas.

"2. The requirement to show that a name has not been used by five different authors in at least ten publications before the law of priority is applied is not only a very onerous one, but it is virtually impossible to achieve with certainty particularly in view of the wide-open provision of item iv. Even if a taxonomist established to his satisfaction that a name had been used by less than five authors and in less than ten publications during the stipulated period, subsequent examination of literature might well expose additional citations which would upset the synonym that he had proposed, under the second sentence of item ii. There is therefore an inherent source of instability in the proposed arrangement. Both the difficult task of a negative proof and the instability will be frequent rather than rare in a majority of animal groups.

"3. Both the practical problem and the climate of opinion differ widely for workers in different groups, the present proposals make no provision for different arrangements to suit these different circumstances.

"4. The establishment of a 'fifty years before present' criterion for usage means that the status of names can change from one day to the next. This is particularly a difficulty where manuscripts are completed near the end of a fifty-year period after proposal of a rarely-used name. Between submission of a paper for publication and its actual appearance the status of a name may well change and it may be impossible for the author or the editor to predict whether or not this is going to be the case. The difficulty of course would be avoided if the status as a nomen oblitum were determined from a fixed date rather than from a 'fifty years before present' date.

"In my view both the proposed text and the existing text of Article 23(b) are completely unsatisfactory and the prolonged discussion on this subject has led to confusion and loss of support for Article 23(b) rather than a consensus among zoologists. In my view better proposals will be required before an acceptable automatic provision can be drafted and I consider that meanwhile the plenary powers will provide sufficient latitude for the number of significant cases that comes forward. This would particularly be so if efforts could be

directed to streamlining and expediting the procedure for publishing and dealing with cases and if support were given to an acceptable degree of conservation by explicit recommendations as to the type of cases that ought to be submitted to the Commission.

"If an automatic rule is adopted I think it should contain at least the following features not now present in Article 23(b) or the proposed new Declaration:

"1. The status of a name should be determined as from a fixed date rather than a moving one.

"2. The onus ought to be on the proposer of a synonym to prove some positive condition rather than to try to prove beyond reasonable doubt a negative condition.

"3. The period that would determine the status of a name should be much longer than fifty years at least for many groups, and it should be variable to meet the very different circumstances prevailing in different groups, as for instance birds and insects.

"As a minor point I consider that the phrase 'in an abstracting publication, or in a nomenclator or other index or list of names' used in the proposed item iii is still too ambiguous to be capable of certain application, unless these various terms and particularly 'list of names' are precisely defined in an accompanying glossary."

The majority vote in favour of Part 4 of V.P.(69)39 presented an interesting situation. In summary, the Commission had voted (1) to accept the new wording of Article 23(b), (2) to replace the former text by the new text (subject to the authority of the Congress), (3) to give the new text validity as from 1 January 1961, and (4) to delete the Article altogether. This last vote, however, had been presented merely as a means of recording the extent of the opposition to the principle of Article 23(b) at that time. Commissioners might well have felt that they were giving their votes in confidence, rather than for publication. It was for this reason that, on 27 March 1970, Commissioners were asked to vote under the One-Month Rule on V.P.(O.M.)(70)1 for or against the publication of the result of the vote on Part 4 of V.P.(69)39. The voting paper was accompanied by the following note from the Secretary.

Note to accompany V.P.(O.M.)(70)1

"V.P.(69)39, on the Declaration concerning Article 23(b), was divided into four parts. The 4th part called for a vote for or against the proposition that the XVII International Congress of Zoology be asked to delete Article 23(b) from the Code. This proposition received 13 votes in favour to 10 against.

Paragraph 6 of the Note accompanying V.P.(69)39 might be taken to mean that the vote on Part 4 was taken only for the record, in order to "register the extent of the opposition to the principle at this time", and not for publication. It therefore seems proper to ask the permission of Commissioners before publishing the result of the vote.

In considering this question, I would ask you to bear in mind the Commission's majority vote in favour of deletion and the resolution of the XII International Congress of Entomology (see *Bull. zool. Nomencl.* **23** : 259–260).

The Secretariat has obtained legal advice that it would be within the powers of the Commission to request an International Congress of Zoology to delete any Article from the Code. I also enclose a copy of a resolution of the Council of the American Society of Parasitologists to the same effect.[1] I may also point out that it is quite clear that the division of opinion on this subject lies between those who work in groups of animals that have been well studied in relatively recent times and so have acquired a stable nomenclature, such as Mammalia and Aves for example (these are in favour of Article 23b); and those who work in groups that are as yet imperfectly known (for example, many groups of Insecta and other invertebrate classes) where it would be short-sighted to condemn large numbers of senior synonyms of early date and small usage before their value has been properly assessed. Article 23(b) would therefore have the effect of limiting the freedom of taxonomic action of future zoologists, and I am sure that the publication of the vote in favour of deletion would be to the credit of the Commission's reputation for wisdom and far-sightedness."

At the close of the prescribed voting period on 27 April 1970 the state of the voting was as follows:

Affirmative votes—seventeen (17) received in the following order: Evans, Vokes, Melville, Holthuis, Sabrosky, Ride, do Amaral, Obruchev, Tortonese, Munroe, Mertens, Brinck, Jaczewski, Starobogatov, Bonnet, Forest, Alvarado.

Negative votes—five (5): Lemche, Eisenmann, Binder, Mayr, Kraus.

Voting Paper not returned—one (1): Simpson.

The following comments were sent by Commissioners with their votes.

Dr. H. Lemche (31 March 1970). "I strongly urge that this voting be cancelled. A private vote cannot be so treated or rather misused."

Dr. Eisenmann (30 March 1970). "I vote against publication because such publication is likely to confuse the public and tend to prevent a fair trial of the modification or interpretation of Article 23(b), which was noted at the same time. The vote, by a small majority, to ask that the next International Congress of Zoology be asked to delete the Article from the Code has no present legal effect. Amendment of the Code, such as is proposed, requires discussion by the Section on Nomenclature of the Congress, a vote by the Commission there, approval by the Section, and final approval by the Congress (Code, Art. 87).

"Publication of the recent advisory vote (less than two-thirds) has no effect at all at present. The confusion that publication of such votes can occasion is demonstrated by the Resolution of the American Society of Parasitologists, which, quite erroneously, states that Article 23(b) was suspended by vote of the Commission adopted on February 25, 1966. Actually that vote was not presented under the Plenary Power provisions and safeguards, nor did it obtain a two-thirds majority: moreover the Plenary Power does not authorise *general* suspension (in effect a repeal) of a provision of the Code. The Commission was so advised by counsel retained for that purpose.

"The only effect of publication, or indeed of the vote itself, is to put the

[1]See p.162.

whole question on the agenda of the next Congress.

"If the majority of the Commission votes in favour of publication, I request that the Secretary publish this letter or a summary, pointing out that Article 23(b) is still in force, and is not suspended, but should be interpreted in accordance with the recent modifying provisions."

The Secretary replied to this on 17 June 1970: "Your letter of 30 March on this subject revealed several misunderstandings.

"First, the Commission is entirely within its rights in adopting a Declaration deleting an Article from the Code.[1] This, which is quite different from suspending the general application of an Article, was accepted by our legal adviser. Such a Declaration comes into force immediately and so remains until the next Congress ratifies, modifies or reverses it.

"Secondly, there is nothing in the existing Constitution—which was ratified by the 1963 Congress in due form—to require a two-thirds majority vote in favour of a Declaration."

Dr. C. W. Sabrosky (5 April 1970). "It seems to me that this is the time when the Commission and the Commissioners must do more than merely agree to publish the results of the vote of 13 to 10 in favour of asking the Congress to delete Article 23(b) from the Code. Certain procedural questions must be decided.

"1. I assume that the 13–10 vote is in effect a directive to the Secretary to present the proposal at the next International Congress of Zoology. It would seem fatuous to vote on the question and not assume that that would be done, if the vote went that way, and it would be a waste of time to vote again on a proposition to specifically direct the Secretary to do what he should do after the first vote carried.

"2. A Congress of Zoology may be far in the future. Certainly, at least as far as I know now, the date is uncertain. What then of the interim period? Do we suspend 23(b) until action can be taken on our request? Do we decline to render Opinions under an Article that we propose to cast out? I believe that we should so direct, and announce that all cases should be presented under the regular Plenary Powers procedure until the question can be settled.

"3. The 'Note to Accompany V.P.(O.M.)(70)1' did not give the vote on the proposed Declaration. Perhaps it was turned down. In any case, in view of the 13–10 vote, should it be published at this time? The 13–10 appears to be, in effect, a motion to table the Declaration in favour of the overriding proposal to delete 23(b) from the Code.

"4. At the time of suspension of cases under 23(b), announcement should be made to make it clear that justified cases, those of real importance, can always be presented under Article 79 of the code ('Plenary Powers').

"5. In passing, I would note that the Secretary's comment on the division of opinion between 'stable' groups such as Mammalia and Aves and the 'as yet imperfectly known' groups of many invertebrates is probably a true general statement, but the division is not perfect. There are priority and anti-23(b)

[1]See p. 139 above.

taxonomists in Mammalia and Aves, and there are advocates of usage among taxonomists on invertebrate groups. But the number of species and number of problems involved in those smaller vertebrate groups can hardly justify an Article in the Code that serves the special beliefs of taxonomists in those groups. Their problem cases, when properly justified, can always be considered under Plenary Powers."

Dr. E. Mayr (two letters dated 14 April 1970). *Letter* 1. "In view of the fact that the whole zoological world is eagerly awaiting publication of the exact wording of the Declaration on Article 23(b), I take it for granted that the question of a possible recommendation to the next Congress will be published separately. There is no hurry about this recommendation nor is it even part of our assignment by the Congress. I hope the Secretariat uses sound judgment in not letting anything interfere with the speedy publication of the Declaration."

Letter 2. "After long deliberation I have decided to vote against publication of the informal vote of the Commission on a recommendation to the next International Congress of Zoology for a suppression of Article 23(b) for the following reasons:

"(1) This vote would surely confuse zoologists, who might think that this is a device of the Commission to discredit Article 23(b) at once. The Commission functions as the supreme court of the zoologists and should do nothing to undermine the authority of the Code.

"(2) Publication of this vote might seriously weaken the trust of zoologists in the Commission. They will say: How can the Commission recommend the elimination of a rule that has not even been seriously tested? For this reason, surely, a recommendation to repeal an untested rule would be considered as rash and ill-considered.

"(3) The Secretariat in its various communications to the Commission has brought to the attention of the Commission two votes by groups of taxonomists (entomologists, parasitologists) who favour the deletion of Article 23(b). Other groups of taxonomists have strongly come out in favour of Article 23(b). I was informed last year by the Secretary of the German Zoological Society that his Society had passed almost unanimously a resolution strongly endorsing Article 23(b) and that this resolution had been passed to the Secretariat. If this information is correct why was the Commission not informed of this (and perhaps other similar) resolutions? If it were true that only evidence indicating opposition to Article 23(b) has been transmitted to the Commission but not favourable resolutions, would not this indicate bias by the Secretariat?

"If the vote of the Commission on V.P.(O.M.)(70)1 is in favour of publication of the straw ballot, I demand that it be re-submitted to the Commission in accordance with the provisions of the By-Laws (one of which urges the Secretary to re-submit votes when, in the course of ballotting, subject-matter not previously considered is revealed) and that this letter and possibly letters by other members of the Commission, accompanying their ballot, be brought to the attention of the Commission.

"I furthermore propose in such a case an alternate wording of the recommendation: 'The Commission recommends to the next Congress to undertake a careful study of Article 23(b), in order to determine whether it has proven

beneficial for the stability of nomenclature, or rather has either caused more confusion than benefit or has proven unworkable.

" 'The Commission recommends, furthermore, that—depending on the results of this study—the Congress propose appropriate action which may consist either in the incorporation of Declaration 43 in Article 23(b), or its modification, or its outright repeal'.

"I feel that this wording of the recommendation does not prejudge the issue nor interfere with the prerogatives of the next Congress."

The Secretary replied to these letters on 19 June 1970: "In your first letter of 14 April you ask, in effect, for the decision of the Commission to repeal Article 23(b) to be separated from the decision to accept the Committee's text for the period of the valid life of the Article. I can find no justification for such a procedure and am publishing the entire complex decision in a single document. The course you suggest would, in my view, indicate that the Commission could not make up its mind what it was doing and would be a fruitful source of confusion.

"In your second letter you make three points. To your point (1) I say that the Commission's vote is not a 'device to discredit Article 23(b)'. It is a perfectly legal vote taken in full compliance with the Code and the Constitution and can in no way weaken the authority of the Code or the Commission.

"To your point (2) I say that failure to publish the decision would indeed weaken the Commission's authority. We should be open to the accusation of suppressing evidence because it was not agreeable to a minority of the Commission. Furthermore, how do you expect Article 23(b) to be tested in a short space of time? It can only be tested when its effect on neglected groups becomes clear—and it is always the neglected groups that tend to stay neglected. This demand is unrealistic.

"On your third point, I am indeed sorry that the resolution of the German Zoological Society was not communicated to the Commission with V.P.(O.M.)(70)1. Unfortunately, at the same time I omitted to circulate a resolution by Polish zoologists asking for the deletion of Article 23(b), so the two errors approximately cancel each other out. On balance, however, zoological opinion as made known to the Commission is strongly in favour of deleting the article. I do not agree, therefore, that the situation is as you suggest or that the vote on V.P.(O.M.)(70)1 should be re-submitted.

"I find it difficult to follow your suggestion that the next Congress should undertake a careful study of Article 23(b). What action could the Congress take other than to refer the question back to the Commission? How can the effect of the Article be studied except over a very long period of time as neglected groups come to be revised? Since it is virtually certain that the next Congress will be the last one, to what body would the results of the study be reported? I do not see how your suggestion could be carried out in practice, nor do I see the advantage of postponing a final decision on the Article."

CERTIFICATE

I certify that the votes cast on Voting Papers (69)39 and (O.M.)(70)1 were cast as set out above, that the proposal contained in those Voting Papers has

International Commission, is truly recorded in the present Declaration 43.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
June 1970

ARTICLE 23(b): PROPOSED DELETION FROM THE CODE

(*American Society of Parasitologists, per D. V. Moore, Secretary-Treasurer*)

been duly adopted, and that the decision so taken, being the decision of the

The following resolution, adopted unanimously at the fifty-ninth meeting of the Council of the American Society of Parasitologists, was sent to the Commission by Dr. D. V. Moore on 15 January 1970.

The *Bull. zool. Nomencl.* **23** : 258 (1966) contained a report of the activity of the Commission regarding the clarification of Code Article 23(b), which began as follows: "Article 23(b) has been a most controversial one right from its first proposal by Commissioners E. Mayr and L. B. Holthuis during the XV International Congress of Zoology held in London in August 1958". As a result of divergent opinion, Commissioner Dr. Otto Kraus proposed in November, 1965, that Article 23(b) should be suspended until the end of the next meeting of the Commission, and the proposal was adopted on 25 February 1966 by a vote of 14 to 8. Apparently, Article 23(b) is still suspended.[1]

An outstanding action was taken by the XII International Congress of Entomology, which directed the Permanent Committee of the International Congresses of Entomology "to propose and strongly recommend to the International Commission on Zoological Nomenclature that the field of entomology, in the broad sense, be exempted from the provisions of paragraph (b) of Article 23 of the International Code of Zoological Nomenclature. For the purpose of this resolution, entomology in the broad sense is defined as the study of Hexapoda, Arachnida and Myriapoda."

The Committee of the American Society of Parasitologists believes that the exemption of special areas of the field of zoology is not a satisfactory solution of the problem. The establishment of areas of special privilege is objectionable and the Committee holds that the Rules of Nomenclature should be applicable universally to all animal groups. Article 23(b) adversely affects universal acceptance of the Rules:

1. By restricting unnecessarily the principle of Priority, the basis of stability in zoological nomenclature. The Code provides for suspension of the Rules when that action would minimize confusion or injustice.
2. By favouring groups in which few species remain to be described (e.g. the

[1]This is not so. Legal opinion was to the effect that the Commission had no power to suspend any article of the Code; see *Bull. zool. Nomencl.* **23** : 266–8 R.V.M.

vertebrates, less than ten per cent of the animal kingdom), while adding to the difficulties of work with such less well-known groups as the parasitic protozoans and helminths which include numerous as yet undescribed species and many known ones that are seldom mentioned in the literature.

3. By involving decisions of the most subjective nature as to what constitutes "primary zoological literature", and whether the 50-year rule is based on calendar years or dates from the actual time of publication which, in itself, is often difficult to determine.
4. By providing an opportunity for abuse, either by renaming species although previous naming was known before its 'statute of limitations' even expired, or by deliberately renewing the "copyright" of names by using them before they are "forgotten". Although petty, such abuse could have nationalistic overtones and is to be discouraged.
5. By adding to the work of many systematists almost insuperable difficulties of literature search, with claims and counter-claims because of matters included in (3) above.
6. By being impossible to enforce, a power which the Commission lacks. For parasitologists who are necessarily concerned with the systematics of many groups of hosts as well as parasites, conformation of some to the provisions of Article 23(b) and disregarding of those provisions by others would lead to utter confusion.

Because of the above objections, the Committee urgently recommends that Article 23(b) be abrogated.

OPINION 932

POLYGNATHUS HINDE, 1879 (CONODONTA): REFUSAL TO USE THE PLENARY POWERS

RULING.—The use of the plenary powers either to designate a type-species for *Polygnathus* Hinde, 1879, or to designate a neotype for *Polygnathus dubius* Hinde, 1879, is hereby refused.

HISTORY OF THE CASE (Z.N.(S.) 1796)

The present case was presented to the office of the Commission in March and April 1967 in the form of two alternative proposals. A proposal for the designation of a type-species for *Polygnathus* was submitted by Gilbert Klapper, Maurits Lindström and Willi Ziegler; the alternative proposal for designation of a neotype for the present type-species of *Polygnathus*, *Polygnathus dubius*, was submitted by Klaus J. Müller and David L. Clark. The applications were sent to the printer on 3 May 1967 and were published on 20 September 1967 in *Bull. zool. Nomencl.* **24** : 239–243.

Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two palaeontological serials.

The proposals of Klapper et al. were supported by Dr. David Mason, Dr. J. Helms (*Bull. zool. Nomencl.* **25** : 5) and Prof. F. H. T. Rhodes. An objection by Dr. C. W. Sabrosky (*ibid.* **24** : 328) was largely answered by Dr. John W. Huddle (*ibid.* **26** : 8–9), who proposed that the Commission take no action, thus enabling Dr. Huddle to designate a neotype which would be in accordance with the Code. Prof. D. L. Clark (*ibid.* **26** : 71) disagreed with Dr. Huddle.

DECISION OF THE COMMISSION

On 13 November 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)49, in Part 1 either for or against the use of the plenary powers to preserve *Polygnathus* in its accustomed sense, and in Part 2, for either Alternative A (the designation of a type-species for *Polygnathus* as set out in *Bull. zool. Nomencl.* **24** : 241) or for Alternative B (the designation of a neotype for *Polygnathus dubius* as set out in *Bull. zool. Nomencl.* **24** : 243). At the close of the prescribed voting period on 13 February 1970 the state of the voting was as follows:

Part 1. Affirmative votes—ten (10), received in the following order: Obruchev, Alvarado, Jaczewski, Lemche, Tortonese, Binder, Bonnet, Ride, Forest, Brinck.

Negative votes—thirteen (13): China, Vokes, Eisenmann, Mayr, Simpson, Holthuis, do Amaral, Sabrosky, Starobogatov, Melville, Evans, Kraus, Mertens.

Part 2. For Alternative A—three (3): Alvarado, Bonnet, Brinck.

For Alternative B—seven (7): Obruchev, Jaczewski, Lemche, Tortonese, Binder, Ride, Forest.

Voting Papers not returned—one (1): Munroe.

The following comments were made by Commissioners in returning their votes:

Prof. H. E. Vokes (19.xi.69): "The Huddle proposal will be the only one fulfilling the requirement that the neotype be from the type locality, and in-so-far as possible, from the type horizon."

Mr. E. Eisenmann (1.xii.69): "My reason for voting against the use of the plenary powers is that a zoological question exists: what was the lectotype of *P. dubius*? Dr. Huddle says it was actually a *P. foliatus*. Dr. Clark says several competent specialists who studied it do not agree. Let us hear from *them* before voting."

Dr. C. W. Sabrosky (19.i.70): "There seems to be much more than first meets the eye in this case. The remarks of Clark (*Bull. zool. Nomencl.* **26** : 71) cast a shadow that should be cleared up before the Commission can fairly consider the merits of the two applications. I have consulted Dr. Huddle and have examined the photographs he has, and can report as follows:

"1. Fortunately he had had photographed the plate of the lectotype, both in side view and in ventral view with the outline of the plate completely exposed, before further preparation and before additional stereoscan photographs were requested, during which the specimen was accidentally lost.

"2. Comparing those photographs with photographs of *Polygnathus dubius*, sensu authors, it is obvious that the narrow, elongate form of the type was not at all like the broad, foliate form of *dubius* of authors.

"3. Dr. Huddle cannot be certain of the identity of the type because the surface ornamentation of the plate had not yet been exposed, but from the even, non-serrate margin, especially as seen in lateral view, he believes that it was "probably" the species hitherto known as *P. foliatus* Bryant.

"4. Contrary to Clark's additional point (1) (*Bull. zool. Nomencl.* **26** : 71), Dr. Huddle states that no other conodont specialists saw the type between the time it was partially prepared, exposing the outline of the plate, and the time it was inadvertently lost in the vacuum preparation for the stereoscan photography. Dr. Clark can only have referred to earlier study by specialists. It is true that according to applicants Klapper et al. (*Bull. zool. Nomencl.* **24** : 240), the lectotype "is an indeterminate fragment" (actually their paragraph 9 implies a whole specimen chiefly hidden in a shale matrix) and 'Conodont specialists who have studied Hinde's material are agreed in this conclusion'. However, hidden as the type was until Huddle's preparation, specialists were in no position to identify *P. dubius*, no matter how competent they were. Huddle is to be commended for painstakingly preparing the type so that it could be studied.

"5. The possible inference in Clark's words that Huddle might have destroyed the type is unwarranted, as a very embarrassed photographer in the U.S. Geological Survey can testify. These accidents are unfortunate, but they can and do happen in stereoscan photography. Specialists would be well advised, especially in dealing with type material, to have photomicrographs made, or stereoscan photographs at several times or at an early stage, as Huddle wisely did.

"From Huddle's report (*Bull. zool. Nomencl.* **26** : 8) and from his photo-

graphs, it is clear that *P. dubius* s.str. is congeneric with *P. dubius* of authors, and is even in the same species group, the *decorosus* Stauffer complex. Applications on the basis of a threat to the stability of *Polygnathus* are therefore unjustified; there is no threat. Application of the specific name *dubius* would be changed, but *dubius* had already been abandoned, by Ziegler et al. (1964), as a *nomen dubium*. This was repeated by Klapper et al. (1967, *Bull. zool. Nomencl.* **24** : 240). Obviously, there is not the 'worldwide accepted concept of *P. dubius*' postulated by Clark (*Bull. zool. Nomencl.* **26** : 71).

"I am informed that the subzone designation '*Polygnathus dubius* zone' dates only from Ziegler (1962), and paleontologists will certainly realize that this is an infinitesimal amount of time. No great amount of usage is involved.

"I believe that both applications should be denied, and that competent conodont specialist Huddle should be left free to designate a neotype—if indeed it be considered 'essential for solving a complex zoological problem'—in conformity with his best judgment from his study of the lectotype and the existing photographs of it. These photographs and his description show clearly (1) that the type-species designation proposed by Klapper et al. is unnecessary, and (2) that the neotype suggested by Müller and Clark is not conspecific with the lectotype."

Mr. R. V. Melville (4.ii.70): "I think the Commission should refrain from any action at this stage. The next step must be for specialists to agree on a neotype (there was apparently disagreement over the identification of the lost lectotype) and then to see whether reference to the Commission is necessary."

CERTIFICATE

I certify that the votes cast on Voting Paper (69)49 were cast as set out above, that neither of the proposals set out in that Voting Paper has been adopted, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 932.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
20 *April* 1970

OPINION 933

LIPHISTIUS SCHIØDTE, 1849 (ARANEAE): EMENDATION FROM *LIPISTIUS* VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the emendation to *Liphistius* of the generic name *Lipistius* Schiødte, 1849, is hereby validated.

(2) The generic name *Liphistius* Schiødte, 1849 (gender: masculine), type-species, by monotypy, *Lipistius* [sic] *desultor* Schiødte, 1849, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1928.

(3) The specific name *desultor* Schiødte, 1849, as published in the binomen *Lipistius* [sic] *desultor* (type-species of *Liphistius* Schiødte, 1849) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2418.

(4) The family name LIPHISTIIDAE Thorell, 1869 (type-genus *Liphistius* Schiødte, 1849) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 455.

(5) The generic name *Lipistius* Schiødte, 1849 (Ruled under the plenary powers in (1) above to be an incorrect original spelling for *Liphistius*) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1985.

HISTORY OF THE CASE (Z.N.(S.) 1828)

The present application was submitted by Dr. Herbert W. Levi in September 1967. Dr. Levi's application was sent to the printer on 4 October 1967 and was published on 18 January 1968 in *Bull. zool. Nomencl.* **24** : 359. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184).

Dr. Levi's proposals were supported by Prof. P. Bonnet (*Bull. zool. Nomencl.* **26** : 6–7), Dr. V. D. Roth, Prof. B. J. Kaston, Dr. M. H. Muma, Dr. J. Brandegård, Dr. O. Kraus, Dr. J. Denis, Dr. J. A. L. Cooke, and Dr. B. Y. Main. An objection by Dr. B. R. Vogel was published in *Bull. zool. Nomencl.* **25** : 127.

DECISION OF THE COMMISSION

On 13 November 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)52 either for or against the proposals set out in *Bull. zool. Nomencl.* **24** : 359. At the close of the prescribed voting period on 13 February 1970 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: China, Vokes, Obruchev, Mayr, Alvarado, Holthuis, Jaczewski, do Amaral, Lemche, Tortonese, Melville, Binder, Evans, Bonnet, Ride, Kraus, Forest, Mertens, Brinck.

Negative votes—three (3): Simpson, Sabrosky, Starobogatov.

Voting Papers not returned—one (1): Munroe.

Commissioner Eisenmann did not vote, giving the following explanation: "Where current usage is overwhelmingly in support of an ancient (but under the Code unwarranted) emendation for puristic reasons, I would support its maintenance; likewise if the Statute of Limitations could be said to bar the original spelling. But this is not the case here. Roewer (1942) in his 'Katalog der Araneae' reverted to the original spelling. In this he was adopting a reasonable interpretation of the Règles, which became explicit under the Copenhagen Decisions as well as the Code and which had long been adopted in many fields of zoology. I do not vote because current usage is not fully stated."

The following comments were made by other Commissioners in returning their votes:

Prof. G. G. Simpson (21.xii.69): "Schiødte evidently wrote *Lipistius* intentionally. To change it because his transliteration was not 'correct' would open a Pandora's box. There are surely hundreds, perhaps thousands, of names that could give rise to etymological quibbling. Further: 'De minimis non curat lex!' "

Dr. C. W. Sabrosky (7.i.70): "I sympathize with the long-standing usage based on an emendation by a classical scholar long ago. But, as Bonnet pointed out, there are thousands of such names. Rather than piecemeal action, name by name, should we reconsider the effect of the London Congress action of making Article 32 retroactive to 1758?"

Original References

The following are the original references for names placed on the Official Lists and Index by the Ruling given in the present Opinion:

desultor, *Lipistius*, Schiødte, 1849, *Nat. Tidskr.* (2)**2** : 621

LIPHISTIIDAE Thorell, 1869, *On European Spiders* : 43

Liphistius Schiødte, 1849, *Nat. Tidskr.* (2)**2** : 621

Lipistius Schiødte, 1849, an incorrect original spelling for *Liphistius*, q.v.

CERTIFICATE

I certify that the votes cast on Voting Paper (69)52 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 933.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
4 *May* 1970

OPINION 934

BOLLIA JONES & HOLL, 1886 (OSTRACODA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the nominal genus *Bollia* Jones & Holl, 1886, made prior to the present Ruling, are hereby set aside, and the nominal species *Bollia bicollina* Jones & Holl, 1886, is hereby designated to be the type-species of that genus.

(2) The generic name *Bollia* Jones & Holl, 1886 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Bollia bicollina* Jones & Holl, 1886, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1929.

(3) The specific name *bicollina* Jones & Holl, 1886, as published in the binomen *Bollia bicollina* (type-species of *Bollia* Jones & Holl, 1886) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2419.

(4) The family name BOLLIIDAE Bouček, 1936 (type-genus *Bollia* Jones & Holl, 1886) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 456.

HISTORY OF THE CASE (Z.N.(S.) 1831)

The present case was submitted to the office of the Commission by Prof. Albert L. Guber in November 1967. Prof. Guber's application was sent to the printer on 7 November 1967 and was published on 18 January 1968 in *Bull. zool. Nomencl.* **24** : 360–363. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials. No comment was received. Prof. Guber wrote in April 1968 to correct a typographical error: in proposal (4) on page 363, "Bouček 1938" should read "Bouček 1936".

DECISION OF THE COMMISSION

On 13 November 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)53 either for or against the proposal set out in *Bull. zool. Nomencl.* **24** : 362–363. At the close of the prescribed voting period on 13 February 1970 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Vokes, Obruchev, Eisenmann, Mayr, Alvarado, Jaczewski, Simpson, Holthuis, do Amaral, Lemche, Tortonese, Sabrosky, Starobogatov, Melville, Binder, Evans, Bonnet, Ride, Kraus, Forest, Mertens, Brinck.

Negative votes—none (0).

Voting Papers not returned—one (1): Munroe.

ORIGINAL REFERENCES

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

bicollina, Bollia, Jones & Holl, 1886, *Ann. Mag. nat. Hist.* (5)**17** : 361, pl. 12, figs. 14 a–c, 15, 16

Bollia Jones & Holl, 1886, *Ann. Mag. nat. Hist.* (5)**17** : 360

BOLLIIDAE Bouček, 1936, *Neues Jahrb.* **76** B (1) : 40

CERTIFICATE

I certify that the votes cast on Voting Paper (69)53 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken being the decision of the International Commission, is truly recorded in the present Opinion No. 934.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
4 *May* 1970

OPINION 935

SIMIA LEUCOPHAEA F. CUVIER, 1807 (MAMMALIA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the following specific names are hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(*a*) *sylvicola* Kerr, 1792, as published in the combination *Simia* (*Papio*) *sylvicola*;

(b) *variegata* Kerr, 1792, as published in the combination *Simia* (*Papio*) *variegata*;

(c) *cinerea* Kerr, 1792, as published in the combination *Simia* (*Papio*) *cinerea*;

(d) *livea* Kerr, 1792, as published in the combination *Simia* (*Papio*) *livea*.

(2) The specific name *leucophaea* F. Cuvier, 1807, as published in the binomen *Simia leucophaea*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2420.

(3) The following specific names, as suppressed under the plenary powers in (1) above, are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *sylvicola* Kerr, 1792, as published in the combination *Simia* (*Papio*) *sylvicola* (Name No. 946);

(b) *variegata* Kerr, 1792, as published in the combination *Simia* (*Papio*) *variegata* (Name No. 947);

(c) *cinerea* Kerr, 1792, as published in the combination *Simia* (*Papio*) *cinerea* (Name No. 948);

(d) *livea* Kerr, 1792, as published in the combination *Simia* (*Papio*) *livea* (Name No. 949).

HISTORY OF THE CASE (Z.N.(S.) 1820)

The present application was submitted to the office of the Commission by Dr. Colin P. Groves in November 1967. Dr. Groves's application was sent to the printer on 15 February 1968 and was published on 24 May 1968 in *Bull. zool. Nomencl.* **25** : 36–37. Public Notice of the possible use of the plenary Powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials. No comment was received.

DECISION OF THE COMMISSION

On 13 November 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)54 either for or against the proposals set out in *Bull. zool. Nomencl.* **25** : 37. At the close of the prescribed voting period on 13 February 1970 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Vokes, Obruchev, Eisenmann, Mayr, Alvarado, Simpson, Holthuis, do Amaral, Lemche, Tortonese, Sabrosky, Jaczewski, Starobogatov, Melville, Binder, Evans, Bonnet, Ride, Kraus, Forest, Mertens, Brinck.

Negative votes—none (0).

Voting Papers not returned—one (1): Munroe.

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

cinerea, *Simia* (*Papio*), Kerr, 1792, *The Animal Kingdom*, Mammalia : 62

leucophaea, *Simia*, Cuvier, 1807, *Ann. Mus. Hist. nat.*, Paris **9** : 477, pl. 37

livea, *Simia* (*Papio*), Kerr, 1792, *The Animal Kingdom*, Mammalia : 62

sylvicola, *Simia* (*Papio*), Kerr, 1792, *The Animal Kingdom*, Mammalia : 61

variegata, *Simia* (*Papio*), Kerr, 1792, *The Animal Kingdom*, Mammalia : 62

CERTIFICATE

I certify that the votes cast on Voting Paper (69)54 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 935.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
6 *May* 1970

OPINION 936

JULUS PALLIPES OLIVIER, 1792 (DIPLOPODA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers:

(a) the specific name *pallipes* Olivier, 1792, as published in the binomen *Julus pallipes*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(b) all designations of type-species for the nominal genus *Tropisoma* C. L. Koch, 1844, made prior to the present Ruling are hereby set aside, and the nominal species *Julus stigmatosus* Eichwald, 1830, is hereby designated to be the type-species of that genus.

(2) The generic name *Strongylosoma* Brandt, 1833 (gender: neuter), type-species, by monotypy, *Julus stigmatosus* Eichwald, 1830, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1930.

(3) The specific name *stigmatosus* Eichwald, 1830, as published in the binomen *Julus stigmatosus* (type-species of *Strongylosoma* Brandt, 1833) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2421.

(4) The specific name *pallipes* Olivier, 1792, as published in the binomen *Julus pallipes* (as suppressed under the plenary powers in (1)(a) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 950.

HISTORY OF THE CASE (Z.N.(S.) 1823)

The present case was submitted to the office of the Commission by Dr. C. A. W. Jeekel in September 1967. Dr. Jeekel's application was sent to the printer on 7 November 1967 and was published on 24 May 1968 in *Bull. zool. Nomencl.* **25** : 38–40. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The proposals were supported by Dr. U. Haacker.

DECISION OF THE COMMISSION

On 13 November 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)55 either for or against the proposals set out in *Bull. zool. Nomencl.* **25** : 39–40. At the close of the prescribed voting period on 13 February 1970 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Vokes, Obruchev, Eisenmann, Mayr, Jaczewski, Alvarado, Simpson, Holthuis, do Amaral, Lemche, Tortonese, Sabrosky, Starobogatov, Melville, Binder, Evans, Bonnet, Ride,* Kraus, Forest, Mertens, Brinck.

* Dr. Ride excepted proposal (5) from his affirmative vote; see comment below.

Negative votes—none (0).

Voting Papers not returned—one (1): Munroe.

The following comment was made by Dr. W. D. L. Ride in returning his vote: "Nothing is gained by adding a junior objective synonym to the Official Index. Moreover the Code specifies that names 'rejected in Opinions' are to be entered in Indexes. This name is not rejected in the Opinion, but by virtue of the Opinion must be rejected while the senior objective synonym is available."

Because of Dr. Ride's objection, and because the applicant himself expressed doubts upon this point, *Tropisoma* has not been placed on the Index.

Original References

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

pallipes, Julus, Olivier, 1792, *Ency. méth.*, Ins. **7** : 416

stigmatosus, Julus, Eichwald, 1830, *Zoologia specialis*, Pars altera : 124

Strongylosoma Brandt, 1833, *Bull. Soc. imp. Nat. Moscou* **6** : 205

CERTIFICATE

I certify that the votes cast on Voting Paper (69)55 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 936.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
6 *May* 1970

OPINION 937

HELIX HAMMONIS STRØM, 1765 (GASTROPODA): ADDED TO THE OFFICIAL LIST

RULING.—The specific name *hammonis* Strøm, 1765, as published in the binomen *Helix hammonis*, as defined by the neotype designated by Waldén, 1968, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2422.

HISTORY OF THE CASE (Z.N.(S.) 1830)

The present case was submitted to the office of the Commission by Dr. H. W. Waldén in October 1967. Dr. Waldén's application was sent to the printer on 15 February 1968 and was published on 23 May 1968 in *Bull. zool. Nomencl.* **25** : 41–49. A statement by seven zoologists in support of Dr. Waldén's proposal was printed with his application. No other comment was received.

DECISION OF THE COMMISSION

On 13 November 1969 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (69)56 either for or against the proposal set out in *Bull. zool. Nomencl.* **25** : 47. At the close of the prescribed voting period on 13 February 1970 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Vokes, Jaczewski, Obruchev, Eisenmann, Mayr, Alvarado, Simpson, Holthuis, do Amaral, Lemche, Tortonese, Sabrosky, Starobogatov, Melville, Binder, Evans, Bonnet, Ride, Kraus, Forest, Mertens, Brinck.

Negative votes—none (0).

Voting Papers not returned—one (1): Munroe.

Original Reference

The following is the original reference for the name placed on the Official List by the Ruling given in the present Opinion:

hammonis, *Helix*, Strøm, 1765, *Trondheim. Selsk. Skr.* **3** : 435–436

The following is the original reference for the designation of a neotype for the species concerned in the present Ruling:

For *Helix hammonis* Strøm, 1765: Waldén, 1968, *Bull. zool. Nomencl.* **25** : 47

CERTIFICATE

I certify that the votes cast on Voting Paper (69)56 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 937.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
11 *May* 1970

OPINION 938

LARIUS BODDAERT, 1783 (AVES): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Larius* Boddaert, 1783, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Lorius* Vigors, 1825 (gender: masculine), type-species, by original designation, *Psittacus domicella* Linnaeus, 1758 (Name No. 1931);

(b) *Eclectus* Wagler, 1832 (gender: masculine), type-species, by designation by Gray, 1840, *Psittacus grandis* Gmelin, 1789 (Name No. 1932).

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

(a) *domicella* Linnaeus, 1758, as published in the binomen *Psittacus domicella* (type-species of *Lorius* Vigors, 1825) (Name No. 2423);

(b) *roratus* Müller, 1776, as published in the binomen *Psittacus roratus* (Name No. 2424).

(4) The family-group name LORIIDAE (correction of LORIANAE) Swainson, 1837 (type-genus *Lorius* Vigors, 1825) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 457.

(5) The generic name *Larius* Boddaert, 1783 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1986.

HISTORY OF THE CASE (Z.N.(S.) 1833)

The present case was submitted to the office of the Commission by Professor Ernst Mayr and Dr. H. T. Condon in November 1967. The application was sent to the printer of 15 February 1968 and was published on 24 May 1968 in *Bull. zool. Nomencl.* **25** : 52–54. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the Bulletin as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). A list of those supporting the proposals was printed with the application. No further comment was received.

DECISION OF THE COMMISSION

On 28 January 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)2 either for or against the proposals set out in *Bull. zool. Nomencl.* **25** : 54. At the close of the prescribed voting period on 28 April 1970 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Lemche, Holthuis, Melville, Bonnet, Vokes, Evans, Jaczewski, Munroe, Tortonese, Obruchev, do Amaral, Sabrosky, Mayr, Simpson, Binder, Ride,

Brinck, Starobogatov, Forest, Kraus, Alvarado, Mertens.

Negative votes—none (0).

Dr. Eisenmann, who did not vote, commented as follows: "Considering the very wide recent usage (since Peters 1937) of *Lorius* (emendation of *Larius*) Boddaert for the Eclectus Parrot, I would be inclined to favour the total suppression of both *Lorius* and *Larius* of whatever authorship. The proposal will require a transfer of current names which I consider bad nomenclatural policy. However, the overwhelming support for the proposal by those taxonomists most concerned induces me not to vote in opposition."

Original References

The following are the original references for names placed on the Official Lists and Index by the Ruling given in the present Opinion:

domicella, *Psittacus*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 100

Eclectus Wagler, 1832, *Abh. K.-bayer. Akad. Wiss.*, München **1** : 495

Larius Boddaert, 1783, *Tabl. Pl. enlum. Hist. nat. Daubenton* : 42 (ref. Pl. 683)

LORIINAE Swainson, 1837, *Nat. Hist. Classif. Birds* **2** : 303

Lorius Vigors, 1825, *Zool. Journ.* **2** : 400

roratus, *Psittacus* Müller, 1776, *Natursyst. Suppl.* : 77

The following is the original reference for the designation of a type-species for a genus concerned in the present Ruling:

For *Eclectus* Wagler, 1832 : G. R. Gray, 1840, *List. Gen. Birds* (ed. 1) : 52

CERTIFICATE

I certify that the votes cast on Voting Paper (70)2 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 938.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
18 *June* 1970

OPINION 939

PYTHON TIMORENSIS MÜLLER, 1844 (REPTILIA): SPECIFIC NAME SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *timorensis* Müller, 1844, as published in the binomen *Python timorensis*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *timoriensis* Peters, 1876, as published in the binomen *Liasis timoriensis* (Name No. 2425);

(b) *mackloti* Duméril & Bibron, 1844, as published in the binomen *Liasis mackloti* (Name No. 2426).

(3) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *timorensis* Müller, 1844, as published in the binomen *Python timorensis* (as suppressed under the plenary powers in (1) above) (Name No. 951);

(b) *timoriensis* Müller, 1857, as published in the binomen *Python timoriensis* (an incorrect spelling for *timorensis*, *Python*, Müller, 1844) (Name No. 952).

HISTORY OF THE CASE (Z.N.(S.) 1834)

The present case was submitted to the office of the Commission by Dr. L. D. Brongersma in December 1967. Dr. Brongersma's application was sent to the printer on 15 February 1968 and was published on 24 May 1968 in *Bull. zool. Nomencl.* **25** : 55–59. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two herpetological serials. The proposals were supported by Prof. Hobart M. Smith (*Bull. zool. Nomencl.* **25** : 134) and by the Nomenclature Committee of the American Society of Ichthyologists and Herpetologists.

DECISION OF THE COMMISSION

On 28 January 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)3 either for or against the proposal set out in *Bull. zool. Nomencl.* **25** : 58. At the close of the prescribed voting period on 28 April 1970 the state of the voting was as follows:

Affirmative votes—twenty-four (24), received in the following order: China, Lemche, Holthuis, Bonnet, Vokes, Eisenmann, Evans, Munroe, Tortonese, Obruchev, do Amaral, Melville, Sabrosky, Jaczewski, Mayr, Simpson, Binder, Ride, Brinck, Starobogatov, Forest, Kraus, Alvarado, Mertens.

Negative votes—none (0).

ORIGINAL REFERENCES

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

mackloti, *Liasis*, Duméril & Bibron, 1844, *Erpét. gén.* **6** : 440

timorensis, *Python*, Müller, 1844, *Verh. Natuurl. Gesch. Ned. Overz. Bez., Land- en Volkenkunde* (7) : 211, 221

timoriensis, *Liasis*, Peters, 1876, *Monatsber. Kön. Preuss. Akad. Wiss. Berlin :* 533, pl.

timoriensis, *Python*, Müller, 1857, *Reizen en Onderzoekingen in den Indischen Archipel, gedaan op last der Nederlandsche Indische Regeering, tusschen de Jaren* 1828 en 1836, **2** : 172

CERTIFICATE

I certify that the votes cast on Voting Paper (70)3 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 939.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
1 *July* 1970

THE GENERIC NAME *ORTHOCERAS* BRUGUIÈRE, 1789 (CLASS CEPHALOPODA). Z.N.(S.) 44

By R. V. Melville (*Secretary, International Commission on Zoological Nomenclature*)

Introduction

In 1959 (*Bull. zool. Nomencl.* **17** : 9–24) I reported to the Commission on the case concerning the generic names *Orthoceras* Bruguière, 1789, *Orthoceros* Brünnich, 1771 and *Orthocera* Modeer, 1789. The main purpose of the report was to establish *Orthoceras* in its accustomed usage for a genus of fossil Cephalopoda and to prevent any of the three names being used in replacement of generic names in current use in the Foraminifera. The proposals were not then submitted for a vote because, although they were supported by specialists in both Cephalopoda and Foraminifera, they were strongly opposed by one cephalopod specialist (Dr. Rousseau H. Flower, State Bureau of Mines, Socorro, New Mexico). Recently, however, I have been urged to revive the case and present it for a vote.

2. The case is a complicated one and the situation under the existing Code is not the same as it was in 1959. Much of the 1959 report was taken up with showing how progressive changes in the Code and successive decisions by the Commission had changed the grounds on which it had to be considered. This matter is now omitted and the case is presented solely in the light of the Code now in force and of the current state of knowledge.

3. Before presenting the factual aspects of the case, two preliminary points should first be explained. When I examined the circumstances in 1959 it was clear that the generic name *Orthoceratites* Lamarck, 1799, was also involved. Since that name raised problems in the Bivalvia, I asked the late Dr. L. R. Cox to deal with it; and his application for the suppression of *Orthoceratites* so as to validate *Hippurites* Lamarck, 1801, was approved by the Commission in Opinion 613 (*Bull. zool. Nomencl.* **18** : 355–6, 1961).

4. The second point is that there is nothing surprising in the same generic names being used for both cephalopod mollusca and foraminifera. The view that foraminifera were minute cephalopods persisted at least until the 1840's (e.g. d'Orbigny, 1835–47, *Voyage dans l'Amérique méridional*). Linnaeus (*Syst. Nat.* ed. 10, 1758) described cephalopods and foraminifera under the generic name *Nautilus* and Fleming (1828, *A history of British animals*) divided *Orthocera* into two groups corresponding approximately to Recent Foraminifera and fossil Cephalopoda respectively. The interests of workers in both these groups have therefore to be borne in mind.

The generic name Orthoceras

5. The generic name *Orthoceras* was at one time habitually attributed to the pre-Linnean, though accidentally binominal author Breyn (or Breynius), 1732, although the name he in fact used was *Orthoceratites*. The first author

to publish *Orthoceras* as an available name was Bruguière (1789, *Ency. méth., Hist. nat. Vers*, pt. i, page xvi) as follows: "ORTHOCÉRATE.—Orthoceras. Coquille conique, composée de cloisons transverses, & d'une gouttière sur un des côtés, l'ouverture fermée par un opercule". No species were included in the genus. In spite of wide use of the generic name throughout the 19th century, the first authors to refer any species to *Orthoceras* Bruguière, 1789, were Miller, Dunbar and Condra (1933), who referred *Orthoceratites regularis* Schlotheim, 1820, to it and at the same time designated that species as type-species of *Orthoceras*. This action is definitive under Article 69a. It was rejected by Miller and Teichert (1936 : 353–4) on the grounds that the species did not correspond with the generic description given by Bruguière, but their objection is groundless.

6. *Orthoceras regularis* (Schlotheim) was fully re-described and illustrated by Troedsson (1931) on the basis of a lectotype from Schlotheim's collection. Troedsson referred *Orthoceras* to Blainville, 1825 (*Man. Malac.* : 379), but this is of no importance.

7. The generic name *Orthoceras* was used, apparently as a new name and without citation of any earlier author, by the following: Batsch, A.I.G.C., 1791, *Sechs Kupfertafeln mit Conchylien des Seesandes*, in relation to fourteen named species of foraminifera; Spalovsky, J.J.N.A., 1795, *Prodromus in Syst. nat. Hist. Test.* in connection with one named species of foraminifera; Schrank, F. von P. von, 1796, *Samml. nat. phys. Aufsatz*, for a dipteran insect; Perry, G., 1811, *Conch. nat. Hist. Shells*, in relation to a named foraminiferan and a doubful organism; Blainville, H. M. D. de, 1825, *Man. Malac.*, for two straight nautiloids and four foraminifera; Deshayes, G. P., 1831, *Descr. Coquilles caract. Terrains*, for a straight nautiloid; and Phillips, J., 1836, *Ill. Geol. Yorks.* for eighteen species of straight nautiloids. Subsequent nineteenth century authors all used the name for straight nautiloids and attributed the name to the pre-Linnean author Breyn, 1732, sometimes spelt Breynius.

8. The facts given in the three preceding paragraphs are all that it is really necessary to state about *Orthoceras*. However, it may be of interest to repeat the following paragraph from p. 17 of the 1959 report to illustrate the sort of confusion that at one time surrounded *Orthoceras*, *Orthoceratites* and *Orthocera*. It does not appear that Bruguière's genus *Orthoceras* was ever dealt with in the text of the work in which the name was first published. In volume 3 of the "Vers" in the *Ency. méth.*, written by G. P. Deshayes and published in 1832, the following appears on p. 627 under *Nodosaria*: "On ne peut trop savoir quelle a été l'opinion de Bruguière à l'égard de ce genre; parmi le petit nombre de genres qu'il a démembrés des Nautiles de Linné, il semble que ce seroit plutôt à celui qu'il a nommé Orthocère qu'il appartiendroit qu'à tout autre." The difficulty in interpreting this statement lies in the fact that the French vernacular word "Orthocère" was generally used as the equivalent of *Orthocera* rather than of *Orthoceras* ("Orthocérate"), but it appears that Deshayes considered *Orthoceras* Bruguière as representing a genus of foraminifera, whereas Dr. Cox, in his application relating to *Hippurites* [see *Bull. zool. Nomencl.* **17** : 25] considers that the description accompanying the name might well apply to a Rudistid lamellibranch, and Dr. Eames has remarked to me that that description could

not possibly apply to any known species of foraminifera. Later (: 673), Deshayes remarks: "Il faut se souvenir enfin que, dans quelques méthodes, toutes ces choses si diverses, portant des noms à peu près semblables, [i.e. *Orthocera*, *Orthoceras*, *Orthoceratites*] sont confondues quelquefois dans un seul genre, et quelquefois dans une même famille: cette famille, pour augmenter la confusion sans doute, porte aussi le nom d'Orthocères ou d'Orthocéreés. Pour éviter une telle confusion, nous adoptons complètement le genre Nodosaire de M. d'Orbigny; nous adoptons également dans son entier le genre Orthocérate de M. Sowerby, nommé à tort Orthocère par M. d'Orbigny, et nous rejetons tout le reste comme nuisible à la science par la confusion extrême que cela y apporte." It is clear from these two passages that Deshayes regarded *Orthoceras* Bruguière as a *nomen dubium* and that he proposed to attribute that name to Sowerby, who had in fact used *Orthocera* for straight nautiloid cephalopods.

The generic name Orthoceros

9. The late Mr. R. Winckworth applied to the Commission (*Bull. zool. Nomencl.* **1** : 113–7) for a ruling on the status of Brünnich's *Zoologiae Fundamenta* (1771). At the Paris (1948) Congress (*Bull. zool. Nomencl.* **4** : 307–10) the Commission agreed to render an Opinion (Opinion 236, *Ops. Decls. Int. Comm. zool. Nomencl.* **4** : 329–42) that the generic names in that work are available under the Code and decided to defer a decision on the status of *Orthoceros* pending consultations with palaeontologists. It had already been proposed by Teichert and Miller (1936) that *Orthoceros* might be adopted in place of *Orthoceras* and that *Orthoceratites regularis* Schlotheim, 1820, might be designated as its type-species, although they themselves carefully refrained from taking any such action. In 1944 Ulrich, Foerste, Miller and Unklesbay said: "The genotype of *Orthoceros* is *Orthoceratites regularis* Schlotheim . . ." and this would appear to be valid under Article 69a(iii) if this clause can be extended to cover genera proposed with no included species (as is the case with all Brünnich's genera). This action clearly gave *Orthoceros* Brünnich, 1771, the status of a senior objective synonym of *Orthoceras* Bruguière, 1789, but the name has never been accepted and is never likely to be.

10. Balashov (1956) suggested that *Orthoceros* Brünnich, 1771, should be emended to *Orthoceras*. Such action would be possible under the plenary powers, but there seems to be no particular merit in it at this time. *Orthoceras* Balashov, 1956, is an unjustified emendation of *Orthoceros* and a junior homonym of *Orthoceras* Bruguière.

The generic name Orthocera

11. The generic name *Orthocera* was first published as an available name under the Code by Modeer, 1789 (*Illustr. quaedam in R. D. Ambr. Soldani opus egreg. Saggio Orittograffico dictum*). This work was first published as a part of Soldani's *Testaceogr. ac Zoophytogr. parvae et microsc. tomus primus*, which is a non-binominal work. Modeer's contribution, however, is strictly binominal and was re-issued in 1791 in *Nova Acta Acad. Caes. Leop.-Carol.* **8** (Appendix) : 85–94. The following species were expressly and unambiguously referred to the genus by Modeer: *Orthocera crispata* Modeer, *Nautilus orbiculus*

Forskål, 1785, *Nautilus raphanistrum* Linnaeus, 1758, *Nautilus obliquus* Linnaeus, 1758, *Orthocera armilla* Modeer, *Nautilus radicula* Linnaeus, 1758, *Nautilus raphanus* Linnaeus, 1758, *Nautilus legumen* Linnaeus, 1758 and *Orthocera pupa* Modeer. No type-species was designated or indicated and an additional species cited as "*Nautilus rapistrum* Linnaeus ... mihi *Orthocera* vel *Arthrocena rapistrum*" is not eligible for selection as type-species since it was referred to the genus only with doubt. (Modeer's work consists of comments on various specimens figured by Soldani in his *Saggio Orittograffico* rather than of a systematic description of new species. The specific name "*rapistrum*" is not known in Linnaeus's works.) Galloway (1933, *Man. Foram.* : 453) selected *Orthocera sipunculus* Modeer, 1796, as the type but this is invalid because the species was not among those originally included in the genus. Dr. Banner informs me (*in lit.* 27 November 1958) that no valid type-selection is known for *Orthocera* Modeer, 1789. Not all of these specific names are in current use; those that are are referred to various well-established genera, including *Nodosaria* [Lamarck], [1816], *Dentalina* Risso, 1826, *Orbitolites* Lamarck, 1801, *Vaginulinopsis* Silvestri, 1904, and *Pseudoglandulina* Cushman, 1929. The type-species of *Nodosaria*, which is perhaps the most important of these genera, is *Nautilus radicula* Linnaeus, 1758, by subsequent designation by Children (1823 : 113). In my 1959 report I designated that species as type-species of *Orthocera* Modeer, 1789. That name is clearly a potentially dangerous threat to stability and it should certainly be suppressed.

12. Modeer used his own generic name *Orthocera* in 1791, in the re-issue of his 1789 work already mentioned, and in 1796 (*K. Vetensk.-Akad. nya Handl.* **17** : 63) for foraminifera and for straight nautiloids. The name was also used by Lamarck, 1799 (*Mem. Soc. Hist. nat. Paris* **1** : 80), for foraminifera; J. Sowerby, 1812 (*Min. Conch.* **1** : 127) for straight nautiloids; Fleming, 1815 (*Ann. Phil.* **5** : 201–206) for nautiloid cephalopods and one species of foraminifera; and Blainville, 1828 (*Dict. Sci. nat.* **36** : 485) for foraminifera. No usage of *Orthocera* later than 1828 (Blainville, *op. cit.*; Fleming, *Hist. brit. Anim.*) has been traced.

Arguments for and against stabilizing Orthoceras

13. The principal statements on either side of the argument for and against stabilizing *Orthoceras* are set out in Annexe 1. The main points are summarized here.

14. The late Dr. A. K. Miller, when he first approached the Commission in 1930 during the Secretaryship of Dr. Wardell Stiles, pointed out that *Orthoceras* is "deeply imbedded in cephalopod literature". This is incontrovertibly true, and presents only a part of the picture. *Orthoceras* and various words derived from it, are deeply imbedded in general geological literature and in teaching manuals and textbooks. When Mr. Hemming was pursuing his enquiries into *Orthoceros*, and the possibility of its being adopted in place of *Orthoceras* (see paragraph 9 above), he consulted Dr. (now Sir James) Stubblefield and the late Dr. Spath. Dr. Stubblefield replied: "You ask whether I think that confusion would result, either in systematic work or in the teaching of invertebrate zoology, if the name *Orthoceras* were transferred from the

Mollusca to the Protozoa. I would reply that *Orthoceras* used as a name for a cephalopod is one of the few genera of fossils mentioned in Parker & Haswell's *Text-book of Zoology*, 1910 edition; the name is similarly used in almost all the text-books of invertebrate Palaeontology; I know of no exception. I would say also that a similar usage will be found in any text-book dealing with the general stratigraphy of the Palaeozoic rocks. In my opinion, the transference of this name to the Protozoa would create confusion, and, I am inclined to think, ridicule among those impatient of nomenclatorial matters. The name *Orthoceras* has given rise to such systematic terms as 'Orthoceroid', 'Orthoceratid' and 'orthocone'; these would presumably create confusion in the Protozoa and Cephalopod literature if a change were to be made. In conclusion, personally were I asked, I would prefer that a suspension of the rules be allowed and that *Orthoceras* (rather than *Orthoceros*) be retained for the well-known cephalopod; in any case, with the present restriction of genera to those species close to the chosen type species, in systematic work the use of the name would be much more restricted than in the last century; but *Orthoceras* would remain a useful, easily remembered name for the field geologist."

15. Dr. Spath, in a letter dated 4 September 1944, expressed the view that it would be unwise for the Commission to use the plenary powers in the present case at least until a type-species for *Orthoceras* had been validly selected. (Under the present Code this had, of course been done by Miller, Dunbar and Condra, 1933—see paragraph 5 above—but this was not clear when Dr. Spath wrote.) He added that it was "probable that between 1758 and 1789 some earlier author, unknown to Miller or Teichert, used the name *Orthoceras* Breyn, 1732 (which was excellently figured) in a binary form" and that "the name *Orthoceras* as used in all modern text-books, is without exact meaning; it is used as a synonym of 'orthocone' or a straight nautiloid, and will continue to be so used, whatever the Commission may find, simply because it is so deeply embedded in geological literature".

16. In the 1959 report (pp. 15–16) I referred to *Orthoceras* being regarded as an ancestral cephalopod, a rootstock from which the many thousands of curved or spirally-coiled forms were derived. That view had been proved incorrect before I expressed it and has not been held for many years. However, if it is not a factor in present-day usage of *Orthoceras*, it undoubtedly contributed to the process whereby the name became embedded in a wide range of literature that is still consulted.

17. The main opposition to the stabilization of *Orthoceras* comes from Dr. Flower. As will be seen from his letters reproduced in Annexe 1, the central point of his argument is that the type-species, *O. regularis*, is inadequately known from the standpoint of modern taxonomy. The classification of the Palaeozoic cephalopods of the orders Endoceratoida, Actinoceratoida and Nautiloida depends upon the structure and morphology of the siphuncle and on deposits formed during life in the chambers of the phragmocone and in the siphuncle. The research into these features has been in no small part the work of Dr. Flower himself and it has led to a great refinement of the taxonomy of the fossils and greatly increased their utility in applied stratigraphy. A genus based on a type-species of which these characters are unknown is clearly not of

great interest from this point of view. However, more recently, Dr. Flower himself (1962 : 23–4; 1968 : 39) has done much to throw light on these structures in O. *regularis* and thus to clarify its position in the current taxonomic scheme.

18. An important development since the 1959 report has been the publication in 1965 of Part K of the *Treatise of Invertebrate Paleontology* (edited by Professor R. C. Moore). In this volume, which deals with the endoceratid, actinoceratid and nautiloid cephalopods, the authors have assumed that the proposals that I made in 1959 would be adopted (though they overlooked the suppression of *Orthoceratites* in Opinion 613) and they have found no difficulty in fitting *Orthoceras* and the family ORTHOCERATIDAE into their taxonomic scheme. There is no doubt that the Treatise is having the effect of stabilizing nomenclature over large parts of the field of invertebrate palaeontology. Its effect should not be lightly disregarded.

19. Finally, as I showed in 1959, the valid name for the family of which *Orthoceras* is the type-genus is ORTHOCERATIDAE M'Coy, 1844. If *Orthoceros* is suppressed, then ORTHOCEROTIDAE Teichert and Miller, 1936, should be placed on the Official Index.

20. In order to ensure that Dr. Flower's objections are fully considered, I have re-arranged my earlier proposals as follows:

PART 1

The Commission is asked *either*

(a) to place the generic name *Orthoceras* Bruguière, 1789 (gender: neuter), type-species, by subsequent designation by Miller, Dunbar and Condra (1933) *Orthoceratites regularis* Schlotheim, 1820, on the Official List of Generic Names in Zoology;

(b) to place the specific name *regularis* Schlotheim, 1820, as published in the binomen *Orthoceratites regularis* (type-species of *Orthoceras* Bruguière, 1789) on the Official List of Specific Names in Zoology;

(c) to place the family name ORTHOCERATIDAE M'Coy, 1844 (type-genus *Orthoceras* Bruguière, 1789) on the Official List of Family-Group Names in Zoology;

or

to use its plenary powers to suppress the generic name *Orthoceras* Bruguière, 1789, for the purposes of the Law of Priority but not for those of the Law of Homonymy and having done so to place it on the Official Index of Rejected and Invalid Generic Names in Zoology.

PART 2

The Commission is asked to

(1) use its plenary powers to suppress the following generic names for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(i) *Orthoceros* Brünnich, 1771 (an unused senior objective synonym of *Orthoceras* Bruguière, 1789);

(ii) *Orthocera* Modeer, 1789 (an unused senior objective synonym of

Nodosaria [Lamarck], [1816]);

(2) rule that the following generic name are invalid by reason of being junior homonyms of *Orthoceras* Bruguière, 1789;
(a) *Orthoceras* Batsch, 1791; (b) *Orthoceras* Spalovsky, 1795;
(c) *Orthoceras* Schrank, 1796; (d) *Orthoceras* Perry, 1811;
(e) *Orthoceras* Blainville, 1825; (f) *Orthoceras* Deshayes, 1831;
(g) *Orthoceras* Phillips, 1836; (h) *Orthoceras* Balashov, 1956;

(3) place the following generic name on the Official List of Generic Names in Zoology: *Nodosaria* [Lamarck], [1816] (gender: feminine), type-species, by selection by Children, 1823, *Nautilus radicula* Linnaeus, 1758 (Class Rhizopoda, Order Foraminifera);

(4) place the following specific name on the Official List of Specific Names in Zoology: *radicula* Linnaeus, 1758, as published in the binomen *Nautilus radicula* (type-species, by selection by Children, 1823, of *Nodosaria* [Lamarck], [1816]);

(5) place the following generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:
(a) the two generic names suppressed under the plenary powers in (1) above;
(b) the eight generic names declared in (2) above to be invalid junior homonyms of *Orthoceras* Bruguière, 1789;
(c) the following junior homonyms of *Orthocera* Modeer, 1789:
(i) *Orthocera* Lamarck, 1799; (ii) *Orthocera* J. Sowerby, 1812;
(iii) *Orthocera* Fleming, 1815; (iv) *Orthocera* Blainville, 1828;
(d) the following reputed generic names published in a non-binominal work by a non-binominal author: (i) *Orthocerata* Soldani, 1780;
(ii) *Orthoceratia* Soldani, 1780;

(6) place the family-name ORTHOCEROTIDAE Teichert & Miller, 1936 (rendered invalid by the suppression under the Plenary Powers in (1) above of *Orthoceros* Brünnich, 1771) on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

ANNEXE 1

Extracts from Letters received

Dr. F. T. Banner, 27 *November* 1958—The name *Orthocera* does not seem to have been applied to any Foraminifera since the middle of the nineteenth century . . . It seems highly probable that (a) no type-species has been validly designated for *Orthocera* Modeer, 1789, and this genus is still potentially valid and a potential nuisance unless suppressed; (b) *Orthocera* Lamarck is a homonym of *Orthocera* Modeer; (c) *Orthoceras* has not been used validly for any group of Foraminifera, and (d) there is a strong case for the suppression of *Orthocera* on the grounds of stability.

Dr. F. E. Eames, 9 *January* 1959—Although *Orthoceras* was used as a generic name for foraminifera in the eighteenth century, it has for many years been used for long, straight, nautiloid cephalopods, and in this sense it has acquired, and still enjoys, wide usage in stratigraphical palaeontology and field

geology and in the teaching of palaeontology and evolution. As a specialist in foraminifera, I strongly oppose any attempt to transfer the name to that group; and as being concerned in my work with fossils of many groups, I use the name in its accustomed sense not only from force of teaching and habit, but also because I know that my colleagues will immediately understand what I mean by it. I therefore wish to support the proposal to conserve the generic name *Orthoceras* in the sense in which it has been used during the last hundred years or more.

Dr. Curt Teichert, 19 *January* 1959—I was very glad to have my attention called to the modification of Opinion 46. This, if applied retroactively, as I suppose it must be, invalidates entirely all arguments presented by Miller and myself in 1936 against the possibility of selecting a cephalopod as type-species of *Orthoceras* Bruguière . . . I have reviewed again all the relevant literature from the 1920's and early 1930's and I find that Miller, Dunbar & Condra (1933 : 31) very definitely and unambiguously designated *Orthoceratites regularis* Schlotheim as the genotype of *Orthoceras* Bruguière.

Dr. Teichert, 27 *January* 1959—It looks to me now as if final settlement can only be achieved by appeal to the Commission. I would favour an appeal to the Commission to uphold Miller, Dunbar & Condra's selection of *Orthoceratites regularis* as type-species of *Orthoceras* Bruguière. Confirmation of this choice is now possible since the part of Opinion 46 requiring that the type-species must come "under the description as originally published" has been rescinded. As far as I am aware no type-species for *Orthoceras* Bruguière had been selected prior to 1933 nor had it ever been stated that Bruguière was technically the author of that genus. As late as the late 1920's it was customary to credit *Orthoceras* to Breyn, a non-Linnean author. It may, therefore, be assumed that references of *Orthoceras* prior to the publication of Miller, Dunbar & Condra's paper, other than those concerned with *Orthoceratites regularis*, may be regarded as junior homonyms of Bruguière's genus. If you concur in this opinion and would like to prepare a statement of the case for submission to the I.C.Z.N., I shall be very glad to support the application. I am definitely not in favour of emending *Orthoceros* Brünnich and I fully concur in the reasons stated by you against such action.

Dr. R. H. Cummings (*Department of Geology, Glasgow University*), 20 *March* 1959—I have discussed this matter with Professor George and Dr. Weir. Both feel as strongly as I do on having the generic name *Orthoceras* placed on the Official List and reserved for the Cephalopoda.

Dr. A. H. Smout (*then of Iraq Petroleum Co. Ltd., London*), 17 *November* 1959—Your proposals have my support. I am glad to see that you have been able to reconcile the practical needs with the Rules to such a large extent and have avoided interference with the Foraminifera.

Dr. M. K. Howarth (*British Museum* (*Natural History*)), 22 *December* 1959—I wish to support Mr. R. V. Melville's application to stabilize the generic name *Orthoceras* Bruguière, 1789, by means of action by the Commission as set out in paragraph 39 of his application. Although this is a case of extraordinary complications the desired results are clear cut: that the genus be retained for Cephalopoda alone with the spelling *Orthoceras* and that its type species be a

straight, unornamented form, preferably Ordovician in age. No other course of action will be acceptable to general palaeontologists who have used the name in this sense for more than a hundred years. Not least among the arguments in its favour is that a break from general text-book practice of more than a century is bound to be ignored by all but a few English-speaking specialists. I therefore support the stabilization of *Orthoceras* Bruguière, 1789, with *Orthoceratites regularis* Schlotheim, 1820, as its type species.

Dr. R. H. Flower (*State Bureau of Mines, New Mexico, U.S.A.*), 22 *January* 1960—Concerning your inquiry concerning *Orthoceras* it is my feeling:

1. The generic name has been used, or misused for straight cephalopods in general for so long that it has no other meaning. As the situation now stands, it is of some use to know that the genus is a wastebasket; a species referred to it has either received insufficient study, or is known from such poor material that adequate generic assignment is not possible. To validate the genus would add a third possible category.

2. If the intent of this petition is to re-establish *Orthoceras* as a genus of straight cephalopods of considerable scope, and based upon an adequately known species, it will fail in both respects. In spite of Troedsson's fine paper, we still know nothing about the cameral or siphonal deposits in *O. regularis*; and there can be no question but that definition of species groups and genera must take these structures into consideration. As the genus stands on known criteria, it must be distinguished on the basis of the internal thickenings of the living chamber, and I know of no other species which could be assigned to the genus.

3. If the idea that cephalopod evolution progressed from *Orthoceras* through *Cyrtoceras*, *Gyroceras* and *Nautilus* is to be a basis for urging the retention of *Orthoceras*, I must, on the same ground, oppose the recommendation. It is now evident that *Orthoceras* is not the primitive shell form of the nautiloids. Curiously, the species of straight cephalopods which are close to the general lineage from which exogastric curved and coiled forms are developed (*Cyrtoceras*, *Gyroceras* and *Nautilus* in the old broad sense of the form-genera) constitute a handful of species in the Lower Canadian (Tremadoc) almost none of which were known when this idea was proposed. *Orthoceras*, as broadly used in the past for straight cephalopods, applied originally to three great orders, highly specialized in themselves, now the Michelinoceratida, Endoceratida and Actinoceratida. Curiously, a text as late as 1912 listed *Endoceras* as a subgenus of *Orthoceras*! See Flower 1955, *Evolution*, Vol. 9, no. 3, p. 248, for evolution. The idea that *Orthoceras* (as an orthocone) was the archetype of the cephalopod lineage is inconsistent with the facts known today. A pity in a way, it was a lovely idea.

4. The present petition seems to minimize the evidence set forth by Teichert and Miller on the basis of which they conclude that *Orthoceras* was first applied to a rudistid. If so, and I find no reason to doubt this conclusion, the advisability of asking the commission to substitute a cephalopod, though possible under present reports of what the new rules are going to be, still remains highly inadvisable.

5. In the event, that the petition concerning *Orthoceras* is granted, cephalopod taxonomy would be greatly simplified if Michelinoceratidae and Michelinoceratida are retained; *Michelinoceras* being based upon a much better known species morphologically. Indeed, in the present state of our knowledge of *Orthoceratites regularis*, it might be possible to argue (though I think it would not prove correct ultimately) that the genus should be assigned not to the Michelinoceratidae of the present classification, but to the Baltoceratidae.

6. I should favour suppression of *Orthoceras* as a rudistid and as a cephalopod; mainly, as used in the late 1700's, it applied to any straight organic object with chambers or various sorts of more solid fillings; also, there was such widespread variation in spellings, particularly of endings, that it is impossible to determine which such variants were modifications of spelling, and which were deliberate proposals of new generic groups; if all such variations on the theme of *Orthoceras* were suppressed, it would be almost a mercy killing. As things now stand, *Orthoceratites regularis* is the type of a very small genus, restricted geographically and stratigraphically, as has *Orthoceros*—which really has priority over any post-Linnean usage of *Orthoceras*. *Orthoceratites*, based on *O. gracilis*, will, I am quite certain, be a valid generic group.

As to the impingement of the present petition on the Michelinoceratida, (1) Orthoceratidae has priority over Michelinoceratidae, (2) some could argue that the order should be changed to Orthoceratida. This I would not support. The last comprehensive classification (Flower and Kummel, 1950) was even then only an approximation; some revisions are definite from subsequent work, many others are suggested. Redefinition will be needed in the near future which will, I believe, leave Michelinoceratidae as a great lineage from the beginning of the group to its extinction in the Triassic; of this the Orthoceratidae is a small offshoot; it is doubtful whether it continued beyond the close of the Ordovician.

Present difficulties exist, stemming from the necessity of using structures in tracing lineages, particularly cameral and siphonal deposits, the significance of which was not begun to be understood before the middle 1930's. Most of the several thousand species of orthocones (most of them were assigned to *Orthoceras*) involved were described before 1900; descriptions and figures supply inadequate information; their restudy is an appalling task. Added to this is the problem of a large list of proposed genera, not to mention a few proposed family names, based upon similarly inadequately described species, which complicates what names may ultimately apply, by priority to many of these groups.

R. V. Melville, 2 *February* 1960—In reply to your first two paragraphs, I would say that the situation regarding these "household words" generic names is often confused, and it is a question whether things are better left in a vague and woolly state, or placed on an objective and definite basis. My own preference is strongly for the latter course, although I fully appreciate the value of "waste-basket" genera in palaeontology. The generic name *Ammonites*, for instance, now forever suppressed by the Commission, could, in my view, have

easily been given a firm basis and a proper validity; and if this had involved the loss of, say, the generic name *Coroniceras*, this could have caused confusion of comparatively limited scope and short duration. The name *Rhynchonella* is luckily firmly based on a type-species fixed by monotypy. This species, which is, so far as I am aware, known from only a single locality now permanently under water in the Moscow River, has only been adequately studied in the last year or two. This does not prevent "*Rhynchonella*", in quotation marks, from being used for a host of Mesozoic rhynchonelloid species that are either insufficiently known, or based on unsatisfactory material. Thus the name has both a precise and a vague use, and the former is no obstacle to the latter. The same is true of the name *Cidaris*, which is now applied only to living species defined by characters which can virtually never be found fossil. This does not prevent the use of "*Cidaris*" for the hundreds of Mesozoic and Tertiary species that cannot be placed in any genus within the family CIDARIDAE. I think, therefore, that your opposition to the proposal to validate *Orthoceras* is based on groundless fears. I quite recognize that, as a taxonomic genus, it is never likely to be very large, but this is true also of *Rhynchonella*. The point is that it is better for the name to have an objective meaning than to be endlessly subject to variable subjective interpretations.

3. There are two further purposes which this application is intended to serve, neither of which is mentioned in your letter. The first is the very strong desire of some teachers of palaeontology to be able to continue to use the name, and to know what they are talking about when they do so. This is the sort of "conservationism" about which controversy rages today, but which cannot be altogether ignored if stability of nomenclature is to be taken at all seriously. The second is the equally strong concern of workers in foraminifera to prevent any attempt to introduce *Orthoceras* as a generic name in that group, which could possibly happen if Bruguière's use of the name were to be disregarded in favour of that by Modeer, Spalovsky, etc.; and of workers in mollusca to remove any threat to the nomenclature of rudists based on subjective interpretations of Bruguière's diagnosis.

4. There are thus very strong reasons in favour of validating *Orthoceras* in a sense that will respect the wishes of the conservationists, remove the fears of workers in other groups, and at the same time not prevent the use of the name in its "waste-basket" sense. I may add in passing that neozoologists have very little sympathy for or understanding of the usefulness of these comfortable genera in palaeontology, and it is well that one can preserve this use of a name while at the same time giving it a precise meaning.

5. The only harm that could possibly result, so far as I can see, is if the true *Orthoceras regularis* should prove, when eventually studied on modern lines, to belong to an already named genus. This situation can surely be met as and when it arises. The evolutionary aspect of the matter is not really relevant, though I admit I was out of date in my ideas on the subject when I wrote my report.

6. The rudist side of the question is, I think, adequately dealt with by Dr. Cox in the paper immediately following mine. The point is, that both Bruguière's description of *Orthoceras* and Lamarck's description of *Ortho-*

ceratites in all probability apply to a rudist of the basic genus *Hippurites*; and that whereas the former has a claim to be validated in its usual sense, the latter has no such title. As regards variant spellings, if my proposals and those of Dr. Cox are accepted, *Orthocera*, *Orthoceratites* and *Orthoceros* will all be suppressed.

7. There are now no rules applying to order/class-group names, so that there is nothing the Commission can do about Michelinoceratida; there seems no reason to suppose that many people will want to change this to Orthoceratida, but if they do, there is no way of stopping them. On the family name question, on the other hand, the Commission can act, and it is important that they should do so. Your arguments for suppressing ORTHOCERATIDAE so as to preserve MICHELINOCERATIDAE are very strong. Can you tell me of any other specialists in the subject whose views on this point might help the Commission? I can write to Dr. Teichert, Dr. Kummel and Dr. Herman Schmidt at once, but I should be glad to learn of any others who might be consulted.

8. Finally, I should like to assure you that I have no intension of adding to the difficulties of workers in the group, and that I shall of course do all I can to avoid doing so if the main object of my proposals can be met at the same time. Allow me to thank you once again for your sensible and helpful contritribution to the problem.

V. N. Shimansky (*Academy of Sciences, Moscow, U.S.S.R.*), 23 *March* 1960—I think it extremely desirable to stabilise the name *Orthoceras*. It is quite impossible to compel geologists to write *Orthoceros*, Orthocerotids or *Orthoceros*-Limestone. Some editors even correct *Orthoceros* into *Orthoceras*, taking it for a lapsus calami, and do not always notify the author about the change. The name *Orthoceras* has taken too deep root in the geological literature to be eradicated.

Dr. Flower, 3 *August* 1960—This is in reply to your letter of February 2 concerning *Orthoceras*.

The generic name *Orthoceras* was long applied to any straight fossil object which had some kind of partitions or internal divisions. At length it came to be used primarily for straight nautiloids; this in itself was a restriction, but it contained about 3 thousand species. Further restriction was proposed by Hyatt in 1884, but did not attain any general recognition at all until about 1924, and even today one requires the services of a really reliable medium to determine whether *Orthoceras* means, in any one instance, all straight cephalopods, or whether it is restricted by removal of forms with various prominent surface markings, or whether such internal features as separate the orders Endoceratida, Actinoceratida and Michelinoceratida have been ignored or taken into consideration. Whatever restricted sense is given to the generic name *Orthoceras*, it will remain a term used (1) in its proper generic sense, (2) in the general sense of an orthoconic nautiloid and (3) various shades of meaning in between. Rejection of the present petition by the commission would do much to discourage this situation. In this way, the suppression of the genus *Ammonites* must be regarded as a highly commendable step; it is one which might well be followed here where a name is involved which has been employed in so many different usages.

The arguments in favour of the retention of *Orthoceras* as a valid genus seem to rest upon (1) general fondness for the retention of an old name and (2) a desire to use the name in general discussions concerning evolution, etc. If the first is a valid consideration, surely priority should be followed, and the name should be applied to a rudistid. It would then, happily, cease to be a factor in the most difficult revision of the Michelinoceratida of the nautiloids. The desire to retain the name for general discussions seems to be connected with the old idea that evolution of the nautiloids progressed from *Orthoceras* (orthocones) to cyrtocones, gyrocones and nautilicones. As the concept which appears in most current texts hearkens back to ideas which it is now necessary to abandon, the evidence would favour most strongly suppression of *Orthoceras* as a valid cephalopod genus if by doing so this interesting but very inaccurate concept can be discouraged.

It would appear logical that if such an action as is now proposed be taken for *Orthoceras*, similar procedures might be invoked to validate *Cyrtoceras*, *Gyroceras* and *Trochoceras* with genotypes selected among the nautiloids, equally poorly chosen with regard to adequate knowledge of the species, and therefore of the genus based on them.

Unfortunately, the desire to retain *Orthoceras* and to attach it to a genotype which is adequately known, is ill served by the present proposal, and it is one which promises to be extremely troublesome in the present state of taxonomy of these organisms. *Orthoceras regulare* is not as adequately known as its proponents for its position as a selected genotype seem to believe. Classification of these forms is indeed sad at present, largely because of the limits of material—specimens which are commonly only fragments, and too often with crucial structures inadequately preserved. However, it is evident along what lines future taxonomic refinements must proceed if a natural classification is to be achieved, and the crucial characters are those of the phragmocone. Those of *Orthoceras regulare* are most inadequately known. It is not alone in this, but the increase of selection of such species as genotypes should be actively discouraged and not encouraged, which will be the result of favourable action of the commission on this present petition. Until adequate material can be assembled and studied—(and my efforts along this line have been unsuccessful, and I know of no one else who has even tried)—we will not know essential features; they will not be of any general interest, of course, but we cannot answer the following questions as to *Orthoceras regulare*: Are deposits wanting in the siphuncle or is it only that early enough stages have not been recognized and studied? If so, what is their form? (On this basis rests distinction between two most significant families certainly known to exist in the time interval from which *O. regulare* comes.) Are cameral deposits unknown because they are really absent, or only for the reason noted above for siphonal deposits? If present, what is their structure? Until a species for which these things are known can be selected as a type, the application of *Orthoceras* to a straight nautiloid will only serve as connecting the generic name with a species requiring fuller investigation, needed for a proper understanding of its relationships with related or similar genera.

As the petition now stands, it would ask the Commission to validate as the

genotype of *Orthoceras* such a species that, if the action is taken, there is no other species which can be placed properly in the genus, which should be set off—quite apart from our inadequate knowledge of the phragmocone, by the longitudinal internal thickenings of the living chamber. Similar thickenings are reported for only one other species, and that is an annular shell the genotype of the little known *Ctenoceras*; and there is a question whether these features are real in that genus or whether a peculiarly crushed shell is responsible for the reported features. Limitation of taxonomic categories involves subjective elements. I would be tempted to regard *Orthoceras* as the sole genus of the Orthoceratidae, if it is validated, but this is an inadequate solution, for the Orthoceratidae would remain of uncertain affinities within the order Michelinoceratida.

The happiest course, from the viewpoint of cephalopod taxonomy would be the removal of *Orthoceras* as a valid genus to be reckoned with that are in exactly this situation is the greatest single influence stifling progress in the understanding of what is now the Michelinoceratida. [1] Indeed, even at present there is strong indication that if work were undertaken without regard to priority, the rules of zoological nomenclature, in that inadequately known genera were completely bypassed, it would offer results of great value from the viewpoint of tracing evolution, range and distribution of lineages, and the classification which should ideally be an expression of these facts. To add one more genus based upon an inaqeduately known species to the lot already to be reckoned with, and one which, as in this case, is attached to a family name which should be given priority, is to be discouraged.

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[1] This sentence is given as written by Dr. Flower, R.V.M.

TYPES IN THE SPECIES-GROUP. Z.N.(S.) 1571

By R. V. Melville (*Secretary, International Commission on Zoological Nomenclature*)

At the XVI International Congress of Zoology in Washington in 1963, the Commission had before it two proposals relating to types in the species-group. The first of these (Case No. 12), put forward by Professor Hobart M. Smith, asked for a reconsideration of the categories of type-specimens (*Bull. zool. Nomencl.* **20** : 56–60) and was rejected; the second (Case No. 17) asked for a relaxation of the rules concerning neotypes (dos Passos, *Bull. zool. Nomencl.* **20** : 71–2) and was referred to the Secretariat so that Article 75 could be redrafted as a Declaration. Any consideration of neotypes, however, soon leads to a consideration of the type-series, all specimens in which must, it appears, be lost or destroyed before a neotype can be designated. Close examination of Articles 72, 73 and 75 reveals not only internal inconsistencies in the wording, but also confusion between the taxonomic and nomenclatural implications of the word "type". The conclusion is that no improvement can be made to any part of the three articles referred to unless they are viewed as a comprehensive whole.

2. Simpson (1940) clearly expounded the differences between the three meanings for which the word "type" is used in zoology: types may be (a) a sample from which the characters of a group of individuals or a population are estimated; (b) a standard of comparison between samples, or (c) name-bearers. Nomenclature is, strictly speaking, only concerned with types as name-bearers; but a name-bearer only serves its purpose (as an "onomatophore" of Simpson) if it is also suitable to serve as a sample, or as part of a sample, of a population and as a standard, or as part of a standard, of comparison (Simpson's "hypodigm"). Moreover, whereas the hypodigm is fluid and changes according to the view of each successive student of a species, the name-bearer is unique, permanently fixed and cannot change. This concept of the unique unchanging name-bearer carries with it the potential risk that for any species advances in taxonomic work may render the specimen unsuitable as part of a hypodigm, so that the name degenerates into a *nomen dubium*. This has an important bearing on the question of neotypes.

3. It seems to me that the Code is capable of improvement in three respects. First, the definition of "type-series" in Article 72b clearly confuses the onomatophore with the hypodigm; it should be rewritten so as to remove this confusion. Secondly, no clear procedure is laid down for dealing with the case in which a holotype or lectotype is destroyed but paratypes or paralectotypes (originally syntypes) survive. Thirdly, no guidance is given on the question of types that have been demonstrated to be taxonomically useless.

4. The defect of Article 72b is that it defines the type-series as including "all the specimens on which an author bases the species . . ." (with stated exceptions), in other words, as being identical with his hypodigm. A zoologist

then faces the difficulty of trying to identify and, if he is conscientious, bring together all the surviving specimens of this series. Where all the specimens composing the type-series are listed with their depositories and registered numbers, this may present little difficulty. At the other extreme, it may be evident from internal evidence that the author saw a number of specimens, but extremely difficult to find any clue as to how many they were or to their present possible whereabouts. He may also list a number of references in synonymy without explaining whether he has examined the specimens on which those references are based or not. In such circumstances it may be impossible to delimit the type-series with any confidence. Although the type-series (considered as a group of potential onomatophores) may coincide with the original hypodigm, it is not identical with it. Where no onomatophore has been originally designated (i.e. where no holotype exists), and where the extent of the original hypodigm cannot readily be determined, the range of specimens from which a lectotype can be designated, or the loss or destruction of which must be proved before a neotype can be designated, ought to be conventionally restricted in some way. In other words, a means ought to be provided for considering only certain specimens as qualifying for the nomenclatural category of "syntype".

5. It is, however, not easy to see how to circumscribe such a restricted category of syntypes in a way that gives the zoologist a practical problem to solve without at the same time unduly restricting his choice. Yet while it may be impossible to say with confidence what was the sum of the specimens examined by the original author of a name, it may often be possible to say with certainty that certain specimens were examined by him. These will include specimens that he figures and any that he indicates by whatever method that he has examined (the mark of exclamation was often used for this purpose by early zoologists), e.g. by giving measurements or by other internal evidence of citation of individual specimens as such. It is suggested that the "type-series" be given a restricted definition on these lines, so that Article 72b might read, for example:

"(b) **Type-series.**—The type-series of a species consists of all the specimens that can be certainly identified as having been examined by the author when he made the specific name available, and of no other specimens, and excludes any that he refers to as variants, or doubtfully associates with the nominal species, or expressly excludes from it.

(i) The only specimens eligible for inclusion in the type-series are those figured by the author and those that he indicates, by whatever method, that he has individually examined."

6. While the above draft might prove helpful in a large number of cases, it might not be acceptable to zoologists who have to deal with cases where later specimens have been added to original specimens in a single container (see, e.g. Whitehead and Boeseman, *Bull. zool. Nomencl.* **23** : 110–113; and many applications to the Commission concerning Linnean types). The effect on cases of this kind might well be to force recourse to a neotype; but at least an element of clarity would have been added to the situation.

7. If Article 72b were to be rewritten on these lines, then certain amendments would need to be made to Article 73c. In the second line a cross-

reference to "[Art. 72(b)]" should be inserted. In Article 73c(i) a full point should be inserted after "term" in the second line and the subsequent part deleted. Recommendation 73D should also be deleted: paratypes may be helpful in explaining the original hypodigm, but they have no function as name bearers except insofar as they implicitly form part of the type-series as here redefined. Even then, their potential utility would only be realized in the event of the loss or destruction of the holotype. It may often be just as difficult to identify all the paratypes of a nominal species based on a designated holotype as it is to identify all the syntypes of a nominal species not based on one.

8. It is doubtful whether Recommendation 74E should remain in the Code. With the best will in the world, Article 72b as redrafted is open to an element of subjective interpretation; Recommendation 74E merely indicates how a zoologist should record his opinion about the original hypodigm, and this is not strictly a nomenclatural matter.

9. The next problem is the procedure to be laid down in cases where a holotype or lectotype is destroyed but specimens of the type-series (as redefined) still exist. What is to be the status of such specimens? In my view, they have no greater importance as potential name-bearers than any other specimen of the current hypodigm of the species, whatever may be their historical value as indicating the shape of the original hypodigm. It is implicit in the present Code (Article 75) that such specimens are potential neotypes. It would seem sufficient to me to make this explicit by adding a Recommendation to the effect that a neotype should, other things being equal, be designated from among surviving specimens of the type-series, if such exist. No narrower restriction ought to be placed on the freedom of a zoologist to designate a neotype that meets the requirements of current taxonomic thought and practice.

10. In his proposals to the Commission for relaxation of the rules concerning neotypes, Mr. dos Passos objected to the subjective character of the words "revisory work" and proposed to replace them by the words "scientific paper"—though it is doubtful if they are any less subjective. In addition, Article 75 as it stands is internally inconsistent. The opening sentence says that a neotype may be designated if no holotype, lectotype or syntype exists; Article 75c(3) requires the author to believe all the specimens of the original type-series to have been lost or destroyed—that is, including paratypes and paralectotypes not referred to in the opening sentence. Moreover, if surviving syntypes, paratypes and paralectotypes are to be given no more nomenclatural status than any other specimens of the current hypodigm, it is not necessary to refer to any of them in this article. A neotype is one unique name-bearer proposed to replace another unique name-bearer that has been lost or destroyed. It should not be necessary to consider any specimens other than the lost name-bearer as having a higher status than any others.

11. These difficulties, as well as Mr. dos Passos's point, could perhaps be met if Article 75a and 75a(i) were united in a single paragraph and if Article 75c(3) were amended, as follows:

"(a) **Cases admitted**.—A neotype is only to be designated when such action is found to be necessary in the interests of stability of nomenclature, for example, when the identity of a species, or of two or more closely

similar species, is in doubt and when for any of them no holotype or lectotype exists."

"(c) **Qualifying conditions.**— . . . .

(3) the author's reasons for believing the holotype or lectotype to be lost or destroyed, and the steps that have been taken to trace it;"

The Glossary definition of neotype should at the same time be amended to read:

neotype, *n.* A single specimen designated as the type-specimen of a nominal species-group taxon of which the holotype or lectotype has been lost or destroyed [Art. 75]."

12. There remains the problem of holotypes, lectotypes or neotypes that are demonstrated to be taxonomically useless. This is clearly a subjective matter of taxonomic judgment that cannot be dealt with by regulation in the Code. In effect, a zoologist faced with this problem has two possible courses of action. He may either reject the name in question because it has become a *nomen dubium* for his purposes, and propose a new name for the species; or he may seek means, possibly involving an application for the use of the plenary powers by the Commission, to give the name a new validity. The concept of the unchanging type would indicate the former procedure; the objective of nomenclatural stability would indicate the latter. To my mind the latter, even though it may involve the zoologist in more work, is to be preferred. If this view is generally accepted, then a new Recommendation could be added at the end of Article 75 on the following lines:

"**Type found to be taxonomically useless.**—A zoologist who subjectively considers the type of a nominal species to be taxonomically useless should, in the interests of stability of nomenclature, seek means to renew the validity of the name in preference to rejecting it as a *nomen dubium*."

13. Comments on these proposals received within six months after the date of publication will be taken into account in submitting a draft Declaration to the Council of the Commission.

TRYPETA MEIGEN, 1803 (INSECTA: DIPTERA); *TRYPETES* SCHOENHERR, 1836 (INSECTA: COLEOPTERA); *TRYPETESA* NORMAN, 1903 (CRUSTACEA: CIRRIPEDIA). A CASE OF TRIPLE HOMONYMY IN FAMILY-GROUP NAMES. Z.N.(S.) 1733

By R. V. Melville (*Secretary, International Commission on Zoological Nomenclature*)

In April 1966 (*Bull. zool. Nomencl.* **23** : 46–7), Dr. C. W. Sabrosky and Dr. E. C. Zimmerman drew attention to the following situation of homonymy between two family-group names based on type-genera whose names were similarly spelled:

Diptera: *Trypeta* Meigen, 1803: TRYPETIDAE Loew, 1861

Coleoptera: *Trypetes* Schoenherr, 1836: TRYPETINAE Lacordaire, 1866 (as "Tribu Trypétidés").

They proposed to remedy this situation by renaming the junior (Coleopteran) family-group homonym TRYPETESINAE and asked the Commission to use its plenary powers to this effect.

2. On 5 January 1968 Dr. L. B. Holthuis, in returning a vote against the application, pointed out that in the Cirripede Crustacea the genus *Trypetesa* Norman, 1903, was the type-genus of the family TRYPETESIDAE. The author and date of this name were then thought to be Krüger, 1940 (but see paragraph 3 below). Since "TRYPETESIDAE Krüger, 1940" clearly had priority over TRYPETESIDAE Sabrosky and Zimmerman, 1966, Dr. Holthuis suggested that a new solution be sought by adopting the form TRYPETEDINAE for the Coleopteran family-group name.

3. On 21 January 1968 Dr. Zimmerman announced the discovery of the fact that TRYPETESIDAE had in fact been proposed as a family-group name in Coleoptera by Heller (*in* Sarasin & Roux, 1916) as a deliberate emendation of TRYPETINAE Lacordaire, 1866, to overcome the homonymy with TRYPETIDAE Loew, 1861, in Diptera. This name is clearly available under the provisions of Article 33a(ii) and takes priority over "TRYPETESIDAE Krüger, 1940" in Cirripedia. However, Dr. Holthuis later found (19 May 1969) that TRYPETESIDAE in Cirripedia dated from Stebbing, 1910, so that the Cirripede name takes priority over the Coleopteran name.

4. Meanwhile, on Dr. Holthuis's suggestion, the question of the correct formation of the family-group names involved had been put to the Commission's Classical Adviser (Mr. J. Griffin). His report showed that both *Trypeta* (Diptera) and *Trypetes* (Coleoptera) give TRYPETIDAE, while *Trypetesa* (Cirripedia) gives TRYPETESIDAE. He suggested that either the Dipteran or the Coleopteran generic name might be changed so as to give a different family-group name. If this were not acceptable, he proposed:

Diptera: *Trypeta*: TRYPETAIDAE

Coleoptera: *Trypetes*: TRYPETIDAE

Cirripedia: *Trypetesa*: TRYPETESIDAE.

This suggestion had the merit of showing that the original homonymy lies between the Dipteran and the Coleopteran family-group names, and of preserving the correctly-formed and prior Cirripede name. But it was not acceptable to Dr. Sabrosky and Dr. Zimmerman because it allocated TRYPETIDAE to the Coleopteran family; and they were both agreed that that name ought to be preserved for the larger and economically far more important Dipteran family. It was by now clear that the solution involving the least disturbance to existing usage would be one that renamed the Coleopteran family while leaving the names of the Dipteran and Cirripede families undisturbed.

5. Fortunately a possible solution on these lines was discovered by Dr. Zimmerman. He found that Pierce (1919) had proposed TRYPETIDINAE for the Coleopteran taxon "to prevent confusion with the TRYPETINAE based on *Trypeta* in the Diptera". Pierce's deliberate (though unjustified) emendation is available under the provisions of Article 33a(ii) and escapes the fate of TRYPETESIDAE Heller, 1916, preoccupied in Cirripedia. This discovery was communicated by Dr. Sabrosky on 16 May 1969, with a simultaneous proposal that the name TRYPETEINAE might be used for the Coleopteran taxon.

6. At this point, since Dr. Sabrosky, Dr. Zimmerman and Dr. Holthuis all agreed that the Dipteran and Cirripede names ought not to be interfered with, the problem was reduced to one of finding an acceptable new name for the Coleopteran taxon. Since the correct form of the family name in this group is, as shown by the Classical Adviser, TRYPETIDAE, whatever new name is chosen will violate Article 29 and can therefore only be validated by the use of the plenary powers. I accordingly examined the various names that had been suggested to see if there were any factor indicating that a preference should be given to any one of them. There were three such names:

TRYPETIDINAE Pierce, 1919

TRYPETEDINAE (Holthuis, letter dated 5 January 1968)

TRYPETEINAE (Sabrosky, letter dated 16 May 1969).

The fact that Pierce's name has already been available for over 50 years seemed to me to indicate a preference in its favour, and Dr. Sabrosky, Dr. Zimmerman and Dr. Holthuis have all been so generous as to agree with this view.

7. The Commission is therefore asked:

(1) to rule under the plenary powers that the stem of the generic name *Trypetes* Schoenherr, 1836, is to be TRYPETID- in forming names of the family-group;

(2) to place the generic name *Trypetes* Schoenherr, 1836 (gender: masculine), type-species, by original designation, *Trypetes rhinoides* Gyllenhal *in* Schoenherr, 1836, on the Official List of Generic Names in Zoology;

(3) to place the specific name *rhinoides* Gyllenhall *in* Schoenherr, 1836, as published in the binomen *Trypetes rhinoides*, on the Official List of Specific Names in Zoology;

(4) to place the family-group name TRYPETIDINAE Lacordaire, 1866, as Trypétidés, on the Official List of Family-Group Names in Zoology.

ARGIOPE AUDOUIN 1826 (ARACHNIDA, ARANAEA): PROPOSED PRESERVATION UNDER PLENARY POWERS. Z.N.(S.) 1798

By Herbert W. Levi (*Museum of Comparative Zoology, Harvard University, Cambridge, Mass.* 02138, *U.S.A.*)

1. The purpose of the present application is to ask the International Commission on Zoological Nomenclature to use its plenary powers to suppress the spelling *Argyope* Audouin (1826), the emendations *Argyopes*, Latreille (1829, Les Arachnides *in* Cuvier, *Le Règne Animal*, p. 548) and *Argiopes* L. Agassiz (1846, *Nomenclator Zoologicus*, Arachnidae, p. 2) and place these names on the Official Index of Rejected and Invalid Generic Names in Zoology, and place the generic name *Argiope* Audouin, 1826,e mend. Thorell, 1869, on the Official List of Generic Names in Zoology.

2. The name *Argyope* Audouin, 1826 was published in Explication Sommaires des Planches d'Arachnides de l'Egypte et de la Syrie *in* Savigny's *Descriptions de l'Egypte et de la Syrie* (4) : 121. In the following year (1827) in the second edition of the work the name is spelled *Argiope*. Thorell (1869, *On European Spiders*, p. 51) assumed that the emendation was by Audouin and pointed out that the correct spelling has to be with an i.

3. The word *Argiope* is derived from the Greek for brilliant eye [Αργιοπη] and would today require an i in its spelling (Appendix B, *Internat. Code Zool. Nomenclature*).

4. The name of the genus has been spelled for 100 years, since the time of Thorell with an i. It has rarely been spelled with y in the American literature. In the combination *A. trifasciata*, the common cosmopolitan species, the genus has been spelled in the world literature with y by only 4 authors in 5 publications, while 53 authors in over 100 publications have spelled the genus with i up to 1938 (Bonnet, 1955, *Bibliographia Araneorum* 2 : 667). Roewer's *Katalog der Araneae* (1942–1954) changed numerous spellings from long accustomed usage and printed *Argiope* with y. Unfortunately, several recent authors have followed Roewer, apparently oblivious to the need for stability of names as laid down in the Preamble of the Int. Code Zool. Nomencl.

5. The name *Argiope* is the type of a family group name ARGIOPIDAE.

6. Only plenary action by the International Commission will now permit use of the name, used for 100 years, since the last version of the Int. Code Zool. Nomenclature (1961) does not give sanction to "unjustified" emendations, even if universally accepted for more than 100 years.

7. The nominal type-species of *Argiope* is "*Argyope sericea* Audouin, 1826" [= *Aranea sericea* Olivier, 1798], but the valid name for this species is *Argiope lobata* (Pallas, 1772). This synonymy was first recognized by Thorell (1867), but he did not on that occasion designate a type-species of *Argiope*. In 1869 Thorell designated *lobata* Pallas as type-species of *Argiope* but he did not on that occasion expressly synonymize *lobata* and *sericea*, so that under the strict terms of Article 69a(iv) his designation was invalid. Although both the synonymy of the two names and the status of *lobata* as type-species have been universally accepted since Thorell's time, the first author both to designate

lobata as type-species and simultaneously to synonymize it with *sericea* was Bonnet (1955 : 687). Because of a small technicality, therefore, a type-designation that has been accepted for over 100 years can only legally be dated 1955.

The International Commission on Zoological Nomenclature is therefore requested to take the following action:

(1) to use its plenary powers to validate the emendation to *Argiope* of *Argyope* Audouin, 1826;

(2) to place the following generic name on the Official List of Generic Names in Zoology: *Argiope* Audouin, 1826 (gender: feminine), type-species, by subsequent designation by Bonnet, 1955 *Aranea sericea* Olivier, 1798.

(3) to place the following specific name on the Official List of Specific Names in Zoology: *lobata* Pallas, 1772 as published in the binomen *Aranea lobata*;

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

(a) *Argyope* Audouin, 1826 (ruled under the plenary powers in (1) to be an incorrect spelling for *Argiope*.

(b) *Argyopes* Latreille, 1829 (an incorrect spelling for *Argiope*);

(c) *Argiopes* L. Agassiz, 1846 (an incorrect spelling for *Argiope*).

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PROPOSED FIXATION OF NEOTYPE OF *POTERIOCRINUS HEMISPHERICUS* SHUMARD, 1858, TYPE-SPECIES OF *DELOCRINUS* MILLER AND GURLEY, 1890 (CRINOIDEA, ECHINODERMATA). Z.N.(S.) 1905

By Raymond C. Moore (*University of Kansas, Lawrence, Kansas, U.S.A.*) and Harrell L. Strimple (*University of Iowa, Iowa City, Iowa, U.S.A.*)

The purpose of this application is to request the International Commission on Zoological Nomenclature to use its plenary powers to designate a neotype of *Poteriocrinus hemisphericus* Shumard (1858) originally designated as the type species of *Delocrinus* Miller and Gurley (1890a).

2. The Pennsylvanian (Upper Carboniferous) and Permian crinoid genus named *Delocrinus* is more abundantly represented by described nominal species (at least 73) and is more widely distributed (all continents except Africa) than any other late Paleozoic crinoid genus. It is especially characteristic of marine strata which have yielded it, and because of the short vertical ranges of most distinguished species has been found very useful for stratigraphic zonation and correlations.

3. The type-species of *Delocrinus* designated by Miller and Gurley (1890a, p. 10) is *D. hemisphericus* (Shumard), originally described by Shumard (in Shumard and Swallow, 1858, p. 221) under the name *Poteriocrinus hemisphericus*. The type specimens of Shumard's species, inexactly recorded as to their source, have been irretrievably lost, probably destroyed by fire. Accordingly, Miller and Gurley (after quoting Shumard's description) based their diagnosis of *Delocrinus* on specimens obtained by them at Kansas City, Missouri, from beds now identified as Lane Shale of the Missourian Stage (lower part of Upper Pennsylvanian). Beyond doubt, these beds are somewhat higher (therefore younger) than the source or sources of Shumard's crinoids from Missouri, as well as lower (therefore older) than specimens recorded by Shumard (1858, p. 222) from Kansas. No illustrations were ever published to show the nature of Shumard's specimens. The fossils described and figured by Miller and Gurley as *Delocrinus hemisphericus* conform essentially to Shumard's description except for being smooth-plated instead of having a finely granulose surface. Miller and Gurley's specimens are preserved in collections of the University of Chicago, now reposited in the Field Museum of Natural History (Chicago), and were studied by Moore and Plummer (1940).

4. Concluding that Miller and Gurley misidentified Shumard's species, Moore and Plummer (1940, p. 258) renamed the Kansas City crinoids as a new species called *Delocrinus subhemisphericus*. They gave good illustrations of one of Miller and Gurley's specimens, chosen as holotype of the so-called new species, and figured a University of Kansas specimen chosen as one of the paratypes (Moore and Plummer, 1940, pl. 11, fig. 4, pl. 20, fig. 3a–b).

5. Article 70 of the Zoological Code (1961, 1964) explicitly states that a nominal species designated by an author as the type-species of a new genus is

presumed to have been correctly identified by him, subject to the provision, however, that if a zoologist considers this type-species to have been misidentified "he is to refer the case to the Commission to designate as the type species (by use of its plenary powers if necessary) whichever species will in its judgment best serve stability and uniformity of nomenclature (Art. 70,a)." Because such reference was obscurely permitted, rather than enjoined, by the Code (Art. 30,1) which was effective in 1940, Moore and Plummer may be pardoned for their failure to proceed in this way. The Commission now is asked to rule that the nominal species *Poteriocrinus hemisphericus* Shumard (1858), chosen by Miller and Gurley as type-species of their new genus *Delocrinus*, shall be fixed to apply to the species from the Kansas City area described and figured by them. Moore and Plummer's *Delocrinus subhemisphericus* would then become a junior objective synonym of *D. hemisphericus*. Further, the Commission is asked to establish as neotype of *Poteriocrinus hemisphericus* Shumard (1858) one of the specimens figured by Miller and Gurley (1890a, pl. 2, figs. 8–9) which also herein is described and figured. This fossil is catalogued as University of Chicago no. 6234, specimen 1, reposited in the Field Museum of Natural History (Chicago). Accompanying this are University of Chicago no. 6234, specimen 2; and U.C. no. 6234, specimen 3, illustrated by Miller and Gurley (1890a, pl. 2, fig. 10) consisting of an isolated first spinose arm plate (primibrach).

6. Description of proposed neotype of *Poteriocrinus hemisphericus* Shumard (1858) originally designated type-species of *Delocrinus* Miller and Gurley (1890a). Dorsal cup subcircular in outline, low (height approximately one-third of diameter), with narrow, moderately deep basal concavity containing diminutive infrabasal circlet of five down flared plates; basal plates strongly curved longitudinally, forming part of basal concavity and lower outer sides of cup; radial plates notably wider than high, nearly vertical at summit of cup, with broad subhorizontal articular facets of muscular type; single anal plate between posterior radials, with outer surface curved inward; first arm plate (primibrach) in form of long spine directed horizontally outward, with two upper facets for articulation with pair of arms (Fig. 1, 1–3).

7. For the purpose of stabilizing nomenclature and contributing to its uniformity, the International Commission on Zoological Nomenclature is requested:

(a) to use its plenary powers to fix as neotype of *Poteriocrinus hemisphericus* Shumard, 1858, the specimen figured by Miller and Gurley (1890a, pl. 2, figs. 8–9) as *Delocrinus hemisphericus* (Shumard), originally designated as the type-species of *Delocrinus*, this fossil being now reposited in the Field Natural History Museum (Chicago), labelled University of Chicago no. 6234, specimen 1;

(b) to place the generic name *Delocrinus* Miller and Gurley, 1890 (gender: masculine), type species stated in (a) above, *Poteriocrinus hemisphericus* Shumard, 1858, on the Official List of Generic Names in Zoology;

(c) to place the specific name *hemisphericus* Shumard, 1858, as published in the binomen *Poteriocrinus hemisphericus* (type species of *Delocrinus* Miller and Gurley, 1890), on the Official List of Specific Names in Zoology.

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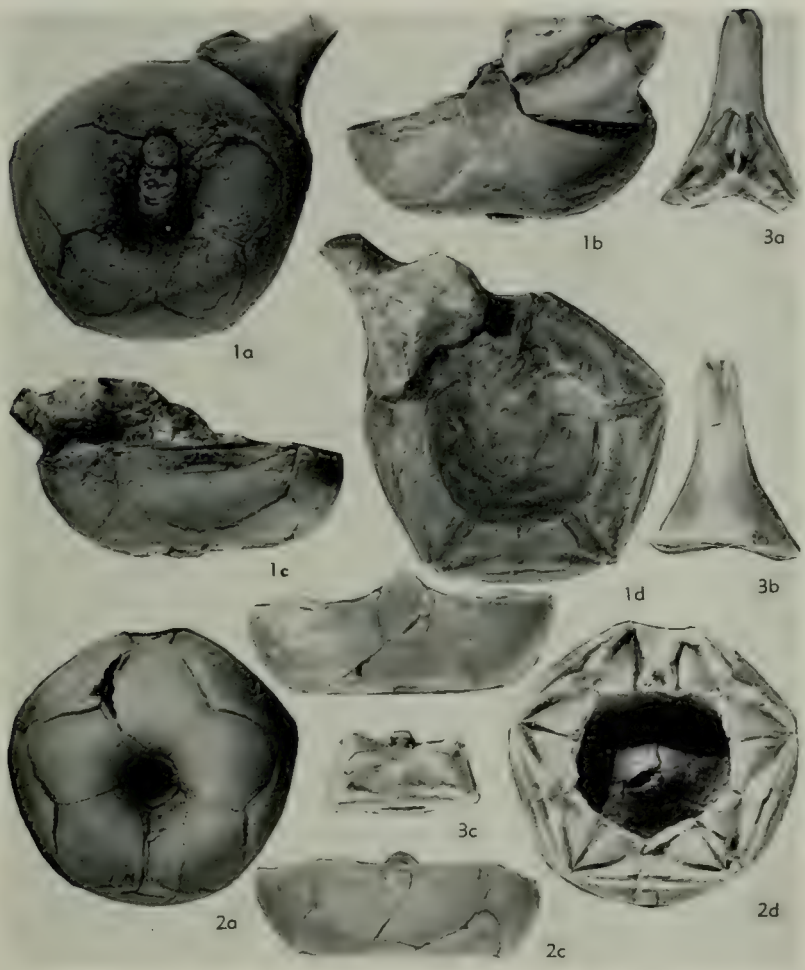
Plate 4

Figure 1. Proposed neotype of *Delocrinus hemisphericus* (Miller and Gurley, 1890), all X2.—1*a–d*. Basal, posterior, anterior, and summit views of proposed neotype (Univ. Chicago no. 6234, specimen 1).—2*a d*. Basal, posterior, anterior, and summit views of another specimen (Univ. Chicago no. 6234, specimen 2).—3*a–c*. Upper, lower, and end facetal views of another specimen (Univ. Chicago no. 6234, specimen 3).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DONAX VARIABILIS SAY, 1822 (MOLLUSCA: BIVALVIA): PROPOSED VALIDATION UNDER THE PLENARY POWERS. Z.N.(S.) 1923

By Kenneth J. Boss (*Museum of Comparative Zoology, Harvard University, Cambridge, Massachusetts, 02138, U.S.A.*)

The problems occasioned by homonymy are manifold, and one case among the Mollusca demands immediate attention to maintain nomenclatorial stability.

The common coquina or bean clam of the western Atlantic Ocean, *Donax variabilis* Say (1822, p. 305) has been the object of considerable taxonomic, ecological and embryological research, and the name has been accepted for nearly 150 years. However, Schumacher (1817, p. 156) described the genus *Latona* with *Latona variabilis* Schumacher, 1817, as type-species by monotypy. Since the generic name *Latona* has been reduced to the status of a subgenus in *Donax*, the binomen *Donax variabilis* (Schumacher, 1817) is a senior secondary homonym of *Donax variabilis* Say, 1822, the junior secondary homonym. Since the Code (Art. 59(b)) stipulates that any junior secondary homonym: "must be rejected by any zoologist who believes that the two species-group taxa in question are congeneric" the well known binomen of Say would be rejected since *Latona* has been accepted as a section or subgenus of *Donax* (Chenu, 1862, p. 72; Römer, 1870, p. 82; Bertin, 1881, pp. 109 and 114; Fischer, 1887, 07; Keen [*in*] Moop. 1102; Thiele, 1935, p. 9re, 1969, p. N628).*

There are several items which argue for making *Donax variabilis* Say, 1822, a *nomen conservandum*:

1. Since the publication of *Latona variabilis* Schumacher, 1817, its combination in *Donax* has virtually never appeared in the primary zoological literature. The principal revisionary and review works on the family Donacidae do not even mention *variabilis* Schumacher (Reeve, 1854; Sowerby, 1866; Römer, 1870; Bertin, 1881).

2. *Latona variabilis* Schumacher, 1817, is a junior subjective synonym of *Donax cuneatus* Linnaeus, 1758 (Prashad, 1932, p. 202) and, as such, will not enter the literature.

3. *Donax variabilis* Say, 1822, has been continuously cited in the literature for nearly 150 years and has been the subject of much zoological research.

For the above mentioned reasons, I hereby petition the Commission:

(1) to use its plenary powers to suppress the specific name *variabilis* Schumacher, 1817, as published in the binomen *Latona variabilis*, for the purposes of both the Law of Priority and the Law of Homonymy;

(2) to place the specific name *variabilis* Say, 1822, as published in the binomen *Donax variabilis*, on the Official List of Specific Names in Zoology;

(3) to place the specific name suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology.

* The name *Latona* is not used at all in the Russian or French treatises (Eberzin [*in*] Orlov, 1960; Franc, [*in*] Grassé, 1960).

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COSCINOCYATHUS BORNEMANN, 1884 (ARCHAEOCYATHA): PROPOSED DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1924

By Françoise Debrenne (*Institut de Paléontologie, 8 Rue de Buffon, Paris Ve, France*)

The third Colloquium on Archaeocyatha held in Moscow from February 23rd to March 1st, 1970, acting through Dr. Françoise Debrenne, referred the present case to the Commission. They request that the Commission, acting in the interest of stability and universality of nomenclature, use its plenary powers to exempt the case of *Coscinocyathus* from the application of the Code.

2. The genus *Coscinocyathus* was published by Bornemann in 1884, and in this first paper no type-species was designated.

3. *Coscinocyathus tuba* Bornemann, 1884 (: 704), one of the first species quoted in the original list, was subsequently designated as type-species of the genus by Ting, 1937 (p. 360). F. Debrenne, 1964 (p. 162), the second reviser, followed Ting's designation and chose as type specimen *tuba* no. 930, Halle Museum (Democratic Republic of Germany), figured by Bornemann in 1887 (pl. 15, fig. a, b, c).

4. When F. Debrenne had opportunity to restudy the type material, she conceded that the usual meaning of *Coscinocyathus*—corresponding to Bornemann's conception of the fossils as having simply porous walls connected by porous septa and tabulae—was wrong. The type-species, *tuba*, has a peculiar inner wall with one pore-tube instead of a porous sheet. She therefore proposed the name *Erismacoscinus* Debrenne, 1958 (type-species *marocanus*), for the species heretofore classified as *Coscinocyathus*, except those with one pore-tube in the inner wall which have to be considered as true Coscinocyathus.

5. This conclusion is according to the Rules, but is not convenient for stability and universality of nomenclature. If it is followed, a well-known and world-wide genus such as *Coscinocyathus* was before the revision of *tuba*, is, after that revision, restricted to six species and less than twenty specimens, instead of more than sixty species and several hundred samples. In order to avoid such a disturbance, and to conserve a stable and universally accepted nomenclature, the third colloquium on Archaeocyatha decided to ask the Commission to annul the choice of *tuba* as type-species of *Coscinocyathus*, and to accept *dianthus* Bornemann, 1884 (: 704), with type specimen no. An 597 Halle Museum, as the new type-species. The species *dianthus* was figured in 1887, pl. XXXI, fig. 5, and is one of the species first included in the genus by Bornemann. If this proposal is accepted, *Erismacoscinus* Debrenne will become a junior synonym of *Coscinocyathus*, and the species which have an inner wall with one pore tube would be placed in a new genus *Tubicoscinus* Debrenne, type-species *tuba* Bornemann.

6. The International Commission is therefore requested:

(1) to use its plenary powers to set aside all designations of type-species for

the genus *Coscinocyathus* Bornemann, 1884, made prior to the Ruling now requested, and, having done so, to designate *Coscinocyathus dianthus* Bornemann, 1884, to be the type-species of that genus;

(2) to place the generic name *Coscinocyathus* Bornemann, 1884 (gender: masculine), type-species, by designation under the plenary powers in (1) above, *Coscinocyathus dianthus* Bornemann, 1884, on the Official List of Generic Names in Zoology;

(3) to place the specific name *dianthus* Bornemann, 1884, as published in the binomen *Coscinocyathus dianthus* (type-species of *Coscinocyathus* Bornemann, 1884) on the Official List of Specific Names in Zoology.

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CONTENTS

(*continued from front wrapper*)

Page

Decisions

Declaration 43 (Repeal of Article 23b) 135
Opinion 932 (*Polygnathus* Hinde, 1879) 164
Opinion 933 (*Liphistius* Schiødte, 1849) 167
Opinion 934 (*Bollia* Jones & Holl, 1886) 169
Opinion 935 (*Simia leucophaea* Cuvier, 1807) 171
Opinion 936 (*Julus pallipes* Olivier, 1792) 173
Opinion 937 (*Helix hammonis* Strøm, 1765) 175
Opinion 938 (*Larius* Boddaert, 1783) 176
Opinion 939 (*Python timorensis* Müller, 1844) 178

New Cases

The generic name *Orthoceras* Bruguière, 1789 (Cephalopoda) (R. V. Melville) 180
Types in the species-group (R. V. Melville) 194
Trypeta Meigen, 1803 (Diptera); *Trypetes* Schoenherr, 1836 (Coleoptera); *Trypetesa* Norman, 1903 (Cirripedia). A case of triple homonymy in family-group names (R. V. Melville) 189
Argiope Audouin, 1826 (Aranaea): Proposed preservation under the plenary powers (Herbert W. Levi) 200
Proposed fixation of neotype of *Poteriocrinus hemisphericus* Shumard, 1858, type-species of *Delocrinus* Miller & Gurley, 1890 (Echinodermata) (Raymond C. Moore & Harrell L. Strimple) 202
Donax variabilis Say, 1822 (Bivalvia): Proposed validation under the plenary powers (Kenneth J. Boss) 205
Coscinocyathus Bornemann, 1884 (Archaeocyatha): Proposed designation of a type-species under the plenary powers (Françoise Debrenne) 207

CONTENTS

(*continued from inside back wrapper*) Page

Comments

Comment on the proposed rectification of homonymy between SPHAERIIDAE in Mollusca and Insecta (D. Heppell) 130
Comment on the proposal to designate a neotype for *Phalaena xylostella* Linnaeus, 1758 (E. C. Pelham-Clinton) 130
Comment on the proposed designation of a type-species for *Littorina* Férussac, 1822 (D. Heppell) 131
Further comment on *Rana maculata* (James A. Peters) 133
A comment on the validation of *Murex lorotium* Linnaeus, 1758 with an alternative proposal (W. O. Cernohorsky) 133

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29th March 1971

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

Page

Notices prescribed by the International Congress of Zoology:

Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature* 209

Notices of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases 209

(*continued inside back wrapper*)

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APR 1971

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 27, Parts 5/6 (pp. 209—290, T.P.—X) 29th March 1971

NOTICES

(a) *Date of Commencement of Voting.*—In normal circumstances the Commission starts to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.*—The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin.:*

(1) Designation of type-species for *Siphona* Meigen, 1803 (Insecta, Diptera). Z.N.(S.) 195

(2) Validation of *Vanikoro* Quoy & Gaimard, 1832; Ruling that *Vanikoro* is of feminine gender and that VANIKOR- is the stem: Ruling that several names are unjustified emendations of *Vanikoro* (Gastropoda). Z.N.(S.) 1824

(3) Designation of a type-species for *Callopanchax* Myers, 1933 (Pisces). Z.N.(S.) 1910

(4) Suppression of *Cypselus abessynicus* Streubel, 1848 (Aves). Z.N.(S.) 1914

(5) Validation of *Terebra variegata* Gray, 1834 (Gastropoda). Z.N.(S.) 1927

(6) Suppression of *Thalascaris* Bate, 1878 (Crustacea, Decapoda). Z.N.(S.) 1928

(7) Validation of *Tanagra cyanea* Linneaus, 1766 (Aves). Z.N.(S.) 1929

(8) Designation of a type-species for *Dendrobates* Wagler, 1830 (Amphibia). Z.N.(S.) 1930

(9) Suppression of *Idalla* Ørsted, 1844 and *Idalla caudata* Ørsted, 1844 (Opisthobranchia). Z.N.(S.) 1931

(c) Owing to an industrial dispute in the electrical supply industry publication of volume 27, parts 3/4, was unavoidably delayed. Distribution of that part began on 23 December 1970, which should therefore be taken as the date of publication.

c/o British Museum (Natural History),
Cromwell Road,
London, S.W.7, England
2 *December* 1970

MARGARET DOYLE
Scientific Assistant
International Commission on
Zoological Nomenclature

COMMENTS ON THE PROPOSED DESIGNATION OF A TYPE-SPECIES FOR *LITTORINA* FÉRUSSAC, 1822. Z.N.(S.) 1901

By W. O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*)

Kadolsky (*Bull. zool. Nomencl.* **27** : 51–54) petitioned the Commission for an acceptance of a type-designation of *Turbo littoreus* Linnaeus, as the type-species of *Littorina* Férussac, 1822. In his summary Kadolsky stated: "I prefer to keep *Turbo littoreus* L. as type-species of *Littorina* Férussac, as only this species was included amongst *Littorina* in the original publication. . . ." If Kadolsky's statement were correct, then *Turbo littoreus* Linnaeus, as the only included species, would *ipso facto* become the type-species by monotypy. From the case outlined by Kadolsky, however, it is apparent that *Littorina* Férussac is actually a genus without included nominal species. The five listed (but not included) species appeared in the original publication in combination with the genus-group name *Turbo* and not *Littorina*, and were attributed to the vernacular "Paludine marine".

Littorina Férussac, being a genus without included species (and from evidence on hand there is no indication to the contrary), would have to take as the type-species *Littorina basterotii* Payraudeau, 1826 (=*Turbo neritoides* Linnaeus, 1758) by subsequent monotypy under the terms of Article 69(a)(2). *Littorina* Férussac, 1822, would then replace *Melaraphe* Menke, 1828. In order to designate *Turbo littoreus* Linnaeus as the type-species of *Littorina* Férussac, the Commission should have been petitioned to set aside all previous type designations.

The genus-group *Neritoides* Brown, 1827, is available for *Nerita littoralis* Linnaeus, since "*Neritoides* Meuschen, 1779" was erected in a non-binomial work in which polynomials were used for specific diagnoses (*Naturforscher* **13** : 85).

By L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden*)

I have read Dr. Kadolsky's application with much interest, but fail to agree with his conclusions. Also there are some inaccuracies in his paper.

De Férussac (1822, *Tabl. systematiques* : xi) did not write "notre sous-genre *littorina*" as cited by Dr. Kadolsky on line 6 of p. 52 of his application, but "notre sous-genre littorine". The latin form *Littorina* being first used on p. xxxiv, being cited there with the vernacular name littorine and the synonyms cited by Dr. Kadolsky on the last line of his para. 3.

As I see it, the only nominal species referred by De Férussac to his sub-genus *Littorina* in the original publication is *Turbo neritoides* L. which on p. xi he assigned to his "sous-genre littorine".

On p. ix De Férussac stated that he formed his sous-genre littorine on the "paludines marines qui constituent le genre *Trochus* d'Adanson". On p. ix and x as, pointed out by Dr. Kadolsky, De Férussac listed a large number of species after 5 of which he gave the indication "Paludina. Marine" (not "Paludine marine"). But this indication is not sufficient to assign these species to *Littorina*, as De Férussac defined his littorine as those marine paludinas that were assigned by Adanson to *Trochus*, while no mention of Adanson is given in his list. As Dr. Kadolsky himself pointed out, De Férussac placed only part of the marine species of his genus *Paludina* in *Littorina*, part were placed in *Rissoa*.

So far as I can see, *Littorina* De Férussac, 1822, has as its type by monotypy, *Turbo neritoides* L.

OBJECTIONS TO THE USE OF THE PLENARY POWERS FOR NEOTYPES OF *ECHINOCORYS SCUTATA* (ECHINOIDEA). Z.N.(S.) 1903

By Curtis W. Sabrosky (*Systematic Entomology Laboratory, U.S.D.A., c/o U.S. National Museum, Washington, D.C.* 20560)

Peake and Melville (1970, *Bull. zool. Nomencl.* **27** : 55–59) have requested the Commission to suppress the neotype designated by Wind (1959) for *Echinocorys scutata* Leske, and to substitute another. Although not an echinoid specialist, I object on general principles to the proposed actions.

2. Wind's neotype (1959) has no standing under the Code, and it can be rejected or ignored by taxonomists without recourse to the Commission's plenary powers. Under Article 75(e), "A neotype-designation published before 1961 takes effect from the time when it fulfills all the provisions of this Article [75]." Accepting the statements given in the application, I submit that the 1959 neotype can never qualify. Most importantly, it does not qualify under the rule of admissibility: Only when "necessary in the interests of stability of nomenclature" (Art. 75(a)). A neotype must be "essential for solving a complex zoological problem, such as the confused or doubtful identities of closely similar species" for which primary type material no longer exists. However, Peake and Melville state unequivocally that Klein's "original text and illustrations [upon which, clearly, Leske based his nominal species] leave the identity of the species *in no doubt*" [italics mine, here and in other quotations], and furthermore they point out that "this identity has been continuously confirmed by all the main works of reference on the subject". Obviously, then, no instability or complex problem existed in 1959, and no neotype was needed—nor is one needed now. Both neotypes fail to satisfy both the letter and the spirit of Article 75.

3. In particular, Wind's neotype cannot fulfill the important provision (75 (c)(4)) of consistency with "what is known of the original type-material, from its description and from other sources". Peake and Melville state positively that Klein's "original text and illustrations leave the identity of the species in no doubt" and that "Wind's neotype differs in many morphological respects from the one figured by Klein".

4. Moreover, although Klein and Leske give only a generalized type locality, "Anglia", Peake and Melville state that "Klein's figure of *E. scutata* represents a form that is characteristic of [the Gravesend] horizon (*and of no other*)". Wind's neotype is from a far distant locality and from a different horizon, separated by several zones from the Gravesend horizon in which the typical form figured by Klein is characteristic and common. Thus Wind's neotype also fails to fulfill the fifth condition in 75(c), that a neotype shall come from "as nearly as practicable from the original type locality, and . . . from the same geological horizon" as the original type material.

This case is precisely the kind of situation for which the fairly stringent provisions of Article 75 were designed. Those rules were aimed at obviating the need for and discouraging unnecessary bookwork on neotypes. Even if ultimately a Declaration removes the term "exceptional circumstances" and relates the defining subsection 75(a)(i) to the phrase "necessary for stability in nomenclature" (cf. *Bull. zool. Nomencl.* **21** : 172, case 17, 1964), that phrase is still a vital point. All that is needed in this present case is for taxonomists to disregard Wind's neotype as unjustified and unqualified under the Code, and thereupon to continue to identify *Echinocorys scutata* Leske in the time-honoured way. The Commission should never do for taxonomists that which they can do for themselves.

By C. W. Wright (37 *Phillimore Gardens, London, W.8, England*)

I strongly support the proposals by Peake and Melville (1970 : 57) to vary the neotype for *Echinocorys scutata* Leske designated by Wind (1959 : 124). A neotype is certainly necessary in this case (Art. 75(a)(i)) but Wind's designation contravenes Art. 75(c)(4) and (5), as is made clear by Peake and Melville in their application.

ECHINOCORYS SCUTATA: REPLY TO DR. SABROSKY. Z.N.(S.) 1903

By R. V. Melville

The points raised by Dr. Sabrosky and Mr. Wright deserve consideration and were indeed considered before our application was submitted. Let me try to explain why we decided that our appliction was justified.

Klein's work was published before geology became a science (and was the more remarkable in its time for so clearly establishing a common classification for the living and fossil echinoids). Even in Leske's day (1778), the science had not greatly advanced and the notion of "strata identified by organized fossils" had still to be clearly perceived and propounded. It is evident from Klein's figure that he was dealing with a Chalk fossil (there were no names for geological formations for him to cite) and he himself cited the locality as "Anglia" (England). Apart from this he gave no factual information on the provenance of his specimen; and Wind's neotype is consistent with such information as Klein gave.

In paragraph 6 of our application we draw reasonable inferences from an old tradition cited by Lambert (in connection with another species; there is no reason why Wind should have known of this reference) and from the appearance of Klein's figure. These latter details would not be obvious to those not familiar with the Chalk of Kent; and an author can hardly be criticized for not taking them into account when designating a neotype, though we think it is desirable to do so.

Dr. Sabrosky seems to have overlooked the reasons given in our paragraph 4 for designating a neotype in this case. The various forms of *Echinocorys* are useful indices of horizon in the Chalk and it is convenient to be able to refer to them by name. Work now in progress aims to replace an old iconographic taxonomy by one based on precise stratigraphy, carefully designed statistical studies and attention to the types of the existing nominal species. It is an obvious first step to ensure that the type-species of the genus is based on a type-specimen that is consistent with established usage. It is because Wind's neotype fails to meet this requirement that we wish to see it replaced; and it is because his neotype can be said to meet the requirements of Article 75 in being consistent with the factual information provided by Klein that we consider our application to be necessary.

It may be added that the Chalk is a formation of considerable economic importance, both as an industrial raw material and as a source of underground water. The identification and correlation of precise horizons in the Chalk is therefore of interest to geologists and engineers as well as to palaeozoologists.

COMMENT ON THE REQUESTED SUPPRESSION OF *AMETISTINA* SCHINZ, 1825. Z.N.(S.) 1894

By W. O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*)

I wish to support the application of A. G. Beu (*Bull. zool. Nomencl.* **27** : 44–46) for a suppression of *Ametistina* Schinz, but wonder if a painless removal of the taxon from molluscan literature could not be achieved by simply considering *Ametistina* as a replacement name for *Janthina*. From the mode of erection by Schinz, i.e. "Ametistina Lam. Janthina" (which could mean "*Ametistina* for Lamarck's *Janthina*"), it could be inferred that *Ametistina* was erected as a substitute name for *Janthina* Lamarck (=Röding), without being expressly proposed as a replacement name.

Should we acknowledge *Ametistina* as a replacement name for *Janthina*, then both genera would have the same type-species (Art. 67(i)), and *Ametistina* would be disposed of as an objective synonym of *Janthina* without a suppression.

COMMENTS ON THE PROPOSED DESIGNATION OF A TYPE-SPECIES FOR *PHIDIPPUS* KOCH, 1846. Z.N.(S.) 1904

By Joseph A. Beatty (*Department of Zoology, Southern Illinois University, Carbondale, Illinois* 62901, *U.S.A.*)

A. The first sentence contains a statement so worded as to be almost certainly an error. The spider now usually referred to as *Phidippus audax* (Hentz) is one of the most familiar American spiders, and one of the most frequently cited in general biological literature, but the probability that it is the most common North American jumping spider is effectively zero.

B. The use of names by ecologists and, especially, by textbook writers should not be permitted to influence decisions on nomenclature. The perpetuation of errors by such authors, long after they have been corrected by specialists, indicates that ecologists and textbook writers are generally willing to use the first name they locate for a given organism, and unwilling to take time to make sure it is the correct name. (This should not be interpreted as strong censure of non-specialist authors. Their time is, after all, limited.)

C. No type specimen is available for either *Salticus variegatus* Lucas or *Attus audax* Hentz. It appears to me that nothing is gained by changing the type-species of the genus from one old and poorly described species to another even more poorly described, unless type material exists. If the type-species of the genus is to be changed at all, I recommend selection of a name for which types (or a type) are available.

D. The taxonomy of the jumping spiders (Salticidae) is in a highly confused state at present. It is certain that new revisions using current standards will result, unavoidably, in wholesale changes in nomenclature. (See R. D. Barnes, 1958, *American Museum Novitates* No. 1867). The genera of the family are oversplit, and based largely on unrealistic characters. Workers in different parts of the world have ignored or been unfamiliar with each others' work.

Under such circumstances it seems unwise to make changes in the nomenclature piecemeal, by action of the I.C.Z.N. Further research may demonstrate that the change proposed in this application is unnecessary or undesirable. Rather, the nomenclatural changes should await a critical re-examination of most or all the genera of the family, and a lumping and re-definition of these genera on more reasonable bases. A series of recent papers by Miss M. E. Galiano provides a good beginning toward this task. (See: *Rev. Soc. Ent. Arg.*, 1965; *Rev. Mus. Arg. Cien. Nat. Ent.*, 1965; etc.) Unless this overall study is made first, any nomenclatural decision reached during the next several years will have a high probability of being rejected later.

My opinion, in summary, is that this application contains an unwise provision (proposal of *Attus audax* Hentz as type of the genus *Phidippus*), and is, in any case, premature. My recommendation is that it be laid on the table, without prejudice, for possible reconsideration later, when more of the necessary reassessment of the genera of salticids has been completed.

By Robin Leech (*Entomology Department, University of Alberta, Edmonton, Alberta, Canada*)

As the type of *Attus auxax* Hentz, 1845, is destroyed (Levi, *in litt.*, November 16, 1970), I do not see that any stability is established by suppressing the apparently senior synonym name *Salticus variegatus* Lucas, 1833, especially when and as it is the type-species for the generic name *Phidippus*.

OPINION 940

GELASIMUS MACRODACTYLUS H. MILNE EDWARDS & LUCAS, 1843 (CRUSTACEA, DECAPODA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *macrodactylus* H. Milne Edwards & Lucas, 1843, as published in the binomen *Gelasimus macrodactylus*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *macrodactylus* H. Milne Edwards & Lucas, 1843, as published in the binomen *Gelasimus macrodactylus* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 953.

HISTORY OF THE CASE (Z.N.(S.) 1835)

The present case was submitted to the office of the Commission by Dr. H. O. v. Hagen and Dr. L. B. Holthuis in December 1967. The application was sent to the printed on 15 February 1968 and was published on 24 May 1968 in *Bull. zool. Nomencl.* **25** : 60–61. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to one specialist serial. No comment was received.

DECISION OF THE COMMISSION

On 28 January 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)4 either for or against the proposal set out in *Bull. zool. Nomencl.* **25** : 61. At the close of the prescribed voting period on 28 April 1970 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Lemche, Holthuis, Bonnet, Vokes, Evans, Jaczewski, Eisenmann, Munroe, Tortonese, Obruchev, do Amaral, Melville, Mayr, Simpson, Binder, Ride, Brinck, Starobogatov, Forest, Kraus, Alvarado, Mertens.

Negative votes—one (1): Sabrosky.

The following comment was made by Commissioner Sabrosky in returning his negative vote: "The name is clearly a *nomen dubium*, and can be disregarded. Plenary power action is not needed, and it is unnecessary to bother the Commission with such cases."

Original Reference

The following is the original reference for the name placed on the Official Index by the Ruling given in the present Opinion:

macrodactylus, *Gelasimus*, H. Milne Edwards & Lucas, 1843, *in* d'Orbigny, *Voy. Amér. Mérid.* **6** : 27

CERTIFICATE

I certify that the votes cast on Voting Paper (70)4 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 940.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
6 *July* 1970

OPINION 941

PINUCA HUPÉ, 1854 (ECHIUROIDEA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Pinuca* Hupé, 1854, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Pinuca* Hupé, 1854 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1987.

(3) The family-group name PINUCIDAE Amor, 1965 (type-genus *Pinuca* Hupé, 1854) (invalid because the name of its type-genus has been suppressed under the plenary powers) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 455.

(4) The generic name *Urechis* Seitz, 1907 (gender : masculine), type-species, by original designation, *Echiurus chilensis* Diesing, 1859, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1933.

(5) The specific name *chilensis* Diesing, 1859, as published in the binomen *Echiurus chilensis* (type-species of *Urechis* Seitz, 1907) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2427.

(6) The family-group name URECHIDAE Fisher & MacGinitie, 1928 (type-genus *Urechis* Seitz, 1907) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 458.

HISTORY OF THE CASE (Z.N.(S.) 1836)

The present application was submitted to the office of the Commission by Dr. Meredith L. Jones, Dr. Joel Hedgpeth and Prof. Cadet Hand in December 1967. The application was sent to the printer on 15 February 1968 and was published on 27 September 1968 in *Bull. zool. Nomencl.* **25** : 100–102. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). The proposals were supported by Dr. S. J. Edmonds, Prof. Donald P. Abbot, Prof. James N. Cather, Prof. A. R. Fontaine, Dr. P. K. B. Menon, Dr. Larry C. Ogelsby and Dr. Edward B. Cutler.

DECISION OF THE COMMISSION

On 28 January 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)6 either for or against the proposals set out in *Bull. zool. Nomencl.* **25** : 101. At the close of the prescribed voting period on 28 April 1970 the state of the voting was as follows:

Affirmative votes—twenty-three (23), received in the following order: China, Lemche, Holthuis, Bonnet, Vokes, Eisenmann, Evans, Jaczewski, Munroe, Tortonese, Obruchev, do Amaral, Melville, Mayr, Simpson, Binder, Ride, Brinck, Starobogatov, Forest, Kraus, Alvarado, Mertens.

Negative votes—one (1): Sabrosky.

The following comments were made by Commissioners in returning their votes:

Dr. C. W. Sabrosky (20.ii.70): "Another case of a name that can be considered a *nomen dubium*, with no action needed."

Dr. W. D. L. Ride (13.iv.70): "I would also have supported an application for the suppression of *Pinuca edulis* unless the author preferred to make a case for its stabilization through neotype selection. I would hope that he will now proceed to do this."

Original References

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

chilensis, *Echiurus*, Diesing, 1859, *SitzBer. Kais. Akad. Wiss. Wien* **37** : 778

Pinuca Hupé, 1854, *in* Gay, *Hist. Chile* (Zool.) **8** : 475

PINUCIDAE Amor, 1965, *Physis* **25** : 165

URECHIDAE Fisher & MacGinitie, 1928, *Ann. Mag. nat. Hist.* (10) **1** : 200

Urechis Seitz, 1907, *Zool. Jahrb., Abt. Anat.* **24** : 323

CERTIFICATE

I certify that the votes cast on Voting Paper (70)6 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 941.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
8 *July* 1970

OPINION 942

OLIGOLOPHUS C. KOCH, 1872 (ARACHNIDA): DESIGNATION OF A TYPE-SPECIES UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers all designations of type-species for the genus *Oligolophus* C. Koch, 1872, made prior to the present Ruling are hereby set aside, and the nominal species *Opilio tridens* C. L. Koch, 1836, is hereby designated to be the type-species of that genus.

(2) The generic name *Oligolophus* C. Koch, 1872 (gender : masculine), type-species, by designation under the plenary powers in (1) above, *Opilio tridens* C. L. Koch, 1836, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1934.

(3) The specific name *tridens* C. L. Koch, 1836, as published in the binomen *Opilio tridens* (type-species of *Oligolophus* C. Koch, 1872) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2428.

(4) The family-group name OLIGOLOPHINAE Banks, 1893 (type-genus *Oligolophus* C. Koch, 1872) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 459.

HISTORY OF THE CASE (Z.N.(S.) 1838)

The present case was submitted to the office of the Commission by Dr. Wojciech Staręga in February 1968. Dr. Staręga's application was sent to the printer on 15 February 1968 and was published on 27 September 1968 in *Bull. zool. Nomencl.* **25** : 103–104. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art 12b; *Bull. zool. Nomencl.* **21** : 184). No comment was received.

DECISION OF THE COMMISSION

On 28 January 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)7 either for or against the proposal set out in *Bull. zool. Nomencl.* **25** : 103–104. At the close of the prescribed voting period on 28 April 1970 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Lemche, Holthuis, Bonnet, Vokes, Eisenmann, Evans, Jaczewski, Munroe, Tortonese, Obruchev, do Amaral, Melville, Mayr, Binder, Ride, Brinck, Starobogatov, Forest, Kraus, Alvarado, Mertens.

Negative votes—two (2): Sabrosky, Simpson.

Original References

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

OLIGOLOPHINAE Banks, 1893, *Canad. Ent.* **25** : 207

Oligolophus C. Koch, 1872, *Ber. Offenb. Ver. Naturk.* **12** : 63–64

tridens, *Opilio*, C. L. Koch, 1836, *Die Arachniden* **3** : 14–15, pl. 78, figs. 173, 173a.

CERTIFICATE

I certify that the votes cast on Voting Paper (70)7 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 943.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
9 *July* 1970

OPINION 943

CALIGUS APPENDICULATUS F. MÜLLER, 1852 (CRUSTACEA, COPEPODA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *appendiculatus* F. Müller, 1852, as published in the binomen *Caligus appendiculatus*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The specific name *lacustris* Steenstrup & Lütken, 1861, as published in the binomen *Caligus lacustris*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2429.

(3) The specific name *appendiculatus* F. Müller, 1852, as published in binomen *Caligus appendiculatus* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 954.

HISTORY OF THE CASE (Z.N.(S.) 1839)

The present case was submitted to the office of the Commission by Dr. Robert R. Parker in March 1968. Dr. Parker's application was sent to the printer on 13 May 1968 and was published on 27 September 1968 in *Bull. zool. Nomencl.* **25** : 105–106. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to one specialist serial. The proposals were supported by Dr. Jan H. Stock and Dr. G. C. Hewitt, as well as by those mentioned in the last paragraph of Dr. Parker's application.

DECISION OF THE COMMISSION

On 28 January 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)8 either for or against the proposals set out in *Bull. zool. Nomencl.* **25** : 105–106. At the close of the prescribed voting period on 28 April 1970 the state of the voting was as follows:

Affirmative votes—twenty-two (22), received in the following order: China, Lemche, Holthuis, Bonnet, Vokes, Eisenmann, Evans, Munroe, Tortonese, Obruchev, Melville, Mayr, Simpson, Jaczewski, Binder, Ride, Brinck, Starobogatov, Forest, Kraus, Alvarado, Mertens.

Negative votes—two (2): do Amaral, Sabrosky.

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

appendiculatus, *Caligus*, F. Müller, 1852, *Arch. Natugesch.* **18** (1) : 92

lacustris, *Caligus*, Steenstrup & Lütken, 1861, *Skr. K. Danske Vidensk. Selsk.* (5) **5** : 15

CERTIFICATE

I certify that the votes cast on Voting Paper (70)8 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 944.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
13 *July* 1970

OPINION 944

GIRAFFA CAMELOPARDALIS RETICULATA DE WINTON, 1899 (MAMMALIA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *reticulata* Weinland, 1863, as published in the combination *Camelopardalis giraffa* var. *reticulata*, is hereby suppressed for the purposes both of the Law of Priority and the Law of Homonymy.

(2) The specific name *reticula* de Winton, 1899, as published in the combination *Giraffa camelopardalis reticulata*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2430.

(3) The specific name *reticulata* Weinland, 1863, as published in the combination *Camelopardalis giraffa* var. *reticulata* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 955.

HISTORY OF THE CASE (Z.N.(S.) 1841)

The present case was submitted to the office of the Commission by Professor Robert Mertens in March 1968. Professor Mertens's application was sent to the printer on 13 May 1968 and was published on 27 September 1968 in *Bull. zool. Nomencl.* **25** : 113. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials. The proposals were supported by Dr. Anne I. Dagg.

DECISION OF THE COMMISSION

On 9 April 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)10 either for or against the proposals set out in *Bull. zool. Nomencl.* **25** : 113. At the close of the prescribed voting period on 9 July 1970 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: Holthuis, Vokes, Bonnet, Lemche, Simpson, Mayr, Jaczewski, Tortonese, Eisenmann, Sabrosky, Evans, Brinck, Mertens, Starobogatov, Binder, Melville, Alvarado, Kraus, Ride.

Negative votes—none (0).

Voting Papers not returned—three (3): do Amaral, Forest, Munroe.

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

reticulata, *Camelopardalis giraffa* var., Weinland, 1863, *Zool. Gart.* **4** : 205

reticulata, *Giraffa camelopardalis*, de Winton, 1899, *Ann. Mag. nat. Hist.* (7) **4** : 212

SPECIAL NOTICE

The strike of the British postal workers, which lasted from 19 January 1971 to 7 March 1971 inclusive, prevented the Commission's office from carrying out its normal functions. The situation did not, however, amount to a State of Emergency in the terms of the Constitution, Article 15 (*Bull. zool. Nomencl.* **21** : 185). Nevertheless, during the period of the strike, no publications were issued, nor were any Declarations or Opinions rendered on behalf of the Commission.

The voting period on the three-month voting papers VP (70) 33–41 ended on 29 January 1971. Six votes on these cases were still outstanding at the beginning of the strike, and are still awaited at the time of writing. It has therefore been decided to extend the voting period on these cases to 31 March 1971, to allow a reasonable period for mail delayed by the strike to reach the Commission's office: but only those votes signed by Commissioners before 29 January 1971 will be considered as valid.

In addition, the earlier delay in the publication of Parts 3/4 of Vol. 27 makes it necessary to extend the period for the nomination of new members for election to the Commission. This period is now extended to 31 July 1971.

Leiden
15 *March* 1971

L. B. HOLTHUIS
Acting President
International Commission on
Zoological Nomenclature

CERTIFICATE

I certify that the votes cast on Voting Paper (70)10 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 945.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
7 *October* 1970

OPINION 945

SCIURUS EBII PEL, 1851 (MAMMALIA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers:

(a) the specific name *ebii* Pel, 1851, as published in the binomen *Sciurus ebii*, is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy;

(b) the emendation to *erythropus* of the specific name *erythopus* (*Sciurus*) Geoffroy, 1803, is hereby validated.

(2) The following specific names are herby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *ebii* Temminck, 1853, as published in the binomen *Sciurus ebii* (Name No. 2431);

(b) *erythropus* E. Geoffroy, 1803, as published in the binomen *Sciurus erythopus* (sic) (Name No. 2432).

(3) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *erythopus* E. Geoffroy, 1803, as published in the binomen *Sciurus erythopus* (Ruled under the plenary powers in (1) (b) above to be an incorrect original spelling for *erythropus*) (Name No. 956);

(b) *ebii* Pel, 1851, as published in the binomen *Sciurus ebii* (as suppressed under the plenary powers in (1) (a) above) (Name No. 957).

HISTORY OF THE CASE (Z.N.(S.) 1846)

The present case was submitted to the office of the Commission by Dr. A. M. Husson and Dr. L. B. Holthuis in May 1968. The application was sent to the printer on 13 May 1968 and was published on 27 September 1968 in *Bull. zool. Nomencl.* **25** : 125–127. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials. No comment was received.

DECISION OF THE COMMISSION

On 9 April 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (7)12 either for or against the proposal set out in *Bull. zool. Nomencl.* **25** : 126–127. At the close of the prescribed Voting Period on 9 July 1970 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: Holthuis, Vokes, Bonnet, Lemche, Simpson, Jaczewski, Mayr, Tortonese, Eisenmann, Sabrosky, Brinck, Evans, Mertens, Starobogatov, Binder, Melville, Alvarado, Kraus, Ride.

Negative votes—none (0).

Voting Papers not returned—three (3): do Amaral, Forest, Munroe.

ORIGINAL REFERENCES

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

ebii, Sciurus, Pel, 1851, *Nederl. Tijdschr. Jagtkunde* **1** : 161

ebii, Sciurus, Temminck, 1853, *Esquisses zool. côte Guinée :* 129

erythopus, Sciurus, E. Geoffroy, 1803, an incorrect original spelling for *erythropus* q.v.

erythropus, Sciurus, E. Geoffroy, 1803, *Cat. Mammif. Mus. nat. Hist. nat.,* Paris : 178

CERTIFICATE

I certify that the votes cast on Voting Paper (70)12 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 946.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
8 *October* 1970

OPINION 946

LUDWIG (R.), 1865–66, "CORALLEN AUS PALÄOLITHISCHEN FORMATIONEN" (*PALAEONTOGRAPHICA* **14**): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the paper by R. Ludwig, 1865–1866, "Corallen aus Paläolithischen Formationen" published in *Palaeontographica* **14** : 133–244 is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The following work is hereby placed on the Official Index of Rejected and Invalid Works in Zoological Nomenclature with the Title Number 79:

LUDWIG, R. 1865–1866. "Corallen aus Paläolithischen Formationen", *Palaeontographica* **14** : 133–244, pls. 31–72 (as suppressed under the plenary powers in (1) above).

HISTORY OF THE CASE (Z.N.(S.) 495)

The present case was submitted to the office of the Commission by Dr. Colin T. Scrutton in July 1968. Dr. Scrutton's paper was sent to the printer on 29 August 1968 and was published on 17 January 1969 in *Bull. zool. Nomencl.* **25** : 156–161. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two palaeontological serials. The proposals were supported by Dr. A. E. H. Pedder.

DECISION OF THE COMMISSION

On 9 April 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)13 either for or against the proposal set out in *Bull. zool. Nomencl.* **25** : 158. At the close of the prescribed voting period on 9 July 1970 the state of the voting was as follows:

Affirmative votes—nineteen (19), received in the following order: Holthuis, Vokes, Bonnet, Lemche, Simpson, Mayr, Jaczewski, Tortonese, Eisenmann, Sabrosky, Brinck, Evans, Mertens, Starobogatov, Binder, Melville, Alvarado, Kraus, Ride.

Negative votes—none (0).

Voting Papers not returned—three (3): do Amaral, Forest, Munroe.

CERTIFICATE

I certify that the votes cast on Voting Paper (70)13 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 947.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
8 *October* 1970

OPINION 947

PROTOMOMYS TEILHARD DE CHARDIN, 1927 (MAMMALIA): SUPPRESSED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the generic name *Protomomys* Teilhard de Chardin, 1927, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Protomomys* Teilhard de Chardin, 1927 (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 1988.

HISTORY OF THE CASE (Z.N.(S.) 1847)

The present case was submitted to the office of the Commission by Drs. M. C. McKenna, Donald E. Russell and D. E. Savage in May 1968. The application was sent to the printer on 29 August 1968 and was published on 17 January 1969 in *Bull. zool. Nomencl.* **25** : 165. Public Notice of the possible use of the plenary powers was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials. No comment was received.

DECISION OF THE COMMISSION

On 9 April 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)14 either for or against the proposals set out in *Bull. zool. Nomencl.* **25** : 165. At the close of the prescribed voting period on 9 July 1970 the state of the voting was as follows:

Affirmative votes—sixteen (16), received in the following order: Holthuis, Vokes, Bonnet, Simpson, Mayr, Jaczewski, Tortonese, Eisenmann, Evans, Brinck, Mertens, Binder, Melville, Alvarado, Kraus, Ride.

Negative votes—three (3): Lemche, Sabrosky, Starobogatov.

Voting Papers not returned—three (3): do Amaral, Forest, Munroe.

The following comments were made by Commissioners in returning votes:

Dr. L. B. Holthuis (16.iv.70): "The authors should have made clearer how commonly the name *Teilhardina* has been used. 'Exclusively used' may actually be only once or twice."

Dr. H. Lemche (23.iv.70): "No necessity for setting aside priority in this case has been demonstrated by the applicants."

Dr. C. W. Sabrosky (8.vi.70): "Though granting that the proposal of *Protomomys* was anything but admirable, I am opposed in principle to use of plenary powers for such recent names."

Prof. P. Brinck (17.vi.70): "It is a pity that the applicants do not say what they mean by *Teilhardina belgica* 'has been accepted and exclusively used'. A few times only? Is any confusion raised by accepting *Protomomys*?"

ORIGINAL REFERENCE

The following is the original reference for the name placed on the Official Index by the Ruling given in the present Opinion:

Protomomys Teilhard de Chardin, 1927, *Mém. Mus. roy. Hist. nat. Belg.* **36** : 16

CERTIFICATE

I certify that the votes cast on Voting Paper (70)14 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 948.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
8 *October* 1970

OPINION 948

TELLINA OBLIQUA J. SOWERBY, 1817 (BIVALVIA): VALIDATED UNDER THE PLENARY POWERS

RULING.—(1) Under the plenary powers the specific name *obliqua* Wood, 1815, as published in the binomen *Tellina obliqua*, is hereby suppressed for the purposes both of the Law of Priority and the Law of Homonymy.

(2) The specific name *obliqua* J. Sowerby, 1817, as published in the binomen *Tellina obliqua*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2433.

(3) The specific name *obliqua* Wood, 1815, as published in the binomen *Tellina obliqua* (as suppressed under the plenary powers in (1) above) is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 958.

HISTORY OF THE CASE (Z.N.(S.) 1849)

The present case was submitted to the office of the Commission by Mr. Eugene V. Coan and Mr. D. L. F. Sealy in May 1968. The application was sent to the printer on 29 August 1969 and was published on 17 January 1969 in *Bull. zool. Nomencl.* **25** : 166. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184) and to two specialist serials. No comment was received.

DECISION OF THE COMMISSION

On 9 April 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)15 either for or against the proposal set out in *Bull. zool. Nomencl.* **25** : 166. At the close of the prescribed voting period on 9 July 1970 the state of the voting was as follows:

Affirmative votes—eighteen (18), received in the following order: Holthuis, Vokes, Bonnet, Lemche, Simpson, Jaczewski, Mayr, Tortonese, Eisenmann, Sabrosky, Evans, Brinck, Mertens, Binder, Melville, Alvarado, Kraus, Ride.

Negative votes—one (1): Starobogatov.

Voting Papers not returned—three (3): do Amaral, Forest, Munroe.

In returning his vote Dr. Holthuis made the following comment: "A little more information on the present status and universality of the use of the specific name *T. obliqua* of Sowerby would not have been superfluous."

Original References

The following are the original references for names placed on the Official List and Index by the Ruling given in the present Opinion:

obliqua, *Tellina*, J. Sowerby, 1817, *Min. Conch.* **2** (28) : 137–8, pl. 161, fig. 1

obliqua, *Tellina*, Wood, 1815, *Gen. Conch.* **1** : 152, pl. 41, figs. 4, 5

CERTIFICATE

I certify that the votes cast on Voting Paper (70)15 were cast as set out above, that the proposal contained in the Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 949.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
8 *October* 1970

OPINION 949

CELLARIA ELLIS & SOLANDER, 1786 (BRYOZOA): USE OF THE PLENARY POWERS TO STABILIZE THE GENERIC NAME AND THREE SPECIES

RULING:—(1) Under the plenary powers:

(a) all type material for the nominal species *Eschara fistulosa* Linnaeus, 1758, is hereby set aside and the specimen described by J. S. Ryland 1968 (*Bull. zool. Nomencl.* **24** : 347, footnote) is hereby designated to be neotype of that species;

(b) all type material for the nominal species *Cellularia salicornia* Pallas, 1766, is hereby set aside and the specimen described by J. S. Ryland 1968 (*Bull. zool. Nomencl.* **24** : 347, footnote) is hereby designated to be neotype of that species;

(c) all type material for the nominal species *Cellaria salicornioides* Lamouroux, 1816, is hereby set aside and the specimen described by J. S. Ryland 1968 (*Bull. zool. Nomencl.* **24** : 349, footnote) is hereby designated to be neotype of that species;

(d) the specific name *farciminoides* Ellis & Solander, 1786, as published in the binomen *Cellaria farciminoides*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(e) all designations of type-species for the nominal genus *Cellaria* Ellis & Solander, 1786, are hereby set aside, and the nominal species *Farcimia sinuosa* Hassall, 1840, is hereby designated to be type-species of that genus.

(2) The generic name *Cellaria* Ellis & Solander, 1786 (gender : feminine), type-species, by designation under the plenary powers in (1) (e) above, *Farcimia sinuosa* Hassall, 1840, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 1935.

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

(a) *fistulosa* Linnaeus, 1758, as published in the binomen *Eschara fistulosa*, as defined by the neotype designated under the plenary powers in (1) (a) above (Name No. 2434);

(b) *salicornioides* Lamouroux, 1816, as published in the binomen *Cellaria salicornioides*, as defined by the neotype designated under the plenary powers in (1) (c) above (Name No. 2435);

(c) *sinuosa* Hassall, 1840, as published in the binomen *Farcimia sinuosa* (type-species of *Cellaria* Ellis & Solander, 1786) (Name No. 2436).

(4) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *farciminoides* Ellis & Solander, 1786, as published in the binomen *Cellaria farciminoides* (as suppressed under the plenary powers in (1) (d) above) (Name No. 959);

(b) *salicornia* Pallas, 1766, as published in the binomen *Cellularia salicornia* (by the neotype designation made under the plenary powers in (1) (b) above, a junior objective synonym of *Eschara fistulosa* Linnaeus, 1758) (Name No. 960).

HISTORY OF THE CASE (Z.N.(S.) 1814)

The present case was submitted to the office of the Commission by Dr. J. S. Ryland in July 1967. After some emendation Dr. Ryland's paper was sent to the printer on 7 November 1967 and was published on 18 January 1968 in *Bull. zool. Nomencl.* **24** : 344–352. Public Notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* **21** : 184). Dr. Anna Hastings commented that she favoured adoption of Dr. Ryland's proposals 4 and 6.

DECISION OF THE COMMISSION

On 9 April 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70)17 on the proposals set out in *Bull. zool. Nomencl.* **24** : 350–352. The Voting Paper was divided into three parts: in Part 1 Commissioners were invited to vote either for or against the use of the plenary powers in the present case; in Part 2 alternative proposals 1–4 were presented and in Part 3 alternative proposals 5 and 6. At the close of the prescribed voting period on 9 July 1970 the state of the voting was as follows:

Part 1. Affirmative votes—eighteen (18), received in the following order: Holthuis, Bonnet, Vokes, Lemche, Jaczewski, Mayr, Tortonese, Eisenmann, Sabrosky, Evans, Brinck, Mertens, Starobogatov, Binder, Melville, Alvarado, Kraus, Ride.

Negative votes—one (1): Simpson.

Part 2. For alternative 1—none (0).

For Alternative 2—two (2): Starobogatov, Alvarado.

For Alternative 3—four (4): Holthuis, Bonnet, Eisenmann, Sabrosky.

For Alternative 4—twelve (12): Vokes, Lemche, Jaczewski, Mayr,* Tortonese, Evans, Brinck, Mertens, Binder, Melville, Kraus, Ride.

Part 3. For Alternative 5—none (0).

For Alternative 6—seventeen (17): Bonnet, Vokes, Lemche, Jaczewski, Mayr,* Tortonese, Eisenmann, Sabrosky, Evans, Brinck, Mertens, Starobogatov, Binder, Melville, Alvarado, Kraus, Ride.

Voting Papers not returned—three (3): do Amaral, Forest, Munroe.

The following comments were made by Commissioners in returning their votes:

Dr. C. W. Sabrosky (8.vi.70): "A situation that is confused by names used ambiguously or diversely would best be clarified by complete removal of those names. Unfortunately, in the present case, such a course of action would remove all relevant names! If one followed the true facts, always a defensible course, in theory at least, one would have *fistulosa* for the Larger Bugle Coralline, with synonyms *salicornia* and *farciminoides*, but one would be left without a

* Prof. Mayr requested that he be counted with the majority.

name for the Smaller, hardly a satisfactory solution. Inasmuch as *sinuosa* is the only name completely free of ambiguity or mixed usage, a choice that adopts it is desirable. I choose alternative 3 as more desirable than 4 because the latter uses *fistulosa* in a way contrary to the original."

Dr. O. Kraus (9.vii.70): "Dr. Ryland has studied the case very carefully, especially the work of early authors. But I think that an application should not only be an analysis of the situation together with a list of possible solutions. After careful discussion with other specialists etc. in the field concerned an application normally should present only one proposal, which is the preferable one from the point of view of usage and stability (or at most two alternatives, when the arguments for two solutions seem to be equal)."

Original References

The following are the original references for names placed on Official Lists and Index by the Ruling given in the present Opinion:

Cellaria Ellis & Solander, 1786, *Nat. Hist. Zoophytes* : 18

farciminoides, *Cellaria*, Ellis & Solander, 1786, *Nat. Hist. Zoophytes* : 26

fistulosa, *Eschara*, Linnaeus, 1758, *Syst. Nat.* (ed. 10) **1** : 804

salicornia, *Cellularia*, Pallas, 1766, *Elench. zooph.* : 61

salicornioides, *Cellaria*, Lamouroux, 1816, *Hist. Poly. corall. flex.* : 127

sinuosa, *Farcimia*, Hassall, 1840, *Ann. Mag. nat. Hist.* **6** : 172

CERTIFICATE

I certify that the votes cast on Voting Paper (70)17 were cast as set out above, that of the proposals contained in that Voting Paper Alternatives 4 and 6 have been adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 950.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
12 *October* 1970

THE TYPE-SPECIES OF *SIPHONA* MEIGEN, 1803, AND *HAEMATOBIA* LEPELETIER AND SERVILLE, 1828 (INSECTA : DIPTERA). Z.N.(S.) 195

By Curtis W. Sabrosky (*Systematic Entomology Laboratory, U.S. Dept. of Agriculture, c/o U.S. National Museum, Washington, D.C.* 20560)

The present case of a misidentified type-species, presented under Article 70a of the International Code of Zoological Nomenclature, involves names of important genera and tribes in two families of flies, the Tachinidae and Muscidae.

(A) *Siphona* Meigen

2. The generic name *Siphona* Meigen (1803) is currently being used in two different families of the order Diptera, in the parasitic family Tachinidae for a large and cosmopolitan genus of small flies, and in the Muscidae, at least by some authors, for an important genus of bloodsucking flies that includes the horn fly, the buffalo fly of Australia, and their relatives. *Siphona* clearly and admittedly was based on a misidentified type-species. The present application is intended to settle that issue and to resolve the confusion of such divergent usage.

3. An earlier name of slight usage, *Crocuta* Meigen (1800), has been removed from consideration by the Commission's Opinion 678 (1963), which suppressed Meigen's 1800 pamphlet.

4. *Siphona* Meigen (1803 : 281) was published with a brief description that contained two salient features, a bare antennal arista ("mit einer nakkten Borste an der Wurzel") and a geniculate proboscis ("Der Rüssel wagerecht, vorgestrekkt, gebrochen"). One species was included, cited as "*Stomoxys irritans* Fabr.". Fabricius never proposed such a name, however, nor did he claim it. Under *Stomoxys irritans* he cited *Conops irritans* Linnaeus.

5. The nominal type-species has been interpreted in two different ways, each unlike what Meigen actually had before him: (1) As true *irritans* Linnaeus, of which *irritans* of Fabricius was a misidentification, and (2) as *Stomoxys stimulans* Meigen (1824), which according to Meigen (1824) was the species that Fabricius really had. However, both *irritans* of Linnaeus and that of Fabricius are unquestionably not what Meigen described as *irritans* in his new genus *Siphona*; rather they have long rays or side hairs on one or both sides of the arista and a straight porrect proboscis, characters in direct conflict with Meigen's description. Thus in this case we are dealing with Meigen's misidentification of Fabricius' misidentification of the Linnaean species! Meigen himself early recognized the errors and corrected them (1824 : 155, 161–2). Using the generic name *Stomoxys* (now confined to the stable fly, *S. calcitrans*, and its relatives, and not part of the present problem), Meigen recognized true *irritans* Linnaeus (the common and widespread pest known in English as the horn fly), described the Fabrician "*irritans*" as *Stomoxys stimulans*, and recognized the small fly with geniculate proboscis as *Siphona geniculata* (De Geer), now in the family Tachinidae. These specific assignments have been followed to the present time. Coquillett (1910 : 606) presumed that Meigen's "*Stomoxys*

irritans Fabr." was in reality a lapsus for *Stomoxys minuta* Fabricius, a small tachinid synonymized by Meigen (1824 : 155) under *Siphona geniculata*, but unfortunately for that assumption *minuta* was not described until 1805, two years after Meigen's mention of "*irritans* Fabr." under *Siphona*.

6. Clearly, Meigen (1803) actually had before him the small tachinid when he described *Siphona*, and I propose that this tachinid be designated under the plenary powers as type-species of *Siphona*. This designation would resolve the confusion of the family position of *Siphona*, would remove the name from consideration in the family Muscidae, and would confirm the wide usage of *Siphona* and Siphonini in the family Tachinidae.

(B) *Haematobia* Lepeletier and Serville

7. *Haematobia* Lepeletier and Serville (1828 : 499), one of the most commonly used names for the horn fly and its relatives, has also been interpreted in different ways, and thus in some classifications used for different genera or subgenera. Obviously it is desirable to clear up this confusion and give taxonomists a clearcut answer. Unlike *Siphona*, the various alternatives are in the same family, subfamily, and tribe: Muscidae, Stomoxyinae, and Haematobiini.

8. *Haematobia* was proposed for two species, *Stomoxys stimulans* Meigen and *S. irritans* (Linnaeus). The earliest type designation was by Westwood (1840 : 140) as "*S. irritans L.*", and this designation has been accepted by Coquillett (1910), Hennig (1964), Huckett (1965), and Bequaert, Malloch, and other authors on the Muscidae. However, two facts cloud the case, and these should be clarified.

(a) Westwood cited the genus as "*Haematobia* Desv.", and some authors have argued that he designated a type-species for *Haematobia* of Robineau-Desvoidy but not for *Haematobia* Lepeletier and Serville. It is now clear under Article 67g that Westwood (1840) is to be interpreted as designating a type-species for the latter even though he cited the wrong author and date. Incidentally, Lepeletier and Serville (1828) also cited "*Haematobia* Robin. *ined.*" when they published the name, but Robineau-Desvoidy's work on the higher Diptera did not appear until 1830.

(b) After "*S. irritans* L.", Westwood cited "Meig. t. 38, f. 8", which is a figure of the other originally included species, *stimulans*. Some authors (e.g., van Emden, 1965) have maintained that this made Westwood's designation ambiguous and therefore invalid. Such authors have preferred to follow Bezzi's designation (1911 : 126) of *stimulans* Meigen as the type-species of *Haematobia*. However, Westwood apparently merely cited Meigen's figure as a published illustration of the genus and its habitus, as he frequently did for the genera included in his Synopsis. The fact remains that he did cite one name and one name only as the type-species, *irritans* Linnaeus, and I believe that this must be accepted as the valid designation. Furthermore, under Article 69a.iii: "In the absence of a prior valid type-designation for a nominal genus, an author is considered to have designated one of the originally included nominal species as type-species, if he states that it is the type (or type-species), for whatever reason, right or wrong, and if it is clear that he himself accepts it as the type-species." Coquillett (1910 : 549) fits this provision perfectly; he

accepted Westwood's designation, and if the latter were considered invalid, then Coquillett's would be the next one eligible, antedating that of Bezzi (1912).

9. I believe that Westwood's 1840 designation of *irritans* Linnaeus as type-species of *Haematobia* is the valid one, rigidly construed, but because of the published differences of opinion, a formal decision is needed. I propose that Westwood's designation of *Conops irritans* Linnaeus as type-species of *Haematobia* Lepeletier and Serville (1828) be confirmed by the Commission.

10. Usage is divided in several ways. Some authors (e.g., Hennig, 1964) recognize only one genus and call it *Siphona*; others recognize only one genus and call it *Haematobia*; others (e.g., van Emden, 1965) place the species in two genera, *Haematobia* (with type *stimulans* Meigen) and *Lyperosia* (type *irritans* Linnaeus); still others (e.g., Malloch, 1932; Huckett, 1965) recognize two genera, one named *Haematobia* with synonym, *Lyperosia* (type of both, *irritans* Linnaeus), and a second genus whose name does not concern us here. Some who call the genus *Siphona* admit that *irritans* is type of both *Haematobia* and *Lyperosia* (e.g., Hennig, 1964). Some who recognize only one genus *Haematobia* divide it into subgenera, but differ in usage as to whether *irritans* is or is not accepted as type of *Haematobia*. With this potpourri of usage, the most appropriate action appears to be to apply the rules and accept *irritans* Linnaeus as type of *Haematobia*.

(C) Other Nominal Genera

11. A number of other younger generic or subgeneric names have been proposed for various species of *Haematobia* sens. lat., such as *Lyperosia* Rondani (1856) (type-species also *irritans* Linnaeus), *Bdellolarynx* Austen (1909), *Lyperosiops* Townsend (1912), etc., but their type-species offer no problems. The classification is still open to divergent interpretations of the genera and subgenera that should be recognized, but this is a purely zoological matter, and the fate of the other names can easily be decided under the Law of Priority. The first and necessary order of business is to settle the questions of the type-species of *Siphona* and *Haematobia*.

(D) Family-Group Names

12. No family or subfamily names are affected. Tribal names have sometimes been used, but classification at this level is not always used, nor agreed upon, and in the present case it seems best not to propose tribal names for the Official List.

(E) Summary

13. The International Commission on Zoological Nomenclature is hereby requested to take the following actions:

(1) to set aside, under its plenary powers, all designations of type-species for *Siphona* Meigen, 1803, and having done so to designate *Musca geniculata* De Geer as type-species of *Siphona* Meigen, 1803;

(2) to confirm the designation by Westwood (1840) of *Conops irritans* Linnaeus as type-species of *Haematobia* Lepeletier and Serville, 1828;

(3) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Siphona* Meigen, 1803 : 281 (gender : feminine) (type-species *Musca geniculata* De Geer, 1776, as designated by the Commission under (1) above);

(b) *Haematobia* Lepeletier and Serville, 1828 : 499 (gender : feminine) (type-species *Conops irritans* Linnaeus, 1758, by designation of Westwood, 1840);

(4) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *geniculata* De Geer, 1776 : 38, as published in the binomen *Musca geniculata* De Geer (type-species of *Siphona* Meigen, 1803) (Insecta);

(b) *irritans* Linnaeus, 1758 : 604, as published in the binomen *Conops irritans* Linnaeus (type-species of *Haematobia* Lepeletier and Serville, 1828) (Insecta).

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THE QUESTION OF THE GENERIC NAME *VANIKORO* QUOY & GAIMARD, 1832 (CLASS GASTROPODA). Z.N.(S.) 1524

By R. V. Melville
(*Secretary, International Commission on Zoological Nomenclature*)

The question of validating the generic name *Vanikoro* Quoy & Gaimard, 1832, was first put to the Commission by Dr. Robert Robertson (*Academy of Natural Sciences, Philadelphia*) in 1962 (*Bull. zool. Nomencl.* **19** : 332–336). Later it was overlooked by reason of work in connection with the Washington Congress and it has been delayed by arguments about the gender of the name and its stem for the purposes of forming family-group names. Because of the lapse of time since the original application, Dr. Robertson's paper is reprinted below, followed by subsequent comments on it.

1. Dr. Robertson's Application.

For more than a century, the name *Vanikoro* has been widely used for a genus of tropical and subtropical marine gastropods. It still is in almost universal use, although the name is not valid under two provisions of the new Code. A case for preserving the name is presented below. The status of the name requires clarification in connection with the forthcoming *Treatise on Invertebrate Paleontology* (Part J).

2. The name "Vanikoro" first was published by Quoy & Gaimard in 1832 (*Voy. Astrolabe, Zool.* **2** : 239). Discussing *Sigaretus cancellatus* Lamarck, 1822, which Quoy & Gaimard obtained at Vanikoro (one of the Santa Cruz Islands, Melanesia) and which they referred to the genus *Velutina* [Fleming, 1820], they stated "Quoiqu'il y ait quelques différences entre ce Mollusque et celui dont M. de Blainville a fait son genre Vélutine, ses rapports généraux sont suffisants pour ne pas l'en séparer et former un genre nouveau, comme nous l'avions fait sous le nom de Vanikoro". The name "Vanikoro" was not applied to a gastropod elsewhere in Quoy & Gaimard's work.

3. For two reasons this is not a valid introduction of a generic name:

(1) It was proposed in synonymy [Article 11d].

(2) It was not italicized and may be construed as a vernacular name (note comparison with "Vélutine") [Article 16b(i)].

4. Subsequent to 1832 and before 1840, *Vanikoro* appears to have been mentioned only once in the literature. In 1838, Deshayes & Milne Edwards (Lamarck, *Hist. Nat. Anim. s. Vert.* (ed. 2) **8** : 559) referred to "le genre nommé Vanikoro par M. Quoy". Again, the name appears to have been used as a vernacular.

The name was adopted by Gray in 1840, 1841, and 1842 as a validly proposed generic name, but was mis-spelled by him *Vanicoro* (see paragraph 6 below). H. & A. Adams (March 1854, *Gen. rec. Moll.* **3**, pl. 41), A. Adams (15 December 1854, *Proc. zool. Soc. London* **21** : 174–175, pl. 20), and later others, adopted Gray's mis-spelling. H. & A. Adams (April 1854, *Gen. rec. Moll.* **1** : 374–375) were the first to adopt the name as originally spelled (*Vanikoro* Quoy & Gaimard).

H. & A. Adams (1854) and A. Adams (1854) were the first to assign a gender to the name: feminine [The original proposals (*Bull.* **19** : 335) included a request for *Vanikoro* to be placed on the Official List with feminine gender (under the ordinary powers of the Commission) with the following footnote: "*Not* masculine, as stated in International Code of Zoological Nomenclature, 1961, p. 33, among examples to Article 30b(ii). Although Quoy & Gaimard did not express or imply that the name *Vanikoro* was to be considered feminine in gender, every malacologist but Poirier (1954, *Up-to-date syst. list* 3200 *seashells Greenland to Texas*, p. 50, mimeographed) appears subsequently to have considered it feminine (see paragraph 4 above)".].

5. The claim has been made that the gastropod identified by Quoy & Gaimard as *Sigaretus cancellatus* Lamarck [*Velutina cancellata* (Lamarck)] is not Lamarck's species. Récluz (1843, *Proc. zool. Soc. London* **11** : 137) renamed, without explanation, Quoy & Gaimard's species *Narica quoyi*. Later, Récluz (1846 ["1845"], *Mag. Zool.* (2) **7**(9) : 24) claimed that Quoy & Gaimard had *Narica petitiana* Récluz, 1843 (*ibid.*, pp. 138–139), which in 1843 he had considered distinct from *N. quoyi*.

E. A. Smith (1908, *Proc. Malacological Soc. London* **8** : 106) has synonymized *N. petitiana* and *N. quoyi* Récluz with *Vanikoro cancellata* (Lamarck). Such action appears to have been correct, because Quoy & Gaimard's figures (pl. 66 bis, figs. 20–22) even more closely resemble the shell identified by authors as *Sigaretus cancellatus* than do Chemnitz's illustrations (1788, *Syst. Conch.-Cab.* **10** : pl. 165, figs. 1596–1597), the figures on which Lamarck's species is based. The particularly large aperture characteristic of the species is not well shown in Chemnitz's fig. 1597, but it is evident from Lamarck's placement of the species (in the genus "*Sigaretus*" [=*Sinum*]) and from his description and discussion, that his name *does* pertain to the only known large *Vanikoro* with a particularly large aperture.

6. The name *Vanikoro* has been mis-spelled and emended (latinized) in various ways. Mis-spellings:

Vanicoro Gray, 1840, *Syn. Brit. Mus.* (ed. 42), [issue 2], p. 152; 1841, *ibid.* (ed. 43), p. 126; 1842, *ibid.* (ed. 44), p. 90. Name not attributed to Quoy & Gaimard. Mis-spelling *Vanicoro* first attributed to Quoy by Agassiz (1845, *Nom. Zool., Moll.* : 95).

Vanicora Paetel, 1887, *Cat. Conch.* (ed. 4), **1** : 511.

Vanikora Whitfield, 1891, *Bull. American Mus. nat. Hist.* **3** : 387–388.

Emmendations:

Vanikoroia Martin, 1914, *Samml. Geol. Reichs-Mus. Leiden*, n.f. **2**(4) : 170.

Vanikoroa Cossmann, 1924, *Essais Paléoconch. Comp.* **13** : 163.

7. Four objective synonyms of "*Vanikoro*" Quoy & Gaimard, 1832, apparently were proposed in the following order:

Merria Gray, 1839(?), *in* Beechey, *Zool. Blossom* : 137. Type-species (monotypy): *Sigaretus cancellatus* Lamarck.

Leucotis Swainson, 1840, *Treat. Malacol.* : 346. Type-species (monotypy): *Sigaretus cancellatus* Lamarck.

Narica Orbigny (*ex* Récluz MS.), 1842(?), *in* Sagra, *Cuba, Moll.* (French ed.) **2** : 39. Type-species (original designation): *Sigaretus cancellatus* Lamarck.

Nioma Gray, 1842, *Syn. Brit. Mus.* (ed. 44), p. 60 [*Niomia* p. 90, name only] (no included species; *nomen dubium*); *Nioma* Gray, 1847, *Proc. zool. Soc. London* **15** : 156 (name in synonymy). Type-species (designated): "*Nerita cancellata*, Chem." [non-binomial] = *Sigaretus cancellatus* Lamarck. [*Niomia* Gray, 1840, *Syn. Brit. Mus.* (ed. 42) [issue 1], p. 147 (*nomen nudum, fide* Neave); *ibid.* [issue 2], p. 151 (*nomen nudum*)].

According to Récluz (1843, *Proc. zool. Soc. London* **11** : 137) Orbigny's text was issued before Gray's name *Merria* was published. If this is so, *Narica* or *Leucotis* may have priority over *Merria*. The dates above are those given by Neave. The publication dates of Orbigny's work on the molluscs of Cuba have yet to be rigorously determined, and the date 1839 on the title page of Beechey's *Zoology of the Blossom* requires confirmation.

8. Three of the four objective synonyms of "*Vanikoro*" listed in paragraph 7 have been mis-spelled:

Leucotus Sowerby, 1842, *Conch. Man.* (ed. 2) : 172 (error for *Leucotis* Swainson).

Niomia (see paragraph 7).

Merrya Récluz, 1846 ["1845"], *Mag. Zool.* (2) **7**(9) : 7–8 (error for *Merria* Gray).

Niona Paetel, 1887, *Cat. Conch.* (ed. 4), **1** : 511 (error for *Nioma* Gray).

9. The oldest family-group name based on any of the above generic names is VANICOROIDAE Gray (1840, *Syn. Brit. Mus.* (ed. 42) [issue 2], pp. 121, 152). H. & A. Adams (1854, *Gen. Rec. Moll.* **1** : 374) corrected the spelling to VANIKORIDAE. Subsequently, the name has also been spelled VANIKOROIDAE.

Article 29(b) of the new Code, relating to the formation of family-group names based on generic names not of classical origin, does not explain whether, in the present case, Gray or H. & A. Adams is to be considered the zoologist who first published a family-group name based on *Vanikoro* Quoy & Gaimard. This determines whether the name should be spelled VANIKORIDAE or VANIKOROIDAE.[1]

Two other family-group names, both based on generic names listed in paragraph 7, have been proposed:

NARICIDAE Récluz, 1846 ["1845"], *Mag. Zool.* (2) **7**(9) : 6, 16.

MERRIIDAE Hedley, 1917, *Journ. Proc. Roy. Soc. New South Wales* **51** : Suppl., p. M62.

10. The name *Vanikoro* has been very widely used as a valid generic name, both in the nineteenth and twentieth centuries. The name even appears among the examples in the new International Code of Zoological Nomenclature (1961, p. 33). E. A. Smith used the name in the most recently published taxonomic study of the genus (1908, On the known Recent species of the genus *Vanikoro*, Quoy & Gaimard. *Proc. Malacological Soc. London* **8** : 104–117).

Vanikoro has been used by malacologists since 1900 in the following countries:

[1] I favour the spelling VANIKORIDAE, even though VANIKOROIDAE may be preferable etymologically. H. & A. Adams were the first to spell the family-group name correctly (VANIKORIDAE).

Great Britain (G. B. Sowerby, 1901; E. A. Smith, 1908; W. H. Turton, 1932)
France (Couturier, 1907; Dautzenberg & Bouge, 1932; Delpey, 1942)
Netherlands (Schepman, 1909; Oostingh, 1931)
Germany (Thiele, 1929; Wenz, 1940)
Sweden (Hägg, 1929)
U.S.A. (Bartsch, 1915; Hertlein & Strong, 1951; Solem, 1953; Abbott, 1954, 1958; Kaicher, 1956; Keen, 1958)
Cuba (Aguayo & Jaume, 1950)
South Africa (Barnard; Macnae & Kalk, 1958)
Japan (Iwakawa, 1909, 1919; Hirase, 1910)
Philippines (Faustino, 1928)
Australia (Iredale, 1912; Hedley, 1912)

Only one malacologist, Nagao (1934, Japan), has adopted either of the emendations of *Vanikoro* (*Vanikoroa* Cossmann).

Merria Gray, 1839(?), the generic name seemingly valid under strict application of the Law of Priority and the new Code (see paragraphs 3 and 7), was first adopted by Hedley (1917, *Journ. Proc. Roy. Soc. New South Wales*, **51** : Suppl., p. M62). Iredale (1918, *Proc. Malacological Soc. London* **13** : 31) agreed with Hedley that the name *Vanikoro* was invalid, but did not at that time adopt *Merria*. Subsequently, other Australian malacologists have used *Merria* (Macpherson & Chapple, 1951; Cotton, 1959; J. Allan, 1959). The genus is rarely mentioned in Australian malacological literature. *Merria* has been used more often in the Japanese literature, first by Kuroda (1928, *Cat. Shell-bearing Mollusca Amami-Oshima*, p. 42; also 1941, etc.), subsequently by Hirase (1938), Hatai (1941), Oyama (1943), Kira (1945), and by Habe (1961).

Despite careful search, I have found no use of *Merria* in malacological literature published in countries other than Australia and Japan, where it has been used primarily in the last two decades.

Leucotis Swainson, 1840, has never been adopted.

Narica Orbigny, 1842(?), was used fairly often in the nineteenth century, notably by French workers such as Fischer (1885, *Man. Conchyl.*, p. 761). During the twentieth century, *Narica* appears to have been used only by Pelseneer (1906, Belgium), Risbec (1931, 1932, France), and by P.-H. Fischer (1950, France).

11. In view of the very wide use, both old and new, of the invalid name *Vanikoro* Quoy & Gaimard, and in view of the uncertainty of the publication dates and priority of the available names *Merria* Gray, *Leucotis* Swainson, and *Narica* Orbigny, the International Commission on Zoological Nomenclature is asked to take the action specified at the end of this article.

2. Comments.

Mr. C. W. Wright (*Bull. zool. Nomencl.* **20** : 223)

Dr. Robertson makes two comments about the Rules, which are of some general significance.

In para. 9 (: 334) he states that Article 29b does not explain in the present case whether Gray or H. & A. Adams is to be considered the zoologist who first published a family-name based on *Vanikoro* Quoy & Gaimard. Gray's

Vanicoro however is an unjustified emendation in the sense of Article 33a(ii) and is thus "a junior objective synonym of the name in its original form" and has status in nomenclature as from Gray, 1840. Gray's VANICOROIDAE therefore is not to be treated as a family-group name based on *Vanikoro* but as one based on a different, if synonymous, name. Consequently H. & A. Adams, in publishing VANIKORIDAE, first determined the stem of *Vanikoro*.

In a footnote to para. 11(2) of his application, Dr. Robertson argues that the gender of *Vanikoro* is feminine, although the original authors neither expressed nor implied that it was, on the ground that "every malacologist but Poirier . . . appears subsequently to have considered it feminine". This practice of malacologists cannot be regarded as overruling Article 30b(ii). If Dr. Robertson wishes to maintain the femininity of *Vanikoro* he should ask the Commission to use its plenary powers to set aside the effect of applying the Rules, but it would surely be a misuse of these powers to employ them for this trivial purpose.

Professor J. Chester Bradley (22 April 1962)

Vanikoro is not an arbitrary combination of letters. According to Robertson it is the name of the Melanesian Island where its type-species was first found.

Since this name is not Latin it has to be Latinized, by reason of Art. 11(b).

Referring to table 2, p. 122, we see that it can be treated as an already latinized word of the 3rd declension, comparable to virgo, feminine, on which basis its stem would be Vanikorin-, or leo, masculine, in which case its stem would be vanikoron-. Grammatically, therefore, if treated as feminine, a family name based on it should be Vanikorinidae, or if masculine Vanikoronidae.

While *Vanikoro* was originally undoubtedly a Melanesian word, we may regard it as Indo-European by adoption. I am unable to find that it has any gender and therefore it cannot effectively be treated under Art. 30(b-i). Should we therefore treat it under 30(b-ii)? The Code needs clarification.

The Code Art. 30(b-ii) uses *Vanikoro* as an example of a masculine word, but does not explain why, unless it was mistaken for an arbitrary combination of letters.

Robertson claims that it is feminine on the grounds that Adams 1854 established that gender, and usage has followed it. There is nothing in the Code that permits either a reviser or usage to establish gender, although it may be desirable that they should do so.

As a latinized word a family-group name based on a masculine *Vanikoro* should be Vanikoronidae, from a linguistic viewpoint. But even regarding the fact that the generic name has had to be latinized, the Code does not permit us to adopt normal linguistic procedure. On the contrary we must adopt the stem used by the first proposer of a family-group name (Art. 29-b). The first such authors, strictly speaking, that is using letter "k" in the name instead of "c", were H. & A. Adams, 1854, who used Vanikoridae. Under the Code this is correct.

This memorandum should have the benefit of criticism or confirmation from Canon Grensted.

The late Canon L. W. Grensted (*then Classical Adviser to the Commission*) (23 November 1962)

Vanikoro. I agree with Prof. Chester Bradley, that the family name must be that fixed in 1854 by H. & A. Adams, i.e. *Vanikoridae*. And of course this is much the most euphonious solution. I think that this could be reached—loosely—by treating the final -o as a Latin suffix and, under Art. 29(a), simply cutting it off. But fortunately no such solution is needed.

The gender is quite indeterminate, but Prof. Chester Bradley is right in saying that the Code does not allow for a subsequent decision, as, in this case, that by Adams. That being so, it becomes a name without Latin grammatical shape or gender, and I think that the intention of the Code is that all such cases should be *masculine*, and Art. 30(b)(ii) certainly applies in such a case. The ending -o is quite indeterminate of gender in Latin, and *Vanikoro* has no appearance of being a feminine form. The feminines in -o are almost entirely confined to the terminations -do, -io, and -go, and *Vanikoro* is not one of these, and has no classical structure at all.

Mr. C. W. Wright (17 December 1962)

1. Yes, of course Vanikoro is an Island.
2. It is a Melanesian word, so why regard it as Indo European by adoption?
3. It falls under 30(b)(ii) as "a word that is neither Greek, Latin, nor modern European". It is quoted as an example of a case in which "no gender was assigned or implied" by the original author: it is therefore "to be treated as masculine" since Latin words ending in "-o" may be either masculine or feminine.
4. Pace Ch. Bradley, table 2 consists of *examples* only. Not all Latin "-o" words that have genitives in "-inis" are feminine ["margo" is either m. or f.] and I suspect that not all with genitives in "-onis" are masculine though I can't think of one at the moment.
5. In any case, since (Art. 29(b)) Vanikoro "is . . . a word not Greek or Latin" "the stem is determined by the zoologist who first etc. etc.".
6. Ch. Bradley has something in his reference to 11*b* and the words "either Latin or latinized, or, if . . .". This article ought, I realize on reflection, to read something like:

"The name must be either Latin or latinized, *or a word that can be spelled out in Latin* or, if an arbitrary combination. . . ."

I cannot remember whether we discussed this point or not on E.C., but there is certainly a slight inconsistency between 11b and e.g. 29. Perhaps it should be saved up for consideration when next detailed amendments are considered.

Professor Myra Keen (31 December 1962)

I would like to urge support of the petition by Robert Robertson [Z.N.(S.) 1524] for the validation of *Vanikoro* Quoy & Gaimard, 1832, on the ground that this is in harmony with current usage as well as with long-established usage and that it will promote stability of nomenclature.

Dr. Robertson (7 June 1963)

Mr. C. W. Wright (*Bull. zool. Nomencl.* **20** : 223) has correctly pointed out that the practice of all malacologists (except Poirier) in treating the generic name *Vanikoro* as feminine in gender does not overrule Article 30b(ii), as I

unintentionally intimated in my petition. However, in order to be used at all *Vanikoro* has to be validated by use of the plenary powers, so I fail to see what useful purpose would be served by not also using the plenary powers to suspend Article 30b(ii) as it affects the gender of *Vanikoro*. Accordingly, I propose that, if the generic name be validated under the plenary powers, the feminine gender be assigned to it. This would accord with widely established usage.

I question whether *Vanicoro* Gray, 1840, is an "emendation" (Article 33a) of *Vanikoro* Quoy & Gaimard, 1832. Was Gray's spelling a "demonstrably intentional change"? (see *Bull. zool. Nomencl.* **19** : 333, para. 6). I interpret *Vanicoro* Gray as an "incorrect subsequent spelling" (Article 33b), with no status in nomenclature. In this light, it was unnecessary for me to have requested that the mis-spelling be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

Mr. R. V. Melville to Dr. Robertson (8 April 1970)

I have recently pulled out the file on this case and am disturbed to find that there has been no action on it since your letter of 7 June 1963. This lapse was evidently due in the first place to the pressure of work connected with the Washington Congress, and there have been plenty of things to do since.

I believe that the best thing to do now is to re-publish your original application (because not everybody interested in it may have access to Bull. vol. 19), followed by the various comments on it. If you agree to this, we will proceed as rapidly as possible with the remaining steps in the case.

May I make one suggestion about the presentation? I think there is no doubt that *Vanikoro* is masculine under the Code. You must therefore make up your mind whether or not you seriously wish to ask for the plenary powers to be used to rule that it is feminine. If you do wish to do so, then I think you would be wise to provide as much supporting evidence as you can from adjectival specific names in the literature, besides drawing attention to the various mis-spellings and emendations of the name itself (*Vanicora*, *Vanikora*, *Vanikoroia*, *Vanikoroa*), all of which show the way their authors' minds were working. Presumably, if they had thought of the name as a masculine one, they would have made masculine endings to their new versions of the name.

Dr. Robertson (28 May 1970)

I agree with you that my application should be republished, and that under the Code the name *Vanikoro* is masculine in gender. I would like to amend my application to request that the plenary powers be used to rule that it be feminine. This would accord with widely established usage. Beginning long before the present Code evolved and detailed provisions such as Article 30b(ii) were incorporated, malacologists for more than a century have used feminine endings for the adjectival specific names in *Vanikoro*. The only malacological publication known to me in which *Vanikoro* is considered masculine is Henry Poirier's *An up-to-date systematic list of* 3200 *seashells from Greenland to Texas: transla, tion, explanation and gender of their names* (New York, 1954, mimeographed)- p. 50. As you have pointed out, most of the mis-spellings and emendations of

Vanikoro end with an "a", another indication that malacologists have considered the name feminine.

The Commission is therefore requested

(1) to use its plenary powers

(a) to validate the generic name *Vanikoro* Quoy & Gaimard, 1832 (type-species, by monotypy, *Sigaretus cancellatus* Lamarck, 1822);

(b) to rule that the gender of the above generic name is feminine;

(c) to rule that the stem of the above generic name for the purposes of Article 29 is VANIKOR-;

(d) to rule that the following generic names are unjustified emendations of *Vanikoro* Quoy & Gaimard, 1832; *Vanicoro* Gray, 1842; *Vanicora* Paetel, 1887; *Vanikora* Whitfield, 1891; *Vanikoroia* Martin, 1914; *Vanikoroa* Cossmann, 1924.

(2) to place the generic name *Vanikoro* Quoy & Gaimard, 1832, validated under the plenary powers in (1) (a) above (gender, as ruled under the plenary powers in (1) (b) above, feminine), type-species, by monotypy, *Sigaretus cancellatus* Lamarck, 1822, on the Official List of Generic Names in Zoology.

(3) to place the specific name *cancellatus* Lamarck, 1822, as published in the binomen *Sigaretus cancellatus* (type-species, by monotypy, of *Vanikoro* Quoy & Gaimard, 1832) on the Official List of Specific Names in Zoology.

(4) to place the family-group name VANIKORIDAE H. & A. Adams, 1854, on the Official List of Family-Group Names in Zoology.

(5) to place the following generic names on the Official Index of Rejected and Invalid Generic Names in Zoology:

(a) five unjustified emendations of *Vanikoro* Quoy & Gaimard, 1832: *Vanicoro* Gray, 1842; *Vanicora* Paetel, 1887; *Vanikora* Whitfield, 1891; *Vanikoroia* Martin, 1914; *Vanikoroa* Cossman, 1924;

(b) four objective junior synonyms of *Vanikoro* Quoy & Gaimard, 1832: *Merria* Gray, 1839(?); *Leucotis* Swainson, 1840; *Narica* d'Orbigny (ex Récluz MS.), 1842(?); *Nioma* Gray, 1842;

(c) four unjustified emendations of names listed in (b) above: *Leucotus* G. B. Sowerby II, 1842; *Niomia* Gray, 1842; *Merrya* Récluz, 1846; *Niona* Paetel, 1887.

(6) to place the following names on the Official Index of Rejected and Invalid Family-Group Names in Zoology:

(a) VANICOROIDAE Gray, 1840 (an incorrect original spelling in consequence of the ruling given under the plenary powers in (1) (c) above);

(b) NARICIDAE Récluz, 1846 and (c) MERRIIDAE Hedley, 1917, based on objective junior synonyms of *Vanikoro* Quoy & Gaimard, 1832.

CALLOPANCHAX MYERS 1933 (PISCES): REQUEST FOR A RULING AS TO THE TYPE-SPECIES. Z.N.(S.) 1910

By G. S. Myers (*Museum of Comparative Zoology, Cambridge, Mass., U.S.A.*)

The purpose of the present application is to ask the International Commission for a ruling on the question of the species to be accepted as the type-species of the genus-group taxon *Callopanchax* Myers, 1933. This case involves a misidentified type-species, and the possible objective synonymization of *Callopanchax* Myers, 1933, with *Fundulopanchax* Myers, 1924.

2. Myers (1924 : 2) proposed the new genus *Aphyosemion* Myers, 1924, with *A. castaneum* Myers, 1924, sp. nov., as its designated type-species. There is no question in regard to this name.

3. In the same paper (Myers, 1924 : 4) I proposed, as a sub-genus of *Aphyosemion*, the new subgeneric name *Fundulopanchax* Myers, 1924, with *Fundulus gularis* var. *caerulea* Boulenger (1915 : 30) as its designated type, at the same time raising var. *caerulea* to species rank, in the combination *Aphyosemion* (*Fundulopanchax*) *caeruleum* (Boulenger). This species was clearly figured by me in Fig. 3. Due to subsequent name changes, it will be most convenient hereinafter to refer to *A. caeruleum* under its vernacular name, "blue gularis", under which it has invariably been known to aquarists from about the year 1910 to the present day. No doubt attaches to the zoological entity know as the "blue gularis" or *Aphyosemion caeruleum*, although *caeruleum* has now disappeared as a subjective junior synonym of another name (see below).

4. Myers (1933 : 184), in a revision of the generic limits of the African genera related to *Aphyosemion*, divided that genus into three subgenera: *Aphyosemion, sensu stricto*; *Fundulopanchax* Myers, 1924; and *Callopanchax* Myers, 1933, subgen. nov., giving, as generic type of *Callopanchax*, the species *Fundulus sjoestedti* Lönnberg, 1895. Only the type-species was referred by me (Myers, 1933) to the monospecific subgenus *Callopanchax*. In this 1933 paper, the taxonomy of the species was not revised, but all nominal species and subspecies names then accepted were listed under their proper genera and subgenera. I had not then seen all the species, but to the name of each species of which I had seen the type specimens I appended a footnote reference, stating: "Types examined". No such footnote was appended to my listing of *Aphyosemion sjoestedti* (Lönnberg), the type-species of *Callopanchax*, because I had not seen Lönnberg's type of that taxon, which is preserved in Stockholm. As in the case of the "blue gularis" mentioned above as the type-species of *Fundulopanchax* Myers, 1924, it will aid in clarity to use the vernacular name for the species which I called *Aphyosemion sjoestedti* in 1933 and which I gave as the type-species of *Callopanchax*; since about 1910, and up until the present, aquarists have uniformly used the name "golden pheasant" for that species.

5. In evaluating my usage of species names in 1933, it will be helpful to point out that, until very recently, the species classification (as distinguished from the generic classification) of the African Cyprinodontidae now under

discussion was that presented by Boulenger (1915; and the addenda in Boulenger 1916). Although many new species had been added to those treated in Boulenger's major work, no important attempts at a revision of the generic and subgeneric limits which I proposed in 1933, and no major revisions of Boulenger's species treatment, were made until the decade of the 1960's. My 1933 listings of the older species names published prior to Boulenger (1915; 1916) followed Boulenger's treatment in detail, except for the raising of his var. *caerulea* to species rank as *Aphyosemion caeruleum*.

6. It must especially be noted that my 1933 concept of what Boulenger (1915 : 38–39) called *Fundulus sjoestedti* (Lönnberg), which is the species that I cited in 1933 as the type of *Callopanchax* Myers, 1933, followed Boulenger precisely. The subgenus *Callopanchax* was based primarily on a high count of dorsal and anal fin rays, and the count-limits that I gave for *Callopanchax* were derived from Boulenger's description of "*Fundulus sjoestedti*" (Boulenger, 1915 : 38). Moreover, the geographical range that I gave for *Callopanchax* was copied directly from Boulenger (1915 : 38–39) and from his addenda (Boulenger, 1916 : 325). Aside from Boulenger's accounts just cited, I had only a single preserved specimen of the species I chose as type of *Callopanchax*; it was almost certainly the only museum specimen of that fish in North America in 1933. It is in the U.S. National Museum (Register no. 94316). It was an aquarium specimen (male) of the "golden pheasant", without locality data, and it agreed well with Boulenger's 1915 figure of the male and his description of "*Fundulus sjoestedti*". From these data it will be abundantly clear that the type-species I chose for *Callopanchax* Myers, 1933, was the "golden pheasant", which was described and figured by Boulenger as *Fundulus sjoestedti* (Lönnberg). Moreover, the matter is verifiable by examination of my specimen (USNM 94316).

7. Stenholt Clausen (1966; 1967) has recently examined the type specimen of *Fundulus sjoestedti* Lönnberg, 1895, in Stockholm, and finds that it is not an example of the "golden pheasant", as Boulenger (1915 : 1916) and all subsequent writers had presumed. Instead, the type specimen of *F. sjoestedti* is an example of the "blue gularis". Thus the species that was previously and invariably called *Aphyosemion caeruleum* (Boulenger, 1915) falls as a junior subjective synonym of *Aphyosemion sjoestedti* (Lönnberg, 1895), the latter combination being thus transferred from the "golden pheasant" to the "blue gularis". There being no available synonyms, the "golden pheasant" was thus left without a species name, and Stenholt Clausen (1966 : 331) proposed *Aphyosemion occidentale* S. Clausen, 1966, sp. nov., for it.

8. However, towards the end of the same paper, Stenholt Clausen (1966 : 338), proposed *Roloffia* S. Clausen, gen. nov., with *Aphyosemion occidentale* S. Clausen of the same paper (p. 331) as type-species, and uses the new combination *Roloffia occidentalis* for the "golden pheasant". For explanation of this act, Stenholt Clausen refers to a then unpublished paper (Stenholt Clausen, 1967). It is of zoological but not nomenclatural importance that I do not consider the taxon called *Roloffia* or *Callopanchax* to be worthy of generic rank.

9. In the last-mentioned paper (1967 : 22) Stenholt Clausen admitted that the "golden pheasant" had uniformly been known as *Aphyosemion sjoestedti*

previous to his publication of 1966. He also admitted that the "golden pheasant" was almost surely the species I had in mind when I made *Fundulus sjoestedti* the type-species of *Callopanchax* in 1933. However, Stenholt Clausen raised doubts as to what species I had intended as type of *Callopanchax* by pointing out that almost the only character I used for defining *Callopanchax* (dorsal and anal fin-ray counts) is not wholly diagnostic, and that the geographical range I gave was not that nowadays known for the "golden pheasant", the only species that I referred to *Callopanchax* in 1933. Stenholt Clausen ignored (or did not verify) the fact that both the fin-ray counts and the geographical range I gave for *Callopanchax* were copied in toto from Boulenger's account of "*Fundulus sjoestedti*" (Boulenger, 1915 : 38–39; 1916 : 325). It is therefore completely verifiable from the literature alone (quite apart from any examination of my specimen in Washington) that the definition and range of *Callopanchax* given by me in 1933 for that monospecific subgenus were drawn entirely and verbatim from Boulenger's 1915 and 1916 accounts of "*Fundulus sjoestedti*" (that is, the "golden pheasant").

10. Stenholt Clausen (1967 : 22) also makes the claim that if I had really intended the "golden pheasant" to be the type of *Callopanchax* in 1933, his discovery (of 1966–1967) that the "golden pheasant" had become nameless (because he had transferred the name *sjoestedti* to the "blue gularis") the generic-group name *Callopanchax* was invalidated because it no longer had a named type-species. I can find no provision of the Code to support the claim that a generic-group name is invalidated when its type-species is found to be misidentified and is temporarily nameless. Moreover, the type-species of *Callopanchax* was never left nameless, because Stenholt Clausen (1966), in the same paper in which he shifted the name *sjoestedti* to the "blue gularis" provided its type-species (the "golden pheasant") with the new name *occidentale*. At best (or worst) the account of the "golden pheasant" given by Boulenger (1915 : 38–39; 1916 : 325) was a composite based upon the "golden pheasant" (which is the species figured) and possibly a few specimens of related populations.

11. Stenholt Clausen (1967 : 22) stated: "It is, in fact, almost certain that Myers [1933] had the undescribed form [the "golden pheasant"] in mind [as the type species of *Callopanchax*], as its identity with *Fundulus sjoestedti* Lönnberg has never been questioned prior to 1966". Nevertheless, Stenholt Clausen proceeded as if the type-species of *Callopanchax* had not been misidentified, which resulted in *Fundulopanchax* Myers, 1924 (type *caeruleum* Boulenger, 1915 = *sjoestedti* Lönnberg, 1895) and *Callopanchax* Myers, 1933 (type *sjoestedti* Lönnberg, 1895 = *caeruleum* Boulenger, 1915) being considered by Stenholt Clausen to have been based on the same species. I must dissent from the implied conclusion that I based two new generic names on the same species! I have already demonstrated that I did not do so, and also that the facts are verifiable from the literature alone, to say nothing of the evidence provided by the only specimen of the "golden pheasant" available to me in 1933. The subgenus *Callopanchax* Myers, 1933, was clearly based upon a misidentified type-species, *Fundulus sjoestedti* Boulenger, 1915 (nec *Fundulus sjoestedti* Lönnberg, 1895), which equals *Aphyosemion occidentale* Stenholt Clausen, 1966.

12. In order to clear up the case, the Commission is requested:

(1) to use its plenary powers to suppress all designations of type-species for the nominal genus *Callopanchax* Myers, 1933, hitherto made and to designate *Aphyosemion occidentale* Stenholt Clausen, 1966, as type-species of that genus;

(2) to place the following names on the Official List of Generic Names in Zoology:

(a) *Callopanchax* Myers, 1933 (gender: masculine), type-species by designation under the plenary powers in (1) above, *Aphyosemion occidentale* Stenholt Clausen, 1966;

(b) *Fundulopanchax* Myers, 1924 (gender: masculine), type-species by original designation *Fundulus gularis* var. *caerulea* Boulenger, 1915.

(3) to place the following names on the Official List of Specific Names in Zoology:

(a) *occidentale* Stenholt Clausen, 1966, as published in the binomen *Aphyosemion occidentale* (type-species of *Callopanchax* Myers, 1933);

(b) *caerulea* Boulenger, 1915, as published in the combination *Fundulus gularis* var. *caerulea* (type-species of *Fundulopanchax* Myers, 1924);

(4) to place the generic name *Roloffia* Stenholt Clausen, 1966, on the Official Index of Rejected and Invalid Generic Names in Zoology (a junior objective synonym of *Callopanchax* Myers, 1933).

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REQUEST FOR REVISION OF THE 1964 CODE TO PERMIT VALID EMENDATION OF CERTAIN *-ii* ENDINGS OF PATRONYMS. Z.N.(S.) 1913

By Hobart M. Smith, L. C. Stuart and Roger Conant

One of the most exasperating concerns of taxonomists is the care required to assure complete conformance of their own citations of species-group names with the original spelling of those names, as the 1964 Code requires. Many names require little attention to achieve the desired conformance; the exasperation comes mostly with names ending in *-i* or *-ii*, since there is no mnemonically effective device enabling quick recollection of the original form. Thus a strictly petty requirement of conformance with original spelling results in expenditure of effort completely out of proportion to the importance of the end result. It is not entirely a matter of opinion that the end result is of little relative importance; Article 58(10) of the Code explicitly states that species-group names differing only in "the termination *-i* or *-ii* in a patronymic genitive (*e.g. smithi, smithii*)" are to be considered homonyms. In effect, then, the difference is inconsequential, for there is no rule explicitly stating that the spelling of a senior homonym takes precedence over that of a junior homonym: homonyms are operational equivalents if they are decreed as homonyms, whether they actually differ in spelling or not.

On other grounds, however, it is unmistakably implicit that senior homonyms take precedence over junior operational homonyms of different spelling, by virtue of Article 32 requiring that "The original spelling of a name is to be retained as the 'correct original spelling', unless . . ." The three exceptions listed do not enter into present considerations. It could scarcely be requested that all the operational homonyms listed in Article 58 be included among the exceptions to Article 32, as it would then be necessary to specify a procedure for each one to determine the single valid spelling, or to permit free choice among taxonomists of the variant they prefer to use. One alternative entails inacceptably excessive detail of regulation; the other threatens one of the fundamental objectives of the Code, "to ensure that each name is unique and distinct" (Preamble).

In reality the only one of the 12 sets of operational homonyms listed by Article 58 for species-group names that is bothersome to taxonomists is the one that involves the terminal *-i* versus *-ii*; the others are mnemonically simple to deal with.

The grammatical acceptability of the two termination spellings (double or single *-i*) is not equal. The *-ius* ending required in Latin for all family names in the nominative singular was not accompanied, in *classical* Latin, by the expected double *-ii* termination in the genitive singular, but by a contraction to the single *-i* form, with rare exceptions. In *postclassical* Latin the double *-ii* termination, uncontracted, was frequently used. Therefore on no grounds could the single *-i* termination be considered grammatically inacceptable, whereas the double *-ii* termination could be rejected if conformance with rules of classical Latin were required.

The problem of the terminal *-i* versus *-ii* was very effectively dealt with by Articles 31 and 31 (a) of the 1961 Code, but the 1964 edition deleted Article 31(a) completely and reduced Article 31 to the status of a recommendation. In respect for the due consideration given to the complexity of these Articles (which dealt with a variety of patronym endings), we cannot ask that restitution of the Articles be reconsidered. Instead we ask for consideration solely of the terminal *-i* versus *-ii* problem.

The problem could be solved either by permitting free usage of either the *-i* or the *-ii* ending, the two variants being considered nomenclatural equals; or by requiring usage of the single *-i* ending even where the *-ii* ending was originally proposed (except in the cases described in Appendix D III 16–17).* Our preference is for the less restrictive, first alternative. Only minor alterations in the Code would be required to effect it, suggested as follows through the courtesy of Mr. Melville:

a new paragraph 32(a)(iv): "In the case of a species-group name, it ends in the nomenclaturally equal *-i* or *-ii* (Art. 33c)."

a new paragraph 33c: "*Species-group names ending in -i or -ii.* A species-group name originally published with the termination *-i* or *-ii* may be subsequently spelt with either termination, deliberately or inadvertently, without constituting either an emendation or an incorrect subsequent spelling (but see Art. 58(10) and Appendix D III 16, 17)."

The intent of these inserts is (1) to eliminate the need for attention to the original spelling (in reference to the terminal patronymic *-i* or *-ii*) except as required by the name itself (*e.g.*, Bonarelli, *bonarellii*) or by Latin, latinized or Greek names (see Appendix D III 17); and (2) to deny separate nomenclatural status to usages of the *-i* or *-ii* termination. The latter provision renders it unnecessary for the conscientious bibliographer to distinguish, as in synonymies, between usages of spellings with one terminal *-i* as opposed to two.

These objectives are clearly reflective of increasingly popular opinion among taxonomists, many of whom have become so exasperated with the tedium of inconsequential consistency with original form (in respect to the single or double terminal *-i*) that they have arbitrarily adopted the simple course of always using a single terminal *-i*, despite the violation of rules thus incurred. K. P. Schmidt (*e.g.*, 1953, A check list of North American amphibians and reptiles, p. 5) and L. C. Stuart (*e.g.*, 1963, A checklist of the herpetofauna of Guatemala, Misc. Publ. Mus. Zool. Univ. Michigan, 122 : 8) are especially notable among dissenters. In addition, Dr. William S. Creighton kindly advised that myrmecologists publishing in the 1900's generally adopted the single terminal *-i* irrespective of original spelling with a single or double terminal *-i*, and that he emphatically endorses the present appeal. Dr. Robert E. Gregg, also a prolific myrmecologist, supports this petition. Conversation with numerous other experienced taxonomists dealing with both vertebrate and invertebrate nomen-

* "In forming a species-group name from the name of a modern man that is neither Latin, nor Latinized, nor of Greek origin, the genitive singular case-ending *-i*, in preference to the termination *-ii*, should be added to the entire name, e.g., *smithi* rather than *smithii* (from Smith), *krupai* (from Krupa), *bonarellii* (from Bonarelli))."

clature reveals an almost unanimous desire to eliminate the necessity of preservation of original *-i* or *-ii* spellings.

Yet a deliberate violation of any rule of the Code inevitably undermines confidence in it; and confidence in the Code is absolutely imperative if stability of nomenclature is to be preserved. Accordingly we here seek official sanction for a policy which seems to have widespread if not universal approval among practicing taxonomists, in order to avoid a situation that fosters even such a minor disregard of regulation as this.

Presumably other devices than the one here proposed for effecting the desired change could be devised, and we urge that they be considered. The simplest and least controversial route to the desired ends is most likely to gain approval. We submit the above proposal as a point of departure.

CYPSELUS ABESSYNICUS STREUBEL, 1848 (AVES, APODIDAE): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1914

By Constantine Walter Benson (*Department of Zoology, Cambridge University, England*) and Richard Kendall Brooke (*Salisbury, Rhodesia*)

The purpose of this application is to suppress a name, long used for one form, which has proved to relate to a different form to which another valid name has for over a century been universally applied. Strict application of priority would require not only two changes of name but also a confusing name transfer.

1. In 1848 Streubel described a swift *Cypselus abessynicus* (*Isis von Oken* 1848, col. 354) with the locality given as Ethiopia (then Abyssinia). The type locality was restricted to Massawa on the coast of the Eritrea Province of Ethiopia by Grant and Mackworth-Praed (1937, *Bulletin of the British Ornithologists' Club* **58** : 21). The type specimen is in the Humboldt Museum in Berlin.

2. In the literature since 1848 Streubel's name *abessynicus* has been applied to a swift breeding in tropical Africa which is generally considered a sub-species of *Apus affinis* (J. E. Gray), the nominate form of which was described from Bengal in India in Gray & Hardwick's *Illustrations of Indian Zoology* **1** (2) : pl. 35, f. 2, 1830. The generic name *Cypselus* Illiger, 1811, used by both Gray and Streubel has been universally replaced by *Apus* Scopoli, 1777, on the grounds of priority.

3. An allied swift *Cypselus galilejensis* was described from the Sea of Galilee in Israel (then Palestine) in 1855 by Antinori (*Naumannia :* 307). This form is currently considered to have a breeding range from Morocco through Israel to Afghanistan. It is also currently treated as a sub-species of *Apus affinis*. The name *galilejensis* has been universally and exclusively used for the swift of this complex breeding in Israel, Syria and adjacent western Asia. Efforts to trace the type specimen of *galilejensis* have yielded no result.

4. Recently Brooke, on discovering that all Red Sea coastal Ethiopian and Somali specimens were *galilejensis*, concluded that *abessynicus* was not pertinent to the tropical African breeding form to which that name had been applied but was a name given to the southernmost breeding population of the form universally called *galilejensis*. The reasons for this conclusion are given by Brooke in the *Bulletin of the British Ornithologists' Club* **89** : 166; 1969. In that paper Brooke pointed out that as the tropical African breeding form was without a name a new name had to be supplied for it and he proposed *Apus affinis aerobates* with type locality at Mbandaka in the Democratic Republic of the Congo. Brooke also called attention to the unfortunate and confusing consequence of shifting the name *abessynicus* to the form which for more than a century had been universally known as *galilejensis* (see Hartert, 1892, *Catalogue of Birds in the British Museum* vol. xvi, p. 454; Peters, 1940, *Check-list of the Birds of the World* **IV** : 251; Meinertzhagen, 1954, *Birds of Arabia :* 283; Ripley, 1961, *A synopsis of the Birds of India and Pakistan :* 210; Heim de

Balsac and Mayaud, 1962, *Les Oiseaux du nord ouest de l'Afrique :* 197; Vaurie, 1965, *The Birds of the Palaearctic Fauna* **2** : 649; White, 1965, *A revised check list of African non-passerine birds :* 214; Dement'ev et al., 1966, *Birds of the Soviet Union* **1** : 699; Etchécopar and Hüe, 1967, *The Birds of North Africa :* 358). So far as we are aware, since 1855 the name *galilejensis* has always been used for the Israeli and west Asian populations and the name *abessynicus* has never been applied to them.

5. That *abessynicus* was applied erroneously to another form to which it is inapplicable raises a problem best handled by suppressing the name under the plenary powers. Transfer of the name from one form to another bearing a different well-known name is the most undesirable and confusing kind of nomenclatural change.

6. The International Commission on Zoological Nomenclature is therefore requested to take the following action:

(1) to use the plenary powers to suppress for the purpose of the Law of Priority but not for the purpose of the Law of Homonymy the specific name *abessynicus* Streubel, 1848, as published in the binomen *Cypselus abessynicus;*

(2) to place the specific name *galilejensis* Antinori, 1855, as published in the binomen *Cypselus galilejensis*, on the Official List of Specific Names in Zoology;

(3) to place the specific name *abessynicus* Streubel, 1848, as published in the binomen *Cypselus abessynicus*, on the Official Index of Rejected and Invalid Names in Zoology;

TEREBRA VARIEGATA GRAY, 1834 (GASTROPODA): PROPOSED PRESERVATION UNDER THE PLENARY POWERS. Z.N.(S.) 1927

By Twila Bratcher (*Research Assistant, Los Angeles County Museum of Natural History*) and Robert Burch (*Research Assistant, Los Angeles County Museum of Natural History*) [posthumous work]

1. This petition asks that the International Commission on Zoological Nomenclature to use its plenary powers to conserve the specific name *Terebra variegata* Gray, 1834 (Nov. 25), for a well known gastropod species of the eastern Pacific, which now as a result of newly published evidence (Cowan, 1969) on the dates of one of the works concerned must be recognized as having been for some 136 years a junior synonym of *Terebra africana* Griffith and Pidgeon, the date of which may be 1833 and in any case seems to be no later than June 1834, a matter of several months of priority.

2. The name *Terebra variegata* Gray, 1834, has been widely used. In 1844 Hinds (p. 164) recommended the synonymy that has since been unquestioned, saying: "I can scarcely discover the priority of these names, but the second [i.e., *T. africana*] is obviously objectionable". Hinds also supplied, from the original label in the Gray collection, the type locality, which Gray had omitted in his description: "Guaymas, Gulf of California, 10 to 12 fathoms; Cuming". Hinds repeated this synonymy in his monograph of *Terebra* in Sowerby, 1845 (vol. 1, p. 173, pl. 43, fig. 53). It was accepted by Reeve, 1866, and by every major reviewer of Panamic province mollusks since that time.

3. The name *Terebra africana* Griffith and Pidgeon ?[1833–1834] appeared on a plate caption, with no description and no cited locality. The taxon was accepted by Kiener, 1839 (*Icon. Coq. Viv.* **9** : 14, pl. 2, fig. 2), who cited it as from an unknown locality. No other citation appears in the literature except for two references to the presence of the holotype in the collection of the British Museum (Tomlin, 1944: *Minutes of the Conchological Club of Southern California*, no. 41 : 14; and Cernohorsky, 1968: *The Veliger*, **11** (3) : 211).

4. The Commission is therefore asked:

(1) to use its plenary powers to suppress the specific name *africana* Griffith & Pidgeon, ?[1833–1834], as published in the binomen *Terebra africana* for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the specific name *variegata* Gray, 1834, as published in the binomen *Terebra variegata*, on the Official List of Specific Names in Zoology;

(3) to place the specific name suppressed under the plenary powers in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology.

Note added in proof.—Lt.-Col. C. F. Cowan, who was asked by the Secretary if he had any more information on the dates of the Mollusca parts of Griffith's *Animal Kingdom*, has kindly replied saying that only when parts in original wrappers are found will the full dates of this work be known. Vol. 12 contains

Mollusca followed by Zoophytes (pp. 435–594) and he thinks that the page partition was probably Part (38): [1]–192, (39): 193–368, (40): 369–[602], based on binder's pencillings in his copy. The plates were probably issued with each part. There are about 40 Mollusca plates in Vol. 12 and all but about three of these are dated "1833" (as is Pl. 23), whereas all but one of the 20 Zoophyte plates are dated "1834". This strongly indicates that Pl. 23 was published with Part (38) or (39) and not with Part (40). At this stage he feels fairly sure that the whole of Vol. 12 was published before November, 1834, and practically certain that Pl. 23 was published before then, but more cannot now be stated. *Terebra africana* was described—and attributed to Gray—on p. 600, but this was certainly published later than Pl. 23 and its caption. R.V.M. 29 September 1970.

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THALASCARIS BATE, 1878 (CRUSTACEA, DECAPODA): REQUEST FOR SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1928

By L. B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

In 1878, in a paper entitled "On the *Willemoesia* Group of Crustacea" C. Spence Bate (1878, *Ann. Mag. nat. Hist.* (5) **2** : 282), when discussing the reduced eyes in the species of the genus *Willemoesia* remarked: "That the depauperized state of the organs of vision is not due to loss of light from the great depth at which *Willemoesia* is taken is evident from the fact that *Thalascaris*, n.g. (Crangonidae), is taken at depths equally great, and is remarkable for the large size of its eyes". This is, so far as I know the only mention of the generic name *Thalascaris* in the literature. It was published in such an obscure and casual fashion that it even escaped the attention of nomenclators and is, e.g. not mentioned in Neaves' *Nomenclator Zoologicus*. However, the name *Thalascaris* is validly published and is an available name. So far no nominal species have been referred to it.

Bate's 1878 publication was one of the shorter notes on Challenger Decapoda Macrura, which he wrote before publishing in 1888 his voluminous report on the Challenger collection of these animals. In this Challenger report Bate (1888, *Rep. Voy. Challenger, Zool.*, **24**) did not mention at all the generic name *Thalascaris*, and there is evidence that in 1888 Bate used the generic name *Glyphocrangon* A. Milne Edwards, 1881, for that genus; Bate (1888) himself evidently did not consider *Thalascaris* validly published. None of the Crangonidae mentioned by Bate in his Challenger report fit his 1878 definition of *Thalascaris*: only two species of *Pontophilus*, viz. *P. gracilis* Bate (1100–2150 fm.) and *P. profundus* Bate (2600 fm.) live at the depths (1375 and 1900 fathoms) indicated by Bate (1878) for *Willemoesia*. However, of *P. gracilis* Bate (1888 : 489) stated in his description "The ophthalmopoda are not large, being well hidden within the orbital cavity", and of *P. profundus* (: 490). "The ophthalmi are ovate and tolerably large and prominent". However in the diagnosis of *Glyphocrangon*, a genus which after its discovery was at first assigned to the Crangonidae, but later was split off, Bate (1888 : 505) stated: "The ophthalmopoda are short and support large and globular ophthalmi". The species of *Glyphocrangon* were reported by Bate from depths between 200 and 1875 fathoms. That Bate (1878) with *Thalascaris* actually meant *Glyphocrangon* is finally shown by the fact that under *Glyphocrangon rimapes* Bate, he remarked (Bate, 1888 : 525): "The type of this species was brought up by the trawl in the same locality in the South Atlantic (Station 133) at which *Willemoesia leptodactyla* was obtained, and it is worthy of remark that while in the last-named genus the organs of vision are reduced to a rudimentary condition, those of *Glyphocrangon* are unusually large", a sentence too remarkably alike to that cited in the first paragraph of the present paper not to be inspired by the same material. *Glyphocrangon rimapes* Bate, 1888, may therefore be considered the type-species of *Thalascaris* Bate, 1878. *Glyphocrangon* A. Milne Edwards, 1881, thus being a junior subjective synonym of *Thalascaris* Bate, 1878.

Although *Glyphocrangon* is a deep sea genus without commercial importance, and thus the literature pertaining to it is rather small, the genus is reasonably well known: it is the type of the monotypic family Glyphocrangonidae and at present contains about 35 known species. The name *Glyphocrangon* has been uninterruptedly used for this genus since 1884 and has been placed on the *Official List of Generic Names in Zoology* as name no. 1120 by the International Commission on Zoological Nomenclature in their Opinion 470 (1957, *Opin. Decl. Int. Comm. zool. Nomencl.*, **16** (9) : 136). The name *Thalascaris*, as already remarked above, has, so far as I know, not been used a single time since its original publication. Another drawback to this name is that it is so similar to the generic name *Thalassocaris* Stimpson, 1860, which also is given to a genus of Caridean prawns; therefore a possible confusion is not precluded if the two were to exist side by side.

As nothing is gained by the strict application of the Rules in this case, the Commission is asked:

(1) to use its plenary powers to suppress for the purposes of the Law of Priority, but not for those of the Law of Homonymy the generic name *Thalascaris* Bate (1878, *Ann. Mag. nat. Hist.* (5) **2** : 282), type-species by present designation: *Glyphocrangon rimapes* Bate (1888, *Rep. Voy. Challenger*, Zool., **24** : 523); gender feminine.

(2) to place on the Official Index of Rejected and Invalid Names in Zoology the name *Thalascaris* Bate, 1878, as suppressed under (1) above.

Since the names *Glyphocrangon* and Glyphocrangonidae are already placed on their respective Official Lists in Opinion 470, no action has to be taken in regard to them. Also the name *Thalassocaris* Stimpson, 1860, figures already on the Official List.

LOXIA CYANEA LINNAEUS, 1758 (AVES): PROPOSED INVALIDATION UNDER THE PLENARY POWERS, IN ORDER TO CONSERVE *TANAGRA CYANEA* LINNAEUS, 1766. Z.N.(S.) 1929

By Eugene Eisenmann (*American Museum of Natural History; Chairman American Ornithologists' Union Committee on Classification and Nomenclature*), Raymond A. Paynter, Jr. (*Museum of Comparative Zoology, Harvard University; Editor, "Check-lists of Birds of the World"*), and Charles Vaurie (*American Museum of Natural History; Chairman, Standing Committee on Ornithological Nomenclature of the International Ornithological Congress*).

1. This application is designed to preserve the name of the Indigo Bunting, currently known as *Passerina cyanea* (Linnaeus, 1766), one of the best known species of breeding North American birds, whose winter range extends to northern South America. The reason for the proposed invalidation of the earlier name *Loxia cyanea* Linnaeus, 1758, which has heretofore been used for the South American Ultramarine Grosbeak in the combination *Cyanocompsa cyanea*, is that one of the applicants proposes for the first time to merge the genus *Cyanocompsa* in the genus *Passerina* in the forthcoming Volume 13 of Peters' "Check-List of Birds of the World"—expected to appear some time in 1970. Unless the Commission acts, such a merger would require the transfer of the binomen *Passerina cyanea* from the Indigo Bunting to the Ultramarine Grosbeak, a little known species. This would not only be destructive of stability but would create great confusion with regard to the past literature (which is enormous for the Indigo Bunting). The transfer would continue to cause confusion indefinitely, because under the International Code zoologists who do not agree with the merger will continue to use *Passerina cyanea* for the Indigo Bunting, while, at the same time, those who support the merger will use the same name for the other species.

2. The applicants, while not in accord on the taxonomic question, agree that the nomenclatural impasse can only be avoided by application of the plenary powers so as to preserve the current usage of *Passerina cyanea* for the Indigo Bunting (Code, Arts. 5, 79, 80).

The first named applicant, Eisenmann, is Chairman of the American Ornithologists' Union Committee on Classification and Nomenclature, which is charged with the preparation of the periodically published "A. O. U. Check-list of North American Birds". This work, of which five editions have already appeared, is the basis used by most zoologists for nomenclature of North American birds. The name *Passerina cyanea* has been used for the Indigo Bunting from at least as early as the first A.O.U. Check-list, 1886, and in all the recent editions of the Check-list, including the latest, 1957. The same binomen is also used in *all* current literature. Literally hundreds of publications have employed this name for the Indigo Bunting. The second applicant, Paynter, is Editor of the "Check-List of Birds of the World", begun by the late James L. Peters, and is the author of the section on Cardinalinae (soon to be published)

in which the Indigo Bunting and the Ultramarine Grosbeak are included. The third applicant, Vaurie, is Chairman of the Standing Committee on Ornithological Nomenclature of the International Ornithological Congress. This Committee has an established policy to maintain well-established usage in nomenclature.

3. *Tanagra cyanea* Linnaeus (1766, *Syst. Nat.* (12th ed.): 315) is based on "The blue Linnet" of Catesby (*Nat. Hist. Carolina*, **1** : 45, pl. 45), which indubitably applies to the Indigo Bunting. Linnaeus' specific name *cyanea* has been consistently employed for this species in all the literature. The only synonym appears to be *Emberiza cyanella* Sparrman (1787, *Museum Carls.* Fasc. 2, plates 42, 43), apparently never used again, based on an immature male, according to Gyldenstolpe (1926, *Ark. Zool.* **19,** A (1) : 21). The Indigo Bunting has been known by the binomen *Passerina cyanea* since the 19th Century (see 1886, *A.O.U. Check-list of North American Birds*), and universally since 1910. In the intervening period the binomen *Cyanospiza cyanea* was used by some authors. Both the genera *Passerina* Vieillot (1816, *Analyse Nouv. Orn. Elém.*: 30) and *Cyanospiza* Baird (1858, *Rept. Expl. Surv. R.R. Pacific*, **9** : 500) have as their type species *Tanagra cyanea* Linnaeus, 1766.

4. The South American Ultramarine Grosbeak (sometimes called Brazilian Blue Grosbeak) is currently known in the literature as *Cyanocompsa cyanea* (e.g., 1966, R. M. de Schauensee, *Species of Birds of South America*: 504). The specific name is based on *Loxia cyanea* Linnaeus (1758, *Syst. Nat.* (10th ed.): 174), which was based on "The Blue Grosbeak" of Edwards (*Nat. Hist. Birds*, **3** : 125, pl. 125, "coast of Angola, in Africa"). The plate strongly suggests the South American Ultramarine Grosbeak, rather than any African bird, and the name has long been applied to the South American species. While the provenance of the type specimen (which no longer exists) is unknown, there has been general acceptance of the view adopted by Todd (1923, *Auk*, **40** : 65) restricting this name to the northern Brazilian population, with type locality Bahia. In practically all literature since 1907 this species has been placed in the genus *Cyanocompsa* (1851, Cabanis, *J. Orn.*, **9** : 4), although it was at one time included in the genus *Guiraca*. The species has never been included in the genus *Passerina*, nor been regarded hitherto as congeneric with *Passerina cyanea*, the Indigo Bunting. For the Ultramarine Grosbeak there is a junior synonym available, *Fringilla brissonii* Lichtenstein (1823, *Verz. Doubl. Berliner Mus.*: 22) based on *Loxia caerulea* var. β Gmelin (1789, *Syst. Nat.*, **1** (2) : 863), which, in turn, rests upon "Le Bouvreuil blue de Brésil" of Brisson (*Orn.*, **3** : 231, pl. 17, fig. 2, Brésil). This name was used by Wied (1830, *Beitr. Naturg. Bras.*, **3** (1) : 561) for the form from Bahia. The applicability of the name *brissonii* to the species is clear, but there is no longer any means of determining on which Brazilian subspecies it was based. However its use for the Bahia population of the Ultramarine Grosbeak both by Wied and, as a synonym of *Cyanocompsa c. cyanea*, by Hellmayr (1938, *Field Mus. Nat. Hist. Zool.*, Ser. 13, Part 2 : 103) justifies restricting it to the race found in Bahia, the same locality to which Linnaeus' name *Loxia cyanea*, 1758, has been restricted. Thus if the Linnaean name is invalidated, the Lichtenstein name will be available for use for the same form, and, as it is earlier than any other name for any race

of this species, it would become the valid specific name for the Ultramarine Grosbeak. The name is not unknown, since it is included in Hellmayr's standard "Catalogue of Birds of the Americas" (1938, *op. cit.*) and will be included in the forthcoming volume of Peters' "Check-list of Birds of the World".

5. Paynter in Volume 13 of the "Check-List of Birds of the World" will merge *Cyanocompsa* in the genus *Passerina*. Unless the plenary powers are invoked to preserve the well-established name *Passerina cyanea* for the Indigo Bunting, that combination will have to be transferred to the Ultramarine Grosbeak.

All the applicants believe such transfer to be both confusing and destructive of stability and universality of usage. This is particularly true because some ornithologists (for example, the applicant Eisenmann) do not consider the two genera sufficiently close for merger.[1] Under the Code, Art. 59(c), zoologists not considering the genera congeric would properly continue to employ *Passerina cyanea* for the Indigo Bunting, while those accepting the merger would use the identical binomen for the Ultramarine Grosbeak,—species which in some localities may occur together. The best way of preventing this unfortunate result is by exercise of the plenary powers to invalidate the earlier Linnaean name of 1758 (applicable to the much less well-known species), thus ensuring that the name is maintained for the Indigo Bunting, and that the specific name, *brissonii* Lichtenstein, is applied to the Ultramarine Grosbeak regardless of the genus in which it is placed.

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

(a) to use its plenary powers to suppress for purposes of both the Law of Priority and the Law of Homonymy the specific name *cyanea*, as originally published in the binomen *Loxia cyanea* Linnaeus (1758, *Syst. Nat.* (10th ed.): 174);

(b) to fix the type locality of *Fringilla brissonii* Lichtenstein (1823, *Verz. Doubl. Berliner Mus.*: 22) as Bahia, Brazil;

(c) to place on the Official Index of Rejected and Invalid Names in Zoology the binomen *Loxia cyanea* Linnaeus, 1758;

(d) to place on the Official List of Specific Names in Zoology the specific name *cyanea* as originally published in the binomen *Tanagra cyanea* Linnaeus, 1766.

[1]The applicant Vaurie prefers not to express an opinion on the taxonomic situation, but feels that there is clear need for nomenclatural action.

DENDROBATES WAGLER, 1830 (AMPHIBIA: ANURA): PROPOSED DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.) 1930

By Philip A. Silverstone (*Dept. of Biological Sciences, University of Southern California, Los Angeles, California*, 90007, *U.S.A.*)

Wagler (1830) included three species in his genus *Dendrobates*, *Hyla nigerrima* Spix, 1824 (: 36), *Calamita tinctoria* Schneider, 1799 (: 175), and *Hyla trivittata* Spix, 1824 (: 35), but did not designate one of them as the type-species. Fitzinger (1843 : 32) designated *Hyla nigerrima* as the type-species.

The type-specimens of *H. nigerrima* and *H. trivittata* were apparently destroyed at Munich during World War II. *H. trivittata* is clearly identifiable from Spix's plate 9, and is a well-known Amazonian species. Spix's illustration of *H. nigerrima* (plate 9) is extremely poor, but according to Peters (1872 : 213), who saw the type-specimens, *H. nigerrima* agreed with, and is conspecific with *H. trivittata*.

The name *Dendrobates* has traditionally been applied to toothless dendrobatid frogs, and the name *Phyllobates* (type: *Phyllobates bicolor* Bibron in Sagra, 1841: pl. 29 bis) to some or all of the toothed dendrobatid frogs (Savage 1968).

In the light of present morphological and chromosomal evidence, it is clear that *Dendrobates trivittatus*(Spix), though it lacks teeth, is more closely related to the toothed brightly-colored dendrobatid frogs than to the other toothless dendrobatids.

Strict adherence to the rules of nomenclature would result in changing the name of those frogs presently called *Phyllobates* to *Dendrobates*, and inventing a new generic name for those frogs presently called *Dendrobates*. The extensive literature (partial list: Posada Arango (1909); Phisalix (1922); Wassén (1934); Santesson (1935); Mezey (1947); Wassén (1957); Märki and Witkop (1963); Witkop (1965); Daly, Witkop, Bommer, and Biemann (1965); Daly and Witkop (1966); Daly and Myers (1967); Tokuyama, Daly, Witkop, Karle, and Karle (1968); Karle and Karle (1969); Warnick (1969); Tokuyama, Daly and Witkop (1969)) on the poisonous properties of *Dendrobates* and *Phyllobates* uses these names in the traditional sense. Transferring the name *Dendrobates* to those frogs now called *Phyllobates* would not only confuse herpetologists, but would also cause confusion among physiologists and biochemists engaged in the study of the poisons of this group, and among anthropologists studying aboriginal use of the frogs.

In the interests of nomenclatural stability, it seems best to invalidate Fitzinger's (1843 : 32) designation of *Hyla nigerrima* Spix (= *Hyla trivittata* Spix) as the type-species of the genus *Dendrobates*, and to designate the second species included in Wagler's (1830 : 202) original concept of *Dendrobates*, namely *Calamita tinctoria* Schneider, 1799 (:175) as the type-species. Thus *Dendrobates trivittatus* (Spix), 1824 (: 35) (along with two other species which are morphologically *Phyllobates*, *Dendrobates pictus* (Bibron in Tschudi), 1838

(: 71) and *Dendrobates parvulus* Boulenger, 1882 (: 145)) becomes *Phyllobates trivittatus* (Spix), 1824, and the generic names of only three species change, instead of thirty-two species.

I therefore request the International Commission on Zoological Nomenclature to take the following actions:

(1) to use its plenary powers to suppress all designations of type-species for the genus *Dendrobates* Wagler, 1830 (: 202), made prior to the Ruling now requested and having done so to designate *Calamita tinctoria* Schneider, 1799 (: 175) as the type-species of the genus *Dendrobates* Wagler, 1830;

(2) to place the generic name *Dendrobates* Wagler, 1830 (: 202), (gender: masculine), type-species by designation under the plenary powers *Calamita tinctoria* Schneider, 1799 (: 175), on the Official List of Generic Names in Zoology;

(3) to place the generic name *Phyllobates* Bibron *in* Sagra, 1841 (: pl. 29 bis), (gender: masculine), type-species, by monotypy, *Phyllobates bicolor* Bibron *in* Sagra, 1841 (: pl. 29 bis), on the Official List of Generic Names in Zoology;

(4) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *tinctoria* Schneider, 1799, as published in the binomen *Calamita tinctoria* (type-species of *Dendrobates* Wagler, 1830);

(b) *bicolor* Bibron, 1841, as published in the binomen *Phyllobates bicolor* (type-species of *Phyllobates* Bibron, 1841).

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OKENIA MENKE, 1830, AND *IDALIELLA* BERGH, 1881 (MOLLUSCA, OPISTHOBRANCHIA): PROPOSED ADDITION TO THE OFFICIAL LIST. Z.N.(S.) 1931

By Henning Lemche (*Universitetets zoologiske Museum, Universitetsparken* 15, 2100 *Copenhagen, Danmark*)

The present application aims at putting an end to all controversies over the use of the names *Okenia* Menke, 1830, and *Idaliella* Bergh, 1881.

1. The name *Okenia* was first used by Bronn (1826, *Ergebn. meiner naturh. Reise* **1** : 329) as a *nomen nudum*. In 1881 Bergh (*Arch. Naturgesch.* **47** : 142) comments "Alles was sich hier findet ist 'Okenia: I. *O. elegans* Leuck.'. Ist diese die Idalia elegans von Leuckart? und wie kam Bronn dann zu diesem erst 1828 publicierten Namen?". Evidently, Bronn's names are *nomina nuda*.

2. Two years later, Leuckart (1828, *Breves anim. quorum descr.*: 15) published *Idalia*, typus *I. elegans* n.sp. as type by monotypy, but without mentioning *Okenia*. This publication would make *Idalia* available, if it was not that that same name had already been used by Hübner (1820, *Verz. bek. Schmetterlinge*).

3. Menke (1830, *Synopsis methodica molluscorum generum Omnium*: 10) writes: "*Idalia* Leuck. (*Okenia* Leuck.)". By this action, *Okenia* was presented as a name—though only in synonymy—for the same genus as that called by Leuckart *Idalia*, and thus automatically taking the same type *I. elegans* Leuckart.

4. The genus was called *Idalia* Leuckart right up to 1923, when Iredale & O'Donoghue (*Proc. Malac. Soc. Lond.* **15** : 217) called attention to the homonymy in which *Idalia* was involved, and quite correctly established *Okenia* instead. This change was immediately adopted (suffice it here to cite Thiele, 1831—*Handb. d. Moll.-Kunde 1* : 428: "*Okenia* (Bronn, 1826) Menke, 1830)".

5. Quite recently, Vogel & Schultz (1970, *Veliger* **12** : 388) reject *Okenia* because of Art. 10d (*sic.*—actually 11d) "a name first published as a synonym is not thereby made available"—but they stop short here, forgetting to continue "unless prior to 1961 it has been treated as an available name with its original date and authorship, and either adopted as the name of a taxon or used as a senior synonym". Evidently, therefore, Vogel & Schultz are unjustified in rejecting *Okenia* which has been in general use now for 47 years, and their now proposed substitute name *Cargoa* is only a junior objective synonym of *Okenia* Menke, 1830.

6. The closely related genus *Idaliella* also has its name threatened by the same authors. Ørsted (1844, *De regionis marinis*: 73) cites "*Idalla caudata* nob." from Kullen (Sweden). No specimens are extant, but it is fairly certain that the species in question is the one described by Alder & Hancock in 1845 as *Idalia aspersa* (*Mon. Brit. nudibr. Mollusca* Fam. 1 pl. 26). It may be argued that *Idalla* is a misspelling of *Idalia*, and apparently it has generally been so considered. In that case it has no status whatsoever in Zoology. But the name may well be considered as having standing, and in this case its type species becomes by monotypy *Idalla caudata* Ørsted, 1844.

7. The species *caudata* Ørsted = *aspersa* Alder & Hancock belongs to a group of species which were separated from the remainder in the genus *Idalia* by Bergh, (1881, *Arch. Naturgesch.* **47** : 145) under the name *Idaliella*. Among the three species unquestionably included, Iredale and O'Donoghue (1923, *Proc. Malac. Soc. Lond.* **15** : 217) selected *Idalia aspersa* Alder & Hancock as the type. Evidently, *Idalla* is a senior synonym—if any available name at all—of *Idaliella* Bergh, but the uncertainties about its availability, together with the fact that it has not been used for 125 years now, make it highly unwanted. The specific name *caudata*—prior by one year to *aspersa* Alder & Hancock, has never since been used and is the more unwanted, too, because its use will immediately recall the controversy over the generic name *Idalla* to which it is so closely linked. I propose, therefore, the suppression of both the generic and the specific name *Idalla caudata*, either under Art. 23b, for which action this paragraph is extremely well fitted—or else through the use of the plenary powers.

8. My formal proposals run as follows:

(1) Under the plenary powers (or under Article 23b) to suppress for the purposes of the Law of Priority, but not for those of the Law of Homonymy the generic and the specific names of the combination *Idalla caudata* Ørsted, 1844;

(2) to place on the Official List of Generic Names in Zoology the names
  (a) *Okenia* Menke, 1830 (in synonymy of *Idalia* preocc.) type-species by monotypy, *Idalia elegans* Leuckart, 1828 (gender: feminine);
  (b) *Idaliella* Bergh, 1881, type-species by subsequent designation by Iredale & O'Donoghue, 1923, *Idalia aspersa* Alder & Hancock, 1845 (gender: feminine);

(3) to place on the Official List of Specific Names in Zoology the names
  (a) *elegans* Leuckart, 1828, as published in the combination *Idalia elegans* (type of *Okenia* Menke, 1830);
  (b) *aspersa* Alder & Hancock, 1845, as published in the combination *Idalia aspersa* (type of *Idaliella* Bergh, 1881);

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology the name *Idalla* Ørsted, 1844 (as suppressed under the plenary powers in (1) above);

(5) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the name *caudata* Ørsted, 1844, as published in the combination *Idalla caudata* (as suppressed under the plenary powers in (1) above).

PRIAPUS HUMANUS LINNAEUS, 1758, AND *HOLOTHURIA PRIAPUS* LINNAEUS, 1767 (PRIAPULIDA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 1932

By J. van der Land (*Rijksmuseum van Natuurlijke Historie, Leiden, The Netherlands*)

The purpose of this application is to request the suppression of the specific names *humanus* Linnaeus, 1758 (published in the combination *Priapus humanus*), and *priapus* Linnaeus, 1767 (published in the combination *Holothuria priapus*).

2. Linnaeus (1758, *Systema naturae* (ed. 10) **1** : 656) described *Priapus humanus*. His description was based on an earlier description under the same name by Odhelius (1754, *Chinensia Lagerströmiana*). The type-specimen is almost certainly lost. *Priapus equinus* Linnaeus, 1758, has been designated as type of the genus by Poche (1908, *Zool. Anz.* **32** : 109), so *Priapus* must be considered a genus of coelenterates.

3. Later Linnaeus (1767, *Systema naturae* (ed. 12) **1** (2) : 1091) transferred the species to another genus and at the same time changed the specific name: *Holothuria priapus*. *Holothuria* is a genus of echinoderms.

4. De Lamarck (1816, *Histoire naturelle des animaux sans vertèbres* **3** : 77) created a new genus for this species and at the same time changed the specific name: *Priapulus caudatus*. The genus *Priapulus* is the type of the family PRIAPULIDAE and the name of the phylum has also been derived from it.

5. The specific name *humanus* has been used in about ten publications in the binomina *Priapus humanus* (1758, 1759, 1770) and *Priapulus humanus* (1888, 1901, 1906, 1908, 1920, 1952).

6. The specific name *priapus* has been used in 20 to 25 publications in the binomina *Holothuria priapus* (1767–1840), *Priapula priapus* (1826), and *Priapulus priapus* (1906, 1910).

7. The specific name *caudatus* in the binomen *Priapulus caudatus* has been used in over 200 publications (1816 to date), including several textbooks.

8. There is a considerable number of younger synonyms but names of priapulids (generic or specific) published in 1816 or earlier other than those mentioned above, are not available.

9. This is a purely nomenclatorial problem. The case is in no way affected by differences of opinion about the systematic status of the species because the three specific names are objective synonyms. It is important to make a decision; personally I find it less important whether it is positive or negative. It is a simple choice between stability and priority.

10. The International Commission on Zoological Nomenclature is asked, in the interests of stability of nomenclature:

(1) to use its plenary powers to suppress the following names, for the purpose of the Law of Priority, but not for those of the Law of Homonymy:
  (a) the specific name *humanus* Linnaeus, 1758, as published in the binomen *Priapus humanus;*
  (b) the specific name *priapus* Linnaeus, 1767, as published in the binomen *Holothuria priapus;*

(2) to place the generic name *Priapulus* Lamarck, 1816 (gender : masculine), type species by monotypy, *Priapulus caudatus* Lamarck, 1816, on the Official List of Generic Names in Zoology;

(3) to place the specific name *caudatus* Lamarck, 1816, as published in the binomen *Priapulus caudatus* (type-species of *Priapulus* Lamarck, 1816), on the Official List of Specific Names in Zoology;

(4) to place the following specific names, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Names in Zoology:

(a) *humanus* Linnaeus, 1758, as published in the binomen *Priapus humanus*;

(b) *priapus* Linnaeus, 1767, as published in the binomen *Holothuria priapus*.

REQUEST FOR A DECLARATION MODIFYING ARTICLE 1 SO AS TO EXCLUDE NAMES PROPOSED FOR DOMESTIC ANIMALS FROM ZOOLOGICAL NOMENCLATURE. Z.N.(S.) 1935

By C. P. Groves (*Faculty of Archaeology and Anthropology, Cambridge, England*)

Domestic animals have long been a problem to the taxonomist and the user of Zoological Nomenclature. Their nomenclatorial treatment, with its consequent implications for taxonomy, has been inconsistent, varying considerably both between authors and even within the works of a single author. Whether to apply a name given to a domestic species to the wild representatives of the same species has been a troublesome problem; Ellerman and Morrison-Scott (1951) use the name *Capra hircus* for the Wild Goat, although this name was applied by Linnaeus to a domestic goat, but (by inference) refuse to use the name *Ovis aries*, given to the domestic sheep, for any wild species of sheep. One might ask, what is the difference? The answer matters little; for such internal inconsistency is surely symptomatic of the whole problem.

It is probable that the definitions and discussions of the Species and Subspecies concepts in Mayr (1963) reflect, to a greater or lesser extent, the views of the consensus of taxonomic workers. Mayr makes the point (p. 20) that "species consist of populations, rather than individuals", and later on (p. 137) defines the local population as "a group of individuals so situated that any two of them have equal probability of mating with each other and producing offspring"—an idealized situation probably rarely, if ever, realized in nature, but implying what does appear to be the case, namely that the reproduction within such a group is under the control of members of the group itself. However, in no sense can a domestic "species" be called a local population; only at the level of Breeds and below can one suppose that there is equal probability of mating, but even here the choice of partner is, as often as not, outside the control of the members of the group. Moreover, breeds are not geographically circumscribed: they overlap one another geographically as if they were distinct biological species.

If domestic breeds are reproductively isolated, it might be worth asking whether perhaps these are not the species, rather than domestic "forms" taken as a whole. But if man's vigilance over these breeds is relaxed, their reproductive isolation will disappear, as many a pedigree dog breeder knows to his dismay. Moreover, if wild kindred are living in the vicinity, there is often interbreeding between these and the domesticates. So that, but for man's influence, there would be no reproductive isolation between domestic breeds, nor between them and wild animals. Whether it is legitimate or meaningful to consider that in this case man is an isolating mechanism promoting speciation, is doubtful: the interbreeding of domestic and wild relatives seems the nearest approach to "natural conditions" made by a domestic animal, so we may conclude that the wild and domestic forms in such cases are conspecific.

It must next be asked, how does one divide up a species, some of whose individuals are domestic, into sub-species? A sub-species is an entity both

geographically and morphologically distinct from other, conspecific sub-species. The domesticates cannot themselves, therefore, belong to separate sub-species; they must be taken into account region by region when the species is being revised, and each sub-species of the species has to include both the wild and the domestic forms of the given region.

Of course, this latter scheme makes a nonsense of all attempts to elucidate geographic variation within a species, and completely obscures the whole function of taxonomy. The solution to the dilemma is surely that the Linnaean system—even as modified and interpreted by such modern writers as Mayr—was never intended to handle such situations; that the relation of domestic and wild forms is something qualitatively different from the relationship between two wild forms; and that the system of zoological nomenclature should be restricted to defining and interpreting the relationships among wild animals, a function it performs adequately in spite of the complexities these relationships often involve, and not pressed unwillingly into service in a system which is different in principle from this.

Several schemes have been proposed of recent years to recognize this situation nomenclatorially. Bohlken (1958) recognized that the concept of a domestic species or race is an artificial one and refused to use the names applied to them to cover wild species, in cases where the domestic animal had been described first (as is so often the case). Thus we have the yak referred to as *Bos mutus* Przewalski, 1873, this being the earliest name applied to a wild yak—whereas the domestic yak has been known as *Bos grunniens* Linnaeus, 1758. Ellerman and Morrison-Scott (1951) make the wild yak a sub-species of the domestic yak, and call it *Bos grunniens mutus:* as has been discussed above, this is unrealistic since the two simply do not stand in the relationship of sub-species to one another. However, Bohlken goes on to say, "But a domestic yak is, after all, still a yak!"—and adds the name of the domestic form to that of the wild one, *Bos mutus grunniens*, as if they were in fact sub-species, and also in violation of the Rules of Nomenclature.

Trumler (1961) goes further. He considers, contrary to Bohlken, that some domestic "species" have a multiple wild origin: not necessarily by hybridization, but often by separate processes of domestication. In his view, the donkey is one of these: he considers it descended from two wild species which he calls *Asinus africanus* and *Asinus taeniopus*. Combining this viewpoint with Bohlken's system of nomenclature, he concludes that some breeds of donkey should be called *Asinus africanus asinus* and the others *Asinus taeniopus asinus*—the Linnaean name being in fact *Equus asinus* (for "the" domestic donkey).

In a reconsideration, Bohlken adduced a new system of naming, on the grounds that domesticated animals could be considered "ecological races" of their species. In his 1961 paper, he recommended interposing "f." between the wild and domestic names; thus: *Equus przewalskii* f. *caballus*, for the domestic horse.

Finally, a different system again is proposed by Dennler de la Tour (1968). This author proposes using a standard name which would always denote a domesticate; he suggests the word *familiaris*, to be placed in inverted commas somewhere within the name. In cases where the origin of a domestic form from

a given wild form is proved, the name of the wild form is followed by the key-word "*familiaris*" and this is followed by the name given to the domesticated variety, thus: *Bos mutus* "*familiaris*" *grunniens*. But in disputed cases, where the wild ancestor is not proved, the trivial name applied to the domesticate is to be used as the specific name, followed by the key-word, thus: *Equus asinus* "*familiaris*".

It is here submitted that domesticates are not adequately dealt with by any system of nomenclature thus far proposed; and that this is hardly surprising, since nomenclature is designed to serve the purposes of the classification of natural populations. The schemes of Bohlken (1958, 1961) and Dennler de la Tour (1968) both flout the rules of nomenclature and in effect (except for Bohlken's second system) treat domesticates as if they were sub-species of wild species. The only solution is to remove them from zoological nomenclature altogether.

The International Code, Art. 1, states:

> Zoological nomenclature is the system of scientific names applied to taxonomic units of animals (taxa; singular: taxon) known to occur in nature, whether living or extinct. This code is concerned with names in the family-, genus- and species-groups. Names given to hypothetical concepts, to teratological specimens or to hybrids as such, to infrasubspecific forms as such, or names proposed for other than taxonomic use, are excluded.

It could be argued that domesticated animals are already excluded from the code in the phrases "in nature" (Shorter Oxford English Dictionary, NATURE, meaning IV, 2: "The features and products of the earth itself, as contrasted with those of human civilization"), and "hypothetical concepts". But such an interpretation is not always given to the wording: only the insertion of an explicit phrase will make this clear. It is therefore proposed to alter the third sentence to read:

> Names given to hypothetical concepts, to domesticates, to teratological specimens or to hybrids as such, to infrasubspecific forms as such, or names proposed for other than taxonomic use, are excluded.

The definition of domestic animals, at least in the archaeological record, is a difficult matter: Higgs and Jarman (1969) view it as a long process, disputing the theory of a rapid "neolithic revolution", and suggest that in origin it is not different in principle from other human activities such as selective hunting. Be this as it may, there is hardly ever any doubt in a modern situation whether an animal is domesticated or not; and the proposal here put forward would not prevent adequate reference being made to putative intermediate stages by archaeological workers—indeed it would simplify matters, since such meaningless questions as whether a given set of remains represents *Bos primigenius* or *Bos taurus* would be prevented.

The implications of removing domesticated forms from nomenclature would be that all animals would be identifiable under a name that refers to a local wild population, with a type locality; and trinomials would be restricted, as they are supposed to be, to sub-species. If it is desired to refer to a domesticate, the name of the (wild) species would be employed, if the wild representative is

known down to species or sub-species level; and no further scientific name would be added to specify a domesticated form, although the writer could qualify it in the vernacular to his heart's content. Thus a domestic cow could be *Bos primigenius* (domestic form); *Bos primigenius* Bojanus, Jersey cow; *Bos primigenius* dom., or whatever was felt most appropriate—even *Bos primigenius* taurus, so long as the "taurus" was not written in italics and could not be mistaken for a scientific trinominal. It should be pointed out that domesticated plants are excluded from Botanical Nomenclature and there is a separate International Code of Nomenclature for Cultivated Plants; it is probably unnecessary to establish a Code for Domesticated Animals, but the botanists' example in excluding plant domesticates from Botanical Nomenclature should be noted.

Note also that feral populations (formed by individuals that have regained their freedom from a domesticated state) are not excluded along with domesticated forms. There is no reason why, in principle, long-established and easily recognizable feral populations, the products of natural selection like any other wild forms, should not be treated on their merits and classified accordingly with suitable nomenclatorial dignifying.

The International Commission on Zoological Nomenclature is therefore requested to issue a Declaration, to insert in Art. 1 of the Code, sentence three, between the fifth and sixth words (between "concepts", and "to teratological . . .") the words "to domesticates", in order to explicitly remove such animals from nomenclatorial consideration.

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INDEX TO AUTHORS

	Page
Amadon, Dean	110
Ansell, W. F. H.	104
Beatty, Joseph A.	213
Benson, Constantine Walter	253
Beu, A. G.	44, 47
Boss, Kenneth J.	205
Bratcher, Twila	255
Brooke, Richard Kendall	253
Brothers, D. J.	115
Burch, Robert	255
Cernohorsky, Walter O.	133, 210, 212
Conant, Roger	250
Cowan, C. F.	5, 63, 101
Daly, Howell V.	121
Debrenne, Françoise	207
Eisenmann, Eugene	110, 259
Fleming, C. A.	47
Garrick, J. A. F.	2
Getty, T. A.	105
Grant, J. A.	113
Groves, C. P.	269
Heppell, David	130, 131
Higgins, L. G.	68
Holthuis, L. B.	210, 257
Kadolsky, Dietrich	51
Key, K. H. L.	5
Knight, Fred B.	123
Land, J. van der	267
Leech, Robin	213
Lemche, Henning	265
Levi, Herbert W.	103, 200
Luxton, M.	119
Lynch, John D.	66
Maxwell, P. A.	47
Melville, R. V.	55, 180, 194, 198, 211, 238
Moore, Raymond C.	202
Myers, G. S.	246
Nord, John C.	123
Paynter, Raymond A., Jr.	259
Peake, N. B.	55
Pelham-Clinton, E. C.	130
Peters, James A.	133
Pinter, Lawrence J.	103
Rehder, Harald A.	41, 67
Richards, O. W.	121
Riley, N. D.	68
Sabrosky, Curtis W.	69, 211, 234
Silverstone, Philip A.	262
Smith, Hobart M.	66, 250
Spain, A.	119
Stock, Jan H.	49
Strimple, Harrell L.	202
Stuart, L. C.	250
Štys, P.	113
Thompson, R. T.	3
Vaurie, Charles	259
Watson, George E.	110
Wetmore, Alexander	110
Wolff, Niels L.	60
Wright, C. W.	211

LIST OF DECISIONS IN THIS VOLUME

Declaration *Page*

43 (Repeal of Article 23b) 135

Opinion

905 (*Polyxenus* Latreille, [1802–1803]) 8
906 (*Nematus leachii* Dahlbom, 1835) 6
907 (*Bicornes* Schuchert & LeVene, 1929) 10
908 (*Crioceris* Müller, 1764, and *Lema* Fabricius, 1798) 12
909 (*Receptaculites* Deshayes, 1828) 14
910 (*Tellina gari* Linnaeus, 1758) 16
911 (Six misidentified type-species in Muricacea) 20
912 (*Gracillaria* Haworth, 1828) 27
913 (*Crobylophorus chimaerae* Krøyer, 1852) 29
914 (*Holothuria monacaria* Lesson, 1830) 31
915 (*Tetrahymena* Furgason, 1940) 33
916 (*Fusulina gracilis* Meek, 1864) 39
917 (*Cyathocrinites* Miller, 1821) 70
918 (O. F. Müller works) 73
919 (*Lyrodon kefersteini* Münster, 1837) 75
920 (*Inuus fuscatus* Blyth, 1875) 77
921 (PLETHODONTIDAE in Pisces & Amphibia) 79
922 (*Charaxes iocaste* Butler, 1865) 81
923 (*Argynnis chlorodippe* Villiers & Guenée, 1835) 83
924 (*Terebratulina* d'Orbigny, 1847) 85
925 (Three Linnaean Brachiopod species) 87
926 (*Tintinnidium* Kent & *Leprotintinnus* Jörgensen) 89
927 (*Cystidea* Barrande, 1868) 91
928 (*Pachyrhynchus* Germar, 1824) 93
929 (*Lasioptera* Meigen, 1818) 95
930 (*Megalichthys* Agassiz & *Rhizodus* Owen)... 97
931 (*Attus obscurus* Taczanowski, 1872) 100
932 (*Polygnathus* Hinde, 1879) 164
933 (*Liphistius* Schiødte, 1849) 167
934 (*Bollia* Jones & Holl, 1886)... 169
935 (*Simia leucophaea* Cuvier, 1807) 171
936 (*Julus pallipes* Olivier, 1792) 173
937 (*Helix hammonis* Strøm, 1765) 175

Opinion

	Page
938 (*Larius* Boddaert, 1783)	176
939 (*Python timorensis* Müller, 1844)	178
940 (*Gelasimus macrodactylus* H. Milne Edwards & Lucas, 1843) ...	214
941 (*Pinuca* Hupé, 1854)	216
942 (*Oligolophus* C. Koch, 1872)	218
943 (*Caligus appendiculatus* F. Müller, 1852)	220
944 (*Giraffa camelopardalis reticulata* de Winton, 1899)	222
945 (*Sciurus ebii* Pel, 1851)	224
946 (Ludwig, 1865–1866 work)	226
947 (*Protomomys* Teilhard de Chardin, 1927)	227
948 (*Tellina obliqua* J. Sowerby, 1817)	229
949 (*Cellaria* Ellis & Solander, 1786)	231

INDEX TO KEY NAMES

	Page
abessynicus, *Cypselus*, Streubel, 1848	253
Acanthopleuroceras Hyatt, 1900	108
achaemenes, *Charaxes*, Felder, 1866	81
aequicauda, *Carinogammarus*, Martynov, 1931	49
africana, *Terebra*, Griffith & Pidgeon, [?1833–34]	255
aglaja, *Papilio*, Linnaeus, 1758	69
Alle Link, 1807	110
alle, *Alca*, Linnaeus, 1758	110
alouina, *Volema*, [Röding], 1798	21
amethystus, *Solen*, Wood, 1815	16
Ametistina Schinz, 1825	44, 212
Amphiptyches Wagener, 1852	29
Ampulla Röding, 1798	41
anastomosis, *Gracillaria*, Haworth, 1828	27
appendiculatus, *Caligus*, Müller, 1852	220
aprugnus, *Hyocephalus*, Bergroth, 1906	113
Argiope Audouin, 1826	200
Argyope Audouin, 1826	200
Ascitellina Marwick, 1928	47
asparagi, *Chrysomela*, Linnaeus, 1758	12
aspersa, *Idalia*, Alder & Hancock, 1845	265
audax, *Attus*, Hentz, 1845	103, 213
australis, *Tolema*, Laseron, 1955	21
Balantidium Claparède & Lachmann, 1858	33
bavarica, *Cystidea*, Barrande, 1868	91
bicollina, *Bollia*, Jones & Holl, 1886	169
bicolor, *Phyllobates*, Bibron, 1841	262
Bicornes Schuchert & LeVene, 1929	10
binotatus, *Ammonites*, Oppel, 1862	107
Bollia Jones & Holl, 1886	169
BOLLIIDAE Bouček, 1936	169
Brachyrhinus Latreille, 1802	3
caerulea, *Fundulus gularis* var., Boulenger, 1915	246
Callopanchax Myers, 1933	246
cancellatus, *Sigaretus*, Lamarck, 1822	238
caudata, *Idalla*, Ørsted, 1844	265
caudatus, *Priapulus*, Lamarck, 1816	267
Cellaria Ellis & Solander, 1786	231
Ceratina Latreille, [1802–1803]	121
CERATINIDAE Latreille, [1802–1803]	122
charlottae, *Tellina*, Smith, 1885	47

	Page
Chicoreus Montfort, 1810	20
chilensis, Echiurus, Diesing, 1859	216
chimaerae, Crobylophorus, Krøyer, 1852	29
chlorodippe, Argynnis, Herrich-Schaeffer, 1851; Villiers & Guenée, 1835 ...	83
cinerea, Simia (Papio), Kerr, 1792	171
Clavicera Latreille, 1802	121
Colpidium Stein, 1860	33
Colpoda Müller, 1773	33
colpoda, Paramaecium, Losana, 1829	34
Coscinocyathus Bornemann, 1884	207
crinitus, Zelandobates, Hopkins, 1966	119
Crioceris Müller, 1764	12
Crobylophorus Krøyer, 1852	29
cucullus, Kolpoda, Müller, 1773	34
cucurbitina, Apis, Rossi, 1792	121
cyanea, Lema, Fabricius, 1798	12
cyanea, Loxia, Linnaeus, 1758	259
cyanea, Tanagra, Linnaeus, 1766	259
Cyathocrinites Miller, 1821	70
Cystidea Barrande, 1868	91
Delocrinus Miller & Gurley, 1890	202
Dendrobates Wagler, 1830	262
desultor, Lipistius, Schiødte, 1849	167
dianthus, Coscinocyathus, Bornemann, 1884	207
difficilis, Holothuria, Semper, 1868	31
domicella, Psittacus, Linnaeus, 1758	176
donaciformis, Ascitellina, Marwick, 1928	47
doria, Antilope, Ogilby, 1837	104
dubius, Polygnathus, Hinde, 1879	164
duodecimus, Fusus, Gray, 1843	21
ebii, Sciurus, Pel, 1851; Temminck, 1853	224
Echinocorys Leske, 1778	55
Echinocorytes Leske, 1778	55
Eclectus Wagler, 1832	176
elegans, Ialia, Leuckart, 1828	265
Enchelis Müller, 1773	34
Enchelys Müller, 1773	34
entozoon, Bursaria, Ehrenberg, 1838	34
Eoparafusulina Coogan, 1960	39
erythropus, Sciurus, Geoffroy, 1803...	224
exigua, Janthina, Lamarck, [1816]	44
expansus, Plethodus, Dixon, 1850	79

	Page
farcimen, Enchelis, Müller, 1773	34
farciminoides, Cellaria, Ellis & Solander, 1786	231
fervensis, Tellina, Gmelin, 1791	16
filosa, Psammobia, Conrad, 1833	16
Finlay, 1827 works	69
fistulosa, Eschara, Linnaeus, 1758	231
fluviatilis, Tintinnus, Stein, 1863	89
foliatus, Triplex, Perry, 1810	21
Fundulopanchax Myers, 1924	246
fuscatus, I[*nuus*], Blyth, 1875	77
galilejensis, Cypselus, Antinori, 1855	253
Gari Schumacher, 1817	16
gari, Tellina, Linnaeus, 1758	16
Garum Dall, 1900	16
geniculata, Musca, De Geer, 1776	234
geversianum, Buccinum, Pallas, 1774	21
giganteus, Gyrolepis, Agassiz, 1835	98
Glaucoma Ehrenberg, 1830	34
glutinosa, Salamandra, Green, 1818	79
GRACILARIIDAE Stainton, 1854	27
gracilis, Fusulina, Meek, 1864	39
Gracillaria Haworth, 1828	27
GRACILLARIIDAE Stainton, 1854	27
grandis, Zealandobates, Hammer, 1967	119
Gyrocotyle Diesing, 1850	29
Haematobia Lepeletier & Serville, 1828	235
hammonis, Helix, Strøm, 1765	175
hemisphericus, Poteriocrinus, Schumard, 1858	202
Hemprich & Ehrenberg, 1828 work	2
hibberti, Megalichthys, Agassiz, 1835	97
hibberti, Rhizodus, Owen, 1840	97
hilla, Holothuria, Lesson, 1830	31
hippocastanum, Murex, Linnaeus, 1758	21
Holoptychius Egerton, 1837; Agassiz, 1839	97
Holoptychus Buckland, 1837	98
humanus, Priapus, Linnaeus, 1758	267
HYOCEPHALIDAE Bergroth, 1906	113
Hyocephalus Bergroth, 1906	113
Hyposmochoma Butler, 1881	5
hysterita, Anomia, Linnaeus, 1758	87
Idaliella Bergh, 1881	265
Idalia, Ørsted, 1844	265

	Page
impennis, *Alca*, Linnaeus, 1758	111
inornata, *Saperda*, Say, 1824...	123
inquilina, *Trichoda*, Müller, 1776	89
Iodina Mörch, 1860	45
irritans, *Conops*, Linnaeus, 1758	234
japonicus, *Papio*, [Rennie], 1838	77
Kalydon Hutton, 1884	21
kefersteini, *Lyrodon*, Münster, 1837	75
Kolpoda Müller, 1773	34
kolpoda, *Paramaecium*, Losana, 1829	35
lacunosa, *Anomia*, Linnaeus, 1758	87
lacustris, *Caligus*, Steenstrup & Lütken, 1861	220
lagura, *Scolopendra*, Linnaeus, 1758	6
Larius Boodaert, 1783	176
Lasioptera Meigen, 1818	95
leachii, *Nematus*, Dahlbom, 1835	8
lebona, *Hypolycaena*, Hewitson, [1865]	63
Lema Fabricius, 1798...	12
Leprotintinnus Jörgensen, 1900	89
Leptoglena Grassé & de Boissezon, 1929	34
Leucopera Gmelin, 1790	34
leucophaea, *Simia*, Cuvier, 1807	171
Leucophrus Ehrenberg, 1838	34
LEUCOPHRYDAE Mugard, 1949	35
LEUCOPHRYENS Dujardin, 1841	35
LEUCOPHRYIDAE Mugard, 1949	35
Leucophrys Ehrenberg, 1830	34
Leucotis Swainson, 1840	239
lilii, *Attelabus*, Scopoli, 1763	12
Lilioceris Reitter, 1912	12
LIPHISTIIDAE Thorell, 1869	167
Liphistius Schiødte, 1849	167
Lipistius Schiødte, 1849	167
littoreus, *Turbo*, Linnaeus, 1758	51, 131
Littorina Férussac, 1822	51, 131, 210
livea, *Simia* (*Papio*), Kerr, 1792	171
livonica, *Terebratula*, von Buch, 1834	10
lobata, *Aranea*, Pallas, 1772	200
LORIIDAE Swainson, 1837	176
Lorius Vigors, 1825	176
lotorium, *Murex*, Linnaeus, 1758	67, 133
Ludwig, R., 1865–66 work	226

Page

mackloti, Liasis, Duméril & Bibron, 1844 178
Macrocystella Callaway, 1877 91
MACROCYSTELLIDAE Bather, 1899 91
macrodactylus, Gelasimus, H. Milne Edwards & Lucas, 1843 214
maculata, Rana, Daudin, 1801 ... ... 66, 133
maculipennis, Plutella, Curtis, 1832 60
Mancinella Link, 1807 20
mancinella, Murex, Linnaeus, 1758 21
Maoritellina Finlay, 1927 48
mariae, Macrocystella, Callaway, 1877 91
mauritiana, Holothuria, Quoy & Gaimard, 1833 31
Megalichthys Agassiz, 1835 97
Merria Gray, 1839 239
Mimecomutilla Ashmead, 1903 115
monacaria, Holothuria, Lesson, 1830 31
moniliferus, Pachyrhynchus, Germar, 1824 93
Müller, (J.), 1826 and 1828 works 5
Müller, (O. F.), 1769 and 1770 works 73

Narica d'Orbigny, 1842 239
natrix, Ammonites, Schlotheim, 1820 105
neptuni, Receptacules, Defrance, 1827 14
Nioma Gray, 1842 240
nobilissimus, Holoptychius, Agassiz, 1839 97
Nodosaria [Lamarck, 1816] 183

obliqua, Tellina, Wood, 1815; Sowerby, 1817 229
obscurus, Attus, Taczanowski, 1872... 100
occidentale, Aphyosemion, Stenholt Clausen, 1966 247
Okenia Menke, 1830 265
OLIGOLOPHINAE Banks, 1893 218
Oligolophus Koch, 1872 218
Orthocera Modeer, 1789 182
Orthoceras Bruguière, 1789 180
ORTHOCERATIDAE M'Coy, 1844 185
Orthoceros Brünnich, 1771 182
ORTHOCEROTIDAE Teichert & Miller, 1936 185
Otiorhynchus Germar, 1824 3
ovulum, Enchelis, Müller, 1773 35

PACHYRHYNCHINI Schoenherr, 1826 93
Pachyrhynchus Wagler, 1822; Germar, 1824 93
pallida, Janthina, Thomson, 1840 45
pallipes, Julus, Olivier, 1792 173

	Page
palmarosae, Murex, Lamarck, 1822	21
Paraglaucoma Warren, 1932	34
patula, Leucophrys, Ehrenberg, 1830	34
patula, Trichoda, Müller, 1786	35
pellucidus, Tintinnus, Cleve, 1899	89
Phidippus Koch, 1846	103, 213
Phyllobates Bibron, 1841	262
picta, Lasioptera, Meigen, 1818	95
Pinguinus Bonnaterre, 1791	110
Pinuca Hupé, 1854	216
PINUCIDAE Amor, 1965	216
piriformis, of the literature	35
pirum, Kolpoda, Müller, 1786	35
planus, Cyathocrinites, Miller, 1821	70
Plautus Klein, 1760; Gunnerus, 1761; Brunnich, 1772	110
plebejus, Trophon, Hutton, 1873	21
PLETHODIDAE Loomis, 1900	79
Plethodon Tschudi, 1838	79
PLETHODONTIDAE Gray, 1850; Hay, 1929	79
Plethodus Dixon, 1850	79
Plotus Gunnerus, 1761	110
plumicornis, Gammarus, Costa, 1853	49
Polygnathus Hinde, 1879	164
POLYXENIDAE Lucas, 1840	6
Polyxenus Latreille, [1802–1803]	6
priamus, Helix, Gmelin, 1791	41
Priapulus Lamarck, 1816	267
priapus, Holothuria, Linnaeus, 1767	267
Protobalantidium Abé, 1927	35
Protomomys Teilhard de Chardin, 1927	227
Psammobia Lamarck, 1818	16
PSAMMOBIADAE Fleming, 1828	16
PSAMMOBIIDAE Fleming, 1828	16
Psodos Treitsche, 1825	101
Psoidos Treitsche, 1825	101
Ptyxidium Perty, 1852	35
purpurata, Mutilla, Smith, 1879	115
pyriformis, Leucophrys, Ehrenberg, 1830	34
pyrum, Trichoda, Ehrenberg, 1830	35
quadrifaria, Phalaena, Sulzer, 1776	102
radicula, Nautilus, Linnaeus, 1758	183
raibeliana, Cryptina, Boué, 1835	75
ramosus, Murex, Linnaeus, 1758	21

	Page
Ramsayellus Spain & Luxton, 1970	119
Receptaculites Defrance, 1827; Deshayes, 1828	14
regularis, Orthoceratites, Schlotheim, 1820	181
renominanda, Mimecomutilla, Bischoff, 1921	115
reticulata, Camelopardalis giraffa var., Weinland, 1863	222
reticulata, Giraffa camelopardalis, de Winton, 1899	222
retusa, Anomia, Linnaeus, 1758	85
rhinoides, Trypetes, Gyllenhal, 1836	199
Rhizodus Owen, 1840	97
Ripidiorhynchus Sartenaer, 1966	10
Roloffia Stenholt Clausen, 1966	247
roratus, Psittacus, Müller, 1776	176
rugosa, Gyrocotyle, Diesing, 1850	29
salicornia, Cellularia, Pallas, 1766	231
salicornioides, Cellaria, Lamouroux, 1816	231
Saperda Fabricius, 1775	123
Saprophilus Stokes, 1887	35
scintillans, Glaucoma, Ehrenberg, 1830	34
scutata, Echinocorys, Leske, 1778	55, 211
sebrus, Papilio, Huebner, 1824–26	68
sinuosa, Farcimia, Hassall, 1840	231
Siphona Meigen, 1803	234
speciosus, Macacus, I. Geoffroy, 1826	77
SPHAERIIDAE Jeffreys, 1862	130
stigmatosus, Julus, Eichwald, 1830	173
striatula, Anomia, Linnaeus, 1758	87
Strongylosoma Brandt, 1833	173
sylvicola, Simia (*Papio*), Kerr, 1792	171
Tatura Butler, [1888]	63
Tellinella Mörch, 1853	47
Temnocrinus Springer, 1902	70
Terebratulina d'Orbigny, 1847	85
Tetrahymen Mast & Pace, 1946	34
Tetrahymena Furgason, 1940	35
Tetrahymenia Mugard, 1949	35
TETRAHYMENIDAE Corliss, 1952	34
Thalascaris Bate, 1878	257
thompsoni, Eoparafusulina, Skinner & Wilde, 1965	39
timorensis, Python, Müller, 1844	178
timoriensis, Liasis, Peters, 1876	178
timoriensis, Python, Müller, 1857	178
tinctoria, Calamita, Schneider, 1799	262
TINTINNIDAE Claparède & Lachmann, 1858	89

Page
TINTINNIDIIDAE Kofoid & Campbell, 1929 89
Tintinnidium Kent, 1881 89
Tintinnus Schrank, 1803 89
Tolema Iredale, 1929 20
tridens, Opilio, Koch, 1836 218
Trophon Montfort, 1810 20
truncata, Tellina, Linnaeus, 1767 16
Trunculariopsis Cossmann, 1921 20
trunculus, Murex, Linnaeus, 1758 21
Trypetes Schoenherr, 1836 198
TRYPETIDINAE Lacordaire, 1866 199
tuberculatus, Cyathocrinites, Miller, 1821 70
tunetanus, Gammarus, Simon, 1885 49
Turchiniella Grassé & de Boissezon, 1929 35

umbrina, Holothuria, Rüppell & Leuckardt, 1828 31
URECHIDAE Fisher & MacGinitie, 1928 216
Urechis Seitz, 1907 216
urna, Amphiptyches, Grube & Wagener, 1852 29

valdani, Ammonites, d'Orbigny, 1844 107
VANIKORIDAE H. & A. Adams, 1854 240
Vanikoro Quoy & Gaimard, 1832 238
variabilis, Donax, Say, 1822 205
variabilis, Latona, Schumacher, 1817 205
variegata, Simia (Papio), Kerr, 1792 171
variegata, Terebra, Gray, 1834 255
variegatus, Salticus, Lucas, 1833 ... ... 103, 213
virgata, Tellina, Linnaeus, 1758 48
vulvarius, Hysterolithes, Schlotheim, 1820 87

wilsoni, Terebratula, Sowerby, 1816... 87

xylostella, Phalaena Tinea, Linnaeus, 1758... ... ... 60, 130
Xymene Iredale, 1915 20

Zealandobates Hammer, 1967 119
zebra, Antilope, Gray, 1838 104
Zelandobates Hopkins, 1966 119

NAMES PLACED ON OFFICIAL LISTS AND INDEXES IN DECISIONS PUBLISHED IN VOLUME 27

Official List of Generic Names in Zoology

Amphiptyches Wagener, 1852
Balantidium Claparède & Lachmann, 1858
Bollia Jones & Holl, 1886
Cellaria Ellis & Solander, 1786
Chicoreus Montfort, 1810
Colpidium Stein, 1860
Colpoda Müller, 1773
Crioceris Müller, 1764
Cyathocrinites Miller, 1821
Eclectus Wagler, 1832
Enchelys Müller, 1773
Eoparafusulina Coogan, 1960
Gari Schumacher, 1817
Garum Dall, 1900
Glaucoma Ehrenberg, 1830
Gracillaria Haworth, 1828
Gyrocotyle Diesing, 1850
Holoptychius Agassiz, 1839
Lasioptera Meigen, 1818
Lema Fabricius, 1798
Leprotintinnus Jörgensen, 1900
Lilioceris Reitter, 1912
Liphistius Schiødte, 1849
Lorius Vigors, 1825
Macrocystella Callaway, 1877
Mancinella Link, 1807
Megalichthys Agassiz, 1835
Oligolophus C. Koch, 1872
Pachyrhynchus Germar, 1824
Plethodon Tschudi, 1838
Plethodus Dixon, 1850
Polyxenus Latreille, [1802–1803]
Psammobia Lamarck, 1818
Receptaculites Deshayes, 1828
Rhizodus Owen, 1840
Ripidiorhynchus Sartenaer, 1966
Strongylosoma Brandt, 1833
Temnocrinus Springer, 1902
Terebratulina d'Orbigny, 1847
Tetrahymena Furgason, 1940
Tintinnidium Kent, 1881
Tintinnus Schrank, 1803
Tolema Iredale, 1929
Trophon Montfort, 1810
Trunculariopsis Cossmann, 1921
Urechis Seitz, 1907
Xymene Iredale, 1915

Official List of Specific Names in Zoology

achaemenes, *Charaxes*, Felder, 1866
alouina, *Volema*, [Röding], 1798
amethystus, *Solen*, Wood, 1815
anastomosis, *Gracillaria*, Haworth, 1828
asparagi, *Chrysomela*, Linnaeus, 1758
australis, *Tolema*, Laseron, 1955
bavarica, *Cystidea*, Barrande, 1868
bicollina, *Bollia*, Jones & Holl, 1886
chilensis, *Euchiurus*, Diesing, 1859
chlorodippe, *Argynnis*, Herrich-Schaeffer, 1851
colpoda, *Paramaecium*, Losana, 1829
cucullus, *Kolpoda*, Müller, 1773
cyanea, *Lema*, Fabricius, 1798
desultor, *Lipistius*, Schiødte, 1849
difficilis, *Holothuria*, Semper, 1868
domicella, *Psittacus*, Linnaeus, 1758
ebii, *Sciurus*, Temminck, 1853

entozoon, *Bursaria*, Ehrenberg, 1838
erythropus, *Sciurus*, E. Geoffroy, 1803
expansus, *Plethodus*, Dixon, 1850
farcimen, *Enchelis*, Müller, 1773
fervensis, *Tellina*, Gemlin, 1791
filosa, *Psammobia*, Conrad, 1833
fistulosa, *Eschara*, Linnaeus, 1758
fluviatilis, *Tintinnus*, Stein, 1863
fuscatas, *I*[*nuus*], Blyth, 1875
geversianum, *Buccinum*, Pallas, 1774
glutinosa, *Salamandra*, Green, 1818
gracilis, *Fusulina*, Meek, 1864
hammonis, *Helix*, Strøm, 1765
hibberti, *Megalichthys*, Agassiz, 1835
hibberti, *Rhizodus*, Owen, 1840
hilla, *Holothuria*, Lesson, 1830
inquilina, *Trichoda*, Müller, 1776
kefersteini, *Lyrodon*, Münster, 1837
lacustris, *Caligus*, Steenstrup & Lütken, 1861
lagura, *Scolopendra*, Linnaeus, 1758
leucophaea, *Simia*, Cuvier, 1807
lilii, *Attelabus*, Scopoli, 1763
livonica, *Terebratula*, von Buch, 1834
mackloti, *Liasis*, Duméril & Bibron, 1844
mariae, *Macrocystella*, Callaway, 1877
mauritiana, *Holothuria*, Quoy & Gaimard, 1833
moniliferus, *Pachyrhynchus*, Germar, 1824
neptuni, *Receptacules*, Defrance, 1827
nobilissimus, *Holoptychius*, Agassiz, 1839
obliqua, *Tellina*, Sowerby, 1817
palmarosae, *Murex*, Lamarck, 1822
patula, *Leucophrys*, Ehrenberg, 1830
pellucidus, *Tintinnus*, Cleve, 1899
picta, *Lasioptera*, Meigen, 1818
planus, *Cyathocrinites*, Miller, 1821
plebejus, *Trophon*, Hutton, 1873
pyriformis, *Leucophrys*, Ehrenberg, 1830
ramosus, *Murex*, Linnaeus, 1758
reticulata, *Giraffa camelopardalis*, de Winton, 1899
retusa, *Anomia*, Linnaeus, 1758
roratus, *Psittacus*, Müller, 1776
rugosa, *Gyrocotyle*, Diesing, 1850
salicornioides, *Cellaria*, Lamouroux, 1816
scintillans, *Glaucoma*, Ehrenberg, 1830
sinuosa, *Farcimia*, Hassall, 1840
stigmatosus, *Julus*, Eichwald, 1830
thompsoni, *Eoparafusulina*, Skinner & Wilde, 1965
timoriensis, *Liasis*, Peters, 1876
tridens, *Opilio*, C. L. Koch, 1836
truncata, *Tellina*, Linnaeus, 1767
trunculus, *Murex*, Linnaeus, 1758
tuberculatus, *Cyathocrinites*, Miller, 1821
urna, *Amphiptyches*, Grube & Wagener, 1852
vulvarius, *Hysterolithes*, Schlotheim, 1820
wilsoni, *Terebratula*, Sowerby, 1816

Official List of Family-Group Names in Zoology

BOLLIDAE Bouček, 1936
GRACILLARIDAE Stainton, 1854
LIPHISTIIDAE Thorell, 1869
LORIIDAE Swainson, 1837
MACROCYSTELLIDAE Bather, 1899
OLIGOLOPHINAE Banks, 1893
PACHYRHYNCHINI Schoenherr, 1826
PLETHODIDAE Loomis, 1900
PLETHODONTIDAE J. E. Gray, 1850
POLYXENIDAE Lucas, 1840
PSAMMOBIIDAE Fleming, 1828
TETRAHYMENIDAE Corliss, 1952
TINTINNIDAE Claparède & Lachmann, 1858
TINTINNIDIIDAE Kofoid & Campbell, 1929
URECHIDAE Fisher & MacGinitie, 1928

Official Index of Rejected and Invalid Generic Names in Zoology

Bicornes Schuchert & Le Vene, 1929
Crobylophorus Krøyer, 1852
Cystidea Barrande, 1868
Enchelis Müller, 1773
Holoptychius Egerton, 1837
Holoptychus Buckland, 1837
Kalydon Hutton, 1884
Kolpoda Müller, 1773
Larius Boddaert, 1783
Leptoglena Grassé & de Boissezon, 1929
Leucopera Gmelin, 1790
Leucophrus Ehrenberg, 1838
Leucophrys Ehrenberg, 1830
Lipistius Schiødte, 1849
Pachyrhynchus Wagler, 1822
Paraglaucoma Warren, 1932
Pinuca Hupé, 1854
Pollyxenus Latreille, [1802–1803]
Protobalantidium Abé, 1927
Protomomys Teilhard de Chardin, 1927
Ptyxidium Perty, 1852
Receptacules Defrance, 1827
Saprophilus Stokes, 1887
Tetrahymen Mast & Pace, 1946
Tetrahymenia Mugard, 1949
Turchiniella Grassé & de Boissezon, 1929

Official Index of Rejected and Invalid Specific Names in Zoology

appendiculatus, *Caligus*, F. Müller, 1852
chimaerae, *Crobylophorus*, Krøyer, 1852
chlorodippe, *Argynnis*, Villiers & Guenée, 1835
cinerea, *Simia* (*Papio*), Kerr, 1792
duodecimus, *Fusus*, Gray, 1843
ebii, *Scurrus*, Pel, 1851
erythopus, *Scurrus*, Geoffroy, 1803
farciminoides, *Cellaria*, Ellis & Solander, 1786
foliatus, *Triplex*, Perry, 1810
gari, *Tellina*, Linnaeus, 1758
giganteus, *Gyrolepis*, Agassiz, 1835
hippocastanum, *Murex*, Linnaeus, 1758
hysterita, *Anomia*, Linnaeus, 1758
japonicus, *Papio*, [Rennie], 1838
kolpoda, *Paramaecium*, Losana, 1829
lacunosa, *Anomia*, Linnaeus, 1758
leachii, *Nematus*, Dahlbom, 1835
livea, *Simia* (*Papio*), Kerr, 1792
macrodactylus, *Gelasimus*, H. Milne Edwards & Lucas, 1843
mancinella, *Murex*, Linnaeus, 1758
monacaria, *Holothuria*, Lesson, 1830
obliqua, *Tellina*, Wood, 1815
ovulum, *Enchelis*, Müller, 1773
pallipes, *Julus*, Olivier, 1792
patula, *Trichoda*, Müller, 1786
piriformis, of the literature
pirum, *Kolpoda*, Müller, 1786
pyrum, *Trichoda*, Ehrenberg, 1830
raibeliana, *Cryptina*, Boué, 1835
reticulata, *Camelopardalis giraffa* var., Weinland, 1863
salicornia, *Cellularia*, Pallas, 1766
speciosus, *Macacus*, I. Geoffroy, 1826
striatula, *Anomia*, Linnaeus, 1758
sylvicola, *Simia* (*Papio*), Kerr, 1792
timorenis, *Python*, Müller, 1844
timoriensis, *Python*, Müller, 1857
umbrina, *Holothuria*, Rüppell & Leuckardt, 1828
variegata, *Simia* (*Papio*), Kerr, 1792

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LEUCOPHRYDAE Mugard, 1949

LEUCOPHRYENS Dujardin, 1841

LEUCOPHRYIDAE Mugard, 1949

PINUCIDAE Amor, 1965

PLETHODONTIDAE Hay, 1929

POLLYXÉNITES Lucas, 1840

PSAMMOBIADAE Fleming, 1828

CORRIGENDA

page 4. Line 16: substitute "type-genus" for "type-species".

page 40. Line 4: substitute "Skinner & Wilde, 1965, *Univ. Kansas Paleont. Contr., Protozoa* **6**: 77" for "Skinner & Wilde, 1965, *Mem. geol. Soc. Amer.* **17**: 74".

page 104. Line 13: substitute "1833, p. 1" for "1833, pl 1".
Line 23: substitute "Zebra Duiker" for "Zebra Zuiker".

page 111. Line 7 from bottom: substitute "gender: masculine" for "gender: feminine".

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CONTENTS

(*continued from front wrapper*)

Page

Opinions

Opinion 940 (*Gelasimus macrodactylus* H. Milne Edwards & Lucas, 1843) 214
Opinion 941 (*Pinuca* Hupé, 1854) 216
Opinion 942 (*Oligolophus* C. Koch, 1872) 218
Opinion 943 (*Caligus appendiculatus* F. Müller, 1852) 220
Opinion 944 (*Giraffa camelopardalis reticulata* de Winton, 1899) .. 222
Opinion 945 (*Sciurus ebii* Pel, 1851) 224
Opinion 946 (Ludwig, 1865–66 work) 226
Opinion 947 (*Protomomys* Teilhard de Chardin, 1927) 227
Opinion 948 (*Tellina obliqua* J. Sowerby, 1817) 229
Opinion 949 (*Cellaria* Ellis & Solander, 1786) 231

New Cases

The type-species of *Siphona* Meigen, 1803, and *Haematobia* Lepeletier and Serville, 1828 (Insecta, Diptera) (Curtis W. Sabrosky) 234
The question of the generic name *Vanikoro* Quoy & Gaimard, 1832 (Gastropoda) (R. V. Melville) 238
Callopanchax Myers, 1933 (Pisces): Request for a Ruling as to the type-species (G. S. Myers) 246
Request for revision of the 1964 Code to permit valid emendation of certain *-ii* endings of patronyms (Hobart M. Smith, L. C. Stuart and Roger Conant) 250
Cypselus abessynicus Streubel, 1848 (Aves): Proposed suppression under the plenary powers (Constantine Walter Benson & Richard Kendall Brooke) 253
Terebra variegata Gray, 1834 (Gastropoda): Proposed preservation under the plenary powers (Twila Bratcher & Robert Burch) .. 255

CONTENTS

(*continued from inside back wrapper*)

Page

Thalascaris Bate, 1878 (Crustacea, Decapoda): Request for suppression under the plenary powers (L. B. Holthuis) 257
Loxia cyanea Linnaeus, 1758 (Aves): Proposed invalidation under the plenary powers, in order to conserve *Tanagra cyanea* Linnaeus, 1766 (Eugene Eisenmann, Raymond A. Paynter, Jr., and Charles Vaurie) 259
Dendrobates Wagler, 1830 (Amphibia): Proposed designation of type-species under the plenary powers (Philip A. Silverstone) 262
Okenia Menke, 1830, and *Idaliella* Bergh, 1881 (Mollusca, Opisthobranchia): Proposed addition to Official List (Henning Lemche) .. 265
Priapus humanus Linnaeus, 1758, and *Holothuria priapus* Linnaeus, 1767 (Priapulida): Proposed suppression under the plenary powers (J. van der Land) 267
Request for a Declaration modifying Article 1 so as to exclude names proposed for domestic animals from zoological nomenclature (C. P. Groves) 269

Comments

Comments on the proposed designation of a type-species for *Littorina* Férussac, 1822 (W. O. Cernohorsky; L. B. Holthuis) 210
Objections to the use of the plenary powers for neotypes of *Echinocorys scutata* (Echinoidea) (C. W. Sabrosky; C. W. Wright) 211
Echinocorys scutata: Reply to Dr. Sabrosky (R. V. Melville) 212
Comment on the requested suppression of *Ametistina* Schinz, 1825 (W. O. Cernohorsky) 212
Comments on the proposed designation of a type-species for *Phidippus* Koch, 1846 (J. A. Beatty; R. Leech) 213

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