OPINION 2079 (Case 2926)

Trichia Hartmann, 1840 (Mollusca, Gastropoda): proposed conservation; and TRICHIINAE Ložek, 1956 (Gastropoda): proposed emendation of spelling to TRICHIAINAE, so removing the homonymy with TRICHIIDAE Fleming, 1821 (Insecta, Coleoptera) not approved

Abstract. The Commission has ruled that the name *Trichia* Hartmann, 1840 (Mollusca, Gastropoda) is not conserved. The names *Trochulus* Chemnitz, 1786, *Trichia* De Haan, 1839 (Crustacea, Brachyura) and TROCHULINAE Lindholm, 1927 are placed on Official Lists. *Trichia* Hartmann, 1840, *Trichia* Nietner. 1861 (Lepidoptera), *Trichia* Reuter, 1875 (Heteroptera), and TRICHIINAE Ložek, 1956 are placed on Official Indexes.

Keywords. Nomenclature; taxonomy; Gastropoda; Brachyura; Coleoptera; TROCHULINAE; *Trochulus*; *Trichia*; pulmonates; crabs; beetles.

Ruling

- (1) Proposals put forward to conserve the name *Trichia* Hartmann, 1840 by the suppression of *Trochulus* Alten, 1812 [= *Trochulus* Chemnitz, 1786; see Editor's note] (Gastropoda) and *Trichia* De Haan, 1839 (Brachyura) were not approved.
- (2) The following names are hereby placed on the Official List of Generic Names in Zoology:
 - (a) *Trochulus* Chemnitz, 1786 (gender: masculine), type species by monotypy *Helix hispida* Linnaeus, 1758 (Gastropoda);
 - (b) *Trichia* De Haan, 1839 (gender: feminine), type species by monotypy *Trichia dromiaeformis* De Haan, 1839 (Brachyura);
 - (c) *Trichius* Fabricius, 1775 (gender: masculine), type species by subsequent designation by Latreille (1810) *Scarabaeus fasciatus* Linnaeus, 1758 (Coleoptera).
- (3) The following names are hereby placed on the Official List of Specific Names in Zoology:
 - (a) hispida Linnaeus, 1758, as published in the binomen Helix hispida (specific name of the type species of Trochulus Chemnitz, 1786) (Gastropoda);
 - (b) dromiaeformis De Haan, 1839, as published in the binomen Trichia dromiaeformis (specific name of the type species of Trichia De Haan, 1839) (Brachyura);
 - (c) fasciatus Linnaeus, 1758, as published in the binomen Scarabaeus fasciatus (specific name of the type species of Trichius Fabricius, 1775) (Coleoptera).
- (4) The name TROCHULINAE Lindholm, 1927 (type genus *Trochulus* Chemnitz, 1786) is hereby placed on the Official List of Family-Group Names in Zoology (Gastropoda).
- (5) The following names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology:

- (a) *Trichia* Hartmann, 1840 (a junior primary homonym of *Trichia* De Haan, 1839) (Gastropoda);
- (b) Zalasius Rathbun, 1897 (an unnecessary substitute name for *Trichia* De Haan, 1839) (Brachyura);
- (c) *Erethismus* Gistel, 1848 (a junior objective synonym of *Trichia* Hartmann, 1840) (Gastropoda);
- (d) *Macneillena* Iredale, 1930 (a junior objective synonym of *Trichia* De Haan, 1839) (Brachyura);
- (e) *Trichia* Hong, 1981 (a junior homonym of *Trichia* De Haan, 1839) (Diptera).
- (6) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
 - (a) TRICHIINAE Ložek, 1956 (based on *Trichia* Hartmann, 1840, a junior primary homonym of *Trichia* De Haan, 1839) (Gastropoda);
 - (b) ZALASIINAE Serène, 1968 (based on *Zalasius* Rathbun, 1897, an unnecessary substitute name for *Trichia* De Haan, 1839) (Brachyura).

History of Case 2926

An application to conserve the name *Trichia* Hartmann, 1840 (Gastropoda) and to remove the homonymy between the family-group names trichiidae Fleming, 1821 (Coleoptera, Palaearctic dung beetles) and trichiinae Ložek, 1956 (Gastropoda) by emending the stem of the name *Trichia* Hartmann, 1840 on which the gastropod name is based, to become trichiainae was received from E. Gittenberger and L.B. Holthuis (*Nationaal Natuurhistorisch Museum, Leiden, The Netherlands*) on 17 January 1994. After correspondence the issue of homonymy with the ambiregnal taxon *Trichia* von Haller, 1768 (Myxomycetes or Mycetozoa) was included and the case was published, with E. Gittenberger as the sole author, in BZN 57: 17–23 (March 2000). Notice of the case was sent to appropriate journals.

Comments opposing the application

Comments opposing the application were received from Holthuis (BZN 57: 109–110) stating that 'the only argument for . . . saving *Trichia* Hartmann, 1840 was its frequent usage in the last ten years, but in Myxomycetes (or Mycetozoa) Trichia had clearly been used unambiguously for a much longer period of time . . . in this case the Code should be strictly applied . . .' Rosenberg (BZN 57: 225-227), following Article 1.1.1 of the Code, reasoned that slime molds, being typically studied by mycologists who follow the botanical Code, could be considered to be outside the scope of zoological nomenclature. However, Article 2.2 states that any available name of a taxon that has at any time been classified as animal continues to compete in homonymy in zoological nomenclature even though the taxon is later not classified as animal. Since 90% of myxomycetan genera are recorded in standard indexing sources, homonymy with strictly zoological names is easily detected . . . the arguments against conserving Trichia Hartmann, 1840 are persuasive. Rosenberg also was opposed to emending the spelling of TRICHIINAE Ložek, 1956 (Gastropoda) to TRICHIAINAE. In opposing the application Kadolsky (BZN 58: 53) also addressed the ambiregnal issue with reference to the homonymy of the myxomycete familygroup name and that of TRICHIIDAE Fleming, 1821 (Coleoptera).

Bouchet & Falkner (BZN 58: 141–142) sympathized with Rosenberg's view because nomenclature becomes impenetrable when *Hemitrichia* Möllendorff, 1888 is regarded as invalid because of homonymy in the Myxomycetes and *Trichia* Hartmann, 1840 is not. They further pointed out that *Trochulus* should be dated from Schröter (1788) who published the binomen *Trochulus hispidus* in an index to Chemnitz's (1786) work although placed on the Official Index by Direction 1, Schröter made the name available (it satisfies the conditions of Article 11.4.3 of the Code). *Trochulus* Schröter, 1788 is available under Article 12.2.2 with the type species, by monotypy, *Helix hispida* Linnaeus, 1758 [see Editor's note].

Comments in support of the application

Comments in support of the application were published in BZN 57: 166–167. Gittenberger, Goud, Maassen, Menkhorst, Ripken, de Winter & Bank, in support of the application, pointed out that if the names *Trichia* and TRICHIIDAE in Myxomycetes are accepted as senior homonyms in zoological nomenclature, as Holthuis (BZN 57: 109–110) had proposed, a further application must be brought to the Commission to remove the homonymy between TRICHIIDAE in Myxomycetes, Insecta and Mollusca.

Heppell (BZN 57: 223–225), in support of the application to conserve *Trichia* Hartmann, 1840, proposed that the names *Capillifera* Honigmann, 1906 (Mollusca), *Trichia* Nietner, 1861 (Lepidoptera) and *Trichia* Reuter, 1875 (Heteroptera) be placed on the Official Index of Rejected and Invalid Generic Names in Zoology.

Krell (BZN 58: 54–56) also supported the application 'in particular the conservation of the scarab beetle family name TRICHIIDAE Fleming, 1821' and further noted that Fries was not the original author of the name but Nees von Esenbeck who introduced 'Trichocisti' [Myxomycetes] in 1816.

Ambiregnal taxa

The broad issues raised by ambiregnal taxa were reviewed by Corliss (BZN 52: 11–17). Following an open meeting of the Bionomenclature Committee convened at the International Union of Biological Sciences (IUBS) General Assembly in Naples in November 2000 it was noted that the nomenclature of ambiregnal organisms (at both the botanical/zoological and botanical/bacteriological interfaces) presented problems and existing names should not be replaced because of inter-regnal homonymy. Krell added further comments on this issue (see BZN 58: 54–56, 142).

Decision of the Commission

The application was sent to the Commission for voting on 1 September 2002. Members of the Commission were invited to vote on the proposals published in BZN 57: 20–21, with the additional proposals published in BZN 57: 224. At the close of the voting period on 1 December 2002 the proposals received a majority of the votes cast but failed to reach the required two-thirds majority (15 votes in favour and 10 against; two Commissioners did not vote and one was on leave of absence).

Bouchet commented on his voting paper that the name TRICHIINAE Ložek, 1956 was not accompanied by a description and does not satisfy the provisions of Article 13.1.1

but it was extensively used as valid before 2000 and meets the requirements of Article 13.2.1. TRICHIINAE was made available by Schileyko, 1970 (*Zoologischeskij Zhurnal*, 49(9): 1307). Bouchet also noted that the voting paper did not address the issue of the author and date of *Trochulus*. Bouchet & Falkner (BZN 58: 141) advocated that it should be attributed to Schröter, 1788, and this should have been reflected in the proposals (1)(a)(i), (5)(a) and (6)(a).

Rosenberg commented that Schröter (1788) had not been accepted by malacologists as consistently binominal, and so cannot be a source for the genus *Trochulus* as suggested by Bouchet & Falkner. Accepting Schröter's work as binominal would displace hundreds of later names in a situation exactly analogous to that of Karsten's (1789) *Museum Leskeanum* (BZN 53: 38–42), which was suppressed in Opinion 1877 (BZN 54: 193).

Under the bylaws the case was submitted for a revote.

On 1 March 2003 the members of the Commission were invited to vote again on the proposal published in BZN 57: 20–21 and the additional or alternative proposals to para. 11(6) published in BZN 57: 223–224. At the close of the voting period on 1 June 2003 the votes were as follows: 12 Commissioners voted FOR all of the proposals, 12 Commissioners voted AGAINST all the proposals, no vote was received from Böhme.

Commissioners voting against this case pointed out that none of the species that could be affected by a generic change in this particularly complicated case is of special importance and to rule that the name *Trichia* Hartmann, 1840 (Gastropoda) is not rendered invalid by the existence of *Trichia* von Haller, 1768 in Myxomycetes would avoid rather than solve the problem of extant homonymy.

Original references

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

dromiaeformis, Trichia, De Haan, 1839, Fauna Japonica, fasc. 4, pl. 29, fig. 4; pl. H.

Erethismus Gistel, 1848, Naturgeschichte des Thierreichs für höhere Schulen, p. xi. fasciatus, Scarabaeus, Linnaeus, 1758, Systema Naturae, Ed. 10, vol. 1, p. 352.

hispida, Helix, Linnaeus, 1758, Systema Naturae, Ed. 10, vol. 1, p. 771.

Macneillena Iredale, 1930, Australian Zoologist, 6(2): 175.

Trichia De Haan, 1839, Fauna Japonica, fasc. 4, pl. 29, fig. 4; pl. H.

Trichia Hartmann, 1840, Erd- und Süsswasser-Gasteropoden, p. xiii, footnote.

Trichia Hong, 1981, Eocene fossil Diptera Insecta in amber in Fushun coalfield, p. 28.

trichiinae Ložek, 1956, Klic Ceskoslovenskych Mékkysu. [Key to Czechoslovakian Mollusca], p. 200.

Trichius Fabricius, 1775, Systema Entomologiae, sistens Insectorum classes, ordines, genera, species, p. 40.

TROCHULINAE Lindholm, 1927, Archiv für Molluskenkunde, 59(2): 122.

Trochulus Chemnitz, 1786, Neues Systematisches Conchylien-Cabinet, vol. 9, pt. 2, p. 52. ZALASIINAE Serène, 1968, UNESCO Special Publication, Singapore, 1 (Fauna 3, Cc3), p. 62.

Zalasius Rathbun, 1897, Proceedings of the Biological Society of Washington, 11: 166.

The following is the reference for the designation of *Scarabaeus fasciatus* Linnaeus, 1758 as the type species of the nominal genus *Trichius* Fabricius, 1775:

Latreille, P.A. 1810. Considérations générales sur l'ordre naturel des animaux, composant les classes des crustacés, des arachnides et des insectes; avec un tableau méthodique de leurs genres, disposés en familles, p. 428.

Editor's note:

Under Opinion 184 and Direction 1 the generic name *Trochulus* is available from Chemnitz, 1786 (vol. 9, part 2, p. 52, pl. 122, figs. 1057–1058) (see para. 5 of the application). The ruling in the Opinion and Direction was misinterpreted and is given below:

Opinion 184 states that any new generic name published in volumes 1 to 11 of Martini & Chemnitz 1769–1795 is to be accepted as available nomenclatorially, provided that individually it satisfies the requirements of the International Code. No new specific or subspecific trivial name published in these volumes has any status in nomenclature. The position as respects generic names published in these volumes will need to be re-examined if later it is decided to reject generic names published by authors not applying the binominal system. (ICZN, 1944. Opinion 184. On the status of names first published in volumes 1 to 11 of Martini (F.H.W.) and Chemnitz (J.H.) Neues Systematisches Conchylien-Cabinet Nürnberg, 1769–1795. Opinions and Declarations rendered by the International Commission on Zoological Nomenclature, vol. 3, part 3, pp. 25–36. London).

Direction 1. 1954. (Pp. 408, 410) Addition to the 'Official Lists' and 'Official Indexes' of certain books dealt with in 'Opinions' 182 to 194.

Opinion 184: The following entry is to be made in the *Official Index of Rejected and Invalid Works in Zoological Nomenclature*: Martini (F.H.W.) and Chemnitz (J.H.), 1769–1795, *Neues Systematisches Conchylien-Cabinet*, Volumes 1–11, all new specific names and names of lower rank.

Note 3: No proposal is here submitted in regard to the status of new generic names published in volumes 1–11 of Martini and Chemnitz, Neues Systematisches Conchylien-Cabinet, for the Ruling given in Opinion 184 was expressly stated to be an interim Ruling, pending a decision being taken as to the interpretation of Proviso (b) to Article 25. A decision on this later question was taken in 1948, and it will be necessary, therefore, to review the question of the status of new generic names published in the foregoing work. A proposal on this subject will therefore be submitted as soon as possible (File Z.S.N. 800).

(ICZN, 1954. Addition to the 'Official Lists' and 'Official Indexes' of certain books dealt with in 'Opinions' 182 to 194. *Opinions and Declarations rendered by the International Commission on Zoological Nomenclature*, vol. 3, part 30, pp. 401–416. London).

File Z.S.N. 800 was closed without further action on 10 June 1985.