

## SPHAERIIDAE IN MOLLUSCA AND INSECTA: PROPOSAL FOR RECTIFICATION OF HOMONYMY. Z.N.(S.) 1892

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The family name SPHAERIIDAE is currently utilized in both Mollusca (Eulamellibranchia) and Insecta (Coleoptera). In accordance with Article 55a the International Commission is notified of this homonymy and is requested to take appropriate corrective action. Details are as follows.

2. SPHAERIIDAE (Mollusca) was first proposed by Jeffreys (1862), not by Bourguignat (1833, SPHAERIDAE) or by Dall (1895, SPHAERIIDAE) as stated by recent authors. It is based on *Sphaerium* Scopoli, 1777 (Official List of Generic Names, Name No. 462). H. B. Baker (1964) has pointed out that according to Article 40 SPHAERIIDAE (Mollusca) must date from CYCLADIA Rafinesque, 1820, which is the earliest family-group name applicable to these abundant but small freshwater "fingernail" and "pea" clams. CYCLADIDAE Rafinesque (correction of CYCLADIA), based on *Cyclas* Lamarck, 1798, a junior synonym of *Sphaerium*, is obsolete, however.

3. Another early name, PISIDIIDAE (correction of PISIDIADAE) Gray, 1857, has been placed on the Official List of Family-Group Names in Zoology (Name No. 36) "for use by any worker who may consider that the genera *Pisidium* Pfeiffer and *Sphaerium* Scopoli, 1777, the type-genus of the taxon SPHAERIIDAE, belong to different family-group taxa" (Direction 27).

4. Despite these earlier names SPHAERIIDAE (Mollusca) has been used universally in malacological literature for at least 50 years (e.g. Walker, 1918; F. C. Baker, 1928; Germain, 1931; Thiele, 1935; Adam, 1960; Herrington, 1962; Dance, 1967; and Heard, 1969). Herrington (1962) recognizes 34 North American species. The world-wide total of taxonomically valid living species is probably of the order of 100.

5. SPHAERIIDAE (Insecta) dates from 1845 when it was first proposed by Erichson (SPHAERINA) (pers. comm., E. C. Becker and T. J. Spilman). It was later emended by Thomson (1862, SPHAERIIDAE). SPHAERIIDAE (Insecta) is based on *Sphaerius* Walzl (1838, type-species *S. acaroides* Walzl, by monotypy) a little-known genus of small water-beetles. SPHAERIIDAE (Insecta) has also been in general use for over 50 years (e.g. Csiki, 1910; Comstock, 1924; Blackwelder, 1944; Britton, 1966). Eighteen living species are recognized (Britton, 1966).

6. Application of Article 40 gives SPHAERIIDAE (Mollusca) priority over SPHAERIIDAE (Insecta). The molluscan family is also more important and better known. It is desirable therefore to conserve SPHAERIIDAE (Mollusca) and to emend SPHAERIIDAE (Insecta). Alteration of the latter to SPHAERIDAE, although grammatically incorrect, avoids conflict with other taxa having similar roots (see Neave, 1940 : 238) and is recommended.

The Commission is therefore requested to take the following action:

(1) to rule under the plenary powers that SPHAERIDAE is to be accepted as the



- correct spelling of the family-group name based on *Sphaerius* Waltl, 1838;
- (2) to place the following family-group names on the Official List of Family-group Names in Zoology:
    - (a) SPHAERIIDAE Jeffreys, 1862 [1820] (1 : 1) (type-genus *Sphaerium* Scopoli, 1777) (Mollusca);
    - (b) SPHAERIDAE Erichson, 1845 (: 38) (type-genus *Sphaerius* Waltl, 1838) (Insecta);
  - (3) to place the following generic name on the Official List of Generic Names in Zoology:
    - (a) *Sphaerius* Waltl, 1838 (: 272) (gender: masculine) (type-species *Sphaerius acaroides* Waltl, 1838, by monotypy);
  - (4) to place the following specific name on the Official List of Specific Names in Zoology:
    - (a) *acaroides* Waltl, 1838 (: 272), as published in the binomen *Sphaerius acaroides* (type-species of *Sphaerius* Waltl, 1838) (Insecta);
  - (5) to place the following family-group name on the Official Index of Rejected and Invalid Family-Group Names in Zoology:
    - (a) SPHAERIIDAE Erichson, 1845 (type-genus *Sphaerius* Waltl, 1838) (ruled under the plenary powers in (1) above to be an incorrect spelling for SPHAERIDAE Erichson, 1845) (Insecta).

## REFERENCES

- ADAM, WILLIAM. 1960. *Faune de Belgique, Mollusques*. Tome 1. *Mollusques Terrestres et Dulcicoles*. Institut royal des Sciences naturelles de Belgique, Bruxelles
- BAKER, C. 1928. The Fresh Water Mollusca of Wisconsin. Part 2. Pelecypoda. *Bulletin of the University of Wisconsin*, Serial No. 1527, Madison
- BAKER, H. B. 1964. Notes on sphaeriid names. *The Nautilus* 78 (2) : 45-46
- BLACKWELDER, R. E. 1944. Checklist of the Coleopterous Insects of Mexico, Central America, the West Indies, and South America. Part 1. *United States National Museum, Bulletin* 185
- BOURGUIGNAT, J.-R. 1883. *Histoire Malacologique de L'Abyssinie*. Société Anonyme des Imprimeries Réunies, Paris
- BRITTON, E. B. 1966. On the larva of *Sphaerius* and the systematic position of the Sphaeriidae (Coleoptera). *Australian Journal of Zoology* 14 : 1193-98
- COMSTOCK, J. H. 1924. *An Introduction to Entomology*. First Complete Edition. The Comstock Publishing Co., Ithaca, New York
- CSIKI, E. 1910. Family Sphaeriidae. *Coleopterorum Catalogus auspiciis et auxilio W. Junk* (S. Schenkling, ed.). Part 18 : 34-35
- DALL, W. H. 1895. A new classification of the Pelecypoda. *Wagner Free Institute of Science* 3 (3) : 481-570, Philadelphia
- DANCE, S. P. 1967. *Pisidium* collected by the 1924 Mount Everest Expedition, with descriptions of two new species (Bivalvia: Sphaeriidae). *The Journal of Conchology* 26 (3) : 175-180
- ERICHSON, W. F. 1845. *Naturgeschichte der Insecten Deutschlands*, 3 : 1-320. Berlin
- GERMAIN, LOUIS. 1931. *Faune de France*. 22. Mollusques Terrestres et Fluviatiles (deuxième partie). Paul Lechevalier, Paris
- GRAY, J. E. in Turton, William. 1857. *Manual of the Land and Fresh-Water Shells of the British Islands*. Longman, Brown, Green, Longmans, and Roberts, London



- HEARD, W. H. 1969. Hinge tooth reversals in sphaeriid clams. *The Nautilus* 82 (4) : 137-144
- HERRINGTON, H. B. 1962. A Revision of the Sphaeriidae of North America (Mollusca : Pelecypoda). *Miscellaneous Publications, Museum of Zoology, University of Michigan*, No. 118
- JEFFREYS, J. G. 1862. *British Conchology*. Volume 1. Land and Freshwater Shells. J. Van Voorst, London
- NEAVE, S. A. 1940. *Nomenclator Zoologicus*, 4. The Zoological Society, London
- RAFINESQUE, C. S. 1820. *Annales Générales des Sciences Physiques, Bruxelles* 5 (13) : 287-322. Reprinted by W. G. Binney and G. W. Tryon, 1864. *The Complete Writings of Constantine Smaltz Rafinesque*. Bailliere Brothers, New York
- THIELE, JOHANNES. 1935. *Handbuch der Systematischen Weichtierkunde*. Zweiter Band. Gustav Fischer, Jena
- THOMSON, C. G. 1862. *Skandinaviens Coleoptera. Synoptiskt Bearbetade* 4. Lund
- WALKER, BRYANT. 1918. A Synopsis of the Classification of the Fresh-Water Mollusca of North America [etc.]. *Museum of Zoology, University of Michigan, Miscellaneous Publications* No. 6
- WATTL, JOSEPH. 1838. Beiträge zur nähern naturhistorischen Kenntniss des Unterdonaukreisses in Bayern. *Isis von Oken*, 1838 : 250-273



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