

OPINION 2314 (Case 3546)***Praeradiolites* Douvillé, 1903 (Bivalvia, RADIOLITIDAE): designation of *Sphaerulites ponsiana* d'Archiac, 1837 as the type species**

Abstract. The Commission has conserved the usage of the generic name *Praeradiolites* Douvillé, 1903 by designation of *Sphaerulites ponsiana* d'Archiac, 1837 as the type species.

Keywords. Nomenclature; taxonomy; Bivalvia; RADIOLITIDAE; *Praeradiolites*; *Eoradiolites*; *Sphaerulites*; *fleuriaus*; *ponsiana*; Cretaceous; Tethys.

Ruling

- (1) Under the plenary power the Commission has set aside all previous type fixations for the genus *Praeradiolites* Douvillé, 1903 and designated *Sphaerulites ponsiana* d'Archiac, 1837 as the type species.
- (2) The entry on the Official List of Generic Names in Zoology for the name *Praeradiolites* Douvillé, 1903 (gender: masculine), has been emended to record that its type species is *Sphaerulites ponsiana* d'Archiac, 1837, and not *Radiolites fleuriaus* d'Orbigny, 1842, as ruled in (1) above.
- (3) The name *ponsiana* d'Archiac, 1837, as published in the binomen *Sphaerulites ponsiana* (the type species of *Praeradiolites* Douvillé, 1903, as ruled in (1) above) has been placed on the Official List of Specific Names in Zoology.
- (4) The entry on the Official List of Generic Names in Zoology for the name *Praeradiolites* Douvillé has been emended to record that its correct publication date is 1903 and not 1902.
- (5) The entry on the Official List of Specific Names in Zoology for the name *fleuriaus* d'Orbigny, 1842, as published in the binomen *Radiolites fleuriaus* has been emended to record that it is not the type species of *Praeradiolites* Douvillé, 1903, as ruled in (1) above, and that its correct original spelling is *fleuriaus* and not *fleuriausi*.

History of Case 3546

An application to conserve the usage of the generic name *Praeradiolites* Douvillé, 1903 by designation of *Sphaerulites ponsiana* d'Archiac, 1837 as the type species, was received from J. Jose Maria Pons and Enric Vicens (*Universitat Autònoma de Barcelona, Barcelona, Spain*) on 17 December 2010. After correspondence the case was published in BZN **68**: 105–108 (2011). The title, abstract and keywords of the case were published on the Commission's website. No comments were received on this Case.

Decision of the Commission

On 1 September 2012 the members of the Commission were invited to vote on the proposals published in BZN **68**: 107. At the close of the voting period on 1 December 2012 the votes were as follows:

Affirmative votes – 21: Alonso-Zarazaga, Ballerio, Bogutskaya, Bouchet, Brothers, Fautin, Grygier, Halliday, Harvey, Krell, Kottelat, Kullander, Minelli, Ng, Patterson, Rosenberg, Štys, Winston, Yanega, Zhang and Zhou.

Negative votes – 4: Kojima, Lamas, Pape, and van Tol.

Pyle was on leave of absence. No vote was received from Lim.

Voting FOR, Alonso-Zarazaga said that he considered it was correct to use *Sphaerulites* as feminine and *Radiolites* as masculine, since the only species epithet attached originally to it, *angeiodes* (from Greek adjective αγγειωδης, hollow like a vessel), became invariable when latinized. All names ending in *-ites* must follow Article 30.1.4.4, so it was necessary to check the original descriptions one by one. He added that *ponsiana* was a toponymic adjective and must agree in gender with the genus with which it is combined.

Also voting FOR, Grygier commented that the argument for the type-species change was clear, assuming that rudist workers continued to regard both nominal genera involved as valid. However, the background information given seemed to indicate that *Eoradiolites* was paraphyletic with respect to *Praeradiolites*. If so, in any cladistic classification the two genera would be merged as *Praeradiolites*, and no change in type species would be needed. Grygier said he was not entirely comfortable with changing the type species when the need for this might disappear with a change in taxonomic practice, but the Commission could not dictate that practice. In any case, the proposed Official Corrections to the Official Lists were necessary and must be instituted whatever the outcome of the vote. Also voting FOR, Ng said he saw this as the best option rather than to create new names.

Also voting FOR, Štys said the generic classification would undoubtedly be changed by those following cladistic principles, but a future taxonomic change did not have any bearing on the present nomenclatural problem.

Voting AGAINST, Kojima said he thought that the proposal did not explicitly state the reason(s) why *Eoradiolites* Douville, 1909 should not be regarded as a synonym of *Praeradiolites* Douville, 1903. *Eoradiolites* was said to be a group consisting of primitive species in *Eoradiolites* + *Praeradiolites*, thus *Eoradiolites* could be a paraphyletic group in terms of *Praeradiolites* in the sense of currently prevailing usage. If *Radiolites fleuriaus* d'Orbigny, 1842, the type species of *Praeradiolites*, possessed the characters of *Eoradiolites* in the current usage, then *Eoradiolites* could be synonymized under *Praeradiolites*.

Also voting AGAINST, Lamas said that paraphrasing Sabrosky's comment on Opinion 856 (see BZN 25: 87), he too would like to say that he found no indication in the application (i.e. Case 3546) ... that the Principle of Priority should be suspended in order to accommodate the taxonomic hypotheses favoured by the authors of the application. Also voting AGAINST, Pape explained that *Praeradiolites* of current usage had been based on insufficient studies of its type species *Radiolites fleuriaus* d'Orbigny, 1842. Bringing the usage of *Praeradiolites* Douvillé, 1903 in agreement with its type species would result in a junior subjective synonymy (*Eoradiolites* under *Praeradiolites*) and the proposal of a new generic name for the species currently ascribed to *Praeradiolites*. This was not an uncommon situation in zoology, and the application did not quantify how a strict adherence to the Code would 'seriously undermine stability', except for mentioning the changes resulting

directly from the new insight gained on the type species (i.e. the subjective synonymy, the new generic name and the number of species affected).

Original references

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

Praeradiolites Douvillé, 1903, *Bulletin de la Société Géologique de France*, (4)**2**: 469.
ponsiana, *Sphaerulites*, d'Archiac, 1837, *Mémoires de la Société Géologique de France*, **2**(7): 182.
fleuriausius, *Radiolites*, d'Orbigny, 1842, *Annales de Sciences Naturelles*, (2)**17**: 181.