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; Eora-
diolites; Sphaerulites; fleuriausus; 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 fleuriausus 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 fleuriausus d’Orbigny, 1842, as published in the binomen Radiolites fleuriausus 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 fleuriausus and not fleuriausisi.

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, angeioides (from Greek adjective ἄγειοιδες, hollow like a vessel), became invariable when latinized. All names ending in -itis 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 fleuriasi 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 fleuriasi 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: