Comment on the proposed attribution of the specific name of *Ceratites nodosus* to Schlotheim, 1813, and the proposed designation of a lectotype (Cephalopoda, Ammonoidea)

(Case 2732; BZN 48: 31–35, 246; 49: 145–149, 290; 50: 54–56, 141–142, 229–231, 284–285)

E.T. Tozer

Geological Survey of Canada, 100 West Pender Street, Vancouver, British Columbia, Canada V6B 1R8

No less than eight persons have now commented on Urlichs's proposal that authorship of *Ceratites nodosus* be attributed to Schlotheim (1813) instead of Bruguière (1789) and that a specimen from the Schlotheim collection (MB: C 785) illustrated for the first time in 1987 be accepted as the lectotype.

Significantly most of those supporting Urlichs (Hahn, Horn, Strauch, Bertling, Lehmann) are from Germany, where ammonoids generally identified as Ceratites nodosus are index fossils in the upper part of the Middle Triassic Muschelkalk formation. The presence of these index fossils provides the foundation for a stratigraphic division — the Ceratites nodosus Zone. Those supporting Urlichs believe that he is right in claiming that his proposed lectotype for Ceratites nodosus conforms with established usage and is an example of a species that characterizes the Ceratites nodosus Zone. They also accept Urlichs's opinion that the lectotype of Ceratites nodosus Bruguière (PIMUZ L/1651), chosen by Rieber & Tozer in 1986, is different from the species in the Ceratites nodosus Zone. PIMUZ L/1651, in Urlichs's opinion, is a species found in a lower part of the Muschelkalk. According to Urlichs's interpretation, acceptance of the Rieber & Tozer proposal would mean that Ceratites nodosus does not occur in the Ceratites nodosus Zone. This would necessitate giving a new name to the Zone and would thus disrupt the current stratigraphic terminology in Germany. Understandably the geologists do not view this propect with favour.

Opposition to Urlichs's proposal has been expressed by the late Richard Melville, N.J. Silberling and the writer. Our objections addressed the question solely from a zoological standpoint. I maintain that from this standpoint our arguments are unassailable. Nobody questions that PIMUZ L/1651 is the specimen on which Ammonites nodosa Bruguière, and hence Ceratites nodosus, is based. According to Urlichs, current usage of Ceratites nodosus in Germany was established by Schlotheim and perpetuated by Philippi in 1901. This view cannot be supported. Schlotheim illustrated only one specimen of what he called Ammonites nodosus. Philippi regarded this specimen as a representative of Ceratites nodosus. Urlichs has located this specimen but he identifies it as Ceratites (Acanthoceratites) spinosus spinosus Philippi, 1901, not as Ceratites nodosus. Schlotheim published no illustration that conforms with Urlichs's concept of Ceratites nodosus. Urlichs's usage of Ceratites nodosus was clearly given in 1987, but not before.

Concerning use of the name Ceratites nodosus, students of Muschelkalk ammonoid stratigraphy seem comparable with Humpty Dumpty: 'When I use a word ... it means just what I choose it to mean — neither more nor less' (Alice through the Looking Glass, Lewis Carroll, 1871).

I still maintain that according to the rules of zoological nomenclature it is wrong for the Commission to sanction a taxon named Ceratites nodosus attributed to Schlotheim. Schotheim did not propose a new taxon. It is only Urlichs's opinion that the proposed lectotype for 'Ceratites nodosus (Schlotheim)' corresponds with Schlotheim's concept of the species. As explained above, there is, in fact, greater justification for regarding the taxon identified by Urlichs as 'Ceratites (Acanthoceratites) spinosus spinosus Philippi, 1901' as representing Schlotheim's interpretation of Ammonites nodosa. In this light, if one accepts Urlichs's identification, if any ammonoid deserves to be called Ceratites nodosus (Schlotheim), it is Ceratites (Acanthoceratites) spinosus spinosus Philippi.

If the question was purely of a zoological nature it would seem a straightforward matter for the Commission to rule that the proper name for the taxon is *Ceratites nodosus* (Bruguière) with PIMUZ L/1651 as lectotype. This case has been made by Melville, Silberling and the writer. Nothing written by Urlichs and his colleagues from Germany and Austria refutes our arguments.

The zoological importance of the decision stems from the fact that *Ammonites nodosa* Bruguière, 1789 is the type species for the genus *Ceratites* de Haan, 1825. Designation was by J.P. Smith in 1904. As recognized by Urlichs (para. 7 of his application) Smith's designation refers to a non-existent figure but this has never been taken to invalidate the designation.

Acceptance of Urlichs's proposals would mean that the specimen on which the definition of the genus *Ceratites* depends is MB: C 785, not PIMUZ L/1651.

The geological importance of the decision relates to the desire of German geologists to retain the name *Ceratites nodosus* for the ammonoids that characterize the *Ceratites nodosus* stratigraphic zone.

Hence the problem: the ammonoids of the *Ceratites nodosus* Zone are identified by Urlichs as being of a different species compared with the Rieber & Tozer lectotype for *Ceratites nodosus* (Bruguière). Thus the straight forward zoological case cannot be reconciled with the stratigraphic nomenclature advocated by Urlichs and his colleagues. Acceptance of Urlichs's proposal requires that geological considerations take priority over zoological rules.

Throughout this debate I have been reluctant to accept Urlichs's proposal because it necessitates bending the rules of zoological nomenclature to accommodate his opinions on the identification of the ammonoids in question in order that they agree with the conventional stratigraphic terminology in the Muschelkalk Formation.

The important consideration is that a clear unambiguous definition of the genus Ceratites should emerge as a result of the Commission's ruling. In my opinion the definition of the genus Ceratites will be much the same whether the type species be Ceratites nodosus (Bruguière) (sensu Rieber & Tozer) or Ceratites nodosus (Schlotheim) (sensu Urlichs & Mundlos). The ammonoids in question are sufficiently similar that I do not anticipate the introduction of problems concerning the interpretation of the genus Ceratites if Urlichs's proposal is accepted by the Commission.

Although in the matter of zoological nomenclature geological arguments should presumably be subordinate to the zoological facts, possibly the Commission may nevertheless give priority to the geological arguments in this case and thus stabilize both the zoological and geological interpretation of the genus *Ceratites*.

I therefore now withdraw opposition to Urlichs's proposal. Withdrawal of my opposition should not be construed as withdrawal of the facts and opinions expressed in my previous comment (BZN 49: 145–149), or my full agreement with the submissions by Richard Melville (BZN 50: 55–56) and N.J. Silberling (BZN 50: 141–142). I am simply adopting the position that in this case geological considerations be allowed to override the zoological rules. I take this position, which will satisfy the German geologists, only because acceptance of Urlichs's proposal, although contrary to the rules, in my opinion will not result in a radical change in the zoological interpretation of the genus *Ceratites*.

Comments on the proposed conservation of *Hydromantes* Gistel, 1848 by the designation of *Salamandra genei* Temminck & Schlegel, 1838 as the type species (Amphibia, Caudata)

(Case 2868; see BZN 50: 219-223)

(1) Mark R. Jennings

Fish and Wildlife Service, National Ecology Research Center, United States Department of the Interior, 1830 Sharon Avenue, Davis, California 95616, U.S.A. and Department of Herpetology, California Academy of Sciences, California, U.S.A.

I write to support the application submitted by Prof Hobart Smith & Dr David Wake.

I have been involved in a number of projects dealing with the genus *Hydromantes* in California over the past decade — everything from check lists (e.g. Jennings, 1983) to the current status of *H. platycephalus* in the State (Jennings & Hayes, in press) — and I believe that the replacement of this long-established generic name by *Hydromantoides* would cause needless confusion amongst professionals and the lay public.

Looking through my own library resources, I find that I have over 40 pieces of primary literature, field guides, popular publications and agency reports dealing with this genus. Only three publications (Camp, 1916; Lanza & Vanni, 1981; and Dubois, 1984) do not utilize the name *Hydromantes*. Because of the importance of this salamander to land management agencies in California (both *H. brunus* and *H. shastae* are listed by the State of California as threatened; *H. platycephalus* and an undescribed species of *Hydromantes* from the Owens Valley are also protected by other State Laws) and its presence in a number of State and National Parks where it is showcased (e.g. Merced River Canyon Ecological Reserve, Yosemite National Park), it is desirable to prevent certain confusion in future reports, public interpretation materials and press releases and to continue to use the name *Hydromantes* for these web-toed salamanders.

I would also like to point out that, because of its uniqueness and limited distribution, *Hydromantes* (especially *H. platycephalus*) is represented in a large number of museum collections around the world. My own data base indicates 475 specimens scattered amongst 22 collections. Changing all the specimen name records in these collections would seem to be a pointless task. The best mode of action would be for the Commission to approve the application and thus negate the need for such a task.



Tozer, E. T. 1994. "Comment On The Proposed Attribution Of The Specific Name Of Ceratites Nodosus To Schlotheim, 1813, And The Proposed Designation Of A Lectotype (Cephalopoda, Ammonoidea)." *The Bulletin of zoological nomenclature* 51, 147–149. https://doi.org/10.5962/bhl.part.7179.

View This Item Online: https://www.biodiversitylibrary.org/item/44552

DOI: https://doi.org/10.5962/bhl.part.7179

Permalink: https://www.biodiversitylibrary.org/partpdf/7179

Holding Institution

Natural History Museum Library, London

Sponsored by

Natural History Museum Library, London

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

Rights Holder: International Commission on Zoological Nomenclature

License: http://creativecommons.org/licenses/by-nc-sa/3.0/

Rights: https://biodiversitylibrary.org/permissions

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at https://www.biodiversitylibrary.org.