

その学名は適格か：白亜紀アンモナイト *Polyptychoceras* 属の命名法的検討 Available or unavailable? : nomenclatural examination of the Cretaceous ammonite genus *Polyptychoceras*

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生物の種類を表現する手段として学名が有効であることは、論を待たない。しかし命名規約に従って適切に学名を運用することは必ずしも容易ではなく、学名の混乱によって研究の客観性が損なわれてしまうことがある。

上部白亜系から産出する *Polyptychoceras* Yabe, 1927 は、クリップ状の殻形態が特徴的な異常巻きアンモナイトの 1 属である。本邦では *P. pseudogaultinum* (Yokoyama, 1890) 以来 12 種の産出が報告されている一方で、種分類を見直す必要性が指摘されている。しかし本属各種はそもそも、これまでに提唱されている学名に関して不明な点が多い。例えば、本属の 1 種 *P. yubarensis* は Yabe (1927) が最初に提唱したことから、多くの文献で本種の著者と公表の日付が Yabe, 1927 とされてきた。ところが Yabe (1927) は本種の学名を掲載しているにすぎないため、本種の本記載論文にはあたらない (規約条 12.1)。

そこで本研究では、最新の国際動物命名規約第 4 版 (動物命名法国際審議会, 2000) に基づいて、これら 12 種の学名を検討した。その結果、命名法上の適格性・著者・公表の日付・原記載論文が明らかになった。このことは、今後の分類学的研究に資するだけでなく、本属を扱った全ての研究の客観性を高めることにつながると考えられる。

なお、本予稿は動物命名法の目的のために発行するものではない (規約条 8.2 に基づく棄権宣言)。

引用文献

動物命名法国際審議会, 2000, 国際動物命名規約第 4 版日本語版. 日本動物分類学関連学会連合, 札幌, XVIII + 133 p.
Yabe, H., 1927, *The science reports of the Tôhoku Imperial University, 2nd series (geology)*, **11**, 27-100.

キーワード: *Polyptychoceras*, 異常巻きアンモナイト, 学名, 国際動物命名規約, 白亜紀

Keywords: *Polyptychoceras*, heteromorph ammonite, scientific names, International Code of Zoological Nomenclature, Cretaceous

種毎の産出個体数に基づく多様性変動の評価：白亜系蝦夷層群産アンモノイドの例
Assessment of local diversity in Cretaceous ammonoids from the Yezo Group using individual taxonomic abundance

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Exploring global diversity change across the Phanerozoic has been an important part of paleontology in the past quarter-century. It is widely known that the diversity estimates are seriously biased by variation in the volume of paleontological data and there have been many debates on how to remove the sampling intensity biases. The taxonomic richness has been standardized by sampling proxies such as collection-based occurrences and the amount of rock records. On the other hand, use of the number of individuals observed in each taxon is limited to the studies on sample level diversity at the outcrops because those data are not available at the global level. An intermediate approach between at the global and sample levels is commonly found in the tabulation of number of species for a particular taxonomic group through a restricted geologic time interval at the local level. However, such a local database compiled in a traditional manner does not record any information on abundance of each species in most cases.

Here, we studied chronological change in species diversity of Cretaceous ammonoids from the Yezo Group exposed in central Hokkaido, Japan, using the diversity indices that take into account the abundance of each species. This study was based on the fossil collections collected from Soya, Nakagawa, Haboro, Kotambetsu, Obira, Mikasa, Oyubari or Hobetsu areas and stored at Shizuoka University, National Museum of Nature and Science, Tokyo, Nakagawa Museum of Natural History, Mikasa City Museum and Hobetsu Museum. The number of individuals was counted for each species for each stratigraphic unit from the Cenomanian to Maastrichtian. A total of 9,834 individuals of 266 species was identified and counted.

The patterns of diversity change estimated in the present analysis were considerably different among collections even when the same diversity index was adopted. A plausible reason of this discrepancy is the difference in relative species abundance observed among collections. The only exception is the Shannon-Weiner function which exhibited a consistent pattern of diversity change independent of which collection was utilized. This result suggests that the Shannon-Weiner function is the most robust against variation in relative species abundance. The diversity estimates based on species richness tended to be correlated with the proportion of the rare species to the total number of species. This result suggests that these diversity estimates are readily distorted by the impact of rare species.

キーワード: 多様性変動, 白亜紀, アンモノイド, 蝦夷層群, 産出個体数

Keywords: paleobiodiversity, Cretaceous, ammonoids, Yezo Group, individual taxonomic abundance