

## Early Katian, Late Ordovician, heliolitine corals from southern Kuruktag in northeastern Tarim Basin of China

Yu-Nong Cui and Guang-Xu Wang


*Acta Palaeontologica Polonica* 68 (2) 2023: 273-295 doi:<https://doi.org/10.4202/app.01023.2022>

Heliolitines are a major tabulate coral group, which experienced their early diversification in the Katian (Late Ordovician). Fossils of this group are well represented in the Kuruktag area of northeastern Tarim Basin, Northwest China, but detailed studies of corals from this area are still lacking. Here, we systematically describe early Katian heliolitines of the Tarim Block based on new material from the lower Katian Yuanbaoshan Formation of southern Kuruktag, which include the plasmoporellids *Plasmoporella xinjiangensis* and *Plasmoporella grandis*, the sibiriolitids *Mongoliolites obliterans* and *Mongoliolites* sp., the protoheliolitid *Wormsipora* sp., the proporid *Acidalopora sokolovi*, the pseudoplasmoporida *Navoites irregularis*, and the heliolitid *Apekinella zeravshanica*. A faunal comparison indicates that the biogeographic connections of Tarim Block are closest to Chu-Ili and South Tianshan, but relatively weaker with Qilian and North China.

**Key words:** Tabulata, Heliolitida, biogeography, Katian, Ordovician, Tarim, China.

Yu Nong Cui [[yncui@nigpas.ac.cn](mailto:yncui@nigpas.ac.cn); ORCID: <https://orcid.org/0000-0002-7566-7411> ] and Guang Xu Wang [[gxwang@nigpas.ac.cn](mailto:gxwang@nigpas.ac.cn); ORCID: <https://orcid.org/0000-0001-7946-5537> ], State Key Laboratory of Palaeobiology and Stratigraphy, Nanjing Institute of Geology and Palaeontology, Chinese Academy of Sciences, 39 East Beijing Road, Nanjing 210008, China; University of Chinese Academy of Sciences, Beijing 100049, China.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see [creativecommons.org](https://creativecommons.org)), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

 [Full text \(5,069.2 kB\)](#)