

A low diversity shallow water lingulid brachiopod-gastropod association from the Upper Ordovician of Kyrgyz Range


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A low diversity association made up of the lingulid *Tunisiglossa almalensis* Popov and Mambetov, sp. nov. and the gastropod *Ptychonema agyris* Ebbestad, sp. nov. is described from the Upper Member of the Almaly Formation at Kyrgyz Range, North Tien Shan, Kyrgyzstan/Kazakhstan. The specimens co-occur in dense coquinas, made up of different sized individuals, deposited in a shallow water, intertidal, and storm driven depositional environment. The lingulid shells display a completely reduced dorsal pseudointerarea typical of Glossellinae, and the smooth shell lacking fine external granulation, radial or pitted ornament, a small ventral pseudointerarea, and no dorsal median ridge place it in the hitherto monotypic *Tunisiglossa* known previously only from the Lower Ordovician (Tremadocian) Sanrhar Formation of Libya. It compares with *Ectenoglossa sorbulakensis* that is widespread in the lower to middle Caradocian Anderken Formation of Chu-Ili Range in southern Kazakhstan. Gastropods of this age have not been reported earlier in Kyrgyzstan; neither can *Ptychonema* be compare with any taxon in the gastropod association earlier described from the contemporary Anderken Formation in Kazakhstan. *Ptychonema* is otherwise commonly associated with peri-Gondwana terranes, but the Late Ordovician dispersal pattern of the genus is unknown. Overall, however, the Upper Ordovician faunas of North Tien Shan show close similarities to contemporaneous faunas of the Chu-Ili terrane, which have strong biogeographic signatures linking them to the faunas of South and North China.

Key words: Brachiopoda, Gastropoda, Lingulida, Ordovician, Kazakhstan, Kyrgyzstan, Almaly Formation, palaeobiogeography, North Tien Shan

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