

Silicified Anisian (Middle Triassic) spiriferinid brachiopods from Guizhou, South China

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A newly discovered silicified brachiopod interval from the Upper Member of the Guanling Formation (Late Anisian, Middle Triassic) in Guizhou Province (South China) is described for the first time. The most remarkable feature of this brachiopod assemblage, besides the very good preservation, is the very low taxonomic evenness and diversity. This impoverished, low diversity/high density assemblage is represented by more than 700 recovered specimens belonging to three species within two spiriferinid genera (*Pseudospiriferina multicosata*, *P. pinguis*, and *Punctospirella fragilis*). It is characterized by the overwhelming abundance of an endemic spiriferinid species, *P. multicosata*, which contributes to more than 90% of the community. Silicified valves of *P. multicosata* and *Punctospirella fragilis* allow detailed descriptions of the internal morphology based on direct observation. Brachiopod paleoecology, assessed by considering host–rock lithology, shell disarticulation, and shell size suggests that this endemic brachiopod fauna represents a favourable niche for development of dense brachiopod–dominated communities, i.e., high energy, hard substrate, nutrient rich environment.

Key words: Brachiopoda, Spiriferinida, Anisian, Triassic, China

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