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New Katian bivalves from the Upper Ordovician Xiazhen Formation, Jiangxi Province, China

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A bivalve association reported herein was recently discovered from the Xiazhen Formation (upper Katian, Upper Ordovician) at Zhuzhai, southern Yushan County, northeastern Jiangxi Province, East China. Nine genera and ten species are systematically documented including four new species: *Palaeoneilo rectus* sp. nov. (most abundant), *Palaeoneilo cf. constricta, Goniophorina volvens, Modiolopsis elegantulus, Cyrtodontula* sp.*, Cuneamya?* sp.*, Trigonoconcha brevis* sp. nov.*, Similodonta minor* sp. nov.*, Concavodonta varius* sp. nov., and *Paulinea* cf. *parva.* The association is mainly composed of Protobranchia (Nuculiformii and Nuculaniformii) and subordinate Pteriomorphia, suggesting a relatively low palaeolatitudinal setting. The dominance of infaunal protobranch bivalves is notable, and against the trend of rapid diversification of pteriomorphs during the Late Ordovician. This discrepancy is likely attributable to a cold water tongue extending from then South Pole to South China palaeoplate, and the ecological pressure from those much more abundant brachiopods on the substrate surface, both hindering the development of epifaunal pteriomorphs in the region. Significantly, this bivalve association shares several common genera with its coeval bivalve fauna from the Oslo region, Norway.

Key words: Bivalvia, Protobranchia, Pteriomorphia, epifauna, infauna, Katian, Late Ordovician, Jiangxi, South China.

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