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Late Frasnian Athyridida (Brachiopoda) from Poland and the Late Devonian biotic turnover

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Late Frasnian representatives of the order Athyridida from the Holy Cross Mountains, Poland, support the idea that the Laurussian basins were the places of origin and radiation of the subfamilies Athyridinae and Meristinae during the middle and early late Paleozoic. At least three new species have been identified from two localities (Łgawa Hill and Kowala) in the Gałęzice Syncline. Of these, one was probaby endemic (*Merista rhenanensis* sp. n.; maybe also ?*Zonathyris* sp. A), and two (*Athyris postconcentrica* sp. n. and *Pachyplaxoides postgyralea* gen. et sp. n.) were more widely distributed in this part of the Laurussian shelf, being known also from the East European Platform and Rheinisches Schiefergebirge, respectively. This confirms an intermediate biogeographic position of the Holy Cross Mountains area, belonging to an important centre of brachiopod origin and diversification. In contrast to other articulate brachiopods, athyridids reveal a higher rate of diversification, especially at the species (and partly also generic) level, during the global Kellwasser Crisis.

Key words: Brachiopoda, Athyridida, taxonomy, biostratigraphy, biogeography, phylogeny, mass-extinction, Kellwasser Crisis, Frasnian, Famennian, Devonian, Poland.

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