

Devonian athyridoid brachiopods with double spiralia

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A double-spired athyridoid, morphologically transitional between Early Devonian *Helenathyris* and Late Devonian *Biernatella* has been identified in the Givetian of the Holy Cross Mts., Poland. It appears that in the course of evolution between these brachiopods dental plates and cardinal plate atrophied. The biernatellids may have developed a diplospirium independently of Triassic diplospirellids. They originated either from the Siluro-Devonian lineage represented by *Coelospira*, *Anoplothea*, *Bifidia* and *Kayseria* or, more likely, they can be derived from their pre-Devonian common ancestors. Biernatellids were probably well adapted to environments with a poor supply of food. *Eobiernatella rackii* gen. et sp. n., *Biernatella ovalis* sp. n., and *B. lentiformis* sp. n. are proposed.

Key words: athyridoid brachiopods, diplospirium, phylogenetic relationship, Devonian.

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