

A new Early Devonian antiarch placoderm from Belarus, and the phylogeny of Asterolepidoidei

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A new asterolepidoid antiarch, *Sherbonaspis talimaae* sp. nov., is described based on the disarticulated skeletal elements from several boreholes in Belarus, from the Lepel Beds of the Vitebsk Formation, which has been assigned to an Early Devonian, late Emsian age. New information is provided on the structure of the paranuchal plate previously unknown in *Sherbonaspis*. Data on the remains of the other fossil vertebrates, and the characteristics of the fossil-bearing rocks are provided. These data add information on the taxonomic composition of the late Emsian–early Eifelian fish fauna from the western part of the East European Platform. The new cladistic analysis of the Euantiarcha provides results more reliable in comparison with the analysis of all antiarchs together, and supports traditional subdivision of the group into Bothriolepidoidei and Asterolepidoidei. However, further analysis demonstrates unresolved polytomy close to the base of the Asterolepidoidei, and supports the hypothesis that the family Pterichthyodidae is polyphyletic. Until the phylogenetic relationships of Asterolepidoidei are more clearly resolved, *Sherbonaspis* is attributed to Pterichthyodidae. Comparison of the sections of the Lepel Beds of Belarus with the age-equivalent deposits in Estonia, Lithuania, and Latvia supports a late Emsian or possibly early Eifelian age for the Lepel Beds.

Key words: Placodermi, Asterolepidoidei, phylogeny, Devonian, Belarus.

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