

New osteostracans from the Lower Devonian terrigenous deposits of Podolia, Ukraine

Victor Voichyshyn *Acta Palaeontologica Polonica* 51 (1), 2006: 131-142

New osteostracans (Agnatha, Osteostraci) Zenaspis dzieduszyckii sp. nov. and Wladysagitta janvieri gen. et sp. nov., as well as new form of Diademaspis are described from the Lower Devonian of Podolia (Ukraine). Among them Zenaspis dzieduszyckii sp. nov. differs from all other representatives of the genus by its smaller overall size and relatively larger orbits. Wladysagitta janvieri is remarkable by having a rostral process. This new species together with 'Cephalaspis' acutirostris Stensiö, 1932 from Old Red deposits of Shropshire (Great Britain) are proposed to be united under common generic name Wladysagitta. Since Diademaspis sp. is completely unknown in outline of its shield, it could not be named as new species, although it should be a really new form. New diagnostic features, such as relative width of the orbits, relative width of the dorsal field, and the position of the posterior end of the lateral fields relatively to the margins of the headshield, are proposed to differentiate genera within the Zenaspididae. Probably, the rostral process of osteostracans should be considered as a multifunctional device having at least a sensory function for food-search, possibly hydrodynamic functions, or may play a role in scaring predators.

Key words: Agnatha, Osteostraci, Devonian, Podolia, taxonomy, morphology.

Victor Voichyshyn <u>victor@museum.lviv.net</u>, Department of the Taxonomy of Modern and Fossil Biota, State Museum of Natural History NASU, Teatralna Str. 18, 79008, Lviv, Ukraine.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (for details please see <u>creativecommons.org</u>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.