Acanthodian jaw bones from Lower Devonian marine deposits of Podolia, Ukraine

Victor Voichyshyn and Hubert Szaniawski

Ischnacanthiform acanthodian dentigerous jaw bones from the Lower Devonian (Late Lochkovian) of Podolia are described for the first time. One new genus and one new species are established. *Podoliacanthus* gen. nov. is diagnosed as having small–sized jaw bones, the presence of specific accessory cusps/denticles on the medial side of teeth of the lateral tooth row, and groups of denticles forming the lingual tooth row. *Podoliacanthus zychi* sp. nov. is distinguished in having elongated slender jaw bones and lateral teeth with one medial side denticle. Besides, three species are described in open nomenclature: *Podoliacanthus* sp. 1, while similar to *Podoliacanthus zychi* sp. nov., differs in having stronger posterior inclination of the teeth tips and presence of well developed flanges of the teeth, *Podoliacanthus* sp. 2 has quite robust jaw bones and teeth with two medial side denticles, and *Podoliacanthus* sp. 3 has small narrow jaw bones and teeth with three medial side denticles. Morphology of the lingual tooth row is considered to be a diagnostic feature of generic and higher taxonomic levels, while accessory medial cusps/denticles of the teeth are regarded as diagnostic features at species level. The new genus also occurs in Upper Silurian or Lower Devonian deposits of North Greenland. Preservation of the jaw bones possibly depends on their secondary mineralization.

**Key words:** Acanthodii, Ischnacanthiformes, dentigerous jaw bone, Devonian, Lochkovian, Podolia.

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