

New Early Jurassic thylacocephalan assemblage from the Western Carpathians in Slovakia

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Thylacocephalans (Euarthropoda: Pancrustacea) are extinct marine pancrustaceans characterised by a folded shield, with fossils known from the Upper Ordovician to the Upper Cretaceous, reaching a diversity peak in the Triassic. We described two new thylacocephalan taxa, *Dollocaris toarcica* sp. nov. and *Zazrivacaris jodorowskyi* gen. et sp. nov., from the lower Toarcian, Lower Jurassic black shales of the “Hrýzeň beds” of the Šariš Unit (Grajcarek Succession) exposed in Zázrivá, Slovakia. Thylacocephalans are an accessory element of an euarthropod association, dominated by dendrobranchiate shrimps. This occurrence represents not only the first record of thylacocephalans from Slovakia but also their first formal description from the Toarcian. *Dollocaris toarcica* sp. nov. is the third described species of its genus, previously known from the Middle Jurassic (Callovian) of France and Upper Jurassic (Tithonian) of Germany, expanding the stratigraphic span of the genus to the Lower Jurassic. The newly described genus *Zazrivacaris* shows morphological similarities with *Mayrocaris*, yet another genus known from the Upper Jurassic (Tithonian) of Germany. Considering current knowledge, we present a review of all known micro- and macro-structural patterns present on thylacocephalan shields. These structures appear to be unique to each genus and/or species and are therefore important for taxonomic evaluation.

Key words: Arthropoda, Thylacocephala, *Dollocaris*, *Zazrivacaris*, Lower Toarcian, Jurassic, Slovakia, Carpathians.

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