

## CLOSE RELATIVES OF EXTANT PARASITIC FORMS OF CRUSTACEANS FROM THE MESOZOIC OF EUROPE

Schädel, M.<sup>1</sup>, Hyžný, M.<sup>2</sup>, Nagler, C.<sup>1</sup> & Haug, J.T.<sup>1,3</sup>

<sup>1</sup>Ludwig-Maximilians-Universität München, Fakultät Biologie, Planegg, Germany,  
mario.schaedel@palaeo-evo-devo.info

<sup>2</sup>Comenius University Bratislava, Department of Geology and Paleontology, Bratislava, Slovakia

<sup>3</sup>Ludwig-Maximilians-Universität München, GeoBio-Center, Munich, Germany

Isopoda is a species-rich group of crustaceans living in various habitats and pursuing different ecological strategies, ranging from detritus-feeding terrestrial woodlice to large deep sea scavengers and parasites of fishes and other crustaceans. The fossil record of the group is overall relatively sparse compared to that of other crustaceans, such as crabs (Brachyura) or seed shrimps (Ostracoda). Nevertheless, fossils of the group occur in many field sites, and also fossils of presumed parasites have been recorded. Fossils that have been associated with the name *Urda* Münster, 1840 are known from a few Jurassic and Cretaceous field sites throughout the world and have also been discussed as possible parasites presumably closely related to extant parasitic forms. However, only some of the *Urda* fossils, and so far only those from Europe, can safely be identified as being closely related to each other as well as to an extant group of fish parasites, Gnathiidae Leach, 1814. The close relationship to Gnathiidae is attested by a number of apomorphic features shared between the fossil specimens and extant representatives of Gnathiidae. However, there seems to be no unambiguous autapomorphy for a group *Urda*. This results in a still to be resolved, maybe complex, relationship between the fossils and their extant counterparts, making the fossil specimens a valuable source of information that could help to elucidate the, also still to be resolved, relationship between Gnathiidae and other extant lineages of Isopoda.