

Marine-like isopod *Heterosphaeroma priscum* from the Late Paleocene freshwater system in Sézanne, France, revisited


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Well-known for its Palaeocene terrestrial flora, the travertine deposit of Sézanne (Marne, Champagne, France) has also yielded a small number of well-preserved crustaceans, including isopods. In 1868, a single specimen of these isopods has been described by the French zoologist Alphonse Milne-Edwards who remarked on its resemblance to the common benthic isopods from the marine littoral (Sphaeromatidae). A few years later, more material of that same species from Sézanne allowed Charles P.E. Munier-Chalmas to place it in his new genus *Heterosphaeroma*, but without figuring the species or proposing many diagnostic features. Recently, more material of this species turned up in the Sorbonne collection allowing for a more complete description. Here, we provide a redescription of the Sézanne isopod species based on rediscovered original material. Systematic features are discussed that confirm its sphaeromid affinity. In light of recent knowledge on incursions of the Thanetian Sea in this area, and associated travertine palaeofauna and flora, we assume a high likelihood for this species to have lived in karstic spring waters and freshwater calcareous streams during the end of the Palaeocene. We finally discuss the ability of some Recent sphaeromatids to live in freshwater conditions, deep inland, and we compare their ecology to those found in the Paris Basin travertine palaeoenvironments.

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