A sebecosuchian in a middle Eocene karst with comments on the dorsal shield in Crocodylomorpha

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Isolated elements comprising a set of ziphodont teeth and osteoderms from the middle Eocene karst deposit of Lissieu, France are assigned to either *Iberosuchus* sp. or *Bergisuchus* sp., poorly known crocodylomorphs of possible sebecosuchian affinities. A general survey of dorsal osteoderm variability among Crocodylomorpha points to the similarity between the osteoderms from Lissieu and those of some Cretaceous notosuchians, notably the sebecosuchian *Baurusuchus*. Such isolated osteoderms represent a useful tool for identifying non-eusuchian crocodylomorphs in post-Cretaceous deposits. Relying on the distinctive morphology of these osteoderms might help augmenting the extremely scant fossil record of Paleogene sebecosuchians in Europe, thus improving the spatiotemporal resolution of this group. At least three types of predators coexisted in the ecosystem of Lissieu, which indicates that in the middle Eocene of Europe, carnivorous mammals were not the exclusive predators in terrestrial habitats and shared resources with a ground bird and a sebecosuchian. This faunal composition is comparable to contemporaneous ecosystems in South America.

Key words: Crocodilia, Sebecosuchia, Paleogene, Eocene, France.

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