

A new species of halisaurine mosasaurid from the Upper Cretaceous of Egypt

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Acta Palaeontologica Polonica 71 (3), 2026: 589-604 doi:<https://doi.org/10.4202/app.01310.2025>

Halisaurinae are an extinct subfamily of small- to medium-sized mosasaurids that diversified in the latest Cretaceous. Halisaurines were particularly abundant and diverse in the Tethys Sea and Atlantic Ocean surrounding North Africa. Here we report a new species of *Halisaurus* from the lower Maastrichtian of the Dakhla Shale from the Dakhla Oasis, in the Western Desert of Egypt. The new species is characterized by very long and slender maxillae and dentaries, a high tooth count, with 20+ maxillary and dentary teeth, a long and narrow frontal, and a highly modified quadrate in which the stapedial notch is expanded and the suprastapedial and infrastapedial processes form a thin ring of bone surrounding it. Phylogenetic analysis suggests that the new species is sister to a clade including the late Maastrichtian *Halisaurus platyspondylus* and *Halisaurus arambourgi*. The long, slender jaws and posteriorly placed coronoid process suggest a fast but relatively weak bite compared to other species of *Halisaurus*; along with the specialized ears they suggest a niche distinct from the contemporary *Halisaurus hebae* or other Halisaurinae. The existence of two morphologically distinct species in the Dakhla Shale suggests that halisaurines engaged in niche partitioning.

Key words: Mosasauridae, Halisaurinae, Late Cretaceous, Maastrichtian, Tethys, Egypt

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