**The Cenomanian vertebrates from the Algora site (central Spain): New information on the faunal replacement between the European Lower and uppermost Cretaceous faunas**

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The fossil site of Algora (Guadalajara Province, central Spain) represents the main concentration of Cenomanian vertebrate macroremains in south-western Europe. Fishes, plesiosaurs, turtles, crocodiles, theropod and sauropod dinosaurs are identified. Knowledge has been remarkably increased as a result of the study of several recently found specimens. Thus, the previous systematic identification of the fishes from this site is refuted, being reattributed to a single species, shared with the African record. The systematic identification of the primitive turtle (i.e. Solemydidae) from this site can be justified for the first time, the previous attribution being also refuted. The presence of carcharodontosaurid theropods in Algora cannot be supported, a basal representative of Allosauroidea being identified. The crocodile remains allow justifying the presence of Eusuchia. The Algora fauna is composed of some lineages present in the European Lower Cretaceous record, some of them being scarce at those levels (e.g. eusuchians and titanosaurs), as well as by clades originated in Gondwana, and not recognized in pre-Cenomanian sites of this continent (e.g. gars, bothremydids). Therefore, the faunal composition of Algora markedly differs from that of the European Lower Cretaceous levels, showing more affinities with that of the uppermost Cretaceous. Thus, the faunal replacement identified when the European Lower and uppermost Cretaceous continental vertebrate faunas are compared had already occurred, at least for some lineages, before or during the middle Cenomanian. The climate changes that took place at the end of the Lower Cretaceous to the lower Cenomanian are identified as factors that conditioned this faunal replacement.