

Rhabdodontid ornithopod remains from the Late Cretaceous of Chera (Valencia, Iberian Peninsula): a tentative assignment

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The Late Cretaceous (mid-Campanian to lower Maastrichtian) palustrine beds of the Sierra Perenchiza Formation at Chera (Valencia province, eastern Iberian Peninsula) have yielded a rich vertebrate fauna composed of actinopterygians, amphibians, squamates, chelonians, crocodyliformes, dinosaurs and pterosaurs. The Chera sites are one of the most productive latest Cretaceous continental vertebrate localities from Europe (Company, 2005). Among dinosaurs, ornithopod remains are quite abundant and constitutes up to the 65 % of the identifiable remains of some fossiliferous horizons. Recovered material consists of fragmentary, isolated or partially associated cranial and postcranial elements, including a fragment of a maxilla, isolated maxillary and dentary teeth, dorsal and caudal vertebrae, a partial sacrum, a partial ischium, humeri, femora, fibulae and tibiae, fragmentary metatopodials and phalanges. Several individuals, ranging in age from immature to mature specimens, are represented in the Chera assemblages.

The Chera ornithopod is referred here to the Rhabdodontidae, because of its dental morphology and the bowed nature of the recovered femora (Weishampel et al., 2003). The Chera teeth are indistinguishable from those of the rhabdodontid *Rhabdodon* from the Campanian-Maastrichtian of the Ibero-Armorican Realm (Brinkmann, 1988; Pereda-Suberbiola & Sanz, 1998; Pincemaille-Quillévéré, 2002) and, apparently, differ from those of *Zalmoxes*, a close relative from the Campanian-Maastrichtian of Central Europe (Sachs & Hornung, in press), in having a lesser number of secondary ridges on the lingual side of the dentary crowns. The Chera femora exhibit a fourth trochanter entirely located on the proximal half of the shaft, as is in *Rhabdodon priscus*, in contrast to that of *Zalmoxes*, in which the fourth trochanter is placed at midshaft or on the distal half of the femur (Weishampel et al., 2003). Moreover, the deltopectoral crest of the humerus is well projected laterally, as is usually in *Rhabdodon priscus*.

Hence, Based on tooth and limb bone features, the Chera rhabdodontid is tentatively assigned to *Rhabdodon priscus*.

The body size estimates for the Chera *Rhabdodon* ranges approximately from 5 to 5,5 m for the largest, presumably mature specimens. Adult individuals of *Zalmoxes* are about 3-4 m in length (Weishampel et al., 2003) whereas *Rhabdodon* specimens from southern France and the Iberian Peninsula can reach a greater size of about 5-7 m long (Pereda-Suberbiola & Sanz, 1999; Pincemaille-Quillévéré, 2002).

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