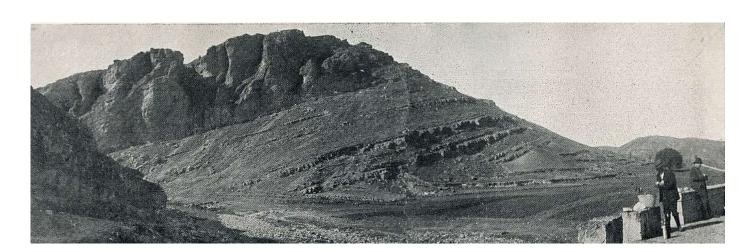




V CONGRESO DEL CRETÁCICO DE ESPAÑA

García-Hidalgo, J.F., Gil-Gil, J., Barroso-Barcenilla, F., López Olmedo, F. y Díaz de Neira, J.A. (Editores)









BIVALVE MOLLUSCS FROM THE CONIACIAN OF THE IBERIAN BASIN (UPPER CRETACEOUS, SPAIN)

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The Iberian Basin was a Mesozoic intracratonic basin located on the Iberian Subplate, being one of the epicontinental regions of Tethys realm flooded during the globally recognized Late Cretaceous sea-level rise. In the Coniacian 3rd order sequence, the fossil assemblages are common, relevant and well preserved in both open and shallow platform facies. Studies undertaken in this sequence have improved: i) the understanding of their stratal and depositional architecture; ii) a detailed biostratigraphy based on ammonite and rudist faunas; and iii) the vertical evolution of these fossil assemblages (García-Hidalgo et al., 2012). With the main aim of to contribute for the knowledge of the rest of biotic communities of the same sequence, a detailed sampling of the bivalve molluscs has been developed in the Castro de Fuentidueña, Castrojimeno, and Castroserracín sections (Segovia province), where mixed siliciclastic-carbonate successions, representing the landward end of the inner shallow carbonate platforms developed in the central areas of the Iberian Basin are recorded. The studied Coniacian bivalves totalize 325 specimens and an overall diversity of 33 taxa. From these, 17 have been determined to the specific level. The remaining taxa are mostly from Heteroconchia with aragonitic shells that suffered digenetic dissolution, and occur as moulds lacking hinge details and well-preserved external ornamentation. From a taxonomic point of view and, thus, considering the limitations of the sample due to the incomplete preservation of many specimens, is interesting to note that the check-list reveals a broad spectrum of marine bivalves belonging to many of the most representative orders and families found in Upper Cretaceous contexts, with emphasis to Ostreida, Pectinida and Cardiida. The studied bivalve assemblage is typical of a shallow marine environment with stable and well-oxygenated soft substrates. This can be confirmed by the presence of many infaunal taxa, as well by representatives of other invertebrate groups like, for example, spatangoid echinoids (Hemiaster). Regarding their origins, their diversity show that the privileged palaeobiogeographic location of the Iberian carbonate platforms allowed the migration and mixing of bivalve faunas with both Boreal and Temperate-Tethyan ranges.

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