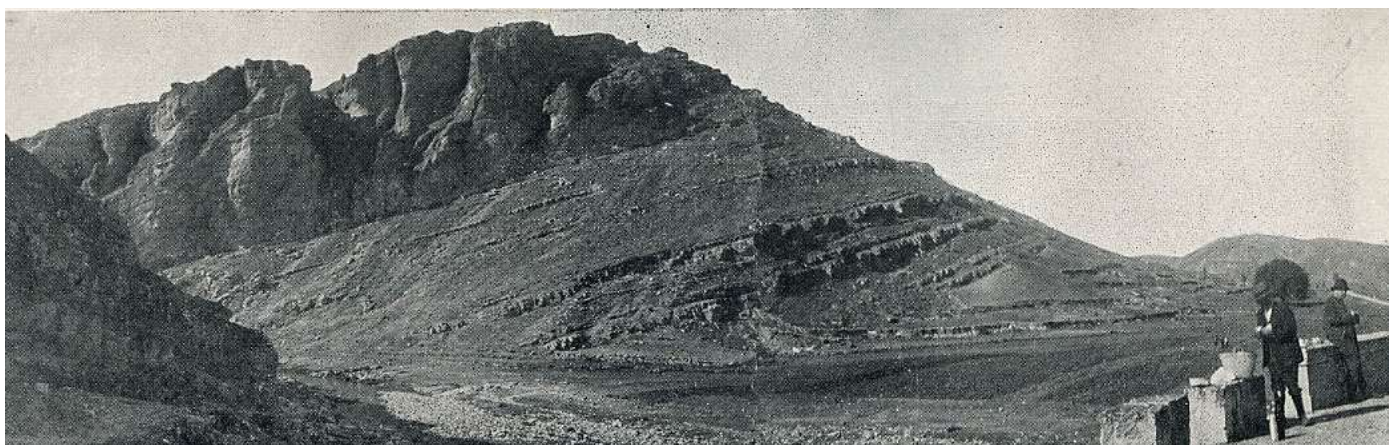




V CONGRESO DEL CRETÁCICO DE ESPAÑA

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



UPPER CENOMANIAN-LOWER TURONIAN BIVALVES OF THE SOUTHEASTERN MARGIN OF THE CENTRAL SYSTEM (GUADALAJARA, SPAIN)

Mélani Berrocal-Casero¹, Fernando Barroso-Barcenilla^{1,2} and Pedro Callapez³

¹ Dpto. de Paleontología, Facultad de Ciencias Geológicas, Universidad Complutense de Madrid. 28040 Madrid, España - Spain. melani.berrocal@estumail.ucm.es

² Grupo de Investigación IberCreta, Universidad de Alcalá de Henares. 28871 Alcalá de Henares, España - Spain.

³ Departamento de Ciências da Terra, Universidade de Coimbra. 3000-272 Coimbra, Portugal.

The upper Cenomanian-lower Turonian bivalves of the southeastern margin of the Central System have been scarcely studied (Berrocal et al., 2013; Moratilla-García et al., 2013). In this region, the studied interval is represented by the sandstones of the top of the Utrillas Fm., and the marlstones and limestones with abundant bivalves, gastropods, cephalopods, echinoderms and some brachiopods of the Margas y Calizas de Picofrentes Fm. (Floquet et al., 1982; Gil et al., 2004). Between these two units, a sandy limestones-dolostones interval can be differentiated as the Santa María de las Hoyas Fm. In the studied materials, the following bivalves have been identified: *Chlamys* cf. *guerangeri*, *Cerastostreon flabellatum*, *Ilymatogyra pseudoafricana*, *Rhynchostreon suborbiculatum*, *Exogyra* (*Costagyra*) *olisiponensis*, *Granocardium* cf. *productum*, *Granocardium* sp., *Trigonarca* sp., *Proveniella* sp., *Pleuromya servesensis*, *Trigonarca passyana* and *Durania* sp. The rudist species *Sauvagesia sharpei* has also been collected, being one of the first representatives of this group identified in the region. From a palaeoecologic point of view, *C.* cf. *guerangeri* has been considered here as a typical epibenthonic-nectonic bivalve. In the nodular beds corresponding to relatively hard substrates of shallow environments, numerous *C. flabellatum*, *I. pseudoafricana*, *R. suborbiculatum*, *E. (C.) olisiponensis* and other epibenthic invertebrates, such as gastropods and regular echinoids, are recorded. On the contrary, the marls, interpreted as comparatively soft substrates of deeper environments, facultatively-mobile semi-infaunal suspension-feeders, such as *Trigonarca* sp. and *T. passyana*, and endobenthonic suspension-feeders, such as *Granocardium* sp., *G.* cf. *productum*, *Proveniella* sp. and *P. servesensis*, are present. Therefore, we can explain the studied facies as the record of neritic to littoral shelf palaeoenvironments, where two main deep controlled bivalve assemblages can be distinguished: a shallower one with dominant epibenthonic species, and a deeper one with abundant endobenthonic taxa.

Acknowledgements: Thanks to Pablo del Buey Fernández. Research projects PEIII1-0237-7926 of the Junta de Castilla-La Mancha, and CGL2009-12008, CGL2011-25894 and CGL2012-35199 of the Ministerio de Ciencia e Innovación, Spain.

References

- Berrocal, M., Segura, M., García Joral, F. & Moratilla-García, M. 2013. Macrofósiles del Cenomaniense superior-Turonense inferior de Santamera y Riofrío del Llano (Guadalajara, España). Navas-Parejo, P., Martínez-Pérez, C. & Pla-Pueyo, S. (eds.). In: *Trending Topics in Palaeontology*. 148 pp. Atarfe, Granada.
- Floquet, M., Alonso, A. & Meléndez, A. 1982. Cameros-Castilla. García, A. (ed.). In: *El Cretácico de España*. 680 pp. Madrid.
- Gil, J., Carenas, B., Segura, m., García-Hidalgo, J.F. & García, A. 2004. Unidades litoestratigráficas del Cretácico Superior en el centro de España: correlación y revisión. *Revista de la Sociedad Geológica de España*, 17: 249-266.
- Moratilla-García, M., Barroso-Barcenilla, F., Callapez, P. & Berrocal, M. 2013. New data on the palaeontology of the Upper Cretaceous in the Hiendelaencina area (Guadalajara, Spain). Navas-Parejo, P., Martínez-Pérez, C. & Pla-Pueyo, S. (eds.). *Trending Topics in Palaeontology*. 148 pp. Atarfe, Granada.



CON LA COLABORACIÓN DE:

