**First spore data of the Upper Devonian Bolloncillos Formation (NE Iberian Peninsula)**

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The Upper Devonian Bolloncillos Formation consists of a series of detritic rocks with alternance of shales and sandstones. Previous works have documented a great diversity of ostracods, tentaculites and conodonts from which key biozone correlations of marine environments have been done.In this communication, we present the first dispersed spore data of this formation. The isolated spore assemblage is formed by 26 spore taxa, belonging to 20 genera, including *Acinosporites* [sp.,](http://www.amjbot.org/content/96/10/1849.full#ref-50) *Ambitisporites avitus-dilutus*, *Aneurospora greggsii*, *Aneurospora* sp., *Convolutispora* sp*.*, *Emphanisporites mcgregorii*, *Emphanisporites rotates*, *Geminospora punctata*, *Geminospora lemurata, Retusotriletes rotundus*, *Retusotriletes rugulatus,* *Rugospora* cf. *spinosa, Rugospora* cf. *minuta*, *Samarisporites triangulatus, Verrucosisporites bulliferus* and *Zonotriletes brevivelatus* (among others). Spore evidence (*Retusotriletes rugulatus* and *Verrucosisporites bulliferus*) suggests that the time interval covered by the palynoflora would correspond to the *ovalis-bulliferous* Assemblage Zone of the Old Red Sandstone Palaeocontinent. This zone, equivalent to several key spore zonations of western Europe, such as the BJ (*bulliferus-jekhowskyi*), BM (*bulliferus-media*) zones, as well as the BA (*bricei-acanthaceus*) spore zone (lower part), advocates for a mid- to late Frasnian age for the outcrop.Results also indicate that *Zonotriletes brevivelatus*, a taxon previously only documented from the Lower Devonian of North Africa, would extend its distribution through Devonian. The new data presented here allow improved comparisons between marine biostratigraphy and Devonian terrestrial facies zonations. Implications of the temporal-spatial distribution of spore taxa are discussed.

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