
ABSTRACTS AND PROGRAM



*MONDELLO, SICILY
ITALY*

Edited by LUCA MARTIRE



International Subcommission on Jurassic Stratigraphy

some personal reminiscences of the past, some reflections on the present and some hopes for the future.

BIOSTRATIGRAPHY OF TOARCIAN RABAÇAL AREA FORAMINIFERA

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The Maria Pares outcrop in the Rabaçal area is known as an important reference in the studies of the Toarcian of Portugal. These sediments are exposed along the road between Zambujal and Janeanes with a thickness of 174 meters.

Four depositional sequences, each one characterized by differentiated vertical facies arrangements (lithological, sequential and paleontological), were defined in the Rabaçal area. The depositional sequences show shallowing upward evolutions resulted by allo genetic factors deposited in an outer homoclinal ramp setting, dipping towards northwest (Duarte, 1998; Duarte & Krautter, 1998).

A total of 75 samples were processed for the study of benthic foraminifera. In these samples 17 common species of benthic foraminifera were identified. The more abundant foraminiferal species are *Lenticulina Toarcence* mg. *Lenticulina* and *Lenticulina muensteri* mg. *Lenticulina*.

Four foraminiferal associations were defined conformal to the four sequential units (Duarte, 1997).

References:

- Duarte, L.V. (1998): Comun. Inst. Geol. e Mineiro, V Congr. Nac. de Geologia, 47-51.
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GEOMETRY OF THE OXFORDIAN CARBONATE PLATFORM EDGE IN THE EASTERN PART OF THE PARIS BASIN

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The global shallowing upward trend of the sedimentation during the Early Oxfordian and the beginning of the Middle Oxfordian has led to the setting of a reefal carbonate platform in Lorraine. A field mapping survey performed over the southwestern part of this Oxfordian reef complex allowed to recognise the geometry of different sedimentary units. This has been possible with the construction of isohypses for both top and bottom of each unit. It allows more precise estimates of thickness variations, thus providing a new insight of the architecture of the platform edge (fig. 1).

The vertical succession from the "Argiles de la Woëvre" to the "Terrain à chailles" formations initiates the shallowing upward trend. Both these argillaceous formations developed a ramp geometry, gently sloping down to the Southwest. The progressive enrichment in carbonate and the increase of benthic biotas adapted to firm and hard substrates confirm the shallowing-upward trend. Later, the

settlement of reef tracts begun with pioneer lamellar microsolenids and evolved toward more diversified and more actively growing corals. This unit is defined as the "Zone inférieure à polypiers" (lower coral zone) which corresponds to the transition from ramp to platform morphology. The "Zone supérieure à polypiers" (upper coral zone) is separated from the previous unit by a marker bed of oncolitic limestone. In the upper coral zone, facies evolve from lagoonal chalky wackestones towards platform edge facies ("Oolithe de Doulaincourt") including ooids, oncoids, chaetetids, nerineids, *Diceras* and essentially phaceloid corals, often reworked and bioeroded. The vertical evolution of this platform edge previously interpreted as a continuous reef barrier appears in fact as a succession of two separated oolitic units ("Oolithe de Doulaincourt" and "Oolithe de Saucourt"). They represent two environments of oolitic shoals each one forming the boundary of a lagoon.

The "Oolithe de Doulaincourt" was deposited in a context of decreasing accommodation. Based on observations of the lagoonal facies, the muddy beds intercalated between the two oolitic units rather suggest a climatic control than a significant eustatic fluctuation. The previous succession is overlain by oolitic grainstones ("Oolithe de Lamothe" Formation) and finally by lagoonal mudstones ("Calcaire à astartes supérieur" Formation) which demonstrate the disappearance of slopes in the studied sector.

From a general point of view, the high carbonate production and the low accommodation have induced a general prograding trend of the Oxfordian platform.

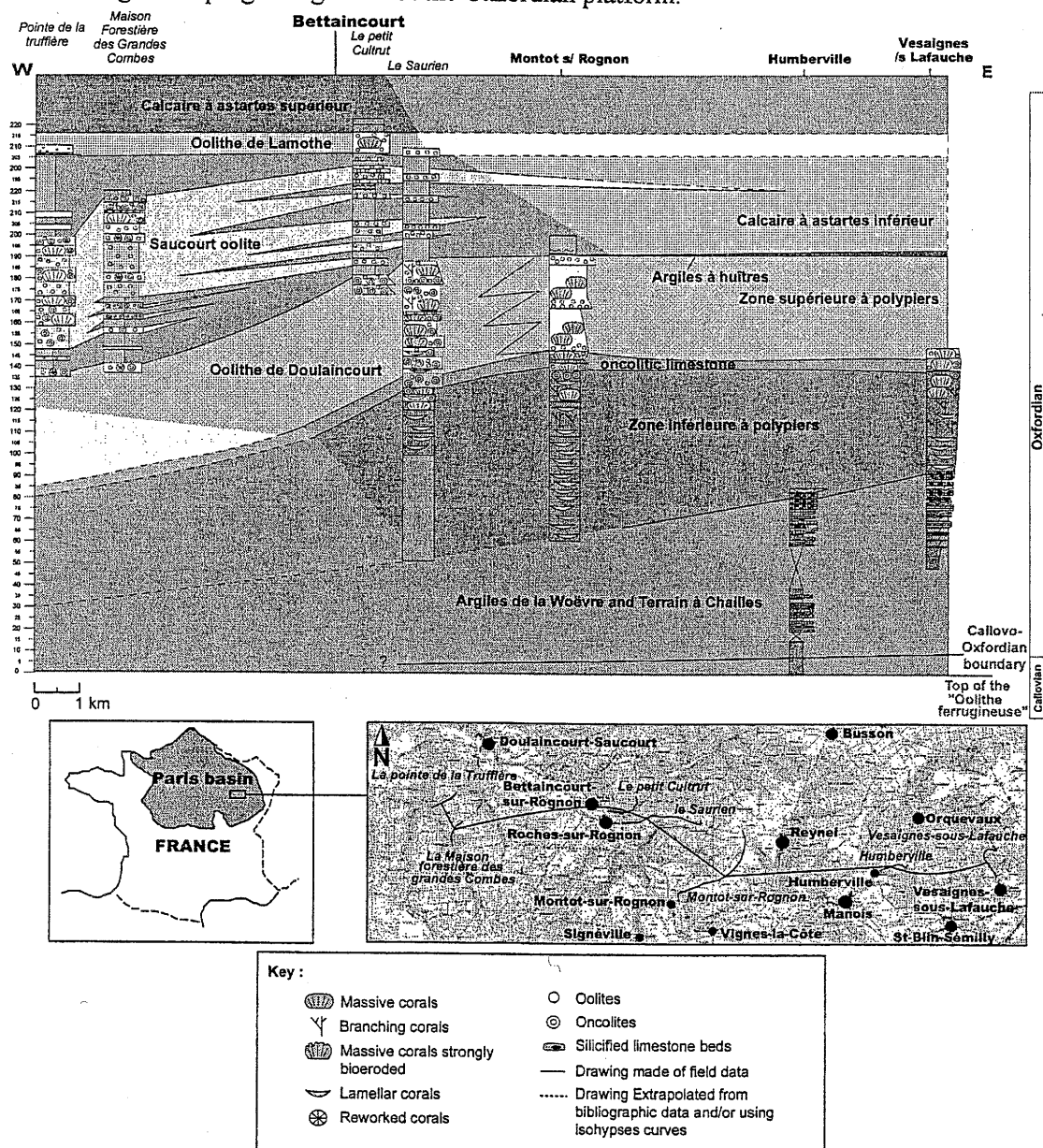


Figure 1 : Synthetic diagram showing the geometry of the Oxfordian platform edge in the eastern part of the Paris basin.