

Dinoflagellate Cyst Biostratigraphy and Paleoenvironmental Interpretation of the Cretaceous Sequences in the Agadir –Tarfaya Region, Southwestern Morocco

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The primary focus of this paper is to report the results of the palynological investigation carried out, using dinoflagellate cysts, on the Cretaceous sequences in Morocco.

The study is centred in the Tarfaya - Agadir region (western Morocco), where ditch cuttings samples, from boreholes sections, provided by ONHYM, were analysed for palynology, supplemented by selected Foraminiferal analyses.

The diverse organic-walled microfossils yielded, comprise spores, pollen grains, foraminiferal test linings and dinoflagellates.

The rich and well-preserved dinocysts assemblages recovered, belonging to yet more than 35 genera and ranging from Berriasian to Albian, allowed the refining of the ages, inferred by previous micropaleontological studies, on the basis of poor foraminifera assemblages and have been useful in interpreting the paleoenvironments of the Cretaceous sequences.

The present work stresses the use of dinoflagellate cysts in biostratigraphical analysis of sedimentary deposits, especially those where environmental factors and diagenetic processes have rendered ineffective the use of the Foraminifera and the results may have a wider application for the Moroccan Atlantic margin as a whole and could assist in the ongoing offshore exploration activity.