

Comparative Analysis of the Palynoflora in Pliocene Basins of the Atlantic and the Mediterranean Realm (Spain and Morocco)

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Comparative palynological analysis is made in the sediments of Lower Pliocene age of three basins, two in the Eastern Atlantic realm: Asilah (Morocco) and Guadalquivir (SW Spain), and one in the Western Mediterranean realm: Bajo Llobregat (NE Spain).

The palynology of the Bajo Llobregat basin reflects a change in the vegetal cover, of probably climatic origin. Progressive disappearance of taxa from dense and warm forest is observed (Taxodiaceae, Nyssa, Carya, Engelhardtia, etc.) and they are replaced by taxa from more xerophytic environments belonging to the Mediterranean flora. In the Atlantic realm, the palynological assemblages of the Oued Messaoud section in the Asilah basin, show variations in the taxonomic composition of the vegetation. The lower levels suggest a humid climate, (abundance of deciduous and evergreen Quercus, Poaceae and Pteridophyta). The upper ones show a drier climate dominated by evergreen Quercus and Plantago.

In the Guadalquivir basin, the palynological study is focused on the Lower Pliocene "Arenas de Huelva" Formation, where a mixed forest with warm (mainly Pinus and Pteridophyta with Nyssa, Taxodiaceae, Sapotaceae, Arecaceae, etc.) and temperate taxa (Quercus, Juglandaceae, Salicaceae...) is observed. In the uppermost levels, the landscape was probably more arid, with an increase of taxa such as Chenopodiaceae.

Key words: Palynology. Vegetation. Pliocene. Atlantic. Mediterranean.

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