New Paleontological Data in the Neogene of Safi (Morocco)

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Several classical (Jorf Al Yhoudi, Jerifat, Si Bel Krakra) and other new sections of the Neogene around Safi (W of Morocco) are studied. The basal levels consist in yelow tabular or sigmoidal calcarenites, ordered in fining-upwards sequences, and disposed in several outcrops as thickening-upwards macrosequences. Cross-bedding and bioturbation is common. The upper levels are fine to coarse yelow sands, locally with conglomerates. The correlation between the different deposits is difficult because they are isolated in general.

Taphonomic signature of macrofossils suggest more or less protected nearshore environments. Removing and redeposit of the shells, in more continous or discontinuos vawe action settings, have produced several macrofaunal shell concentrations, very rich in Ostrea lamellosa, or Pecten, or in the echinoid Rotuloidea fimbriata, sometimes alternanting with levels with articulated bivalves in life-position, like Panopea or Lutraria. Diagenetic dissolution of aragonitic shells are important, with a great presence of moulds.

The more abundant macrofauna preserved are Ostreids, Pectinids, Balanids and Echinoids. The presence of the pectinid Palliolum excisum, wich starts in the Pliocene, agree with previous age supposed by workers of the middle of last century. With respect to microfauna, Foraminifers are scarce, and poorly preserved. Elphidiidae, (E. crispum and E. advenum), Lobatula lobatula, Ammonia beccarii, Cibicides refulgens, Asterigerinata planorbis and Pararotalia sp. are the most common taxa. Ostracods are also scarce, with presence of Aurila, Loxoconcha and Callistocythere. Palinology is represented by xeric, halophytic herbs (Amaranthaceae- Chenopodiaceae, Artemisia), with a small percentage of aquatic or semiaquatic plants (Cyperaceae), suggesting influence of fresh water.

Both the macro and microfauna, the taphonomical, sedimentological and stratigraphical data are according with nearshore changing marine environments from inner platform to intertidal in the area.

Key words: taphonomy, paleoecology, Neogene, Safi (Morocco)

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