

**LITHO- AND BIOSTRATIGRAPHY OF THE SCAGLIA BIANCA FORMATION
(LATE ALBIAN-LATE CENOMANIAN)
IN THE UMBRIA-MARCHE APENNINES
(ITALY)**

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A detailed litho- and biostratigraphic study has been carried out on 36 sections of the Scaglia Bianca Formation (Late Albian-Late Cenomanian) in the Umbria-Marche basin.

Most of the sections are characterized by continuous pelagic sedimentation and are constituted of limestones and marly limestones containing chert, and subordinately of marls. Black-shales are found interbedded in the lowermost and uppermost portions of the Formation. In the southern part of the basin calcareous turbidites, made of remobilized pelagic mud or containing shallow-water skeletal debris discharged from the Latium-Abruzzi carbonate platform are interbedded within the pelagic sequences. The ichthyolithitic-bituminous-radiolaritic Livello Bonarelli which took place under eutrophic and anoxic conditions (Coccioni et al., 1991), characterizes the uppermost portion of the Formation. On the basis of the colours, the Scaglia Bianca Formation can be subdivided into the following members (from bottom to top): (1) the Lower Yellowish - Grey Member, (2) the Reddish Member, (3) the Upper Yellowish - Grey Member, and (4) the Greyish Member.

The biostratigraphic analysis, based on planktonic foraminifera, showed several well-differentiated and sequential events which allowed us to define five biozones and two subzones as follows (from bottom to top): (1) *Rotalipora appenninica* Zone, (2) *Rotalipora brotzeni* Zone, (3) *Rotalipora reicheli* Zone, (4) *Rotalipora cushmani* Zone, (4a) *Rotalipora greenhomensis* Subzone, (4b) *Dicarinella algeriana* Subzone, and (5) *Whiteinella archeocretacea* Zone.

Syn depositional tectonic activity, which is represented by calcareous turbidites and hiatuses, reached a peak in the Middle-Late Cenomanian time. Therefore, a fairly good correspondence may be noted between the evolution of the tectonic activity and the emersion in the Latium-Abruzzi platform typified by a beuxitic karst.

References

Coccioni R., Erba E., and Premoli Silva I. (1991) - Litho- and biostratigraphy of the Livello Bonarelli close to the Cenomanian/Turonian boundary (Umbria-Marche Apennines, Italy) and possible paleoceanographic significance. Colloque International sur les Evénements de la limite Cénomanien-Turonien, Grenoble, 24-26 Mai, 1991. *Geologie Alpine, Memoire H.S. 17*, 25-26 (abstract).