

Description of red algae genus from Jibou area and characteristics of limestones from where they came from

Andrea Peter¹, Ioana Prica²

¹ „Babes-Bolyai” University, department of Geology, str. Kogalniceanu 1, RO-3400 Cluj-Napoca, Romania (andreapeter@gmail.com)

² S.C. Ducons S.R.L., str. Romulus Vuia, nr. 52, Cluj-Napoca (ioana@libyemail.net)

This work is a detailed study about Eocene-Oligocene limestones from Cuciulat quarry in Preluca area.

The researches focused to obtain a real geological profile from the quarry based on profound fieldwork and thin sections examination regarding presentation of red algae, microfaciesal determinations, also to describe some data about the sedimentary evolution of the Eocene-Oligocene deposits from Cuciulat area.

The results of these researches have a practical use; the macro and microstructural descriptions of the Eocen-Oligocen limestones from the studied area can provide important clues for future exploitation of these limestones.

In the area these limestones are exploited in more quarries. At present they are used in construction works, also as ornamentation rocks.

Following the sedimentary evolution from Cuciulat quarry one can observe a cycle of sedimentation as a result of the bioaccumulated and bioconstructed facies alternation. Bioconstructed facies are represented by coraligen bioconstructions which alternates with coralgae bioconstructions (bindstone type). This bioconstructions are composed from red algae talus and crusts belonging to *Polystrata alba*, *Lithothamnion* sp, *Corallina* sp, *Lithoporella melobesioides*.

The purpose of these work is a presentation of some red algae genus from Eocene limestones within Jibou area, also contain a physical-mechanical and chemical characterization, a short presentation of the economical importance data and technical utilization of the limestones mentioned above was the realization of a facies analysis and reconstruction of the sedimentary evolution of the Eocene-Oligocene deposits from Cuciulat.