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## FINDING OF AMMONITES IN THE ITTIOLITHIC LIMESTONES AT PIETRAROJA

The ittiolithic limestones, outcropping on the top of "Civita " at Pietraraja, have been studied for a long time and have brought to light a large number of fossil in a very good state. Their age is Early Cretaceous, more exactly Lower Albian, and their upright extension is broken off by the Miocenic trasgression.

These limestones are characterized by a thin lamination, with laminae up to 25 cm thick, and by several bituminous residue as well as band of flintstone.

They are made up by minutely stratified calcilutites, rich in invertebrates and vertebrates fossils. Among the invertebrates, in the body of the layers, are *Foraminifera* represented by the genus *Cuneolina* (*Cuneolina camposauri*, *C.laurenti*, *C.hensoni*) and the genus *Orbitolina* in association with *Textularidae*, *Miliolidae*, *Vulvulinidae* and *Ophthalmididae*; *Algae*, including the genus *Salpingoporella* (*Salpingoporella mülbergi*, *S. dinarica*), the species *Thaumatoporella parvovesiculifera* and *Codiaceae*; *Bivalvia*, including *Veneridae* and *Rudistae*; *Gastropoda*, including *Cerithidae* and *Turitellidae*; *Crustacea* and *Echinodermata*.

Two specimens of ammonites have been found inside a single block, totally detached from the body of the layers.

Such specimens belong to the superfamily *Hoplitaceae*, family *Trochleiceratidae*, genus *Trochleiceras* Fallot & Termier 1923. The genus, has a distribution ranging from the Upper Aptian to the Lower Albian, in the Tethian area (Baleari Islands - Madagascar).

The ammonites are small-sized (< 2 cm), and are present inside the block with the positive and negative casts. Part of the shell, rimeralized with a stile clear suture can be noticed.

The very small size of the two specimens didn't allow the identification of the species. The importance of this discovery (ammonites were never reported to be found at Pietraraja) is not related to the possibility of identifying a species, but to the prominent clue the ammonites represent to the paleoecology reconstruction.

Pietraraja has been interpreted as a narrow, shallow water lagoon, connected with the emerged land (for the presence of merely terrestrial organism) and next to fresh water (for the presence of an amphibian). The presence of the ammonites gives full evidence of a way towards the open sea, the Thetian ocean, which nectonic organism (among there the ammonites) could pass through, periodically driven by waves and streams.

Further researches are being carried out into the presence of phytoplankton.

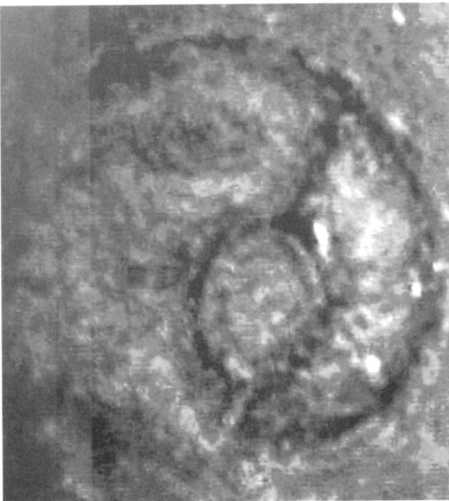
Moreover, from a stratigraphic point of view, the distribution of the genus *Trochleiceras* once more confirms the age of the deposit.

SPECIMEN	DIAMETER	HEIGHT of the spira
A	1,9 CM	0,5 CM
B	1,65 CM	0,7 CM

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