

NEW RESULTS IN CRETACEOUS STRATIGRAPHY

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Abstract

The stratigraphic and related knowledge of Hungarian Cretaceous formations is uneven: the study of some formations and fossil groups reached European levels (Mogyorósdomb Limestone Formation, Zirc Limestone, Pénteskút Marl; Calpionellidae, sporomorphs, some planktonic foraminifer associations, etc.), while the study of other formations, fossil groups and geographic regions is far behind from the level desirable today. This situation is due to the lack of experts, of research possibilities, and of the ranking of research fields.

The most important questions in the Transdanubian Central Range concern the temporal and spatial relations of the Cretaceous sediments (Bersek Marl, Lábatlan Sandstone and Neszmély Formation) to the Tata Limestone, Környe Limestone and Vértessomló Siltstone, respectively. Special emphasis is needed to draw the Aptian/Albian boundary.

Typical facies of the Borzavár Limestone is little known yet.

There are several fundamental questions to be solved in the Mecsek zone, not forgetting that outcrops are limited to the Mecsek Hills only. Separation of slope and basin facies of Magyaregregy Formation, chronostratigraphic subdivision of Magyaregregy Formation and Apátvarasd Limestone and their interrelationship are problems to be solved.

Relationship between the Cenomanian-Turonian sedimentary cycle and the Lower and Upper Cretaceous, respectively, are unclear. We do not know the time of initial sedimentation in the flysch graben; further studies are needed to understand the gap between Nádudvar and Debrecen Formations, its extent, and origin.

In the Villány Zone the questions are mostly connected to the Nagyharsány Limestone. The present investigations are insufficient to map the variable strating time of its deposition. The few boreholes with occasional coring are not sufficient to separate and define the Nagyharsány Limestone and the underlying variable Biharugra Calcareous Formation.