# EARLY TO MIDDLE MIOCENE CALCAREOUS NANNOFOSSILS FROM ALBANIAN-THESSALIAN BASIN (ALBANIA)

**Mădălina-Elena Kallanxhi[1,*] & Stjepan Ćorić[2]**

[1] *Department of Geology, Babeș-Bolyai University, M. Kogălniceanu 1, 400084 Cluj-Napoca, Romania*
[2] *Geological Survey of Austria, Neulinggasse 38, A-1030 Vienna, Austria*

*corresponding author: madalina_kallanxhi@yahoo.com

The Albanian-Thessalian intramontane Basin (Albania) represents the continuation of the Mesohellenic trough (Greece), evolved as a narrow marine basin and preserves three main sedimentary sequences (PASHKO et al., 1973): the Middle Eocene sequence, the Late Rupelian to Aquitanian sequence, and the Burdigalian to Langhian sequence. The investigated transects belong to the third sedimentary sequence. The Burdigalian and Langhian sediments are restricted only to the southeastern part of the Albanian-Thessalian Basin. They are represented by a succession composed of reddish-yellowish sandstones and conglomerates, limestones with *Lithothamnium*, thick bluish siltstones and marlstones with sandstones and conglomeratic lenses intercalations, belonging to the Morava Formation, followed by the Bradvica Formation with sandstones, bluish marlstones, sandy marls, and conglomeratic lenses intercalations, and finally the Langhian Sinica Formation represented by deep-marine bluish marlstones with fine-grained sandstones intercalations.

Quantitative and semi-quantitative investigations of calcareous nannofossils were performed on a total number of 117 samples, collected from four transects (Kodra Partizani, Mirasi-1, Mirasi-2 and Çetë). The material contains moderate to well preserved calcareous nannofossil assemblages, dominated by: *Reticulofenestra minuta* (blooms in Mirasi-1), *R. haqii*, *Coccolithus pelagicus*, *R. pseudoumbilicus, Sphenolithus heteromorphus* and *Umbilicosphaera jafari.* Other species and taxonomical groups present in less quantities, are: *Acanthoica* sp., *Braarudosphaera bigelowii*, *Calcidiscus* spp., *Coccolithus miopelagicus*, *Coronosphaera mediterranea*, *Cyclicargolithus floridanus*, *Discoaster* spp., *Hayella challengeri, Helicosphaera* spp. (*H. ampliaperta*, *H. carteri*, *H. euphratis*, *H. intermedia*, *H. mediterranea*, *H. minuta*, *H. scissura*, *H. walberdorfensis*, *H.* cf. w*altrans* and *Helicosphaera* sp.), *Holodiscolithus macroporus*, *Pontosphaera discopora*, *P. multipora*, *Pontosphaera* sp., *Reticulofenestra gelida, Reticulofenestra* sp (3 - 5μm), *Sphenolithus belemnos, S. moriformis*, *Sphenolithus* sp., *Syracosphaera pulchra*, *Triquetrorhabdulus* spp. and *Umbilicosphaera rotula.* Reworked specimens from Mesozoic and lower stages of the Paleogene are present in very low amounts.

Biostratigraphically, the calcareous nannofossil assemblages allowed the correlation of the mentioned outcrops to the following standard biozones: NN3 – *Sphenolithus belemnos* Zone of Burdigalian age, NN4 – *Helicosphaera ampliaperta* Zone (Burdigalian – Early Langhian) and NN5 – *Sphenolithus heteromorphus* Zone (of Langhian age). The biostratigraphical assignment is supported by the occurrence of several index species such as: *H. ampliaperta*, *H. walberdorfensis*, *H*. cf. *waltrans, Sphenolithus belemnos* and *S. heteromorphus.*

Acknowledgements: This work was possible due to the financial support of the Sectorial Operational Program for Human Resources Development 2007-2013, co-financed by the European Social Fund, under the project number POSDRU/159/1.5/S/132400 with the title „Young successful researchers – professional development in an international and interdisciplinary environment".

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