

NEW BIOSTRATIGRAPHICAL DATA ON THE FLYSCH-DEPOSITS
OF THE GREAT HUNGARIAN PLAIN^x

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Abstract

Foraminifera and nannoplankton determinations were carried out on core samples gained from boreholes made for petrol-research. 20 of the 52 examined samples contained nannofossils, and one from 14 examined samples contained benthic and planktonic foraminiferas.

The oldest nannoplankton-assemblage was found in the Borehole Szandaszőlő /Sza/-11. It belongs probably to the NP 18 nannozone, Upper Eocene.

The 1344-1346 m core of the Borehole Hajduszoboszló /Hsz/-17. supported rich nannoplankton-flora /NP 21/ and foraminifera-fauna /P 18/ of Lower Oligocene age.

The Sphenolithus specimens found in the cores of Hsz-15. /1447-1450 m/ and Tiszapalkonya /Tip/-4. /2119-2122 m/ indicate a Middle-Upper Oligocene age of NP 24. Some more samples of boreholes from Hajduszoboszló and Debrecen /Hsz-15, Dá-1. and D-2./ contained Middle and Upper Oligocene nannofloras /NP 24-25 zone/.

Cores of Cretaceous and Paleocene age were not found, but it is supposed there were some pre-Middle Eocene cores too among the samples free of fossils. The presence of fossil-free sediments can be explained by the assumption of a very deep flysch basin of Upper Cretaceous-Paleocene-Lower Eocene age.

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Our paleontological examinations have given new evidences to the statement of SZEPESHÁZY /1973/, i.e. the Cretaceous, Paleocene and Lower Eocene deposits of the Tiszántul flysch-basin are practically free of fossils, valuable microfossil-assemblages were found only in the stratas deposited probably in a more shallow water, later than the Middle Eocene.

The datas published in this paper give some contributions to the paleogeography too. In the last decade the geologists in Hungary and Rumania have made numerous attempts to explain the identical moments in the history of the Paleogene sedimentary basins of Transsylvania and North-Hungary. BOMBITA /1972/ has correlated the marginal pararhytmities of the Valea Carelor Strates /an equivalent of the Tard Clay/ and the Valea Lapusului Formation with the Szolnok-Máramaros Flysch-deposits, while KŐRÖSSY /1977/ essentially demonstrated this connection using the lithological data published in the Soviet Union and Rumania. BÁLDI /1979/ compared the mollusc-faunas of Transsylvania and North-Hungary of Lower Kiscellian and Egerian age, and proved the marine connection between the two areas, as a possibility for significant faunal migration.

The recent demonstration of the zones NP 18, NP 21 and P 18 being traceable in the Paleogene section of the Szolnok-Máramaros Flysch Basin, in North Hungary and in Transsylvania respectively, supports an evidence of the existence of marine connection between the lithologically very similar Transylvanian Nagyilonda Stratas and the Tard Clay Formation in North Hungary.

Both KŐRÖSSY /1977/ and SZEPESHÁZY /1973/ agree in the assumption, that the formation of the Upper Cretaceous and Early Paleogene flysch in the Szolnok Flysch Basin was followed by post-Lutetian epicontinental sedimentation, which does not present flysch-like lithological properties except a slight rithmicity.