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Important Foraminifera of the Bohemian Cretaceous

Planctonic and benthonic foraminifera as individual components of the microfossil associations were studied in the Bohemian Cretaceous. Statistical methods were applied in this study. Important species were evaluated in detail. Their study brought some new taxonomic, phylogenetic, ecological, and stratigraphical conclusions.

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Nummulites from the Area of Bojnice, the Upper Hron Depression and the Budin Paleogene around Sturovo

In the submitted report the biostratigraphy of the Paleogene of the Central Carpathians from the wider environments of Bojnice, the Upper Hron Depression and the Budín developement of the Paleogene in the Stúrovo area was presented, based on larger foraminifers, mainly Nummulites.

In the wider environments of Bojnice the basal transgressive lithofacies were deposited from the Upper Lutetian to the Lower Priabonian, the marginal lithofacies in the Upper Lutetian, the flysch lithofacies from the Upper Lutetian to the end of the Priabonian. In the Upper Hron Depression the basal transgressive lithofacies was deposited from the Upper Lutetian to the end of the Priabonian, the sandy-claystone lithofacies in the Upper Priabonian, the claystone lithofacies in the Upper Priabonian too. In the Stúrovo area a thick complex of sediments contained montonous assemblages of Upper Lutetian age. According to their stratigraphic range larger foraminifers were divided into seven assemblages. The assemblages I-V fall into the Upper Lutetian, the assemblage VI falls into the Lower Priabonian and the assemblage VII into the Upper Priabonian. Comparing bioassociations from the wider environments of Bojnice and the Upper Hron Depression with associations from the Budín developement of the Paleogene in the Štúrovo area, the associations from the first two areas were found to contain granular species with massive shells and the associations from the Budín developement of the Paleogene to contain species with simpler shell structure.

The different nature of bioassociations in the Central Carpathian Paleogene in the wider vicinity of Bojnice, and in the Upper-Hron depression and from the depression and from the Budín Paleogene around Stúrovo may be ascribed to their appurtenance to two different paleogeographical sedimentation areas. The supposed connection of the sedimentation area of the Budín Paleogene across the wider area of Bojnice and the Hornonitrianska kotlina (depression) with the Central-Carpathian Paleogene cannot be documented with nummulite associations. In fact, till the present no nummulite bioassociations have been found as to comprise numerically equal granulated and non-granulated forms.

The occurence of alveolines below the association with Nummulites gallensis (HEIM) in the wider vicinity of Bojnice indicates the connection of the Central-Carpathian Paleogene with the epicontinental Paleogene in the Bakony mountains. Here, below the horizon with Nummulites perforatus perforatus (MONTFORT) in the horizon with Assilina spira (IXth horizon) occur the species Alveolina elongata D'ORBIGNY and Alveolina fusiformis SOWERBY (G. KOPEK, T. KECSKEMÉTI & E. DUDICH, 1965). The connection of the Budín Paleogene with the central-Carpathian Paleogene across the region of the wider vicinity of Bojnice and Hornonitrianska kotlina (depression) could only be indicated by a sporadical occurence of Orbitolites (not yet determined) from the boreholes Mužl'a-3 and Obid-6, situated near Štúrovo.