

## **Ekogeological research on the western part of the Danube–Tisza Interfluve**

BARBARA KERÉK, LÁSZLÓ KUTI, Geological Institute of Hungary, Budapest, Hungary.

The development of a biotop is a long process in which a number of factors take part, such as the parent rock of the soil, the relief, and the climate. The fundamentals of the biotop basically determine the establishment of the flora and fauna, that is the biocenosis which is typical in the biotop. This is not a one-way relation. The inanimate factors and the live biological organisms have an effect on each other and this interaction, although its intensity and quality is changing, maintains the biological balance. It requires divergent knowledge to understand this linking-system and because of that the one-by-one selection and research of the factors is practical.

The area, where the research took place, is the western part of the Danube–Tisza Hilly Region. Within the framework of the geological mapping of the Great Hungarian Plain a drilling of 10 m deep shallow boreholes was completed according to a regular grid. The near-surface layers were surveyed in 0,5, 1 and 1,5 metres-depth for the  $\text{CaCO}_3$  content. On the basis of the received data the beds were put in three categories according to the  $\text{CaCO}_3$  content (high:  $>30\%$ , medium:  $5\text{--}30\%$ , low:  $5\%>$ ). Maps were created in the three preferred depths and with the help of these the possible occurrence of acidification was represent. Based on the  $\text{CaCO}_3$  content the area was classified into seven categories: acidic, acidified, acidifying, acidic in depth,  $\text{CaCO}_3$  accumulation on the surface,  $\text{CaCO}_3$  accumulation in depth, non acidic. Besides these, four area-typical bio-area types were chosen (sandy, carbonate muddy, salt affected and peaty areas) based on geology.