Quantitative and Qualitative Description of Silica Phytolith Assemblages in Soil Profiles in Hungary

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Abstract

The siliceous microremain assemblages of former plant species that accumulate in the topsoil play an important role in the evaluation of landscape evolution. With the examination of phytoliths from modern soils we may build a reference base suitable for follow-up palaeoecological, geographical and archaeological studies. Besides these aims, phytolith analysis may help to answer questions related human activity in the development of the landscape

At the Department of Nature Conservation and Landscape Ecology (Szent István University – Gödöllő, Hungary) we have focused our research on soil profiles of different landscapes and different – but typical for a given landscape zone – soil types. The main aim of our ongoing survey is to reveal the differences in the quantitative distribution and qualitative properties of the main and most common soil types in Hungary.

Profiles have been choosen from plain areas, as well as from mountain areas. All profiles were choosen according to their vegetation patterns, parent material and geographical location. On the basis of the preliminary results we try to discuss some questions related to landscape evolution and soil geography.

Key words: phytolith, modern soil profile, Hungary

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