

The European Soil Bureau Network and the Hungarian Soil Science Society, under the auspices of the 2011 Hungarian Presidency of the European Union, is proud to present

THE SOILS OF HUNGARY

Soils are among the most precious natural resources of Hungary.

The favourable landscape, climate and soil conditions allowed the original Hungarians to settle in the Carpathian Basin.



The most fertile soils are the dark Chernozems, that have developed predominantly in lowland areas in loess and loess-like sediments under ancient grasslands. They cover 21% of Hungary.

Chernozem

A highly productive soils that is used for agriculture, Chernozems have a deep, dark, surface horizon (0 – 50 cm in the photograph) that is rich in organic matter. They carry favourable physical chemical properties, such as a good granular structure, high porosity, good infiltration and water storage and nutrient holding capacity. These characteristics ensure good yields for almost any crop type that is grown in them. The only limitation to agricultural production is the availability of water. The major crops grown on Chernozems are winter wheat and corn. A typical Chernozem soil profile will exhibit a 40-60 cm deep topsoil that is soft and rich organic matter, overlaying a subsoil containing calcium carbonate rich parent material. There is usually a transitional horizon in between the two.

Chernozems are sensitive to mismanagement and can lose several of the highly sought after properties mentioned above if care is not taken. Compaction, structural degradation and erosion are the most common issues. Compacted soils have reduced porosity and infiltration causing increased runoff, erosion and less storage of soil moisture. With appropriate soil management practices, the organic carbon content and the bio-diversity of the soils can be maintained or even enhanced.

Soil performs many vital functions that are worthy of protection because of their socio-economic as well as environmental importance. For this reason, the European Commission has adopted a Soil Thematic Strategy with the objective to protect soils across the EU. For more information, please visit http://ec.europa.eu/environment/soil/index_en.htm