Ozsoy G. and E. Aksoy (2012) Genesis and classification of some Mollisols developed under forest vegetation in Bursa, Turkey. International journal of Agriculture & Biology 14:75–80.

ABSTRACT

In this research morphological characteristics and physicochemical properties of selected four soil profiles, developed on different parent material under forest cover, were studied. Soil formation in all studied profiles is characterized by downward movement of clay and organic matter, forming cambic and/or mollic horizons with high base status. Addition and accumulation of organic materials and leaching bases are the other soil forming factors. The profiles have dark color with moderate-strong blocky structure, high cation exchange capacity and clay content with high base saturation. The main limitation factors regarding soil productivity for the studied soils are soil shallowness, summer drought, and high contents of clay. Problem related to salinity and alkalinity was not found in the studied soils. On the basis of morphological and physicochemical analysis, soil profiles were classified as Typic and Vertic Haploxeroll sub groups according to the Soil Taxonomy and as in Calcaric Phaeozem soil units according to the FAO/UNESCO Soil Map of the World Legend classification systems. The results of this study can be used for to compare with the other studies on Mollisols in wherever they are recognized. This study also provides useful soil data for decision makers and planners in order to produce the new management plans of the study area.