

Ozsoy G. and E. Aksoy (2011) Genesis and classification of Entisols in mediterranean climate in northwest of Turkey. Journal of Food, Agriculture & Environment, vol.9 (3&4):998-1004.

ABSTRACT

Entisols occur in every part of the world and needed to be examined for their adequate management. The morphological, physical and chemical properties of six soil profiles representing the common forms of Entisols seen in the Mediterranean climate zone of Northwest Turkey were determined and sampled. The soils are neogene aged AC horizon and have parent material mostly cemented with lime. Four of them were formed on steep slopes where soil erosion is in crucial stage and classified as Orthents. They were weakly developed, commonly on such steep slopes, subject to erosion and were usually very shallow and rocky soils and had moisture limitations due to the Mediterranean climate. The other two profiles were from young river terraces and classified as Fluvents due to their morphological, chemical and physical characteristics. They were very deep soils with flat topography and very fertile soils for agricultural use but they had some physical limitations because of inaccurate and intensive cultivation. The main limiting factors regarding soil productivity for the studied soils were soil shallowness, summer drought, low organic matter content and high contents of CaCO₃ and clay. Problem related to salinity and alkalinity was not found in the studied soils. The soil profiles were classified up to subgroup level as Typic Xerorthent, Lithic Xerorthent and Typic Xerofluvent according to the Soil Taxonomy and Eutric Leptosol, Calcaric Regosol and Calcaric Fluvisol soil units according to the FAO/Unesco Soil Map of the World legend classification systems.