Turkish Journal

of

Agriculture and Forestry





agric@tubitak.gov.tr

Scientific Journals Home Page

Turkish Journal of Agriculture and Forestry

The Effects of Different Plant Cover Conditions on Erodibility of Soil

Ahmet Ali IŞILDAR Süleyman Demirel Üniversitesi, Ziraat Fakültesi, Toprak Bölümü, Atabey, Isparta -TÜRKİYE

Abstract: Because of changes in the surface soil structure during winter the highest potential soil erosion usually occurs in spring. This investigation was undertaken in order to determine the effects of different slope and plant cover conditions on the erodibility of soils before the erosive precipitation of spring in the Isparta-Atabey district. In this research, 3 different slopes (% <5, 5-10, 10-15) and 4 different plant covers (orchard, cereal, vineyard and vacant field) were investigated and 24 surface soil samples were used. The erodibility of the soils was determined by means of their dispersion ratio, erosion ratio, aggregate stability and soil erodibility factor. Some properties of the soils studied can be summarised as follows: medium to coarse in texture, very low to very high in organic matter content and free of alkalinity. The erodibility of soils covered by cereals was lowest in all of the slope groups. The basic factor determining the erodibility of soils in orchards and vineyards was the mulch cover on the soil surface rather than the plant species.

Turk. J. Agric. For., **23**, (1999), 665-670. Full text: <u>pdf</u> Other articles published in the same issue:<u>Turk. J. Agric. For.,vol.23,iss.EK3</u>.