



Tillage and stubble management in soil moisture preservation and erosion prevention

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Estimation of soil and water relation is dependent on soil physical characteristics affected by tillage. Soil physical characteristics provide the exact and effective studying of soil surface evaporation, runoff and erosion for researchers. In this study, tillage management influence studied by attention to stubble effects in soil conditions improvement. Four type tillage implements (moldboard, chisel, high speed disk and traditional plough) have been treated. The study included straw treatment effect on moisture preservation and erosion prevention, soil water related to evaporation measurement (S), elevation root mean square(RMS) and mean roughness depth (RZ). Based on analysis of variance (ANOVA) differences between blocks for elevations RMS were significant ($p < 0.05$), and Comparison between quantity of soil surface area related to evaporation measurement and RZ showed significant differences ($p < 0.01$). results show that adopting an effective tillage policy can prevent erosion after harvesting, in attention it helps to soil organic matter preservation and also help to moisture storage for next season.

Keyword: stubble, RMS, RZ, surface evaporation, storage depression

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