

# **INFLUENCE OF DIFFERENT PLOWING METHODS AND IRRIGATION PERIODS ON SOME SOIL PHYSICAL PROPERTIES UNDER CROP GROWING OF CORN PLANT .**

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## **ABSTRACT**

This study was Conducted in clay loam soil to investigate the effect of different plowing methods and irrigation periods on some soil physical properties under growing of corn plant. Three different plowing methods were used , namely conventional , minimum, and no-tillage. Surface water irrigation method was used in the experiment. Irrigation water was cut after 4 , 8 , 12 weeks of Planting .water requirement was calculated before and after irrigation.

The results showed that bulk density and soil water content reduced significantly by Plowing . Conventional tillage caused decreasing on bulk density and soil penetration resistance comparing with minimum and no-tillage . Infiltration rate and hydraulic conduction increased by using conventional tillage . Growth of corn had significant effect on bulk density, soil resistant, and mean weight diameter in the end of the growth season comparing with the beginning of the season.