

A Study of Some Water Relations and Soil Salinity Using Geotextile Mat under Sprinkler System

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Abstract : This work aimed to study the influence of a geotextile material under sprinkler irrigation on the availability of soil moisture content and salinity of 40 cm top soil profile. Field experiment was carried out to measure soil moisture content, soil salinity and water application efficiency under sprinkler irrigation system. The results indicated that, the mats placed at 20 cm depth leads to increasing of the availability of soil moisture content in the root zone. The results further showed increases in water application efficiency because of using the geotextile material. In addition, soil salinity in the root zone decreased because of increasing soil moisture content.

Keywords : geotextile, moisture content, sprinkler irrigation

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