

CONSUMPTIVE WATER USE FOR ONION YIELD UNDER CONVENTIONAL AND STRIP DRIP IRRIGATION .

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ABSTRACT

A field experiment was conducted in agricultural season 2003 / 2004 at Al-Anbar Governorate – Ramadi in silty clay soil classified as Typic Torrifluent , to study the consumptive water use for onion crop under drip irrigation system . Split – Split with Completely Randomized Block Design was used with three replications. Irrigation methods (conventional and strip drip) were considered as primary treatments , organic matter as a secondary treatment with two levels (0 , 3 kg.m⁻²) , where the sub secondary treatments included soil mulching with black polyethelene and without mulching .Onion (*Allium cepa* L.) was planted at 17-3-2004. The results showed the consumptive water use were 352.7 mm.season⁻¹for conventional drip irrigation method and 392.2 mm.season⁻¹for strip drip irrigation with increasing percentage of 11.19%.but water use efficiency for strip drip irrigation was 8.988 Kg.m⁻³ and 8.387 Kg.m⁻³ for conventional drip irrigation with increasing percentage of 7%.