EFFECT OF POTASSIUM FERTILIZER, ORGANIC MATTER AND DEFICIT IRRIGATION ON COTTON.

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ABSTRACT

A field experiment was carried out in Diyala province during the growing season 2012 at the eastern of Baquba, to study the effect of fertilizer potassium (potassium Sulphate) in (0, 240, 480) kg.ha^{-1} / and organic matter (cows residues) (0, 8, 16 tons.ha^{-1}) and irrigation levels of (100% , 80% , 60%) of water available on yield and yield components on cotton crop (var. Lashata),The experimental design R.C.B.D in a split split plot arrangement with three replications , the results showed significant differences for levels of potassium fertilization significant effect on all characteristics , the second level gave highest number of bolls open in about 22.63 , mean weights of bolls(3.01gm), cotton lint yield(1278.2 ton.ha^{-1}), and ginning percent (34.72%) total number of bolls (29.28-29.33)at the second and third levels. as well as the results showed that organic matter has significant effect on all traits adding 8 tons.ha^{-1} gave higher number of opening bolls was(22.77), added 8and 16 tons.ha^{-1} highest number of total bolls(28.47- 28.66),total lint yield(1297.0-1307.2 tons.ha^{-1}). Irrigation has significant effect on all properties 100% level was superior in lint yield(1348.3 ton .ha^{-1}) and did not differ significantly from the 80% level.

Key words : Cotton, Potassium , Organic matter , Deficit irrigation.