

EFFECT OF MULCHING SOIL AND BIOFERTILIZER BY MYCORRHIZA FUNGI *Glomus mosseae* IN SOME CHARACTERES YIELD TO CULTIVARS TOMATO *lycopersicon esculentum* CULTIVATED IN GYPSIFEROUS SOIL.

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ABSTRACT

Field experiment was carried out during spring season 2009 on two Tomato cultivars ;superqueen and Berek under gypsiferous soil. and soil mulching with three level: with out mulching, mulching with plastic covers and mulching with strew and the other factor with out fungi inoculation and with fungi inoculation factorial experiment with in split plots design was used to study: Tomato cultivars as the main split plot . where as, the other two factors biological fertilization and soil mulching which were distributed randomly with in the main split plots. L.S.D test under %5 probability level was used to comparre between the means of treatments . The results could be summarized as follows;

Tomato Berek cultivar was significant supereminent as compared with superqueen cultuivar in most characteres yield. Micorrhizal inoculation increased significantly most studied properties as compared with the un inoculation treatments. Black plastic covers treatment was significant supereminent in early yield, total yield, NO.of fruits,yield per plant wile With out mulch. second interation increased significantly most studied properties as compared with signle factor. interaction between berek cultuvar,black plastic mulching and micorrhizal biofertilization were supereminent for most of studied properties as compared with the effect of all single factors and the coupled interactions under investigation. Maximum early yield (13.59 t/h) by increasing percentage (338 %) and Maximum total yield (19.93 t/h) by increasing percentage (229%) and Maximum yield perplant(2.42 kg) by increasing percentage(265%) Maximum mean fruit weight funed in superqueen; with out mulching and with out fungi inoculation was (173 g) treatment by increasing percentage (119%) the interaction between superqueen cultuvar, black plastic mulching and micorrhizal biofertilization F1) Maximum, NO. of fruits (23.1) by increasing percentage(200%).

Key words: micorrhiza, mulching, Tomato cultivars.