Abstract:

This study was carried out at Baquba nursery/ Diyala governorate during the period 15/3 - 15/10/2012 on three citrus rootstocks (Cleopatra Mandarian , SwingleCitrumelo , and Volkameriana Lemon). 162 of 2 years old seedlings were selected to study the effects of (*Trichoderma spp*) and Organic fertilizer (Humic plus , and seaweed Extract) application on citrus Rootstocks growth . R.C.B.D was used with three replications (3 seedlings per experimental unit).The experiment included soil application of Humic plus (1%) of *Trichoderma spp*. (2g. kg^{-1}) , and foliar application of seaweed Extract (1%) , Three times (30 days intervals) Data were analyzed according to spss using SAS test at 5% level. The result showed :

1- Individual application of *Trichoderma spp* and Seaweed extract and Humic acid caused a significant increase in most vegetative growth characterstics (main stem length , stem Circumference , Leaves number , Leaf area , number and length of branches , vegetative and root system fresh and dry weight vegetative / root system fresh and dry weight ratio) Leaf NPK percent and total chlorophyll.

2-*Trichoderma* and Seaweed extract interaction caused asignificant increase in all studied characterstics.

3- *Trichoderma*interaction with Humic acid resulted in a significant increase vegetative growth charactercis.

4- Volkameriana Lemon rootstock showed asuperiority over the rest rootstocks in growth characters (except leaf N percent , and Total chlorophyll).

5- DRIS system successfully proved an efficiency of Bio and organic fertilizers application .

The use of this system supported the previously used parameters where the best growth combined with NPK indicator in Trichoderma + Humic acid , and Trichoderma + Seaweed extract treatments . Thus they gave the lowest absolute total (10) and the higest yield of dry matter (93.77 , 93.37 g.plant^{-1} , respectively).