EFFECT OF NITROGEN AND IRON AT TOW LEVELS OF FIELD CAPASITY ON THE GROWTH AND YIELD OF LINSEED

(*Linum usitatissimum*L) .

Luct. A.Y. Hassen **A. T. Shaker**

* Crops Department- College of Agriculture- University of Diyala.
** Crops Department- College of Agriculture- University of Mosul.

ABSTRACT

Pots experiment of linseed was carried out during the winter growing season of 2011-2012 at Mosul university in clay soil. The experimental design was factorial experiment using CRD with three replicates. To study the two levels of field capacity (50%, 75%), three levels of nitrogen (0, 100, 200) kg N/h and three levels of iron (ferrous sulphat) (0.5, 1, 1.5)% Fe.The results showed That increasing nitrogen fertilizer levels to 200kg N/h, iron at 1.5% Fe and the containing Moisture of soil 75% of field capacity significantly increase in plant height (cm), number of branches/plant, number of leaves/ plant, number of capsules/plant and seeds yield/plant (g). Also the highestvalue of number of seeds/capsules when plants treated with 200kg N/h 1% Fe fertilized and the containing moisture of soil 50% of field capacity. The second order interactions between different factors show significantly differences in the studied characters. This study Concluded that the flax crops sensitive to water stress and need to provide humidity containing ready for absorption from soil, also it responses highly effect to nitrogen and iron fertilizer in increase seed yield.

Key words: nitrogen; iron; field capacity; linseed.