INFLUENCE OF FERTILIZERS AND ORGANIC NUTRIENTS ON GROWTH AND SEED YIELD OF ONION .

A. M. H. Al-Khafagy*

K. D. H. Al-Gebory*

* Hort. Dept. - College of Agric. - University of Baghdad .

ABSTRACT

The study was carried out in the vegetable field of Horticulture Dept., College of Agriculture, University of Baghdad, Abu-Ghraib, to study the effect of different kinds of organic fertilizers to improve growth and yield of seeds onion plant Allium cepa L., cv. Texas Early Grano in RCBD with three replicates. The experiment contain nine treatments, those include sheep manure (20 ton. Ha⁻¹) and foliar application with water soluble extract of sheep manure (6.66%) and participated treatment between the foliar spraying of soluble extract of sheep manure and the soil applied sheep manure (20 ton. Ha⁻¹) and foliar application with organic fertilizers that include poly amin (3 $g.L^{-1}$), vit org (4.5 $g.L^{-1}$) and two concentration of water soluble extract of root Liquorice plant 5 and 7.5 g.L⁻¹. In addition to the chemical fertilizer and the control treatment (without fertilization). The sheep manure added to the soil before planting, the organic fertilizers and the natural soluble extracts sprayed on plant four times starting from 1st.Dec to 1st.March, the spraying repeated monthly.

The Results shown the superiority of poly amin treatment to reducing the number of days that are required for flowering (175.9 days) and seed maturation (207.3) days and gave high values of plant seed yield (36 g) and the total yield (1058.8 kg.ha⁻¹) participated treatment between spraying of water soluble extract of sheep manure and the sheep manure (20 ton. Ha⁻¹) to reducing the number of days that are required for flowering (171.9)days and seed maturation (207.3), and gave the highest percentages of fruit setting (89%) ,and high values of plant seed yield ($(\circ, \epsilon \circ g)$) and the total yield (1042.7 kg.ha⁻¹)