

**EFFECT OF ORGANIC AND CHEMICAL FERTILIZATION AND
THEIR COMBINATION ON GROWTH AND YIELD FOR TWO
GARLIC CULTIVARS OF (*Allium sativum* L.) .**

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ABSTRACT

Experiment was conducted in the fields of the College of Agriculture - University of Diyala during agricultural season 2013 \ 2014 to study the effect of the types of organic fertilizers animal, Chemical and mixing between them in the growth and yield of two varieties of garlic (Chinese and local) and carried out using R.C.B.D. for split – plot design with three replicates .The agriculture has been done directly after irrigation using drip and the cultivation of the lobes in 11/ 10 / 2013 on two lines (line of each side of the tube drip) and for each experimental unit consisted of 50 plants and studied the number of leaves, value of chlorophyll in the leaves , plant height, thickness of the neck of the bulb ,number of lobes in each bulb ,lobes weight and yield per dunom .The significant differences between the averages has been tested by the least significant differences (L.S.D.) at level of probability of 0.05 .

The study showed superiority of local variety in plant height , number of leaves , number of lobes in bulb, while the China variety give high total yield per dunom, high diameter neck bulb, high bulb weight.

There was no significant differences between the two varieties in chlorophyll of the leaves. Organic manure sheep showed moral superiority in the height of the plant and number of lobes. The poultry manure excelled in weight bulb and total yield per dunom. The mixture of poultry manure with fertilizer DAP moral superiority in the value of the chlorophyll in the leaves. The compost cow mixture with DAP was superiority in the diameter to of the bulb and weight lobe. There were no significant effects for fertilizer treatments in leaves number for each plant. The interaction between local variety with sheep manure was significant superiority for height plant and number of lobes. The interaction between china variety and poultry fertilizer was significant superiority for weight bulb and total yield per dunom.

Keywords: garlic ,organic fertilizer , chemical fertilizer , yield.