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THE EFFECT OF ORGANIC AND CHEMICAL FERTILIZER IN VEGETATIVE GROWTH FOR CHARACTERISTICS AND YIELD OF THREE GENOTYPES OF CAULIFLOWER

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ABSTRACT

A field experiment has been conducted in certain farm of town of Diyala province during the growing season of 2013- 2014, to investigate the effect of organic and chemical fertilizers on three genotypes from Cauliflower

cauliflower on growth characteristics of vegetative, and crops. This experiment included 18 processes of treatment, in which a conformation is made among three genotypes of Cauliflower Nhar, Soled and G4 with the addition of six types of organic and chemical fertilizers. The organic fertilizers involve (poultry manure, sheep manure and cow manure) while the chemical fertilizers include (DAP fertilizer and triple superphosphate fertilizer), and control treatment (without fertilization). A factorial experiment is carried out by using Split Plot design within Complete Randomized Block Design, with three replicate. The data were tested by L.S.D () test among the averages with probability level of 0.05. The results obtained can be summarized as follows:

There are significant differences among genotypes in terms , the average weight of the total plant the average weight of inflorescence and distinguished by considerable decrease in nitrates of inflorescence content genotype G4 exceeds in traits of leaves number. Plants genotypes of Soled and G4 gave largest values of total chlorophyll in plants. The treatment processes of organic fertilizer by using poultry manure and chemical fertilizer by using DAP fertilizer exceeded and caused a significant increase in most examined characteristics of vegetative, floral and crops growth, in which the given fertilized plants by poultry manure exceeded in the value of chlorophyll in leaves, the average weight of the total plant, the average diameter of inflorescence.

Keywords: Organic Fertilization, chemiel Fertilization ,yield, cauliflower.