

Abstract

In order to compare the effects of organic and bio-fertilizers on crop characteristics and yield components of safflower varieties → Goldasht agricultural research center of zabol university (chahimeh) experiment was carried out in a randomized complete block with three replications and five treatments: T1 _ no application (control), _T2 humic acid (4 liters per hectare), _T3 vermicompost (4 ha), _T4 Nitrokara bio-fertilizer (100 ml ha) and _T5 phosphate solubilizing bio-fertilizer (100 kg ha). Before harvest traits such as plant height, number of branches, number of secondary branches, number of heads per plant, number of seeds per head, LAI was measured in the flowering stage. And was conducted in compliance with the marginal effect of harvest maturity and postharvest biological yield, grain yield, harvest index, seed weight, oil percentage, protein, chlorophyll a and b were measured. This study investigated the characteristics treatments have a significant impact on the left so that the greatest effect on plant height, grain yield, number of heads, seed weight, seed number, biological yield indices related to chlorophyll b was treated with vermicompost, organic fertilizers and biological function, was the used of these fertilizers 7/4756 kg . The highest percent of oil with a mean of 32% of vermicompost, because no statistically significant differences with other fertilizers. Bio-fertilizer Nitrokara highest branches, leaf area index, chlorophyll a and protein peresent and bio-fertilizer fertilize 2 make also make minor tributaries and harvest index. This study showed that vermicompost fertilizer due to the availability of the necessary elements for the plant has been able to increase plant performance. be said Can about other fertilizers due to organisms and help absorb nutrients have been able to increase the yield mentioned. Due to the increasing pollution caused by chemical fertilizers can be expressed fertilizers (vermicompost and Acid hiumic) and bio-fertilizers (Nitrokara and phosphate solubilizing fertilized 2) to obtain a safe product alternatives are.

Keywords: Organic fertilizer, Bio-fertilizer, Yield, Safflower



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