

Effect of Organic and Inorganic Fertilizers on Growth and Yield of Cabbage

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Abstract

Cabbage is a popular cultivar of the species *Brassica oleracea*. The crop is a vegetable rich in vitamins A, C and E, magnesium, selenium which are important for human health. The objective of the study was to determine the effects of organic and inorganic source of nutrients on growth and yield of cabbage. The experiment was laid out as Randomized Complete Block Design with four replicates at the University of Embu Farm. Treatments were (T1) =Nitrogen phosphorus potassium fertilizer, (T2) =Chicken manure, (T3) = Cattle manure, and (T4) =control. Data was collected on plant height, length of the leaf and weight of the head of the cabbage. Data was subjected to analysis of variance using SAS computer software package and separation of means was done using least significant difference (LSD) at $p < 0.05$. Cabbage treated with poultry manure had the highest yield of 2.1533kg/plant followed by nitrogen phosphorus potassium fertilizers at 1.626kg/plant. Cabbage treated with cattle manure had 0.86kg and lastly control had 0.54kg/plant. It was concluded that both organic and inorganic fertilizers treatment increased the growth and yield of cabbage. Treatment with poultry manure performed better because it had highest cabbage head yield and the plants were also the tallest. It is recommended that the study be repeated for another season to confirm the results of this study.