

**Effects of Diammonium Phosphate, Mavuno Fertilizers and Cattle Manure on Common
Bean Yield**

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Abstract

Common bean (*Phaseolus vulgaris*) is an important legume in the Sub Saharan Africa region and plays an important role in human nutrition and market economies. The crop is rich in proteins, calories and vegetables. Bean yield among small holder farmers ranges between five bags per acre. The reduced yield is attributed to low soil fertility due to over cultivation without replacing lost nutrients, poor crop management and use of inappropriate seed variety. The objective of the study was to determine the effect of Diammonium phosphate, Mavuno fertilizers and cattle manure on beans performance and yield. The experiment involved common bean variety known as (mwitemania) tested with Diammonium phosphate (DAP), Mavuno fertilizers and cattle manure. The experiment was laid out as a completely randomized block design with three replicates and three plots per block. Data collected included stem height, leaf area, and number of pods per plant, pod length and total grain weight. The data was subjected to analysis of variance using SAS computer software package and separation of means was done using least significant difference (LSD) at $p < 0.05$. The probability for significance in the F values was determined at 5% probability level of significance. The results of this study indicated Mavuno fertilizer was superior to other fertilizers and had higher yields than other fertilizers. It is recommended that the study be repeated for another season to confirm the results of this study.

