

Effects of Cow Manure on Growth and Yields of Baby Carrots

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Abstract

Baby carrot (*Daucus carota* L.) is an essential root vegetable commonly used because it is the best source of carotene; a precursor of Vitamin A. Continuous cultivation of farms has led to decline in soil fertility due to constant removal of nutrients leading to reduction of carrot yields. A field study was carried out at University of Embu, Horticulture Research and Teaching field with the aim of investigating the effects of decomposed cow manure on carrot growth and performance. The experimental design was a Randomized Complete Block Design with three replications. Treatments comprised four levels (0, 10, 16, and 21 t/ha) of decomposed cow manure which were applied to experimental plots during planting. Growth, yield and quality parameters of the carrot were then recorded and used to discern the treatment effects. Obtained data were then subjected to ANOVA using Genstat software. Results showed that decomposed cow manure can increase yields and quality of carrots. Cow manure applied at 21 t/ha increased the length and plant height but increased forking. Cow manure applied 16 t/ha increased yields without causing significant amount of forking. Results from this study shows that cow manure applied at 16 t/ha could be used to increase yields especially where forking is not a quality consideration.