

Effect of Cowdung and Poultry Compost on the Physical and Chemical Properties of an Alfisol Soil in a Forest Ecology

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Abstract

Application of compost to agricultural fields is a widely used method of increasing soil organic matter and fertility. Cowdung and poultry droppings were separately collected and composted for three months. The composts were applied singly and in-combination to a typical alfisol soil when maize was the test crop with a view to determining the effect of these compost applications on soil properties. This was a field experiment carried out in early and late cropping season of 2014. The experiment consisted of seven treatments; namely, 100% cowdung compost (CD), 100% poultry compost (PT), 50% CD + 50% PT, each at 3 and 6 t ha⁻¹ and zero compost application served as control. The experiment was a randomized complete block design and each treatment plots (3.0 m x 2.5 m) was replicated three times to give a total of 21 plots. We concluded that application of animal composts to an alfisol soil enhanced soil properties, particularly the soil organic matter, a major key in crop husbandry. and 3) both genetic ablation and pharmacologic inhibition of XOR resulted in improved vascular and cardiac function. These results indicate, in this/these models of obesity, UA is not causative of metabolic dysfunction whereas elevated XOR activity does alter cardiovascular function.

Biography

Bukola Aina is a PhD Student in Obafemi Awolowo University, Nigeria. Her field of interest is Green Chemistry, Ecology, Climate Change, Environmental Science.

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