

Effects of Farmyard Manure on Growth and Performance of *Solanum nigrum* in Embu County

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Abstract

African nightshade (*Solanum nigrum*) is among the many leafy vegetables that continue to be cultivated by Kenyan communities. The vegetable is rich in calcium, iron and vitamin A and C. Farmyard manure has multiple benefits on both the improvement of the soil and vegetables performance. As a soil fertility amendment, farmyard manure can be used as a source of soil nutrients as well as mulch to ameliorate soil temperatures. This study was conducted to investigate the effects of farmyard manure on the growth and performance of African nightshade under greenhouse conditions. This research also sought to determine the performance of African nightshade in Embu. The experiment was laid out in a randomized complete block design with three replications. The experiment had three treatments of different rates of farmyard manure collected from the University of Embu farm as follows; 0 t/ha, 6 t/ha, 9 t/ha and 12 t/ha. The results showed that farmyard manure applied at the rate of 12 t/ha had the highest number of leaves, fresh weight and number of branches. This could be attributed to the high amounts of nitrogen in farm yard manure which is important for the development of the crop. Farmers can therefore use farmyard manure at 12 t/ha to improve on the growth and performance of African nightshade.

