**Yield of Eggplant Grown in Horse Manure and Vermicompost Amended Soil**

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**ABSTRACT**

A field trial was established at the University of Kentucky South Research Farm. Eggplant, *Solanum melongena* var. Epic seedlings of 60 d old were planted in raised freshly tilled soil at eighteen inch in row spacing. Each plot was 4 × 10 feet2 and the entire study area contained 42 plots (3 replicates × 14 treatments). The experiment was replicated in a randomized complete block design (RCBD) with the following treatments: 1) control (untreated soil); 2) sewage sludge; 3) horse manure; 4) chicken manure; and 5) vermicompost (worm castings), 6) organic fertilizer (Nature Safe 20:2:8); and 7) inorganic fertilizer (Southern State 19:19:19). Each of the 7 treatments was also mixed with 10% (w/w) biochar obtained from Wakefield Agricultural Carbon (Columbia, MO) to make a total of 14 treatments. Fruits of eggplant were harvested during the growing season and graded according to the USDA guidelines into Fancy, US No.1, US No. 2, and Culls (unmarketable fruits). Results revealed that fruits of harvest 1 plants treated with inorganic fertilizer produced the greatest average weight of culls (978 g/plot) compared to HM and NM treatments (505 and 477 g/plot, respectively). In harvest 2, the number of fruits (29 and 22 fruits/plot) and weight of fruits (12 and 8 kg/plot) obtained from vermicompost treatments were significantly greater compared to other soil treatments. Overall, we concluded that the yield of plants grown in soil amended with HM (44 kg/plot) was greater compared to the yield of plants grown in vermicompost (33 kg/plot).