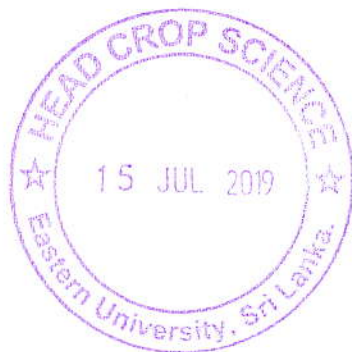
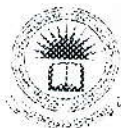


EFFECT OF GOAT MANURE AND SUGERCANE MOLASSES ON GROWTH AND YIELD OF BEETROOT (*Beta vulgaris* L.)



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ABSTRACT

The pot experiment was conducted to study effect of goat manure and sugarcane molasses on growth and yield of beetroot (*Beta vulgaris L.*) in sandy regosol under partial shade. The experimental was laid out in a completely randomized design (CRD) with six treatments. The treatments were recommended inorganic fertilizer (T1), 10 t/ha goat manure alone (T2), 10 t/ha goat manure with 1 t/ha sugarcane molasses (T3), 10 t/ha goat manure with 2 t/ha sugarcane molasses (T4), 10 t/ha goat manure with 3 t/ha sugarcane molasses (T5) and 10 t/ha goat manure with 4 t/ha sugarcane molasses (T6). The results showed that plant growth parameters (leaf length, leaf petiole length, leaf width, number of leaves, fresh weight and dry weight of leaves) were significantly varied among the treatments. And also there was significant difference in diameter of beetroot among the treatments. Significant differences ($P < 0.05$) were observed in fresh weight of beetroot and total plant among the treatments. Fresh weight of root yield and total yield of beetroot per plant were increased in T4 and T5 when compared to the control (T1). The Total yield of beetroot per m^2 was 1792.62 g in T4 and 1402.68 g in the control treatment. The root yield of beet root was increased with 10 t/ha goat manure and 2 t/ha sugarcane molasses than the control treatment. This study can be concluded that application of 10 t/ha goat manure with 2 t/ha sugarcane molasses would be more suitable for sandy regosol for obtaining high yield of beetroot.

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