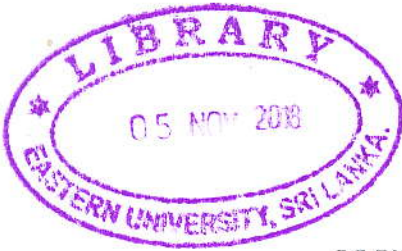


**EFFECT OF INTEGRATED PLANT NUTRIENT MANAGEMENT ON
GROWTH AND YIELD OF RADISH (*Raphanus sativas* L.)**

IN SANDY REGOSOL



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ABSTRACT

Field experiment was conducted to study effect of integrated plant nutrient management on growth and yield of radish (*Raphanus sativas* L.) in Sandy Regosol. This study was carried out at the crop farm, Eastern University Sri Lanka. The experimental was laid out in a Randomized Complete Block Design (RCBD) with seven treatments and four replicates. The treatments were recommended inorganic fertilizer application (T1), 10t/ha cow dung with $\frac{1}{2}$ dose of top dressing (T2), 8t/ha cow dung +2 t/ha compost + $\frac{1}{2}$ dose of top dressing (T3), 6t/ha cow dung + 4 t/ha compost + $\frac{1}{2}$ dose of top dressing (T4), 4t/ha cow dung + 6 t/ha compost + $\frac{1}{2}$ dose of top dressing (T5) , 2t/ha cow dung + 8 t/ha compost + $\frac{1}{2}$ dose of top dressing (T6), 10t/ha compost + $\frac{1}{2}$ dose of top dressing (T7).

This study revealed that tuberous root diameter were significantly ($P<0.01$) varied at 7th week after planting. However, there were no significant difference ($P>0.05$) in tuberous root length, number of leaves per plant, chlorophyll content, leaf area index, fresh weights of plant, tuberous root and leaf, number of cracked roots per plot at 7th week after planting. Total yield and total marketable yield per plot showed significant difference ($P<0.05$) at 7th week after planting and it was high in T5 and no significant variation between T5 and T1. This study conclude that application of 6 t/ha compost with 4t/ha cow dung as a basal and $\frac{1}{2}$ dose of recommended fertilizer as a top dressing (T5) would be more suitable for sandy regosol.

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