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Productivity improvement of foliage plant d*racaena sanderiana* (Ribbon Dracaena) variety "White"

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In Sri Lanka, there are large scale *Dracaena sanderiana* plantations but with low productivity mostly due to poor soil conditions. With the objective of increasing the productivity of these plantations, three treatments were applied to selected four years old *Dracaena sanderiana* variety 'White' plantation at Tropical Foliage Private Limited, Badalgama. Treatments were arranged into split-split plot design, with four replicates.
Main factor - Forking of soil.
Sub factor - Application of coir dust and cow dung mixture.
Sub-sub factor- Fertilizer application (Urea based mixture, Ammonia based mixture and two slow release fertilizer types which differ in quality of the outer coat)

Recording number of cuttings per each sub-sub plot and rejection percentage of cuttings at monthly intervals measured the increment of productivity. Soil pH, soil moisture content and bulk density were recorded to measure the changes in soil conditions. Analysis of data was performed by using Statistical Analytical Software (SAS) package.

Results revealed that forking, application of coir dust and cow dung mixture and four fertilizer types had a significant effect on number of cuttings ($P \leq 0.05$), but not on the quality of cuttings. Ammonia based fertilizer mixture had the highest average yield (0.037 cuttings/ stem) followed by Urea based mixture (0.03 cuttings/ stem). When considering the soil pH values, Ammonia based mixture showed higher acidity (5 pH) than others. Cow dung and coir dust mixture had a buffering effect on soil pH. Forking and application of coir dust and cow dung mixture, significantly improved the bulk density and moisture content of the soil ($P \leq 0.05$).

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