## VARIOUS COMPOSITIONS OF PLANTING MEDIA APPLICATION AND VARIOUS TYPES OF LIQUID ORGANIC FERTILIZERS ON COCOA PLANT NURSERY (Theobroma cacao L.)

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## ABSTRACT

The planting media is expected to provide nutrients for the growth of cocoa seedlings. Application of liquid organic fertilizer (LOF) to enhance nutrients in the planting media. This study aims to determine the best composition of planting media and LOF for cocoa nurseries. The research used a factorial Completely Randomized Design. The first factor was the composition of the planting media, and the second factor was the LOF. Data were analyzed using Analysis of Variance (ANOVA) at 5%l, followed by Least Significant Different (LSD) at 5%l. Orthogonal contrast tests were performed to compare treatments with the control. Results indicated an interaction between treatments on stem diameter. The planting media treatment with husk charcoal and tea dregs was significantly better for seedling height at 10 WAP, number of leaves, leaf area, root volume, and plant wet weight. The treatment with sawdust and tea dregs was better for seedling height at 6 WAP and stem diameter at 8 and 10 WAP. The tea dregs media was better for seedling height at 8 and 12 WAP, stem diameter at 12 WAP, and dry weight. LOF with balakacida tips was significant for seedling height at 12 WAP, and plant wet weight and dry weights. The combined treatments were better than the control for stem diameter at 8, 10, and 12 WAP.

Keywords: Cocoa, Nursery, Planting Media, Liquid Organic Fertilizer