SUBSTITUTE FOR COIR DUST IN THE POTTING MIXTURE OF COCONUT (*Cocos nucifera*) POLYBAG SEEDLINGS

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Quality seedlings are vital for productive coconut cultivation. Polybagged coconut seedlings are ideal planting materials as they are superior in quality to conventional bare-rooted seedlings. The recommended potting mixture of polybag consists of topsoil, cow dung, and coir dust in a 1:2:3 ratio, featuring a significant amount of coir dust. However, the high export potential of coir dust has rendered it a limited and scarce resource in Sri Lanka. The present study has identified alternative materials as substitutes for coir dust in the potting mixture of coconut polybag seedlings. Three-month-old coconut seedlings of variety CRIC 60 with similar sprout length were established in polybags filled with five different media; T1: coir dust, T2: sawdust, T3: half-burned paddy husk, T4: paddy husk and T5: paddy straw in combination with soil: cow dung in 3:1:2 ratio. The experiment was laid out in a Randomized Complete Block Design with three replicates. Days taken for the emergence of the first leaf, morphological characteristics of the seedlings, relative chlorophyll content of leaves, and soil properties were recorded. Data were analyzed using the Analysis of Variance procedure in R software. Stem girth, seedling height, length and width of leaves, and relative chlorophyll content of leaves were not significantly ($p>0.05$) different among treatments two months after transplanting. Soil pH and electrical conductivity of potting mixtures were in the desirable range in all treatments. In conclusion, freely available sawdust, paddy straw, and paddy husk can effectively be incorporated into the potting mixture of coconut polybag seedlings as a low-cost substitute for coir dust. Soil nutrient analysis is suggested before any recommendation.

***Keywords**: Morphological characters, Paddy husk, Paddy straw, Sawdust, Soil properties.*