

**OPTIMIZATION OF POTTING MEDIUM FOR  
ACCLIMATIZATION TISSUE CULTURE OF BANANA**

*(Musa acuminata)*



**BY**

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**2023**

## Abstract

This experiment was conducted to optimize the potting medium and environmental conditions for acclimatization tissue cultured banana plants (*Musa acuminata*). This experiment was conducted in the farm area located in Wilaththawa, Bingiriya Kent Agro Plantations.

The potential of incorporating different medium was examined in this study. Accordingly, the objective of the study was to examine some combinations of physical properties of incorporated materials and determine the impact of them on plant growth of Tissue cultured Cavendish (*Musa acuminata*) plant. The study was conducted under-protected agriculture condition to obtain confirmed results.

Different combinations of potting media/treatments were used in this experiment such as coir pith (T1), coir pith and sand (T2); sand, top soil and compost (T3); coir pellet (T4); sand, cow dung and top soil (T5); paddy husk, charcoal and compost (T6); poultry manure, sand and top soil (T7), Goat manure, sand and topsoil (T8); sand, coir pith and charcoal (T9) and Top soil (T10). A Completely Randomized Design (CRD) was carried out in this study.

The parameters measured during the experiment were Plant height, root growth, stem circumference and leaf number. Data will be checked for normal distribution by using suitable descriptive statistical method. Analysis of variance will be used to compare the effect of treatment combinations by using Statistical software such as Minitab 19. Therefore, this study was conducted to find out suitable growing media for Cavendish banana.

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