

Identification of suitable intercrops for high density planting system of Banana (Musa spp.)

Intercropping can be practiced with dense planting system of Banana to increase the profitability. This investigation was carried out with the objectives of obtaining an additional income from Banana cultivation during early developmental stages of Banana and to find out more suitable annual crops for intercropping of densely planted Banana cultivation. Banana variety Ambul and Kolikuttu were established with the spacing of 3x1 m and Radish, Kangkung, Maize, Groundnut were tested as intercrops with their recommended spacing.

Consumable yields of Radish, Kangkung, Maize and Groundnut were 8.7 t/ha, 4.5 t/ha, 4.1 t/ha and 1.0 t/ha respectively. Groundnut and Maize produced biomass of 6.7 t/ha and 18.6 t/ha respectively providing additional agronomic advantages. The highest total income (45,111.00 Rs/ha) and the lowest unit profit (2.25 Rs/kg) were recorded for Kangkung and the lowest total income (14,853.00 Rs/ha) and the highest unit profit (6.75 Rs/kg) were recorded for Groundnut. Kangkung performed poor under the limited amount of water but the other crops performed better. Maize was completely free from diseases and pests while the other three intercrops were affected.

LER values for Radish, kangkung, Maize and Groundnut were 1.43,1.27, 1.21,and 1.18 respectively. Therefore Radish, Maize Groundnut can be identified as suitable short term crops for intercropping of densely planted Banana.