

A PRELIMINARY SOCIO-ECONOMIC STUDY OF
TISSUE CULTURED BANANA
AT FIELD LEVEL IN SRI LANKA

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Dissertation submitted in partial fulfillment of the requirements for the degree of
MASTER OF SCIENCE of the UNIVERSITY OF COLOMBO, SRI LANKA.

University of Colombo,

June - 1998.

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ABSTRACT

This study attempts to ascertain the current situation of tissue cultured banana at field level with special reference to growth characteristics, some socio-economic aspects, and to suggest improvements and further research.

Data was collected through a questionnaire which dealt with the above aspects of banana cultivation (both tissue cultured plants and the conventional plants). A sample of 138 people including banana growers, agricultural instructors and farmers who are non growers of banana were interviewed.

Through the questionnaire it was observed that, there is a very high demand for disease free planting material. Disease problem was reported to be minimal for tissue cultured plants. These plants produce more suckers than conventional plants, over 85 % are sword suckers. Village level extension services are not at a satisfactory level to disseminate the improved cultural practices and answer the needs of the farmers. Farmers are satisfied with the quality of the bunches they have obtained through tissue cultured plants over conventional planting material. Some tissue cultured Banana plants had failed to produce fruits, probably due to the use of inaccurate techniques such as extensive sub culturing at the laboratory level. Therefore there was a tendency for some farmers to refuse these plants. Farmers have not received an encouragement for the use of tissue cultured banana plants.



Since it was observed that tissue cultured plants require more water at the initial stages, a pot experiment of tissue cultured plants and conventional planting material was carried out to compare the requirement of water during their establishment in the soil. Three water levels were used where watering was done at a fixed time. Plant height and girth size were measured every 7th day for 11 weeks. It was observed that tissue cultured Banana plants need more water than conventional plants during the first three months in the field. When given the required amount of water, tissue cultured plants grew faster than the conventional plants.

The factors such as technical, cultural, sociological and economic values packaged in an assimilable form for direct use, would play an indispensable role in the successful transfer of new technology.