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RESEARCH ARTICLE

Liquid medium culture method for rapid multiplication of banana (*Musa acuminata*) cv. 'GRAND NAINE' through tissue culture

■ G. PRABHULING AND B.N. SATHYANARAYANA

SUMMARY

For an increasing number of plantlets, liquid culture methods have demonstrated a number of important advantages over conventional semi-solid micropropagation, including several fold increase in multiplication rate, reduction in medium cost and also space, energy and lobour requirements. These cost-saving advantages have been the driving force for increased attention to the use of liquid systems. Effects of liquid medium using different simple low cost culture containers on *in vitro* propagation of banana cv. 'GRAND NAINE' were investigated and compared with conventional solid medium. The treatments studied included: Growtech container with nylon wire mesh support; simple polypropylene container with cotton fibre support; simple polypropylene container with partial immersion, simple polypropylene container with full immersion and conventional baby jar bottle with agar gelled medium. Simple polypropylene container with cotton fibre support was found effective than that of agar-gelled medium. The plantlets produced were also sturdier and better quality.

Key Words: In vitro, Aseptic cultures, Support matrix, Microshoots, Vitrification

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