

Feasibility of Somatic Embryo Development in *Musa*, cv. *Bluggoe*

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ABSTRACT. *The uppermost part of proliferating buds (in vitro) of Musa, ABB, cv. Bluggoe, produced meristematic globules in basic Murashige and Skoog liquid medium (Murashige and Skoog, 1962), supplemented with 2,4 D (5.10^{-6} M) and BAP (10^{-6} M). Individual meristematic globules of size ≤ 2 mm diameter were confirmed as somatic pro-embryos.*

Somatic embryos were obtained upon successive transfer of pro-embryos initially into a medium with ABA (10^{-5} M), and then to a medium without any growth regulators and finally to BAP (10^{-6} M) and IAA (10^{-6} M).

The embryo proper (shoot and root apex) and continuous pro-cambial strands between the shoot and root apices were observed in these structures.

INTRODUCTION

Banana and plantain are the staple food in most tropical and sub-tropical parts of Africa. They are also an important fruit to the whole world and a largely consumed fruit in Asia.

Banana and plantain are classified under the genus *Musa*. Simmonds and Shepherd (1955) reported that majority of the edible *Musa* are inter-specific hybrids of the two wild species, *Musa balbisiana* (BB) and *Musa acuminata* (AA). Naturally occurring AA, AB, BB, AAA, AAB, ABB and ABBB groups have been identified (Stover and Simmonds,

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Somatic embryos were obtained upon successive transfer of pro-embryos initially into a medium with ABA (10^{-5} M), and then to a medium without any growth regulators and finally to BAP (10^{-6} M) and LAA (10^{-6} M).

The embryo proper (shoot and root apex) and continuous pro-cambial strands between the shoot and root apices were observed in these structures.

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