

THERMOTHERAPY, SHOOT TIP CULTURE, AXILLARY BUD  
PROLIFERATION AND PLANT REGENERATION IN YAM  
(*DIOSCOREA TRIFIDA* L.)

(Thermothérapie, culture d'apex, prolifération de bourgeon axillaire  
et régénération de plantes chez l'igname *Dioscorea trifida* L.)

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## SUMMARY

Axillary bud proliferation in *Dioscorea trifida* L. (CATIE introduction n° 10715) was achieved when axillary bud shoot tips with 4-6 leaf primordia were cultured on semi-solid Murashige and Skoog (MS) medium supplemented with several concentrations of N<sup>6</sup>-isopentyladenine (2-iP) in combination with naphthaleneacetic acid (NAA). The emerging buds were excised and individually recultured onto semi-solid MS medium devoid of growth regulators in order to promote root development and recovery of complete plants.

## RESUME

La prolifération de bourgeon axillaire chez *Dioscorea trifida* L. (introduction n° 10715 du CATIE) a été réussie à partir d'apex ayant 4-6 primordia foliaire cultivé sur un milieu semi-solide de MURASHIGE et SKOOG (MS) complété par diverses concentrations de n-isopentyladenine (2-iP) en combinaison avec l'acide naphthalène acétique (ANA = NAA). Les bourgeons apparus ont été excisés et repiqués individuellement sur milieu MS semi-solide régulateur de croissance pour favoriser le développement racinaire et parvenir à des plantes complètes.

## INTRODUCTION

Yams (*Dioscorea* spp.) are an important source of medicinal compounds such as steroids and are also a carbohydrate staple of subsistence farmers in several countries of the Caribbean, Central America, Africa and Asia. With the recent immigration of some of these peoples to the United States and Europe these countries have initiated importation of yams from the West Indies (4) and Costa Rica.