In vitro Micropropagation of Boswellia ovalifoliolata

Thummala Chandrasekhar^{a,b,*},

T. Mohammad Hussain^a, and Boddu Jayanand^{a,c}

- Department of Botany, Sri Venkateswara University, Tirupthi 517502, AP, India
 Present address: Graduate Institute of Biotechnology,
- National Chung-Hsing University, Taicung-402,
 Taiwan-ROC. E-mail: chandrasekhart2k@yahoo.com
- c Department of Agronomy and Plant Genetics, 1991 Buford Circle, University of Minnesota, St. Paul, MN55108-6026, USA
- * Author for correspondence and reprint requests

Z. Naturforsch. **60 c**, 505–507 (2005); received March 3, 2005

A protocol for micropropagation of Boswellia ovalifoliolata Bal & Henry (Burseraceae) was developed using cotyledonary nodal explant on Murashige and Skoog modified medium (MS). A comparative study of micropropagation with 6-benzyladenine, kinetin and thidiazuron along with 1-naphthalene acetic acid (0.054 μ M) was conducted. The highest shoot multiplication (7.1 \pm 0.2 shoots per node) was achieved in 50 d on MS supplemented with thidiazuron (2.72 μ M). Excised shoot cuttings of 3.0 cm were placed on the MS basal medium supplemented with indole-3-acetic acid and indole-3-butyric acid alone and in combinations for rooting. Activated charcoal (100 mg l⁻¹) and polyvinylpyrrolidone (40 mg l⁻¹) were added to the medium to prevent browning of cultures. The regenerated plantlets have been successfully acclimatized and transferred to soil.

Key words: Boswellia, Cotyledonary, Regeneration