TISSUE CULTURE PROPAGATION OF AGLAONEMA VARIETIES

A.H.S. Senanayake, C.J. Lekamge and K. Amerasena
CTC Plantec Laboratory, Kalagedihena.

Aglaonema is a popular ornamental plant. Procedures were established for clonal multiplication of Aglaonema varieties viz: SILVER QUEEN, LILIAN & MANILA as in-vitro techniques are not available due to lack of any published information.

Shoot tips of actively growing terminals or laterals were selected as ex-plants. Shoot tip initiation was successful in solid media of MS, Nitsch or Schenk and Hildebrandt supplemented with 0.3 g/l $NaH_2PO_4 \cdot 2H_2O$, 80 mg/l Adenine sulphate, 0.5 g/l casein, 0.1-1 mg/l auxin NAA or IAA and 1-10 mg/l cytokinin BAP, PBA, KINETIN or Zip.

For further growth and multiplication, schenk and Hildebrandt medium was superior to Nitsch or MS. The optima with respect to some cytokinins and an auxin for multiplication of shoots was determined to be 0.6 mg/l BAP or PBA and 0.5 mg/l NAA, PBA being superior to BAP. Further supplementation of 15% coconut water or 500 mg/l yeast extract to the medium enhanced the growth and multiplication rates of shoots. Rooting was achieved in the basic medium without any hormones, supplemented with 0.5 g/l activated charcoal.

Tissue culture plants were successfully grown in pots in a medium of coir dust, after hardening in a propagator under high humidity for two weeks and are performing well.