

Aglaonema, as 10 cm plants, has a high demand in the export markets. Large numbers of 10 cm plants required by the importers can only be produced through *in vitro* clonal propagation. However, *in vitro* propagation of Aglaonema has been a failure due to endophytic microorganisms. Therefore, investigations were carried out with the objective of developing a suitable method to eliminate such microorganisms to establish Aglaonema *in vitro*.

Axillary and apical buds were used as explants in this study. These buds were dipped overnight in a solution containing a mixture of 1 g/L Benlate and 140 mg/L Streptomycin. Then they were exposed to standard sterilization with NaOCl followed by 0.1% mercuric chloride for 5 minutes. Explants were washed with sterilized water and kept in 250 mg/L Cefotaxim. There were 80% buds free of microbial contamination, and 100% of these showed active growth.

Mercuric chloride is a toxic substance, and therefore a suitable modification to this was sought. The explants exposed to the same procedure as above and washed afterwards with 6% hydrogen peroxide for 1½ h instead of HgCl<sub>2</sub>. The survival of buds in this experiment was 75% but the shoots grew and proliferated better than the shoots of the 1<sup>st</sup> experiment.

In considering the above experiments the following conclusion can be drawn. The best procedure to obtain microorganism free cultures in the establishment stage for *Aglaonema* is to dip the explants overnight in a mixture of 1 g/L Benlate and 140 mg/ L Cefotaxim for 30 min. The explants then should be cultured on MS medium containing 100mg/ L Cefotaxim as a part of microorganism elimination programme.