

## B-123: Carry over effects of cytokinin in anthurium micropropagation

S T C Fernando, S E Peiris

(Crop Science Dept, Faculty of Agric, Univ of Peradeniya)

*Anthurium andreaeanum* Lind. gains increasing popularity in Sri Lanka as a high potential cut flower for the export market. Propagation of this species through tissue culture plays an important role as it is the most appropriate propagating technique for uniform, disease-free plants for commercial cultivation. However, some micropropagated anthurium plants in the soil, tend to produce basal branches within the vegetative phase, giving the plant a bushy appearance. This situation delays flowering which is economically unacceptable.

This study examines the carry over effect of cytokinin, which stimulates shoot production. Shoot tips maintained under in vitro condition were established in liquid and solid cultures of Murashige & Skoog (1962) medium supplemented with 2 levels of BAP; 0.0 and 0.6 mg/L, and 15% (v/v) coconut water. These cultures were maintained for 6 and 12 weeks under in vitro conditions. After transferring to ex vitro conditions, shoot production in each cytokinin level and coconut water level was evaluated.

Liquid culture of 0.0 and 0.6 mg/L BAP and 15% coconut water showed a higher number of shoot production than the solid cultures under in vitro conditions. The highest number of shoots was obtained from the 0.6 mg/L BAP level maintained for 12 weeks. This was also true under ex vitro conditions in comparison to number of basal branches produced. Thus the suitable method to suppress basal branching under ex vitro conditions, is to maintain anthurium shoots under cytokinin free solid culture medium prior to establishment of ex vitro.