IMPACT OF CHEMICAL TREATMENTS TO EXTEND VASE LIFE OF *Calathea zebrina, Calathea louisae* AND *Chlorophytum amaniense*

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Cut foliage contributes 40% of the total floriculture earnings of Sri Lanka. *Calathea zebrina, Calathea louisae* and *Chlorophytum amaniense* have the highest demand among cut foliage though wilting, rolling and yellowing of leaves are the major problems in these species. Research was conducted at the Royal Botanic Garden, Peradeniya to study different pretreatment solutions on extending the vase life of above species.

Three concentrations of citric acid, 2 concentrations each of Tween-20 and Clorex and one concentration each of citric acid, Phyzan and $KMnO_4$ in 1% sucrose solution were tested singly or in combination in 4 separate experiments using leaves (standard maturity) of 3 foliage plant species. Five leaves per treatment were used in CRD design with 5 replicates.

Results indicated pretreatment solution of citric acid (25mg/l) + Tween-20 (0.25ml/l) was the best preservative solution for *Calathea Zebrina* and *Calathea louisae* whereas Clorox (1ml/l), citric acid (10mg/l), sucrose 1% + $KMNO_4$ (25ml/l) were the best for *Chlorophytum amaniense* for extending vase life.

Key words: Chemical treatments, *Calathea zebrina, Calathea louisae*, *Chlorophytum amaniens*, Vase life