**B-18: Effect of low temperature and wax application on foluage quality of *Bromelia neorogilifa* and *Dracena purple compacta* during simulated sea shipment trials**

D Sivakumar, R S Wilson Wijeratnam
*(Post Harvest Technology Group, Agro & Food Technology Div, CISIR, Colombo 7)*

*Bromelia neorogilifa* (12 - 14 cm height) and *Dracena purple compacta* (90 - 100 cm height) potted plants were held at 18.5°C and 17° C respectively for 14, 21, 28 days. Both foliage plants were adversely affected when held at these temperatures for 21 days. Increased rate of defoliation, yellowing of foliage and low colour retention were observed with increased cold storage. The anthocyanin content responsible for the red to purple colour of foliage in both plants also decreased with increased cold storage in the absence of light. Both foliage plants recovered within 35 - 40 days in a greenhouse environment after the simulated sea shipment trials. Three different waxes including Sta-fresh 705 Carnauba wax and Semper-fresh were sprayed on the foliage in order to upgrade the plant quality during simulated sea shipment trials at the above mentioned low temperatures for 28 days. No significant variation in anthocyanin content and colour retention was observed between the control plants (held at ambient temperature) and plants sprayed with Sta-fresh 705 and Carnauba wax. A significant reduction on percentage defoliation and yellowing of leaves were observed for both plant spp, with the application of Sta-fresh 705 and Carnuba wax. However Semper-fresh application did not upgrade the quality by reducing the rate of defoliation, yellowing of foliage and retaining the anthocyanin content responsible for the colour for the foliage for both plant spp.

This study revealed that the storage quality of *Bromelia neorogilifa* and *Dracena purple compacta* could be maintained for a period of 28 days at 18.5°C and 17°C respectively with the application of Sta-fresh 705 and Carnauba wax.