B-150 Characterization of *Anthurium andreanum* varieties using starch gel electrophoresis

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Anthurium andreanum is a leading tropical cut flower which has a a high potential in the export trade. Sri Lankan anthurium varieties have never been subjected to biochemical or histological identification other than morphological characters. Therefore, an attempt was made to screen isoenzymes for anthurium identification and to characterize anthurium varieties using selected isoenzyme banding patterns.

Horizontal starch gel electrophoresis was used to analyse buffered leaf extracts, prepared from immature leaves of 'Crinkled Red' 'Orange', 'Pink', 'White', 'Coral Pink' and 'Bicolour' anthurium varieties grown in the plant house. Banding patterns of Glutamate Oxaloacetate (GOT), Diaphorase (DIAP), Malic Dehydrogenase (MDH), 6-Phosphogluconic Dehydrogenase (6PGDH) were compared for their different banding patterns.

There were isoenzyme variabilities in rate of migration (Rf value) and number of bands among each anthurium variety. Banding patterns in GOT were more distinctive than other isoenzymes. 'Orange' and 'White' varieties produced 1 band. 'Crinkled Red', 'Pink', 'Coral Pink', 'Bicolour' varieties produced 2 different bands.

MDH, 6PGDH, DIAP showed polymorphism phenotype for isoenzymes. Thus these isoenzymes produced variability among varieties. Since, the electrophoretic zymograms are stable varietal characteristics which are controlled by genes, they can be used in varietal characterization of anthurium.