

#### **D-59: Preliminary studies on prolonging storage life of king coconuts**

R Wimalasekera, C S Ranasinghe, C Jayasekera  
(*Cocomut Research Institute, Lunuwila*)

The major problems associated with exporting whole nuts of king coconut (*Cocos nucifera* var *aurantiaca*) are the physico-chemical changes that take place after harvesting and during the period of sea freight.

The liquid endosperm of seven month old fresh healthy king coconuts contains 4.5-6% total sugar and it consists mainly of glucose(2-3%) and fructose (2-3%). The pH value of the fresh liquid endosperm is 4-5.5. Preliminary investigations were carried out to develop a storage technique to maintain freshness of fruit for 3-4 weeks.

Seven month old king coconuts picked from four different locations were stored at 27-29°C, 20-22°C, 14-16°C and 8-10°C for one to four weeks. Weekly observations were taken on sugars; glucose, fructos, sucrose, glucose-6PO<sub>4</sub>, raffinose and galactose by High Performance Liquid Chromatography (Sugar-PAK 1 column), pH, external appearance of the nut and taste of liquid endosperm.