EXTENDING THE STORAGE LIFE OF "MUKUNUWANNA" USING A LOW COST EVAPORATIVE COOLING SYSTEM

A PROJECT REPORT PRESENTED

BY

A. S. K. DE SILVA

to the

POSTGRADUATE INSTITUTE OF SCIENCE

in partial fulfillment of the requirement

for the award of the degree of

MASTER OF SCIENCE

of the

UNIVERSITY OF PERADENIYA

SRI LANKA

January 2002

551864
ABSTRACT

Mukunuwanna (*Alternanthera sessile*) is a highly perishable leafy green mainly grown in the wet zone of Sri Lanka. Due to its inherent nutritional quality it has high export potential and local demand. Incorrect handling practices of Mukunuwanna restricts the availability of this product more than a day in the domestic market. Conventional cold storage conditions at 10 °C and 90 % RH help to keep the commodity more than 10 days by retaining the overall quality. Low cost storage method (an on farm storage structure) is very much important to farmers to keep Mukunuwanna more than 5 days. Yellowing is the major problem during the storage in an evaporative cooler (26 -28 °C and 98% RH). Ethylene scrubber (KMnO₄ impregnated brick crystals) reduced the yellowing of Mukunuwanna in the evaporative cooler.