

**CANNING OF PALMYRAH YOUNG FRUIT
KERNAL (ICE APPLE) USING IN PALMYRAH
SWEET TODDY (SAP)**

A dissertation submitted to the
Faculty of Animal Science and Export Agriculture
Uva Wellassa University

In partial fulfillment of the requirements for the award of the
Degree of Bachelor of Science in Palm & Latex Technology and Value
Addition

By

UMARDEEN RINAS

Faculty of Animal Science and Export Agriculture
Uva Wellassa University

2013

ABSTRACT

Palmyrah palm (*Borassus flbaellifer*) is one of the natural vegetative resources of Sri Lanka with significant economic potential and grows extensively in the dried region, predominantly Northern, Eastern provinces. Palmyrah has been called the tree of life as it has contributed in a major manner to the poor classes of people shelter.

This study was carried out to develop a cost effective canned Palmyrah fruit (ice apple) product using Palmyrah sweet toddy (palmyrah sap) as the packing medium. The other main objective was investigated the suitable sugar concentration to be used in the medium. Three treatment were tested (1- Brix level -15°, 2- Brix condition-25°, 3- Brix level-35°). Glass jars/bottles were used as the containers and standard canning procedure (filling, exhausting, sealing, retorting) was carried out. All three treatments were treated under the specific temperature (sterilization and pasteurization). Then each heat treatments were compared to find the best temperature in applied in canning process. All treatments shelf stable chemically and microbiologically during the period of study. Sensory evaluation by a trained panel was carried out to select the best treatments in terms of sensory attributes and by statistical analysis of sensory data (Minitab 15). Therefore brix level 25° and sterilization heat treatment were selected. Therefore it was concluded that Brix level 25° best for the product developed. Treatments were determined by sensory analysis method determined. Brix condition 15° and 35° were rejected mainly due to the softening of the texture.

Key word- Brix, sterilization and pasteurization, statistical analysis, packing medium.