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EFFECT OF DIFFERENT PACKAGING
MATERIALS ON QUALITY
AND SHELF LIFE OF
KALAMAY BUNA

THESIS

PAMELA VEGA ESCAREZ

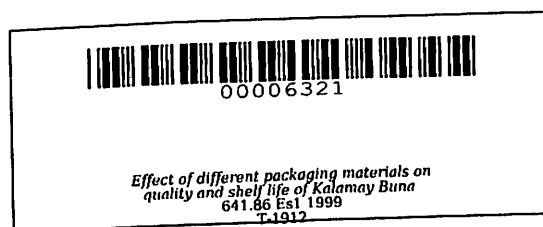
Institute of Food Science and Technology
CAVITE STATE UNIVERSITY
Indang Cavite

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**EFFECT OF DIFFERENT PACKAGING MATERIALS
ON QUALITY AND SHELF LIFE OF
KALAMAY BUNA**

**Submitted to the Faculty of the
Institute of Food Science and Technology
College of Agriculture, Forestry, Environment and
Natural Resources, Cavite State University,
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**In Partial Fulfillment
of the Requirements for the Degree
of Bachelor of Science in Agriculture
(Major in Food Processing)**



PAMELA V. ESCAREZ

April 1999

ABSTRACT

PAMELA V. ESCAREZ. Cavite State University, Indang, Cavite. April 1999.
EFFECT OF DIFFERENT PACKAGING MATERIALS ON QUALITY AND SHELF LIFE OF KALAMAY BUNA.

ADVISER: Mrs. Fe N. Dimero

The study was conducted to determine the shelf life of kalamay Buna using different packaging materials, and storage temperature based on the sensory properties. Microbial load of the samples on storage was also monitored.

Samples were packed in four types of packaging materials, ordinary plastic, polyethylene, aluminum foil and styrofoam and were subjected to three storage temperatures, 22°C, 27°C and 32°C.

Results of the sensory evaluation indicated moderately perceptible flavor up to 10th day of storage period, at 22°C, 27°C and 32°C storage temperatures. Low rancidity incidence was observed at 22°C, 27°C and 32°C in plastic packaging. No significant differences were observed among samples based on the general acceptability.

Thirty-four percent of the respondents chose the samples packed in styrofoam with cling wrap because of the nice presentation of the packed samples.

Moisture accumulation was lowest with aluminum foil and highest with styrofoam packaging.

With regards to microbial content, it was found that samples packed in styrofoam with cling wrap contained the highest microbial load.

The styrofoam-packed samples had the highest production cost among the four treatments.

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EFFECT OF DIFFERENT PACKAGING MATERIALS ON QUALITY AND SHELF-LIFE OF KALAMAY-BUNA

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An undergraduate thesis submitted to the faculty of the Cavite State University, Indang, Cavite, in partial fulfillment of the requirements for graduation with the degree of Bachelor of Science in Agriculture (BSA), department contribution No. 98-99-302-012. Prepared at the Institute of Food Science and Technology under the supervision of Mrs. Fe N. Dimero.

INTRODUCTION

Kalamay-Buna is a coconut-based delicacy developed in Buna Lejos, Indang, Cavite. It is prepared by continuously heating a mixture of glutinous rice (galapong), grated young coconut, coconut milk and brown sugar until a sticky gel-like consistency is attained. The product is then flattened on banana leaves or plastic sheets assuming a circular brown cake.

Kalamay industry has been the main source of living of Buna folks for over 50 years. At present, there are about 50 main producers and 100 distributors and retailers of the product from Buna alone.

The product has been a popular delicacy because of its pleasant sweet taste. It is often bought by commuters as 'pasalubong' or take home items. The popularity of the product, however, was confined mainly in Indang and its nearby towns. Attempts have been made to transport kalamay Buna but the quality has