PRODUCTION OF KROPEK PROMISABA. BANA(Musa sapientum balbisiana) FLOUP

RESEARCH STUDY

TODE AGNES L. CRUCENTA MA. MAEGHELLE A. MUESTRO M. ERVENLY V. VIDALLON

CAPTE STATE UNIFIERSITY
Indang Carrie

PRODUCTION OF KROPECK FROM SABA BANANA (Musa sapientum balbisiana) FLOUR

Research Study Presented to the Faculty of Laboratory School,
College of Education of the Cavite State University
Indang, Cavite

In partial fulfillment of the requirements for Graduation

Jude Agnes L. Crucena Ma. Maechelle A. Nuestro Beverly V. Vidallon



Production of kropeck from saba banana (Musa sapientium balbisiana) flour 634.772 C88 2004 R.454

April 2004

ABSTRACT

CRUCENA, JUDE AGNES L.; NUESTRO, MA. MAECHELLE A.; VIDALLON, BEVERLY V., Applied Research III (General Science Curriculum), Cavite State University, Indang, Cavite. April 2004. PRODUCTION OF KROPECK FROM SABA BANANA (Musa Sapientum balbisiana) FLOUR.

Adviser: Mrs. Nancy C. Alaras

The study "Production of Kropeck from Saba Banana Musa Sapientum balbisiana) Flour" was conducted at Esperanza, Alfonso, Cavite and at HRM Foods Laboratory, College of Education of the Cavite State University to evaluate the acceptability of the kropeck made from different proportion of glutinous rice flour (galapong) to banana flour. It aimed to describe the sensory qualities of each kropeck treatment in terms of color, texture, flavor, and general acceptability; to identify the most acceptable kropeck treatment; and to determine the cost analysis of kropeck from glutinous rice flour (galapong) and the kropeck made from banana flour.

The different treatments used were: 100% glutinous rice flour (T₀); 75% glutinous rice flour - 25% banana flour (T₁); 50% glutinous rice flour - 50% banana flour (T₂); 25% glutinous rice flour - 75% banana flour (T₃); and 100% banana flour (T₄). The characteristics of such treatments were compared with the control treatment (T_0) .

The samples of banana kropeck were presented to 30 judges for evaluation. Color, texture, flavor and general acceptability of the samples were significantly different because these attributes were significantly affected by the increasing proportion of banana flour to glutinous rice flour.

Results of the study revealed that banana flour is less acceptable than glutinous rice flour in the production of kropeck. The most acceptable kropeck treatment is T_1 (75% glutinous rice flour and 25% banana flour).

TABLE OF CONTENTS

Contents	Page
Title Page	i
Approval Sheet	ii
Biographical Sketch	iii
Acknowledgement	v
Abstract	viii
List of Tables	xiii
List of Appendices	xiv
List of Plates	xv
Introduction	1
Statement of the Problem	2
Objectives of the Study	2
Importance of the Study	3
Scope and Limitation of the Study	3
Time and Place of the Study	3
Review of Related Literature	4
Banana Fruit	4
Saba	4
Uses of Banana	5
Banana Industry	6
Physical and Biochemical Properties of Green Banana Flour	6

	banana Flour	7
	Rice Flour	8
	Difference Between Rice Flour and Other Flours	9
	Flour	10
	Composition of Flour	11
	Protein in Flour	11
	Gluten Flour	12
	Fish Kropeck	12
	Kropeck	12
	Color Additive	13
Metho	odology	15
	Materials	15
	Procurement of the Materials	16
	Preparation of Banana Flour	16
	Preparation of Treatments	16
	Production of Kropeck	17
	Evaluation of Samples	18
	Statistical Analysis	18
Resul	ts and Discussion	19
	Sensory Evaluation	19
	Color	19
	Flavor	20
	Texture	21

General Acceptability	22
Cost Analysis	24
Summary, Conclusion and Recommendation	25
Summary	25
Conclusion	25
Recommendation	26
Literature Cited	27
Appendices	28
Plates	33

LIST OF TABLES

		Page
1	Mean sensory score for color	20
2	Mean sensory score for flavor	21
3	Mean sensory score for texture	22
4	Mean sensory score for general acceptability	23
5	Cost of production	24

LIST OF APPENDICES

		Page
A	Score sheet	29
В	Table of analysis of variance	30
С	Treatment design	32

LIST OF PLATES

		Page
	Processing of Banana Flour	34
1	Fully matured green banana (saba)	35
2	Peeling the saba banana	36
3	Peeled bananas	37
4	The peeled bananas were blanched in boiling	
	water for three minutes	38
5	The sliced saba banana	39
6	The bananas were dried in oven at 80°C for two hours	40
7	The dried bananas were ground into powder	41
8	The banana flour	42
	Production of Kropeck	43
9	Ingredients used	44
10	The flour together with salt, lime solution and shrimp powder	45
11	Mixing of all the ingredients use	46
12	The mixture in the pan was steamed for ten minutes	47
13	The five treatments used in the study	48
14	Evaluation of the product	49

PRODUCTION OF KROPECK FROM SABA BANANA (Musa Sapientum balbisiana) FLOUR

By

Jude Agnes Crucena Ma. Maechelle Nuestro Beverly Vidallon

A Research Study presented to the Faculty of Secondary Education, Laboratory School, Cavite State University, Indang, Cavite, in partial fulfillment of the requirements for graduation, prepared under the supervision of Mrs. Nancy Alaras.

INTRODUCTION

Banana (*Musa sapientum*) is the most widely and commonly grown fruit in the Philippines. The fruit is in demand in our country due to its food value and being rich in carbohydrate content, which helps to maintain good health and proper diet of the Filipinos.

Bananas have different varieties such as saba, bungulan, latundan, ternate, 40 days, and others. Among these different varieties, saba is the most common grown by farmers because it does not employ highly specialized farming techniques to produce quality crops. Moreover, bananas also yield a number of minor products including sweetmeats, figs, flour, and powder. According to Jumamil and Sulit (1970) banana flour made from saba banana pulp could be manufactured to provide a very good substitute for wheat flour.

Kropeck is a common cracker made of glutinous rice flour (galapong), but because glutinous rice flour (galapong) is expensive compared to banana flour, this study