

**MICRO-SCALE PRODUCTION OF PINEAPPLE JAM AND JELLY
WITH SUGAR PALM SAP AS SWEETENER**

Undergraduate Thesis
Submitted to Faculty of the
College of Agriculture, Food, Environment, and Natural Resources
Cavite State University
Indang, Cavite

In partial fulfillment
of the requirements for the degree
Bachelor of Science in Food Technology

ERWIN N. CRUZ
April 2016

ABSTRACT

CRUZ, ERWIN N. Micro-scale Production of Pineapple Jam and Jelly with Sugar Palm Sap as Sweetener. Undergraduate Thesis. Bachelor of Science in Food Technology. Cavite State University, Indang, Cavite. April 2016. Adviser: Dr. Fe N. Dimero.

The study, Micro-scale Production of Pineapple Jam and Jelly with Sugar Palm Sap as Sweetener, was conducted to produce pineapple jam and jelly on a micro-scale. Specifically the study aims to identify production requirements, implement quality control, develop packaging and labeling style for pineapple jam and jelly, determine the appropriate marketing strategy and analyze cost and return.

Micro-scale production of pineapple jam and jelly with sugar palm sap as sweetener includes the following activities: receiving, selection, preparation, cooking, cooling, packaging and storage.

Processing of 50kg pineapples into jam and jelly with sugar palm sap yielded 40 bottles (350ml) and 35 bottles (350ml), respectively. The production cost of pineapple jam is Php 6,812, while for pineapple jelly is Php 6,734. Unit price per bottle of 350ml the pineapple jam is Php 170 and for pineapple jelly, Php 192.40.

The selling price for pineapple jam and jelly are Php 200 and Php 220, respectively. Total sales for pineapple jam is Php 8,000 which gives a net profit of Php 1,188. Total sales of pineapple jelly is Php 7,700 which gives a net profit of Php 1,070.

The products were distributed in glass jars with printed graphical sticker providing the mandatory information in the label.

Marketing strategy used are advertisement strategy and place strategy. The promotional tools used are direct selling and social media.

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA.....	ii
ACKNOWLEDGMENT.....	iii
ABSTRACT.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	ix
LIST OF FIGURES.....	x
LIST OF APPENDIX TABLES.....	xi
LIST OF APPENDIX FIGURES.....	xiii
INTRODUCTION	1
Statement of the Problem.....	2
Objectives of the Study.....	2
Significance of the Study.....	3
Scope and Limitation of the Study.....	3
Time and Place of the Study.....	3
REVIEW OF RELATED LITERATURE.....	4
Processing of Pineapple Jam.....	4
Processing of Pineapple Jelly.....	4
Sugar Palm Sap.....	5
Processing of Sugar Palm Sap.....	5
Jam and Jelly.....	5

Pectin.....	6
Packaging.....	7
Label.....	7
Marketing strategies.....	7
METHODOLOGY.....	10
Production Requirements.....	10
Processing Technology for Pineapple Jam.....	10
Quality control specification.....	12
Determination of sensory properties.....	12
Determination of acceptability.....	12
Determination of acceptability for packaging and labeling.....	12
Processing Technology for Pineapple Jelly.....	12
Quality control specification.....	14
Determination of sensory properties.....	14
Determination of acceptability.....	14
Determination of acceptability for packaging and labeling.....	14
Marketing Strategy.....	14
Cost and return analysis.....	15
Development of Packaging and Labeling.....	15
Consumer Evaluation for Jam and Jelly.....	15
Evaluation for Price of Jam and Jelly.....	15
Statistical Analysis for Jam and Jelly.....	15
RESULTS AND DISCUSSION.....	16

Production facilities.....	16
Product specification and quality control.....	16
Sensory properties of pineapple jam.....	23
Sensory properties of pineapple jelly.....	24
Comparison of pineapple jam to commercial jam and pineapple jelly to traditional jelly.....	22
Consumer Acceptability.....	26
Packaging and Labeling.....	26
Cost and Return Analysis.....	28
SUMMARY, CONCLUSION, AND RECOMMENDATION.....	31
Summary.....	31
Conclusion.....	32
Recommendation.....	33
REFERENCES.....	34