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DEVELOPMENT, CONSTRUCTION AND EVALUATION
OF A MANUALLY OPERATED PINEAPPLE SLICER

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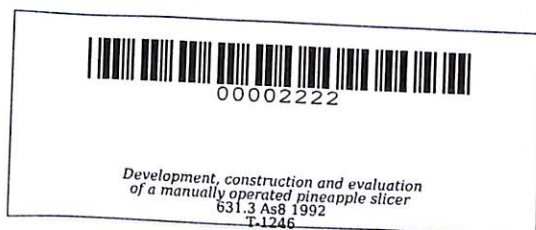
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DEVELOPMENT, CONSTRUCTION AND EVALUATION OF A
MANUALLY OPERATED PINEAPPLE SLICER

An Undergraduate Thesis
Submitted to the Faculty of the
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ABSTRACT

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The main concern in the development of this machine was to come up with a pineapple slicer which requires less manpower, shorter time of operation and higher efficiency as compared to the traditional method of cutting the pineapple.

The machine consists of four principal components, namely: The cylinder, the horizontal blade, the vertical blade and the rectangular outlet.

Results showed that the capacity of the designed machine was significantly higher compared to the traditional method (which was by hand with an ordinary knife). The designed machine has a capacity of 1.07 piece of pineapple per minute while the traditional method has only 0.54 piece of pineapple per minute. In addition, the designed machine has a relative efficiency of 198 % over the traditional method. But the slicing efficiency of the designed machine was much lower than the traditional method assuming that its efficiency was 100 %. The performance of the pineapple slicer was dependent on the operator, the size and the ripeness of the pineapple, and the sharpness of the two blades involved.

The total amount spent in constructing this kind of machine was ₱2,377.00.

TABLE OF CONTENTS

	PAGE
BIOGRAPHICAL DATA	iii
ACKNOWLEDGMENT	iv
ABSTRACT	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
LIST OF APPENDIX TABLE	xi
LIST OF APPENDIX FIGURES	xii
INTRODUCTION	1
Importance of the Study	2
Objectives of the Study	3
Time and Place of the Study	3
REVIEW OF RELATED LITERATURE	4
MATERIALS AND METHODS	7
Design Requirements	7
Description of the principal parts	8
Principles of Operation	12
Testing and Evaluation.....	14
Data Gathered	14
Statistical Analysis	15
RESULTS AND DISCUSSIONS	16
Description of the Machine	16
Capacity of the Pineapple Slicer and the Traditional Method	17

Relative Efficiency	18
Efficiency of the machine	19
Time Consumed.....	21
Percentage of Undamaged Cut Pineapple.....	24
Cost of Construction	26
Cost and Return	28
SUMMARY, CONCLUSION AND RECOMMENDATION	30
LITERATURE CITED	32
APPENDIX	33

LIST OF TABLES

Table		Page
1	Capacity of the Machine and the Traditional Method	17
2	Relative Efficiency	18
3	Slicing Efficiency (for chunks)	20
4	Time Consumed in Making Pineapple Chunks	21
5	Time Consumed in Making Pineapple Spears	23
6	Percentage of Undamage Cut Pineapple (Chunks)	25
7	Cost of Construction of the Machine	26
8	Basic Information of the Pineapple Slicer	27
9	Cost and Return Analysis of the Machine	29

LIST OF FIGURES

Figure		Page
1	The Cylinder	9
2	The Horizontal Blade	10
3	The Vertical Blade	11
4	The Rectangular Outlet	13

LIST OF APPENDIX TABLE

Appendix Table	Page
1 Capacity of the Machine and the traditional Method	34
2 Time Consumed (for Chunks).....	35

LIST OF APPENDIX FIGURES

Appendix Figure		Page
1	Photographic View of the Slicer	36
2	Top View of the Pineapple Slicer Showing the Final Cut	37
3	Sample Products of Pineapple Chunks	38

DEVELOPMENT ,CONSTRUCTION AND EVALUATION
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INTRODUCTION

The pineapple industry is one of the fastest growing fruit crop industries. Its processed products generate significant earning of foreign exchange and have also provide employment and income to thousands of Filipinos.

Pineapple for export is mostly located in Mindanao grown by Philippine Packing Corporation (Del Monte) and the DOLE Philippine Incorporated. These companies employ advanced technology in the production of pineapple and are obtaining yields up to 42 tons per hectare. In addition, the DOLE Philippine Incorporated utilize modern machines to preserve the pineapple. One way to ease the process of preserving pineapple is by cutting the pineapple into different shapes before preserving it. The most common cuts