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DESIGN, CONSTRUCTION AND EVALUATION
OF A MANUALLY OPERATED
PINEAPPLE PEELER

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DESIGN, CONSTRUCTION AND EVALUATION
OF A MANUALLY OPERATED
PINEAPPLE PEELER

An Undergraduate Thesis
Submitted to the Faculty of the
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In Partial Fulfillment
of the Requirements for the Degree of
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(Major in Crop Processing)



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ABSTRACT

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A manually operated pineapple peeler was designed, constructed and evaluated in the Department of Engineering and Agro-Industrial Technology, Don Severino Agricultural College, Indang, Cavite. The main concern in the development of this machine was to come up with a peeler which require less manpower, shorter time of operation and higher efficiency as compared to the traditional method of peeling pineapple.

The machine consisted of principal components namely: the platform, the guide, and the peeler.

Results showed that the capacity of the designed machine was significantly higher compared to the traditional method of peeling pineapple with a relative efficiency of 337 percent. The peeling efficiency was dependent on the operator's performance and on the size and ripeness of pineapple.

The total amount needed to construct the machine was P 1,180.00

TABLE OF CONTENTS

	Page
BIOGRAPHICAL DATA	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	vi
LIST OF TABLES	ix
LIST OF FIGURES	x
INTRODUCTION	1
Objectives of the Study	2
Time and Place of the Study	2
Scope and Limitation of the Study	3
REVIEW OF RELATED LITERATURE	4
Pineapple	4
Pineapple Peeler	5
History of the Pineapple Peeler	6
MATERIALS AND METHODS	8
The Design Requirements	8
The Pineapple Peeler	8
Principle of Operation	8
Materials for the Construction of the Machine	9
Principal Components of the Machine	13
Platform and Guide	13
Peeler	13
Core Remover	13
Release Trap	14
Testing and Evaluation	19
Experimental Design	20

DISCUSSION OF RESULTS	21
General Findings	21
Capacity of the Machine	22
Peeling Efficiency of the Machine	22
Time Consumed in Peeling Pineapple	23
Limitations of the Machine	27
Cost of Construction	28
Cost and Return Analysis	29
SUMMARY, CONCLUSION AND RECOMMENDATIONS	35
Summary	35
Conclusion	35
Recommendations	36
LITERATURE CITED	38

LIST OF TABLES

Table		Page
1	Capacity of the Designed Machine and the Traditional Method	24
2	Peeling Efficiency of the Designed Machine and the Traditional Method	25
3	Time Consumed in Peeling Pineapple	26
4	Cost of Construction of the Machine	28
5	Basic Information of the Pineapple Peeler	33
6	Financial Analysis of the Pineapple Peeler	34

LIST OF FIGURES

Figure		Page
1	Principle of Operation (A)	10
2	Principle of Operation (B)	11
3	The End Product	12
4	The Platform and the Guide	15
5	The Peeler	16
6	Core Remover	17
7	The Release Trap	18

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INTRODUCTION

Pineapple (Ananas Comosus) belongs to the family Bromeliaceaea. It is a tropical plant cultivated for its large oval fruits. The pineapple was domesticated by the Guarari Indians and they carried the fruits to other parts of South America where it was first discovered by the Europeans. It subsequently spread throughout tropical Asia, Africa and Polynesia.

Pineapple is a fruit extensively cultivated in the Philippines. The processed products generate significant amounts of foreign exchange and its fresh fruits has recently become a major commodity.