DESIGN, CONSTRUCTION AND EVALUATION OF A MANUALLY OPERATED PINEAPPLE PEELER

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(Major in Crop Processing)

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ABSTRACT

NUESTRO, CHARLIE Y NUESTRO. Don Severino Agricultural College, Indang, Cavite, April, 1991. Design, Construction and Evaluation of a Manually Operated Pineapple Peeler. Adviser: Engr. Conrado M. Baltazar.

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 ₱ 1,180.00

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[1/] An Undergraduate Thesis presented to the faculty of the Don Severino Agricultural College, Indang, Cavite in partial fulfillment of the requirements for the degree of Bachelor of Science in Agricultural Engineering (BSAE), major in Crop Processing. Contribution No. Ag. Eng'g 91048-021. Prepared in the Department of Engineering and Agro-Industrial Technology under the supervision of Engr. Conrado M. Baltazar.

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.