

UNIVERSITI TEKNOLOGI MARA

**LOOSE FRUIT COLLECTOR AND
INSTANT PACKAGING MACHINE
FOR PALM OIL INDUSTRY**

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Dissertation submitted in partial fulfillment
of the requirements for the degree of

**DIPLOMA
(MECHANICAL ENGINEERING)**

COLLEGE OF ENGINEERING

Feb 2023

ABSTRACT

This project is about to help Felda workers who has a hard time rearranging palm seeds as well as packaging it to send it to factories to make other products. Other than that, the palm seeds are small in size and amount are numerous to be picked up in a short period of time. The main objective for this project is to design and analyse Loose fruit collector and instant packaging procedure for it and also to fabricate physical prototype of this project. Methods that is used in this project rolling a collector roller along the earths floor and the roller will move along collecting the palm seeds in its way. At the end of this project, a new and fabricated design of a combination between a collector roller and a trolley. The trolley acts as a medium where the palm seeds are collected and will be packed from there. As for the collector roller it acts as a medium which collects the palm seeds. In the conclusion this project is medium on cost and is environmentally safe. It does not use any source of power or electricity. It works fully by human effort. The materials used are also easy to be found. The process to made this project is not complicated it involves cutting and joining process to connect each part.

ACKNOWLEDGEMENT

Firstly, I wish to thank Allah SWT for giving me the opportunity to embark on my studies through diploma and for ease my journey to become the student I am today. My gratitude and thanks go to both of my supervisor, Ts. Dr. Ab Aziz Bin Mohd Yusuf and Dr. Kamariah Binti Md Isa for their guide and lesson that taught me on how to overcome my problems.

Finally, this dissertation is dedicated to my family members especially my uncles and my mother. The strength and support that they gave me was unbreakable. Even though I almost gave up in my diploma studies they have always have my back. Pushing me and gave me the best life on a student. And I want to thank myself for not stopping they things I started. How bad a life a be if we don't try to face it with our own self.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Palm oil are made from palm fruits that goes through numbers of process from plucking the fruit until extracting the loose seeds and its oil from it. These types of work are usually done by taking a longer period of time. The loose palm seeds are small in size and the amount of it on the ground are numerous. By the way, nowadays every cooking needs oils that are low on cholesterol and good for the family health. By using palm oil, it will reduce the time taken to cook and also has less oil contains in it. Palm fruits and its loose seeds are the easy to be found in Peninsular of Malaysia.

1.2 Problem Statement

The main problems for workers that works on palm trees are collecting the main fruit and its loose fruits. Rearranging the loose fruits takes time because its numerous in numbers on the earth's floor which requires a lot of time taken. The other problem is to pack them into bags which are also hard because of the size and the numbers. The packed ones are delivered to industries or factories which will produce new products from these loose seeds.