

**UNIVERSITI TEKNOLOGI MARA**

**DEVELOPMENT OF A PROTOTYPE  
HYDRO FRUIT PICKER**

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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**

Fabrication and design The hydro fruit picker is a project that improvises a standard fruit picker in order to achieve the goal of a multi-function picker. At the same time, the purpose of this sort of picker is to ensure that it can be plucked in a safer manner than standard pickers. The issue that the former has is finding a type of picker that is ideal for commercial tasks. Designing the model, drilling, cutting, and joining are some of the approaches that could be employed in this product manufacture. The literature review will help to improve the project and designing, and sketching is to ensure project completion. Fabrication and testing the product is the last and the main important step in order to complete the project. The goal of this product is to create a fully functional hydro fruit picker. The increasing of commercial farm from time to time is the main objective why I choose to design and fabricate this type of picker that will improve the function of traditional fruit picker.

## **ACKNOWLEDGEMENT**

First and foremost, I want to thank Allah SWT for giving the opportunity to complete the process of my final year project (FYP) I and II. . By completing final year project (FYP), it will mean I need and must apply all that I have learn for the past5 semester. I also want to thank and recognise my supervisor, Dr, Abdul Hadi bin Abdul rahim @ Ibrahim for teaching and assisting me in completing my FYP

Last but not least , I want to dedicated this dessertation to both of my parents whom gave a full support from the inception of project untill the completion date. Without both of my parents andmy supervisor, my dessertation may not be completed.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

For any entrepreneur, business technology is critical. Technology will aid improving business quality and services. There is a lot of room for improvisation and ingenuity when it comes to taking a business to the next level. This article will explain the findings of a study that focused on the level of safety of methods for plucking fruits for all levels of farmers, particularly medium and small farmers. The predicted product qualities, such as the type of material used and the strength of the materials used, will also be covered in this overview. In addition, this article will discuss the methods and solutions for providing a fruit picker that can maintain the quality of the fruit.

### 1.2 Problem Statement

Nowadays in Malaysia, the number of commercial farms has been increasing from year to year. The fruit picker on the market right now has limitations on itself as most of the pickers only have a single function which is only to pluck the fruit. The limitation on the picker causes farmers to spend money to buy a tool that has only one function that they need, which is only to pluck the fruits. The project will be analyzed and studied to see how it can be improved from a normal fruit picker to be multi-functional.

### 1.3 Objectives

The main objectives of this project are:

- a) To evaluate the effectiveness of the hydro fruit picker as well as the strength of the picker