

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT OF DRONE RIGS
FOR FARMERS**

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ABSTRACT

Nowadays, the world is at the pinnacle of technology including our developing country, Malaysia. So, for this project, we will develop a drone rig for fruit orchard. We were focusing on plantation industry as in this new era they are using a high-tech technology to make sure farmers can develop great quality product such as drone for their plantation activities. So, the main problem here is they don't have a proper place to store the drone that can land and take off the drone on the spot and protect the drone. Our main objective in this project is to design a drone platform for a fan drone to take-off and land and have safety features to store it in the fruit orchard. Very simple mechanisms are used in this machine. We were expecting that this product will help agriculture industries especially for farmers that use drone for their agriculture activities by using this drone rigs. So, we need to brainstorm a product design that will achieve all the objectives for this project that will cost in the range of RM300.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Recently, most sector in the country use high technology to increase their performance. Including plantation sector, they also demand for high technology invention to help them on the daily work. In the plantation industry, they must protect their farm from pest or intruder. They also need to do daily or weekly check on their orchards for ripe fruit or damaged fruit. This will require a high-tech technology to make sure farmers can develop great quality product because the scare crow is to old school to be used in these days. So, our goal is to help the farmer by creating a drone rig for use in their orchards. Drone is very initial stuff in this sector nowadays because by using drone, farmer can do a daily check up on their orchards for ripe fruit easily or to protect their orchard from intruders. So, we need to create a proper drone box to store the drone securely in the orchard that can protect them from bad weather, pest or being stolen. With our skill and knowledge, we need to design and fabricate a drone box with a budget of RM300.

1.2 Problem Statement

In this modern era, plantation industry using a high-tech technology product to make sure farmers can develop great quality product because the scare crow is to old school to be used in these days. They will use drone for their plantation activities in this era. So, the main problem here is they need a proper place to store the drone and to launch it on the spot. So, they need a drone rig for the drone to take off and land on the spot easily. Other than that, the problem is they need to make sure the drone is safe from bad weather, pest or being stolen.