

UNIVERSITI TEKNOLOGI MARA

COCONUT GRATING MACHINE

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Dissertation submitted in partial fulfillment
of the requirements for the degree of
Diploma
(Mechanical Engineering)

College of Engineering

Feb 2025

ABSTRACT

This project is presenting an innovation of Coconut grating machine. The objective of this project is to design the part that are safe for user and fabricate it to reduce injuries while using the machine. The purpose of this project is to make sure the coconut grating machine is friendly and effective for user. This project discussed about the changing of coconut grating machine, the safety issues of the coconut grating machine. Plus, this project want to solve the problem about the safety of using the coconut grating machine by making the handle for the coconut, and the types of material that can use to fabricate it. This project can help user to use the coconut grating machine in good condition without giving them any injuries. In conclusion, this project addresses the safety issues of traditional and modern coconut graters by adding a safer handle tool mechanism, it can reduce the risk of injury and improve the user experience. This innovation offers a more efficient, safe and accessible solution for coconut grating.

ACKNOWLEDGEMENT

First of all, I would like to express my deepest gratitude to Universiti Teknologi MARA (UiTM) for giving me the opportunity to pursue my diploma studies, equipping me with the knowledge and skills that are essential for my academic journey and professional growth.

I would like to thank my project supervisor Mr. Fadzli Bin Ismail, who has tirelessly guided me throughout the journey of the Final Year Project (FYP), from FYP 1 to FYP 2. His constant support and insightful ideas have enriched my project, helping me improve and refine it to its best potential.

I am also very grateful to my father, who has been my biggest supporter. His encouragement, valuable advice, and help in choosing the right materials have been instrumental in the development of my project. Special thanks go to my friends, who have supported me through challenging times, offering not only moral support but also practical help. Some aided me in operating the machine safely, while others shared useful "shortcuts" to access important information, making my research process smoother.

Finally, I would like to acknowledge myself for persevering through FYP 2, overcoming various obstacles in research, writing, and data collection. This experience has taught me resilience and has strengthened my determination to achieve my goals.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

Grated coconut is usually used in cooking, especially in making traditional Malay food. To get grated coconut, coconut kernels need to be broken and grated using appropriate tools. In the past, coconuts were grated using a coconut scraper that was shaped like a bench and has a blade in front of it. Coconuts need to be granted by hand and the coconut grader can sit on top of it because it holds to make it easier for users to grate coconuts with a lot of energy.

However, with the increase era of modernization, the coconut scaler has been replaced by a coconut grating machine. This machine makes it easier for users to grate coconuts without using a lot of energy, because it comes with a high-powered motor. So, the user only needs to turn on the switch and the coconut to the blade and grate the coconut easily.

In the meantime, there is also new problems in the manufacture of this machine, such as user safety and the relatively big size of the machine. following the issue, the realized product to be produced has a handle for the coconut and is also small than usual to facilitate work and solve storage problems. Therefore, from the explanation above the project that will be produced can guarantee safety, facilitate, and provide comfort to users to grate coconuts. The aim of the study is to design, analyze and fabricate an innovative coconut grating machine that prioritizes user safety, ease of use, and compact size, aiming to address the emerging challenges associate with traditional coconut grating methods and existing coconut grating machines. The studies seek to provide a solution that ensure safety, convenience, and comfort for users during coconut grating, thus enhance efficiency and modernizing coconut processing techniques.