UNIVERSITI TEKNOLOGI MARA

FABRICATION OF DRY CHILLI SEED REMOVER

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ABSTRACT

The Chili Seed Remover Machine is an innovative agricultural device designed the process of extracting seeds from chili peppers efficiently and uniformly. As the demand for processed chili products increases, manual seed removal becomes labour-intensive, time-consuming, and inconsistent. This machine addresses these problems by utilizing a combination of mechanical and automated components to remove seeds from the peppers efficiently without damaging the fruit's flesh. The design incorporates adjustable settings for varying pepper sizes and types, ensuring optimal performance on different chili varieties. With enhanced productivity, reduced labor costs, and increased consistency in seed removal, the Chili Seed Remover Machine is a valuable solution for both small-scale producers and small domestic use, contributing to improved production efficiency in the spice industry.

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CHAPTER ONE
INTRODUCTION

1.1 Background of Study

Dried chilli pepper is widely used in a culinary practise around the world [8]. Therefore, the research of dried chilli seed remover is to try tackling the inefficient way to separate seed from its pepper.

Dried chilli usually undergoes several steps before can be use. However, the texture and flavour of the finished product might be altered by the seeds present in dried chilli peppers. Thus, eliminating the seed from the pepper is crucial.

In this project, the design and fabrication of automatic chilli seed remover will be done and eliminate the possibility of doubt about the project. This machine will be mainly powered by motor. Careful research has been done to ensure the product will have a unique characteristic compared to the existing product in the market. This project also involves suitable material to be use in the machine to make sure safety of the chilli pepper so that it can be consume and material for the project must be affordable. For example, the material must be resistant to rust and lightweight to be easily moves. To create this project, a lot of technique or skill will be applied such as welding process, bending, milling and shearing machine to fabricate the machine for this machine.

1.2 Problem Statement

Cause injury if handled by hands. Might cause an injury if on contact with the eye it can cause redness and inflammation.[6]

Intensive labour. Dealing with smaller chilli pepper is not easy to remove. [7]

The machine scale capacity for industrial use is big. The existing product is not meant to be use domestically such as home or restaurant. For example, the existing machine in the market able to produce 800 Kg/h [5].