

## EXPERIMENTAL STUDY OF WASTE VEGETABLE OIL AS A BIOFUEL.

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"I declare that this thesis is the result of my own work except the ideas and summaries which I have clarified their sources. This thesis has not been accepted for any degree and is not concurrently submitted in candidature of any degree"

Signed:.

17/5/09

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### **ABSTRACT**

Biodiesel is an alternative fuel for diesel that is produced by chemically combining waste vegetable oils with an alcohol to form methyl esters. This paper reviews the history of biodiesel development, two strokes engines performance, and the technology to utilize the fuel without problems. The scopes of the projects are to produce the fuel and the analysis on combustion process by using waste vegetable oil. Extensive research and analysis projects have shown the waste vegetable oil can produce energy when it been tested using the bomb colorimeter and also to find the final product from the reaction of waste vegetable oil with alcohol using combustion chamber. Through this research, the basic knowledge of how combustion process works using waste material and how to improve it can be gained.

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