

The Effect of Using Bioethanol From Orange Peel Waste on the Performance of a 110CC Metic Motorcycle

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ABSTRACT

This study aims to determine the effect of torque and power on the motor using a fuel mixture. This study used an experimental method of analysis to determine the difference in torque and power of the fuel mixture tested on motorbikes. Torque testing increased from 4000 to 5000 Rpm with the condition of using P 95% + BE 5%. then the highest maximum torque generated from the condition of using P 85% + BE 15% has increased by 2.26% from the condition without using a fuel mixture and has decreased in conditions using P 95% + BE 5% and conditions using P 90% +BE 10%. Meanwhile, the power test experienced an increase in every condition using a fuel mixture but in conditions using P 95% + BE 5% and conditions using P 90% + BE 10% which had an increase of 1.1% from conditions without using a fuel mixture. Based on the results of the torque and power tests, it shows that if the conditions of using P 95% + BE 5% do not experience an increase in performance at engine speed of 4000 to 5000 Rpm.

Keywords: Bioethanol, Torque, Power