

**ANALYSIS OF THE EFFECT OF CYLINDER LENGTH VARIATION ON
PERFORMANCE AND EXHAUST EMISSION LEVELS USING
ETHANOL CANE AND PERTALITE MIXTURE ON
SUPRA X 125 CC MOTOR**

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ABSTRACT

The petroleum fuel requirements in indonesia have been improving from year to year. Improvement necessity of the fuel oil has not balanced with increased production of fuel oil .One of alternatives of this case is using of renewable energy or energy that can be renewed and can be used to replace the use of fuel oil or gas nature (fossil fuels) .the name of this Alternative fuel is bioethanol, the experimental influence test of the addition of bioethanol molasses 96 % in fuel pertamax to show off work a percentage mixture of a gasoline motor on 5% , 10% , 15% , and 20% .The results of the testing that has been done out : that in low to medium-sized round there was an increase in power and torque from all machine type of fuel mixture than testing with pure pertamax fuel. The torque and scattered power obtained on mixed fuel with bioethanol 20 % .

Key words: length variations of the cylinder , power , torque , The gas emissions , bioethanol molasses , pertalite