Pengaruh Penambahan Bioethanol Dalam Bahan Bakar Premium Terhadap Performa dan Emisi Gas Buang Mesin Kawasaki KLX 150cc

(*The Use Of Bioethanol As A Premium Mixing For Performance And Emission Of Gas Disposed Motorcycle KLX 150cc)*

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ABSTRACT

One of the causes of air pollution is motor vehicle exhaust emissions. Efforts that can be made to reduce exhaust emissions are by using biofuels that have high octane numbers so that combustion is more complete and exhaust gas is reduced. Methanol and bioethanol are chemicals that have a high octane number and can be used as vehicle fuel at certain levels, as well as bioethanol classified as biofuel and renewable. The use of methanol and bioethanol as a premium mixture for motor vehicle fuel can improve engine performance and lower exhaust emissions. The research conducted on the use of methanol and bioethanol as a fuel mixture shows the results that a mixture of 10%, 15%,20% and 25% can improve the performance of the engine combustion engine that is torque (Nm) and power (HP). And in the mixture of 20%, and 25% both methanol and bioethanol emission of the exhaust gas (CO and HC) tested at idle rotation is lower than premium as the kontrol fuel, while the mixture is 10% and 15% higher.

Key words: motor fuel, methanol, bioethanol, performance, exhaust gas