

Pengaruh Penggunaan Minyak Atsiri Sebagai Bioaditif Bahan Bakar Terhadap Performa Mesin dan Konsumsi Bahan Bakar Sepeda Motor Injeksi (*The Effect Of The Use Of Essential Oil As A Bioaditive Fuel On Machine Performance and Fuel Consumption Of Injection Motorcycles*)
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ABSTRACT

One of the efforts that can be made to overcome the problem of fuel oil and ensure that the supply of domestic fuel is guaranteed is through energy conservation. Energy conservation efforts can be done by using fuel additives. Essential oil is one type of organic material that has great potential to be used as a biofuel fuel oil. The purpose of this study was to analyze the effect of adding clove essential oil on engine performance and fuel consumption. This type of research uses experimental research. The object of this research is engine performance and fuel consumption using fuel with the addition of clove essential oil. The result of this research is that testing engine performance and fuel consumption is carried out five times and is carried out on average. The highest average engine torque value is found in a mixture of 30 ml of clove essential oil with the highest torque value found at 6000 RPM, which is 19.11 Nm. The highest average engine power value is found in a mixture of 30 ml of clove essential oil with the highest power value found at RPM 8000, which is 20.48 Hp. The results of the calculation of the lowest average fuel consumption are found in a mixture of 10 ml with a fuel consumption value of 0.31 ml / s.

Keyword: *essential oil, engine performance, fuel consumption*