

UTILIZATION OF BANANA ROD FIBER AS A SUBSTITUTE GLASSWOLL FOR NOISE LEVEL AND EMISSION ON 4-STEP MOTOR

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Abstract

As the era of automotive technology grows rapidly. Good means of information production communication technology and entertainment. With increasing it will all impact the environment such as noise pollution or noise. As is the case in urban many community activities that use motorised vehicles that can interfere, the measurement results by using a Dicebel meter indicates the noise level reaches 70-80 dB. As for the purpose of this research the utilization of banana stem fiber as damper exhaust glasswool replacement. Comparing the results of the sound test and exhaust gas emissions on the exhaust of various types of motor 4 step two wheels with variations of motor type Honda GL, Megapro, Tiger. The Material used is the stem of banana fiber and use a mixture of flame-retardant chemical fluid, and produce decibels on variations of vehicle type Honda Megapro, Honda Tiger, Honda GL, the lowest value for decibels at RPM 1200 that is ridden Honda Megapro on Glasswool with a value of 71.8 dB, Banana Fiber 72, 55dB. At 2000 RPM The highest value is on a Honda Tiger vehicle on a glasswool with a value of 88, 37dB, Banana Fiber 89, 57dB. HC at RPM 1200 the lowest value on the Honda GL Max vehicle is on a glasswool with a value of 679 ppm, a 202ppm banana fiber. At 2000 RPM The highest value on a Honda GI max vehicle on a glasswool with a value of 235, 5ppm, banana fiber 202pmm. Co at RPM 1200 the lowest value on a Honda Tiger vehicle on a glasswool with a value of 2.16% fiber of 1.98%. At 2000 RPM The highest value on a Honda Tiger vehicle on a glasswool with a value of 4.69%, banana fiber 2.65%. Lambda at RPM 1200 the lowest value on a Honda GL max vehicle on a glasswool with a value of 1.65 AFR, Banana Fiber 1, 95AFR. At 2000 RPM The highest value on Honda Megapro on Glasswool with a value of 2, 1AFR, banana fiber 1, 95AFR

Keywords: Banana fiber, sound reducer and exhaust emission rate, vehicle type variation.