

**Perancangan Dan Analisis Filter Udara Berbahan Dasar Ampas Tebu
Dengan Metode Bertingkat Terhadap Unjuk Kerja Mesin Mobil 1300cc**
*(Design and Analysis of Sugarcane Bagasse-Based Air Filters With Multilevel
Methods Against Car Engine Performance 1300cc)*
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ABSTRACT

This study aims to determine the effect of using a standard air filter and an air filter from bagasse on the performance of the Daihatsu Xenia 1300cc car engine. The method used in this research is the experimental method. The results of this study indicate that the use of a standard air filter produces a higher torque of 77.77 Nm at 4737 rpm compared to the use of an air filter from bagasse which only reaches a torque of 76.15 Nm at 4428 rpm. And for the use of a filter air from bagasse has a higher power value of 60.23 HP at 6385 rpm compared to the use of a standard air filter which only reaches a power of 59.40 HP at 6123 rpm. get the highest power on the car engine daihatsu xenia 1300cc.

Keywords: *Sugarcane Bagasse Air Filter, Performance*