

***THE EFFECT OF SUGAR CANE BAGASSE FIBER AS A SOUND  
ABSORBING MATERIAL WITH LATEX BINDER ON NOISE LEVELS***

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***ABSTRACT***

*Indonesia is experiencing development in urban sectors, infrastructure, and industry, which has led to increased mobility and noise, especially from vehicles and industries. In Jember, East Java, the rising population and number of vehicles have caused high traffic noise levels exceeding the standard threshold of 55 dB, with an average reaching 73.40 dB. One solution to address noise pollution is the use of sound absorbers, particularly those made from environmentally friendly natural materials such as fibers from sugar cane bagasse. Sugar cane bagasse contains lignocellulose, carbon, and silica, which are effective in absorbing sound and have biodegradable properties, are inexpensive, and do not pose health risks.*

***Keywords:*** *Sugar Cane Bagasse Fiber, Noise, Latex*