Analisa Karakteristik Mutu Eko-Briket pada Variasi Pencampuran Limbah Sekam Padi dengan sampah Plastik PET (*Polyethylene Terephthalate*)
Analysis of Eco-briquette Quality Characteristics on Variations of Rice Husk Waste mixing with PET Plastic (Polyethylene Terephthalate)

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ABSTRACT

Increased growth in energy consumption resulted in depletion of energy availability especially from fossil fuels. Rice husk which is one of the byproducts of the milling process. In addition, this waste has a calorific value of 3300-3600 kcal / kg, and waste from sugar processing factories are molasses that have a heat value of 1.213 kJ, and Plastics are often in use for packaging namely the type of PET plastic (Polyethylene Terephthalate) which is a bottle of mineral water that also has a calorific value of 17139.97 J / gr. Based on the high calorific value of these three materials, these materials can be used as alternative fuel, which is eco-briquette. There were 3 main ingredients composition of polymerized rice husk and PET plastic waste with variation ratio was 98%: 2%, 96%: 4%, 94%: 6% using molasses adhesive. From the research result, it is found that eco-briquette still has quality in accordance with Indonesian National Standard (SNI), such as moisture content, ash content, density value, press constancy value, where all variations in comparison with Indonesian National Standard (SNI) eco-briquette has not reached the standard, eco-briquettes are close to the standard value that is in the composition of 94: 6% with a calorific value of 4591.32 kal / gr.

***Keywords**: Eco-briquette, Rice husk charcoal, Molasses, PET plastic*