Utilization of Banana Peel and Rice Husk Waste into Briquettes as Environmentally Friendly Alternative Materials

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ABSTRACT

This study aims to determine the best composition of banana peel charcoal briquettes and rice husks. Analysis of the data used in this study was to compare banana peel charcoal briquettes and rice husks with tapioca flour adhesive 7.5% by weight compared to SNI 1-6235-2000. The results showed that banana peel and rice husk charcoal briquettes with a ratio of 1:2 are the best of several other comparisons and meet the standards in SNI with an average water content of 3.8%, ash content of 3.5%, calorific value of 4593 cal. /g, combustion rate of 0.058 gr/s density 0.89 g/cm³ and kamba density 0.47 g/cm³. Briquettes with a composition of banana peel charcoal and rice husks with a ratio of 2:1 had the lowest yield in this study with a water content of 3.8%, ash content of 3.5%, calorific value 4506 cal/g, burning rate 0.058 gr/s density 0.89 g/cm³ and kamba density 0.47 g/cm³.

Keyword: Briquettes, Banana Peels, Rice Husk, Tapioca Flour.