

**COMPARISON OF CALORIFIC VALUE BETWEEN BRIQUETTES
MADE FROM RICE HUSK AND COCONUT SHELL USING GLUE
FROM ACACIA LEAVES (*Acacia mangium willd*) AND MANGROVE
LEAVES (*Rhizophora stylosa*)**

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ABSTRACT

The abundance of agricultural and plantation waste such as coconut shells and rice husks, as well as mangrove leaves and acacia leaves that are not utilized by the community can be an alternative to making fuels such as briquettes. Briquettes can be said to have good quality if they have a calorific value that is at least equal to SNI 01-6235-2000, which is 5000 cal/g. The purpose of this study was to determine the comparison of Calorific Value between Briquettes from Rice Husk and Coconut Shells Using Glue From Acacia Leaves (*Acacia mangium willd*), Mangrove Leaves (*Rhizophora stylosa*), and Tapioca with SNI.

The type of research is pra experiment. While the research design used is Static Group Comparison, which compares the calorific value of briquettes made from a mixture of coconut shell charcoal and rice husks with a ratio of 1: 1 using glue from top, middle and bottom acacia leaf, top, middle and bottom mangrove leaves, and tapioca with each material and glue ratio of 5: 1 and 5: 2. The analysis used was descriptive statistics using one-way anova test.

The results of this study are the highest calorific value of briquettes using glue from acacia leaf, namely 4125.32 cal/g obtained in glue from top acacia leaves in a ratio of 5:1, mangrove leaves 3473.56cal/g found in middle mangrove leaves in a ratio of 5:1, and tapioca in a ratio of 5:1 amounting to 4087.34 cal/g. The calorific value of briquettes using glue from acacia leaf and tapioca is higher than mangrove leaves when viewed individually. From these results it can be seen that briquette materials and glue can affect the calorific value. For further researchers can use different materials, glue, and ratio.

Keywords: Briquettes, Calorific Value, Acacia Leaf, Mangrove Leaf, Tapioca.