

Coffee Leather Waste Briquettes Using Hibiscus Leaf Adhesive

(Hibiscus rosa-sinensis L.)

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ABSTRACT

Biomass briquette is an alternative fuel that is environmentally friendly. One of the biomass that can be used as briquettes is coffee husk waste. Generally, the process of making briquettes uses tapioca flour adhesive, but tapioca flour is a food ingredient. The adhesive material that can be used as a substitute for tapioca flour is adhesive mucilage. adhesive Mucilage is an adhesive made from the sap of the leaves and the water like hibiscus. The purpose of this study was to determine the best characteristics and compositions produced from variations in the percentages of natural adhesive ingredients for hibiscus leaves 20%, 25% and 30% made from coffee skin by comparing the results of the study with the 2000 SNI for wood charcoal briquettes. The higher the percentage of hibiscus leaf adhesive, the higher the characteristics of the briquettes such as the value of water content, ash content, density, density of kamba and compressive strength of briquettes, but the value of the combustion rate and the resulting calorific value is lower. The best composition is found in BK 1 with 20% treatment of hibiscus leaf adhesive with a moisture content value of 2.22%, an ash content of 0.88% and a calorific value of 6434,31 cal/gr according to SNI for wood charcoal briquettes in 2000.

Keywords: *Briquettes, Hibiscus Leaf, Coffee Leather.*