MANUFACTURING OF BRICKETS MADE OF NATURAL WASTE MAHOONY POWDER WITH cassava peel adhesive (MANIHOT

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ABSTRACT

Charcoal briquettes are solid fuels that contain carbon and have a high calorific value. Raw materials that can be used as briquettes are biomass such as twigs, agricultural waste and mahogany sawdust. The raw material that has the potential to be used as charcoal briquettes is the result of processing mahogany wood, which goes through a roasting process to reduce the water content as raw material for charcoal. Cassava peel as an adhesive material that comes from the outside of the cassava fruit. In this study, carbonized mahogany sawdust and cassava peel were used as materials for briquettes. The purpose of this study was to determine the characteristics of briquettes produced from mahogany sawdust and cassava peels. The results showed that the entire composition of mahogany sawdust charcoal briquettes with cassava peel adhesive was in accordance with SNI standards. The best composition is in the V3 composition, which is 70% mahogany sawdust and 30% cassava peel, with a moisture content value of 7.5%, ash content 6.2%, calorific value 10850.40 cal/g, density value according to the standard. commercial briquettes are 1.5466 g/cm3, and the compressive strength value is not in accordance with the British briquette standard with a value of 1.135 kg/cm2.

Keywords: Briquettes, Cassava Peel, Mahogany Sawdust