The Use of Sengon (Albizia Chinensis) Wood and Cassava Peel in Making Briquettes

Dafit Ari Prasetyo S.T., M.T. as a reasearch councelor

Feriska Tri Aprilia

Study Program of Renewable Energy Engineering Engineering Department

ABSTRACT

This study aims to determine the best composition of cassava peel and charcoal particle size on sengon wood sawdust charcoal briquettes. Data analysis used in this study was to perform three variations of the composition of cassava peel adhesive 25%, 30%, 35% cassava peel and variation of particle size with a sieve shaker 20, 40, 60 mesh. The carbonization process using the pyrolisis at 300°C. The results showed that sengon wood sawdust charcoal briquettes with an adhesive composition of 20% and 60 mesh of particle size in Variation A1B1 were the best and qualified the standards at SNI 1-6235-2000 briquettes with an average value of 4.04% moisture content, 5.34% ash content, density 1.1 gr/cm³, the bulk density is 0.19 gr/cm³, the combustion rate is 0.021 gr/s, and 1802 cal/g of calorific value

Keywords: briquettes, cassava peel, sawdust sengon wood.