

**ANALYSIS OF QUALITY AND ECONOMIC TECHNOLOGY OF
BRICKET FROM POWDER OF TEAK (*Tectona grandis L.*) WITH SHOE
FLOWER ADHESIVE (*Hibiscus rosa-sinesis L.*) AS ALTERNATIVE
ENERGY SOURCES**

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ABSTRACT

In the wood processing industry, especially in the sawmill or manual section, a lot of sawdust waste is left alone. In this way, wood waste is used as an alternative fuel in the form of briquettes. This briquette uses hibiscus leaf adhesive. This research was conducted to make sawdust briquettes using hibiscus leaf adhesive, as well as to determine the characteristics of the briquettes produced and also the economic technology. The percentage of hibiscus leaf adhesive is 20%, 25% and 30%. The results of the best briquette composition were treated 20% hibiscus adhesive with water content of 6,31%, ash content of 4,27%, calorific value of 5007,27 cal, and 1,2329 g/cm³. The results of the estimated of the cost of producing briquettes with an annual capacity of 46.080 kg and the annual fee is Rp. 73.651.200,00 while for the production cost is Rp. 1.598,3 /kg and the selling value proposed to the buyer is Rp. 2.400,00 /kg. in this economy, the determined BEP (kg) value is 17.171,34 kg and this BEP can be achieved with in a period of 4,43 months, BEP in rupiah is Rp. 74.237.902,34.

Key Words : *Briquettes, Teak Wood Powder, Hibiscus Leaves*