Making Charcoal Briquettes from Mahogany Wood Powder Waste Using Castor Jatropha leaves

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ABSTRACT

One of the biomass raw materials that can be used as briquette briquettes is mahogany wood powder which has a high calorific value by using castor leaf adhesive which has a tannin value. The availability of these materials is very abundant and easy to obtain but underutilized. The purpose of this study was to determine the best composition and to determine the characteristics of mahogany sawdust briquettes using jatropha leaf adhesive. The writing method used in this research is pyrolysis. The variation of the research carried out is the adhesive variation of 10%, 20%, and 30%. In addition to adhesive variations, this study also varied the particle sizes of 35 mesh, 60 mesh, and 100 mesh. The best briquette is A3B1 where A3B1 is 30% adhesive 70% mahogany sawdust which has 7.09% moisture content, 7.77% ash content, calorific value 6122 cal/gr, specific gravity 0.89 gr/cm³, burning rate 0.035 gr /s, the specific gravity of kamba is 0.89 gr/cm³, the compressive strength is 1.85 kg/cm².

Key Words: Briquettes, Mahogany Wood Powder, Jatropha Leaves.