Utilization Of Coffee Husk Waste As An Alternative Fuel For Briquettes With A Mixture Of Rice Husk Waste

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ABSTRACT

Coffee is one of the largest commodities in the plantation subsector. The high productivity of coffee is in line with the waste produced. The accumulation of plantation waste such as coffee husks has not been utilized optimally. The purpose of this study is to determine the quality of charcoal briquettes from a mixture of coffee husk waste and rice husk waste with tapioca adhesive based on Indonesian National Standard No.1/6235/2000. This study uses a Regression Correlation Test . The treatment in this study was B1 (60% coffee husks, 10% rice husks, 30% adhesives), B2 (50% coffee husks, 20% rice husks, 30% adhesives), B3 (40% coffee husks, 30% rice husks, 30% adhesives). The method used in testing moisture content and ash content uses the thermogravimetric method, for the combustion rate using the manual method, and the calorimeter value test using an oxygen calorimeter bomb. The resulting research data was then compared with the Indonesian National Quality Standard (SNI) No.1/6235/2000. The results of the test data obtained were that the moisture content ranged from 5.865%-9.402%, the ash content ranged from 12.048%-15.009%, the calorific value ranged from 3913 cal/gr-4125 cal/gr, and the combustion rate ranged from 0.738 gr/min-1.073 gr/min.

Keywords: *Briquettes, Coffee Husks, Rice Husks*