

***Performance Of Anglo And UB-03 Type Of Biomass Stove On Variations Of Fuel Variety Of Bagasse, Corn Cob And Coconut Shell***

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**ABSTRACT**

*Biomass stove is one of the tools for cooking purposes in Indonesia. The stainlesssteel biomass stove is designed in such a way and has an ergonomic value in use, and is designed according to the energy needs of daily cooking. There are several types of biomass stoves, one of which is the Anglo and UB-03 biomass stove. Combustion in a biomass furnace occurs in two stages in the same place or furnace. The first stage of combustion is the combustion of fuel. The second stage of the combustion process is the combustion of smoke. This study aims to determine the performance of the Anglo and UB-03 biomass stoves on variations in the fuel of bagasse, corn cobs and coconut shells. The parameters used in this research are moisture content, material density, density of kamba material, rate of combustion and ash content. The test results showed that the water content of bagasse was 8.108%, corn cobs moisture content was 10%, and coconut shell moisture content was 9.879%. The value of the density of bagasse material is 9.879 gr/cm<sup>2</sup>, the density of corn cobs is 0.8 gr/cm<sup>2</sup>, the density of coconut shell material is 0.7692 gr/cm<sup>2</sup>. The density value of bagasse kamba was 0.176 gr/cm<sup>2</sup>, corn cob kamba density was 0.1655 gr/cm<sup>2</sup>, coconut shell kamba density was 0.091 gr/cm<sup>2</sup>. The value of bagasse ash content is 17.5278%, corn cobs ash content is 15.4054 %, coconut shell ash content is 15.4054%. The value of the burning rate of the stove of anglo bagasse is 0.7594 g/s, corn cobs 0.4296 g/s, coconut shells 0.4510 g/s. The burning rate of the UB-03 stove is 0.7155 g/s, the corn cob burning rate is 0.4139 g/s, and the coconut shell burning rate is 0.4414 g/s.*

**Keyword:** *Brazier Stove, UB-03 Stove, Biomass Stove.*