

Utilization of Rice Straw, Corn Cobs, and Coffee Peel Waste Fuel on the Efficiency of Anglo Biomass Stoves. Yuli Hananto, S.TP, M.Si as chief counselor.

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ABSTRACT

The brazier biomass stove that has been around for a long time in the archipelago and is used for cooking purposes. The brazier biomass stove is designed in such a way and has an ergonomic value in use, including materials that are strong and easy to shape, so they are easy to make. Various kinds of biomass fuels that are around us can be used as fuel for brazier biomass stoves such as rice straw, corn cobs, and coffee husk waste. This study aims to determine the characteristics of the fuel in accordance with the brazier biomass stove and to determine the efficiency of the brazier biomass stove for each fuel used. The parameters used in the fuel test are air content, material density, kamba density, combustion rate, ash content, and conduction heat of the stove, where the fuel that is suitable for biomass stoves in Indonesia is corn cobs by testing various parameters. The brazier biomass stove was then tested by the Water Boiling Test (WBT) method to determine its efficiency. The results of the WBT test show that the efficiency of the brazier biomass stove using rice straw as fuel is 6.62%, the use of corncob fuel is 12.77%, and the use of coffee peel waste fuel is 10.89%.

Key words : *Anglo Biomass Stove, Biomass Fuel, Efficiency*