Briket Tongkol Jagung (*Zea Mays L*) Menggunakan Perekat Daun Jati (*Tectona Grandis*) (Briquette of Corn Cob (*Zea Mays L*) Using Teak Leaf Adhesive (*Tectona Grandis*))
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ABSTRACT

Briquettes are charcoal obtained by burning dry biomass without air (pyrolysis).This process is also called the carbonization process that is the process for obtaining carbon or charcoal, also called "High Temperature Carbonization" at a temperature of 4500 C-5000C.In the process pyrolysis is produced gases, such as CO, CO2, CH4, H2, and mild hydrocarbons.The type of gas produced varies depending on the raw material. The raw material that can be used as briquette fuel is corn cob, which is generally made using tapioca flour adhesive.The problem with tapioca flour is that it is contrary to foodstuffs, so it needs natural adhesives such as teak leaves. In the process of making adhesive, there are 2 methods, namely the dry method and the wet method, and in this study, the adhesive making treatment was obtained using the wet method. The purpose of this study is to know the best composition of corn cob briquettes using teak leaf adhesive. The composition consists of TJ1 (80% corn cobs charcoal with 20% teak leaf adhesive), TJ2 (75% corncob charcoal with 25% teak leaf adhesive), TJ3 (70% corn cobs charcoal with 30% teak leaf adhesive), and TJ4 (91% corn cobs charcoal with 9% tapioca starch adhesive). The results were obtained that corn cob briquettes using teak leaf adhesive based on its characteristics such as moisture content, ash content, density, calorific value, and strong press have been in accordance with SNI 1-62235-2000.The best composition on TJ2 is 75% corn cob charcoal with 25% teak leaf adhesive, where the treatment has a water content value of 1.88%, ash content 7.94%, density 0.69 g/cm3, calorific value of 6069.64 cal/g, strong press 0.731 kg/cm3.

Keyword : briqueete, corncob, teak leaf.