**Biomassa Tempurung Buah Nyamplung** ***(Callophyllum spp)*** **untuk Pembuatan Briket Arang sebagai** **Bahan Bakar Alternatif**

Fahrizal Hazra 1 dan Novita Sari 2

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1) Departemen Ilmu Tanah dan Sumberdaya Lahan, Fakultas

 Pertanian - IPB, Jl. Meranti, Kampus IPB Darmaga, Bogor 16680

2) Alumni Program Keahlian Analisis Kimia

 Progan Diploma IPB, E-mail : fhazra2011@yahoo.com

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***ABSTRACT·***

*Nyamplung shell is a biomass whose existence has not been optimally utilized. Biomass is a solid waste that can be used again as a source of fuel. Favorable characteristics of the biomass is an energy source that can be utilized in a sustainable manner because it is renewable. Biomass of Nyamplung shell can be processed become a form of solid fuel with a same specific dimension, it is resulting from compression of bulk materials, powders, and the relatively small size commonly referred to as charcoal briquettes.*

*The aim of this research is to test the feasibility of nyamplung shell as a raw material for making briquettes on the households by conducting analysis of quality parameters briquette specimens including physical properties (water content, calor value, and density), briquette durability (persistence press), chemical (ash content, fixed carbon and* . *volatile matter content) and the rate of burning . charcoal briquette.*

*The- treatment in this aim is a mixture composition of raw materials (charcoal of Nyampfung shell) who were given the same* *amount of adhesive and compressed by compressed by compressing hydraulic briquette.*

*The result showed that, charcoal briquettes made from the Calophyllum shell can be used as alternative energy, with a characteristic range of values from 3,39-3,83% moisture content, calor value ranges from 3.646,14-5.431,35 calories/gram, the range of density values 0,663-0,721 gram/cm3, the range of cash content value 19,89-24,51%, the fixed carbon value 33,09-40,86%, the range of volatile matter value 35,03-38,57%, and the range of rate of burning from 0,0574-0,0898 gr/second. The low value of moisture content can lead to higher heating value of charcoal briquettes. High/low levels of volatile could affect fast/slow rate of burning charcoal briquettes.*