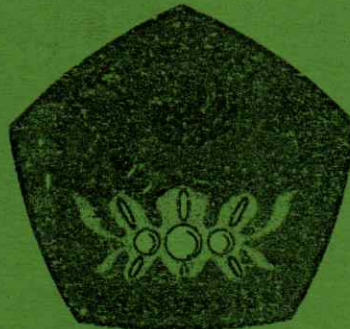


LAPORAN PENELITIAN MANDIRI

PENGARUH JENIS BAMBU (*Bambusa sp.*) DAN TEKANAN
TERHADAP KUALITAS BRIKET ARANG

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ABSTRACT

Effect of Bamboo Type (*Bambusa sp*) and Pressure on the Quality of Charcoal Briquettes.

This study examines three types of bamboo namely, Javanese bamboo (*Schizostachyum brachycladum*), petung bamboo (*Dendrocalamus asper*) and suanggi bamboo (*Schizostachyum arundinaceae*) and power of 3 tons, 2.5 tons and 2 tons.

The results showed the type of bamboo (A), pressure (B) and interaction (AB) affected the yield and water content of dry air, while the type of bamboo (A) only affected the heating value,

The yield value is between 56,683% - 62,530%, the value of dry water content is between 6,553% - 6,620%, the oven dry water content is between 3,426% - 3,446%, the ash content is between 4,154% - 4,240%, the easy content of substances is seen between 7,64% - 7,99%, meeting carbon content between 60,295% - 60,456% and recreational calorific value between 4336,283 cal/g - 4833,243 cal/g. these three types of bamboo can be used as raw material for charcoal briquettes and can be used as an alternative energy source for fuel oil.

Keywords: Bamboo, Pressure, Charcoal, Charcoal Briquettes

ABSTRAK

Pengaruh Jenis Bambu (*Bambusa sp*) Dan Tekanan Terhadap Kualitas Briket Arang.

Penelitian ini mengkaji tentang tiga jenis bambu yaitu, Bambu Jawa (*Schizostachyum brachycladum*), Bambu Petung (*Dendrocalamus asper*) dan Bambu Suanggi (*Schizostachyum arundinaceae*) dan tekanan 3 ton, 2,5 ton dan 2 ton.

Hasil penelitian menunjukkan bahwa jenis bambu (A), tekanan (B) dan interaksi (AB) berpengaruh terhadap rendemen dan kadar air kering udara, sedangkan jenis bambu (A) hanya berpengaruh terhadap nilai kalor,

Nilai rendemen berkisar antara 56,683% - 62,530%, nilai kadar air kering udara berkisar antara 6,553% - 6,620%, kadar air kering oven berkisar antara 3,426% - 3,446%, kadar abu berkisar antara 4,154% - 4,240%, kadar zat mudah menguap berkisar antara 7,64% - 7,99%, kadar karbon terikat berkisar antara 60,295% - 60,456% dan nilai kalor berkisar antara 4336,283 cal/g - 4833,243 cal/g. Tiga jenis bambu ini dapat dimanfaatkan sebagai bahan baku briket arang dan dapat dijadikan sumber energi alternative pengganti bahan bakar minyak.

Kata Kunci: Bambu, tekanan, arang, briket arang.