KAJIAN JENIS DAN KONSENTRASI PEREKAT PADA PEMBUATAN BRIKET DARI SABUT BUAH NIPAH (*Nypa fruticans,* Wurmb)

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ABSTRAK

Penelitian ini bertujuan untuk mengkaji pengaruh interaksi jenis dan konsentrasi perekat, pengaruh jenis dan konsentrasi perekat terbaik berdasarkan karakteristik briket, dan menganalisis *Break Event Point* (BEP). Penelitian ini dilakukan dengan metode Rancangan Acak Lengkap Faktorial dengan 2 faktor yang terdiri atas 9 perlakuan dan 3 kali ulangan. Data yang didapatkan dianalisis secara statistik menggunakan *Analysis of Variance* (ANOVA) jika terdapat adanya interaksi maka dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DNMRT) pada taraf 5 %. Kajian jenis dan konsentrasi briket dari sabut buah nipah terdapat adanya interaksi terhadap kadar air, kadar abu, karbon terikat, nilai kalor, nyala api, dan kuat tekan, tetapi tidak ada interakasi terhadap kadar zat terbang dan densitas briket. Jenis perekat berbeda nyata terhadap kadar air, kadar abu, zat terbang, karbon terikat, nilai kalor, nyala api, densitas dan kuat tekan. Konsentrasi perekat berbeda nyata terhadap kadar air, kadar abu, karbon terikat, nilai kalor, nyala api, densitas dan kuat tekan, tetapi tidak berbeda nyata terhadap zat terbang briket. Formulasi perlakuan terbaik yaitu pada perlakuan perlakuan A2B1 perekat arpus dengan konsentrasi 9%. Analisis titik impas Briket (BEP) yaitu Rp 1.029,45 pcs/bulan.

Kata Kunci: Arpus, Briket, Lateks, Nipah, Tapioka

STUDY OF TYPES AND CONCENTRATION OF ADHESIVE IN MAKING BRIQUETTES FROM NIPAH FRUIT COARSE (*Nypa fruticas,* Wurmb)

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ABSTRACT

This study aimed to examine the influence of the interaction of adhesive type and concentration, the influence of the type and concentration of the best adhesive based on the characteristics of the briquettes, and analyze the Break Event Point (BEP). This study was conducted using the Factorial Complete Random Design method with 2 factors consisting of 9 treatments and 3 replications. The data obtained was statistically analyzed using Analysis of Variance (ANOVA) if there was an interaction, it was followed by the Duncan's New Multiple Range Test (DNMRT) test at the level of 5%. The study of the type and concentration of briquettes from nipah fruit coir found an interaction with moisture content, ash content, carbon bonded, calorific value, flame, and compressive strength, but there was no interaction with the content of flying substances and briquette density. The types of adhesives differ markedly in terms of moisture content, ash content, flying substances, carbon bonds, calorific value, flame, density and compressive strength. The concentration of adhesives differs markedly in terms of moisture content, ash content, bonded carbon, calorific value, flame, density and compressive strength, but not significantly different from that of briquette flying. The best treatment formulation is the treatment of A2B1 arpus adhesive with a concentration of 9%. The break-even point analysis of Briquettes (BEP) is IDR 1,029.45 pcs/month.

Key Words: Arpus, Briquettes, Latex, Nipah, Tapioca