

ABSTRAK

PENGARUH PENGOLAHAN AMONIASI, FERMENTASI DAN AMOFER MENGUNAKAN *Aspergillus niger* PADA KLOBOT JAGUNG TERHADAP KUALITAS FISIK, PROTEIN KASAR DAN SERAT KASAR

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Penelitian ini bertujuan untuk mengevaluasi pengolahan amoniasi, fermentasi dan amofer terhadap kualitas fisik, protein kasar dan serat kasar klobot jagung. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) yang terdiri dari 4 perlakuan dan 4 ulangan. Perlakuan yang diberikan yaitu P1: klobot jagung tanpa perlakuan (kontrol), P2: klobot jagung amoniasi (2% urea), P3: klobot jagung fermentasi (5% *Aspergillus niger*), dan P4: klobot jagung amofer (2% urea + 5% *Aspergillus niger*). Variabel yang diamati meliputi kualitas fisik, protein kasar, dan serat kasar. Data yang diperoleh akan dianalisis menggunakan Analisis Ragam dan dilanjutkan dengan Uji Jarak Berganda Duncan (UJBD). Hasil penelitian menunjukkan bahwa kualiasi fisik (P1: kuning kecoklatan, khas kulit jagung, kasar; P2: coklat, sedikit amonia, sedikit lebih lunak; P3: coklat sedikit kehitaman, agak asam, sedikit lebih lunak; P4: coklat sedikit kehitaman, agak asam dan sedikit amonia, sedikit lebih lunak), protein kasar (P1: 4,522%; P2: 6,69%; P3: 5,05%; dan P4: 8,161%), dan serat kasar (P1: 29,86%; P2: 25,419%; P3: 22,294%; dan P4: 20,475%) berpengaruh sangat nyata ($P < 0,01$) diantara perlakuan (P1, P2, P3, dan P4). Pengolahan amofer memberikan pengaruh terbaik ($P < 0,05$) terhadap kualitas fisik, protein kasar, dan serat kasar.

Kata kunci: Amofer, Amoniasi, *Aspergillus niger*, Fermentasi, Klobot Jagung

ABSTRACT

THE EFFECT OF AMMONIATION, FERMENTATION AND AMMONIATION-FERMENTATION TREATMENT USING *Aspergillus niger* ON CORN HUSK OF THE PHYSICAL QUALITY, CRUDE PROTEIN, AND CRUDE FIBER

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This research aimed to evaluate the ammoniation, fermentation and ammoniation-fermentation (amofer) treatment of the physical quality, crude protein and crude fiber of corn husk. This study used a completely randomized design which consisted of 4 treatments and 4 replications. The treatments provided were P1: corn husk without treatment (control), P2: ammoniation corn husk (2% urea), P3: fermentation corn husk (5% *Aspergillus niger*), and P4: amofer corn husk (2% urea + 5% *Aspergillus niger*). Variables measured were physical quality, crude protein, and crude fiber. The data obtained will be analyzed using Analysis of Variance and continued by Duncan's Multiple Range Test (DMRT). The results showed that the physical quality (P1: brownish yellow, typical of corn husk, rough; P2: brown, slightly ammonia, slightly softer; P3: slightly blackish brown, slightly sour, slightly softer; P4: slightly blackish brown, slightly sour and a little ammonia, slightly softer), crude protein (P1: 4.522%; P2: 6.69%; P3: 5.05%; and P4: 8.161%), and crude fiber (P1: 29.86%; P2: 25.419%; P3: 22.294%; and P4: 20.475%) had a very significant effect ($P < 0.01$) among treatments (P1, P2, P3, and P4). Amofer treatment gave the best effect ($P < 0.05$) on physical quality, crude protein, and crude fiber.

Keyword : Ammoniation, Amofer, *Aspergillus niger*, Corn Husk, Fermentation