

PENGARUH PEMBERIAN MOLASE DAN BEKATUL (20%) TERHADAP
KUALITAS KIMIA DAN FISIK SILASE AMPAS TEBU (*Bagasse*)

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INTISARI*

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian kombinasi molase dan bekatul terhadap kualitas kimia dan fisik silase ampas tebu (*bagasse*). Penelitian ini dilakukan pada tanggal 11 Februari 2019 sampai 28 Maret 2019 di Laboratorium Peternakan dan Laboratorium Kimia, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola searah dengan empat (4) perlakuan dan tiga (3) kali ulangan. Perlakuan yang digunakan yaitu P0 (kontrol), P1 (bekatul 20%), P2 (Bekatul 10% + Molase 10%) dan P3 (molase 20%). Variabel yang diamati adalah Bahan Kering, Kadar Abu, Serat Kasar, Protein Kasar, Lemak Kasar, BETN (Bahan Ekstrak Tanpa Nitrogen), pH, Jamur dan Aroma. Data yang diperoleh dianalisis dengan *Analysis of Variance* (ANOVA) bila berbeda nyata dilanjutkan dengan uji *Duncan's new Multiple Range Test* (DMRT). Hasil penelitian menunjukkan rerata bahan kering : P0 63,80, P1 66,78, P2 60,22, dan P3 52,25, kadar abu : P0 3,17, P1 4,26, P2 4,26, dan P3 4,29, serat kasar : P0 59,95, P1 56,88, P2 54,34, dan P3 50,69, protein kasar : P0 4,25, P1 4,66, P2 4,54, dan P3 5,50, lemak kasar : P0 0,68, P1 0,99, P2 1,37, dan P3 0,87, BETN : P0 31,93, P1 33,20, P2 35,49, dan P3 38,64, pH : P0 3,6, P1 3,6, P2 3,6, dan P3 3,5, jamur : P0 1, P1 1, P2 1,33, dan P3 1, dan aroma : P0 2,67, P1 1,33, P2 1,33, dan P3 1. Hasil analisis variansi pada kualitas kimia menunjukkan bahwa penggunaan kombinasi molase dan bekatul 20% berpengaruh nyata ($P < 0,05$) terhadap bahan kering, kadar abu, serat kasar, dan BETN, dan berpengaruh tidak nyata ($P > 0,05$) terhadap protein kasar dan lemak kasar. Hasil analisis variansi pada kualitas fisik menunjukkan bahwa penggunaan kombinasi molase dan bekatul berpengaruh tidak nyata ($P > 0,05$) terhadap pH, banyaknya jamur, dan aroma. Dari penelitian ini disimpulkan bahwa penambahan molase sebanyak 20% pada pembuatan silase ampas tebu menghasilkan kualitas kimia dan fisik terbaik.

Kata kunci : Ampas tebu (*bagasse*), silase, kualitas kimia, kualitas fisik, bekatul, molase.

*Intisari Skripsi Sarjana Peternakan, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, 2019.

THE EFFECT OF MOLASSES AND RICE BRAN (20%) GIVING ON CHEMICAL AND PHYSICAL QUALITY OF BAGASSE SILAGE

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ABSTRACT*

This study aims to determine the effect of the combination of molasses and rice bran on the chemical and physical quality of bagasse silage. This research was conducted on February 11, 2019 until March 28, 2019 at the Animal Husbandry Laboratory and Chemical Laboratory of Agroindustry Faculty of Mercu Buana University Yogyakarta. This study used a Completely Randomized Design (CRD) oneway pattern with four (4) treatments and three (3) replications. The treatments used were P0 (control), P1 (rice bran 20%), P2 (rice bran 10% + Molasses 10%) and P3 (molasses 20%). The variables observed were dry matter, ash content, crude fiber, crude protein, crude fat, EMWN (Extract Material Without Nitrogen), pH, mold and aroma. The data obtained were analyzed by Analysis of Variance (ANOVA) if significantly different continued with Duncan's new Multiple Range Test (DMRT) test. The results showed the mean dry matter : P0 63,80, P1 66,78, P2 60,22, and P3 52,25, ash content : P0 3,17, P1 4,26, P2 4,26, and P3 4, 29, crude fiber : P0 59.95, P1 56.88, P2 54,34, and P3 50,69, crude protein : P0 4.25, P1 4.66, P2 4,54, and P3 5,50, crude fat : P0 0.68, P1 0.99, P2 1,37, and P3 0,87, BETN : P0 31,93, P1 33,20, P2 35,49, and P3 38,64, pH : P0 3,6, P1 3,6, P2 3,6, and P3 3,5, mushrooms : P0 1, P1 1, P2 1,33, and P3 1, and aroma : P0 2,67, P1 1,33, P2 1,33, and P3 1. The results of the variance analysis on chemical quality showed that the used of 20% rice bran and molasses combination had a significant effect ($P < 0.05$) on dry matter, ash content, crude fiber, and EMWN, and no effect real ($P > 0.05$) on crude protein and crude fat. The results of the analysis of variance on physical quality showed that the used of a combination of rice bran and molasses had no significant effect ($P > 0.05$) on pH, the number of mushroom and aroma. From this study it was concluded that the addition of 20% molasses to the production of bagasse silage produced the best chemical and physical qualities.

Key words : Bagasse, silage, chemical quality, physical quality, rice bran, molasses.

*Abstract Thesis of S1 Animal Husbandry, Faculty of Agroindustry, University of Mercu Buana Yogyakarta, 2019.