

**KUALITAS FISIK DAN KIMIA SILASE BATANG PISANG
(*Musa paradisiaca*) YANG DIBERI POLLARD DENGAN
LEVEL YANG BERBEDA**

**BENI PRASETYA
NIM.17021024**

INTISARI*)

Penelitian ini bertujuan untuk mengetahui tingkat penggunaan pollard yang optimal pada kualitas fisik dan kimia silase batang pisang (*Musa paradisiaca*). Penelitian ini dilakukan pada tanggal 14 Mei – 15 Juli 2021. Pembuatan silase bertempat di Rumah Bapak Sumaryo RT.04 No.53 Desa Karanglo Argomulyo, Kapanewon Sedayu Bantul, Daerah Istimewa Yogyakarta dan uji fisik bertempat di Laboratorium Nutrisi dan Teknologi Hasil Ternak Program Studi Peternakan Universitas Mercu Buana Yogyakarta. Materi yang digunakan adalah batang pisang (*Musa paradisiaca*), pollard, molases, aquades, EM4, dan air. Penelitian ini menggunakan Rancangan Acak lengkap (RAL) pola searah dengan empat (4) perlakuan dan tiga (3) ulangan. Variabel yang diamati adalah pH, aroma, tekstur, jamur dan warna. Data yang diperoleh dianalisis dengan *Analysis of variance* (ANOVA), apabila berbeda nyata dilanjutkan dengan uji *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan rerata nilai pH silase batang pisang menunjukkan PO 4,50, P1 3,33, P2 3,70 dan P3 3,67; aroma P0 3,85, P1 4,23, P2 3,83 dan P3 3,90; jamur P0 4,47, P1 4,67, P2 4,23 dan P3 4,10; tekstur P0 4,07, P1 4,10, P2 3,93 dan P3 3,70; warna P0 3,38, P1 3,83, P2 3,80 dan P3 3,77; kadar protein kasar P0 4,46, P1 4,55, P2 4,97 dan P3 4,25; kadar serat kasar P0 39,37, P1 32,24, P2 31,26 dan P3 32,06. Hasil analisis variansi rerata kualitas fisik dan kualitas kimia silase batang pisang menunjukkan bahwa penambahan pollard berpengaruh nyata ($P < 0,05$) pada variabel pH, jamur dan kadar serat kasar. Berpengaruh tidak nyata ($P > 0,05$) pada variabel warna, tekstur, aroma dan kadar protein kasar. Berdasarkan hasil penelitian dapat disimpulkan bahwa kualitas fisik dan kimia silase batang pisang yang terbaik adalah pada level pollard 5%.

Kata kunci : Silase, batang pisang, pollard, kualitas fisik dan kimia

*) Intisari Skripsi Sarjana Peternakan, Program Studi Peternakan, Fakultas Agroindustri, Universitas Mercu Buana Yogyakarta, 2022.

**PHYSICAL AND CHEMICAL QUALITY OF BANANA (*Musa paradisiaca*)
STEM SILAGE WHICH GIVEN POLLARD
WITH DIFFERENT LEVEL**

**BENI PRASETYA
NIM.17021024**

ABSTRACT*)

This study aims to determine the optimal level of pollard use on the physical and chemical quality of banana (*Musa paradisiaca*) stem silage. This research was conducted on May 14 – July 15, 2021. The silage making took place at Mr. Sumaryo's house RT.04 No.53 Karanglo Argomulyo Village, Kapanewon Sedayu Bantul, Yogyakarta Special Region and the physical test took place at the Laboratory of Nutrition and Technology of Livestock Products Animal Husbandry Study Program Mercu Buana University Yogyakarta. The materials used are banana stems (*Musa paradisiaca*), pollard, molasses, aquades, EM4, and water. This study used a *completely randomized design* (CRD) with a unidirectional pattern with four (4) treatments and three (3) replications. The variables observed were pH, aroma, texture, fungus and color. The data obtained were analyzed by *Analysis of variance* (ANOVA), if significantly different, then continued with *Duncan's New Multiple Range Test* (DMRT). The results showed that the average pH value of banana stem silage showed P0 4.50, P1 3.33, P2 3.70 and P3 3.67; aroma P0 3.85, P1 4.23, P2 3.83 and P3 3.90; mushrooms P0 4.47, P1 4.67, P2 4.23 and P3 4.10; texture P0 4.07, P1 4.10, P2 3.93 and P3 3.70; color P0 3.38, P1 3.83, P2 3.80 and P3 3.77; crude protein content of P0 4.46, P1 4.55, P2 4.97 and P3 4.25; crude fiber content P0 39.37, P1 32.24, P2 31.26 and P3 32.06. The results of the analysis of variance on the average physical quality and chemical quality of banana stem silage showed that the addition of pollard had a significant effect ($P < 0.05$) on the variables of pH, fungus and crude fiber content. No significant effect ($P > 0.05$) on the variables of color, texture, aroma and crude protein content. Based on the research results, it can be concluded that the best physical and chemical quality of banana stem silage is at the 5% pollard level.

Keywords: Silage, banana stem, pollard, physical and chemical quality.

*) Abstract Thesis of S1 Animal Husbandry, Faculty of Agroindustry, University of Mercu Buana Yogyakarta, 2022.