PENGARUH LAMA FERMENTASI TERHADAP KUALITAS FISIK SILASE PAKAN KOMPLIT BERBAHAN DASAR AZOLLA (*Azolla microphylla)*

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INTISARI*

Penelitian ini bertujuan untuk mengetahui kualitas fisik silase pakan komplit berbahan dasar *Azolla microphylla* dengan berbagai lama fermentasi yang berbeda. Materi penelitian yang digunakan adalah *Azolla microphylla*, dedak padi, molases, EM4 dan air. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) dengan pola searah yang terdiri dari 4 perlakuan dan 3 ulangan. Variabel yang diamati yaitu aroma, tekstur, warna, total koloni jamur dan pH. Data dianalisis menggunakan *Analysis of Variance* (ANOVA), jika terdapat perbedaan yang nyata dilanjutkan menggunakan *Duncan's New Multiple Range Test* (DMRT). Hasil penelitian menunjukkan rerata nilai aroma silase pakan komplit berbahan dasar *Azolla microphylla* pada P0; P1; P2 dan P3 adalah 1,37; 1,93; 2,40 dan 2,87. Rerata nilai tekstur silase pakan komplit berbahan dasar *Azolla microphylla,* pada P0; P1; P2 dan P3 adalah 2,87; 2,07; 2,00 dan 2,87. Rerata warna silase pakan komplit berbahan dasar *Azolla microphylla,* pada P0; P1; P2 dan P3 adalah 2,80; 2,10; 2,33 dan 2,77. Rerata total koloni jamur silase pakan komplit berbahan dasar *Azolla microphylla,* pada P0; P1; P2 dan P3 adalah 3,00; 3,00; 2,17 dan 2,33. Rerata nilai pH silase pakan komplit berbahan dasar *Azolla microphylla,* pada P0; P1; P2 dan P3 berturut-turut adalah 6,13; 4,51; 4,00 dan 3,80. Berdasarkan analisis variansi menunjukkan perbedaan yang nyata ($P \leq 0,05$) pada semua variabel yang diamati. Berdasarkan hasil penelitian dapat disimpulkan bahwa kualitas fisik silase pakan komplit berbahan utama *Azolla microphylla* terbaik pada perlakuan lama fermentasi 21 hari.

Kata Kunci : Silase, *Azolla microphylla,* kualitas fisik, lama fermentasi.

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THE EFFECT OF FERMENTATION DURATION ON PHYSICAL QUALITY OF COMPLETE FEED SILAGE MADE FROM AZOLLA (Azolla microphylla)

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ABSTRACT*

This study aims to determine the physical quality of complete feed silage made from Azolla microphylla with a different fermentation duration. The research material used was Azolla microphylla, rice bran, molasses, EM4 and water. This study used a completely randomized design (CRD) with a one way pattern consisting of 4 treatments and 3 replications. The observed variables were aroma, texture, color, total of fungal colonies and pH. Data were analyzed using Analysis of Variance (ANOVA), if there were significant differences followed by Duncan's New Multiple Range Test (DMRT). The results showed the average value of complete feed silage aroma made from Azolla microphylla at P0; P1; P2 and P3 are 1.37; 1.93; 2.40 and 2.87. Average value of complete feed silage texture made from Azolla microphylla, at P0; P1; P2 and P3 are 2.87; 2.07; 2,00 and 2.87. The average silage color of complete feed made from Azolla microphylla, at P0; P1; P2 and P3 are 2.80; 2,10; 2.33 and 2.77. Average total fungal silage fungal colonies made from Azolla microphylla, at P0; P1; P2 and P3 are 3.00 ; 2,17 and 2,33. The average pH value of complete feed silage made from Azolla microphylla, at P0; P1; P2 and P3 are 6.13; 4,51; 4,00 and 3.80. Based on the analysis of variance showed significant differences ($P < 0.05$) on all observed variables. Based on the results of the study it can be concluded that the physical quality of complete feed silage made from Azolla microphylla is the best in the 21 day fermentation treatment.

Keywords: Silage, Azolla microphylla, physical quality, fermentation duration.

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