

PENGARUH PENGGUNAAN TEPUNG ALFALFA TROPIK (*Medicago sativa* L) PADA RANSUM AYAM PETELUR TERHADAP KUALITAS KIMIA TELUR

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh pemberian Alfalfa Tropik (*Medicago sativa* L) dengan metode substitusi terhadap kualitas kimia telur ayam Hy-Line Brown. Penelitian dilakukan pada bulan Agustus sampai November 2021 di kandang ayam petelur milik Laboratorium Biokimia Nutrisi Fakultas Peternakan, Universitas Gadjah Mada, Sleman, Daerah Istimewa Yogyakarta. Sampel telur diambil dari ayam petelur komersial strain Hy-line Brown yang berumur 60 minggu, 64 minggu dan 68 minggu untuk diuji kadar proksimatnya. Penelitian ini terdiri atas 3 perlakuan pemberian Alfalfa yaitu 0% (P1), 3% (P2) dan 5% (P3) dengan 5 kali ulangan pada masing-masing umur ayam. Kualitas kimia telur yang diamati meliputi kadar air, protein kasar, lemak kasar dan bahan organik. Data dianalisis dengan menggunakan ANOVA (analisis variansi) berdasarkan Rancangan Acak Lengkap Pola Faktorial antara perlakuan Alfalfa dengan periode pemeliharaan menggunakan bantuan *software Statistical Product and Service Solution* (SPSS) versi 25. Apabila terjadi perbedaan nyata pada perlakuan maka akan dilanjutkan dengan uji beda *mean* menggunakan *Duncan's Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa penambahan Alfalfa dalam ransum tidak memberikan perbedaan yang nyata ($P > 0,05$) terhadap kualitas kimia telur dan periode pemeliharaan memberikan perbedaan yang nyata ($P < 0,05$) pada kualitas kimia telur. Tidak terdapat interaksi antara perlakuan penambahan Alfalfa dengan periode pemeliharaan. Kesimpulan dari penelitian ini yaitu Alfalfa dapat digunakan sebagai substitusi ayam petelur untuk meningkatkan produktivitas ayam petelur tanpa mempengaruhi kualitas kimia telur yang dihasilkan.

(Kata kunci: Alfalfa, Kualitas Kimia, Substitusi, Telur Ayam)

THE EFFECT OF THE USE OF TROPICAL ALFALFA FLOUR (*Medicago sativa* L) IN LAYING HENS ON THE CHEMICAL QUALITY OF EGGS

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ABSTRACT

The research was conducted to determine the effect of Alfalfa (*Medicago sativa* L) substitution for egg chemical quality. The research was conducted from August to November 2021 in a laying hens coop belonging to the Biochemistry Nutrition Laboratory of the Faculty of Animal Husbandry, Gadjah Mada University, Sleman, Special Region of Yogyakarta. Sample eggs were taken from commercial laying hens Hy-line Brown strain aged 60 weeks, 64 weeks and 68 weeks to be tested for proximate levels. The research consisted of 3 feed treatments namely 0% (P1), 3% (P2) and 5% (P3) with 5 replicates at each age of the chicks. The chemical quality of the eggs observed included water holding capacity, crude protein, crude fat and organik matter. The data were analyzed by factorial of classification of variance analysis (ANOVA) between Alfalfa and period of treatment with the help of the Statistical Product and Service Solution (SPSS) version 25 computer program. The significant differences then continued with the Duncan's Multiple Range Test (DMRT). The results showed that the addition of Alfalfa in the ration did not affect to the chemical quality of the eggs and the period affected to the chemical quality of the eggs. There was no interaction between the addition of Alfalfa treatment with the maintenance period. The conclusion of this study is that Alfalfa can be used as a substitute for laying hens to increase the productivity of laying hens without affecting the chemical quality of the eggs produced.

(Keyword: Alfalfa, Chemical Quality, Substitution, Egg)