PENGARUH SUPLEMENTASI ALFALFA (*Medicago sativa* L.) PADA PAKAN BASAL BERBEDA TERHADAP PERFORMA, KOLESTEROL DAGING DAN KARAKTERISTIK LEMAK DARAH ITIK HIBRIDA

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INTISARI

Penelitian ini dilakukan untuk mengetahui pengaruh suplementasi alfalfa (*Medicago sativa* L.) pada pakan basal berbeda terhadap performa, kolesterol daging dan karakteristik lemak darah itik hibrida. Penelitian ini dilakukan secara *in vivo* dengan total 120 ekor itik hibrida MA (Mojosari x Alabio), menggunakan rancangan acak lengkap (RAL) pola searah dengani 4 perlakuan dan 6 ulangan dengan setiap ulangan terdiri dari 5 ekor itik. Perlakuan terdiri dari P1 = pakan komersial 100%, P2 = pakan konvensional 100%, P3 = pakan komersial 90% + suplementasi alfalfa segar 10% dan P4 = pakan konvensional 90% + suplementasi alfalfa segar 10%. Itik dipelihara selama 40 hari. Pakan dan air minum diberikan secara *ad libitum*. Alfalfa yang disuplementasikan berbentuk segar dan sudah dicacah sebelum diberikan pada ternak. Dilakukan penimbangan bobot badan itik per minggu hingga minggu sebelum panen. Variabel yang diamati adalah performa produksi yang meliputi konsumsi pakan, pertambahan bobot badan dan nilai *feed conversion ratio* (FCR) serta kolesterol daging yang terdiri dari daging dada dan daging paha kemudian yang terakhir adalah karakteristik lemak darah itik seperti total kolesterol, trigliserida, LDL (*Low-density Lipoprotein*) dan HDL (*High-Density Lipoprotein*). Data yang diperoleh dianalisa menggunakan analisis variansi (ANOVA) pola searah dan apabila terdapat perbedaan yang nyata pada perlakuan maka akan diuji lanjut menggunakan *Duncan's new multiple range test* (DMRT) dengan aplikasi *Statistical Package for Sosial Science* (SPSS) versi 22. Hasil penelitian menunjukkan bahwa suplementasi alfalfa 10% pada pakan komersial dan pakan konvensional menunjukkan pengaruh nyata ($P<0,05$) terhadap nilai konsumsi pakan, pertambahan bobot badan dan nilai FCR. Suplementasi alfalfa 10% pada pakan komersial dan konvensional menunjukkan pengaruh yang nyata ($P<0,05$) terhadap kolesterol daging dada dan daging paha, tetapi tidak memberikan pengaruh ($P>0,05$) pada profil lemak darah yang meliputi kolesterol darah, trigliserida, LDL dan HDL. Berdasarkan hal tersebut dapat disimpulkan bahwa suplementasi alfalfa 10% menyebabkan peningkatan konsumsi dan tidak meningkatkan pertumbuhan bobot badan serta tidak menurunkan FCR. Suplementasi alfalfa 10% pada pakan basal berbeda juga dapat menurunkan kadar kolesterol daging paha dan daging dada itik, namun tidak berpengaruh terhadap karakteristik lemak darah yang meliputi total kolesterol, trigliserida, LDL dan HDL.

Kata kunci: Alfalfa, itik hibrida, pakan komersial, pakan konvensional, performan

THE EFFECT OF ALFALFA (*Medicago sativa* L.) SUPPLEMENTATION ON DIFFERENT BASAL FEED FOR PERFORMANCE, CHOLESTEROL MEAT AND BLOOD LIPID CHARACTERISTICS OF HYBRID DUCK

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ABSTRACT

The aimed of this research was to determine effect of Supplementation of Alfalfa (*Medicago sativa* L.) on different basal feeds for performance, cholesterol meat and blood lipid characteristics of hybrid duck. This research was conducted by *in vivo* method with 120 MA (Mojosari x Alabio) hybrid ducks, using one way pattern of completely randomized design (CRD) with 4 treatments and 6 repetitions with 5 ducks each repetition. The treatment consisteds of P1 = Commercial feed 100%, P2 = Conventional feed 100%, P3 = Commercial Feed 90% + supplementation of fresh alfalfa 10% and P4 = Conventional feed 90% + supplementation of fresh alfalfa 10%. Ducks were maintenanced for 40 days. Feed and water was offered Ad libitum. The supplemented alfalfa had been fresh and chopped before given to ducks. Body weight measurements had been done per weeks. The variables observed were performance which included feed consumption, body weight gain and feed conversion ratio (FCR), meat cholesterol consisting of breast and thigh meat and blood lipid characteristics of duck such as total cholesterol, triglycerides, LDL (Low-density Lipoprotein) and HDL (High-Density Lipoprotein). The data were analyzed using one-way analysis of variance (ANOVA) and continued with Duncan's multiple range test (DMRT) if the treatment had a significant effect by the Program of Statistical Package for Social Science (SPSS) version 22. The results showed that 10% alfalfa supplementation in commercial feeds and conventional feeds have significant lower/higher ($P < 0.05$) value of feed consumption, weight gain and FCR value. 10% alfalfa supplementation in commercial and conventional feed showed a significant effect ($P < 0.05$) on breast and thigh meat cholesterol, but had no effect ($P > 0.05$) on the blood lipid profile included blood cholesterol, triglycerides, LDL and HDL. Based on these results, it can be concluded that 10% alfalfa supplementation cause increased consumption, but didn't increase body weight growth and didin't reduce FCR. 10% alfalfa supplementation on basal feed could also reduce cholesterol levels of thigh meat and duck breast meat, but it didn't affect the charactersitics of blood lipid, including total cholesterol, triglycerides, LDL and HDL.

Keywords: Alfalfa, Commercial Feed, Conventional Feed, Performance, Hybrid Duck