

PENGARUH PENAMBAHAN ADITIF SARI BUAH BELIMBING WULUH (*Averrhoa bilimbi*) DALAM AIR MINUM TERHADAP KUALITAS FISIK DAGING AYAM BROILER

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan aditif sari buah belimbing wuluh (*Averrhoa bilimbi*) dalam air minum terhadap kualitas fisik daging ayam broiler. Penelitian ini dilakukan dengan menggunakan 90 ekor ayam broiler jantan *strain* New Lohmann MB-202 yang dipelihara selama 35 hari. Setiap ekor ayam broiler dalam penelitian ini mendapatkan salah satu dari tiga perlakuan: air minum tanpa penambahan aditif pakan (AP-0; kontrol negatif), air minum + 100 ppm antibiotik Tetrasiklin (AP-1; kontrol positif), dan air minum + 0,45% sari buah belimbing wuluh (AP-2). Setiap perlakuan diberikan replikasi 5 kali, masing-masing terdiri dari 6 ekor ayam di setiap kandang replikasi. Data yang diamati adalah nilai pH, daya ikat air, susut masak, dan tingkat keempukan. Data yang diperoleh dianalisis statistik menggunakan *Analysis of Variance* pola searah berdasarkan *Completely Randomized Design* berbasis nilai probabilitas kurang dari 5%. Data dengan perbedaan yang nyata diuji lanjut menggunakan *Duncan's new Multiple Range Test*. Hasil analisis statistik menunjukkan bahwa penambahan 0,45% sari buah belimbing wuluh dalam air minum tidak mempengaruhi nilai pH, daya ikat air, susut masak, dan keempukan daging ayam broiler. Namun demikian, penambahan 100 ppm antibiotik Tetrasiklin meningkatkan kualitas fisik daging ayam broiler ($P < 0,05$). Berdasarkan penelitian ini dapat disimpulkan bahwa penambahan 0,45% sari buah belimbing wuluh dalam air minum tidak mempengaruhi kualitas fisik daging ayam broiler.

Kata kunci: Air minum, Ayam broiler, Belimbing wuluh, Kualitas fisik daging, Sari buah

THE EFFECT OF *Averrhoa bilimbi* FRUIT EXTRACT SUPPLEMENTATION THROUGH DRINKING WATER ON MEAT PHYSICAL QUALITY OF BROILER CHICKENS

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ABSTRACT

This study was conducted to investigate the effect of *Averrhoa bilimbi* fruit extract supplementation through drinking water on meat physical quality of broiler chickens. This study was conducted using 90 male broiler chickens New Lohmann MB-202 that were reared for 35 days. Each broiler chicken in this study received one of three treatments: drinking water without any addition (AP-0; negative control), drinking water + 100 ppm Tetracycline (AP-1; positive control), and drinking water + 0.45% *Averrhoa bilimbi* fruit extract (AP-2). Each treatment in this study was given 5 replications with 6 birds in each replicate cage. The variable observed in this study were: pH value, water holding capacity, cooking loss, and meat tenderness. The data obtained were analyzed statistically using Completely Randomized Design with one way arrangement, based on the value of $P < 0.05$. Data with significant difference were further tested using Duncan's new Multiple Range Test. Results of statistical analysis showed that drinking water supplementation with 0.45% *Averrhoa bilimbi* fruit extract did not affect pH value, water holding capacity, cooking loss, and meat tenderness. However, supplementation of drinking water with 100 ppm Tetracycline increased meat physical quality ($P < 0.05$). Based on this study, it can be concluded that supplementation of drinking water with 0.45% *Averrhoa bilimbi* fruit extract did not influence meat physical quality of broiler chickens.

Keyword: *Averrhoa bilimbi*, Broiler chickens, Drinking water, Fruit extract, Meat physical quality