

**PENGARUH SUPLEMENTASI EKSTRAK DAUN MINDI
(*Melia azedarach* L.) MELALUI AIR MINUM
TERHADAP KUALITAS FISIKO-KIMIA
DAGING AYAM BROILER JANTAN**

Muhammad Alfin
16/394475/PT/07148

INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas fisik dan kimia daging ayam broiler jantan yang mendapatkan air minum dengan suplementasi ekstrak daun mindi (*Melia azedarach* L.; EDM). Penelitian dilakukan menggunakan 120 ekor ayam broiler jantan strain New Lohmann MB-202 Platinum yang dipelihara pada kandang sistem terbuka. Setiap ayam dalam penelitian ini mendapatkan salah satu dari lima perlakuan: air minum tanpa penambahan aditif pakan (kontrol negatif; P0), air minum + 100 ppm antibiotik tetracycline (kontrol positif; P1), air minum + 100 mg/l EDM (P2), air minum + 200 mg/l EDM (P3), dan air minum + 400 mg/l EDM (P4). Setiap perlakuan dalam penelitian ini diberikan replikasi 4 kali dengan 6 ekor ayam di setiap kandang replikasi. Variabel yang diamati pada penelitian ini meliputi: tingkat keempukan daging, derajat keasaman (pH), daya ikat air, susut masak, dan kadar protein. Data yang diperoleh dianalisis statistik menggunakan Completely Randomized Design, dan apabila terdapat perbedaan maka diuji lanjut menggunakan uji Kontras Ortogonal. Indikasi perbedaan yang nyata pada masing-masing perlakuan didasarkan pada nilai probabilitas kurang dari 5 %. Hasil penelitian menunjukkan bahwa suplementasi air minum dengan EDM menurunkan tingkat keempukan daging ($P < 0,05$). Suplementasi EDM tidak mempengaruhi nilai pH, daya ikat air, dan susut masak, namun meningkatkan kadar protein daging ($P < 0,05$) ayam broiler jantan. Dapat disimpulkan bahwa meskipun tidak memberikan nilai positif terhadap kualitas fisik daging, namun penambahan ekstrak daun mindi melalui air minum bermanfaat meningkatkan kadar protein daging.

Kata kunci: Daging ayam broiler jantan, Ekstrak daun mindi, Kandungan protein, Kualitas fisik daging

THE EFFECTS OF MINDI (*Melia azedarach* L.) LEAF EXTRACT SUPPLEMENTATIONS THROUGH DRINKING WATER ON MEAT PHYSICO-CHEMICAL QUALITIES OF MALE BROILER CHICKENS

Muhammad Alfin
16/394475/PT/07148

ABSTRACT

This research was conducted to determine the physical and chemical qualities of broiler chicken meat that received drinking water with mindi (*Melia azedarach* L.) leaf extract (MLE) supplementations. The study was carried out using 120 male New Lohmann MB 202 Platinum broiler chickens that kept in opened system poultry house. Each chicken in this research received one of five treatments: drinking water without any addition (negative control; P0), drinking water + 100 ppm Tetracycline (positive control; P1), drinking water + 100 mg/l of MLE (P2), drinking water + 200 mg/l of MLE (P3), and drinking air + 400 mg/l of MLE (P4). Each treatment in current research was given 4 replications with 6 birds in each replicate cage. The variables observed in this research were: level of meat tenderness, level of acidity (pH), air holding capacity, cooking loss, and protein content. The data obtained were analyzed statistically using Completed Randomized Design, and followed by Orthogonal Contrast Test for data with significant difference. Indication of significancy was based on a probability value of less than 5%. The results showed that drinking water supplementation with MLE reduced meat tenderness ($P < 0.05$). Supplementation with MLE did not affect meat pH, water holding capacity, and cooking loss, but increased meat protein content ($P < 0.05$) of male broiler chickens. It can be concluded that even though it does not give any positive effect to the physical quality of meat, the addition of MLE through drinking water is helpful in increasing the protein content of the meat.

Keyword : Male broiler chickens, Mindi leaf extract, Protein conten, Physical quality of meat