

PENGARUH PENAMBAHAN EKSTRAK KAYU MANIS (*Cinnamomum burmannii*) PADA AIR MINUM TERHADAP PERFORMA PRODUKSI AYAM BROILER

Akhmad Arif Sulthoni
17/413009/PT/07397

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak kayu manis pada air minum terhadap performa produksi ayam broiler. Sebanyak 200 ekor ayam broiler jantan strain Lohmann W99 Grade-A dikelompokkan secara acak dalam 5 perlakuan air minum. Setiap perlakuan terdiri 5 kali ulangan yang masing-masing terdiri dari 8 ekor ayam per ulangan. Pakan yang diberikan berupa pakan formulasi yang disusun berdasarkan kebutuhan nutrisi ayam broiler menurut *National Research Council* (NRC). Perlakuan yang digunakan adalah KN= kontrol negatif, air tanpa penambahan ekstrak kayu manis; AT= kontrol positif, air + antibiotik *tetracycline* 45 mg/L; NK1= air + ekstrak kayu manis 0,025 ml/L; NK2= air + ekstrak kayu manis 0,05 ml/L; dan NK3= air + ekstrak kayu manis 0,1 ml/L. Pakan dan air minum diberikan secara *ad libitum*. Variabel yang diamati dalam penelitian berupa konsumsi pakan, konsumsi minum, bobot badan, pertambahan bobot badan, konversi pakan (FCR), mortalitas, indeks performa, *Income Over Feed Cost* (IOFC). Waktu pemeliharaan selama 28 hari. Data hasil pengamatan diperoleh dengan cara mengamati pengaruh perlakuan terhadap variabel pengamatan. Adanya pengaruh dari perlakuan dianalisis menggunakan analisis variansi dengan Rancangan Acak Lengkap Pola Searah. Data yang berbeda antar perlakuan diuji lanjut menggunakan uji Duncan. Indikasi perbedaan nyata didasarkan pada probabilitas kurang dari 5%. Hasil penelitian menunjukkan bahwa Semua perlakuan dengan penambahan ekstrak kayu manis (NK1, NK2, NK3) serta perlakuan kontrol positif berupa antibiotik (AT) berpengaruh nyata terhadap konsumsi pakan, konsumsi minum, konversi pakan, dan dapat meningkatkan nilai IOFC. Disimpulkan bahwa penambahan ekstrak kayu manis pada air minum pada level terendah pun (0,025 ml/L) memiliki hasil yang sama dengan penambahan antibiotik untuk dapat meningkatkan performa produksi berupa konsumsi pakan, konsumsi minum, konversi pakan, dan bermanfaat meningkatkan nilai IOFC pada proses pemeliharaan ayam broiler.

Kata kunci: Ayam broiler, performa produksi, ekstrak kayu manis.

THE EFFECT OF CINNAMON EXTRACT (*Cinnamomum burmannii*) IN DRINKING WATER ON PRODUCTION PERFORMANCE OF BROILER CHICKEN

Akhmad Arif Sulthoni
17/413009/PT/07397

ABSTRACT

This study aims to determine the effect of adding cinnamon extract to drinking water on the performance of broiler chicken production. A total of 200 male broilers of Lohmann W99 Grade-A strain were grouped randomly into 5 drinking water treatments. Each treatment consisted of 5 replications, each of which consisted of 8 chickens per replication. The feed provided was in the form of a formulated feed based on the nutritional needs of broilers according to the National Research Council (NRC). The treatments used were KN = negative control, water without the addition of cinnamon extract; AT= positive control, water + antibiotic tetracycline 45 mg/L; NK1= water + cinnamon extract 0.025 ml/L; NK2= water + cinnamon extract 0.05 ml/L; and NK3= water + cinnamon extract 0.1 ml/L. Feed and drinking water are provided ad libitum. The variables observed in the study were feed consumption, drinking consumption, body weight, body weight gain, feed conversion (FCR), mortality, performance index, Income Over Feed Cost (IOFC). Maintenance time for 28 days. Observational data were obtained by observing the effect of treatment on the observed variables. The influence of the treatment was analyzed using analysis of variance with a completely randomized design in one-way patterns. Different data between treatments were further tested using Duncan's test. Indication of real difference is based on a probability of less than 5%. It was concluded that the addition of cinnamon extract to drinking water at the lowest level (0.025 ml/L) had the same results as the addition of antibiotics to improve production performance in the form of feed consumption, drinking consumption, feed conversion, and was beneficial in increasing the IOFC value in the process of raising chickens broiler.

Key words: Broiler chicken, performance production, cinnamon extract.