

PENGARUH PENAMBAHAN EKSTRAK KAYU MANIS (*Cinnamomum burmannii*) PADA AIR MINUM TERHADAP BOBOT KARKAS DAN BERAT ORGAN DALAM AYAM BROILER

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak kayu manis (*Cinnamomum burmannii*) pada air minum terhadap produksi karkas dan performa abdominal (berat relatif hati, *gizzard*, dan usus halus) pada ayam broiler. Materi penelitian ini adalah 160 ekor ayam broiler strain Lohmann W99 Grade-A. Penelitian menggunakan rancangan acak lengkap (RAL) dengan 5 perlakuan dan 4 ulangan, masing-masing 8 ekor ayam. Pakan yang diberikan berupa pakan formulasi yang disusun berdasarkan kebutuhan nutrisi ayam pedaging menurut National Research Council (NRC, 1994). Pakan dan air minum diberikan secara *ad libitum*. Perlakuan yang digunakan adalah KN= kontrol negatif, air minum tanpa penambahan ekstrak kayu manis; AT= kontrol positif, air minum + antibiotik tetracycline 45 mg/L; NK1= air minum + ekstrak kayu manis 0,025 ml/L; NK2= air minum + ekstrak kayu manis 0,05 ml/L; dan NK3= air minum + ekstrak kayu manis 0,1 ml/L. Variabel yang diamati dalam penelitian ini berupa berat karkas, persentase berat karkas, dan persentase berat abdominal ayam broiler (hati, *gizzard*, dan usus halus). Data yang diperoleh dianalisis menggunakan ANOVA (Analysis of Variance) dan data yang berbeda antar perlakuan diuji lanjut menggunakan uji Duncan pada taraf probabilitas 5%. Hasil penelitian menunjukkan bahwa semua perlakuan penambahan ekstrak kayu manis (NK 1, NK 2, dan NK 3) dan perlakuan kontrol positif dengan penambahan antibiotik *tetracycline* dapat meningkatkan berat dan persentase karkas. Adapun perlakuan penambahan ekstrak kayu manis (NK 1, NK 2, dan NK 3) dan perlakuan kontrol positif dengan penambahan antibiotik *tetracycline* memberikan hasil tidak berbeda nyata terhadap persentase hati, *gizzard*, *duodenum*, *jejunum*, dan *ileum*. Disimpulkan bahwa penambahan ekstrak kayu manis level terendah (0,025 ml/L) dapat memberikan hasil yang sama dengan penambahan antibiotik *tetracycline* untuk dapat meningkatkan berat dan persentase karkas.

Kata kunci: Ayam broiler, karkas, ekstrak kayu manis, abdominal

THE EFFECT OF CINNAMON EXTRACT (*Cinnamomum burmannii*) ON DRINKING WATER TO CARCASS WEIGHT AND ORGAN WEIGHT IN BROILER CHICKEN

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ABSTRACT

This study aimed to determine the effect of adding cinnamon extract (*Cinnamomum burmannii*) to drinking water on carcass production and abdominal performance (relative weight of liver, gizzard, and small intestine) of broiler chickens. The research material was 160 strain Lohmann W99 Grade-A broiler chickens. The study used a completely randomized design (CRD) using 5 treatments and 4 replications, with 8 chicken in each. The form of feed given was formulated feed based on the nutritional needs of broilers according to the National Research Council (NRC, 1994). Feed and drinking water are provided ad libitum. The treatments were KN = negative control, drinking water without the addition of cinnamon extract; AT= positive control, drinking water + tetracycline antibiotic 45 mg/L; NK1= drinking water + cinnamon extract 0.025 ml/L; NK2= drinking water + cinnamon extract 0.05 ml/L; and NK3= drinking water + cinnamon extract 0.1 ml/L. The variables observed in this study were carcass weight, carcass weight percentage, and broiler abdominal weight percentage (liver, gizzard, and small intestine). The obtained data were analyzed using ANOVA (Analysis of Variance) and different data between treatments were further tested using Duncan's test at a probability level of 5%. The results showed that all treatments with the addition of cinnamon extract (NK 1, NK 2, and NK 3) and positive control treatments with the addition of tetracycline antibiotics can increase on carcass weight and percentage. The treatment with the addition of cinnamon extract (NK 1, NK 2, and NK 3) and the positive control treatment with the addition of tetracycline antibiotics gave no significant difference to the percentages of liver, gizzard, duodenum, jejunum, and ileum. It can be concluded that the addition of the lowest level of cinnamon extract (0.025 ml/L) could give the same results as the addition of tetracycline antibiotics to increase carcass weight and percentage.

Keywords: Broiler chicken, carcass, cinnamon extract, abdominal