

PENGARUH SUPLEMENTASI AIR MINUM DENGAN MINYAK ATSIRI BIJI KETUMBAR (*Coriandrum sativum*) TERHADAP PERFORMA AYAM PEDAGING FASE STARTER

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh suplementasi minyak atsiri biji ketumbar (*Coriandrum sativum*) pada air minum yang digunakan sebagai *feed additive* alami. Variable yang diamati yaitu konsumsi pakan, *feed conversion ratio* (FCR), pertambahan bobot badan, bobot badan akhir, *index performance* dan konsumsi air minum pada ayam pedaging. Pengamatan dilakukan pada ayam fase *starter*, yaitu pada usia 8 sampai 21 hari. Penelitian ini dilakukan dengan melakukan suplementasi pada air minum dengan minyak atsiri biji ketumbar pada ayam pedaging. Penelitian ini menggunakan 180 ekor *day old chick* (DOC) ayam pedaging *strain New Lohman* yang dibagi secara acak dalam 20 kelompok atau pen, masing-masing 9 ekor untuk setiap pen. Setiap ayam akan mendapat perlakuan pakan yang sama dan perlakuan yang dilakukan pada air minum sebagai berikut: air minum tanpa aditif pakan (kontrol negatif; Air), air minum + 25 mg/l antibiotik Tetracycline (kontrol positif; AB), air minum + 25 µl/l minyak atsiri biji ketumbar (BK 1), air minum + 50 µl/l minyak atsiri biji ketumbar (BK 2), atau air minum + 100 µl/l minyak atsiri biji ketumbar (BK 3) dan setiap perlakuan nantinya diberikan replikasi sebanyak 4 kali. Variabel yang nantinya akan diamati pada parameter performa meliputi konsumsi air minum, konsumsi pakan, *feed conversion ratio* (FCR), pertambahan bobot badan harian, bobot badan akhir dan *index performance*. Data yang diperoleh akan dianalisis variansi mengikuti rancangan acak lengkap (RAL) pola searah dan didasarkan pada probabilitas kurang dari 5%. Apabila terdapat perbedaan nyata maka data akan di uji lanjut menggunakan Uji Duncan atau *Duncan's new Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa semua perlakuan dengan suplementasi minyak atsiri biji ketumbar (BK1, BK2, BK3) serta perlakuan kontrol positif berupa antibiotik (AB) dapat mempengaruhi performa ayam pedaging fase *starter*. Disimpulkan bahwa suplementasi minyak atsiri biji ketumbar dapat meningkatkan performa ayam pedaging fase *starter* yang meliputi konsumsi pakan, konsumsi air minum, pertambahan bobot badan, konversi pakan, bobot badan akhir, dan indeks performa.

Kata kunci: ayam pedaging, performa, minyak atsiri, *Coriandrum sativum*, *linalool*

THE EFFECT OF DRINKING WATER SUPPLEMENTATION WITH CORIANDER SEED ESSENTIAL OIL (*Coriandrum Sativum*) ON THE PERFORMANCE OF BROILER CHICKEN STARTER PHASE

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ABSTRACT

This research was conducted to evaluate the effect of coriander (*Coriandrum sativum*) essential oil supplementation in drinking water as a natural feed additive by using feed consumption, feed conversion ratio (FCR), body weight gain, final body weight, performance index and water consumption of broiler chickens as a variable to be observed. Observations were done on broiler chickens on the starter phase, at the age of 8 to 21 days. This research was done by coriander (*Coriandrum sativum*) essential oil supplementing in drinking water of broiler chickens. This research used 180-day-old New Lohman strain chick broiler were randomly divided into 20 groups or pens, 9 chicks per replicated pen. Every chick will receive the same feed treatment and the treatment is carried out on drinking water as follows: drinking water without feed additives (negative control; Air), drinking water + 25 mg/l of the antibiotic Tetracycline (positive control; AB), drinking water + 25 l/l coriander essential oil (BK 1), drinking water + 50 l/l coriander essential oil (BK 2), or drinking water + 100 l/l coriander essential oil (BK 3) and every treatment was 4 replicated. Variables that will be observed on performance parameters include feed consumption, feed conversion ratio (FCR), daily body weight gain, final body weight, performance index and drinking water consumption. The data obtained will be analyzed for variance following a completely randomized design (CRD) with a unidirectional pattern and based on a probability of less than 5%. If there is a significant difference, the data will be further tested using Duncan's new Multiple Range Test (DMRT). It was concluded that the supplementation of coriander oil can improve the performance from broiler chicken in the form of feed consumption, water consumption, body weight gain, feed conversion ratio, final body weight, and performance index.

Keywords: broiler, performance, coriander oil, *Coriandrum sativum*, *linalool*