

PENAMBAHAN EKSTRAK DAUN SERAI DAN BIJI KAPULAGA MELALUI AIR MINUM DAN PENGARUHNYA TERHADAP KINERJA PERTUMBUHAN AYAM BROILER

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan ekstrak daun serai (EDS) dan ekstrak biji kapulaga (EKL) melalui air minum dan pengaruhnya terhadap kinerja pertumbuhan ayam broiler fase pertumbuhan. Sebanyak 150 ekor *day old chick* ayam broiler jantan strain New Lohmann didistribusikan secara acak ke dalam 5 perlakuan dengan 6 ulangan, dan 5 ekor ayam di setiap kandang replikasi. Seluruh ayam mendapatkan pakan basal yang sama, namun dengan perlakuan penambahan bahan aditif melalui air minum dengan jenis dan kadar yang berbeda. Perlakuan yang diberikan adalah: air minum tanpa suplementasi bahan aditif (T1; kontrol); air minum + 2% EDS (T2); air minum + 2% EKL (T3); air minum + 1% EDS + 1% EKL (T4); serta air minum + 2% EDS + 2% EKL (T5). Perlakuan air minum mulai diberikan setelah ayam berumur 6 hari hingga akhir penelitian. Pada hari ke-21, data konsumsi pakan, bobot akhir, pertambahan bobot badan, efisiensi pakan, dan indeks ayam pedaging dicatat dan dianalisis statistik menggunakan rancangan acak lengkap pola searah. Uji lanjut Duncan's new Multiple Range Test dilakukan pada data dengan perbedaan yang nyata berdasarkan nilai P kurang dari 5%. Hasil analisis menunjukkan bahwa suplementasi EDS dan EKL melalui air minum tidak mempengaruhi kinerja pertumbuhan ayam pedaging umur 21 hari, namun penambahan 2% EKL secara individual (T3) maupun dikombinasi dengan EDS dengan dosis masing-masing 1% meningkatkan konsumsi pakan ($P < 0,05$), dibandingkan suplementasi 2% EDS maupun air minum tanpa suplementasi aditif. Selanjutnya, ayam yang mendapatkan suplementasi 2% EDS memiliki konversi pakan yang lebih rendah dibandingkan perlakuan lainnya ($P < 0,05$). Terdapat indikasi bahwa ekstrak daun sirih dan ekstrak biji kapulaga bermanfaat untuk meningkatkan konversi pakan ayam broiler fase pertumbuhan.

Kata kunci : Ayam broiler, Biji kapulaga, Daun serai, Fase pertumbuhan, Kinerja pertumbuhan.

ADDITION OF LEMONGRASS LEAVES AND CARDAMOM SEED EXTRACTS VIA DRINKING WATER AND THE EFFECT ON GROWTH PERFORMANCE OF BROILER CHICKENS

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ABSTRACT

This research was conducted to investigate the effect of dietary supplementation of lemon grass (EDS) and cardamom (EKL) extracts via drinking water on growth performance of broiler chicken in grower phase. A total number of 150 day-old chick male New Lohmann were distributed randomly into 5 dietary treatments with 6 replicates per treatment and 5 birds in each replicate pen. All birds had the same basal diet, but with different drinking water treatments. The treatments diet were: a control drink without any additive supplementation (T1; control), a drinking water + 2% EDS (T2), a drinking water + 2% EKL (T3), a drinking water 1% EDS + 1% EKL (T4), and a drinking water + 2% EDS + 2% EKL (T5). Drinking water treatments were given from day 6 to 21. On day 21, data of feed intake, final body weight, gain, feed efficiency, and performance index of broiler were collected and statistically analyzed using one-way classification of completely randomized design. The differences between mean per group were separated by Duncan's new Multiple Range of Test, based on the P value of less than 5%. Result showed that addition of EDS and EKL supplementation at different levels did not affect growth performance of 21 days broiler chickens. However, individual supplementation of 2% EKL (T3) or combination of EKL and EDS with the rate of 1% each increased feed intake ($P < 0.05$), compared to supplementation with 2% EDS or only drinking water without additive supplementation. The birds that received 2% EDS supplemented diet had lower feed conversion ratio than that of other treatments ($P < 0.05$). The result might indicate that lemon grass and cardamom seed extract are useful for improving feed conversion ratio of starter phase broiler chicken.

Kata kunci : Broiler chicken, Cardamom seed, Grower phase, Lemon grass, Performance.