

**BIO-EFIKASI ADITIF PAKAN EKSTRAK LABU KUNING DAN SARI
BUAH BELIMBING WULUH UNTUK MENINGKATKAN KINERJA
PERTUMBUHAN AYAM BROILER**

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INTISARI

Penelitian ini bertujuan untuk mengetahui bio-efikasi ekstrak labu kuning dan sari buah belimbing wuluh sebagai aditif pakan alami untuk meningkatkan kinerja pertumbuhan ayam broiler. Penelitian menggunakan 150 anak ayam broiler jantan strain New Lohmann MB-202 yang dipelihara pada kandang sistem terbuka selama 35 hari. Setiap ayam dalam penelitian mendapatkan salah satu dari 5 perlakuan: air minum tanpa suplementasi aditif (NC; kontrol negatif), air minum + 100 ppm antibiotik Tetrasiklin (PC; kontrol positif), air minum + 100 ppm ekstrak labu kuning (NA-1), air minum + 200 ppm ekstrak labu kuning (NA-2), atau air minum + 0,45% sari buah belimbing wuluh (NA-3). Setiap perlakuan direplikasi 5 kali dengan 6 ekor ayam pada setiap kandang replikasi. Variabel data yang diamati meliputi: konsumsi pakan harian, konsumsi air minum harian, pertambahan bobot badan harian, bobot akhir, dan konversi pakan. Seluruh data dianalisis statistik menggunakan Completely Randomized Design kemudian diuji lanjut menggunakan Duncan's new Multiple Range Test. Data hasil penelitian menunjukkan bahwa suplementasi 100-200 ppm ekstrak labu kuning, 0,45% sari buah belimbing wuluh, maupun 100 ppm antibiotik Tetrasiklin dalam air minum meningkatkan konsumsi pakan harian ($P < 0,05$), pertambahan bobot badan harian ($P < 0,05$), bobot akhir ($P < 0,05$), dan menurunkan nilai konversi pakan ($P < 0,05$). Suplementasi 200 ppm ekstrak labu kuning menurunkan konsumsi air minum harian ($P < 0,01$) dan suplementasi 0,45% sari buah belimbing wuluh maupun 100 ppm antibiotik Tetrasiklin meningkatkan konsumsi air minum harian ($P < 0,01$). Berdasarkan hasil penelitian dapat disimpulkan bahwa suplementasi air minum dengan ekstrak labu kuning 100-200 ppm maupun 0,45% sari buah belimbing wuluh meningkatkan kinerja pertumbuhan ayam broiler.

Kata kunci: Aditif pakan, Ayam broiler, Ekstrak labu kuning, Kinerja pertumbuhan, Sari buah belimbing wuluh

BIO-EFFICACY OF NATURAL ADDITIVES PUMPKIN EXTRACT AND BILIMBI FRUIT EXTRACT FOR INCREASING BROILER CHICKEN'S GROWTH PERFORMANCE

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ABSTRACT

Aim of this study was to observe the bio-efficacy of pumpkin extract and bilimbi fruit extract as natural additives for increasing growth performance of broiler chickens. The study used 150 male New Lohmann MB-202 broiler chickens that were raised in opened poultry house for 35 days. Each chicken in current study was given one of the following five treatments: drinking water without additive supplementation (NC; negative control), drinking water + 100 ppm antibiotic Tetracycline (PC; positive control), drinking water + 100 ppm pumpkin extract (NA-1), drinking water + 200 ppm pumpkin extract (NA-2), or drinking water + 0,45% bilimbi fruit extract (NA-3). Each treatment was replicated five times with six chickens in each replicate cage. Daily feed and drinking water consumption, daily body weight gain, final weight, and feed conversion ratio data were observed. All collected data were statistically analyzed using Oneway fashion of Completely Randomized Design then further tested using Duncan's new Multiple Range Test. Results showed that supplementation of 100-200 ppm pumpkin extract, 0,45% bilimbi fruit extract, or 100 ppm antibiotic Tetracycline in drinking water increased daily feed consumption ($P<0,05$), daily body weight gain ($P<0,05$), final weight ($P<0,05$), and decreased feed conversion ratio ($P<0,05$). Supplementation of 200 ppm pumpkin extract reduced daily drinking water consumption ($P<0,01$), and supplementation with 0,45% bilimbi fruit extract and 100 ppm antibiotic Tetracycline increased daily drinking water consumption ($P<0,01$). Based on the results of current study, it can be concluded that supplementations of drinking water with pumpkin extract 100-200 ppm and 0,45% bilimbi fruit extract increased the growth performance of broiler chickens.

Keywords: Bilimbi fruit extract, Broiler chickens, Feed additives, Growth performance, Pumpkin extract