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MINUM TERHADAP KINERJA PERTUMBUHAN AYAM BROILER**
Tsaltsa Khoirunnisa, Prof. Dr. Ir. Zuprizal, DEA., IPU., ASEAN Eng.
Universitas Gadjah Mada, 2026 | Diunduh dari http://etd.repository.ugm.ac.id/

PENGARUH LARUTAN PERAK YANG TEREDUKSI DENGAN EKSTRAK DAUN MENGKUDU (*Morinda citrifolia*) DALAM AIR MINUM TERHADAP KINERJA PERTUMBUHAN AYAM BROILER

Tsaltsa Khoirunnisa
22/493658/PT/09277

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan larutan perak yang tereduksi ekstrak daun mengkudu pada air minum terhadap kinerja pertumbuhan ayam broiler. Penelitian ini menggunakan 200 ekor *day old chick* ayam broiler jantan strain Indian River yang dipelihara selama 35 hari di kandang sistem semi tertutup dengan 5 perlakuan, 4 ulangan dan setiap ulangan terdiri dari 10 ekor ayam. Perlakuan meliputi kontrol negatif tanpa aditif (P-), kontrol positif dengan 45 ppm tetrasiklin (P+), serta larutan perak yang tereduksi ekstrak daun mengkudu pada konsentrasi 6 ppm (P1), 12 ppm (P2), dan 18 ppm (P3). Data variabel yang diambil meliputi konsumsi pakan, pertambahan bobot badan, konversi pakan, dan konsumsi air minum. Data yang diperoleh dianalisis dengan Rancangan Acak Lengkap pola searah dan diuji lanjut dengan Duncan's new Multiple Range Test. Hasil penelitian menunjukkan bahwa perlakuan penambahan larutan perak yang tereduksi ekstrak daun mengkudu tidak memengaruhi konsumsi air minum, namun meningkatkan pertambahan bobot badan ($P<0,01$) dan konsumsi pakan ($P<0,01$), serta menurunkan nilai konversi pakan ($P<0,001$). Berdasarkan hasil tersebut, dapat disimpulkan bahwa penambahan air minum dengan 6 ppm larutan perak yang tereduksi ekstrak daun mengkudu meningkatkan kinerja pertumbuhan, sehingga dapat dijadikan alternatif pengganti *Antibiotic Growth Promotor* yang aman dan efektif.

Kata kunci: Ayam broiler, Daun mengkudu, Kinerja pertumbuhan, Larutan perak

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THE EFFECT OF SILVER SOLUTION REDUCED BY NONI (*Morinda citrifolia*) LEAF EXTRACT IN DRINKING WATER ON THE GROWTH PERFORMANCE OF BROILER CHICKENS

Tsaltsa Khoirunnisa
22/493658/PT/09277

ABSTRACT

This study was aimed to determine the effect of silver solution reduced by noni (*Morinda citrifolia*) leaf extract supplementation in drinking water on the growth performance of broiler chickens. The study used 200 Indian River male day-old broiler chicks that reared for 35 days in a semi-closed house system. A completely randomized design with oneway arrangement was employed, consisting of 5 treatments and 4 replicates, with 10 chickens per replicate. The treatments included a negative control without additives (P-), a positive control with 45 ppm tetracycline (P+), and the silver solution reduced by noni leaf extract at concentrations of 6 ppm (P1), 12 ppm (P2), and 18 ppm (P3). The variables measured were feed consumption, body weight gain, feed conversion ratio, and water consumption. Data were analyzed using completely randomized design with a unidirectional pattern and further tested using Duncan's Multiple Range Test. Results showed that silver solution reduced by noni leaf extract supplementation in drinking water did not affect water consumption. However, supplementation of 6 ppm increased body weight gain ($P< 0,01$) and feed consumption ($P<0,01$), as well as decreased feed conversion ratio ($P<0,001$). Based on these findings, it can be concluded that supplementation of 6 ppm silver solution reduced by noni leaf extract in drinking water improved growth performance, making it a safe and effective alternative to antibiotic growth promoters in broiler chickens.

Keywords: Broiler chicken, Growth performance, Noni leaf, Silver solution