

PENGARUH SUPLEMENTASI NANOSIZE MINERAL ZINC TERHADAP KINERJA PERTUMBUHAN AYAM KAMPUNG UNGGUL BALITBANGTAN (KUB)

Fitriani Nur Khasanah
18/424557/PT/07609

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh suplementasi nanosize mineral zinc (n-Zn) terhadap kinerja pertumbuhan ayam KUB yang ditinjau dari pertambahan bobot badan, bobot panen, dan nilai konversi pakan. Penelitian ini dilakukan menggunakan 200 ekor ayam KUB umur satu hari. Setiap ayam akan mendapatkan salah satu dari lima perlakuan pakan: pakan basal tanpa penambahan n-Zn (P0; kontrol), pakan basal + 15 mg/kg n-Zn (P1), pakan basal + 30 mg/kg n-Zn (P2), pakan basal + 45 mg/kg n-Zn (P3), atau pakan basal + 60 mg/kg n-Zn (P5). Setiap perlakuan pakan diberikan replikasi 4 kali, masing-masing terdiri dari 10 ekor ayam di setiap kandang replikasi. Variabel yang diamati adalah pertambahan bobot badan per minggu, bobot panen, konsumsi pakan, dan nilai konversi pakan. Data yang diperoleh dianalisis statistik menggunakan Rancangan Acak Lengkap Pola Searah. Data yang berbeda nyata diuji lanjut menggunakan Duncan's new Multiple Range Test. Hasil penelitian menunjukkan bahwa suplementasi n-Zn sebanyak 45-60 mg/kg meningkatkan pertambahan bobot badan ($P < 0,001$) dan menurunkan nilai konversi pakan ($P < 0,05$). Suplementasi n-Zn sebanyak 60 mg/kg meningkatkan konsumsi pakan ayam KUB ($P < 0,05$). Dapat disimpulkan bahwa suplementasi n-Zn sebanyak 45-60 mg/kg bermanfaat meningkatkan kinerja pertumbuhan ayam kampung unggul Balitbangtan.

Kata kunci: Ayam KUB, Kinerja pertumbuhan, Nanosize mineral zinc, Suplementasi pakan

THE EFFECT OF NANOSIZE MINERAL ZINC SUPPLEMENTATION ON GROWTH PERFORMANCE OF KAMPUNG UNGGUL BALITBANGTAN (KUB) CHICKEN

Fitriani Nur Khasanah
18/424557/PT/07609

ABSTRACT

This research was aimed to determine the effect of nanosize zinc (n-Zn) supplementation on the growth performance of KUB chickens using body weight gain, harvest weight, and feed conversion ratio as response criterion observed. This research was conducted using 200 KUB day old chicks. Each chicken was given one of the following dietary treatments: basal diet without any addition (P0; control), basal diet + 15 mg/kg n-Zn (P1), basal diet + 30 mg/kg n-Zn (P2), basal diet + 45 mg/kg n-Zn (P3), or basal diet + 60 mg/kg n-Zn (P5). Each dietary treatment was replicated 4 times, with 10 birds in each replication cage. The variables observed in current study were weekly body weight gain, final weight, feed consumption, and feed conversion ratio. The data obtained were statistically analyzed using completely randomized design with one-way arrangement. Significantly different data were further tested using Duncan's new Multiple Range Test. Results showed that 60 mg/kg n-Zn supplementation could increase feed consumption ($P < 0.05$), 30-60 mg/kg n-Zn supplementation could increase body weight gain ($P < 0.05$), and n-Zn supplementation as much as 45-60 mg/kg can reduce feed conversion ratio ($p < 0.05$). Dietary 60 mg/kg nano-Zinc supplementation improved growth performance of KUB chickens.

Keywords: Dietary supplementation, Growth performance, KUB chicken, Nanosize mineral zinc