

KINERJA PERTUMBUHAN DAN EFISIENSI NUTRIEN-ENERGI AYAM KAMPUNG YANG MENDAPAT PAKAN TUNGGAL DEDAK HALUS DENGAN PENAMBAHAN ASAM AMINO KRITIS

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh penambahan asam amino kritis (AAK) dalam pakan tunggal dedak halus terhadap efisiensi nutrisi-energi dan kinerja pertumbuhan ayam kampung umur 12 minggu. Pakan tunggal yang digunakan adalah dedak halus dengan perlakuan penambahan AAK metionin, lisin, dan treonin dengan level yang berbeda. Sembilan puluh ekor ayam kampung umur satu hari dibagi dalam tiga kelompok perlakuan, yaitu: pakan dedak halus tanpa penambahan AAK (P0); pakan bekatul + AAK sesuai kebutuhan (P1); pakan bekatul + AAK 1,5 kali kebutuhan (P2). Setiap kelompok perlakuan diberikan replikasi 3 kali, masing-masing dengan 10 ekor ayam. Data yang dikumpulkan dari penelitian ini adalah kinerja pertumbuhan dan efisiensi nutrisi-energi. Data dianalisis variansi menggunakan Rancangan Acak Lengkap Pola Searah. Hasil penelitian menunjukkan bahwa penambahan AAK pada pakan tunggal dedak halus meningkatkan ($P < 0,05$) kinerja pertumbuhan ayam kampung. Konsumsi pakan ayam kampung dengan perlakuan P0, P1, dan P2 secara berturut-turut yaitu 2923,90 g; 2667,80 g; dan 2829,20 g. Pertambahan bobot badan ayam kampung dengan perlakuan P0, P1, dan P2 secara berturut-turut yaitu 289,05 g; 383,51 g; dan 539,36 g. Nilai konversi pakan perlakuan P0, P1, dan P2 secara berturut-turut yaitu 10,13; 6,96; dan 5,25. Penambahan AAK pada pakan tunggal dedak halus juga meningkatkan ($P < 0,05$) rasio efisiensi penggunaan protein dan energi. Rasio efisiensi protein pada perlakuan P0, P1, dan P2 secara berturut-turut yaitu 1,24; 1,83, dan 2,47. Rasio efisiensi energy pada perlakuan P0, P1, dan P2 secara berturut-turut yaitu 4,04; 5,93; dan 7,91. Dapat disimpulkan bahwa penambahan asam amino kritis sebanyak 1,5 kali kebutuhan pada pakan tunggal dedak halus meningkatkan kinerja pertumbuhan dan efisiensi penggunaan protein-energi pakan ayam kampung umur 12 minggu.

Kata kunci: Ayam kampung, Dedak halus, Asam amino kritis, Kinerja pertumbuhan, Efisiensi pakan,

GROWTH PERFORMANCE AND NUTRIENT-ENERGY EFFICIENCY OF NATIVE CHICKEN FED RICEBRAN SINGLE DIETS SUPPLEMENTED WITH CRITICAL AMINO ACIDS

ABSTRACT

This study was designed to determine the effects of dietary critical amino acids (*methionine*, *lysine*, and *threonine*) supplementation on ricebran single diets on nutrient-energy efficiency and growth performance of 12 weeks native chicken. Ninety day old native chickens were divided into three groups, which were: a pure ricebran single diet without critical amino acid (AAK) supplementation (P0; control), ricebran diets supplemented with AAK, equivalent to the native chicken requirement (P1), and ricebran diets supplemented with AAK, equivalent to 1.5 times native chicken requirement. Each treatment consisted of three replications with 10 birds each. Variables which observed in current study were nutrient-energy efficiency and growth performance. The data were statistically analyzed using One Way ANOVA applying Completely Randomized Design. The results showed that AAK supplementation in ricebran single diets were increased feed intake ($P < 0.05$), body weight gain ($P < 0.05$), and reduced value of FCR ($P < 0.01$). The result of the treatment of P0, P1 and P2 for feed intake sequentially was 2923.90 g, 2667.80 g, and 2829.20 g. The result of the treatment of P0, P1 and P2 for body weight gain sequentially was 289.05 g, 383.51 g, and 539.36 g. The result of the treatment of P0, P1 and P2 for feed conversion ratio sequentially was 10.13, 6.96, and 5.25. Supplementing ricebrand single diet with AAK equal to the requirement did not affect protein and energy consumption, but increased ($P < 0.05$) the protein and energy efficiency ratio. The protein efficiency ratio from P0, P1, dan P2 sequentially was 1.24, 1.83, and 2.47. The energy efficiency ratio from P0, P1, and P2 sequentially was 4.04, 5.93, and 7.91. It can be concluded that addition of critical amino acids up to 1.5 times of the requirement improved growth performance and nutrient-energy efficiency ratio of 12 weeks native chicken.

Key words: Native chickens, Ricebran, Critical amino acids, Growth performance, Protein-energy efficiency