

## **PENGARUH LEVEL PROTEIN DENGAN KOREKSI ASAM AMINO ESENSIAL DALAM PAKAN TERHADAP PENAMPILAN, PRODUKSI KARKAS DAN NITROGEN EKSKRETA AYAM KAMPUNG**

Harimurti Februari Trisiwi

### **INTISARI**

Penelitian ini bertujuan untuk mengetahui pengaruh penurunan level protein dengan koreksi asam amino lisin, metionin dan treonin terhadap penampilan, produksi karkas, dan nitrogen ekskreta ayam kampung. Ayam kampung umur sehari *unsexed* sebanyak 100 ekor dibagi secara acak menjadi 4 kelompok perlakuan, setiap perlakuan terdiri dari 5 ulangan dan setiap ulangan terdiri dari 5 ekor. Ayam dipelihara sampai umur 10 minggu dengan mendapat 4 perlakuan pakan yaitu protein kasar (PK) masing-masing 18% (P1), 16% (P2) 14%, (P3), dan 12% (P4), keempat pakan perlakuan isoenergi (2600 kcal/kg) dengan level lisin 0,98% metionin 0,36% dan treonin 0,69%. Pakan dan air minum diberikan secara *ad libitum*. Sampel daging dada (*Pectoralis supecialis*) diambil untuk uji kualitas fisik dan kadar lemak daging. Kualitas fisik yang diamati meliputi pH, daya ikat air (DIA), susut masak, dan keempukan. Ekskreta pada tiga hari terakhir diambil untuk mengetahui kandungan N ekskreta. Data yang diperoleh dianalisis dengan analisis variansi rancangan acak lengkap pola searah, dan perbedaan rerata perlakuan diuji dengan *Duncan's Multiple Range Test* (DMRT). Hasil analisis statistik menunjukkan bahwa penurunan level protein dari 18 menjadi 16% dengan koreksi asam amino lisin, metionin, dan treonin dapat mempertahankan penampilan ayam kampung umur 10 minggu, demikian pula persentase karkas dan kualitas karkas sedangkan kadar lemak daging tertinggi dan nitrogen ekstrata terendah pada level CP 12%.

Kata kunci : Ayam kampung, Protein, Asam amino esensial, Lisin, Metionin, Treonin, Penampilan, Kualitas karkas, Lemak daging, Nitrogen ekskreta

## **EFFECT OF THE PROTEIN LEVEL BY ESSENTIAL AMINO ACID CORRECTION ON PERFORMANCE, CARCASS PRODUCTION, AND NITROGEN EXCRETA OF NATIVE CHICKEN**

Harimurti Febuari Trisiwi

### **ABSTRACT**

The study was conducted to know the effect of protein level by essential amino acid correction (lysine, methionine, and threonine) on performance, carcass production, and nitrogen excreta of native chicken. One hundred unsexed day old native chicken were randomly divided into 4 groups of treatment in 5 replications and consisted of 5 birds each. The native chicken were kept up to 10 weeks old receiving 4 ration treatments *i.e.* crude protein levels of 18% (P1) 16% (P2), 14% (P3), and 12% (P4), 4 ration treatments were isoenergy (2600 kcal/kg) with level of lysine 0.98%, methionine 0.36%, and threonine 0.69%. Ration and drinking water were offered *ad libitum*. The meat samples were taken from breast for physical characteristic and fatness. Those of the physical properties were pH, water holding capacity (WHC), cooking loss, and tenderness. The collected data were analysed by a one way classification of variance analysis (CRD), followed by testing the significant means by Duncan's Multiple Range Test (DMRT). The results of the experiment showed that lowering protein levels from 18 down to 16 % by lysine, methionine, and threonine correction maintained native chicken performance, so were the carcass percentage and carcass quality. Highest fat meat percentage and lowest nitrogen excreta were observed at 12% crude protein ration.

Key words : Native chicken, Protein, Essential amino acid, Lysine, Methionine, Threonine, Performance, Carcass quality, Meat fat, Nitrogen excreta.