

ABSTRACT

AHMAD FAIZ FARQOLITH. A.1610715. Difference in Energy and Protein Balance in Quail Nutrient Digestibility. Mentored by Deden Sudrajat and Dewi Wahyuni.

This research were aimed to study the effects of difference in energy and protein balance in quail. The research was carried out for 40 days, starting in March - April 2020, in the poultry laboratory of the Animal Husbandry Program at the Faculty of Agriculture, University of Djuanda, Bogor and the analysis test was conducted at the Laboratory of Animal Husbandry Research Institute, Ciawi. The quail used in this study were quails originating from Slamet Quail Farm as many as 96 quails aged 40 days. The feed ingredients used in this study as basic rations are yellow corn, fine bran, soybean meal, fish meal, premix, CPO, DCP and CaCO₃. The design used in this study is Completely Randomized Design consisting 4 treatments and 4 replications with 6 quails each cage unit. The data were analyzed using Analysis of variance (ANOVA) if the data showed significantly different results ($P < 0.05$), it will followed by Duncan's test. The variables observed in the study were digestibility of dry matter, crude fiber, crude fat, ash, extract material without nitrogen and nitrogen retention. The conclusion of the study showed that the difference in energy and protein balance in quail did not have a significant effects on the digestibility of dry matter and nitrogen retention, whereas the difference in energy and protein balance in quail had a gave significant effects on the digestibility of crude fiber, crude fat, ash and extract without nitrogen.

Keywords: *Energy Balance, Protein, Quail, Digestion, Nitrogen Retention.*



ABSTRAK

AHMAD FAIZ FARQOLITH. A.1610715. Pengaruh Perbedaan Imbangan Energi dan Protein Ransum Terhadap Kecernaan Nutrien Puyuh. Dibimbing oleh Deden Sudrajat dan Dewi Wahyuni.

Penelitian ini bertujuan untuk mempelajari pengaruh perbedaan imbangan energi dan protein pada ransum puyuh terhadap kecernaan nutrien. Penelitian dilaksanakan selama 40 hari, mulai pada bulan Maret - April 2020, di kandang unggas Program Studi Peternakan Fakultas Pertanian Universitas Djuanda Bogor. Ternak yang digunakan dalam penelitian ini adalah puyuh yang berasal dari Slamet Quail Farm sebanyak 96 ekor berjenis kelamin betina umur 40 hari. Bahan pakan yang digunakan pada penelitian ini sebagai ransum dasar yaitu jagung kuning, dedak halus, bungkil kedelai, tepung ikan, premix, *Crude Palm Oil* (CPO), Dikalsium Phospat (DCP) dan Kapur Kalsium Karbonat (CaCO_3). Rancangan yang digunakan pada penelitian ini menggunakan Rancangan Acak Lengkap (RAL) terdiri atas 4 perlakuan dan 4 ulangan dengan 6 ekor burung puyuh setiap unit kandang. Data yang diperoleh dianalisis menggunakan *Analisis of variance* (ANOVA) bila data menunjukkan hasil berbeda nyata ($P < 0,05$) dilanjutkan dengan uji *Duncan*. Data hasil KCBK, KCABU dan retensi N menunjukkan hasil yang tidak berbeda nyata ($P > 0,05$). Data hasil KCSK, KCLK dan kecernaan BETN dengan superskrip huruf yang tidak sama dalam kolom menunjukkan beda nyata ($P < 0,05$). Kesimpulan dari penelitian menunjukkan perbedaan imbangan energi dan protein pada ransum puyuh tidak memberikan pengaruh nyata terhadap kecernaan bahan kering dan retensi nitrogen, sedangkan perbedaan imbangan energi dan protein pada ransum puyuh memberikan pengaruh nyata terhadap kecernaan serat kasar, lemak kasar, abu, dan bahan ekstrak tanpa nitrogen.

Kata Kunci : *Imbangan Energi, Protein, Puyuh, Kecernaan, Retensi Nitrogen.*

