

PENGARUH PEMBERIAN LEVEL PROTEIN BERBEDA PADA RANSUM TERHADAP KUALITAS TELUR ITIK PENGGING UMUR 32 MINGGU

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INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh level protein pada ransum terhadap kualitas telur itik Pengging umur 32 minggu. Penelitian dilaksanakan di Agri *Farm* milik Bapak Gotot Muhatari yang berlokasi di Klaten, Jawa Tengah. Sebanyak 60 ekor itik Pengging (umur 20 minggu) dalam kandang baterai individual, dibagi menjadi 3 kelompok dengan 5 replikasi, setiap replikasi terdiri atas 4 ekor itik dan ditempatkan secara acak. Perlakuan ransum terdiri dari 3 jenis: perlakuan 1 (P1) 18% protein dengan ransum 150 g/ekor/hari, perlakuan 2 (P2) 20% protein dengan ransum 135 g/ekor/hari, dan perlakuan 3 (P3) 22% protein dengan ransum 123 g/ekor/hari. *Intake* protein yang diperhitungkan sama untuk semua perlakuan yaitu 27 g/ekor/hari. Data yang dikumpulkan pada minggu ke-32 berupa berat telur, berat jenis telur, indeks telur, berat kerabang, ketebalan kerabang, kekuatan kerabang, indeks *yolk*, indeks *albumen*, warna *yolk*, nilai *Haugh Unit* (HU), dan berat *yolk*. Data yang diperoleh dianalisis menggunakan analisis variansi RAL pola searah dan dilanjutkan dengan *Duncan's new Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa penggunaan level protein sebesar 22% berpengaruh nyata ($P < 0,05$) terhadap warna *yolk*. Perbedaan level protein tidak berpengaruh nyata ($P > 0,05$) terhadap berat telur, berat jenis telur, indeks telur, berat kerabang, ketebalan kerabang, kekuatan kerabang, indeks *albumen*, indeks *yolk*, nilai *Haugh Unit* (HU), dan berat *yolk*. Berdasarkan penelitian ini dapat disimpulkan bahwa pemberian level protein 22% dengan *intake* protein yang sama dapat mempengaruhi warna *yolk*.

Kata kunci: Itik Pengging, Kualitas Telur, Protein, Ransum Itik, Telur Itik

EFFECT OF FEEDING DIFFERENT PROTEIN LEVELS IN THE RATION ON QUALITY PENGGING DUCKS EGG 32-WEEK-OLD

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ABSTRACT

The objective of this study is to ascertain the impact of the protein component of the diet on the quality of eggs produced by 32-week-old Pengging ducks. The study was carried out in Mr. Gotot Muhatari's Agri Farm situated in Klaten, Central Java. 60 Pengging ducks, aged 20 weeks, were housed in separate battery cages. They were divided into 3 groups with 5 replications. Each replication consisted of 4 ducks and the placement was randomized. The ration treatments included three types: treatment 1 (P1) with an 18% protein content and a daily ration of 150 g per head, treatment 2 (P2) with a 20% protein content and a daily ration of 135 g per head, and treatment 3 (P3) with a 22% protein content and a daily diet of 123 g per head. The protein consumption was consistent across all treatments, with an estimated value of 27 grams per head per day. The data acquired during week 32 included measurements of egg weight, egg specific gravity, egg index, shell weight, shell thickness, shell strength, yolk index, albumen index, yolk color, Haugh Unit (HU) value, and yolk weight. The acquired data were analyzed using a unidirectional pattern analysis of variance (ANOVA) followed by Duncan's new Multiple Range Test (DMRT). The findings indicated that the utilization of a protein level of 22% had a noteworthy impact ($P < 0.05$) on the hue of the yolk. The variation in protein content did not have a statistically significant impact ($P > 0.05$) on the following parameters: egg weight, egg specific gravity, egg index, shell weight, shell thickness, shell strength, albumen index, yolk index, Haugh Unit (HU) value, and yolk weight. According to this study, it can be inferred that providing a 22% protein level while maintaining the same protein consumption can influence the color of the yolk.

Key words: Pengging Duck, Egg Quality, Protein, Duck Ration, Duck Egg.