

ABSTRAK

DONI DAMARA TRISWIDIYAN, Penelitian berjudul “Pengaruh Penambahan Probiotik terhadap Kekuatan Kerabang dan Indeks Telur pada Ayam Niaga Petelur Umur 88 Minggu”, bertujuan untuk mengetahui dosis terbaik penambahan probiotik terhadap kekuatan kerabang dan indeks telur pada ayam niaga petelur umur 88 minggu. Materi yang digunakan dalam penelitian ini terdiri dari ayam niaga petelur strain Lohmann 72 ekor umur 88 minggu, telur 180 butir, kandang battery, perlengkapan penunjang kandang. Bahan yang digunakan adalah pakan dan probiotik. Pemberian air minum secara *ad libitum*. Tahapan penelitian meliputi persiapan kandang, preliminari, penambahan probiotik pada pakan, pemeliharaan, dan cuci kandang. Metode penelitian ini dilakukan secara eksperimen menggunakan Rancangan Acak Lengkap (RAL) dengan 3 perlakuan dan 6 ulangan, tiap ulangan terdiri dari 4 ekor unit percobaan. Perlakuan tersebut adalah P_0 (Penambahan probiotik 0 ml/kg pakan), P_1 (Penambahan probiotik 1 ml/kg pakan), P_2 (Penambahan probiotik 2 ml/kg pakan). Perlakuan diberikan selama 5 minggu dengan cara penambahan probiotik ke dalam pakan. Pengujian sampel dilakukan setiap minggu sebanyak 36 butir telur hasil dari seleksi dengan bobot yang sama. Pengujian sampel dilakukan dengan menggunakan alat *egg strange* dan jangka sorong. Data yang diperoleh ditabulasikan dalam tabel tabulasi data dilanjutkan dianalisis menggunakan analisis variansi. Hasil rata-rata kekuatan kerabang secara berurutan $P_0 = 0,304 \pm 0,015$; $P_1 = 0,291 \pm 0,039$; $P_2 = 0,285 \pm 0,025$. Hasil rata-rata indeks telur secara berurutan $P_0 = 76,75 \% \pm 0,734$; $P_1 = 76,88 \% \pm 0,984$; $P_2 = 77,59 \% \pm 0,883$. Hasil penelitian menunjukkan bahwa penambahan probiotik ke dalam pakan terhadap kekuatan kerabang dan indeks telur berpengaruh tidak nyata ($P > 0,05$). Kesimpulan penelitian ini adalah penambahan probiotik belum dapat meningkatkan kekuatan kerabang dan mengoptimalkan indeks telur ayam niaga petelur umur 88 minggu.

Kata Kunci : Penambahan Probiotik, Kekuatan Kerabang, Indeks Telur, Ayam Niaga Petelur

ABSTRACT

DONI DAMARA TRISWIDIYAN, Research entitled "Effect of Probiotic Addition on Egg Strength and Egg Index on 88 week Old Laying Commercial Chickens", aims to find out the best dose of probiotic addition to eggshell strength and egg index on 88 week old commercial laying hens. The material used in this study consisted of laying commercial chicken Lohmann 72 strains aged 88 weeks, 180 eggs, battery cages, supporting equipment cages. The ingredients used are feed and probiotics. Provision of drinking water in an ad libitum manner. Stages of research include cage preparation, preliminary, addition of probiotics to feed, maintenance, and washing cages. The research method was carried out experimentally using a Completely Randomized Design (CRD) with 3 treatments and 6 replications, each repetition consisted of 4 chickens as the experimental unit. These treatments are P₀ (Addition of Probiotics 0 ml/kg of feed), P₁ (Addition of Probiotics 1 ml/kg of feed), P₃ (Addition of Probiotics 2 ml/kg of feed). The treatment is given for 5 weeks by adding probiotics to the feed. Sample testing is done every week as many as 36 eggs from the selection with the same weight. Sample testing is done using egg strange and calipers. The data obtained were tabulated in the tabulated data table and then analyzed using variance analysis. The results of the average strength of the shells P₀ = 0.304 ± 0.015; P₁ = 0.291 ± 0.039; P₂ = 0.285 ± 0.025. The average egg index results P₀ = 76.75% ± 0.734; P₁ = 76.88% ± 0.984; P₂ = 77.59% ± 0.883. The results showed that the addition of probiotics into the feed on eggshell strength and egg index had no significant effect (P > 0,05). The conclusion of this study is that the addition of probiotics has not been able to increase the strength of shellfish and optimize the index of 88-week-old commercial laying hens.

Keywords: Probiotic Addition, Shell Strength, Egg Index, Laying Commercial Chickens