

RINGKASAN

AHMAD FAJRUN NAJAH. Penelitian ini berjudul “Pengaruh Penggunaan Berbagai Macam Probiotik Cair terhadap Konsumsi Mineral dan Tebal Kerabang Telur Puyuh (*Coturnix coturnix japonica*)”. Penelitian dilaksanakan dari tanggal 1 September 2018 – 19 November 2018 di Desa Sokaraja Kulon RT 02/12, Kecamatan Sokaraja, Kabupaten Banyumas, Laboratorium Ilmu Nutrisi Ternak dan Laboratorium Produksi Ternak Unggas Fakultas Peternakan, Universitas Jenderal Soedirman, Purwokerto. Penelitian ini bertujuan untuk mengkaji pengaruh penggunaan berbagai macam probiotik cair terhadap konsumsi mineral dan tebal kerabang telur puyuh yang diaplikasikan melalui air minum. Materi yang digunakan dalam penelitian ini yaitu puyuh petelur betina umur 30 hari yang berjumlah 100 ekor. Pakan yang diberikan adalah ransum dengan PK 22,2% dan Energi 3032,5 kkal. Percobaan dilakukan secara eksperimen dan menggunakan Rancangan Acak Lengkap (RAL). Rancangan terdiri dari 4 perlakuan dan setiap perlakuan diulang sebanyak 5 kali dengan masing-masing ulangan terdiri dari 5 ekor puyuh. Perlakuan terdiri dari P₀ (Air minum tanpa penambahan probiotik cair), P₁ (Air minum dengan penambahan probiotik cair A), P₂ (Air minum dengan penambahan probiotik cair B) dan P₃ (Air minum dengan penambahan probiotik cair C). Hasil analisis variansi menunjukkan bahwa penggunaan berbagai probiotik cair yang diaplikasikan melalui air minum berpengaruh tidak nyata ($P > 0,05$) terhadap konsumsi mineral dan tebal kerabang telur. Rataan konsumsi mineral puyuh yang diperoleh yaitu P₀: 2,35; P₁: 2,28; P₂: 2,38; dan P₃: 2,31 gr/ekor/hari, sedangkan rata-rata hasil pengukuran tebal kerabang yaitu P₀: 0,173; P₁: 0,178; P₂: 0,183; dan P₃: 0,167 mm. Dapat disimpulkan bahwa penggunaan berbagai macam probiotik cair sebanyak 2 ml/liter air minum belum mampu meningkatkan konsumsi mineral dan tebal kerabang telur puyuh.

Kata kunci: *Feed additive*, probiotik cair, konsumsi mineral, tebal kerabang, puyuh

SUMMARY

AHMAD FAJRUN NAJAH. This study has a title "The Effect of Using Liquid Probiotics on Consumption of Minerals and Thickness of Quail Egg Shells (*Coturnix coturnix japonica*)". The research was conducted from September 1st, 2018 – November 19th, 2018 in Sokaraja Kulon RT 02/12, Sokaraja, Banyumas, Animal Nutrition Science Laboratory and Poultry Production Laboratory, Animal Science Faculty, Universitas Jenderal Soedirman, Purwokerto. This study aims to examine the effect of using various of liquid probiotics on mineral consumption and thickness of quail eggshells that are applied through drinking water. The materials used in this study are quail laying 30 day old total 100 heads. Feed given was a ration with CF 22.2% and Energy 3032.5 kcal. Experiments were carried out experimentally and used Completely Randomized Design (CRD). The design consisted of 4 treatments and each treatment was repeated 5 times with each replication consisting of 5 quails. The treatment consisted of P₀ (Drinking water without the addition of liquid probiotics), P₁ (Drinking water with the addition of liquid probiotics A), P₂ (Drinking water with the addition of liquid probiotics B) and P₃ (Drinking water with the addition of liquid probiotic C). The results of the variance analysis showed that the use of various liquid probiotics applied through drinking water had no significant effect ($P > 0.05$) on mineral consumption and thickness of eggshell. The average of mineral consumption obtained are P₀: 2.35; P₁: 2.28; P₂: 2.38; and P₃: 2.31 gr/head/day, while the average thickness of quail eggshell are P₀: 0.173; P₁: 0.178; P₂: 0.183; and P₃: 0.167 mm. It can be concluded that the use of various kinds of liquid probiotics as much as 2 ml/liter of drinking water have not been able to increase mineral consumption and thickness of quail eggshells.

Keywords: Feed additive, liquid probiotics, mineral consumption, thickness of eggshells, quail