

RINGKASAN

Tujuan penelitian ini adalah mengetahui pengaruh penambahan probiotik dan fitobiotik dalam pakan terhadap jumlah eritrosit, kadar hemoglobin dan hematokrit darah itik Tegal. Materi penelitian ini menggunakan 80 ekor itik Tegal betina umur 24 minggu. Pakan basal yang digunakan terdiri atas campuran jagung kuning giling 30%, dedak padi 40%, dan konsentrat itik 30% dengan kandungan nutrisi pakan, PK: 17%, ME: 2900 kcal/kg, Ca: 3,02%, dan P: 1,06%. Tambahan pakan berupa probiotik dan fitobiotik (tepung kunyit dan tepung temulawak). Metode penelitian adalah eksperimen menggunakan Rancangan Acak Lengkap (RAL) dengan 4 perlakuan dan 5 ulangan. Perlakuan yang diujicobakan terdiri atas P0: pakan basal (kontrol), P1: pakan basal + probiotik 2%, P2: pakan basal + tepung kunyit 4%, dan P3: pakan basal + tepung temulawak 4%. Peubah yang diamati adalah jumlah eritrosit, kadar hemoglobin dan hematokrit. Data dianalisis menggunakan analisis variansi dan uji lanjut kontras orthogonal. Hasil penelitian menunjukkan bahwa nilai rata-rata jumlah eritrosit itik Tegal berkisar antara $3,324 \pm 0,446 \times 10^6/\mu l$ sampai $3,698 \pm 0,338 \times 10^6/\mu l$, rata-rata kadar hemoglobin antara $11,10 \pm 0,784 \text{ g/dl}$ sampai $11,64 \pm 0,573 \text{ g/dl}$, dan rata-rata nilai hematokrit antara $35,2 \pm 7,014\%$ sampai $40,8 \pm 6,723\%$. Hasil analisis ragam menunjukkan bahwa penambahan probiotik dan fitobiotik (tepung kunyit dan tepung temulawak) berpengaruh tidak nyata ($P > 0.05$) terhadap jumlah eritrosit, kadar hemoglobin dan hematokrit darah itik Tegal. Berdasarkan hasil penelitian dapat disimpulkan bahwa penambahan probiotik dan fitobiotik berupa tepung kunyit dan tepung temulawak dapat mempertahankan kondisi normal jumlah eritrosit, kadar hemoglobin dan hematokrit darah itik Tegal betina.

Kata kunci: itik, eritrosit, hemoglobin, hematokrit, fitobiotik.

SUMMARY

The purpose of this research was to study the effect of adding probiotic and phytobiotics in the feed to the number of erythrocytes, hemoglobin and hematocrit levels of Tegal duck. The research material used 80 female Tegal ducks age 24 weeks. Basal feed used 30% milled yellow corn, 40% rice bran, and 30% duck concentrates with feed nutrient content, CP: 17%, ME: 2900 kcal/kg, Ca: 3.02%, and P: 1.06%. Feed additives such as probiotics and phytobiotic (turmeric and Javanese turmeric powder). The research method was an experiment used completely randomized design (CRD) with 4 treatments and 5 replications. The treatments were P0: basal feed (control), P1: basal feed + 2% probiotic, P2: basal feed + 4% turmeric powder, and P3: basal feed + 4% Javanese turmeric powder. The variables were the number of erythrocytes, hemoglobin and hematocrit levels. The data were analyzed using variance analysis and orthogonal contrast test. The results showed that the average number of erythrocytes Tegal ducks range from $3.324 \pm 0.446 \times 10^6/\mu l$ to $3.698 \pm 0.338 \times 10^6/\mu l$, the average hemoglobin levels between $11.10 \pm 0.784 \text{ g/dl}$ to $11.64 \pm 0.573 \text{ g/dl}$, and the average hematocrit levels between $35.2 \pm 7.014\%$ to $40.8 \pm 6.723\%$. The results of analysis of variance showed that the addition of probiotics and phytobiotic (turmeric and Javanese turmeric powder) had no effect ($P > 0.05$) on the number of erythrocytes, hemoglobin and hematocrit levels of Tegal duck. It can be concluded that the addition of probiotics and phytobiotic (turmeric and Javanese turmeric powder) could maintain normal conditions the number of erythrocytes, hemoglobin and hematocrit of female Tegal ducks.

Keywords: duck, erythrocytes, hemoglobin, hematocrit, phytobiotic.