

ABSTRAK

RAIS IBNU SALAM. Kadar Kolesterol Total, HDL dan LDL Darah Itik Tegal yang Pakannya Ditambahkan dengan Probiotik dan Fitobiotik. Tujuan penelitian ini adalah mengkaji pengaruh penambahan probiotik dan fitobiotik terhadap kadar kolesterol total, LDL dan HDL darah itik Tegal. Penelitian dilaksanakan pada tanggal 25 November 2016 sampai 29 Desember 2016, di Desa Dukuwaluh, Kecamatan Kembaran, Kabupaten Banyumas. Analisis kolesterol darah dilakukan di Laboratorium Patologi Klinis Fakultas Kedokteran Hewan, Universitas Gajah Mada Yogyakarta.

Metode penelitian adalah eksperimen dengan rancangan yang digunakan adalah Rancangan Acak Lengkap, setiap perlakuan diulang sebanyak 5 kali dan setiap unit percobaan terdapat 4 ekor itik Tegal, perlakuan penambahan *feed additive* terdiri atas : T_0 = itik Tegal diberi pakan basal (kontrol) T_1 = itik Tegal diberi pakan basal + Probiotik 2 %, T_2 = itik Tegal diberi pakan basal + penambahan temulawak 4 % T_3 = itik Tegal diberi pakan basal + penambahan kunyit 4 %. Materi yang digunakan adalah itik Tegal betina umur 20 minggu sebanyak 80 ekor, Pakan basal sebanyak 524 kg, probiotik starbio sebanyak 2,52 kg, tepung kunyit dan temulawak masing-masing sebanyak 5,04 kg, bahan kimia untuk analisa kolesterol, LDL, dan HDL. Alat penelitian yang digunakan adalah kandang percobaan dengan ukuran 1 m x 1 m x 0,8 m (panjang x lebar x tinggi) sebanyak 20 unit yang dilengkapi dengan tempat pakan dan minum. Peralatan yang lain digunakan adalah ember, alat semprot untuk desinfektan, spektrofotometer, seperangkat alat untuk analisis kolesterol, HDL, LDL.

Hasil dari penelitian ini adalah bahwa kadar kolesterol darah berkisar antara 166,7 (T_3) sampai 277,8 (T_0) mg/dl, kadar HDL darah itik berkisar antara 41,8 (T_3) sampai 105,6 (T_1) mg/dl, dan kadar LDL darah itik berkisar antara 116,62 (T_1) sampai 271,73 (T_0) mg/dl. Kesimpulan penelitian menunjukkan bahwa penambahan probiotik dan fitobiotik dalam pakan berpengaruh nyata terhadap kadar kolesterol total, dan LDL darah ($P < 0,05$), dan berpengaruh sangat nyata ($P < 0,01$) terhadap kadar HDL darah, yaitu menaikkan kadar HDL darah. Kesimpulan penelitian yaitu Penambahan probiotik dan fitobiotik dalam pakan memiliki efektifitas yang relatif sama dalam menurunkan kadar kolesterol total, dan LDL darah itik Tegal. Peningkatan kadar HDL darah itik Tegal yang terbaik menggunakan penambahan probiotik dalam pakan yaitu sebesar 34,545%.

Kata kunci : Probiotik, Temulawak, Kunyit, Kolesterol, HDL, LDL, Itik Tegal.

SUMMARY

RAIS IBNU SALAM. Levels of total cholesterol, HDL and LDL blood Tegal ducks which feed added with the probiotic and Fitobiotik. The purpose of this study is to assess the effect of adding probiotics and fitobiotik against total cholesterol, LDL and HDL Tegal duck blood. The research was conducted on 25 November 2016 to 29 December 2016, in the village of Dukuwaluh, District Kembaran, Banyumas. Analysis of blood cholesterol is carried in the Laboratory of Clinical Pathology, Faculty of Veterinary Medicine, University of Gajah Mada.

The research method is experimental design used was completely randomized design, each treatment was repeated 5 times and each experimental unit there are 4 ducks Tegal, treatment of the addition of feed additives consisting of: T0 = duck Tegal fed basal (control) T1 = duck Tegal Probiotics fed basal + 2%, T2 = Tegal ducks fed with the addition of ginger basal + 4% T3 = Tegal ducks were fed basal + 4% addition of turmeric. The material used is Tegal ducks females age 20 weeks as many as 80 species, basal feed as much as 524 kg, probiotic starbio as much as 2.52 kg, turmeric powder and ginger powder respectively of 5.04 kg, chemicals for analysis of cholesterol, LDL, and HDL. Research tools used were experimental cage with a size of 1 m x 1 m x 0.8 m (length x width x height) of 20 units equipped with where food and drink. Other equipment used was a bucket, disinfectant sprays, spectrophotometer, a set of tools for the analysis of cholesterol, HDL, LDL.

The results of this study were that blood cholesterol levels ranged between 166,7 (T3) to 277,8 (T0) mg/dl, blood duck HDL levels ranged between 41,8 (T3) to 105,6 (T1) mg/dl, And LDL levels of duck blood ranged between 116,62 (T1) to 271,73 (T0) mg/dl. Conclusions The results showed that the addition of probiotics and fitobiotik in the diet can lower total cholesterol, LDL, and increase blood levels of Tegal duck blood HDL. The conclusion The addition of probiotics and phytobiotics in the diet has a relatively similar effectiveness in lowering total cholesterol levels, and LDL of Tegal duck blood, the addition of probiotics in feed that was the best effect to decreased HDL blood level was 34,545%.

Keywords: Probiotics, Temulawak, Turmeric, cholesterol, HDL, LDL, Tegal Ducks.