

ABSTRAK

PENGARUH PEMBERIAN SUPLEMEN BUBUK CANGKANG KERANG DAN BUBUK TULANG BANDENG TERHADAP KADAR HORMON TIROKSIN (T4) AYAM BANGKOK

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Ayam bangkok memerlukan karakteristik tubuh kuat dan performa bagus yang sangat dipengaruhi oleh metabolisme dan pertumbuhannya yang baik. Metabolisme dan pertumbuhan ayam bangkok ini dipengaruhi oleh kadar hormon tiroksin dan asupan nutrisi seperti protein. Bubuk cangkang kerang mengandung Zn, Cu, Fe, dan Selenium yang berperan penting dalam metabolisme, sedangkan bubuk tulang bandeng mengandung protein. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian suplemen bubuk cangkang kerang dan tulang ikan bandeng terhadap kadar hormon tiroksin (T4) dalam serum ayam bangkok yang terdiri dari 6 ekor ayam bangkok jantan umur 3 bulan terbagi menjadi dua kelompok yaitu 3 ekor sebagai kontrol dan 3 ekor diberi perlakuan campuran bubuk cangkang kerang darah 6,6 gram/ekor/hari dan bubuk tulang bandeng 3,3 gram/ekor/hari secara peroral. Pemberian perlakuan diberikan setiap hari selama 35 hari, pengambilan sampel darah dilakukan pada hari ke-7, 14, 21, 28, dan 35. Sampel darah disentrifuse untuk mendapatkan serum, selanjutnya dilakukan uji kadar hormon T4 menggunakan metode ELISA. Hasil penelitian menunjukkan rata-rata kadar T4 pada kelompok kontrol mengalami penurunan sebesar $0,77 \pm 1,36 \mu\text{g/dL}$ sedangkan pada kelompok perlakuan kadar hormon tiroksin (T4) mengalami peningkatan sebesar $0,29 \pm 0,9 \mu\text{g/dL}$ setelah diberikan perlakuan selama 35 hari. Analisis statistik menunjukkan pemberian bubuk cangkang dan tulang bandeng dapat meningkatkan kadar hormon T4 namun tidak berbeda signifikan ($p > 0,05$). Berdasarkan hasil penelitian dapat disimpulkan bahwa pemberian kombinasi bubuk cangkang kerang darah sebanyak 6,6 gram/ekor/hari dan bubuk tulang ikan bandeng sebanyak 3,3 gram/ekor/hari dapat meningkatkan kadar hormon tiroksin (T4) pada ayam bangkok jantan namun tidak signifikan.

Kata kunci: Ayam bangkok jantan, ELISA, metabolisme, protein, Zn

ABSTRACT

THE EFFECT OF GIVING SUPPLEMENT OF BLOOD CLAMSHELL POWDER AND MILKFISH BONE POWDER TO THYROXINE (T4) LEVELS IN BANGKOK CHICKENS

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Bangkok chickens require strong body characteristics and good performance which are greatly influenced by their good metabolism and growth. The metabolism and growth of bangkok chickens are influenced by levels of the hormone thyroxine and intake of nutrients such as protein. Clam shell powder contains Zn, Cu, Fe, and Selenium which play an important role in metabolism, while milkfish bone powder contains protein. This study aims to determine the effect of giving supplementation of shellfish shell powder and milkfish bones on levels of the hormone thyroxine (T4) in the serum of Bangkok chickens consisting of 6 male Bangkok chickens aged 3 months divided into two groups, namely 3 as controls and 3 as controls. treatment of a mixture of blood clam shell powder 6.6 grams/head/day and milkfish bone powder 3.3 grams/head/day orally. Treatment was given every day for 35 days, blood samples were taken on days 7, 14, 21, 28, and 35. The blood sample was centrifuged to obtain serum, then a T4 hormone level test was performed using the ELISA method. The results showed that the average T4 level in the control group decreased by $0,77 \pm 1,36 \mu\text{g/dL}$ while in the treatment group the thyroxine hormone (T4) level increased by $0,29 \pm 0,9 \mu\text{g/dL}$ after being given treatment for 35 days. Statistical analysis showed that giving milkfish shell powder and bones increased T4 levels but not significantly different ($p > 0.05$). Based on the results of the study it can be concluded that giving a combination of blood clam shell powder as much as 6,6 grams/head/day and milkfish bone powder as much as 3,3 grams/head/day can increase thyroxine levels (T4) in bangkok rooster chickens but not significantly.

Keywords: ELISA, bangkok rooster, metabolism, protein, Zn