

ABSTRACT

VIAN EKO PRASETYO. A.1910033. Effect of Substitution of Fish Meal with Maggot Meal on the Performance of Merawang Chicken. Supervised by Dede Kardaya and Dewi Wahyuni.

Fish meal is a protein source feed ingredient in poultry rations but the availability of fish meal is still limited. Maggot Black Soldier Fly (BSF) can be utilized as an alternative feed to replace fish meal because it has a protein content from 40-50%. The objective of the study was to examine the effect of substituting fish meal with BSF maggot meal in the ration on the growth performance of merawang chickens. The research was conducted at Papidoka Farm (Caringin-Bogor) from October 2023 – November 2023. This study used 60 merawang chickens on 9 weeks old with an initial body weight of 721.8 ± 68.6 g. The study used a Completely Randomized Design (CRD) with 5 treatments and 4 replicates for each treatment. The test results were analyzed using SPSS 2023 for analyses of variance (ANOVA) and Duncan's test. The treatments were as follows: P0 = 0% maggot meal and 10% fish meal, P1 = 2.5% maggot meal and 7.5% fish meal, P2 = 5% maggot meal and 5% fish meal, P3 = 7.5% maggot meal and 2.5% fish meal, P4 = 10% maggot meal and 0% fish meal. The observed variables were body weight, body weight gain, feed consumption, feed conversion, mortality, feed cost per gain (FC/G), and income over feed cost (IOFC). The results of the analysis of variance showed that the substitution of fish meal with maggot meal in merawang chickens had no significant effect ($P > 0.05$) in body weight, body weight gain, feed consumption, and feed conversion. It was concluded that the substitution of fish meal with maggot meal at the level of 2.5% - 10% could not increased the performance of merawang chickens in body weight, body weight gain, feed consumption, and feed conversion.

Keywords: chicken performance, fish meal, maggot BSF, merawang chicken

ABSTRAK

VIAN EKO PRASETYO. A.1910033. Pengaruh Substitusi Tepung Ikan dengan Tepung Maggot dalam Pakan terhadap Performa Ayam Merawang. Dibimbing oleh Dede Kardaya dan Dewi Wahyuni.

Tepung ikan termasuk bahan pakan sumber protein dalam ransum ternak unggas tetapi ketersediaan tepung ikan masih terbatas. Maggot *Black Soldier Fly* (BSF) dapat dimanfaatkan sebagai pakan alternatif pengganti tepung ikan karena memiliki kandungan protein berkisar 40-50%. Tujuan penelitian adalah mengkaji pengaruh substitusi tepung ikan dengan tepung maggot BSF dalam ransum terhadap performa pertumbuhan ayam merawang. Penelitian dilaksanakan di Papidoka Farm (Caringin-Bogor) selama bulan Oktober 2023 – November 2023. Penelitian ini menggunakan 60 ekor ayam merawang umur 9 minggu dengan bobot badan awal sebesar $721,8 \pm 68,6$ g. Rancangan yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan 5 perlakuan dan 4 ulangan pada masing-masing perlakuan. Hasil uji dianalisis menggunakan program SPSS 2023 untuk ANOVA dan uji duncan. Adapun perlakuan yang diberikan adalah: P0 = 0% tepung maggot + 10% tepung ikan, P1 = 2,5% tepung maggot + 7,5% tepung ikan, P2 = 5% tepung maggot + 5% tepung ikan, P3 = 7,5% tepung maggot + 2,5% tepung ikan, P4 = 10% tepung maggot + 0% tepung ikan. Peubah yang diamati adalah bobot badan, pertambahan bobot badan (PBB), konsumsi pakan, konversi pakan, mortalitas, *feed cost per gain* (FC/G), dan *income over feed cost* (IOFC). Hasil analisis ragam menunjukkan bahwa substitusi tepung ikan dengan tepung maggot pada ayam merawang tidak berpengaruh nyata ($P > 0,05$) pada bobot badan, pertambahan bobot badan, konsumsi pakan, dan konversi pakan. Kesimpulan penelitian ini adalah substitusi tepung ikan dengan tepung maggot dengan taraf 2,5%-10% belum dapat meningkatkan performa ayam merawang pada bobot badan, pertambahan bobot badan, konsumsi pakan, dan konversi pakan.

Kata Kunci : *ayam merawang, maggot BSF, performa ayam, tepung ikan*

