

ABSTRACT

THE EFFECT OF BLACK SOLDIER FLY (BSF) MAGGOT FLOUR SUBSTITUTION IN BASAL RATION ON THE PERFORMANCE OF KAMPUNG UNGGUL BALITNAK(KUB) STARTER PHASE

BY

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The purpose of this study was to determine the effect of substitution maggot black soldier fly (BSF) flour at different levels in the ration on ration consumption, body weight gain, and ration conversion, as well as the dosage to find out the best treatment for giving maggot black soldier fly (BSF) flour to superior native chicken rations from Balitnak (KUB). This research was conducted from 4 February to 4 March 2023 for 4 weeks at the Labuhan Dalam chicken coop, Tanjung Senang, Bandar Lampung. This study used a completely randomized design (CRD), with 4 treatments and 4 replications, each consisting of 6 KUB chickens. The treatment given was the basal ration P0; (control), P1; 95% basal ration with 5% BSF maggot flour substitution, P2; 90% basal ration with 10% BSF maggot flour substitution, P3; 85% basal replications ration with 15% BSF maggot flour substitution. The data obtained was analyzed by using analysis of variance (ANOVA) at the 5% level, if the results of the analysis of variance are significant then it is continued with the least significant difference test (LSD) to get the best performance using maggot. The results showed that the substitution of BSF maggot flour in the basal ration had a very significant effect ($P < 0.01$) on ration consumption, body weight gain (BWG), ration conversion, and income over feed cost (IOFC) of KUB starter phase chickens. Giving a basal ration with BSF maggot flour substitution of 15% (P3) was significant in increasing ration consumption, increasing body weight, and was able to reduce ration conversion but did not give the best IOFC value. The best IOFC value is found in the basal feed treatment (P0), namely without the addition of maggot flour.

Keywords: Black Soldier Fly (BSF) Maggot Flour Substitution, Basal Ration, Performance of Balitnak Superior Kampong Chicken (KUB) StarterPhase.

ABSTRAK

PENGARUH SUBSTITUSI TEPUNG MAGGOT *BLACK SOLDIER FLY* (BSF) PADA RANSUM BASAL TERHADAP PERFORMA AYAM KAMPUNG UNGGUL BALITNAK (KUB) FASE *STARTER*

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Tujuan penelitian ini untuk mengetahui pengaruh dari substitusi terbaik tepung maggot *black soldier fly* (BSF) pada level berbeda dalam ransum terhadap konsumsi ransum, penambahan berat tubuh, dan konversi ransum ayam kampung unggul balitnak (KUB). Penelitian ini dilaksanakan pada 4 Februari --4 Maret 2023 selama 4 minggu bertempat di kandang ayam Labuhan Dalam, Tanjung Senang, Bandar Lampung. Penelitian ini menggunakan metode Rancangan Acak Lengkap (RAL), dengan 4 perlakuan dan 4 ulangan yang masing-masing ulangan terdiri dari 6 ekor ayam KUB. Perlakuan yang di berikan adalah ransum basal sebagai kontrol (P0); ransum basal 95% dengan substitusi tepungmaggot BSF 5% (P1); ransum basal 90% dengan substitusi tepung maggot BSF 10%(P2); ransum basal 85% dengan substitusi tepung maggot BSF 15% (P3). Data yang diperoleh dianalisis dengan *analysis of variance* (ANOVA) pada taraf 5%, apabila hasil analisis ragam nyata maka di lanjutkan dengan uji beda nyata terkecil (BNT) untuk mendapatkan performa penggunaan maggot terbaik. Hasil penelitian menunjukkan bahwa substitusi tepung maggot BSF pada ransum basal berpengaruh sangat nyata ($P < 0,01$) terhadap konsumsi ransum, penambahan berat tubuh (PBT), konversi ransum, dan *income over feed cost* (IOFC) ayam KUB fase *starter*. Pemberian ransum basal dengan substitusi tepung maggot BSF sebesar 15% (P3) signifikan dalam meningkatkan konsumsi ransum, penambahan berat tubuh, dan mampu menurunkan konversi ransum. Namun, tidak memberikan nilai IOFC terbaik. Nilai IOFC terbaik terdapat pada perlakuan ransum basal (P0) yaitu tanpa penambahan tepung maggot.

Kata kunci: Substitusi Tepung Maggot *Black Soldier Fly* (BSF), Ransum Basal, Performa Ayam Kampung Unggul Balitnak (KUB) *Fase Starter*.