ESTIMASI NILAI RIPITABILITAS PRODUKSI TELUR KETURUNAN F2 HASIL PERSILANGAN AYAM MERAWANG DAN AYAM KAMPUNG UNGGUL BALITBANGTAN (KUB)

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INTISARI

Penelitian bertujuan untuk estimasi nilai ripitabilitas produksi telur pada fase puncak umur 29 hingga 32 minggu ayam betina keturunan F2 hasil persilangan ayam Merawang jantan dengan ayam KUB betina, yang dilaksanakan pada bulan Januari hingga Maret 2024 di Semanu, Gunung Kidul, Yogyakarta. Variabel yang diamati yaitu produksi telur dengan metode observasi pada 4 pola persilangan ayam lokal yang berbeda yaitu persilangan ayam Merawang Sembawa dan KUB Jatinom (A), persilangan ayam Merawang Bangka dan KUB Jatinom (B), persilangan ayam Merawang Sembawa dan KUB Bogor (C), dan persilangan ayam Merawang Bangka dan KUB Bogor (D). Jumlah data ayam yang digunakan berturut-turut 17, 26, 5, dan 26 ekor ayam betina. Pengambilan data produksi telur dilakukan selama 12 minggu. Performa produksi telur dianalisis dengan statistik deskriptif dan analisis variansi satu arah. Nilai ripitabilitas diestimasi dengan metode korelasi dalam kelas dengan analisis variansi Rancangan Acak Lengkap (RAL) pola searah. Hasil analisis menunjukkan bahwa pola persilangan berpengaruh nyata ($P<0,05$) terhadap performa produksi fase 2 pra puncak, tetapi tidak menunjukkan perbedaan yang nyata ($P>0,05$) terhadap fase 1 pra produksi dan fase 3 puncak produksi. Performa produksi telur pada pola persilangan A dan B (tetua betina KUB Jatinom) lebih tinggi dari pada pola persilangan C dan D (tetua betina KUB Bogor). Hasil estimasi nilai ripitabilitas produksi telur ayam betina keturunan F2 hasil persilangan ayam Merawang jantan dengan ayam KUB betina berkisar antara 0,15 hingga 0,52. Berdasarkan penelitian yang dilakukan dapat disimpulkan bahwa produksi telur dapat digunakan sebagai kriteria seleksi dikarenakan memiliki nilai ripitabilitas kategori sedang hingga tinggi.

(Kata kunci**:** Ayam Merawang, Ayam KUB, Produksi telur, Ripitabilitas)

REPEATABILITY ESTIMATION OF EGG PRODUCTION OF F2 RESULTED FROM THE CROSSING OF MERAWANG CHICKEN AND KAMPUNG UNGGUL BALITBANGTAN (KUB) CHICKEN

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ABSTRACT

The objective of the study is to determine the repeatability value of egg production at the peak phase (29 to 32 weeks) in female F2 offspring resulting from crossing male Merawang chickens with female KUB chickens. The research was conducted in Semanu, Gunung Kidul, Yogyakarta from January to March 2024. The observed variable is egg production using observational method on 4 different crossbreeding patterns of local chickens, namely the crossbreeding of Merawang Sembawa and KUB Jatinom (A), Merawang Bangka and KUB Jatinom (B), Merawang Sembawa and KUB Bogor (C), and Merawang Bangka and KUB Bogor (D). The dataset consisted of 17, 26, 5, and 26 female chickens. Data on egg production was gathered over a period of 12 weeks. The evaluation of egg production performance was carried out using descriptive statistics and a one-way analysis of variance. The repeatability value was determined using the intraclass correlation approach with one-way Completely Randomized Design (CRD) analysis of variance. The results indicated that the crossing pattern had a statistically significant impact ($P<0.05$) on the performance of pre-peak phase 2 production. However, there was no significant difference ($P>0.05$) seen in the pre-production phase 1 and peak phase 3 production. The egg production performance of cross patterns A and B, which used female parents from KUB Jatinom, was superior to that of cross patterns C and D, which used female parents from KUB Bogor. The estimated repeatability values for egg production in F2 female hens resulting from crossing male Merawang chickens with female KUB chickens varied between 0.15 and 0.52. According to the performed research, it can be inferred that egg production can serve as a selection criterion due to its moderate to high repeatability value.

(Keywords**:** Repeatability, Egg production, Merawang chicken, KUB chicken)