

ESTIMASI NILAI HERITABILITAS BOBOT BADAN DAN UKURAN TUBUH FASE *GROWER* KETURUNAN F2 HASIL PERSILANGAN AYAM MURUNG PANGGANG DAN AYAM KAMPUNG UNGGUL BALITBANGTAN

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INTISARI

Tujuan dari penelitian ini adalah mengetahui performa dan estimasi nilai heritabilitas bobot badan dan ukuran tubuh keturunan F2 hasil persilangan ayam Murung Panggang jantan dengan ayam Kampung Unggul Balitbangtan betina umur 6, 8, dan 10 minggu (*fase grower*). Penelitian dilaksanakan pada bulan November 2023 sampai Januari 2024 di Kecamatan Semanu, Gunungkidul. Materi yang digunakan yaitu 102 data bobot badan dan ukuran tubuh keturunan F2 ayam Murung Panggang dengan KUB Jatinom (pola persilangan A) dan 146 data bobot badan dan ukuran tubuh keturunan F2 ayam Murung Panggang dengan KUB Bogor (pola persilangan B) pada umur 6, 8, dan 10 minggu. Data ukuran tubuh meliputi lebar dada, lingkaran dada, panjang *shank*, dan panjang sayap. Data yang diperoleh dianalisis performanya menggunakan rata-rata, standar deviasi, serta uji *independent sample t-test*. Data selanjutnya diestimasi nilai heritabilitas menggunakan metode saudara tiri sebakap dengan analisis variansi rancangan acak lengkap pola searah. Hasil analisis menunjukkan bahwa pola persilangan yang berbeda berpengaruh nyata ($P < 0,05$) terhadap bobot badan, lebar dada, lingkaran dada, dan panjang sayap, tetapi tidak menunjukkan perbedaan yang nyata ($P > 0,05$) terhadap bobot badan umur 6 minggu dan panjang *shank*. Performa bobot badan dan ukuran tubuh pola persilangan A lebih tinggi dibandingkan pola persilangan B. Hasil estimasi nilai heritabilitas bobot badan dan ukuran tubuh ayam keturunan F2 hasil persilangan ayam Murung Panggang jantan dengan ayam KUB betina berkisar antara 0,11 sampai 0,86. Berdasarkan penelitian tersebut dapat disimpulkan bahwa bobot badan dan ukuran tubuh dapat digunakan sebagai kriteria seleksi karena memiliki nilai heritabilitas sedang hingga tinggi.

Kata kunci: Heritabilitas, Ayam Murung Panggang, Ayam Kampung Unggul Balitbangtan (KUB), Bobot Badan, Ukuran Tubuh

HERITABILITY OF BODY WEIGHT AND SIZE IN THE GROWER PHASE OF F2 OFFSPRING FROM CROSSING BETWEEN MURUNG PANGGANG AND KAMPUNG UNGGUL BALITBANGTAN CHICKEN

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ABSTRACT

This study examines the performance and estimate the heritability values of body weight and size in F2 offspring resulting from the crossbreeding of male Murung Panggang chickens with female Kampung Unggul Balitbangtan chickens at the ages of 6, 8, and 10 weeks (grower phase). The research was conducted from November 2023 to January 2024 at Semanu District, Gunungkidul. The materials used consisted of 102 data points on body weight and body size of F2 offspring of Murung Panggang chickens with KUB Jatinom (crossbreeding pattern A) and 146 data points on body weight and size of F2 offspring of Murung Panggang chickens with KUB Bogor (crossbreeding pattern B) at the ages of 6, 8, and 10 weeks. Body measurements include chest width, chest circumference, shank length, and wing length. The obtained data is analyzed for its performance using a mean, standard deviation, and independent sample t-test. The next step involves estimating the heritability value using the half sib data correlation method and analyzed using Completely Randomized Design (CRD) analysis of variance. The analysis results indicate that different crossing patterns have a significant effect ($P < 0.05$) on body weight, chest width, chest circumference, and wing length but have no significant different ($P > 0.05$) on body weight at 6 weeks of age and shank length. The body weight and size performance of crossbreeding pattern A are higher compared to crossbreeding pattern B. The estimated heritability values for body weight and size of F2 offspring resulting from the crossbreeding of male Murung Panggang chickens with female KUB chickens range from 0,11 to 0,86. Based on the research, it can be concluded that body weight and size can be used to selection criteria due to the heritability of those criterias was moderate to high.

Key Words: Heritability, Murung Panggang Chicken, Kampung Unggul Balitbangtan (KUB) Chicken, Body Weight, Body Size