

## **ESTIMASI NILAI RIPITABILITAS UKURAN TUBUH FASE STARTER F1 HASIL PERSILANGAN AYAM MURUNG PANGGANG DAN AYAM KAMPUNG UNGGUL BALITBANGTAN (KUB)**

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### **INTISARI**

Ripitabilitas menunjukkan kemampuan individu mengulang peformanya pada periode selanjutnya. Penelitian ini bertujuan untuk mengetahui perbandingan performa dan hasil estimasi nilai ripitabilitas ukuran tubuh F1 hasil persilangan ayam Murung Panggang dan ayam KUB pada pola perkawinan yang berbeda. Penelitian dilaksanakan di Gunungkidul. Terdapat dua pola perkawinan yaitu pola A (ayam Murung Panggang jantan dengan ayam KUB Jatinom betina) dan pola B (ayam Murung Panggang jantan dengan ayam KUB Bogor betina). Materi yang digunakan yaitu data ukuran tubuh berupa lebar dada, panjang *shank*, panjang sayap dan lingkaran dada pada ayam F1 hasil persilangan fase *starter* umur 2, 4 dan 6 minggu. Jumlah data pada pola perkawinan A (51) dan pola perkawinan B (84). Analisis performa menggunakan *independent sample t-test*, sedangkan analisis estimasi nilai ripitabilitas menggunakan metode korelasi dalam kelas dengan analisis variansi Rancangan Acak Lengkap (RAL) pola searah. Hasil analisis menunjukkan bahwa pola perkawinan memberikan pengaruh yang nyata pada ukuran tubuh di setiap umur ( $P < 0,05$ ). Performa ukuran tubuh pola perkawinan B lebih tinggi dibandingkan pola perkawinan A ( $P < 0,05$ ). Nilai ripitabilitas pola perkawinan A termasuk kategori sedang sampai tinggi (0,17 - 0,60), selanjutnya pola perkawinan B juga termasuk kategori yang sama yakni sedang sampai tinggi (0,13 - 0,68). Performa dan estimasi nilai ripitabilitas dapat dijadikan dasar atas direkomendasikannya sifat ukuran tubuh umur 2 minggu pada pola perkawinan B.

(Kata kunci: ayam Murung Panggang, ayam KUB, ukuran tubuh, ripitabilitas)

## **REPEATABILITY ESTIMATION OF BODY SIZE OF CHICKEN F1 RESULTS FROM CROSSING BETWEEN MURUNG PANGGANG AND KAMPUNG UNGGUL BALITBANGTAN (KUB) IN *STARTER* PHASE**

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### **ABSTRACT**

The concept of repeatability refers to the capacity of individuals to consistently replicate their performance in subsequent periods. The objective of this study was to assess the performance comparison and estimate the repeatability value of body size in F1 chickens resulting from the crossbreeding of Murung Panggang chicken and KUB chicken under two mating patterns. The study was carried out in the Gunungkidul region. Two mating patterns were observed in this study, referred to as pattern A (involving the Murung Panggang chicken breed with KUB Jatinom) and pattern B (involving the Murung Panggang chicken breed with KUB Bogor). The study utilized body size measurements, specifically breast width, shank length, wing length, and breast girth, obtained from F1 crossed chickens during the starter phase at 2, 4, and 6 weeks of age. The quantity of data pertaining to mating pattern A is 51, while the quantity of data pertaining to mating pattern B is 84. The performance was assessed by the utilization of an independent sample t-test. Additionally, the repeatability value was estimated using the in-class correlation approach, employing analysis of variance within a Completely Randomized Design (CRD). The findings of the analysis indicate that the mating patterns exerted a statistically significant influence on body size at every age ( $P < 0,05$ ). The body size performance of mating pattern B exhibited a statistically significant increase compared to mating pattern A ( $P < 0,05$ ). The repeatability value observed in mating pattern A was categorized as ranging from moderate to high (0,17 – 0,60), whereas in mating pattern B, it was likewise classed as moderate to high (0,13 – 0,68). The performance and estimated repeatability values can serve as a foundation for recommending body size in a 2-week mating pattern B.

(Keyword: Murung Panggang chicken, KUB chicken, body size, repeatability)