

KUALITAS FISIK DAN KIMIA TELUR AYAM LOKAL GENERASI PERTAMA HASIL PERSILANGAN AYAM MERAWANG DAN MURUNG PANGGANG DENGAN AYAM KAMPUNG UNGGUL BALITBANGTAN (KUB)

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INTISARI

Telur ayam lokal merupakan salah satu produk peternakan penyumbang protein hewani. Tujuan penelitian ini adalah untuk mengetahui kualitas dan kimia telur generasi pertama hasil persilangan ayam KUB Bogor dengan Merawang Sembawa (BS 4 - G1), Merawang Bangka (BS 5 - G1) dan Murung Panggang (BS 6 - G1). Pengujian meliputi kualitas eksternal (berat telur, warna kerabang, keutuhan kerabang, kebersihan kerabang, indeks telur dan berat jenis telur), kualitas internal (indeks *yolk*, indeks *albumen*, pH *yolk* dan pH *albumen*, ketebalan kerabang, berat kerabang dan nilai *Haugh Unit*) serta analisis kimia albumen dan *yolk* meliputi abu, air, protein, lemak, dan karbohidrat. Data Hasil Penelitian dianalisis statistik dengan (ANOVA) satu arah dan hasil yang menunjukkan perbedaan signifikan dilanjutkan dengan uji *Duncan's New Multiple Ranges Test* (DMRT). Hasil penelitian menunjukkan bahwa telur ayam (BS 4 – G1, BS 5 - G1 dan BS 6 - G1) memiliki bentuk oval dan mayoritas berwarna *light brown*. Perbedaan ketiga jenis ayam lokal persilangan generasi pertama berpengaruh signifikan ($P < 0,05$) terhadap berat kerabang, pH *albumen*, protein *albumen*, lemak *yolk* dan karbohidrat *yolk*, tetapi persilangan tidak berpengaruh signifikan ($P > 0,05$) terhadap berat telur, berat jenis telur, indeks telur, nilai *haugh unit*, indeks *yolk*, ketebalan kerabang, pH *yolk*, warna *yolk*, abu *albumen*, abu *yolk*, air *albumen*, abu *yolk*, karbohidrat *albumen* dan protein *yolk*. Berdasarkan berat kerabang, protein *albumen* dan kadar lemak *yolk* telur ayam persilangan BS 5 – G1 memiliki kualitas rerata berat kerabang sebesar $6,08 \pm 0,58$ lebih unggul dibandingkan dengan BS 4 – G1 dan BS 6 – G1, persentase protein *albumen* sebesar $10,08 \pm 1,36$ lebih unggul dibanding dengan telur BS 4 – G1 dan persentase lemak *yolk* $16,22 \pm 1,08$ lebih unggul dibanding dengan telur ayam persilangan BS 4 - G1 dan BS 6 – G1.

Kata Kunci : Ayam lokal, Telur Ayam Persilangan, Kualitas Fisik Telur, Komposisi Kimia Telur

PHYSICAL AND CHEMICAL QUALITY OF FIRST-GENERATION LOCAL CHICKEN EGGS FROM CROSSING MERAWANG AND MURUNG PANGGANG CHICKENS WITH KAMPUNG UNGGUL BALITBANGTAN CHICKENS (KUB)

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ABSTRACT

Local chicken eggs are one of the livestock products that contribute to animal protein. The purpose of this study was to determine the quality and chemistry of first generation eggs from crossing Bogor KUB chickens with Merawang Sembawa (BS 4 - G1), Merawang Bangka (BS 5 - G1) and Murung Panggang (BS 6 - G1). Tests included external quality (egg weight, shell color, shell quality, shell cleanliness, egg index and egg specific gravity), internal quality (yolk index, albumen index, yolk pH and albumen pH, shell thickness, shell weight and Haugh Unit value) and chemical analysis of albumen and yolk including ash, water, protein, fat, and carbohydrates. The data were analyzed statistically with one-way ANOVA and the results that showed significant differences were continued with Duncan's New Multiple Ranges Test (DMRT). The results showed that chicken eggs (BS 4 - G1, BS 5 - G1 and BS 6 - G1) had an oval shape and the majority were light brown in color. Differences in the three local chicken breeds of the first generation cross had a significant effect ($P < 0.05$) on shell weight, albumen pH, albumen protein, yolk fat and yolk carbohydrates, but the cross did not have a significant effect ($P > 0.05$) on egg weight, egg specific gravity, egg index, haugh unit value, yolk index, shell thickness, yolk pH, yolk color, albumen ash, yolk ash, albumen water, yolk ash, albumen carbohydrates and yolk protein. Based on the shell weight, albumen protein and yolk fat content, the eggs of BS 5 - G1 crossbred chickens had a shell weight quality of 6.08 ± 0.58 superior to BS 4 - G1 and BS 6 - G1, albumen protein percentage of 10.08 ± 1.36 superior to BS 4 - G1 eggs and yolk fat percentage of 16.22 ± 1.08 superior to the eggs of BS 4 - G1 and BS 6 - G1 crossbred chickens.

Keywords: Local chicken, crossbred chicken eggs, egg physical quality, egg chemical composition