

PENGARUH BERBAGAI METODE PENGAWETAN DAN LAMA PENYIMPANAN TELUR PUYUH TERHADAP KUALITAS FISIK

ABSTRAK

Akhmad Mukhsin (212410030) Pengaruh Berbagai Metode Pengawetan dan Lama Penyimpanan Telur Puyuh Terhadap Kualitas Fisik. Program Studi Peternakan Fakultas Pertanian Universitas Muhammadiyah Purworejo 2026. Pembimbing: Dr. Roisu Eny M, S.Pt. M.P., M.Si. dan Faruq Iskandar, S.Pt., M.Si.

Penelitian ini bertujuan untuk mengetahui pengaruh berbagai metode pengawetan, lama penyimpanan, serta interaksi antara metode pengawetan dan lama penyimpanan terhadap kualitas fisik telur puyuh. Penelitian dilaksanakan di Laboratorium Terpadu Universitas Muhammadiyah Purworejo selama 8 hari. Penelitian menggunakan Rancangan Acak Lengkap (RAL) pola faktorial dengan lima perlakuan metode pengawetan, yaitu kontrol, kapur, minyak goreng, minyak parafin, dan suhu dingin, serta lima lama penyimpanan yaitu hari ke-0, 2, 4, 6, dan 8, dengan lima kali ulangan. Parameter yang diamati meliputi berat telur, indeks telur, indeks putih telur, indeks kuning telur, warna kuning telur, pH putih telur, dan pH kuning telur. Data dianalisis menggunakan Analysis of Variance (ANOVA), dan apabila terdapat perbedaan dilanjutkan dengan Duncan's New Multiple Range Test (DMRT) pada taraf 5%. Hasil penelitian menunjukkan bahwa metode pengawetan berpengaruh sangat nyata terhadap indeks putih telur, indeks kuning telur, warna kuning telur, dan pH putih telur, tetapi tidak berpengaruh nyata terhadap berat telur, indeks telur, dan pH kuning telur. Lama penyimpanan berpengaruh sangat nyata terhadap indeks putih telur dan indeks kuning telur, sedangkan terhadap parameter lainnya tidak menunjukkan pengaruh nyata berdasarkan kesimpulan penelitian. Terdapat interaksi antara metode pengawetan dan lama penyimpanan terhadap indeks putih telur dan indeks kuning telur. Berdasarkan hasil penelitian, perlakuan suhu dingin merupakan metode pengawetan yang paling baik dalam mempertahankan kualitas fisik telur puyuh selama penyimpanan.

Kata kunci: telur puyuh, pengawetan, lama penyimpanan, kapur, minyak goreng, minyak parafin, suhu dingin, kualitas fisik.

THE EFFECT OF VARIOUS PRESERVATION METHODS AND STORAGE DURATIONS ON THE PHYSICAL QUALITY OF QUAIL EGGS

ABSTRACT

Akhmad Mukhsin (212410030) The Effect of Various Preservation Methods and Storage Durations on the Physical Quality of Quail Eggs. Animal Science Study Program, Faculty of Agriculture, Universitas Muhammadiyah Purworejo, 2026. Supervisors: Dr. Roisu Eny M, S.Pt. M.P., M.Si. dan Faruq Iskandar, S.Pt., M.Si.

This study aimed to determine the effects of various preservation methods, storage duration, and the interaction between preservation methods and storage duration on the physical quality of quail eggs. The study was conducted at the Integrated Laboratory of Universitas Muhammadiyah Purworejo over a period of 8 days. The study used a Completely Randomized Design (CRD) with a factorial pattern consisting of five preservation treatments, namely control, lime, cooking oil, paraffin oil, and cold temperature, and five storage durations, namely days 0, 2, 4, 6, and 8, with five replications. The observed parameters included egg weight, egg index, albumen index, yolk index, yolk color, albumen pH, and yolk pH. The data were analyzed using Analysis of Variance (ANOVA), and when significant differences were found, the analysis was continued with Duncan's New Multiple Range Test (DMRT) at the 5% significance level. The results showed that preservation methods had a highly significant effect on the albumen index, yolk index, yolk color, and albumen pH, but had no significant effect on egg weight, egg index, and yolk pH. Storage duration had a highly significant effect on the albumen index and yolk index, while the other parameters showed no significant effect based on the research conclusions. There was an interaction between preservation methods and storage duration on the albumen index and yolk index. Based on the results, cold temperature was the best preservation method for maintaining the physical quality of quail eggs during storage.

Keywords: quail eggs, preservation, storage duration, lime, cooking oil, paraffin oil, cold temperature, physical quality.