

KUALITAS FISIK DAN KIMIA TELUR CAIR PENUH, ALBUMEN DAN YOLK SELAMA PENYIMPANAN PADA SUHU REFRIGERATOR

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INTISARI

Penelitian ini bertujuan untuk mengetahui kualitas fisik yang meliputi nilai pH dan daya buih; serta mengetahui kualitas kimia yang meliputi kadar air, lemak, protein, dan abu telur cair penuh, *albumen*, dan *yolk* pada penyimpanan suhu *refrigerator*. Analisis data menggunakan analisis *Randomized Completely Block Design*, apabila terdapat perbedaan yang nyata dilanjutkan dengan *Duncan's Multiple Range Test*. Hasil penelitian menunjukkan bahwa perbedaan perlakuan telur cair berpengaruh nyata ($P < 0,01$) terhadap nilai pH, daya buih, kadar air, kadar lemak, kadar protein dan kadar abu. Lama penyimpanan berpengaruh nyata ($P < 0,01$) terhadap nilai pH, daya buih, kadar lemak dan kadar protein, tetapi lama penyimpanan berpengaruh tidak nyata terhadap kadar air dan kadar abu. Rerata nilai pH telur cair penuh, *albumen*, dan *yolk* pada penyimpanan hari ke-0, ke-2, ke-4, dan ke-6 adalah 7,65; 8,62; 9,19; 9,87; 7,97; 8,74; 9,11; 9,84; 6,05; 6,29; 6,51; 7,03. Rerata daya buih telur cair penuh, *albumen*, dan *yolk* pada penyimpanan hari ke-0, ke-2, ke-4, dan ke-6 adalah 330%; 310%; 270%; 219%; 423%; 419%; 373%; 358%; 48%; 44%; 39%; 32%. Rerata kadar air telur cair penuh, *albumen*, dan *yolk* pada penyimpanan hari ke-0, ke-2, ke-4, dan ke-6 adalah 73,61%; 73,63%; 73,63%; 73,64%; 87,91%; 87,91%; 87,90%; 87,91%; 48,75%; 48,75%; 48,74%; 48,74%. Rerata kadar lemak telur cair penuh, *albumen*, dan *yolk* pada penyimpanan hari ke-0, ke-2, ke-4, dan ke-6 adalah 11,570%; 9,613%; 8,030%; 5,947%; 0,034%; 0,029%; 0,021%; 0,012%; 33,770%; 31,980%; 29,673%; 25,923%. Rerata kadar protein telur cair penuh, *albumen*, dan *yolk* pada penyimpanan hari ke-0, ke-2, ke-4, dan ke-6 adalah 11,98%; 10,16%; 8,08%; 5,53%; 7,74%; 6,47%; 5,55%; 2,95%; 15,74%; 12,11%; 11,14%; 7,84%. Rerata kadar abu telur cair penuh, *albumen*, dan *yolk* pada penyimpanan hari ke-0, ke-2, ke-4, dan ke-6 adalah 0,81%; 0,81%; 0,81%; 0,82%; 0,50%; 0,50%; 0,52%; 0,53%; 1,01%; 1,01%; 1,02%; 1,02%. Berdasarkan hasil penelitian dapat disimpulkan bahwa penyimpanan telur cair pada suhu *refrigerator* dapat menurunkan kualitas fisik telur cair yang meliputi peningkatan nilai pH dan penurunan daya buih, disamping itu juga dapat menurunkan kualitas kimia telur cair yang meliputi penurunan kadar lemak dan protein. Berdasarkan kualitas fisik dan kimia, telur cair pada suhu *refrigerator* dapat bertahan sampai hari ke-4.

Kata kunci: Telur ayam ras, Penyimpanan *refrigerator*, Kualitas fisik dan kimia telur cair.

THE PHYSICAL AND CHEMICAL QUALITY OF COMPLETE LIQUID EGG, ALBUMEN AND YOLK WHILE STORING IN REFRIGERATOR TEMPERATURE

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ABSTRACT

This research aims to determine the physical quality which includes the Ph degree and foam potency; and to know the chemical quality which includes the water potency, grease, protein, and the ash of full liquid egg, albumen, and yolk in refrigerator storing. The data analysis uses Randomized Completely Block Design, if available the tangible differences and followed by Duncan's Multiple Range test. The test result shows that the differences between the treatments of liquid egg have tangible influence ($P < 0,01$) against pH degree, foam content, water content, grease content, protein content, and ash content. The storage duration has tangible influence ($P < 0,01$) against pH degree, foam content, grease content and protein content, yet storage duration has intangible influence ($P < 0,01$) against water content and ash content. The average of pH degree of complete egg, albumen, and yolk in 0th, 2nd, 4th, and 6th storage days are 7.65; 8.62; 9.19; 9.87; 7.97; 8.74; 9.11; 9.84; 6.05; 6.29; 6.51; 7.03. The average of foam content of complete egg, albumen, and yolk in 0th, 2nd, 4th, and 6th storage days are 330%; 310%; 270%; 219%; 423%; 419%; 373%; 358%; 48%; 44%; 39%; 32%. The average of water content of the complete egg, albumen, and yolk in 0th, 2nd, 4th, and 6th storage days are 73,61%; 73,63%; 73,63%; 73,64%; 87,91%; 87,91%; 87,90%; 87,91%; 48,75%; 48,75%; 48,74%; 48,74%. The average of grease content of the complete egg, albumen, and yolk in 0th, 2nd, 4th, and 6th storage days are 11,570%; 9,613%; 8,030%; 5,947%; 0,034%; 0,029%; 0,021%; 0,012%; 33,770%; 31,980%; 29,673%; 25,923%. The average of protein content of the complete egg, albumen, and yolk in 0th, 2nd, 4th, and 6th storage days are 11,98%; 10,16%; 8,08%; 5,53%; 7,74%; 6,47%; 5,55%; 2,95%; 15,74%; 12,11%; 11,14%; 7,84%. The average of ash content of the complete egg, albumen, and yolk in 0th, 2nd, 4th, and 6th storage days are 0,81%; 0,81%; 0,81%; 0,82%; 0,50%; 0,50%; 0,52%; 0,53%; 1,01%; 1,01%; 1,02%; 1,02%. Based on the research result can be concluded that the storage of liquid egg in refrigerator temperature may reduce the physical quality of the liquid egg which includes the increasing Ph degree and reducing the foam potency. Furthermore, it can also decrease the chemical quality of liquid egg which includes the reducing of grease potency and protein. Based on the physical and chemical quality, the liquid egg in refrigerator temperature is defendable up to the fourth day.

Key words: *Ras* chicken eggs, Refrigerator storage, The physical and Chemical quality of liquid egg.