

ABSTRAK

PENGARUH SUBSTITUSI KCl DAN PENAMBAHAN JAHE MERAH TERHADAP pH, INDEKS *YOLK*, DAN *HARD YOLK RATIO* TELUR ASIN AYAM PADA LAMA PERENDAMAN BERBEDA

Oleh

Rahmat Fauzi

Penelitian ini bertujuan untuk mengetahui pengaruh substitusi Kalium klorida (KCl), penambahan jahe merah, dan lama perendaman terhadap kualitas *yolk* (pH, indeks *yolk*, dan *hard yolk ratio*) telur asin ayam. Penelitian ini menggunakan Rancangan Acak Lengkap (RAL) pola faktorial 3x2 dengan 4 ulangan. Setiap ulangan menggunakan 7 butir telur ayam ras sebagai satuan percobaan, sehingga total telur yang digunakan yaitu 168 butir telur. Faktor pertama adalah formulasi larutan penggaraman P0: larutan garam NaCl 20% (b/v) sebagai kontrol, P1: larutan garam dengan substitusi 20% dari NaCl oleh KCl dan penambahan jahe merah 8% (b/v), serta P2: larutan garam dengan substitusi 20% dari NaCl oleh KCl dan penambahan jahe merah 16% (b/v). Faktor kedua adalah lama perendaman 14 hari dan 28 hari. Peubah yang diamati adalah pH, indeks *yolk*, dan *hard yolk ratio* telur asin ayam. Data yang diperoleh dianalisis menggunakan analisis ragam pada taraf nyata 5% dan apabila terdapat pengaruh yang nyata, maka dilakukan uji lanjut Beda Nyata Terkecil (BNT). Hasil penelitian menunjukkan bahwa, terdapat interaksi yang nyata ($P < 0,05$) antara formulasi larutan penggaraman dan penambahan jahe merah serta lama perendaman terhadap nilai *hard yolk ratio* yang menghasilkan *hard yolk ratio* terbaik pada P0L1 (0%). Kemudian terdapat pengaruh yang nyata ($P < 0,05$) formulasi larutan penggaraman dan penambahan jahe merah terhadap nilai indeks *yolk*. Indeks *yolk* terbaik (0,85) terdapat pada perlakuan P1: larutan garam dengan substitusi 20% dari NaCl oleh KCl dan penambahan jahe merah 8% (b/v). Lama perendaman berpengaruh nyata ($P < 0,05$) terhadap nilai pH *yolk* telur asin ayam. Lama perendaman 14 hari menghasilkan nilai pH *yolk* terbaik (6,17).

Kata kunci: pH *yolk*, indkes *yolk*, *hard yolk ratio*, KCl, jahe merah, lama perendaman.

ABSTRACT

THE EFFECT OF KCL SUBSTITUTION AND RED GINGER ADDITION ON pH, YOLK INDEX, AND HARD YOLK RATIO OF SALTED CHICKEN EGGS AT DIFFERENT SOAKING TIME

By

Rahmat Fauzi

This study aims to determine the effect substitution Potassium chloride (KCl), the addition of red ginger, and soaking time on the yolk quality (pH, yolk index, and hard yolk ratio) of salted chicken eggs. This study used a Completely Randomized Design (CRD) with a 3x2 factorial pattern with 4 replications. Each replication used 7 broiler chicken eggs as an experimental unit, so that the total number of eggs used was 168 eggs. The first factor was the salting solution formulation P0: 20% (w/v) salt NaCl solution as a control, P1: salt solution with 20% substitution of NaCl by KCl and the addition of 8% (w/v) red ginger, and P2: salt solution with 20% substitution of NaCl by KCl and the addition of 16% (w/v) red ginger. The second factor was the soaking time of 14 days and 28 days. The variables observed were pH, yolk index, and hard yolk ratio of salted chicken eggs. The data obtained were analyzed using analysis of variance at a significance level of 5% and if there was a significant effect, a Least Significant Difference (BNT) further test was carried out. The results showed that there was a significant interaction ($P < 0,05$) between the salting solution formulation and the addition of red ginger and the soaking time on the hard yolk ratio value which produced the best hard yolk ratio at P0L1 (0%). Then there was a significant effect ($P < 0,05$) of the salting solution formulation and the addition of red ginger on the yolk index value. The best yolk index (0,85) was found in treatment P1: salt solution with 20% substitution of NaCl by KCl and the addition of 8% red ginger (w/v). The soaking time had a significant effect ($P < 0,05$) on the pH value of salted chicken egg yolk. The soaking time of 14 days produced the best yolk pH value (6,17).

Keywords: pH yolk, yolk index, hard yolk ratio, KCl, red ginger, soaking time.