

ABSTRACT

EFFECT OF SUGAR LEVELS AND TEMPERATURE ON SUGAR CONTENT OF CHICKEN EGGS AFTER SOAKING IN SUGAR SOLUTION

By

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Making sweet chicken eggs using a sugar solution takes 5 days. This study aims to study the effect of the concentration of the sugar solution and the immersion temperature level on the sugar content in broiler eggs after soaking. This study was designed using a Factorial Completely Randomized Design (CRD) consisting of 2 factors, namely the concentration of sugar solution (15%, 20%, and 25%) and temperature (40 °C, 50 °C, 60 °C, and 70 °C) respectively. Based on this research, each treatment was soaked for 120 hours and repeated three times. The results of this study indicate that the concentration and temperature of immersion affect the sugar content and organoleptic content of sweet chicken eggs. The higher the concentration given, the higher the total sugar content produced in sweet chicken eggs and the higher the immersion temperature, the faster the diffusion of sugar into the eggs.

Keywords : *Sweet egg, sugar concentration, temperature, diffusion*

ABSTRAK

PENGARUH KADAR GULA DAN SUHU TERHADAP KANDUNGAN GULA TELUR AYAM RAS SETELAH PERENDAMAN DALAM LARUTAN GULA

Oleh

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Pembuatan telur ayam manis menggunakan larutan gula membutuhkan waktu selama 5 hari. Penelitian ini bertujuan untuk mempelajari pengaruh konsentrasi larutan kadar gula dan tingkat suhu perendaman terhadap kandungan gula didalam telur ayam ras setelah perendaman. Penelitian ini dirancang menggunakan Rancangan Acak Lengkap (RAL) Faktorial yang terdiri dari 2 faktor yaitu konsentrasi larutan gula (15%, 20%, dan 25%) dan suhu (40 °C, 50 °C, 60 °C, dan 70 °C) masing-masing. Berdasarkan penelitian ini masing-masing perlakuan direndam selama 120 jam dan diulang sebanyak tiga kali. Hasil penelitian ini menunjukkan bahwa konsentrasi dan suhu perendaman mempengaruhi kadar gula dan organoleptik telur ayam manis. Semakin tinggi konsentrasi larutan gula yang diberikan maka akan semakin tinggi kadar gula total yang di dalam telur ayam manis dan semakin tinggi suhu perendaman akan mempercepat difusi gula ke dalam telur.

Kata Kunci : Telur manis, konsentrasi gula, suhu, difusi