PENGARUH KONSENTRASI LARUTAN DAUN JAMBU BIJI (*Psidium guajava* L.) DAN LAMA PENYIMPANAN TERHADAP KUALITAS FISIK DAN MIKROBIOLOGI DAGING AYAM

Islamay Haninditya Ningtyas
18/428063/PT/07717

INTISARI

Penelitian ini bertujuan untuk mengetahui pengaruh perbedaan konsentrasi larutan daun jambu biji dan lama penyimpanan daging ayam pada suhu referigerator. Penelitian ini menggunakan metode Rancangan Acak Lengkap (RAL) pola faktorial (4x6). Faktor pertama adalah konsentrasi larutan daun jambu biji (0, 10, 20 dan 30%) dan faktor kedua adalah lama penyimpanan daging ayam (0, 2, 4, 6, 8 dan 10 hari). Variabel yang diamati yaitu nilai pH, daya ikat air, susut masak, keempukan dan nilai TPC (*Total Plate Count)* bakteri daging ayam. Data yang diperoleh dianalisis menggunakan *Analysis of Variance* (ANOVA), apabila terdapat perbedaan yang nyata maka dilanjutkan uji *Duncan Multiple Range Test* (DMRT). Hasil penelitian menunjukkan bahwa perbedaan konsentrasi larutan daun jambu biji tidak berpengaruh (P>0,05) terhadap nilai pH, daya ikat air, susut masak, dan keempukan, namun berbeda nyata (P<0,05) terhadap total bakteri. Lama penyimpanan daging ayam broiler tidak berpengaruh (P>0,05) terhadap nilai pH dan daya ikat air, namun berpengaruh nyata terhadap susut masak, keempukan dan total bakteri. Terdapat interaksi antara perbedaan konsentrasi larutan daun jambu biji dan lama penyimpanan terhadap nilai total bakteri daging ayam broiler. Konsentrasi larutan daun jambu biji 10% memperoleh nilai total bakteri terendah (5,38 log cfu/g). Lama penyimpanan memberikan pengaruh yang signifikan terhadap susut masak, keempukan, dan total bakteri. Interaksi larutan daun jambu biji 10% dan lama penyimpanan hingga 10 hari menunjukkan total bakteri yang tidak berbeda, namun memberikan nilai terendah dibandingkan daging ayam dengan konsentrasi larutan daun jambu biji 20 dan 30%.

Kata kunci: Daging ayam, Pengawetan, Daun jambu biji, Kualitas fisik, Kualitas mikrobiologi

THE EFFECT OF CONCENTRATION GUAVA LEAF SOLUTION (*Psidium guajava* L.) AND LENGTH OF STORAGE ON PHYSICAL AND MICROBIAL QUALITY OF CHICKEN MEAT

Islamay Haninditya Ningtyas
18/428063/PT/07717

ABSTRACT

This study aims to determine the effect of guava leaf extract with different concentration and the length of storage broiler meat on referigerator temperature. This study using immersion method broiler meat into guava leaf solution with different concentration and three times replication each treatments. This study using Complete Randomized Design (CRD) two way (4x6). The first factor is concentration of guava leaf solution (0, 10, 20 and 30%) and the second factor is the length of storage broiler meat (0, 2, 4, 6, 8 and 10 day). The variables measure are pH value, water holding capacity, cooking loss, tenderness and TPC (Total Plate Count) bacteri of chicken meat. The data obtained were analyzed by Analysis of Variance (ANOVA) if there is a significant result were further analyzed using Duncan Multiple Range Test (DMRT). The results showed that differences in the concentration of guava leaf solution had no effect ($P>0.05$) on pH values, water holding capacity, cooking losses and tenderness, but significantly different ($P<0.05$) on total bacteria. Broiler chicken meat storage time had no effect ($P>0.05$) on the pH value and water holding capacity, but had a significant effect on cooking loss, tenderness and total bacteria. There is an interaction between differences in concentration of guava leaf solution and storage time on the total bacterial value of broiler chicken meat. The concentration of 10% guava leaf solution obtained the lowest total bacterial value (5,38 log cfu/g). Storage time has significant effect on cooking loss, tenderness, and total bacteria. The interaction of 10% guava leaf solution and storage time up to 10 days showed no difference in total bacteria, but gave the lowest value compared to chicken meat with 20 and 30% guava leaf solution concentrations.

Keywords: Chicken meat, Preservative, Guava leaf, Physical quality, Microbial quality