

RINGKASAN

TESSI MAHARANI SOKAK. Pengaruh Perendaman Karkas Ayam Broiler pada Air Dingin ($5-10^{\circ}\text{C}$) Terhadap Total Bakteri, pH, dan Kadar Air. Pengambilan data dilaksanakan mulai tanggal 25 Februari sampai dengan 15 Maret 2017 di Laboratorium Mikrobiologi Fakultas Pertanian Universitas Jenderal Soedirman Purwokerto. Tujuan penelitian adalah untuk mengetahui pengaruh tingkat lama perendaman karkas ayam pada air dingin ($5-10^{\circ}\text{C}$) yang optimal terhadap total bakteri, pH, dan kadar air. Materi penelitian yang digunakan terdiri dari daging ayam bagian dada, air dingin $5 - 10^{\circ}\text{C}$, es batu, dan aquades. Peralatan yang digunakan adalah alat tulis, pH meter, oven, cawan, timbangan, blender, gelas ukur, pisau, spatula, stopwatch, cawan petri, tabung reaksi, *colony counter*, *autoclave*, pipet, *waterbath*, inkubator, dan termos es. Metode penelitian secara eksperimen menggunakan Rancangan Acak Lengkap (RAL) dan uji lanjut Beda Nyata Jujur (BNJ) dengan 5 perlakuan dan ulangan sebanyak 4 kali. Sebagai perlakuan yang diberikan adalah P_0 yaitu karkas ayam bagian dada tanpa perendaman air dingin, P_1 yaitu karkas ayam bagian dada yang direndam dengan air dingin ($5-10^{\circ}\text{C}$) selama 3 detik (sesaat), P_2 yaitu karkas ayam bagian dada yang direndam dengan air dingin ($5-10^{\circ}\text{C}$) selama 15 menit, P_3 karkas ayam bagian dada yang direndam dengan air dingin ($5-10^{\circ}\text{C}$) selama 30 menit, dan P_4 yaitu karkas ayam bagian dada yang direndam dengan air dingin ($5-10^{\circ}\text{C}$) selama 45 menit. Hasil penelitian menunjukkan bahwa lama perendaman karkas ayam bagian dada dengan air dingin ($5-10^{\circ}\text{C}$) berpengaruh nyata ($P < 0,1$) terhadap total bakteri serta berpengaruh tidak nyata ($P > 0,05$) terhadap pH dan kadar air. Rataan total bakteri secara berurutan yaitu $7,48 \times 10^5$ cfu/g; $2,37 \times 10^5$ cfu/g; $2,80 \times 10^5$ cfu/g; $3,75 \times 10^5$ cfu/g; $4,15 \times 10^5$ cfu/g, pH secara berurutan yaitu 6,05; 6,05; 6,21; 6,15; 6,05 dan kadar air secara berurutan yaitu 75,68 %; 73,29 %; 76,76 %; 75,44 %; 76,31 %. Kesimpulan, perendaman karkas ayam bagian dada menggunakan air dingin ($5-10^{\circ}\text{C}$) dengan lama perendaman 3 detik (sesaat), 15, 30, dan 45 menit menurunkan total bakteri sedangkan pH dan kadar air relatif sama; lama perendaman yang optimal adalah perendaman 3 detik (sesaat).

SUMMARY

TESSI MAHARANI SOKAK. The effect of Broiler Chicken Carcass immersion in Cold Water (5-10⁰C) Against Total Bacteria, pH, and Water Content. The data was collected from February 25 to March 15, 2017 at the Microbiology Laboratory of the Faculty of Agriculture, Jenderal Soedirman University Purwokerto. The purpose of this research is to find the most optimal duration influence of chicken carcass soaking in cold water (5-10⁰C) which for total bacteria, pH, and water content. The research material used chicken breast, cold water 5 - 10⁰C, ice cubes, and aquades. The equipment used stationery, pH meter, oven, cup, scales, blender, measuring cup, knife, spatula, stopwatch, petri dish, test tube, colony counter, autoclave, pipet, waterbath, incubator, and flask ice. The experimental method used Completely Randomized Design (CRD) and Honesty Significant Difference (HSD) with 5 treatments and 4 replications. As the treatment, P₀ was chicken breast carcass without cold water immersion, P₁ was chicken breast carcass soaked in cold water (5-10⁰C) for 3 second (momentarily), P₂ was chicken breast carcass soaked in cold water (5-10⁰C) for 15 minutes, P₃ was chicken breast carcass soaked in cold water (5-10⁰C) for 30 minutes, and P₄ was chicken breast carcass soaked in cold water (5-10⁰C) for 45 minutes. The results showed that the duration of soaking chicken carcass with cold water (5-10⁰C) was significant (P < 0,1) to total bacteria and not significant (P > 0,05) to pH and water content. The value of total bacteria were 7,48 x 10⁵ cfu /g; 2.37 x 10⁵ cfu /g; 2.80 x 10⁵ cfu /g; 3.75 x 10⁵ cfu /g; 4.15 x 10⁵ cfu /g, the pH values were 6.05; 6.05; 6.21; 6.15; 6.05 and the water content values were 75.68%; 73.29%; 76.76%; 75.44%; 76.31%. In conclusion, the immersion of chicken breast carcass in cold water (5-10⁰C) for 3 seconds (momentarily), 15, 30, and 45 minutes decrease total bacteria while pH and water content are relatively same, then the optimal duration of immersion is 3 seconds (momentarily).