

PENGARUH LEVEL *ELECTRICAL WATERBATH STUNNING* TERHADAP KUALITAS KARKAS DAN DAGING AYAM BROILER

INTISARI

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Penelitian ini bertujuan untuk mengetahui pengaruh level voltase electrical waterbath stunning terhadap kualitas karkas dan daging ayam broiler. Penelitian ini menggunakan 180 ekor ayam broiler dengan bobot badan 2,4-2,6 kg. Perlakuan terdiri atas tanpa pemingsanan (P0), pemingsanan dengan voltase 40 Volt (P1), pemingsanan dengan voltase 50 Volt (P2), pemingsanan dengan voltase 60 Volt (P3). Variabel yang diamati adalah consciousness, durasi wing flapping, durasi bleeding, blood loss, persentase karkas, mutu karkas meliputi konformasi, keutuhan, perubahan warna dan kebersihan karkas serta kualitas daging meliputi pH daging, daya ikat air, susut masak dan keempukan. Data yang diperoleh dianalisis dengan ragam analysis of variance (ANOVA) pola searah. Jika menunjukkan pengaruh nyata antar perlakuan maka dilanjutkan uji Duncan multiple range test. Analisis persentase karkas ditampilkan dalam bentuk deskriptif. Hasil penelitian menunjukkan adanya perbedaan nyata ($P < 0,05$) pada consciousness, durasi wing flapping, durasi bleeding, blood loss. Konformasi karkas menunjukkan skor I pada semua perlakuan skor I berarti tidak ada kelainan pada karkas, keutuhan karkas menunjukkan skor I untuk perlakuan P1, P2 dan P3 yang berarti tidak ada kerusakan pada tulang, kulit maupun daging sedangkan perlakuan P0 menunjukkan skor III yang berarti terdapat cacat pada bagian sayap. perubahan warna karkas menunjukkan skor II yang berarti terdapat memar pada bagian sayap dan keutuhan karkas menunjukkan skor I yang berarti tidak ada bulu tunas yang masih menempel pada karkas. Hasil menunjukkan tidak adanya perbedaan nyata ($P > 0,05$) pada parameter persentase karkas dan pH daging, daya ikat air, susut masak dan keempukan. Pada penelitian ini rerata pH daging 5,88-5,98, daya ikat air 25,39-25,50%, susut masak 25,29-25,51% dan keempukan 2,32-2,44 kg/cm². Kesimpulan dari penelitian ini voltase yang paling baik digunakan adalah 60 Volt, frekuensi 50 Hz, Ampere 0,5 A.

Kata kunci: Pemingsanan, kualitas, karkas, daging, broiler

EFFECT OF ELECTRICAL WATERBATH STUNNING METHOD WITH DIFFERENT VOLTAGE ON CARCASS AND MEAT QUALITY OF BROILER CHICKEN

ABSTRACT

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This study aims to determine the effect of the Electrical waterbath stunning method with different voltages on the carcass and meat quality of broiler chickens. The method used was a completely randomized design with 4 treatments and 3 replications. The treatment consisted of no stunning (P0), stunning with a voltage of 40 volts 5 seconds (P1), stunning with a voltage of 50 volts 5 seconds (P2), stunning with a voltage of 60 volts 5 seconds (P3). In this study, 180 broiler chickens were used with a body weight of 2.4-2.6 kg, with 15 individuals used for each treatment. The variables observed were consciousness, wing flapping duration, bleeding duration, blood loss, carcass percentage, carcass quality including conformation, integrity, color change and carcass cleanliness and meat quality including meat pH, water holding capacity, cooking loss and tenderness. The data obtained were analyzed with one-way pattern analysis of variance (ANOVA). The result shows a significant effect between treatments then continue with the Duncan multiple range test. Carcass percentage analysis was shown in descriptive form. The results showed that there was a significant difference ($P < 0.05$) in the parameters of consciousness, wing flapping duration, bleeding duration, and blood loss. Carcass conformation showed score I in all treatments, score I means there were no abnormalities in the carcass, carcass integrity showed score I for treatments P1, P2 and P3, which means there was no damage to the bones, skin or meat, while treatment P0 showed score III, which meant there were defects. on the wings. Changes in carcass color indicate score II, which means there are bruises on the wings and carcass integrity shows score I, which means there are no feathers still attached to the carcass. The results showed that there were no significant differences ($P > 0.05$) in the parameters of carcass percentage and meat pH, water holding capacity, cooking loss and tenderness. In this study the average pH of meat was 5.88-5.98, water holding capacity 25.39-25.50%, cooking loss 25.29-25.51% and tenderness 2.32-2.44 kg/cm². Conclusion from this research was that the best voltage to use was 60 volts, frequency 50 Hz current 0.5 A.

Keywords: Stunning, quality, carcass, meat, broiler