Pemanfaatan air terozonasi dalam upaya mempertahankan kualitas daging ayam = Application of ozonated water to control the quality of chicken meat

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Abstrak

ABSTRACT
Pemanfaatan air terozonasi dalam upaya mempertahankan kualitas daging ayam telah dievaluasi berdasarkan parameter fisik, kimia, dan mikrobiologisnya. Penelitian ini memiliki tujuan untuk mengevaluasi keefektivan kinerja metode air terozonasi dilihat dari pengaruh waktu kontak ozon dan penggantian air terozonasi. Untuk menjawab tujuan penelitian ini, dilakukan variasi waktu kontak ozon yaitu 40, 80, dan 120 menit dan penggantian air terozonasi yaitu setiap 40 dan 60 menit serta tanpa penggantian. Parameter kelayakan daging ayam yang dievaluasi adalah jumlah bakteri Escherichia coli, total mesofil aerobik TBMA, kadar protein, pH dan kadar air. Pada hari ketujuh penyimpanan pada waktu kontak 120 menit ozon mampu mendisinfeksi bakteri Escherichia coli dan TBMA sebanyak 1.700 dan 9,4 108 CFU/g, sementara pada penggantian air terozonasi setiap 40 menit sebanyak 1.700 dan 1,1 109 CFU/g lebih banyak dari blanko. Sedangkan kadar protein, kadar air, dan pH pada variasi waktu kontak serta penggantian air masing-masing sebesar 17,45 ; 79,85 ; 4,95 dan 15,70 ; 80,61 ; 4,91.
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ABSTRACT
The application of ozonated water to maintain the quality of chicken meat had been evaluated based on its physical, chemical, and microbiological parameters. The objectives of this study were to evaluate the effectiveness of the performance of the ozonated water in terms of the influence of ozone contact time and the replacement of the ozonated water. To acknowleadge the objectives of this study, the variation of ozone contact time were done 40, 80, and 120 minutes and the replacement of ozonated water were done every 40 and 60 minutes and without replacement. The evaluated parameters were Escherichia coli, total mesophylic aerobic TBMA, pH, protein and water content. On the seventh day storage at 120 minutes of ozone contact time, it was able to disinfect Escherichia coli and TBMA as much as 1.700 and 9,4 108 CFU g, while on the replacement water every 40 minutes 1,700 and 1,1 109 CFU g more than blank. While the levels of protein, moisture content, and pH on the variation of contact time and replacement of water respectively of 17,45 ; 79,85 ; 4,95 and 15,70 ; 80,61 ; 4,91.