ASSESSMENT OF MICROBIOLOGICAL CONTAMINATION AND PARASITIC INFESTATION RISK IN PIG CARCASSES

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Abstract

This study investigates and evaluates the microbiological control of pig carcasses in a slaughterhouse located in Vaslui County, Romania, over a two-year period. During the study, 40 samples from pig carcasses were collected, divided into four batches of 10 samples each. The samples were collected every six months for two years. The assessment focused on determining the total number of germs (NTG), the presence of Enterobacteriaceae, and the detection of Trichinella spiralis. The study employed a rigorous methodology for evaluating microbial contamination, using arithmetic means and standard deviations to summarize the data for each batch. The results demonstrated that microbial contamination, measured as NTG and the presence of Enterobacteriaceae, remained within acceptable limits throughout the study, indicating effective hygiene practices and process controls. Additionally, no carcasses contaminated with Trichinella spiralis were identified, confirming compliance with safety standards. This investigation provides valuable insights into the effectiveness of current meat processing practices and highlights potential areas for improvement in food safety protocols.

Key words: contamination, hygiene, microbiological control, swine