
A COMPARATIVE STUDY OF MICROBIAL LOAD IN WASTE WATER AND DRAINING
STREAM OF SOROTI SLAUGHTER HOUSE

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DECLARATION

I AWOR EVERLINE do declare that this research dissertation is a result of my efforts and knowledge with the guidance of my supervisor and has never been submitted to any institution or university for academic credit

Signature.....

Approval

This research dissertation has been submitted to the Department of Animal production and Management for scripting with the approval of, my research supervisor DR ZIRINTUNDA GERALD

Sign.....

DEDICATION

This work is dedicated with great love to my parents Mr. Okoth Johnson Y and Awor Everline
my lovely friend

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LIST OF ABBREVIATIONS

CWs	Constructed Wetlands
EPEC	Enteropathogenic
GHP	Good Hygienic Practices
GMP	Good Manufacturing Practices
MPN	Most Probable Number
STEC	Shiga toxin-producing
SWW	Slaughterhouse Waste Water
Cfu	colony forming unit

ABSTRACT

The study was to enumerate the microbial population in the wastewater and the draining streams of slaughterhouse

The multiple tube fermentation technique method was used for analysis. Sterile sample bottles of 2.0 liters were used to specially draw part of the wastewater and the stream water at the two abattoirs as wastewater was running off the drainage system and inside the streams after mixture with SWW. Samples were picked from these slaughterhouses twice on different days during the morning hours between 8.00am and 9.00 using the grab sampling method. The samples were placed in an ice box containing ice packs and were transported immediately to the laboratory within 1 hour after collection for analysis. The results showed that both abattoir wastewater and stream water contain several million colony forming units (cfu) /g of total coliform, Municipal SWW and draining stream water having 4.8×10^3 and 4×10^4 , and Asuret SWW and draining stream water 4.2×10^4 and 4.1×10^7 cfu/g respectively.

The presence of these nonpathogenic microbes indicates the possible presence of pathogens of enteric origin. And when Oxytetracycline and vim were used for treating the bacteria, the bacteria were destroyed. It was thus concluded that it is important to treat the SWW before releasing it in the nearby water sources.