



**BUSITEMA  
UNIVERSITY**  
*Pursuing Excellence*

**PREVALENCE AND RISK FACTORS TO MASTITIS IN  
BUDUDA DISTRICT.**

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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND  
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## ABSTRACT

Mastitis in bovine has been recognized as one of the most costly diseases in the world affecting dairy cattle. The disease causes major economic losses for example discarding off large quantities of milk as it cannot be consumed by human beings either due to drug residues in it or lowered quality due to presence of flakes or blood, reduced milk yield, culling of the previously high milk producing cows with chronic mastitis and high treatment costs due to the repeated treatment. This has lowered the production efficiency of many farms due to increased production costs. Objective of the study were to establish prevalence of sub clinical mastitis at the quarter level, to isolate staphylococcus aureus as one of the contagious etiological agents from mastitis milk samples and to determine the risk factors that predispose milk animals to mastitis. A cross sectional study design was followed to address the objectives of the study. A total of 130 lactating cows were selected using simple random and systematic sampling techniques. Thorough clinical examination and California mastitis test (CMT) and a questionnaire were deployed. The result of the study show that 109/130 (83.5%) cows had mastitis and of these 23 (18.5%) cows had clinical mastitis and 86(68.5%) cows had the sub clinical mastitis. Prevalence of SCM at the quarter level were RF 40(47.6), LF 41(48.8), and RH 34 (41). A total prevalence 52.3% of *S. aureus* was isolated from 109 from mastitis positive samples. Risk factors including grazing system, type of floor and milking frequency had significant difference to mastitis. The study shows that farmers have less information concerning SCM due to lack of diagnostic equipment's and reagents. The study has also confirmed that *S. aureus* is an important cause of mastitis which was isolated from more than half of the mastitic cows. The study has indicated the complexity of the disease due to its association with different risk factors (milking frequency, type of floor and grazing systems). This causes a great loss of productivity, quality and quantity of milk yield, and animals due to culling. This should have to be managed before it leads to economic crises

**DECLARATION**

I Juma Cyrus hereby declare that the information and data in this report is mine and has never been reproduced, copied and submitted to any institution for any assistance or award of academic credit or qualification.

Signature: .....

Reg. Number: BU/UP/2018/2772

Date:.....

**Supervisor’s Approval**

This is to certify that this dissertation presented by Juma Cyrus was written under my supervision and I recommend it for presentation to the Board of examiners in partial fulfillment of his requirements for the award of the degree of Animal production and Management of Busitema University.

Signed .....

Dr. ZIRINTUNDA GERALD

Date.....

## **DEDICATION**

I would love to dedicate this report to my parents Situma Fobiano and Mutonyi Florence for the financial support you have offered towards this academic venture. There is nothing worthy I can pay you with but only the almighty God is the only one to reward you.

## **ACKNOWLEDGEMENT**

I thank the Almighty God who has given me the ability, strength and wisdom to accomplish this report. Am especially indebted to my beloved dad Mr. Situma Fobiano who supported me financially and for the love and motivation he showed me during the pursuit of this project. May the Almighty Lord God bless you abundantly?

I acknowledge the efforts of my supervisor Dr. Zirintunda Gerald under whose invaluable guidance I have managed to successfully accomplish this report.

Nobody has been more important to me in the pursuit of this project than the members of my family. I would like to thank my brothers whose love, financial support and guidance are with me in whatever I pursue.

I further extend my sincere appreciations to my friends and fellow students who have stood with me in encouragement, guidance and counsel throughout the process of research and writing the report. God bless you all.

## **LIST OF ABBREVIATIONS (ACRONYMS)**

|       |                                   |
|-------|-----------------------------------|
| CMT   | California mastitis test          |
| SCM   | Sub-clinical mastitis             |
| CM    | CLINICAL MASTITIS                 |
| W.H.O | WORLD HEALTH ORGANISATION         |
| DR    | DOCTOR                            |
| DVO   | DISTRICT VETERINARY OFFICER       |
| FAO   | FOOD AND AGRICULTURE ORGANISATION |
| SCC   | SOMTIC CELL COUNT                 |
| SSP   | SPECIES                           |
| STR   | STREPTOCOCCI                      |
| RF    | RIGHT FORE                        |
| LF    | LEFT FORE                         |
| RH    | RIGHT HIND                        |
| LH    | LEFT HIND                         |

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