
**PREVALENCE OF RUMEN AND RETICULUN FOREIGN BODIES AMONG
CATTLE SLAUGHTERED IN MASAKA MUNICIPAL ABATTOIR**

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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND
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THE AWARD OF THE DEGREE OF ANIMAL PRODUCTION AND MANAGEMENT
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DECLARATION

I, BULUNGU DISAN BU/UG/2015/2095 do hereby declare that this work is my original work and has not been submitted for any academic award in any University or Institution.

Signed 

Bulungu Disan


Date..... 

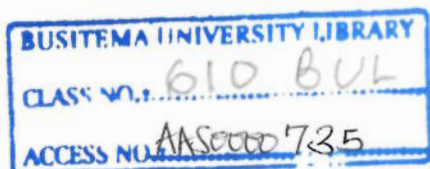
Supervisor's Approval

This is to certify that this dissertation presented by Bulungu Disan 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 

Etiang Patrick

Date..... 



DEDICATION

I wish to dedicate this dissertation to my lovely and caring mother, Namisango Martha, Mum Nakalanzi Julient, my brother Brich Kalanda, my ever-welcoming uncles and aunts and the entire class for their relentless efforts to my successful completion of the course.

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LIST OF ABBREVIATIONS

AM	Ante mortem
DVO	District Veterinary Officer
FBS	Foreign Body syndrome
GDP	Growth domestic product
IFB	Indigestible Foreign Bodies
IFOs	Indigestible foreign objects
PM	Postmortem
TP	Traumatic pericarditis
TRP	Traumatic reticuloperitonitis
UBOS	Uganda bureau of statistics
VFA	Volatile fatty acids

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ABSTRACT

A cross-sectional study was conducted from May 2018 to June, 2018 at Masaka Municipal Abattoir, with the objectives of assessing the prevalence of foreign bodies in rumen and reticulum, identifying types of foreign bodies and relationship between sex, age, and breed with prevalence of foreign materials. Both ante mortem and postmortem examinations were employed to examine the live animal and for the recovery of foreign bodies from rumen and reticulum after slaughter, respectively. Out of 320 cattle examined for the presence of indigestible foreign bodies, 46 (14.4%) animals were found positive for indigestible foreign bodies in their rumen or reticulum. Statistically insignificant difference ($P > 0.05$) in the prevalence of indigestible foreign material was observed between cross breed (26.6%) and local breed (13.7%). A significantly ($p < 0.05$) high proportion of animals > 5 years (24.4%) had Indigestible foreign bodies compared to animals < 5 years (7.7%). Besides, significantly ($P < 0.05$) higher prevalence was observed between females (23.1%) and males (10.9%), As well as significantly higher prevalence was reported in Rumen (91.3%) than Reticulum (8.7%). The common types of foreign bodies detected were plastics 21 (45.7%), fruit seeds 9 (19.6%), clothes 7 (15.2%), Nails 3 (6.5%), Ropes 2 (4.3%), Wires 1 (2.2%) and stones 2 (4.3%). In conclusion, this study revealed ingestion of different types of indigestible foreign bodies by cattle in the study area which may significantly cause poor production and mortality in affected animals. The study also shows that plastics are the biggest culprits. Therefore, awareness for animal owners should be implemented to avoid the risk of foreign body ingestion by their animals and appropriate waste disposal practice should be implemented to reduce environmental pollution thereby enhancing livestock production and productivity.

CHAPTER ONE;

1.0 Introduction

Livestock production is a major component of the agriculture industry in Uganda contributing 5% of Gross Domestic Product and 18% of Agricultural Gross Domestic Product (Agriterra, 2012). The major livestock species kept include cattle, sheep, goats, pigs, rabbits and poultry. It is estimated that 4.5 million households (70.8%) rear at least one kind of livestock. However, livestock contribution is below the expected potential due to prevalent livestock diseases, poor management system and poor genetic performance (Agriterra, 2012).

Ingestion of foreign body in cattle is reported to be a condition of great economic importance and causes severe loss of production and high mortality rates (Bwatota *et al.*, 2018). Sheep and goats are highly selective feeders and ingest significantly less amount of foreign bodies as compared to cattle (Mohammed, 2012).

Foreign bodies ingested by cattle are divided into two main group; the first category, is foreign bodies of metallic origin and the second, is foreign bodies of non-metallic origin (Teshome *et al.*, 2017). Studies have shown that the non-penetrating foreign bodies commonly recovered in bovine stomachs are of non-metallic origin and the major penetrating foreign materials include metallic pieces (Mushonga *et al.*, 2015).

Environmental pollution is a growing problem for grazing animals due to absence of recycling industries, cleaning of environment cultures, and improper disposal of plastic bags (Akraiem & Abd Al-Galil, 2016). Reports from cattle reared with in urban and sub-urban environments indicated that impaction of the rumen resulted from the accumulation of foreign bodies such as plastic bags (Fasil, 2015).

The ingestion of foreign bodies is mainly related with nutritional deficiencies and feeding management and causes various problems in different organs of the system mainly in reticulum and rumen (Teshome *et al.*, 2017). Industrialization and mechanization of agriculture have further increased the incidence of foreign bodies in these animals (Shandilya *et al.*, 2017).

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