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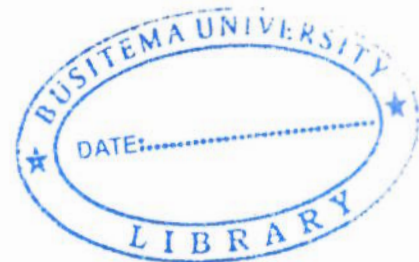
**PREVALENCE OF FASCIOLIASIS IN CATTLE SLAUGHTERED AT GULU
MUNICIPAL ABATTOIR.**

BY

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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND
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MANAGEMENT.**

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Declaration

This research work is my original work and has never been presented for any academic award in any University.

Signature.....*Kevin*.....Date.....*31st.JULY-2018*.....

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APPROVAL

Has been submitted for examination with the approval of my academiesupervisor

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Signed.....Date.....

Dedication

This work is dedicated to my beloved parents (Akena A.J Alata and Akoko Joska), my brothers and sisters.

Acknowledgement

I would like to register my appreciation to the administrators in Gulu municipal abattoir for granting me permission to conduct my research in the abattoir and for the support they offered me.

I also extend my appreciation to my dear supervisor; Mrs. Jolly Akullo Oder, staffs in the Department of Animal Production and Management - Faculty of Agriculture and Animal Sciences, Busitema University.

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Table of contents

Declaration	i
APPROVAL	ii
Dedication	iii
Acknowledgement	iv
Table of contents	v
List of tables and figures	vii
Abstract	viii
1.0 CHAPTER ONE	1
1.1. Introduction	1
1.2. Problem statement	2
1.3. Objectives of the study	2
1.4. Significance of the study	3
1.5. Justification	3
1.6. Scope	3
1.7. Limitations	4
2.0 CHAPTER TWO: LITERATURE REVIEW	5
2.1 Description of Fascioliasis	5
2.2 Epidemiology	5
2.3 Life cycle and biology of <i>Fasciola hepatica</i>	6
2.4. Prevalence of fascioliasis	6
2.5 Consequences of the disease	7
3.0 CHAPTER THREE: STUDY METHODOLOGY	8
3.1 Area of the study	8
3.2 Study population	8

3.4 Sample size	8
3.5 Data collection methods	9
3.6 Data analysis	10
4.0 CHAPTER FOUR: RESULTS	11
4.1. Overall Prevalence of Fascioliasis	11
4.2. Percentage prevalence of fascioliasis according to the breed of the animals.....	11
4.3. Prevalence of Fascioliasis by Sex	11
4.4. Prevalence of Fascioliasis by age	12
4.5. The percentage of infected livers which were heavily or partially infested.....	12
5.0 CHAPTER FIVE: DISCUSSION OF RESULTS	13
6.0 CHAPTER SIX: CONCLUSION AND RECOMMENDATION.....	15
6.1. Conclusion.....	15
6.2. Recommendation	15
REFERENCES	16
APPENDICES:	18

List of tables and figures

Table 1 Prevalence of Bovine Fascioliasis according to Breed	11
Table 2 Sex based occurrence of bovine fascioliasis.....	11
Table 3 Age based prevalence of bovine fascioliasis.....	12
Table 4 DATA COLLECTION SHEET	18
Figure 1 Graph showing the percentage of livers that were partially and heavily infested.....	12
Figure 2 The lifecycle of fasciola,	19
Figure 3 Adult flukes in bile duct.....	19

Abstract

This study was carried out from 21st may to 14th June 2018, in order to estimate prevalence of bovine fascioliasis in cattle slaughtered in Gulu municipal abattoir. Prevalence of fascioliasis was calculated as the number found infected with *Fasciola*, expressed as the percentage of the total number of cattle slaughtered. A total of 206 cattle consisting of 92 females and 114 males from local livestock traders were inspected. The study involved actual postmortem examination of the slaughtered cattle. The livers were examined for the adult flukes. Pearson's chi-square (χ^2) was used to evaluate the association between variables (prevalence, sex, breed and age). A 95% confidence interval and P-value less than 0.05 (at 5% level of significance) was considered significant in all analysis. The result of the investigation showed that 132 (64.04%) of the cattle were infected with fascioliasis. The prevalence rate recorded for female cattle was 59.78% and for the male was 67.54%. The study showed no statistical relationship ($\chi^2=1.300$; $P>0.05$) among the age categories of cattle with the prevalence of fascioliasis (<3 years (60.34%; $n=64$), 3-4 years (68.12%; $n=47$), 5 years and above (67.74%; $n=21$)). There was also no significant difference ($\chi^2= 1.332$; $P=0.248$) in prevalence of fascioliasis between males (67.54%; $n=77$) and females (59.78%; $n=55$). The breed of the animals were also not statistically associated ($\chi^2=0.642$; $p=0.423$) with the prevalence of fascioliasis between the local breed (65.03%; $n=119$) and the exotic breed (56.52%; $n=13$). Local climatic factors, cattle trade, local management practices by local community, presence of snail intermediate hosts are probably the main factors influencing the incidence of disease in the present area of study. Control of snail intermediate host population and a study to find out the risk factors will help reduce rate of infection with fasciola species in Gulu district.

1.0 CHAPTER ONE

1.1. Introduction

Fascioliasis is a common disease of cattle and other ruminants caused by *F. hepatica* and *F. gigantica*. The disease is worldwide in distribution and is liable for causing extensive economic losses to the livestock industry (Rana, Roohi, & Khan, 2014). The economic losses due to fascioliasis are caused by mortality, morbidity, and reduced growth rate, condemnation of liver, increased susceptibility to secondary infections and the expense of control measures (Kalu, 2015).

Parasitism is amongst the major concerns for the development of livestock sector in tropics. Fascioliasis is one of veterinary important parasitic diseases of ruminants. Fascioliasis may infect all domestic animals, human and many wild species, but of economical important in sheep and cattle (Zenzelma et al., 2017). Its range has been increasing over time because of transfers of parasitized animals from locations where the disease is enzootic to non-endemic areas (Vilhena, Martins, Avelar, & Bernardo, 2014).

The livestock sector in Uganda has substantial contribution to the economy, the subsector contributed 1.8 percent to total GDP at current prices, in the fiscal year 2013/14 (Uganda Bureau of Statistics, 2014). Exports are limited because of the prevalence of diseases and lack of any export-standard abattoir; live animals, meat and milk accounted for less than 0.5 percent of imports value in 2002 (FAO, 2005).

Based on Livestock Census 2008, the production of beef in 2013 was estimated to be 197,019 Metric tons, which was an increment of about 3.6 percent compared to 2012 with 191,280 metric tons (Uganda Bureau of Statistics, 2014). The increment in the level of production also ensure improved nutrition in the country however, parasitic diseases like fascioliasis cause a significant economic problem by lowering the productivity of cattle and in addition to losses from condemnation of affected organs.

Snails are mostly found in swampy areas. Most of the farmers in Gulu districts and likewise the neighboring districts use swampy water for the drinking purpose of their cattle and also graze the animals around the swampy areas. This makes the animals to be at a high risk of liver fluke

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