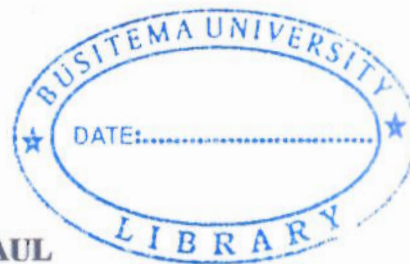




**PREVALENCE AND LIVER CONDEMNATION BY FACIOLIASIS IN RUMINANTS
SLAUGHTERED AT KAPIR SUB COUNTY SLAUGHTER SLABS NGORA
DISTRICT**

BY



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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND
ANIMAL SCIENCES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE AWARD OF A BACHELORS DEGREE IN ANIMAL PRODUCTION OF
BUSITEMA UNIVERSITY**

JUNE, 2015

DECLARATION

I ARIKO JIMMY PAUL hereby declare that this is my original piece of work and that it has never been submitted to any university or to any institution of higher learning for any academic award

Signature... *A. L. Paul* Date... *17 / 09 / 2015*

APPROVAL

This dissertation has been submitted for examination with approval of my supervision.

Sign... *pp. Bylly* Date... *18th / 09 / 2015*

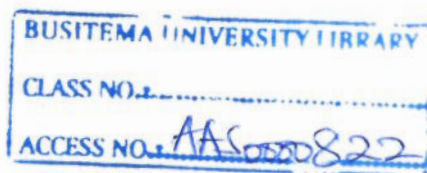
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DEDICATION

I dedicate this dissertation to my parents, sisters, relatives and all my beloved friends and well wishers for the support they rendered me.

ACKNOWLEDGEMENT

I am grateful to God for the gift of life without which this report would not have been in existence.

I particularly thank my parents and elder sister for the financial support, otherwise I wouldn't have gone this far.

I also thank all my lecturers especially Mr. Kauta Moses and entire staff of Busitema university. For their intellectual support for it is by them that I have been able to come up with this dissertation.

I would also like to thank the staff of Kapingo Sub County, butchers and the livestock traders for their co operation during data collection.

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LIST OF ABBREVIATIONS

D V O	District Veterinary Officer
Ex	Examined
FAO	Food and Agricultural Organization
Kg	Kilograms
MAAIF	Ministry of Agriculture and Animal Industry and Fisheries
No.	Number
S/C	Sub County
UBOS	Ugandan Bureau Of Statistics

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ABSTRACT.

A cross sectional study was carried out to determine the prevalence of fascioliasis and its economic loss due to liver condemnation in slaughtered animals in the slaughter slabs in April,2015.A sample size was determined using Thrusfield 1995 formula and for both qualitative and quantitative data.

Following post-mortem examination, the data collected was filled into Microsoft Excel spread sheet with Strata version 9 statistical software. Prevalence and economic loss values were calculated.

Out of 21 cattle examined 19 were positive to fascioliasis hence 95% prevalence rate; 30 sheep were examined 10 were positive to fascioliasis hence 33% prevalence rate and out of 93 goats examined, only 5 were found positive recording the prevalence rate of 5.3% .The infection rate was more in cattle and lower in sheep and very low in goats in the study.

Liver condemnation due to fascioliasis was more prevalent in cattle followed by sheep and least in goats. In the one month study conducted; about 78 kgs of condemnable weight of liver from both livestock species valued at 257.4USD was lost. It was concluded that fascioliasis is prevalent and there is economic loss due to liver condemnation.

It was therefore recommended that; owing to high prevalence rate and serious economic losses sustained, the district local government through its production department organizes rigorous Fascioliasis control programmes which should reinforced with hard to break policies, rule and bylaws.

CHAPTER ONE: INTRODUCTION

1.1 Background

Fascioliasis is an important parasitic disease found distributed worldwide and affecting ruminants such as sheep, goats, cattle and buffalo, it also affects other domestic animals like pigs, horses, camels etc. The disease can result from the migration of large numbers of immature flukes from intestines through the liver to the liver ducts. Fascioliasis is an infection of the liver caused by two trematodes (*Fasciola hepatica* and *F. gigantica*) (Tolosa & Tigre, 2007) Fascioliasis has existed since time immemorial. It was always considered to be mainly a veterinary disease, until the 1980s, only sporadic cases were reported in humans. More recently, its growing prevalence in human populations has prompted health authorities to address the problem effectively. Human fascioliasis is nowadays reported from more than 70 countries across the world. Human infection occurs primarily through the ingestion of *Fasciola* larvae attached to raw or uncooked vegetables such as watercress or water mint, or floating in drinking water.

Fasciola hepatica occurs most abundantly in the United States, in Florida, Louisiana, Texas, California, Oregon, Washington, Montana among the many states and countries (Periago, et al., 2008), (Ali, et al., 2008) and it is being adapted to warmer conditions likely due to the widespread distribution of its intermediate host *Lymnaea natalensis*. *F. hepatica* have more limited distribution of its intermediate host *Lymnaea truncatula* and can exist in zoonotic foci which are more restricted to cooler regions of Africa, including Kenya, Ethiopia, Tanzania and Uganda. In Africa, (Usip, Ibanga, Edoho, Amadi, & Utah, 2014) quoted prevalence rates of 37 % in Sudan, 45 % in Cameroon, 30-90 % in Ethiopia, 16% in Uganda, 62% in the Central Africa Republic and 50% in Rwanda. Infested animals can exhibit poor weight gain and dairy cattle have lower milk yield, and possibly metabolic disease (Aktaruzzaman, Mohamed, Islam, & Howlader, 2015). In the United Kingdom and Ireland losses due to fascioliasis alone are greater than 18 million pounds a year (Dalton, et al., 2003). Swiss study estimated the economic loss due to bovine fascioliasis, largely attributed to sub-clinical infection, that's 52 million pounds a year or 299 pounds per infected animal. (Kithuka, Maingi, Njeruh, & Ombui, 2002) reported up to 0.26 million USD annual losses attributable to fasciolosis-associated liver condemnations in

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