



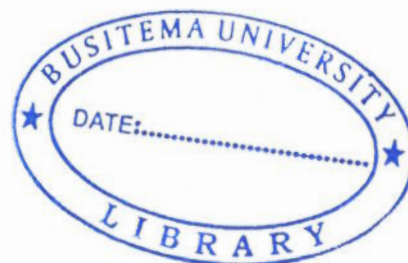
**BUSITEMA  
UNIVERSITY**  
*Pursuing Excellence*

**PREVALENCE OF FASCIOLIASIS IN CATTLE SLAUGHTERED AT GULU  
MUNICIPAL ABATTOIR, GULU DISTRICT**

**BY**

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OF BUSITEMA UNIVERSITY**

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## DECLARATION

I, **Opiyo Alfred**, declare that this dissertation has never been submitted to any university or any other higher institutions of learning in partial fulfillment of the requirements for any academic award.

Signature.......... Date...28/08/2013.....


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Signature.......... Date...28/08/2013.....



## **DEDICATION**

I would like to dedicate this dissertation to my lovely mother Mrs. Santa Apiyo Ojok and to my the late father Mr. Ojok Celestino, My wife Akiyo Monica, my sister Auma Margret, my brothers Ojera Alex, Okello Prester, and all friends who encouraged me to go for further studies. Not forgetting my benefactors Father John Scalabrini, Obali Wilfred Jwee who played very fundamental roles in my education progress and all those who have wished me well.

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## LIST OF ABBREVIATIONS

Mi:	Mile
Km:	Kilometer
D.V.O:	District Veterinary Officer
F.A.O:	Food and Agricultural Organization
&:	And
Ag:	Age
BCS:	Body Condition Score
Spp:	Species
e.g.:	Example
i.e.:	That is
S/No:	Serial Number
e.t.c:	and so on
Kg:	Kilogram
Mm:	Millimeter
Cm:	Centimeter
ECF:	East Cost Fever
TBD:	Tick Borne Diseases
°C:	Degree Celsius
%:	Percent
Yrs:	years

## ABSTRACT

The study was conducted from February to April, 2013 at Gulu municipal abattoir, examining cattle coming from five districts (Kaberamaido, Apac, Dokolo, Lira and Oyam) of Northern Uganda. The fascioliasis infestation in the slaughtered cattle in Gulu municipal abattoir had resulted in decreased production of meat, with about 15 Kg of liver on average being condemned daily, increase secondary bacterial infections and decrease fertility in cattle; farmers had tried to control the fascioliasis using the available drugs in the market but it still persists. The aim of the study were to determined the prevalence of fascioliasis in the slaughtered cattle, determine the distribution of fascioliasis infestation in relation to body conditions of different sex and age group of slaughtered cattle at Gulu municipal abattoir. Following post-mortem examination, of the 204 cattle randomly selected, the prevalence was 86 (42.15%), the data was filled into Microsoft Excel spread sheet, and analyzed by using SPSS (Statistical Package of Social Sciences (SPSS, version 16). The infestation rate were 38.1% and 47.3% in male and female respectively, 45 % of the adults (>4 years), and 37% in the young one (2-3 years). There were significant variation on the prevalence of fasciolosis among the five districts, the prevalence were; Kaberamaido districts 52.7%, Apac 47.2%, Dokolo 46.9%, Lira 33.3% and Oyam 28.6%. Moderate body condition depicted 46.8%, 35% in animals with thin body condition as 0% in all cases of Emaciated, Fat and Very Fat body condition of cattle. Fascioliasis infestation was in both sex, age group irrespective of body conditions of the cattle in all the five Districts stated. Greater vigilance on this parasite, as well as the use of correct anthelminthes couple with farmer education program, equal treatment and management by the farmer is recommended.

## CHAPTER ONE: INTRODUCTION

### 1.1 Back ground

The snail *Lymnaea truncatula* is the intermediate host for fascioliasis. There are 14 different species of snails have been shown to be vectors of the parasite throughout the world. The major hosts for the common liver fluke are cattle, sheep, and goats, it has been found also in swine and deer. *F. hepatica* occurs most abundantly in the United States, in Florida, Louisiana, Texas, California, Oregon, Washington, Montana among the many states and countries (Mas-Coma *et al.*, 2006). In sub-Saharan Africa (Keyyu *et al.*, 2003), *F. gigantica* are the most common fascioliasis 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.

The existing population of the livestock is about 11.4 million cattle, 12.5 million goats, 3.4 million sheep, 3.2 million pigs and 37.4 million poultry (MAAIF & UBOS., 2009). Animal health and economic impact of fasciolosis may vary greatly from year to year, depending on the climate, management, level of infestation, host immune status and age of the animal. In the pastoral and agro-pastoral farming systems, cattle, goats and sheep are kept under open grazing or communal grazing land. With this system of farming, livestock form the main source of milk and meat consumed in Uganda. In this area, the major disease problems of livestock are; tick-borne diseases (TBD) are widely spread throughout and lack seasonality in Uganda e.g. East Cost Fever (ECF), Anaplasmosis, Babesiosis and Cowdriosis among others (Otim., 2000) and Trypanosomosis, in addition to helminthes infestation more especially fascioliasis.

### 1.2 Problem statement

The high prevalence of fascioliasis infestation in the slaughtered cattle in Gulu municipal abattoir had resulted in decreased production of meat, with about 15 Kg of liver on average being condemned daily due to fascioliasis infestation, as well as increase in secondary bacterial infections and decrease fertility in such animal; although some farmers had tried to control the fascioliasis using the available drugs in the market but it still persists with greater economic

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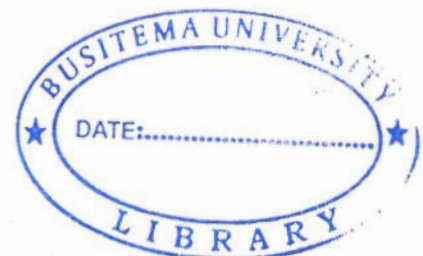
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