
**PREVALENCE OF BOVINE FASCIOLIASIS AMONG CATTLE
SLAUGHTERED IN SOROTI MUNICIPAL ABATTOIR.**

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Declaration.

I Kabacaaki Alice declare that this dissertation has been made using my own efforts and knowledge with the guidance of my supervisor and has never been submitted to any institution or university for academic credit.

Date... 29th July/2018

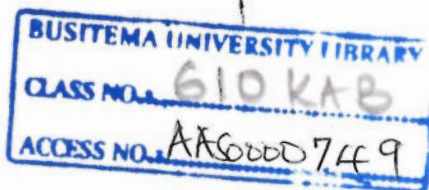
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Approval.

This dissertation has been submitted to the Department of Animal production and Management for scripting with the approval of Dr Matovu Henry, my academic supervisor.

Date

Signature



Dedication.

I dedicate this work to my beloved Magezi family, staff of Soroti municipal abattoir, staff of Busitema University, my friends and my academic supervisor Dr Matovu Henry who have contributed to the success of this research socially, academically, economically and mentally.

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Abbreviations.

AM; ante mortem

PM ; postmortem.

WHO; World Health Organisation.

UBOS; Uganda Bureau Of Statistics.

Abstract.

Fascioliasis is a helminthic disease caused by trematodes of the genus *Fasciola*. Bovine fascioliasis (liver rot) is considered one of the most important parasitic diseases of domestic ruminants spread worldwide. This study determined the prevalence of fascioliasis in cattle slaughtered at Soroti municipal abattoir, Soroti District. A cross sectional study was used to determine the prevalence of fasciolosis using postmortem liver of slaughtered animals. A total of 265 slaughtered cattle were inspected at postmortem. The study revealed that the prevalence of bovine fascioliasis was 80.4% (n=213) among cattle slaughtered in Soroti municipal abattoir. There was a significant difference ($X^2= 22.385$; $P < 0.05$) in prevalence of fascioliasis among adults (91.4%, n=127) and sub-adults (68.3%, n=86). There was no significant difference ($X^2= 0.138$; $P=0.709$) in prevalence of fasciolosis between males (80.9%; n=157) and females (78.9%; n=56). Of the infested livers, 36.2%, 41.3% and 22.5% were mildly, moderately and severely infested respectively. The Adult cattle (cows and bulls) had significantly higher severe fascioliasis infection ($P < 0.05$) than the sub-adults (steers and heifers). Severity of the infestation was significantly higher in the cows (52.5%) than any other age group of cattle slaughtered in Soroti municipal abattoir (X^2 value = 57.547, $P < 0.05$). According to the study 74.2% and 25.8% of the infested livers were partially and totally condemned respectively. To conclude, bovine fascioliasis was found to be prevalent among cattle slaughtered in Soroti municipal abattoir. Based on the study, public enlightenment about the disease and an effective control program are recommended in the catchment areas of Soroti municipal abattoir.

1.0 CHAPTER ONE

1.1. Introduction.

Bovine fascioliasis (liver rot) is considered one of the most important parasitic diseases of domestic ruminants spread worldwide (Port-harcourt & Uduak, 2014). It is caused by trematodes of the genus *Fasciola*. Fascioliasis is caused by two species of *Fasciola* namely *Fasciola hepatica* and *Fasciola gigantica* (Rana, Roohi, & Khan, 2014). Adult worms of this genus parasitize the liver bile ducts of various definitive hosts, mainly ruminants of both domestic and wild animals

Fascioliasis is generally a disease of ruminants such as sheep, cattle and goats and is also recognized as occasional zoonotic disease of man (Bargues & Valero, 2005; Kuchai *et al.*, 2011). This disease belongs to the plant-borne zoonosis, where human infections occur following the ingestion of infected edible aquatic salad vegetation such as watercress (Cwiklinski, Neill, Donnelly, & Dalton, 2016; Mas-Coma, Esteban, & Bargues, 1999)

Fascioliasis has the widest geographic spread as an emerging vector-borne zoonotic disease with estimates of between 2.4 and 17 million people infected worldwide (Esteban & Bargues, 1999; Williams, 1993). The topographical spreading of the infection is intensely related to climate change and ecological conditions such as the presence of water bodies, pastures, and wetlands. These conditions create an advantageous environment for the growth and spread of free-living fluke stages and for the growth of the intermediate host snail (Scott, 2007)

Parasitic infections among cattle greatly affect livestock production and cause important economic losses including the retardation of growth, emaciation, and significant decrease in efficiency as well as the low production of milk and meat (El-Tahawy, Bazh, & Khalafalla, 2017a). The direct economic impact of fascioliasis infection is increased condemnation of liver meat in affected animals (Behm & Sangster, 1999).

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