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PREVALENCE OF FASCIOLIASIS AND MONETARYLOSSES DUE TO LIVER CONDEMNATION IN SMALL RUMINANTS SLAUGHTERED AT MBARARA MUNICIPAL ABATTOIR IN MBARARA DISTRICT.

BY

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DECLARATION

I BAGUMA DARLINGTON hereby declare that the information written in this report is mine and has never been submitted to any other university for any academic award.

Signatures……date…7/08/2018

APPROVAL

This dissertation has been submitted with the approval of my academic supervisor

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DEDICATION

I dedicate this dissertation to my family, friends like Richard Asiimwe, Nelson, my sister, my brother and my mother for the love they have towards my education. may almighty God bless you all.

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I am grateful to God for life and I would like to thank my family, friends and relatives for their support towards my research. Also send my gratitude to my academic supervisor Dr Mawadri Patrick and madam Mercy meat inspector at Mbarara municipal abattoir and Mr. Alex stamp man for their efforts during data collection God bless you.

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LIST OF ABBREVIATIONS

% :	percentage
Cm:	centimeter
F..h:	Fasciola hepatica
F.g:	Fasciola gigantica
FAO:	Food and agriculture organization
Kg :	kilogram
MAAIF:	Ministry of agriculture animal industry and fisheries
S/No.:	Serial number
Spp:	species
UBOS	Uganda bureau of statistics
Yrs:	years

ABSTRACT

This study was carried out to determine the prevalence of fasciolosis and monetary losses due liver condemnation in small ruminants slaughtered in Mbarara municipal abattoir and also to identify species of Fasciola affecting small ruminants slaughtered in the abattoir. A cross sectional study on fasciolosis in small ruminants was conducted from February up to May 2018 using postmortem examination of slaughtered animals. A total of 275 slaughtered small ruminants were examined at post mortem .out of 275 liver samples examined, 7(2.55%) were positive and 268(97.5) were negative for fasciolosis. sheep was highly infected compared to goats with 3 (4.1%) positives out of 74 sheep and 4 (2%) positives out of 201 goats. The Fasciola species affecting the small ruminants was *F. gigantica* (2.5%), and *F. hepatica* was not found during the study. The abattoir lost a total of 56250 Uganda shillings on condemned liver. In conclusion the study found an overall prevalence of 2.55% and monetary loss of 56250 shilling therefore I recommend, Detailed study on the economic and public health implications of the parasite, appropriate strategic deworming has to be designed and implemented in the study area to control the effect of the disease on livestock productivity and Strategic vector control through different techniques should be undertaken

CHARPTER ONE

1.0 Background

Fascioliasis is an important parasitic disease of domestic ruminants caused by two liver fluke species: *Fasciola hepatica* and *F. gigantica* (Trematoda). *Fasciola hepatica* has a cosmopolitan distribution mainly in temperate zones while *F. gigantica* is found in tropical regions of Africa and Asia. Thus, the two Fasciola species overlap in many African and Asian countries and sometimes in the same country, although in such cases the ecological requirements of the flukes and their snail intermediate host are distinct (Mas-Com *et al.*, 2005).

The disease is responsible for considerable economic losses in the cattle industry, mainly through mortality, liver condemnation, reduced production of meat, milk, wool, and expenditures for Anthelmintics, hillyer and Apt, (1999).The world-wide losses in animal productivity due to fascioliasis were estimated at US $200 million per annum, to rural agricultural communities and commercial producers (Boray, 1985), with over 600 million animals infected (Ramajo *et a*, 2001).

The prevalence of Fascioliasis in many parts of Africa has been determined mainly at slaughter .Infection with *Fasciola gigantica* is regarded as one of the most common single helminth infection of ruminants in Asia and Africa (Hammond & Sewell 1990). In Ethiopia, the annual economic losses due to ovine fascioliasis were estimated at 48.4 million Ethiopian Birr, of which 46.5, 48.8, and 4.7% were due to mortality, productivity (weight loss and reproductive wastage), and liver condemnation at slaughter, respectively (*Choothesa A, et al., 2007*) However estimation of economic loss due to Fascioliasis at national or regional level is limited by lack of accurate estimation of the prevalence of disease (Phiri *et al.*, 2005*)*.

Animals for slaughtering may show no clinical signs of diseases and they are detected at the slaughter house. True picture of these diseases could be obtained if they well condemned. The affected parts of the organ are trimmed or the whole organ might be condemned (Kara *et al.*, 2009). Among parasites affecting livestock, liver flukes are very frequent. *Fasciola hepatica*) *F. gigantica* (Mungube *et al.* 2006) are well known parasites of domesticated ruminants causing

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