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PREVALENCE OF FASCIOLIASIS IN CATTLE SLAUGHTERED AT LWENGO TOWN COUNCIL ABATTOIR LWENGO DISTRICT.

BY

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DECLARATION

I, **BBAALE ABDU**, declare that this dissertation is an affirmation of the research activities I carried out as a partial requirement for the award of the Bachelor of Animal Production and Management of Busitema University and that this report has never been submitted to any university or other institution of learning for any academic reward.

Signature..... Date..01/08/2018.....

The research process up to documentation of this report has been developed under the guidance and supervision of an academic supervisor and the approval thereafter

Academic supervisor

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Signature..... Date.....

DEDICATION

I dedicate this report to Dr kizitto Nsubuga for the time and commitment, my parents to support my academics till this far, and my academic supervisor, Dr. Oluge Christopher for his technical guidance during preparation of this dissertation.

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LIST OF ABBREVIATIONS

US	United States
GDP	Gross Domestic Product
UIA	Uganda Investment Authority
MAAIF	Ministry of Agriculture Animal Industry and Fisheries
D.V.O	District Veterinary Officer
F.A.O	Food and Agricultural Organization
WHO	World Health Organization
UBOS	Uganda Bureau of Statistics

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ABSTRACT

The study was to determine the prevalence of fascioliasis among cattle slaughtered in Lwengo town council abattoir Lwengo district, by determining the prevalence of the parameters of age, origin and sex of cattle. The study was carried out in a period of one month. A total of 364 cattle were sampled where ante mortem and post-mortem inspection were used to examine for presence or absence of liver flukes in slaughtered cattle at the abattoir using data collection sheet. liver fluke consistute the bulk of parasitic diseases of economic importance in Lwengo district, they are responsible for high mortality, morbidity and reduced growth rate in young ones besides liver condemnations, increased susceptibility to secondary infections and expenses due to control measures. It has been reported in humans. Therefore a disease of high public health concern, despite all this little is known about the prevalence of fascioliasis in Lwengo town council abattoir

The results found a prevalence of 44.8%.where the prevalence was higher in age groups >5years (59.8%) followed by 3.5-4.5 years (41.4%) and lastly 0-2years (33.3%). Females had a higher prevalence (57.1 %) compared to males which had a prevalence of 29.9%. However there was a significant statistical difference in prevalence between sex's (X^2 =26.827, P value =0.000). lwengo district had the highest prevalence (48.3 %) followed by rakai (44.4%), lyantonde (45.1%), Ssembabule (43.1%) and kyotera (34.4%). However (x=2.056, p=0.725) there was no significant statistical difference in prevalence among origin of cattle.

The study confirms a high prevalence of liverflukes in the area and therefore control strategies should be instituted and put in place.

CHAPTER ONE

1.0 Background

Fascioliasis also known as Liver fluke disease or distomatosis or liver rot disease is considered as one of the most important parasitic diseases of domestic ruminants. It is caused by two major parasitic trematodes; Fasciola *hepatica* and F.*gigantica* Nyindo & Lukambagire, (2015). In East Africa and Uganda, Fasciola *gigantica* vectored by a water snail *Lymnaea natalensis* is the most important fluke Ombui, (2004). Once ingested, the parasites migrate through the liver parenchyma to the bile ducts leading to liver damage. The disease is usually characterized by a chronic sometimes acute or sub-acute, inflammation of the liver and bile ducts, accompanied by sub-mandibular oedema, anaemia, anorexia and general intoxication. It is zoonotic while constituting economic problems by lowering the productivity of cattle, in addition to losses from condemnation of affected liver(Oladele-Bukola,& Odetokun, 2014).

The development of liver flukes requires a suitable intermediate host (a fresh water snail) and various species of ruminants as the definitive host. The other primary factors are adequate amounts of moisture and favorable temperature (above10^0c) required for development of larvae (miracidia)(Carithers, 2001). Depending on the climatic conditions, the seasonal occurrence of fascioliasis varies from country to country. High incidences and clinical disease with high mortality are reported to occur in wet seasons than in dry seasons (Saleha, 1997)

Domestic ruminants which are chronically infected are responsible for spread of the disease by contaminating pastures with liver fluke eggs, grazing of cattle in wetlands during dry season promotes infestation of cattle with liver flukes; also transmission can occur by active and passive migration of infected snails and accidental introduction of infected snails by man or water birds cause the disease to occur in previously non- infected areas and establish endemicity, this is especially in areas that have favorable climatic conditions for survival of snails (the intermediate host).

According to Elshraway & Mahmoud, (2017).Both animals and humans contract fascioliasis infection in the same way; transmission of infection in the environment is usually perpetuated by animals, though humans do not typically contribute to the parasite's life-cycle; they are occasionally infected after failure to observe basic hygienic measures through consuming larvae-contaminated vegetables or drinking larvae-infected water and in animals is through ingestion of

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