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PREVALENCE OF LUMPY SKIN DISEASE IN CATTLE, WAKISO TOWN COUNCIL

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A DISSERTATION SUBMITTED TO THE DEPARTMENT OF ANIMAL PRODUCTION AND MANAGENT FACULTY OF AGRICULTURE AND ANIMAL SCIENCES IN PARTIAL FULFILLMENT FOR THE AWARD OF A BACHELOR'S DEGREE IN ANIMAL PRODUCTION AND MANAGEMENT BUSITEMA UNIVERSITY

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DECLARATION

I **KABENGE JIMMY**, Reg. **BU/UP/2015/196**, declare that this thesis is affirmation of the research activities I carried out as a partial requirement for an award of a degree in bachelor of Animal Production and Management of Busitema University and that this work has never been submitted to any university or any other institution of learning for any academic purpose.

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

APPROVAL

The research process up to the documentation of this report has been developed under the guidance of an academic supervisor and approved by

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DEDICATION

I would like to dedicate this dissertation to my beloved supervisor Dr. Mbogua Joseph, Mr. Kavuma Deo, Miss Namukwaya Stella, Dr. kawuki David, Dr. Ddung and Dr. kaliisa and all those who contributed towards the accomplishment of my research and dissertation.

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LSD – lumpy skin disease

Dr. – doctor

LSDV – lumpy skin disease virus

WTC – wakiso town council

USD – united states dollar

Yr. – year

DVO- District veterinary officer

ABSTRACT

The study was to determine the prevalence of lumpy skin disease in wakiso town council according to age, sex, breed and parish. A total of 100 cattle were selected in 5 different parishes using a stratified random sampling.

The results were analyzed using SPSS version 20. The results showed an overall prevalence of lumpy skin disease in cattle as 26% out of the 100 randomly selected animals. Of the 100 cattle sampled and examined using the observational method following the pathognomonic signs displayed by the disease, 38 were males, 62 were females, 65 cross breeds and 35 local breeds.

The results of the study showed that the disease was more in female (30.6%, n=62) than in male (18.4%, n=38), more in local breeds (28.6%, n=35) than in cross breeds (24.6%, n=65), was relatively higher at the age group of 2-4 years (37%, n=46) and lower at the age group of 1month to 1 year (8.8%, n=34). At the age of 5-6 years, the percentage was (30.8%, n=13) and at 7 and above years it was (28.6%, n=7), high in three parishes namely; Kayunga/ gombe parish (50%), Kisimbiri (55%), Ssala/kkona, (25%). There was a significant difference ($p<0.05$) in the prevalence of lumpy skin disease according to parish and age and there was no significant difference ($p>0.05$) in the prevalence lumpy skin disease according to sex and breed.

It was concluded that the prevalence of lumpy skin disease was high in older animals than in younger animals and high in three parishes namely; Kayunga/ gombe parish (50%), Kisimbiri (55%), Ssala/kkona, (25%).

It was recommended that a similar research should be carried out in the surrounding sub counties so as to determine the prevalence of lumpy skin disease to aid in the design of a comprehensive disease control strategy for the whole district.

CHAPTER ONE: INTRODUCTION

1.0. Introduction

1.1 Background

Lumpy skin disease (LSD) is a skin disease which is a pox disease of cattle that is caused by Neethling poxvirus and it can be acute or sub-acute. It is characterized by fever, development of firm skin nodules, enlarged lymph nodes, and ulcerative lesions particularly of the mucous membrane of the mouth.(Prozesky & Barnard, 1982;Tuppurainen, E.S.; Venter, E.H. and Coetzer, 2005). LSD is characterized by economic losses due to reduced milk production, poor growth, infertility, abortion, and sometimes death. severe and permanent damage can occur to hides, decreasing their commercial value according to (Abdulqa, Rahman, Dyary, & Othman, 2016)

The disease was first described in Northern Rhodesia (currently Zambia) in 1929 (Ahmed & Dessouki, 2013) and It was then spread to Africa, Middle East and recently to Caucasus and Balkan countries posing emerging risk to Europe and other countries.

LSD was first found and diagnosed in East Africa (Kenya) in 1957, Sudan in 1972, and in West Africa in 1974. Tanzania, Kenya, Zimbabwe, Somalia and the Cameroon, also reported an outbreaks of epizootic LSD between 1981 and 1986 with mortality rates of 20% in affected cattle. The disease was restricted to some countries in sub-Saharan Africa between 1929(Lumpy skin disease, 1995).

The outbreak of Lumpy skin disease has been noticed in various districts in Uganda namely; kakumiro in 2017, gulu in 2013, mubende in 2018, mbarara in 2007, kiruhura in 2017, rukungiri in 2016 and currently there is an outbreak in wakiso district which has caused lots of losses to farmers and Little information is published on the prevalence of lumpy skin disease in the present study area.

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