

**BUSITEMA  
UNIVERSITY**  
*Pursuing Excellence*

**KNOWLEDGE PROFILE OF CATTLE FARMERS ON EAST COAST FEVER IN  
KALAGALA SUB- COUNTY, LUWEERO DISTRICT**

**BY**

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**A DESSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND  
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20. (a) Do you know of vaccination against ECF?

20 (b). Who does the vaccination?

20 (c). At stage what age of the animal do you usually do the vaccination?

20 (d) do you know the brand name (s) of the vaccine used?

20 (e) Where is the site of administration of the vaccine?

20 (f) what is the route of administration of the vaccine?

#### SECTION C .Management of ECF out break

21. What do you do when the animal become sick of common TBDs?

.....

.....

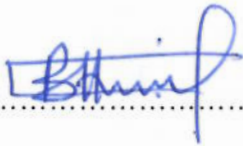
22. If the farmer does treatment him/herself then inquiries will be the following.

- a. Type of drugs used
- b. Cost of the drugs
- c. Where he gets the drugs
- d. Usage of local medicinal plants
- e. Mode of drug administration
- f. Preparation of local solution
- g. Management of swollen lymph
- h. Duration of recovery after the treatment.

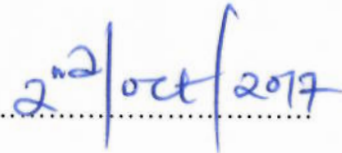
**DECLARATION**

I, **BISSAKI Henry**, hereby declare that the work herein is my own and has not been presented for any academic award in any institution of higher learning.

Sign.....



Date.....

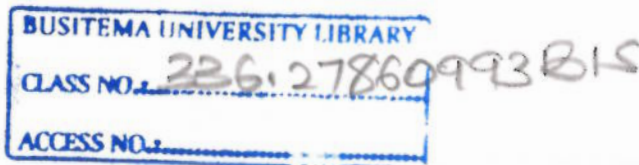


This dissertation has been submitted following the approval of the following supervisor:

Dr. KISAKYE Hellen  
Department of Animal Production and Management,  
Faculty of Agriculture and Animal sciences,  
Busitema University

Sign.....

Date.....



## **DEDICATION**

This achievement is dedicated to my beloved entire Family and my supervisor for time and efforts she has sacrificed for the betterness of my research. God bless you all.

## **ACKNOWLEDGEMENT**

I glorify the name of the almighty God provider of life and wisdom and my grateful acknowledgements are made to my supervisor Dr. Kisakye Hellen and Dr Walusimbi Emmanuel my dear lecturer for the help and guidance throughout the whole course which was both parental and academic guidance accorded to me especially during the course of the project.

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## **LIST OF ABBREVIATIONS**

C.D.O:	.....community development officer
F.A.O:	.....Food and Agricultural Organization
ECF:	.....East Cost Fever
TBD:	.....Tick Borne Diseases
BMPs:	.....Best management practices
PCR:	..... Polymerase chain reaction
UBOS:	.....Uganda Bureau of Statistics
OTC:	.....ox tetracycline
ITM:	.....Infection treatment method
AU-IBAR:	..... African Union Inter-African Bureau for Animal Resources
GALVmed:	.....Global Alliance for Livestock Veterinary Medicines

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## **ABSTRACT**

The aim of this study was to assess the knowledge profile of farmers in Kalagala Sub- County on East Coast Fever. Eighty (80) randomly selected respondents from eight (8) parishes of the Sub-County were interviewed and issued questionnaires. Respondents were assessed on their knowledge of identification, predisposing factors, prevention and control of ECF. The results showed that overall, majority of the respondents (55%) had good knowledge with scores of 50-65%, 28% respondents had excellent knowledge with a score of 80%, 18% had inadequate knowledge with a score of 25%. Most respondents (60%) were most knowledgeable about prevention of ECF and the majority applied acaricide through hand spraying for tick control. Generally 93% farmers had inadequate knowledge on the control of ECF with a score of 20%. Most respondents did not know how the disease is treated. Respondents were aware of vaccination against ECF, although the adoption rate of the method for prevention was very low (1%). There is need to investigate the causes of the low adoption rate of vaccination against ECF in Kalagala sub county. The knowledge of farmers in Kalagala Sub County on ECF can be improved by training and sensitization of the farmers on key areas of concern with regard to ECF.

## 1.0 CHAPTER ONE INTRODUCTION

### 1.1 Background

East Coast Fever (ECF) is a disease of cattle caused by a blood-borne protozoa parasite, *theileria parva parva* vectored by the brown ear tick *Rhipicephalus-appendiculatus*. In Africa ECF affects about twenty five million cattle greatly and also limits the introduction of improved breeds (Gulet *et al.*, 2015). ECF is considered as disease of global concern with serious economic impact in view of mortality, reduced milk yield, weight losses, abortions, and control costs, thus prevention is considered as the best mean to control (Gharbi *et al.*, 2015). Control of the disease is feasible but requires careful planning and any tick control measures must consider other local tick-borne diseases. In the absence of veterinary or technical help in terms of clinical diagnosis of ECF and collection of samples for laboratory diagnosis, stockmen and farmers should learn how to take blood smears and lymph node biopsy smears to send to the laboratory for diagnostic tests. ECF has been reported in 11 countries in the region. In these countries ECF causes substantial mortality in especially exotic dairy cattle and production losses in all production systems under livestock sector and limits the introduction of improved cattle breeds (Lynen *et al.*, 2011).

Cattle from different farmers are mixed for various reasons mostly in the lowland zone under the free range and tethering grazing systems and farmers practice additional fodder importation acting as tick carrier during the dry seasons thus easy spread of the disease (Akiiki *et al.*, 2004). Pasture grazed animals are susceptible to predisposing factors of the disease (Swai *et al.*, 2007) thus farmers practicing fenced and zero-grazing systems have better knowledge of the problems caused by ticks and tick-borne diseases. In Masai pastoralist communities farmer are aware and knowledgeable about East Coast Fever as being non zoonotic disease (FAO, 2003). Farmer practice ethno veterinary medicine as treatment remedy for East coast fever and ectoparasites in central Kenya using medicinal plant species (Njoroge and Bussmann, 2006). Farmers have developed ethno diagnostic skills of livestock disease, they critically look at symptoms, disease vectors, season effects and animal species affected, this helps in proper disease prevention of livestock diseases (Ole-Miaron., 2003). According to GALVmed Position Paper (2015) disease treatment using curative drugs is effective but expensive. Therefore

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