



**BUSITEMA
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**EVALUATION OF FACTORS THAT INFLUENCE USE OF MEDICINAL PLANTS IN
ANIMAL DISEASE MANAGEMENT IN BUYANGA S/C- IGANGA DISTRICT.**

BY



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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE
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JUNE, 2015

DECLARATION

I **WAIBI SARAH** declare that this dissertation is original and has not previously been submitted to any university or other institutions of higher learning for an academic award.

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APPROVAL

This dissertation has been submitted for examination with the approval of my supervisor

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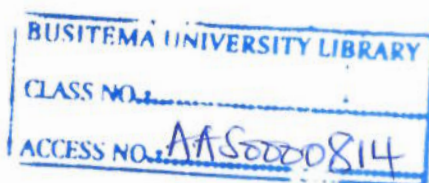
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DEDICATION

This dissertation is dedicated to my lovely parents: Mr. Waibi Moses & Mrs. Beera Jenipher, sisters and brothers for their advice and support.

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LIST OF ABBREVIATIONS

BCS	Body Condition Score
E.g.	For example
ECF	East Coast Fever
Etc	Etcetera
EVM	Ethno- Veterinary Medicine
I.e.	That is to say
ITK	Indigenous Technical Knowledge
MPs	Medicinal Plants
PHC	Primary Health Care
S/C	Sub-County
TMP(s)	Traditional Medicinal Practitioner(s)
WHO	World Health Organization

ABSTRACT

For poor smallholder farmers in Uganda, conventional drugs have become very expensive and an out-of-reach resource for the health management of livestock. The study was carried out in Buyanga S/C, Iganga district to evaluate the factors that influence the use of medicinal plants (MPs) in animal disease management; with emphasis on establishing the common MPs used, studying factors favoring the use of MPs and limitations to the use of MPs in animal disease management. 5 parishes, 2 villages from each parish and then 10 livestock rearing households per village were randomly selected. A total of 100 semi structured questionnaires were distributed to randomly selected farmers who owned livestock. The study results revealed that majority of the respondents were male (73%), Muslims (52%), in the age bracket of 41 – 50 years (45%) and had attained some formal education dominated by secondary education (36%). Most farmers (55%) were using both the MPs and or pharmaceutical drugs to attain sustainable animal disease management, 25% used only pharmaceutical drugs while 20% used MPs only which were easily accessible and affordable than pharmaceutical drugs. A total of 36 plant species, with their plant part used and methods of preparation were established as used by farmers in Buyanga S/C in managing different livestock diseases. Most farmers (48.0%) had experience of 6-10 years in use of MPs, which were easily accessible (60%) mainly from the bushes (46.7%). The use of MPs was considered as a very cheap (60%) alternative to disease control and leaves were most frequently used (66.7%) which they mostly prepared as a cold extract (64.0%). Farmers considered leaves as being easier to collect and also conservationally favorable to the MPs used as also found out by Kamoga (2010). The factors which had statistical significance with the effective use of MPs included; MPs part used, economic benefit, Source of MPs, access to MPs and experience in use of MPs. However, other factor such as; non specific dosage, low palatability of MPs to animals, low efficacy greatly limited effective use of MPs. There is thus need for further research and development to use of the MPs species for integration into the existing; since modern veterinary drugs are considered as inadequate and cost ineffective that is, hardly affordable to many livestock farmers. This review generally suggests that herbal medicines may indeed be beneficial for animal health, whilst at the same time, highlights the need for more controlled in vivo research to validate plant bioactivity.

CHAPTER ONE: INTRODUCTION

1.1 BACK GROUND

It has been reported that an estimated percentage of 80% of Uganda's rural population relies on Agriculture with a varied focus on livestock and crop production depending on the Agro-ecological zone Nabukenya *et al.*, (2014) but there is potential for increasing production if disease control and management strategies are appropriately undertaken. However, one of the major current productivity constraints is lack of ability to deal with pests and diseases (Archambault, 2004) especially to the farmers in rural areas like Buyanga S/C with low income levels. Livestock diseases greatly affect animal health, welfare and productivity leading to high treatment costs and losses through reduced growth and unchecked morbidity and mortality (Nabukenya *et al.*, 2014). The challenge of livestock diseases has a greater opportunity to be overcome using herbal medicines which are locally available and plenty in Uganda especially in Buyanga S/C – Iganga district. Since most livestock farmers in Uganda are resource poor, it is therefore important that disease control strategies project affordability and availability to farmers. This can be achieved by use of locally and naturally available herbal medicines. Kamoga, (2010) confirms this fact. In a related finding, the WHO estimates that about 80% of the human population in developing countries depends on traditional medicine for their primary health care needs (Nabukenya *et al.*, 2014). The use of MPs is extended to the treatment livestock diseases and they provide a cheap source of medicine since pharmaceutical drugs are expensive. They represent an important health and economic component of the biodiversity. Therefore it is very important to make medicinal plant inventory for conservation and sustainable use, (Sebalidica *et al.*, 2011)

However, factors such as palatability, toxicity and dosage need to be considered in MPs use according to Waller, *et al.*, (2001), to ensure their effective and sustainable use in animal disease management. But, there is limited documentation on the factors that influence use of herbal remedies to treat livestock diseases in most cultures. This is thus to the disadvantage of most farmers. Therefore scientific interventions through research are necessary to make herbal medicines more reliable and available to livestock farmers.

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