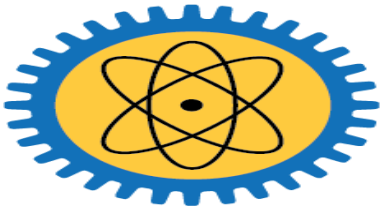

FACULTY OF AGRICULTURE AND ANIMAL SCIENCES

DEPARTMENT OF ANIMAL PRODUCTION AND MANAGEMENT.

ANTICOCCIDIAL-FREE MANAGEMENT STRATEGIES IN SELECTED POULTRY FARMS IN BBAALE COUNTY, KAYUNGA DISTRICT, UGANDA

BY

LUVUMA ERIA

BU/UP/2021/0167

A RESEARCH DISSERTATRION REPORT SUBMITTED TO THE FACULTY OF AGRICULTURE AND ANIMAL SCIENCES IN PARTIAL FULFILLMENT FOR THE AWARD OF BACHELORS DEGREE IN ANIMAL PRODUCTION AND MANAGEMENT OF BUSITEMA UNIVERSITY

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ABSTRACT

The research was an applied research addressing the challenge of controlling coccidiosis in poultry without relying on anticoccidial.

With the purpose of assessing the effectiveness of anticoccidal-free management strategies in control and prevention of coccidiosis in selected poultry farms and the specific objectives of determining the Prevalence of Coccidiosis in the selected poultry farms, identifying the anticoccidial free farming practices poultry farmers use in the management of coccidiosis and identifying the challenges farmers face while implementing the anticoccidial-free management strategies in the selected poultry farms.

Survey and Interviews, Field Observations: Experimental Design, Data Collection, and Statistical Analysis were the methods used.

Lab tests indicated no detection of Eimeria oocysts in the sampled poultry, suggesting effective management practices. However, continuous monitoring is essential to maintain this status and respond quickly to potential outbreaks. Farmers exhibited strong awareness of coccidiosis symptoms, which may enhance their ability to manage and control the disease.

Farmers predominantly employed multi-drug regimens, with amprolium as a key treatment. Farmers emphasized adhering to recommended dosages and rotating drug classes to prevent resistance development, ensuring treatment efficacy and safety. High-quality feeding practices, including maintaining cleanliness and gradual dietary changes, were recognized as vital for preventing stress and disease. A tiered approach to monitoring coccidiosis was evident, with regular flock health monitoring as the foundational method. Record-keeping complemented this monitoring, particularly for intensive surveillance. The combination of monitoring, fecal examinations, and record-keeping was employed when heightened vigilance was necessary, facilitating early detection and impact analysis. Common biosecurity measures included limiting access to poultry houses, preventing contact with wild animals, proper manure management, quarantining new birds, and providing foot baths and clean clothing. These practices were essential in preventing the spread of coccidiosis. While improved hygiene and sanitation were widely adopted, the use of probiotics and herbal supplements was also popular among those exploring anticoccidial-free strategies. Natural resistance breeding was mentioned less frequently but was included in some management combinations.

Several barriers hindered the widespread adoption of anticoccidial-free management strategies, including high costs, labor intensity, limited knowledge, market resistance, and environmental challenges

It’s recommended to encourage the adoption of vaccination programs to build immunity against coccidiosis, assessing their feasibility and cost-effectiveness locally, promote awareness among farmers about the benefits of vaccination as a preventive measure.

DECLARATION

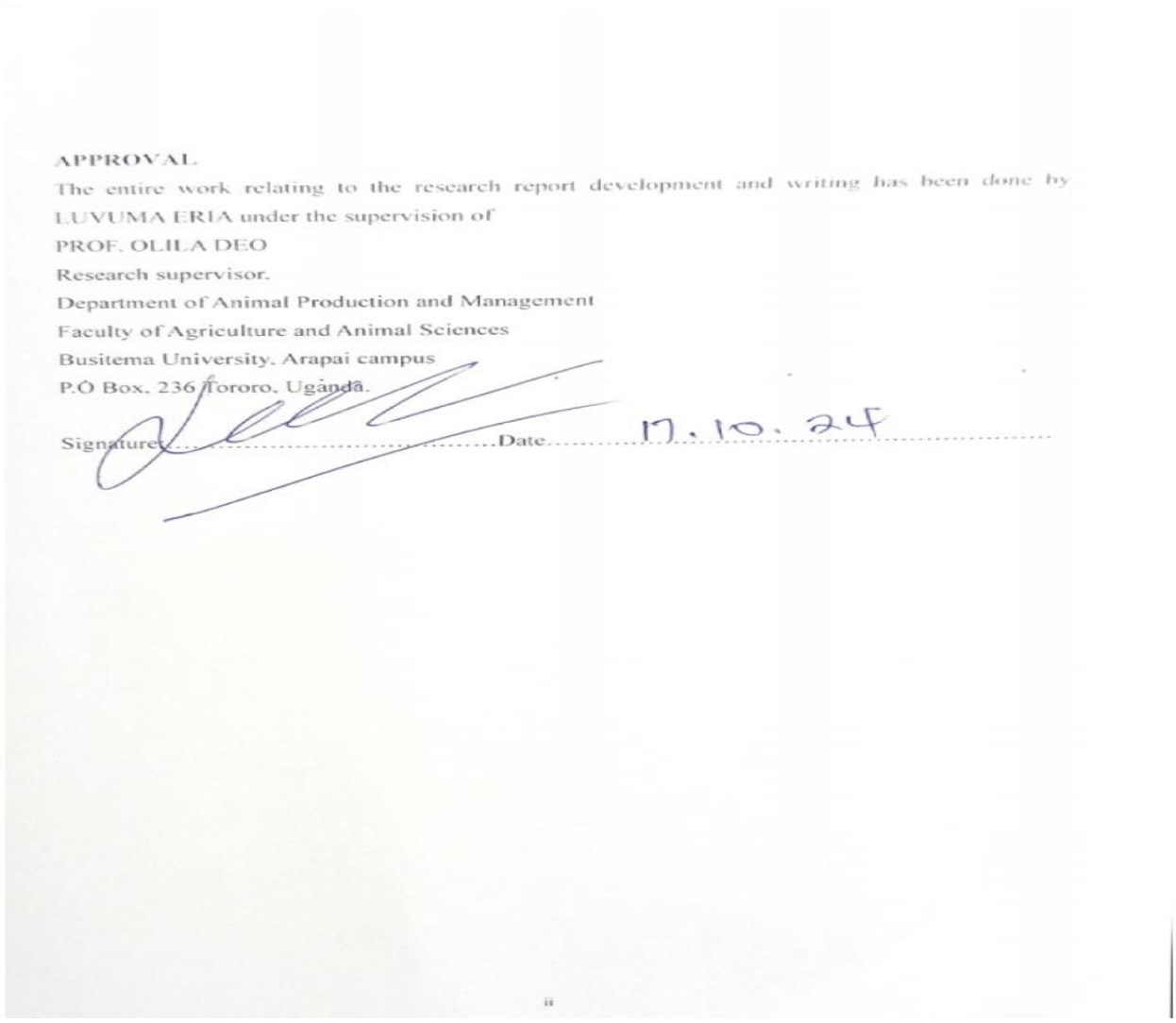
This report contains my own work and has never been submitted to any institution for any assistance or award of academic credit or qualification.

NAME: LUVUMA ERIA

REGISTRATION NUMBER: BU/UP/2021/O167

Signature: ..... Date: 17:10:2024

APPROVAL



APPROVAL

The entire work relating to the research report development and writing has been done by LUVUMA ERIA under the supervision of

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ii

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TABLE OF CONTENT

LIST OF FIGURES

CHAPTER ONE

1.0 BACKGROUND

1.1 Introduction

Coccidiosis is a widespread and economically significant disease in poultry farming globally (Abebe & Gugsa, 2021). The disease adversely reduces growth rates and weight gains, leads to gastrointestinal damage, Diarrhea and Dehydration, immunosuppression, Increased Mortality Rates, economically impacts poultry farming, and overall productivity (Noack et al., 2019). Traditionally, the control of coccidiosis has heavily relied on the use of anticoccidial drugs. However, concerns about drug resistance, residues in poultry products, and the growing interest in sustainable and organic poultry farming practices have necessitated a reevaluation of coccidiosis management strategies (Tom Tabler, 2022).

Coccidiosis is a prevalent issue in poultry farming, impacting both small-scale and commercial operations. The humid tropical climate of Bbaale County, Kayunga District, creates favorable conditions for the survival and transmission of Eimeria oocysts, exacerbating the challenge of coccidiosis management (Fasil, 2019).

Coccidiosis ranks among the top poultry diseases, with a high prevalence rate and considerable economic implications for poultry farmers. This necessitates the discovery of enduring and efficient approaches to manage and prevent coccidiosis in this area (Tadesse & Feyissa, 2016).

Historically, anticoccidial drugs, particularly chemical coccidiostats and ionophores, have been the primary means of controlling coccidiosis in poultry. However, the overreliance on these drugs has raised concerns about the development of drug-resistant strains of Eimeria (Hedman et al., 2020). Additionally, the presence of drug residues in poultry products poses risks to consumer health and may lead to trade restrictions (Patel et al., 2018).

A shift towards sustainable and organic poultry farming practices is evident on a global scale. Nations like the United States and members of the European Union have seen a rise in the desire for poultry raised without anticoccidial drugs, indicating shifts in consumer choices and regulatory policies (Singh & Bhatt, 2021).

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APPENDICES

1: Work plan