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MAGGOT AS AN ALTERNATIVE PROTEIN SUPPLEMENT ON THE GROWTH OF BROILERS

BY

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DECLARATION;

I NAKAKEETO HOPE CAROLINE, declare that this dissertation has never been submitted by any other person in any other university or any other higher institutions of learning.

DATE.....

SIGNATURE.....

DEDICATION.

I dedicate this dissertation to my fellow students who will find it important to refer to it for guidance in future.

ACKNOWLEDGEMENT

I wish to greatly acknowledge the guidance I have received from my supervisor Dr.etiang the research coordinator Mr.mbogua and other Busitema university staff members plus my fellow student's thanks very much for whatever educative information we have shared.

LIST OF ABBREVIATION

BSF-Black soldier fly

DOC-Day old chicks

IBD-Infectious bursa disease

IB-infectious bronchitis

HF-House fly

BSF-Black soldier fly

MM-Maggot Meal

F/M-Fish meal.

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ABSTRACT.

This research was about maggots as an alternative protein supplement it was conducted from Nakasongola town council 80 km away from Kampala city it was an experimental research which lasted for 4 weeks from 5th /06/2019-3rd /07/2019 with two treatments of feeds maggots and fish meal where maggots were fed to broilers in percentages of 100%,70%and 50% then fish meal was the control broilers which was 100%.the main objectives of this experiment was to determine the weight gain of broilers supplemented with alternative protein supplement maggots and the specific objectives was to assess the possibility of maggots as a protein supplement and to assess the palatability of maggot to broilers .

The experiment was successfully conducted where weight gain could be measured on the daily basis for all the groups and the weight recorded on a daily basis and also feed intake measurements were done daily .observations of whether maggots are palatable to broilers was also done on a daily basis for the consecutive 2 weeks of the experiment .

From the findings it was evident that weight gain varied between the percentages of the groups and the control groups where group that were fed on maggots 100% gave a higher difference on weight gain compared to the control group and other groups of the experiment.70% of maggot meal did not show any significant difference from the control group and 100% maggot meal but there a significant difference between group fed on 70% and 50% where 70% showed high weight gain done group of 50%.through out the whole experiment 50% maggot meal had the lowest records on the weight gain meaning that there was no significant difference between the control and 50% maggot meal.

On palatability all the groups had varying levels of feed intake but there was no significant differences recorded this is because all the feeds given was palatable.

According to my observation I assessed the possibility of maggots as an alternative protein supplement because all the feed could be consumed.

In conclusion therefore maggot meal can be supplemented to broilers in different percentages but 100% can work best without any effect on weight gain as stated in other journals of(Ayizanga & Anankware, 2018),(Hf, Ka, & Ndamukong, 2019).

1.0 CHAPTER ONE.

1.1. BACKGROUND

This research was about maggot as protein supplement on weight gain of broilers it involved rearing day old chicks of un sexed cob 500 broilers and supplementing them with both fish meal and dried processed maggots on given percentages in their rations while determining their weight gain, and feed intake.

This experiment was achieved through collecting data, interpreting, and analyzing data to achieve the aims and objectives of the study to solve a problem.

1.1. INTRODUCTION.

1.1.1 BROILERS REARING.

Broiler chicken {Gallus gallus domestica} of the subspecies red jungle are domesticated fowl that are bred and raised for meat production typically broilers have got white feathers and yellowish skin. They are quick maturing that can reach slaughter weight of 1.5-2kgs between 4-7weeks under good management("Broiler Management," n.d.)

Broiler chickens are kept in two systems that are intensive system and Semi-intensive system. With intensive system there's complete confinement, where broilers are kept under deep litter system or battery cage system and then semi-intensive system birds are raised basing on partial confinement and free range this system is suitable for people with large pieces of land that are well fenced to avoid intruders and thieves. Broilers are very important source of vitamins, proteins, and other nutrients and they provide quick income compared to their counterparts like beef, pork among others. To add on that they also contribute a lot to the production chain in urban markets.(John, 2015)

1.1.2 MAGGOT AS PROTEIN SUPPLEMNT.

The search for alternative and sustainable protein is an issue of major importance that needs viable solutions in the short term making maggot meal an increasingly alternative feed option for poultry.

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