
**EFFECT OF *Carica papaya* LEAF CRUDE EXTRACT IN REDUCTION OF COCCIDIA
OOCYSTS IN BROILER CHICKS**

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DECLARATION

I **Kiryia Denis** declare that the work in this dissertation is original and to the best of my understanding has never been submitted to any university or any other institution of higher learning for the award of any degree or any other academic qualification

Signature: Date.....

This dissertation has been submitted with the approval of my supervisor.

Signature: Date.....

Dr. Hellen Kisakye

DEDICATION

This piece of work is dedicated to all Animal production students of Busitema University, Arapai campus, poultry farmers of Butebo District and all extension workers working towards the increase of quality poultry products

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LIST OF ABBREVIATIONS

OPG	Oocysts Per Gram
FAO	Food and Agriculture Organization
NCD	Newcastle Disease
IBD	Infectious Bursal Disease
APM	Animal Production and Management
ANOVA	Analysis Of Variance
SOPs	standard operating procedures

LIST OF TABLES AND FIGURES

Table1: shows the number of oocysts per gram of fecal matter for different treatment groups

Figure1: shows the trend of oocyst output in each treatment group

Table 2: shows the difference between group means (95% CI)

Table 3: shows the reduction rate in oocysts produced

ABSTRACT

In the event of controlling and treating coccidiosis in poultry houses, drug residues have become a public health concern. This study intended to evaluate the efficacy of carica papaya leaf crude extract in reduction of coccidia oocysts in broiler chicks as an alternative to the synthetic anticoccidial drugs. The study took an experimental approach with 30 white Cornish broiler chicks which were equally divided into 6 groups, (D1, D2, D3, D4, D5 & D6). Chicks in D1, D2, D3, D4, & D5 were equally infected with 13100 Eimeria oocysts. Fresh carica Papaya leaves were harvested, dried under shade, ground and sieved powder was used to prepare the crude extract. The extract was administered twice a day at doses of 0.5ml/chick (D1), 1ml/chick (D2) and 1.5ml/chick (D3), directly into their mouths. Chicks of D4 received a standard anti-coccidial drug, (Amprolium). Those in D5 were infected but not treated while D6 was the neutral group, (not infected, and not treated).

In the experimental groups, chickens in D3 had the highest oocyst reduction rate (96.23%), followed by D2 (91.47%), while those in D1 had the lowest (89.96%). The means of the treatments had no significant difference ($P>0.05$). In overall, the highest oocyst reduction count was recorded in chickens of D4 (98.41%) while D5 recorded an increasing number of oocysts with -77.64%

In this study, the crude leaf extract of *C. papaya* showed that it can be used as an alternative to Amprolium drug in the treatment of coccidiosis. However, the active ingredient need to be extracted and its dosage and toxicity levels to be further studied.