

**BLACK SOLDIER LARVAE AS AN ALTERNATIVE PROTEIN SOURCE FOR
WISTAR RATS**

BY

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DECLARATION

The work provided in this dissertation is the researcher's own work and has not been submitted elsewhere for any other qualification.

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APPROVAL

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DEDICATION.

I dedicate this research dissertation to my academic supervisor Dr. Hellen Kisakye, my parents, brothers, sisters the completion of this work was not possible without their support and help.

ACKNOWLEDGEMENT.

I would like to express my deepest respect and most sincere gratitude to my supervisor Dr. Hellen kisakye for her guidance and encouragement at all stages of my work.

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LIST OF ABBREVIATIONS.

FAO: Food agricultural organization.

COVAB: College of veterinary medicine resources and biosecurity.

FCR: Feed conversion ratio.

BSL: black soldier larvae.

DM: dry matter

MC: moisture content

CP: crude protein

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ABSTRACT.

This study was conducted to compare the performance of white rats fed on BSFL and fishmeal during a period of four weeks. A total of 24 rats three weeks old were used in the experiment. The fishmeal was replaced with BRCs at 0%(control A) , 25% group B ,50% for group C ,100% for group D in the rats diets. Treatments (A, B, C and D) were randomly distributed into 8 buckets of 6 rats in a treatment each with one replications . Data were analyzed using a two way a nova to compare the means of treatments. At the end of experiment, there was statistical difference in feed intake live weight gain and FCR ($p<0.05$) among treatments with increasing substitution rates of fishmeal with BSL. Also, the results showed that FCR were not significantly affected by the treatments ($p>0.05$), with the highest performance in treatment B. the results also also show that palatability was significantly affected by substitution ($p<0.05$). Therefore BSL may be included to 25% meal in rat feed