



FINAL YEAR PROJECT REPORT

PREVALENCE OF BRUCELLOSIS AND RISK FACTORS AMONG CATTLE

IN KALONGO TOWN COUNCIL, AGAGO DISTRICT

BY

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**A DISSERTATION SUBMITTED TO THE FACULTY OF AGRICULTURE AND
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ABSTRACT

Brucellosis is a key zoonosis of major public health, animal welfare, and economic significance, and is endemic in livestock in Uganda. A cross-sectional study was carried out to determine the prevalence of Brucellosis, Identify the risk factors associated with Brucellosis among cattle in Kalongo Town Council, Agago District, Northern Uganda and document the practices associated with the control of Brucellosis. A total of 114 serum samples and questionnaires were obtained, the sera were analyzed using Rose Bengal agglutination test.

Prevalence was obtained by descriptive analysis where frequencies and proportions were obtained. Risk factors were analyzed at univariate and bivariate levels, using Chi square and the logistic regression analysis. The overall sero-prevalence was 14.9% (17/114, 95% Confidence Interval). The mixed breed (crosses) were twofold at increased odds of having brucellosis (or=2.083, 95%ci=0.644-6.734) as compared to the local breed animals. However, the likelihood of these animals having brucellosis was not significant. The management systems show that animals on free range were up to threefold at increased odds of having brucellosis (or=3.103, 95% CI=0.168-6.617) as compared to those on semi-intensive care; moreover, the likelihood was highly significant ($p < 0.01$). The history of purchase shows that animals purchased outside the locality were at increased odds of having brucellosis. Strict bio-safety and bio-security and management are some of the measures to control the disease. The data highlights brucellosis occurrence and major risk factors for its transmission in cattle in Kalongo town council, Agago District. The study found that the prevalence of 14.9% was in conformation with the existing findings with association between sero-positive animals to risk factors such as age, breed, management system, sex and large herd size. Improvement in farm bio-security and hygiene practices and avoidance of buy in animals are recommended control measures.

DECLARATION

I Akena Walter do declare that this report is the original copy of my own work and have never been reproduced or submitted to any academic institution for award of any academic credit.

Date.....

Sign.....

APPROVAL

This report has been supervised and approved for onward submission as stipulated by the University for the Partial Fulfillment leading to the award of Bachelor's degree in animal production and management

Dr. Amony Collins (MSc LDPM, MBA, BVM)

Date.....

Sign.....

DEDICATION

With great honor, gratitude and bliss, I dedicate this report to my beloved father Mr. Okello Lamton and mother Areng Hellen and siblings for their tireless support toward my education, with love and care that they have shown and given me right from my academic career until this level, may the Almighty Lord bless them endlessly. I also extend my dedication to my beloved Wife Acan Scovia, my daughters Ayee Michelle Hope and Akena Julian for the support, care and love shown to me during the study and my academic career may the good Lord our God bless them abundantly. I also dedicate this book to the community of Kalongo Town and all staffs of Kalongo Town Council for the comfort, guidance and comfort offered to me during the research data collection, may God bless them abundantly

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