

DECLARATION

I hereby declare that this dissertation submitted to the University of Limpopo for the degree of Master of Science in Agriculture (Animal Production) is the result of my own work and has not been presented elsewhere for a higher degree. All sources of information have been acknowledged by references.

Name: Nakalebe Papali Mary

Signature..... Date.....

ACKNOWLEDGEMENT

I would like to give thanks and praise to Almighty God, who gave me the knowledge and wisdom to accomplish my studies. I would like to thank my major supervisor, Prof. J.W. Ng'ambi, for accepting me as a graduate student, the guidance, patience and supervision and critical suggestions that reinforced my research and knowledge. I would have not done it without your help! I would also like to thank my co-supervisors, Dr M. S Malatje and Dr. D. Norris. I thank Mr. B.S. Raphala and the farm workers, for their technical assistance during the time of my experiment. In addition, I thank all staff members and masters students in Animal Production department, University of Limpopo.

I would also like to thank my family for providing me with unwavering support and belief in my abilities. Lastly, thanks to the National Research Foundation (NRF) for their financial support.

DEDICATION

This dissertation is dedicated to my lovely parents, and family members, especially Seabata and Violet Nakalebe.

ABSTRACT

The study was conducted to determine the effect of dietary energy level and tanniniferous *Acacia karroo* leaf meal level of supplementation at finisher stage on performance and carcass characteristics of male and female Ross 308 broiler chickens. Three hundred and sixty, 21-day old male and female broiler chickens were assigned to twelve treatments with three replications of ten birds in a 2 (sex) x 3 (dietary energy level) x 3 (tanniniferous *Acacia karroo* leaf meal level) factorial, complete randomized design. Supplementation with *Acacia karroo* leaf meal had no effect on diet intake, digestibility and live weight of broiler chickens. However, supplementation with 9 and 12 g of *Acacia karroo* leaf meal per kg DM feed reduced fat pad weights in male broiler chickens by 26 and 29 percentage points, respectively. Similarly, supplementation with 9 and 12 g of *Acacia karroo* leaf meal per kg DM feed reduced fat pad weights in female chickens by 26 percentage points. These reductions were achieved without any significant reduction in feed intake and digestibility. However, the physiological explanation for this effect is not clear and it, thus, merits further investigation.

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