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EFFECTS OF MONENSIN DELIVERED BY A SLOW RELEASE DEVICE ON ASPECTS OF PERFORMANCE IN DAIRY HEIFERS

A THESIS PRESENTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF PHILOSOPHY IN VETERINARY
CLINICAL SCIENCES AT MASSEY UNIVERSITY

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1993

Abstract

Two series of trials (from August 1991 to February 1992 and from April to July 1992) were conducted to evaluate the effect of monensin on the growth, reproductive performance and *Eimeria* oocyst counts of dairy heifers in New Zealand. Two hundred heifers were divided according to their weight into two groups at the beginning of the trials. Heifers with similar weights were assigned randomly to either of two treatments: with or without monensin boluses that delivered 200 mg of monensin per day. Monensin had no effect on weight gains in both parts of the trial. A significant increase in height was observed during the second part of the trial. Monensin significantly decreased ($p<0.05$) the oocyst counts in both parts of the trial and plasma progesterone levels 100 days after the first administration of boluses. Although conception rates and age of heifers at calving were not affected by monensin, the weight of calves was significantly increased by the ionophore. These results indicate that monensin can influence reproductive performance of heifers without affecting their body weight. In addition, its properties as a coccidiostat were confirmed.

Acknowledgements

I would like to thank my supervisor, Professor Norm Williamson for his guidance, patience and help during the whole length of my research. I would also like to thank my co-supervisors, Professor Tony Charleston and Dr. Gavin Wilson for their suggestions.

I would like to thank the New Zealand Government for their financial support through the ODA scholarship fund.

I would like to thank ELANCO New Zealand for their interest and support for this project.

My acknowledgement to Dr. Hugo Varela Alvarez for the statistical guidance he offered me in the analysis of my work.

Special thanks to Jenny Edwards at the Computing Services Building for her help and suggestions to improve this work.

Special thanks to Dr. Max Merrall and his students for his assistance during the sampling period.

To all the farmers that participated in this study, I am very grateful for their cooperation and assistance in making this research possible.

To the technicians at the Veterinary Parasitology laboratory, Shirley Calder and Barbara Adlington for their assistance in the analysis of faecal samples.

To Jane Candy, technician at the RIA laboratory, Department of Physiology and Anatomy for her guidance in the progesterone analysis.

I wish to express my appreciation and sincere gratitude to the people who helped me during the sample collection periods. Special acknowledgement to Chindarat Sincharoenkul, Edith Fernández Baca, Susan R. Lamb, Lois Broadbent, Clare Doyle, Armindo Maia, Leo Lerios and Waiss Samim.

I would like to thank and dedicate this thesis to my family and friends in Colombia. Their communications encouraged me to keep going.

Finalmente, quiero agradecerle a Dios por la energía y disciplina que siempre me ha brindado y su ayuda extra para completar este trabajo.

Table of Contents

List of Tables **Page No.**

List of Figures **Page No.**