

DEVIATIONS OF NUTRIENT DIGESTIBILITY OF
JOHNSONGRASS HAY RATIONS AS INFLUENCED
BY PHENOTHIAZINE AND FECES
DRYING PROCESSES

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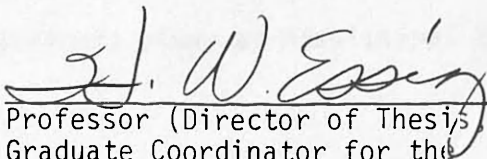
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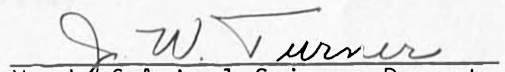
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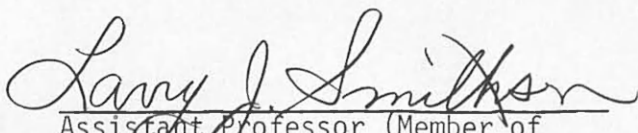
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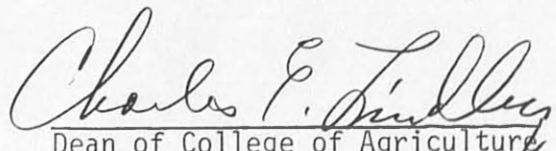
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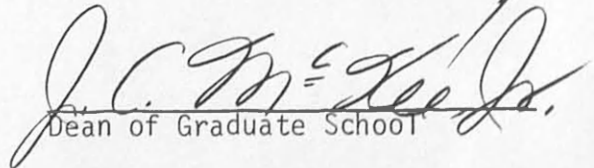

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TABLE OF CONTENTS

CHAPTER	PAGE
ACKNOWLEDGEMENTS.	iii
LIST OF TABLES.	v
LIST OF APPENDIX TABLES	vi
I. INTRODUCTION	1
II. REVIEW OF LITERATURE	3
III. EXPERIMENTAL METHODS AND MATERIALS	16
Experimental Animals	16
Rations and Feeding Procedures	17
Digestion Study.	19
Chemical Analyses.	21
Statistical Analyses	23
IV. RESULTS AND DISCUSSION	24
Experiment 1	24
Digestible Energy, Digestion Coefficient and Digestible Dry Matter.	24
Nitrogen Retention.	28
Volatile Fatty Acid	31
Experiment 2	38
V. SUMMARY.	43
VI. ABSTRACT	45
VII. APPENDIX	47
VIII. LITERATURE CITED	71
VITA	77

LIST OF TABLES

TABLE	PAGE
1. RATION RANDOMIZATION SCHEME USED IN TRIALS 1 AND 2	16
2. RATION INGREDIENT COMPOSITION AND ESTIMATED ANALYSES OF THE RATIONS IN TRIALS 1 AND 2	18
3. SUMMARY OF DIGESTIBLE ENERGY, DIGESTIBLE DRY MATTER AND ENERGY DIGESTION COEFFICIENT OF EXPERIMENTAL RATIONS	25
4. SUMMARY OF NITROGEN RETENTION OF STEERS RECEIVING EXPERIMENTAL RATIONS	29
5. VOLATILE FATTY ACID CONCENTRATION (mM/LITER) CHANGES AND pH OF RUMEN CONTENTS FROM STEERS FED EXPERIMENTAL RATIONS - TRIAL 1 .	32
6. VOLATILE FATTY ACID CONCENTRATION (mM/LITER) CHANGES AND pH OF RUMEN CONTENT FROM STEERS FED EXPERIMENTAL RATIONS - TRIAL 2. .	34
7. SUMMARY OF THE MEANS OF DIGESTIBLE ENERGY, DIGESTIBLE DRY MATTER, ENERGY DIGESTION COEFFICIENT AND TOTAL NITROGEN EXCRETION OF OVEN DRIED AND FREEZE DRIED FECAL SAMPLES	39
8. SUMMARY OF THE MEANS OF NITROGEN RETENTION OF STEERS RECEIVING EXPERIMENTAL RATIONS - TRIALS 1 AND 2	42
9. SUMMARY OF NITROGEN RETENTION PER GRAM OF FEED FED OF STEERS RECEIVING EXPERIMENTAL RATIONS - TRIALS 1 AND 2	45
10. SUMMARY CONDUCTED FOR TOTAL VFA CONCENTRATION AT DIFFERENT SAMPLING TIMES OF STEERS FED EXPERIMENTAL RATIONS - TRIALS 1 AND 2	47
11. SUMMARY CONDUCTED FOR pH OF RUMEN CONTENT AT DIFFERENT SAMPLING TIMES OF STEERS FED EXPERIMENTAL RATIONS - TRIAL 1 AND 2	48
12. SUMMARY CONDUCTED FOR ACETIC ACID CONCENTRATION CHANGE TWO AND FOUR HOURS POST-FEEDING OF STEERS FED EXPERIMENTAL RATIONS -- TRIALS 1 AND 2	49
13. SUMMARY CONDUCTED FOR PROPIONIC ACID CONCENTRATION AT TWO AND FOUR HOURS POST-FEEDING -- TRIALS 1 AND 2	50
14. SUMMARY CONDUCTED FOR BUTYRIC ACID CONCENTRATION CHANGE TWO AND FOUR HOURS POST-FEEDING -- TRIALS 1 AND 2	51
15. SUMMARY CONDUCTED FOR VALERIC ACID CONCENTRATION CHANGE TWO AND FOUR HOURS POST-FEEDING -- TRIALS 1 AND 2	52

LIST OF APPENDIX TABLES

APPENDIX TABLE	PAGE
1. EGGS PER GRAM OF FECAL SAMPLES OF EXPERIMENTAL ANIMALS AS DETERMINED BY McMASTER METHOD.	48
2. SUMMARY OF DIGESTIBLE ENERGY, DIGESTIBLE DRY MATTER , ENERGY DIGESTION COEFFICIENT AND NITROGEN RETENTION FOR DIGESTION TRIAL -- TRIAL 1	49
2a. SUMMARY OF DIGESTIBLE ENERGY, DIGESTIBLE DRY MATTER, ENERGY DIGESTION COEFFICIENT AND NITROGEN RETENTION FOR DIGESTION TRIAL -- TRIAL 2	52
3. ANOV SUMMARY CONDUCTED FOR DIGESTIBLE ENERGY OF STEERS RECEIVING EXPERIMENTAL RATIONS - TRIAL 1 AND 2	54
4. ANOV SUMMARY FOR DIGESTIBLE DRY MATTER OF STEERS FED EXPERIMENTAL RATIONS - TRIALS 1 AND 2.	54
5. ANOV SUMMARY CONDUCTED FOR ENERGY DIGESTION COEFFICIENT OF STEERS RECEIVING EXPERIMENTAL RATIONS IN TRIALS 1 AND 2.	55
6. ANOV SUMMARY OF NITROGEN RETENTION PERCENT OF STEERS RECEIVING EXPERIMENTAL RATIONS - TRIALS 1 AND 2.	55
7. ANOV SUMMARY OF NITROGEN RETENTION PER GRAM OF FEED FED OF STEERS RECEIVING EXPERIMENTAL RATIONS - TRIALS 1 AND 2	56
8. ANOV SUMMARY CONDUCTED FOR TOTAL VFA CONCENTRATION AT DIFFERENT SAMPLING TIMES OF STEERS FED EXPERIMENTAL RATIONS - TRIALS 1 AND 2.	57
9. ANOV SUMMARY CONDUCTED FOR pH OF RUMEN CONTENT AT DIFFERENT SAMPLING TIMES OF STEERS FED EXPERIMENTAL RATIONS - TRIAL 1 AND 2.	58
10. ANOV SUMMARY CONDUCTED FOR ACETIC ACID CONCENTRATION CHANGE TWO AND FOUR HOURS POST-FEEDING OF STEERS FED EXPERIMENTAL RATIONS -- TRIALS 1 AND 2.	59
11. ANOV SUMMARY CONDUCTED FOR PROPIONIC ACID CONCENTRATION AT TWO AND FOUR HOURS POST-FEEDING -- TRIALS 1 AND 2.	60
12. ANOV SUMMARY CONDUCTED FOR BUTYRIC ACID CONCENTRATION CHANGE TWO AND FOUR HOURS POST-FEEDING -- TRIALS 1 AND 2.	61
13. ANOV SUMMARY CONDUCTED FOR VALERIC ACID CONCENTRATION CHANGE TWO AND FOUR HOURS POST-FEEDING -- TRIALS 1 AND 2.	62

LIST OF APPENDIX TABLES CONT'D.

APPENDIX TABLE	PAGE
14. SUMMARY OF VOLATILE FATTY ACID CONCENTRATION (mM/LITER) CHANGES AND pH OF RUMEN CONTENTS FROM STEERS FED EXPERIMENTAL RATIONS -- TRIAL 1, SQUARE 1.	63
15. SUMMARY OF VOLATILE FATTY ACID CONCENTRATION (mM/LITER) CHANGES AND pH OF RUMEN CONTENTS FROM STEERS FED EXPERIMENTAL RATIONS -- TRIAL 2, SQUARE 2.	64
16. TOTAL VOLATILE FATTY ACID CONCENTRATIONS (mM/LITER) AND pH OF RUMEN CONTENTS FROM STEERS FED EXPERIMENTAL RATIONS -- TRIALS 1 AND 2	65
17. WEIGHT CHANGES OF STEERS ON EXPERIMENTAL RATIONS FOR 21-DAY FEEDING PERIOD -- TRIAL 1	66
18. WEIGHT CHANGES OF STEERS ON EXPERIMENTAL RATIONS FOR 21-DAY FEEDING PERIOD -- TRIAL 2	67
19. SUMMARY OF MEANS OF DRY MATTER AND GROSS ENERGY OF FREEZE DRIED AND OVEN DRIED FECES.	68

INTRODUCTION

Feed efficiency and daily weight gain of livestock has improved tremendously in the last 50 years. This may be attributed to better management practices, improved rations, improved breeding programs and through the introduction of synthetic hormones and drugs. Today, more meat is being produced on less feed than ever before. The present livestock industry is based largely on feeds that can also be used directly by humans and is thus in direct competition with the human population. In the face of an ever growing world food crisis, it is imperative that we explore every possible means of increasing our food supplies and utilizing them more efficiently.

From 50 to 60% of the land area of the world is suited only to the production of forage crops. In addition massive quantities of crop residues are not now being completely utilized. Large quantities of low quality roughages are produced and some are fed to beef cattle. Interest in winter grazing has grown over the years; however, low quality roughages are also available during this time of the year and ways and means are being explored to utilize these poor quality roughages more efficiently. Utilization of poor quality roughages has stimulated interest in supplements which will improve the nutritional status and performance of animals receiving such low quality forages.

Phenothiazine, an insecticide, was shown to be an effective anthelmintic against many internal parasites since its discovery about four decades ago. This compound continues to save the livestock industry millions of dollars yearly that would have been lost due to parasites. Many articles that have appeared in the literature report that continuous low level feeding of phenothiazine caused an increase in average daily