

Journal of ANIMAL SCIENCE

Volume 59

July 1984

Number 1

TABLE OF CONTENTS

	<i>Page</i>
APPLIED ANIMAL SCIENCE	
Effects of Dam Age, Prepartum Nutrition and Duration of Labor on Productivity and Postpartum Reproduction in Beef Females. <i>D. E. Doornbos, R. A. Bellows, P. J. Burfening, and B. W. Knapp</i>	1
BREEDING AND GENETICS	
Sire Breed Effects in Matings with Angus Cows: I. Fertility, Calf Survival and Performance to 18 Months. <i>T. J. Marlowe, D. R. Notter, R. A. Brown and E. A. Tolley</i>	11
Sire Breed Effects in Matings with Angus Cows: II. Carcass Characteristics of Steer Progeny. <i>M. A. Swortzel, T. J. Marlowe, D. R. Notter, R. F. Kelly and E. A. Tolley</i>	23
Breed and Sire Effects on Crossbred Lamb Production From Panama Ewes and on Spermatozoan Midpiece Length. <i>N. B. Saoud, D. L. Thomas and W. D. Hobenboken</i>	29
Inheritance of Maternal Immunoglobulin G ₁ Concentration by the Bovine Neonate. <i>N. E. Muggli, W. D. Hobenboken, L. V. Cundiff and K. W. Kelley</i>	39
Selection for Rate and for Efficiency of Lean Growth in Rats: Net Life-Cycle Efficiency. <i>Chuan-Ting Wang and G. E. Dickerson</i>	49
Heritability Estimates for Ages at Farrowing, Rebreeding Interval and Litter Traits in Swine. <i>R. Irgang and O. W. Robison</i>	67
Environmental and Genetic Variation in Milk Yield of Native Cattle and Crosses with Brown Swiss in India. <i>F. Ruvuna, I. L. Mao, R. E. McDowell and M. Gurnani</i>	74
GROWTH AND DEVELOPMENTAL BIOLOGY	
Evaluation of a Role for Prolactin in Growth and the Photoperiod-Induced Growth Response in Sheep. <i>J. H. Eisemann, D. E. Bauman, D. E. Hogue and H. F. Travis</i>	86
Influence of Photoperiod and Prolactin on Body Composition and in Vitro Lipid Metabolism in Wether Lambs. <i>J. H. Eisemann, D. E. Bauman, D. E. Hogue and H. F. Travis</i>	95
MEAT SCIENCE	
Lighting Type and Intensity Effects on Beef Carcass Grade Factors. <i>D. H. Kropf, M. E. Dikeman, M. C. Hunt and H. R. Cross</i>	105
Effects of Dietary Regimen and Tissue Site on Bovine Fatty Acid Profiles. <i>William N. Marmer, Robert J. Maxwell and James E. Williams</i>	109
Update: Prevalence of Salmonella in Pork Sausage. <i>J. C. Silas, J. A. Carpenter and J. O. Reagan</i>	122
NONRUMINANT NUTRITION	
Effects of Source and Particle Size on the Biological Availability of Calcium in Calcium Supplements for Growing Pigs. <i>R. D. Ross, G. L. Cromwell and T. S. Stably</i>	125

Effects of Graded Levels of Lysine and Excess Arginine and Threonine on Young Pigs Fed Practical Diets. <i>V. L. Rosell and D. R. Zimmerman</i>	135
Yield and Composition of Milk and Weight Gain of Nursing Pigs From Sows Fed Diets Containing Fructose or Dextrose. <i>C. E. White, H. H. Head, K. C. Bachman and F. W. Bazer</i>	141
Response of Sows and Litters to Added Dietary Biotin in Environmentally Regulated Facilities. <i>C. R. Hamilton and T. L. Veum</i>	151
Serum Foliates During the Reproductive Cycle of Sows. <i>J. J. Matte, C. L. Girard and G. J. Brisson</i>	158

PHARMACOLOGY AND TOXICOLOGY

Absorption, Excretion and Tissue Residue in Feedlot Heifers Injected with the Synthetic Prostaglandin, Fenprostalene. <i>R. V. Tomlinson, H. R. Spires and J. S. Kent</i>	164
---	-----

PHYSIOLOGY AND ENDOCRINOLOGY

Factors Affecting Ovarian Compensation After Unilateral Ovariectomy in Gilts. <i>D. A. Coleman, M. W. Fleming and R. A. Dailey</i>	170
Ability of Indomethacin to Alter Prostaglandin Metabolite Concentrations and to Enhance the Function of Corpora Lutea Induced in Postpartum Suckled Beef Cows. <i>T. R. Troxel and D. J. Kesler</i>	177
Lack of Peripheral Sympathetic Control of Uterine Blood Flow During Acute Heat Stress. <i>D. E. Brown and P. C. Harrison</i>	182
Active Immunization of Prepubertal Colts Against Estrogens: Hormonal and Testicular Responses After Puberty. <i>D. L. Thompson, Jr. and P. G. Honey</i>	189

RUMINANT NUTRITION

Labile Magnesium Reserves in Beef Cows Subjected to Different Prepasture Supplementation Regimens. <i>R. J. Ritter, J. A. Boling and N. Gay</i>	197
A Silicone Esophageal Cannula; Its Surgical Installation and Use in Research with Grazing Cattle, Sheep or Goats. <i>W. C. Ellis, E. M. Bailey and C. A. Taylor</i>	204
Influence of Molybdenum and Sulfate Supplementation and Withdrawal of Diets Containing High Copper Broiler Litter on Tissue Copper Levels in Ewes. <i>K. J. Olson, J. P. Fontenot and M. L. Failla</i>	210
Influence of Limestone Level in High Concentrate and High Roughage Diets on Site and Extent of Digestion in Lambs. <i>A. E. El Tayeb, M. L. Galyean and H. E. Kiesling</i>	217
Effect of Selected Dietary Buffers Upon Utilization of Concentrate- or Roughage-Based Cattle Diets: Laboratory Studies. <i>Matthew W. Hall and Elvin E. Thomas</i>	227
Comparative Digestion, Rumen Fermentation and Kinetics of Forage Diets by Steers and Wethers. <i>E. C. Prigge, M. J. Baker and G. A. Varga</i>	237
Influence of Dietary Protein and Energy on Disappearance of Dry Matter From Different Forage Types From Dacron Bags Suspended in the Rumen. <i>V. P. de Faria and J. T. Huber</i>	246

OTHER

Southern Section ASAS 1984 Distinguished Service Award	253
Southern Section ASAS 1984 Young Animal Scientist Award	254
Southern Section ASAS 1984 Extension Award	255
Southern Section ASAS Graduate Student Winners	256
Southern Section ASAS Past President	257
Undergraduate Scholarship Medals	258
Reports from Representatives of the Society	267
Errata	268
Memorial—Horace Wakeland “Tod” Norton	269
News and Notes	270
Placement	272