Southern Section
AMERICAN SOCIETY OF ANIMAL SCIENCE

ANNUAL MEETING

February 2-5, 2008
Dallas, Texas

In conjunction with the 105th
Annual Convention of the Southern
Association of Agricultural Scientists

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Boehringer Ingelheim, Vetmedica Division
St. Joseph, MO

Young Animal Scientist – Education

Undergraduate Paper Competition

Graduate Student Awards Competition
PROGRAM EVENTS

Friday, February 1

Academic Quadrathlon (AQ)
9:00 PM Advisor’s Mtg.       College Station, TX

Saturday, February 2

AQ Lab Practicum &
Written Exam College Station, TX

Sunday, February 3

AQ Oral Preparation Adam’s Mark
6:30 AM — NOON Pearl Rooms 1, 2, 3, 4

AQ Oral Presentation Adam’s Mark
8:00 AM — NOON Pearl Room 5

AQ Quiz Bowl Adam’s Mark
8:00 AM — 1:00 PM Live Oak Room

AQ Quiz Bowl Championship & Awards Program Adam’s Mark
8:00 AM — 4:00 PM Seminar Theater

Registration Conference Center
11:00 AM — 4:00 PM Grand Hall

Information Exchange Groups:
SCC-81 – Sustainable small ruminant production Adam’s Mark
10:00 AM — 4:00 PM City View Room 6

SERA-36 – Beef/forage production in Southeast Adam’s Mark
1:00 PM — 4:00 PM Pearl Room 4

SCC-72 – Enhancing reproductive efficiency in cattle Adam’s Mark
1:00 PM — 4:00 PM Pearl Room 5

SAAS Opening Session & Business Meeting Conference Center
3:30 PM — 5:00 PM Dallas Ballroom A3

Super Bowl Party Conference Center
5:00 PM Dallas Ballroom B/C
**Monday, February 4**

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Tuesday, February 5

Registration
8:00 AM — NOON
Conference Center
Grand Hall

Meats
8:00 AM — 8:30 AM
Conference Center
Dallas Ballroom D1

Pastures and Forages 2
8:00 AM — 11:15 AM
Conference Center
Dallas Ballroom B

Physiology 2
8:00 AM — 11:30 AM
Conference Center
Dallas Ballroom A1

Ruminant Animal Production 2
8:00 AM — 11:30 AM
Conference Center
Dallas Ballroom C

Small Ruminant Production 2
8:00 AM — 11:15 AM
Conference Center
Dallas Ballroom A2

Extension 1
9:00 AM — 11:30 AM
Conference Center
Dallas Ballroom D1

Extension Luncheon
11:30 AM — 1:00 PM
Adam's Mark
Majestic Boardroom 1

Extension 2
1:00 PM — 2:30 PM
Conference Center
Dallas Ballroom D1

Ruminant Animal Production 3
1:00 PM — 2:45 PM
Conference Center
Dallas Ballroom C
Monday, February 4

SYMPOSIA AND ORAL SESSIONS

Graduate Student Competition
Chair: Scott Willard
Mississippi State University
Conference Center Dallas Ballroom B

8:00 AM 26
Endotoxin induced uncoupling of the somatotrophic axis in nursery pigs.
L. E. Hulbert*1, J. A. Carroll1, and K. Haydon2,
1Livestock Issues Research Unit, Agricultural Research Service-USDA, Lubbock, TX, 2Prince Agri Products, Inc., Quincy, IL.

8:15 AM 27
Effects of MEGALAC-R® inclusion to receiving diets of weaned feeder calves.

8:30 AM 28
Horned vs. polled: A survey of gene expression in neonatal horn buds and skin.
K. R. Wunderlich*, C. A. Abbey, and C. A. Gill, Texas A&M University, College Station.

8:45 AM 29
Identification of signatures of recent positive selection in beef and dairy cattle.
J. Choi*1, R. Villa-Angulo2, K. Wright3, L. K. Matukumalli2, C. P. Van Tasseli4, C. D. Bustamante3, J. J. Grefenstette2, and C. A. Gill1,
1Texas A&M University, College Station, 2George Mason University, Fairfax, 3Cornell University, Ithaca, 4USDA-ARS, Beltsville.
9:00 AM  30
**Dihydrotestosterone levels in genetically naked and furred male rabbits.**
R. H. Jackson*1, S. D. Lukefahr1, R. L. Stanko1,2, and D. O. Flores1, *Department of Animal and Wildlife Sciences, Texas A&M University-Kingsville, 2Animal Reproductive Laboratory, Texas A&M University Agricultural Research Station, Beeville.

9:15 AM  31
**Historic genetic characterization of King Ranch Quarter Horses.**
L. Dobson*1, S. D. Lukefahr1, S. Moore2, D. S. Delaney2, and J. Lee2, *Department of Animal and Wildlife Sciences, Texas A&M University-Kingsville, 2King Ranch, Kingsville, TX.

9:30 AM  32
**Effects of dietary supplementation of yeast culture to sow diets on sow and litter performance.**
C. Vasquez*1, B. J. Min1, and S. W. Kim2, *Texas Tech University, Lubbock, 2North Carolina State University, Raleigh.

9:45 AM  33
**Identification of single nucleotide polymorphisms in the promoter region of the bovine follicle stimulating hormone gene.**
S. Nabhan*1, S. Reiter1, D. Kreider1, M. Looper2, and C. Rosenkranz1, *University of Arkansas, Fayetteville, 2USDA/ARS, Booneville, AR.

10:00 AM  Break.

10:15 AM  34
**Effects of dried distillers grains during preconditioning on subsequent wheat pasture and finishing performance of fall-weaned beef steers.**
S. J. Winterholler*, B. P. Holland, T. K. Dye, C. R. Krehbiel, and G. W. Horn, Oklahoma State University, Stillwater.
10:30 AM  
Corn grazing: Opportunities for cattle production and wildlife enterprises.
D. H. Manning*, R. C. Vann, and J. C. Jones, Mississippi State University, Mississippi State.

10:45 AM
Bioavailability of iron from soil contamination as affected by silage fermentation.
S. L. Hansen* and J. W. Spears, North Carolina State University, Raleigh.

11:00 AM
Microarray analysis of gene expression in boars supplemented with organic selenium.
S.M. Speight*, M.J. Estienne\textsuperscript{1}, A.F. Harper\textsuperscript{1}, and C.R. Barb\textsuperscript{2}, \textsuperscript{1}Virginia Polytechnic Institute and State University, Blacksburg, \textsuperscript{2}USDA, ARS, Athens, GA.

11:15 AM
Evidence for possible involvement of IGF type II receptors (IGF2R) in regulating growth of two concomitant dominant follicles in cattle.
P. Y. Aad\textsuperscript{1}, S. E. Echternkamp\textsuperscript{2}, and L. J. Spicer\textsuperscript{1}, \textsuperscript{1}Oklahoma State University, Stillwater, \textsuperscript{2}USDA, U.S. Meat Animal Research Center, Clay Center, NE.

11:30 AM
Single nucleotide polymorphisms in the 5′ flanking region of inflammatory mediator genes in ascites– susceptible and –resistant broilers.
S. H. Whiting*, D. L. Kreider\textsuperscript{1}, S. T. Reiter\textsuperscript{1}, and N. B. Anthony\textsuperscript{2}, \textsuperscript{1}University of Arkansas Department of Animal Science, Fayetteville, \textsuperscript{2}University of Arkansas Department of Poultry Science, Fayetteville.
1:00 PM  1
Postweaning gains in calves sired by six sire breeds evaluated on two postweaning management systems.
M. A. Brown*, X. Z. Wang, F. Q. Gao, J. P. Wu, and D. L. Lalman,
USDA-ARS, Grazinglands Research Laboratory, El Reno, OK; Gansu Agricultural University, Lanzhou, Gansu; Oklahoma State University, Stillwater.

1:15 PM  2
Evaluation of disposition scores in Bos indicus/Bos taurus cross calves at weaning.

1:30 PM  3
Breed group means and estimates of heritability for weaning ratio in Angus, Charolais, Hereford, and Red Poll cattle.

1:45 PM  4
Genetic analyses of beef traits of crossbred and purebred Romosinuano, Brahman, and Angus steers.

2:00 PM  5
Genetic effects on circulating concentrations of cortisol at and after weaning in breed-types adapted to the subtropics.
C. C. Chase, Jr.*, R. D. Randel, D. G. Riley, S. W. Coleman, and T. A. Olson, USDA, ARS, Brooksville, FL; Texas Agricultural Experiment Station, Overton, TX; University of Florida, Gainesville.
2:15 PM  
Genetic markers in the leptin gene and association with carcass traits in Brahman steers.
D. E. Franke*¹, T. D. Bidner¹, M. G. Thomas², and B. W. Woodward³, ¹Louisiana State University Agricultural Center, Baton Rouge, ²New Mexico State University, Las Cruces, ³Merial Limited, Duluth, GA.

2:30 PM  
Relationships among genomic polymorphisms of bovine CYP3A28, body condition score, and productivity of Brahman-influenced cows.
A. Moubarak*¹, T. Killian¹, M. Looper², R. Okimoto³, and C. Rosenkrans¹, ¹University of Arkansas, Fayetteville, ²USDA,ARS, Booneville, AR, ³Cobb-Vantress, Siloam Springs, AR.

2:45 PM  
Relationships among bovine heat shock protein 70 genotype, forage type, and plasma concentrations of HSP-70.
I. Nabhan*¹¹, M. Lamb¹, S. Reiter¹, R. Okimoto², M. Brown³, H. Brown, Jr.¹, and C. Rosenkrans, Jr.¹, ¹University of Arkansas, Fayetteville, ²Cobb-Vantress, Siloam Springs, AR, ³USDA/ARS, El Reno, OK.

3:00 PM  
Porcine reproductive and respiratory syndrome (PRRS) viral proteins GP5 and M interact with host membrane fusion protein Snapin.
V. Rilington*¹, D. Yoo², and H. C. Liu¹, ¹North Carolina State University, Raleigh, ²University of Illinois, Urbana.

**Physiology 1**
Chair: Brian Rude
Mississippi State University
Conference Center Dallas Ballroom D1

1:00 PM  
Do light and temperature truly affect semen quality in all species?
Effects of dietary supplementation with an organic source of selenium on semen characteristics in boars.
M. J. Estienne*, S. M. Speight, and A. F. Harper, Virginia Polytechnic Institute and State University, Blacksburg.

Use of a new collection vessel to improve post-collection semen parameters.

Effects of penicillamine, hypotaurine and epinephrine (PHE) on post-thaw bovine sperm parameters, as measured by computer-assisted sperm analysis.
C. N. Person, T. D. Lester, M. D. Person, and R. W. Rorie*, University of Arkansas, Fayetteville.

Effects of an extender containing a novel protein source on semen quality.

Influence of endophyte-infected fescue on semen characteristics of Brahman-influenced bulls.
M. L. Looper*1, R. W. Rorie2, C. N. Person2, M. D. Person*, T. D. Lester2, and C. F. Rosenkrans, Jr.*, 1USDA-ARS, Booneville, AR, 2University of Arkansas, Fayetteville.

Evaluation of PG type and two progestogen based estrous synchronization programs in suckled postpartum Bos indicus x Bos taurus cows.

Day of the estrous cycle (DOC) at initiation of a Select Synch + CIDR® synchronization
protocol affects protocol response in suckled Angus (AN) and Brangus (BN) cows.

3:00 PM   Break.

3:15 PM  66
The effect of serum supplementation, medium volume, and oil overlay on cleavage and blastocyst formation of bovine embryos cultured in vitro.
S. Jung* and S. T. Willard, Mississippi State University, Mississippi State.

3:30 PM  67
Effect of antioxidants on in vitro production of pig embryos.
B. D. Whitaker* and J. W. Knight, Virginia Polytechnic Institute and State University, Blacksburg.

3:45 PM  68
A novel approach to the cryopreservation of equine and porcine embryos by vitrification after blastocoelic micromanipulation.
L. Ray*, J. Scherzer*, W. Graves*, G. Heusner*, and J. Coverdale*, 1University of Georgia, Athens, 2Texas A & M University, College Station.

4:00 PM  69
Development of a rapid automatable test system for determining antimicrobial susceptibility testing in vitro using bioluminescent Salmonella typhimurium.

4:15 PM  70
Modification of lipid composition of poultry egg from hens fed waterleaf (Talinum triangulare) supplements.
M. O. Ezekwe*, F. F. Jeewani*, S. A. Besong*, and C. Okere*, 1Alcorn State University, Alcorn State, MS, 2Delaware State University, Dover.
1:00 PM  
**Invited: Preconditioning Beef Calves in the U.S.**  
R. H. Pritchard, *South Dakota State University, Brookings.*

1:40 PM  
**Preconditioning Beef Calves - Southern Plains.**  
D. L. Lalman, *Oklahoma State University, Stillwater.*

2:00 PM  
**Preconditioning Beef Calves - Gulf South.**  
J. D. Arthington, *University of Florida, Ona.*

2:20 PM  
**Preconditioning Beef Calves - Southeast.**  
M. H. Poore, *North Carolina State University, Raleigh.*

2:40 PM  
**Preconditioning Beef Calves.**  
Discussion/ Q&A.

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**Small Ruminant Production 1: Production and Reproduction**  
Chair: Bob Godfrey  
*University of the Virgin Islands, Agricultural Experiment Station, Kingshill, VI.*

1:00 PM  
**The effect of time of day of feeding on growth and body temperature of hair sheep lambs in the tropics.**  
R. W. Godfrey* and R. C. Ketring, *University of the Virgin Islands, Agricultural Experiment Station, Kingshill, VI.*
1:15 PM 109
Growth of lambs and meat goat kids grazing warm season grasses with or without protein supplement.
S. R. Nusz\textsuperscript{1}, E. L. Walker\textsuperscript{2}, and M. A. Brown\textsuperscript{3},
\textsuperscript{1}Redlands Community College, El Reno, OK, \textsuperscript{2}Missouri State University, Springfield, \textsuperscript{3}USDA-ARS, El Reno, OK.

1:30 PM 110
Endophyte-infected tall fescue affects intake-equalized weight gain in yearling meat goat does.
R. Browning, Jr.*, B. Donnelly, L. Moore, and J. Carlise, Tennessee State University, Nashville.

1:45 PM 111
Prediction of dietary crude protein in sheep and goats with near infrared reflectance spectroscopy of feces (FNIRS): An independent validation.

2:00 PM 112
Assessing the potential of mixed grazing goats with beef cattle to increase the utilization of marginal pasturelands in Virginia.

2:15 PM 113
The effect of breed type and year on real-time ultrasound carcass traits, performance and scrotal circumference of bucks enrolled in the Kentucky Buck Development Program.
K. May*, B. Galbreath, R. Pitzer, P. Prater, and T. Wistuba, Morehead State University, Morehead, KY.

2:30 PM 114
Carcass composition of Polypay versus White Dorper x Polypay crossbred lambs.
2:45 PM 115
*Induced copper deficiency by elevated molybdenum on growth performance and carcass characteristics of goat kids.*
K. Begesse*, S. Solaiman, S. Roper, N. Gurung, and K. Copedge, *Tuskegee University, Tuskegee, AL.*

3:00 PM  Break.

3:15 PM 116
*Effectiveness of Regumate in synchronizing and inducing out-of-season breeding in goats.*
J. L. Eierman*1, R. A. Barczewski1, N. C. Whitley2, and D. J. Jackson1, 1*Delaware State University, Dover, 2University of Maryland Eastern Shore, Princess Anne.*

3:30 PM 117
*Use of short-duration progestagen treatment combined with prostaglandin to synchronize estrus in hair sheep ewes.*
S. Wildeus and J. R. Collins*, *Virginia State University, Petersburg.*

3:45 PM 118
*Sperm motility, viability, and fertility of sheep and goat semen after extended solid storage at 4°C.*
S. Wildeus*, J. L. Mook, and J. R. Collins, *Virginia State University, Petersburg.*

4:00 PM 119
*Effect of egg yolk level, washing and extended pre-freeze equilibration on post-thaw motility of buck semen.*
J. L. Mook* and S. Wildeus, *Virginia State University, Petersburg.*

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**Undergraduate Student Competition**
Chair: Michelle R Garcia, Texas A&M-Kingsville
Conference Center Dallas Ballroom B

1:00 PM 132
*Fabrication method of the infraspinatus muscle affects WBSF.*
1:15 PM 133
Characterization of a QTL for disposition on BTA8.
C. R. Boldt*, C. A. Abbey, and C. A. Gill, Texas A&M University, College Station.

1:30 PM 134
Determining ruminant dietary overlap via near-infrared reflectance spectroscopy (NIRS) of feces: I. calibration development.

1:45 PM 135
Determining ruminant dietary overlap via near-infrared reflectance spectroscopy (NIRS) of feces: II. Field application.

2:00 PM 136
Changes in thermal gradients of the external genitalia of neonatal pigs after oral exposure to soy-derived phytoestrogen genistein and estradiol.
W. C. Brookshire*1, K. W. Necaise1, K. Moulton1, D. L. Christiansen1, M Crenshaw1, C. G. Scanes2, and P. L. Ryan1, 1Mississippi State University, Mississippi State, 2University of Wisconsin at Milwaukee.

2:15 PM 137
Breed of sire, but not feeding program, affects circulating concentrations of leptin in pigs.
K. A. Alberti*, M. J. Estienne, and A. F. Harper, Virginia Polytechnic Institute and State University, Blacksburg.

2:30 PM 138
Agroforestry utilization of goats and sheep for brush and weed control in forests.
J. F. Guay, E. A. Callahan*, and Y. Sato, Berry College, Mount Berry, GA.
2:45 PM 139
Severe copper deficiency combined with high dietary manganese does not affect bovine prion characteristics.

3:00 PM Break.

3:15 PM 140
The effect of Bovine Leukosis Virus infection on the proportion among bovine leukocyte populations in the blood of cows.
S. Touroo*, E. Carson, B. Lewis, B. Galbreath, K. Peterson, P. Prater, and T. Wistuba, Morehead State University, Morehead, KY.

3:30 PM 141
Relationships among lactate dehydrogenase activities, isoenzyme patterns, and hematological values in resting Thoroughbred and Miniature horses.
H. Minard*, C. Bokina, K. Jogan, S. Reiter, and C. Rosenkrans, Jr., University of Arkansas, Fayetteville.

3:45 PM 142
Identification of genomic polymorphisms in upstream elements of the bovine CYP3A28 gene.

Pastures and Forages 1
Chair: Stacey Gunter, University of Arkansas
Adam’s Mark City View Room 3

3:30 PM 42
Tifton 85 bermudagrass and supplemental corn gluten for direct harvest off-pasture of Bonsmara and Simmental crossbred steers.
3:45 PM  
**Effect of corn supplementation on pasture performance and carcass characteristics of cross-bred Bonsmara steers grazing winter annual pasture.**  
T. D. A. Forbes*, F. M. Rouquette, B. G. Warrington, K. R. Hawks, R. K. Miller, and J. W. Holloway, *Texas Agricultural Experiment Station, Uvalde, Texas Agricultural Experiment Station, Overton, Texas Agricultural Experiment Station, College Station.

4:00 PM  
**Evaluation of feeding systems for finishing beef cattle.**  
J. D. Shockey*, S. A. Gunter, P. A. Beck, and J. A. Apple, *University of Arkansas Division of Agriculture, Hope.

4:15 PM  
**Performance of finishing steers in drylot or on ryegrass pasture.**  

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Ruminant Animal Production 1  
Chair: Jason Rowntree  
Louisiana State University Agricultural Center  
Adam’s Mark City View Room 2

3:30 PM  
**Effects of two commercially available modified live virus vaccines on carcass traits of beef steers.**  
Effect of dietary boron on physiological responses in growing steers inoculated with bovine herpesvirus type-1.

Water intake and factors affecting water intake in growing beef cattle.

Actual versus predicted water intake in growing beef cattle.
M. N. Brew1, R. O. Myer2, J. N. Carter2, and G. R. Hansen2, 1University of Florida, Gainesville, 2North Florida Research and Education Center, Marianna.

Tuesday, February 5

Meats
Chair: Chance Brooks, Texas Tech University
Conference Center Dallas Ballroom D1

Has quality grade declined?
R. D. Rhoades*, J. E. Sawyer, A. D. Herring, and D. P. Anderson, Texas A&M University, College Station.

Consumer preferences in purchasing beef and values they attribute to branded beef products.
M. M. Beverly* and R. D. Hanagriff, Sam Houston State University, Huntsville, TX.
8:00 AM  46
Evaluation of forage sampling method and characterization of chemical composition of subtropical forages selected by grazing cattle.
A. Hughes* and M. Hersom, University of Florida, Gainesville.

8:15 AM  47
Urea and(or) feather meal supplementation for yearling steers grazing limpograss (Hemarthria altissima var. ‘Floralta’) pasture.
W. F. Brown*1, M. B. Adjei2, and J. D. Arthington2, 1University of Florida, Gainesville, 2University of Florida, Ona.

8:30 AM  48
Effect of stocking rate and cottonseed cake supplementation on stocker cattle grazing bermudagrass.

8:45 AM  49
Coastcross II, Russell, and Tifton 85 bermudagrass hay intake and digestion by steers.
G. M. Hill*1, W. F. Anderson2, D. J. Renney1, S. V. Tucker1, and B. G. Mullinix, Jr.1, 1University of Georgia, Tifton, 2USDA-ARS, Tifton, GA.

9:00 AM  50
Post-weaning performance of spring-born calves weaned from tall fescue pastures with a wild-type toxic endophyte or a non-toxic novel endophyte.
K. Coffey*1, W. Coblentz2, J. Caldwell1, D. Hubbell, III1, T. Hess1, C. West1, M. Looper3, C. Krehbiel4, and C. Rosenkrans5, 1University of Arkansas, Fayetteville, 2USDA-ARS, Marshfield,
9:15 AM  51
**Evaluation of toxic and non-toxic endophyte-infected tall fescue on growth rate and grazing behavior of beef heifers.**

9:30 AM  52
**Effect of rotational or continuous grazing strategy of winter pasture on beef heifer and forage performance.**

9:45 AM  53
**Effect of establishment method and stocking rate on performance of calves grazing small grain pasture.**

10:00 AM  **Break.**

10:15 AM  54
**Impact of substituting perennial cool-season grasses for winter wheat on stocker performance.**

10:30 AM  55
**Comparison of poured protein block supplement and whole cottonseed fed with hay to beef cows during winter.**
G. M. Hill*, M. H. Poore*, M. E. Pence*, S. V. Tucker*, D. J. Renney*, and B. G. Mullinix, Jr., University of Georgia, Tifton, University of Georgia Veterinary Diagnostic Center, Tifton, North Carolina State University, Raleigh.
10:45 AM  56
**Effects of stage of maturity at harvest and hybrid on production characteristics of corn silage.**
R. Pitzer*, B. Rogers, H. Nauman, B. Galbreath, J. Willard, and T. Wistuba, Morehead State University, Morehead, KY.

11:00 AM  57
**Fecal-near infrared reflectance spectroscopy (NIRS) calibrations for predicting fecal output of donkeys.**
N. Kidane*, J. Stuth, and D. Tolleson, Texas A & M University, College Station.

**Physiology 2**
Chair: Scott Willard
Mississippi State University
Conference Center Dallas Ballroom A1

8:00 AM  71
**Use of unique collection device improves conception rates of Angus based heifers.**

8:15 AM  72
**Effects of Max-Q or KY-31 fescue pastures on development and pregnancy rates in replacement beef heifers.**
A. G. Liles*, S. P. Greiner, L. Wright, and J. B. Hall, Virginia Polytechnic Institute and State University, Blacksburg.

8:30 AM  73
**Effects of bovine somatotropin and suckling on ovarian follicles, reproductive performance and concentrations of ghrelin, GH, and IGF-I in postpartum Brahman-influenced cows.**
R. Flores*1, M. L. Looper2, R. W. Rorie3, C. R. Bailey4, D. M. Halford5, S. T. Reiter6, and C. F. Rosenkrans, Jr.3, 1University of Arkansas for Medical Sciences, Little Rock, 2USDA-ARS, Booneville, AR, 3University of Arkansas, Fayetteville, 4Arkansas Tech University, Russellville, 5New Mexico State University, Las Cruces.
Influence of body condition and forage type on estrus, intramuscular and rib fat, and reproductive performance of postpartum Brahman-influenced cows.

1USDA-ARS, Booneville, AR, 2University of Arkansas, Fayetteville, 3University of Arkansas for Medical Sciences, Little Rock, 4Arkansas Tech University, Russellville.

Effects of heat stress on gestation length of beef cows.

E. C. Wright*, M. J. Prado-Cooper, N. M. Long, and R. P. Wettemann, Oklahoma Agricultural Experiment Station, Stillwater.

Relationship of rumen temperature of beef cows to parturition and estrus.


Relationship of cortisol and immunoglobulin G concentrations to temperament and growth performance in beef calves.

1MAFES-Brown Loam Experiment Station, Raymond, MS, 2Mississippi State University, Mississippi State, 3Texas A & M University Agriculture Research and Extension Center, Overton, 4Texas A & M University, College Station.

Relationship between residual feed intake and age at puberty in Brahman bulls.

1Texas A&M University-Kingsville, 2Texas A&M University Agricultural Research Station, Beeville, 3Texas A&M University Agricultural Research and Extension Center, Overton, 4Mississippi State University, Mississippi State, 5Texas A&M
10:00 AM  Break.

10:15 AM 79
Genetic influences on the bovine acute phase protein response following an endotoxin challenge.
J. A. Carroll*¹, J. D. Arthington², C. C. Chase, Jr.³, S. W. Coleman³, D. G. Riley³, D. E. Spiers⁴, and R. R. Reuter⁵, ¹USDA-ARS, Lubbock, TX, ²University of Florida-IFAS, Ona, ³USDA-ARS, Brooksville, FL, ⁴University of Missouri, Columbia, ⁵The Noble Foundation, Inc., Ardmore, OK.

10:30 AM 80
Evaluation of stress in horses in hippotherapy programs.

10:45 AM 81
Relationships between plasma proteins and hematological values in Thoroughbred and Miniature horses.
C. Bokina*, K. Jogan, and C. Rosenkrans, Jr., University of Arkansas, Fayetteville.

11:00 AM 82
IGF-I dependent gene expression in cultured porcine granulosa cells.

11:15 AM 83
Effects of soy-derived phytoestrogen and estradiol exposure on reproductive development in neonatal pigs: a model for infants fed soy-based formula.
K. Necaise*¹, K. Moulton¹, D. Christiansen¹, M. Crenshaw¹, C. Scanes⁵, and P. Ryan¹, ¹Mississippi State University, Mississippi State, ²University of Wisconsin at Milwaukee.
Ruminant Animal Production 2
Chair: Gordon Carstens, Texas A&M University
Conference Center Dallas Ballroom C

8:00 AM  88
Relative value of five byproducts as supplements to stocker cattle.

8:15 AM  89
Level of cottonseed cake supplementation for beef calves fed tall fescue hay.
P. Beck*, M. Morgan1, S. Gadberry1, T. Hess1, D. Hubbell1, B. Rudolph2, M. Smith2, and J. Butterbaugh2, 1University of Arkansas Division of Agriculture, Little Rock, AR, USA, 2Furst-McNess Company, Freeport, IL, USA.

8:30 AM  90
Frequency of supplementation with a mix of soyhulls and corn gluten feed does not affect performance of growing cattle fed a hay based diet.
M. E. Drewnoski*, M. H. Poore, and G. A. Benson, North Carolina State University, Raleigh.

8:45 AM  91
Effects of supplementation frequency on development of yearling Brahman-crossbred heifers: I. Performance, reproductive, and physiological responses.
R. F. Cooke*1,2, D. B. Araujo1,2, A. D. Ealy2, and J. D. Arthington1, 1University of Florida-IFAS, Ona, 2University of Florida-IFAS, Gainesville.

9:00 AM  92
Effects of supplementation frequency on development of yearling Brahman-crossbred heifers: II. Liver and muscle gene expression.
R. F. Cooke*1,2, D. B. Araujo1,2, A. D. Ealy2, and J. D. Arthington1, 1University of Florida-IFAS, Ona, 2University of Florida-IFAS, Gainesville.

9:15 AM  93
Effects of supplementation frequency on gene expression and physiological responses of Brahman-crossbred cows.
9:30 AM  94
Relationships between residual feed intake and apparent nutrient digestibility in growing calves.
W. K. Krueger*1, G. E. Carstens1, P. A. Lancaster1, L. J. Slay1, J. C. Miller1, and T. D. A. Forbes2, 1Texas A&M University, College Station, 2Texas Agriculture Extension Service, Uvalde, TX.

9:45 AM  95
Predicting back fat thickness in beef cattle using A-mode ultrasound technology.
W. A. Phillips*1, S. W. Coleman2, C. C. Chase, Jr.*2, and D. G. Riley1, 1USDA-ARS, El Reno, OK, 2USDA-ARS, Brooksville, FL.

10:00 AM  Break.

10:15 AM  96
Relationship between body fat deposition and postweaning growth in beef steers.

10:30 AM  97
Effects of forage type and anabolic implantation of steers on growth and subsequent carcass characteristics.
C. R. Bailey*1, M. L. Looper2, A. H. Brown, Jr.*3, and C. F. Rosenkrans, Jr.*3, 1Arkansas Tech University, Russellville, 2USDA-ARS, Booneville, AR, 3University of Arkansas, Fayetteville.

10:45 AM  98
Effects of feeding whole cottonseed on ultrasonic body composition measures in beef cows.
T. L. Perkins* and J. Buck, Missouri State University, Springfield.

11:00 AM  99
Dietary energy source impact on in vitro substrate utilization and dose response to
insulin additions of subcutaneous adipose tissue of Angus steers.

11:15 AM 100
Effect of dietary energy source during backgrounding on in vitro substrate utilization and insulin sensitivity of adipose tissue of Angus steers.

Small Ruminant Production 2: Internal Parasites
Chair: Bob Godfrey
University of the Virgin Islands
Conference Center Dallas Ballroom A2

8:00 AM 120
Evaluation of average fiber diameter of mohair fleeces prior to shearing using a field-portable Near-infrared Reflectance Spectroscopy instrument.

8:15 AM 121
Use of the FAMACHA system to evaluate gastrointestinal nematode resistance in offspring of Katahdin rams.
J. Burke* and J. Miller, USDA, ARS, Booneville, AR, Louisiana State University AgCenter, Baton Rouge.

8:30 AM 122
On-farm integrated management of Katahdin lambs for gastrointestinal nematodes (GIN).
Evaluation of parasite load in hair- or wool-type lambs on drylot or wheat pasture.
L. A. Appeddu, G. Poudyal, A. Hughes, M. A. Brown, and S. P. Hart. Southwestern Oklahoma State University, Weatherford, USDA-ARS, El Reno, OK, Kika de la Garza Institute for Goat Research, Langston University, Langston, OK.

Effect of vaccinating grazing ewes with H-11/H-gal-GP antigens from intestinal membrane cells on established Haemonchus contortus infection.
J. E. Miller, K. P. Shakya, and W. D. Smith. Louisiana State University AgCenter, Baton Rouge, Moredun Research Institute, Edinburgh, Scotland, UK.

The effect of sericea lespedeza, fed as pellets, on established infection of Haemonchus contortus in sheep.
J. E. Miller, J. A. Mosjidis, T. H. Terrill, and J. M. Burke. Louisiana State University AgCenter, Baton Rouge, Auburn University, Fort Valley State University, Fort Valley, GA, USDA-ARS, Booneville, AR.

Use of sericea lespedeza hay to reduce worm burden in goats.
S. A. Shaik, T. H. Terrill, J. A. Mosjidis, G. S. Dykes, J. E. Miller, B. Kouakou, G. Kannan, and J. M. Burke. Fort Valley State University, Auburn University, Louisiana State University AgCenter, Baton Rouge, USDA, ARS, Booneville, AR.

Control of Haemonchus contortus infestation in ewes with copper sulfate.

Break.
Comparison of sheep and goats for efficacy of copper oxide wire particles against gastrointestinal nematodes.
F. A. Soli, T. H. Terrill, W. R. Getz, S. A. Shaik, M. Vanguru, A. K. Vuggam, J. E. Miller, and J. M. Burke. Fort Valley State University, Fort Valley, GA. Louisiana State University AgCenter, Baton Rouge, USDA, ARS, Booneville, AR.

Efficacy of copper oxide wire capsules as an anthelmintic for weanling kids.

Using the FAMACHA® system to control internal parasites in meat goats grazing summer pastures.
S. Schoenian, J. Semler, M. B. Bennett, D. L. Jackson, and J. Dietz-Band. University of Maryland Cooperative Extension, Keedysville, Delaware State University, Dover, West Virginia University Cooperative Extension, Martinsburg, University of Maryland Cooperative Extension, Boonsboro, Many Rocks Farm, Keedysville, MD.

Herbal dewormer fails to control gastrointestinal nematodes (GIN) in goats.
9:00 AM  10
Effects of dietary supplementation of benzoic, formic, and lactic acids to pig diets on ammonia emission from manure and urine pH.
S. W. Kim*, J. O. Vaughn, and D. A. Monson, 1North Carolina State University, Raleigh, 2Emerald Performance Materials, Kalama, WA, 3Texas Tech University, Lubbock.

9:15 AM  11
Measuring the impact of equine grazing schools.

9:30 AM  12
Mississippi Master Stockman: collaborative beef and equine programming-equine emphasis.
P. R. Buff*, J. A. Parish, and J. D. Rhinehart, Mississippi State University, Mississippi State.

9:45 AM  13
Mississippi Animal Disease and Disaster Preparedness Program.
J. D. Rhinehart, J. Watson, P. R. Buff, and J. A. Parish, Mississippi State University, Mississippi State.

10:00 AM  14
Missouri livestock producers' perceptions of the national animal identification system.
B. L. Deimeke*, W. D. Walker, C. Levesque-Bristol, and E. L. Walker, Missouri State University, Springfield.

10:15 AM  15
Determining wastage when ground feeding soybean hulls.
B. M. Nichols and R. S. Wells, 1Cameron University, Lawton, OK, 2Samuel Roberts Noble Foundation, Ardmore, OK.
10:30 AM  16
Free-choice mineral disappearance and projected mineral balance of beef cows consuming bermudagrass and prairie hay.
C. P. McMurphy*, D. L. Lalman, S. J. Winterholler, and C. J. Richards, Oklahoma State University, Stillwater.

10:45 AM  17
Corn stover as an emergency feed for beef cows.
M. H. Poore*, A. D. Shaeffer1, and J. L. Godwin2, 1North Carolina State University, Raleigh, 2North Carolina Department of Agriculture and Consumer Services, Raleigh.

11:00 AM  18
Effect of region of origin, Southeast versus Midwest, on feedlot performance and carcass traits in beef calves.
W. D. Busby*, D. Strohbehn1, L. R. Corah2, and M. E. King2, 1Iowa State University, Ames, 2Certified Angus Beef LLC, Wooster, OH.

11:15 AM  19
Effect of percentage Angus on feedlot performance and carcass traits in beef calves.
W. D. Busby*, L. R. Corah2, M. A. McCully*, and M. E. King2, 1Iowa State University, Ames, 2Certified Angus Beef LLC, Wooster, OH.

Extension Luncheon
Adam’s Mark
11:30 AM – 1:00 PM Majestic Boardroom 1

Extension 2
Chair: David Lalman
Oklahoma State University
Conference Center Dallas Ballroom D1

1:00 PM  20
The Virginia Quality Assured (VQA) certified feeder calf program: Ten years of value-added feeder cattle marketing.
J. B. Hall*, B. R. McKinnon, W. D. Whittier, and S. P. Greiner, Virginia Polytechnic Institute and State University, Blacksburg.
1:15 PM   21
Improving the efficiency of a beef cow calf operation using IRM principles.
B. W. Haller*, J. T. Richeson, B. L. Barham, M. S. Gadberry, J. A. Jennings, and T. R. Troxel,
University of Arkansas, Division of Agriculture, Cooperative Extension Service, Little Rock.

1:30 PM   22
Effect of beef cattle production characteristics on rate of adoption.
J. J. Cleere*, C. T. Boleman, and K. Merten,
Texas Cooperative Extension, College Station.

1:45 PM   23
Beef IQ: A multi-session educational program for Arkansas beef producers.
B. Barham*, M. Gadberry, J. Richeson, P. Beck, W. Whitworth, R. Hogan, and J. Powell,
University of Arkansas Division of Agriculture Cooperative Extension Service, Little Rock and Fayetteville, University of Arkansas Division of Agriculture Research & Extension Center, Hope, Monticello, and Kiser.

2:00 PM   24
Mississippi Master Stockman: Collaborative beef and equine programming-beef emphasis.
J. A. Parish*, J. D. Rhinehart, and P. R. Buff,
Mississippi State University, Mississippi State.

2:15 PM   25
Results of technology questions as part of Master Cattle Producer Survey.
J. B. Neel*, A. E. Fisher, W. W. Gill, C. D. Lane, Jr., and F. D. Kirkpatrick,
University of Tennessee, Knoxville.
1:00 PM 101
Feeding value of peanut skins for sheep.
G. Abdelrahim*, J. Khatiwad1, D. Rankins2, and
N. Gurung3, 1Alabama A & M University,
2Normal, 3Auburn University, Auburn, AL.

1:15 PM 102
Influence of breed and mineral trough
visitation on copper status of beef heifers.
K. Guidry*, J. Rowntree, G. Lum, and D.
Skeans, Louisiana State University Agricultural
Center, Baton Rouge.

1:30 PM 103
Evaluation of external and internal parasite
control with spring calving cows and calves.
S. DeRouen*, J. Miller2, L. Foil2, C. Younger2,
G. Gentry3, and J. Pitchford2, Louisiana State
University Agricultural Center, 1Homer, 2Baton
Rouge, and 3St. Gabriel.

1:45 PM 104
Factors associated with pregnancy rate in
first exposed, crossbred heifers.
Rorie, C. A. Tucker, J. L. Reynolds, and J. A.
Hornsby, University of Arkansas, Fayetteville.

2:00 PM 105
Effects of temperature, temperament, and
Brahman influence on feedlot performance
of weaned heifers wintered on corn silage.
W. A. Storer*, F. M. LeMieux, and T. H. Shields,
McNeese State University, Lake Charles, LA.

2:15 PM 106
Relationship of temperament to production
traits in a commercial cowherd.
B. R. Kutz*, M. L. Buchanan2, M. L. Looper3, A.
H. Brown, Jr.1, Z. B. Johnson1, C. F.
Rosenkranz1, S. T. Reiter2, and S. Nabhan1,
1University of Arkansas, Fayetteville, 2Arkansas
Cooperative Extension Service, Van Buren,
3USDA/ARS, Booneville, AR.
Near infrared reflectance spectroscopy to predict dry matter and organic matter in feedlot manure.

C. Miller\textsuperscript{1}, S. Prince\textsuperscript{1}, K. Banik\textsuperscript{1}, D. Tolleson\textsuperscript{1}, A. Graham\textsuperscript{2}, M. Kitten\textsuperscript{2}, T. Sliffe\textsuperscript{3}, R. Taylor\textsuperscript{4}, J. Sweeten\textsuperscript{4}, and K. Heflin\textsuperscript{1}, \textsuperscript{1}Texas A\&M University, College Station, \textsuperscript{2}Panda Hereford Ethanol LP, Hereford, TX, \textsuperscript{3}Perten Instruments, Springfield, IL, \textsuperscript{4}Texas Agricultural Experiment Station, Amarillo.