

SOUTHERN SECTION

American Society of Animal Science

ANNUAL MEETING

February 5-9, 2010

Orlando, Florida

**In conjunction with the 107th
Annual Convention of the Southern
Association of Agricultural Scientists**

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**Award Sponsors
2010 Southern Section ASAS**

The Southern Section of the American Society of Animal Science expresses appreciation to the following organizations for financial assistance:

**Swine Industry Award for
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National Pork Board
Des Moines, IA

Young Animal Scientist – Research

Elanco Animal Health
Greenfield, IN

Extension Award

Boehringer Ingelheim, Vetmedica
Division
St. Joseph, MO

**Young Animal Scientist –
Education**

Emerging Scholar Award

Pfizer Animal Health
New York, New York

Undergraduate Paper Competition

**Graduate Student Awards
Competition**

PROGRAM EVENTS

Friday, February 5

Academic Quadrathlon (AQ)
9:00 PM Advisors Meeting
Gainesville, FL

Saturday, February 6

AQ Lab Practicum and Written Exam
Gainesville, FL

**Wyndham Orlando Resort
Orlando, FL**

Sunday, February 7

AQ Oral Preparation
6:30 AM – noon – Largo, Marathon,
Cedar, Longboat

AQ Oral Presentation
8:00 AM – noon – Biscayne

AQ Quiz Bowl
8:00 AM – 1:00 PM – Tangerine B

AQ Quiz Bowl Championship/Awards
and Awards Program
8:00 AM – 4:00 PM – Tangerine A

SCC 81: Sustainable Small Ruminant
Production IEG
8:30 AM – 4:00 PM – Siesta

Registration
11:00 AM – 4:00 PM – Key Rooms
Foyer

SCC 72: Enhancing Reproductive
Efficiency in Cattle IEG
1:00 PM – 4:00 PM – Tangerine B

SERA 41: Beef Cattle Production
Using Forages in the Southeast
1:00 PM – 4:00 PM – Largo

SAAS Board Meeting
2:30 PM – 3:30 PM – Longboat

SAAS General Session/Business
Meeting
4:00 PM – 6:00 PM – Jasmine

SS-ASAS Advisory Committee and
Executive Committee
6:00 PM – 8:00 PM – Siesta

SAAS Reception/“Super Bowl Party”
6:00 PM – 10:00 PM – Poolside
Pavillion/Garden Room

Monday, February 8

*Interested in taking an ARPAS exam at the
ASAS Southern Section Meeting?
If so, contact ARPAS at arpas@assoqh.org for
information or to schedule an exam.*

Registration
7:30 AM – 4:00 PM
Key Rooms Foyer

SS-ASAS Business Meeting and
Awards Ceremony
5:00 PM – 7:00 PM – Orange

Small Ruminant Subcommittee of the
NAGP
7:00 PM – 9:00 PM – Tangerine A

Tuesday, February 9

SAAS Board Breakfast Meeting
7:00 AM – 10:00 PM – Oleander B

SS-ASAS Emerging Scholar
Award Presentation
8:00 AM – 8:45 AM – Marathon Room

Registration
8:00 AM - noon
Key Rooms Foyer

Extension Luncheon
Noon – 2:00 PM –

[Biscayne/Siesta Garden Room](#)

SYMPOSIA AND ORAL SESSIONS

Monday, February 8

Graduate Student Competition I

Chair: D.W. Forrest,

Texas A&M University

Orange

8:00 AM 26

Beef cattle performance, forage productivity and quality from mixed small grain/ryegrass pasture.

M. K. Cline*, J. C. Lin, B. Gamble, C. R. Kerth, and R. B. Muntifering, *Auburn University, Auburn, AL.*

8:15 AM 27

Productivity and nutritive quality of Johnsongrass as influenced by interseeded ladino clover and fertilization with commercial fertilizer or broiler litter.

S. L. Dillard*, L. E. Sturgeon, C. W. Wood, J. L. Holliman, R. B. Muntifering, and W. F. Owsley, *Auburn University, Auburn.*

8:30 AM 28

Investigating components of the pomegranate byproducts as a potential natural de-worming source for goats.

S. LeShure*, A. Ludwick, and G. Pritchett, *Tuskegee University, Tuskegee, AL.*

8:45 AM 29

Effect of vaccination against porcine circovirus type 2 (PCV2) on ejaculate characteristics and antibody titers in serum of boars.

K. A. Alberti*¹, M. J. Estienne¹, A. F. Harper¹, and X. J. Meng², ¹*Virginia Polytechnic Institute and State University, Blacksburg*, ²*Virginia-Maryland Regional College of Veterinary Medicine, Blacksburg, VA.*

9:00 AM 30

Effect of vitamin D supplementation on fecal shedding of *E. coli* O157:H7 in naturally-colonized cattle.

R. L. Farrow*, T. S. Edrington, K. M. MacKinnon, T. R. Callaway, R. C. Anderson, and D. J. Nisbet, *Food and Feed Safety Research Unit, ARS-USDA, College Station, TX.*

9:15 AM 31

Identification of single nucleotide polymorphisms of the lactate dehydrogenase-B gene and association with cow and calf performance.

B. C. Williamson*¹, C. F. Rosenkrans, Jr.¹, S. T. Reiter¹, J. D. Thompson¹, M. A. Sales¹, and M. L. Loooper², ¹*University of Arkansas, Fayetteville*, ²*USDA/ARS, DBSFRC, Booneville, AR*.

9:30 AM 32

Prevalence of Salmonella spp. in cow-calf herds grazing on pastures treated with poultry litter.

M. Voyles*¹, T. Platt¹, T. Wistuba¹, J. Phillips¹, and G. Loneragan², ¹*Morehead State University, Morehead, KY*, ²*West Texas A&M University, Canyon*.

~~Pastures and Forages~~

**Interdisciplinary Beef Cattle
Symposium: Putting Pasture-Based
Beef Finishing Systems in Perspective
Chair: Matt Poore,
North Carolina State University
Tangerine A**

8:15 AM

Introduction to the Issues with Pasture- and Feedlot-Based Finishing Systems.

M. H. Poore, North Carolina State University, Raleigh.

8:30 AM Invited

Effects of Finishing System on Meat Quality and Composition.

S. K. Duckett, Clemson University, Clemson.

9:15 AM Invited

Forage Systems for Finishing Beef.

V. A. Corriher, Texas A&M University, Overton.

10:00 AM **Break**

10:20 AM Invited

Genetics for Forage-Based Beef Production.

M. A. Brown, USDA-ARS, El Reno, OK.

11:05 AM Invited

Examining the Environmental Impact of Several Beef Production Systems.

K. A. Johnson, Washington State University, Pullman.

**Teaching and Undergraduate
Education
Chair: John Blanton Jr.,
The Samuel Roberts Noble Foundation
Tangerine B**

8:30 AM 110

Impact of online course duration on student performance in animal science nutrition.

K. Ange-van Heugten* and A. Renjifo McComb, *North Carolina State University, Raleigh.*

8:45 AM 111

Companion animal online instruction at Tuskegee University.

O. Bolden-Tiller* and N. Gurung, *Tuskegee University, Tuskegee, AL.*

**Undergraduate Student Competition
Chair: John Blanton Jr,
The Samuel Roberts Noble Foundation
Tangerine B**

9:00 AM 112

Evolution of exit velocity in the suckling Brahman calf.

B. J. Agado*¹, N. C. Burdick¹, J. C. White¹, K. J. Matheney¹, D. A. Neuendorff², R. C. Vann⁴, D. G. Riley¹, T. H. Welsh, Jr.^{1,3}, and R. D. Randel², ¹*Texas A&M University, College Station*, ²*Texas AgriLife Research, Overton*, ³*Texas AgriLife Research, College Station*, ⁴*MAFES-Brown Loam Experiment Station, Raymond, MS.*

9:15 AM 113

***In situ* ruminal kinetics of DM and NDF disappearance for the biomass forages Amur silvergrass and big bluestem.**

J. A. Robinette*¹, B. C. Williamson², R. Flores³, J. B. Woolley⁴, C. R. Bailey⁵, L. M. Tharel⁶, J. R. King⁶, D. M. Burner⁴, P. Carver⁷, W. K. Coblenz⁸, T. J. Wistuba¹, C. F. Rosenkrans, Jr.², and M. L. Looper⁴, ¹*Morehead State University, Morehead, KY*, ²*University of Arkansas, Fayetteville*, ³*University of Arkansas for Medical Sciences, Little Rock*, ⁴*USDA-ARS, Booneville, AR*, ⁵*University of Tennessee, Martin*, ⁶*USDA-NRCS, Booneville, AR*, ⁷*Bical, Staffordshire, England*, ⁸*USDA-ARS, Marshfield, WI.*

9:30 AM 114

Effects of pond location and watershed grazing management on water quality in Oklahoma and Texas.

C. J. Schriefer*¹, D. O. Alkire², and R. R. Reuter², ¹*North Dakota State University, Fargo*, ²*The Noble Foundation, Agricultural Division, Ardmore, OK.*

9:45 AM 115

The effect of initial market grade on carcass and ultrasound characteristics of feeder goats.

L. Melzer*¹, A. Raymer¹, T. Burkes², R. Miculinich¹, T. Platt¹, and T. Wistuba¹, ¹Morehead State University, Morehead, KY, ²Kentucky Department of Agriculture, Frankfort.

10:00 AM **Break**

10:15 AM 116

The impact of initial market grade on linear characteristics and performance of feeder goats.

A. Raymer*¹, L. Melzer¹, T. Burkes², R. Miculinich¹, T. Platt¹, and T. Wistuba¹, ¹Morehead State University, Morehead, KY, ²Kentucky Department of Agriculture, Frankfort.

10:30 AM 117

Effects of antioxidants on boar spermatozoa.

S. J. Casey* and B. D. Whitaker, *Ferrum College, Ferrum, VA.*

10:45 AM 118

The effects of using Noni pulp (*Morinda citrifolia*) on beef patties to enhance color stability.

W. N. Tapp III*¹, J. W. S. Yancey¹, J. K. Apple¹, and R. G. Godbee², ¹University of Arkansas, Fayetteville, ²Tahitian Noni International, Orem, UT.

11:00 AM 119

Fatty acid variations in fresh pork bellies.

K. A. Trusell*, J. K. Apple, G. L. Galloway, J. W. S. Yancey, T. M. Johnson, and R. J. Stackhouse, *University of Arkansas, Fayetteville.*

11:15 AM 120

Use of a naturally occurring source of sulfur to control gastrointestinal nematodes in small ruminants.

J. C. Davis*¹, F. N. Mhlanga¹, R. H. Anderson², and E. Pierce¹, ¹Abilene Christian University, Abilene, TX, ²Andersons Consulting & Training Service Inc., Garden City, KS.

11:30 AM 121

Utilization of tropical forage legumes (*Lablab purpureus*, *Vigna unguiculata* and *Vigna radiata*) to supplement a sudangrass diet fed to growing small ruminants.

M. W. Shinsky*, C. D. Laws, F. N. Mhlanga, M. A. Nicodemus, and E. Pierce, *Abilene Christian University, Abilene, TX.*

Graduate Student Competition II
Chair: D.W. Forrest,
Texas A&M University
Orange

10:15 AM 33

The effect of breed type on performance, pelvic measurements, and ultrasound carcass characteristics of heifers enrolled in the Eastern Kentucky Heifer Development Program.

W. Turner*, R. Miculinich, T. Platt, and T. Wistuba,
Morehead State University, Morehead, KY.

10:30 AM 34

Evaluation of in vitro gas production pattern and bacteria profile of corn milling (co)products using 16S rDNA bacterial tag-encoded FLX amplicon pyrosequencing.

W. L. Williams*¹, L. O. Tesechi¹, P. J. Kononoff², T. R. Callaway³, S. E. Dowd⁴, K. Karges⁵, and M. L. Gibson⁵, ¹*Texas A&M University, College Station*, ²*University of Nebraska, Lincoln*, ³*Food and Feed Safety Research Unit, USDA-ARS, College Station, TX*, ⁴*Medical Biofilm Research Institute and Research Testing Laboratory, Lubbock, TX*, ⁵*Dakota Gold Research Association, Sioux Falls, SD.*

10:45 AM 35

Duodenal copper transporters in cattle are affected by breed.

R. S. Fry*, M. S. Ashwell, and J. W. Spears, *North Carolina State University, Raleigh.*

11:00 AM 36

Anthelmintic resistance in gastrointestinal nematodes of sheep and goats in the Mid-Atlantic U.S.

E. K. Crook*¹, D. J. O'Brien¹, S. B. Howell², B. Storey², N. C. Whitley³, S. Schoenian⁴, J. M. Burke⁵, and R. M. Kaplan², ¹*Delaware State University, Dover*, ²*University of Georgia, Athens*, ³*North Carolina A&T University, Greensboro*, ⁴*University of Maryland Cooperative Extension, Keedysville*, ⁵*USDA, ARS, Dale Bumpers Small Farms Research Center, Booneville, AR.*

11:15 AM 37

Using limited acreage of non-toxic, novel endophyte-infected tall fescue for spring and fall-calving cows grazing toxic, wild-type endophyte-infected fescue.

J. Caldwell*¹, K. Coffey¹, D. Philipp¹, J. Jennings³, D. Hubbell, III¹, J. Tucker¹, A. Young¹, T. Hess¹, D. Kreider¹, M. Looper², M. Popp¹, M. Savin¹, E. Kegley¹, and C. Rosenkrans, Jr.¹, ¹*University of Arkansas, Fayetteville*, ²*USDA-ARS, Booneville, AR*, ³*University of Arkansas Cooperative Extension Service, Little Rock.*

11:30 AM 38

Leptin regulates angiogenic hormone expression in developing luteal tissue.

R. A. Katchko^{*1}, J. R. Wiles¹, E. A. Aguirre¹, C. W. O'Gorman^{3,1}, D. H. Kiesler³, R. L. Stanko^{1,2}, and M. R. Garcia¹, ¹Texas A&M University, Kingsville, ²Texas A&M University AgriLife Research Station, Beeville, ³University of Missouri, Columbia.

11:45 AM 39

Utilizing corn byproducts for beef cattle stockering and finishing operations in the southeastern United States.

J. R. Segers^{*}, R. L. Stewart Jr., T. D. Pringle, M. A. Froetschel, and A. M. Stelzleni, *University of Georgia, Athens.*

12:00 PM 40

Age at weaning and diet influence age at puberty in *Bos indicus* influenced heifers.

M. D. Mahan^{*1}, E. A. Aguirre¹, M. R. Garcia¹, and R. L. Stanko^{1,2}, ¹Texas A&M University, Kingsville, ²Texas AgriLife Research, Beeville.

12:15 PM **Lunch**

**Ruminant Animal Production I
Chair: Chris Richards,
Oklahoma State University
Tangerine B**

1:25 PM **Introduction**

1:30 PM 71

Influence of sire breed and crude glycerin level in the growing diet on growth and carcass characteristics in steer calves.

M. H. Poore^{*}, J. P. Cassady, M. A. Alley, and K. A. Gray, *North Carolina State University, Raleigh.*

1:45 PM 72

Performance and carcass quality of steers finished with silages and corn-soybean meal or corn-distillers dried grain supplements.

G. M. Hill^{*1}, A. J. Nichols¹, D. J. Renney¹, and V. A. Corriher², ¹University of Georgia, Tifton, ²Texas A&M University, Overton.

2:00 PM 73

Effects of roughage and protein source in receiving diets containing 25% wet corn gluten feed on performance and morbidity of newly received calves.

J. C. MacDonald^{*1,2} and F. T. McCollum III³, ¹Texas AgriLife Research, Amarillo, ²West Texas A&M University, Canyon, ³Texas AgriLife Extension Service, Amarillo.

2:15 PM 74

Use of soyhulls and peanut skins for growing beef cattle.

D. Rankins, Jr.*¹, J. Palmer¹, B. Gamble¹, N. Gurung², and G. Abdrahim³, ¹*Auburn University, Auburn, AL*, ²*Tuskegee University, Tuskegee, AL*, ³*Alabama A&M University, Normal*.

2:30 PM 75

Effects of dried distillers' grains on performance of stocker cattle grazing bermudagrass.

J. Hawley*, E. B. Kegley, K. P. Coffey, T. E. Davis, and J. A. Hornsby, *University of Arkansas, Fayetteville*.

2:45 PM **Break**

3:00 PM 76

Utilization of wet brewers grains (WBG) or dried distillers grains with soluble (DDGS) as supplements to round bale silage (RBS) or dry hay for young beef cows.

M. V. Thomas*, M. J. Hersom, and J. V. Yelich, *University of Florida, Gainesville*.

3:15 PM 77

The effect of wet brewers grains (WBG) or dried distillers grains with soluble (DDGS) as supplements for round bale silage (RBS) or dry hay on intake and digestibility in steers.

M. V. Thomas*, M. J. Hersom, and J. V. Yelich, *University of Florida, Gainesville*.

3:30 PM 78

Performance and behavior of weaned beef cattle that were fed tall fescue dry hay or haylage.

J. A. Black¹, J. G. Carter*¹, A. K. Johnson², and W. W. Gill¹, ¹*Middle Tennessee State University, Murfreesboro*, ²*Iowa State University, Ames*.

3:45 PM 79

Effects of supplementation with dried distillers grain (DDG) in yearling Brangus (BN) and Angus (AN) heifers fed round bale silage (RBS). I. Growth performance and body composition.

A. M. Monari*, E. M. McKinniss, M. J. Hersom, and J. V. Yelich, *University of Florida, Gainesville*.

4:00 PM 80

Effects of supplementation with dried distillers grain (DDG) in yearling Brangus (BN) and Angus (AN) heifers fed round bale silage (RBS). II. Puberty and reproductive performance.

A. M. Monari*, E. M. McKinniss, M. J. Hersom, and J. V. Yelich, *University of Florida, Gainesville*.

Graduate Student Competition III
Chair: D.W. Forrest,
Texas A&M University
Orange

1:30 PM 41

Effects of Ractopamine-HCl (RAC) on carcass quality, muscle fiber types, sensory evaluation and shear force measurements in yearling heifers.

E. N. Hunter*, C. R. Kerth, L. K. Anderson, C. L. Bratcher, and T. Brandebourg, *Auburn University, Auburn, AL.*

1:45 PM 42

Relationships between feed efficiency traits, and scrotal circumference and semen-quality traits in yearling bulls.

A. N. Hafla*¹, P. A. Lancaster², G. E. Carstens¹, D. W. Forrest¹, J. T. Fox³, M. E. Davis⁴, R. D. Randel⁵, and J. W. Holloway⁶, ¹*Texas A&M University, College Station*, ²*Oklahoma State University, Stillwater*, ³*Kansas State University, Manhattan*, ⁴*Ohio State University, Columbus*, ⁵*Texas AgriLife Research, Overton*, ⁶*Texas AgriLife Research, Uvalde.*

2:00 PM 43

Vegetation types to protect the soil when gestating sows have access for grazing.

S. Ireland*¹, B. Pope¹, T. Barrios¹, S.-H. Oh¹, and J. Green², ¹*North Carolina A&T State University, Greensboro*, ²*North Carolina State University, Raleigh.*

2:15 PM 44

Effects of cool- and warm season forages on instrumental color characteristics, Warner-Bratzler shear force and cooking loss of beef steers.

C. W. Rowe*¹, C. R. Kerth¹, R. B. Muntifer¹, K. R. Willian², and C. L. Bratcher¹, ¹*Auburn University, Auburn, AL*, ²*Tuskegee University, Tuskegee, AL.*

2:30 PM 45

Effects of including Micro-Aid® in a protein supplement on in situ ruminal degradation of low quality prairie hay.

C. P. McMurphy*¹, A. J. Sexten¹, G. L. Mourer¹, E. D. Sharman¹, M. J. Rincker², and D. L. Lalman¹, ¹*Oklahoma State University, Stillwater*, ²*DPI Global, Porterville, CA.*

Breeding and Genetics
Chair: Wayne E. Wyatt,
LSU AgCenter
Biscayne/SierraLarge

2:00 PM 1

Relationships between feed utilization and performance traits in developing Angus heifers.
B. L. Winslow*, J. P. Cassady, M. H. Poore, C. S. Whisnant, G. B. Huntington, K. A. Gray, and G. R. Hansen, *North Carolina State University, Raleigh.*

2:15 PM 2

Effects of breed and diet on beef quality characteristics.
T. N. Rojas*¹, H. A. Brown¹, F. W. Pohlman¹, M. A. Brown², Z. B. Johnson¹, P. Dais-Morse¹, L. McKenzie¹, and L. Mehall¹, ¹*University of Arkansas, Fayetteville*, ²*Grazinglands Research Laboratory, El Reno, OK.*

2:30 PM 3

Relationship of fecal egg counts and temperament scores to prolactin promoter polymorphisms in Angus calves.
A. R. Starnes*, A. H. Brown, Jr., Z. B. Johnson, J. G. Powell, J. L. Reynolds, and C. F. Rosenkrans, Jr., *University of Arkansas, Fayetteville.*

2:45 PM 4

Health measures in beef steers of known genetic background following BVDV challenge.
C. A. Runyan*¹, A. D. Herring¹, J. F. Ridpath², M. S. Cabaniss¹, C. T. Muntean¹, and J. E. Sawyer¹, ¹*Texas A&M University, College Station*, ²*USDA-ARS, Ames, IA.*

3:00 PM 5

Feed intake and weight gain in beef steers of known genetic background following BVDV challenge.
C. A. Runyan*¹, A. D. Herring¹, J. F. Ridpath², M. S. Cabaniss¹, C. T. Muntean¹, and J. E. Sawyer¹, ¹*Texas A&M University, College Station*, ²*USDA-ARS, Ames, IA.*

3:15 PM **Break**

3:30 PM 6

Penalization of records in genetic analyses of FAMACHA[®] scores of Merino sheep.
D. G. Riley*¹ and J. A. Van Wyk², ¹*Texas A&M University, College Station*, ²*University of Pretoria, Onderstepoort, South Africa.*

3:45 PM 7

Effects of breed and sex on cytochrome P450 gene expression in cattle liver.

M. S. Ashwell*, R. S. Fry, J. W. Spears, A. T. O'Nan, and C. Maltecca, *North Carolina State University, Raleigh.*

4:00 PM 8

Construction of a goat myostatin gene promoter-GFP translational fusion to study promoter regulation.

M. Singh*¹, A. Sharma², X. Ma¹, E. Amoah¹, and G. Kannan¹, ¹*Fort Valley State University, Fort Valley, GA*, ²*Mayo Clinic, Rochester, MN.*

4:15 PM 9

Growth characteristics of antibiotic free Yorkshire crossbreds raised in the hoop barn.

S.-H. Oh*¹, M. Dudley², J. Talton², B. Hardison², J. Gonzales¹, A. Meier², M. Morrow³, and T. See³, ¹*North Carolina A&T State University, Greensboro*, ²*NCDCA, Cherry Research Farm, Goldsboro, NC*, ³*North Carolina State University, Raleigh.*

**Small Ruminant Animal Production I:
Plants and Parasites
Chair: Niki Whitley,
North Carolina A&T State University
Tangerine A**

2:30 PM 96

Evaluation of sericea lespedeza as a summer forage and natural parasite control for grazing goats.

J.-M. Luginbuhl*¹, J. E. Miller², T. H. Terrill³, and H. M. Glennon¹, ¹*North Carolina State University, Raleigh*, ²*Louisiana State University, Baton Rouge*, ³*Fort Valley State University, Fort Valley, GA.*

2:45 PM 97

Integrated control of gastrointestinal nematodes (GIN) using sericea lespedeza (SL), FAMACHA, and copper oxide wire particles (COWP) in weaned goats in Arkansas.

J. M. Burke*¹, J. E. Miller², J. A. Mosjidis³, and T. H. Terrill⁴, ¹*USDA, ARS, Booneville, AR*, ²*Louisiana State University, Baton Rouge*, ³*Auburn University, Auburn, AL*, ⁴*Fort Valley State University, Fort Valley, GA.*

3:00 PM 98

Integrated control of gastrointestinal nematodes (GIN) using sericea lespedeza (SL), FAMACHA, and copper oxide wire particles (COWP) in weaned lambs in Arkansas.

J. M. Burke*¹, J. E. Miller², J. A. Mosjidis³, and T. H. Terrill⁴, ¹*USDA, ARS, Booneville, AR*, ²*Louisiana State University, Baton Rouge*, ³*Auburn University, Auburn, AL*, ⁴*Fort Valley State University, Fort Valley, GA.*

3:15 PM 99

The effect of forage species on growth rates and gastrointestinal nematode infection in lambs.

M. C. Miller, S. K. Duckett*, and J. G. Andrae,
Clemson University, Clemson, SC.

3:30 PM 100

Feeding sericea lespedeza leaf meal to goats: effect on gastrointestinal nematode infection.

T. H. Terrill*¹, B. R. Joshi¹, D. S. Kommuru¹, A. Mechineni¹, S. Gujja¹, N. R. Kamisetti¹, S. L. Dzimianski¹, J. E. Miller², J. A. Mosjidis³, and J. M. Burke⁴, ¹*Fort Valley State University, Fort Valley, GA*, ²*Louisiana State University, Baton Rouge*, ³*Auburn University, Auburn, AL*, ⁴*USDA/ARS/DBSFRC, Booneville, AR.*

3:45 PM 101

Effect of sericea lespedeza on fecal egg counts and egg hatching in goats infected with *Haemonchus contortus*.

S. B. Howell¹, B. R. Joshi², T. H. Terrill*², and R. M. Kaplan¹, ¹*University of Georgia, Athens*, ²*Fort Valley State University, Fort Valley, GA.*

4:00 PM 102

Influence of diets containing sericea lespedeza leaf meal on gastrointestinal parasite fecal egg counts in goats.

N. C. Whitley*¹, T. H. Terrill², J. E. Miller³, and J. M. Burke⁴, ¹*North Carolina A&T State University, Greensboro*, ²*Fort Valley State University, Fort Valley, GA*, ³*Louisiana State University, Baton Rouge*, ⁴*USDA, ARS, Booneville, AR.*

OTHER EVENTS

**SS-ASAS Business Meeting and
Awards Ceremony 5:00 PM – 7:00 PM
Orange**

Tuesday, February 9

**SYMPOSIA AND ORAL
SESSIONS**

**Ruminant Animal Production II
Chair: Russell Muntifering,
Auburn University
Marathon**

7:55 AM **Introduction**

8:00 AM 81

**SS-ASAS Emerging Scholar Award: Distribution
and role of glucagon-like peptide-2 in cattle.**

C. C. Taylor-Edwards*¹, D. G. Burrin², K. R. McLeod¹, J. J. Holst³, J. C. Matthews¹, and D. L. Harmon¹, ¹University of Kentucky, Lexington, ²USDA/ARS Children's Nutrition Research Center, Baylor College of Medicine, Houston, TX, ³The Panum Institute, University of Copenhagen, Copenhagen, Denmark.

8:45 AM 82

**Evaluation of an experimental sodium chlorate
product, with and without nitroethane, on
Salmonella in cull dairy cattle.**

N. A. Krueger*¹, T. S. Edrington¹, R. L. Farrow¹, R. C. Anderson¹, G. R. Hagevoort³, G. Loneragan², T. R. Callaway¹, and D. J. Nisbet¹, ¹USDA, ARS, Southern Plains Agriculture Research Center, Food and Feed Safety Research Unit, College Station, TX, ²West Texas A&M University, Canyon, ³New Mexico State University, Clovis.

9:00 AM 83

**Effect of rumen undegradable intake protein on
Campylobacter in fed cattle.**

R. C. Anderson*¹, M. Brown², W. E. Pinchak³, J. Osterstock⁴, J. MacDonald^{2,4}, W. Coufal², N. A. Krueger¹, T. R. Callaway¹, T. S. Edrington¹, R. B. Harvey¹, and D. J. Nisbet¹, ¹USDA/ARS, Southern Plains Agricultural Research Center, Food & Feed Safety Research Unit, College Station, TX, ²Feedlot Research Group, West Texas A&M University, Canyon, ³Texas AgriLife Research, Vernon, ⁴Texas AgriLife Research, Amarillo.

9:15 AM **Break**

9:30 AM 84

Evaluation of nose-clip designs for weaning beef calves.

H. T. Boland*¹, J. A. Parish², G. Scaglia³, T. F. Best¹, W. Epperson², S. T. Willard², and M. Howell⁴,
¹Mississippi State University, Prairie, ²Mississippi State University, Mississippi State, ³Iberia Research Station, LSU AgCenter, Louisiana State University, Jeanerette, ⁴North Mississippi R & E Center, Verona.

9:45 AM 85

Efficacy of two metaphylactic antimicrobials in lightweight, high-risk stocker calves.

R. R. Reuter* and D. O. Alkire, *The Noble Foundation, Agricultural Division, Ardmore, OK.*

10:00 AM 86

Characterization of feed efficiency traits and relationships with feeding behavior in growing steers.

E. D. M. Mendes*, G. E. Carstens, L. O. Tedeschi, and Z. Paddock, *Texas A&M University, College Station.*

10:15 AM 87

Prediction of partial efficiency of use of metabolizable energy to net energy for gain.

M. I. Marcondes*^{1,2}, L. O. Tedeschi¹, and S. C. Valadares Filho², ¹Texas A&M University, College Station, ²Universidade Federal de Viçosa, Viçosa, MG, Brazil.

10:30 AM 88

Prediction of chemical composition of carcass and empty body weight of cattle using the 9-11th rib section composition.

M. I. Marcondes*^{1,2}, L. O. Tedeschi¹, S. C. Valadares Filho², and M. L. Chizzotti³, ¹Texas A&M University, College Station, ²Universidade Federal de Viçosa, Viçosa, MG, Brazil, ³Universidade Federal do Vale do São Francisco, Petrolina, PB, Brazil.

**Pastures and Forages
Chair: Shane Gadberry,
University of Arkansas
Cedar**

8:30 AM Invited

Determination of intake in grazing herbivores: Current state of knowledge.

G. Scaglia, *Virginia Polytechnic Institute and State University, Blacksburg.*

9:00 AM 52

Productivity, nutritive quality and beef cattle production from dallisgrass (*Paspalum dilatatum*) under continuous or rotational grazing.

E. J. Bungenstab*, A. C. Pereira, J. C. Lin, J. L. Holliman, and R. B. Muntifering, *Auburn University, Auburn, AL.*

9:15 AM 53

Effect of cow-size and stocking rate during summer grazing on calf growth and cow herd efficiency.

P. Beck*¹, B. Stewart¹, H. Gray¹, J. Smith¹, and S. Gadberry², ¹University of Arkansas SWREC, Hope, ²University of Arkansas Coop. Ext. Ser., Little Rock.

9:30 AM 54

Performance of growing beef heifers strip-grazing stockpiled KY-31 tall fescue with or without byproduct supplements.

J. M. Scruggs*, M. E. Drewnoski, A. D. Shaeffer, and M. H. Poore, North Carolina State University, Raleigh.

9:45 AM **Break**

10:00 AM 55

Distance to water effect on forage mass pattern for cattle grazing toxic and non-toxic fescue.

M. S. Gadberry*¹, P. A. Beck², K. Simon¹, and D. Hubbell, III³, ¹Cooperative Extension Service, Little Rock, AR, ²Southwest Research and Extension Center, Hope, AR, ³Livestock and Forestry Branch Station, Batesville, AR.

10:15 AM 56

Effect of simultaneous exposure of ergot alkaloids on cytochrome P450 system.

A. S. Moubarak*¹, Z. B. Johnson¹, M. L. Looper², D. Holtz¹, and C. F. Rosenkrans, Jr.¹, ¹University of Arkansas, Fayetteville, ²USDA-ARS, Booneville, AR.

10:30 AM 57

Nutritive value and fermentation characteristics of ensiled tropical legumes and bahiagrass.

J. L. Foster*¹, A. T. Adesogan², J. N. Carter³, L. E. Sollenberger², A. R. Blount², and R. O. Myer², ¹Texas AgriLife Research, Beeville, ²University of Florida, Gainesville, ³University of Florida, Marianna.

10:45 AM 58

Effect of treatment of selected mature forages with sodium hydroxide on in vitro dry matter degradability.

E. Hatungimana*, D. W. Kellogg, K. S. Anschutz, and A. H. Brown, Jr., University of Arkansas, Fayetteville.

Physiology

Chair: Peter Ryan,

Mississippi State University

Tangerine A

8:30 AM 59

Oral administration of *Saccharomyces cerevisiae* boulardii reduces *Escherichia coli* endotoxin associated mortality in weaned pigs.

C. T. Collier*¹, J. A. Carroll¹, J. D. Starkey², and J. C. Sparks³, ¹Livestock Issues Research Unit, ARS-USDA, Lubbock, TX, ²Texas Tech University, Lubbock, ³Lallemand, Inc., Rexdale, Ontario, Canada.

8:45 AM 60

Oral administration of citrus pulp reduces gastrointestinal recovery of orally dosed *Escherichia coli* F18 in weaned pigs.

J. A. Carroll¹, C. T. Collier*¹, T. R. Callaway², and J. D. Arthington³, ¹*Livestock Issues Research Unit, ARS-USDA, Lubbock, TX*, ²*Food and Feed Safety Research Unit, ARS-USDA, College Station, TX*, ³*University of Florida, Ona*.

9:00 AM 61

Endogenous cortisol: Acute modulation of cytokine gene expression in bovine PBMCs.

N. C. Burdick*^{1,3}, B. J. Agado², R. D. Randel², D. A. Neuendorff², J. A. Carroll³, R. C. Vann⁴, C. G. Chitko-McKown⁵, S. D. Lawhon¹, and T. H. Welsh, Jr.¹, ¹*Texas A&M University, College Station*, ²*Texas AgriLife Research, Texas A&M System, Overton*, ³*USDA-ARS, Livestock Issues Research Unit, Lubbock, TX*, ⁴*Mississippi State University, Raymond*, ⁵*USDA-ARS, US Meat Animal Research Center, Clay Center, NE*.

9:15 AM 62

Effects of supplemental progesterone during culture on the development, metabolism, and blastocyst cell number of bovine embryos produced by in vitro maturation, fertilization, and culture.

J. E. Larson*¹, R. L. Krisher², and G. C. Lamb³, ¹*Mississippi State University, Mississippi State*, ²*University of Illinois, Urbana*, ³*University of Florida, Marianna*.

9:30 AM 63

Examination of relaxin gene expression in the porcine oocyte during *in vitro* maturation.

J. M. Feugang*, S. T. Willard, and P. L. Ryan, *Mississippi State University, Mississippi State*.

9:45 AM 64

Hair coat traits and body temperature of Senepol cows that are heterozygous or homozygous for the slick hair gene.

A. L. MacAuley, A. J. Weis, and R. W. Godfrey*, *University of the Virgin Islands, St Croix*.

10:00 AM Break

10:15 AM 65

Adult reproductive performance in high- and low-birth weight boars.

M. J. Estienne* and A. F. Harper, *Virginia Polytechnic Institute and State University, Blacksburg*.

10:30 AM 66

Effect of selection for residual feed intake on pubertal characteristics and conception rates of Bonsmara heifers.

A. N. Loyd*^{1,2}, A. W. Lewis¹, D. A. Neuendorff¹, K. J. Matheny^{1,2}, T. D. A. Forbes³, J. W. Holloway³, T. H. Welsh, Jr.², and R. D. Randel¹, ¹*Texas AgriLife Research, Overton*, ²*Texas AgriLife Research, College Station*, ³*Texas AgriLife Research, Uvalde*.

10:45 AM 67

Residual feed intake selection and its effects upon postpartum interval in Brahman cows.

A. K. Poovey*^{1,2}, A. N. Loyd^{1,2}, A. W. Lewis¹, D. A. Neuendorff¹, T. D. A. Forbes³, T. H. Welsh, Jr.², and R. D. Randel¹, ¹Texas AgriLife Research, Overton, ²Texas AgriLife Research, College Station, ³Texas AgriLife Research, Uvalde.

11:00 AM 68

The effect of temperament on circulating concentrations of insulin-like growth factor I (IGF-I) in Brahman calves.

L. C. Caldwell*¹, K. J. Matheney¹, R. C. Vann³, T. H. Welsh, Jr.¹, and R. D. Randel², ¹Texas AgriLife Research, College Station, ²Texas AgriLife Research, Overton, ³Mississippi State University, Raymond.

11:15 AM 69

Relationships between blood parameters at 24 hours of age and subsequent growth traits in beef calves.

K. R. Parker¹, A. N. Musselwhite², S. T. Willard², J. T. Green¹, T. H. Welsh, Jr.³, R. D. Randel⁴, and R. C. Vann*¹, ¹MAFES-Brown Loam Experiment Station, Raymond, MS, ²Mississippi State University, Starkville, ³Texas AgriLife Research, College Station, ⁴Texas AgriLife Research, Overton.

11:30 AM 70

Effects of anthelmintic type on fecal egg counts in yearling quarter horses.

M. L. McMillan*, K. R. Hall, and L. A. Rakowitz, Sam Houston State University, Huntsville, TX.

**Extension I
Chair: Jason Banta,
Texas A&M University
Largo**

9:00 AM 10

Enhancing livestock extension agent skills through specialized training.

A. D. Shaeffer*, M. H. Poore, and M. J. Kistler, North Carolina State University, Raleigh.

9:15 AM 11

Utilizing audience response systems in extension stocker cattle programs.

R. L. Stewart, Jr.*¹, D. W. Hancock, R. C. Lacy, R. W. Ellis, D. W. Clark, J. D. Aaron, C. Talton, and G. W. Nichols, *The University of Georgia, Athens.*

9:30 AM 12

Reaching extension clientele using an email marketing service.

B. L. Barham*, University of Arkansas, Little Rock.

9:45 AM 13

Development of mobile communication device applications for beef cattle producer education and decision making.

J. A. Parish*, J. D. Rhinehart, S. Hankins, M. L. Smith, C. W. Pumphrey, and R. D. Brook, *Mississippi State University, Mississippi State.*

10:00 AM 14

Developing a meat goat performance testing program in Maryland.

S. Schoenian*¹, J. Semler², J. Dietz-Band², W. Lantz³, D. Gordon⁴, M. Bennett⁵, and D. O'Brien⁶, ¹*University of Maryland Extension, Keedysville*, ²*University of Maryland Extension, Boonsboro*, ³*University of Maryland Extension, Mt. Lake Park*, ⁴*University of Maryland Extension, Derwood*, ⁵*West Virginia University Extension, Berkeley*, ⁶*Delaware State University, Dover.*

10:15 AM **Break**

10:30 AM 15

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.

J. Carter*, A. Raymer, L. Melzer, R. Miculinich, T. Platt, and T. Wistuba, *Morehead State University, Morehead, KY.*

10:45 AM 16

Impact of 25 years of progress in swine genetics and feeding programs on nutrient digestibility, ammonia emission, and odor in manure.

E. van Heugten*¹, W. Zhang¹, D. J. Hanson¹, J. P. Cassady¹, M. T. See¹, and T. van Kempen^{1,2}, ¹*North Carolina State University, Raleigh*, ²*Provimi, RIC, Brussels, Belgium.*

11:00 AM 17

Growth efficiency and carcass compositions of pigs raised on pasture in the summer season.

D. L. Kuhlers*, K. Nadarajah, C. L. Bratcher, C. R. Kerth, and W. F. Owsley, *Auburn University, Auburn, AL.*

11:15 AM 18

Effect of producer characteristics of beef producers on marketing practices.

B. T. Campbell*¹, J. B. Neel¹, C. D. Lane¹, F. D. Kirkpatrick¹, and W. W. Gill², ¹*The University of Tennessee, Knoxville*, ²*Middle Tennessee State University, Murfreesboro.*

11:30 AM 19

The effect of producer characteristics on adoption of reproductive practices.

J. B. Neel*¹, B. T. Campbell¹, C. D. Lane¹, F. D. Kirkpatrick¹, and W. W. Gill², ¹*The University of Tennessee, Knoxville*, ²*Middle Tennessee State University, Murfreesboro.*

**Small Ruminant Production II:
Systems, Education, Fiber, and
Reproduction**

**Chair: Sandra Solaiman,
Tuskegee University
Marathon**

11:00 AM 108

Survey of North Carolina sheep and goat producers after gastrointestinal parasite management training.
N.C. Whitley*¹, J-M. Luginbuhl², S. Schoenian³, and M. Worku¹, ¹*North Carolina A&T State University, Greensboro*, ²*North Carolina State University, Raleigh*, ³*University of Maryland Extension, Keedysville*.

11:15 AM 109

Impact evaluation of integrated parasite management training conducted in the Northeast US over a two-year period.
M.A. Perdue*¹, N.C. Whitley², S. Schoenian³, and D. J. O'Brien⁴, ¹*University of Maryland Eastern Shore, Princess Anne*, ²*North Carolina A&T State University, Greensboro*, ³*University of Maryland Extension, Keedysville*, ⁴*Delaware State University, Dover*

11:30 AM 105

Fiber growth and quality in alpacas managed with or without routine anthelmintic treatment in the mid-Atlantic U.S.
S. Wildeus*¹, C. J. Lupton², and A. M. Zajac³, ¹*Virginia State University, Petersburg*, ²*Texas AgriLife Research, San Angelo*, ³*VA-MD Regional College of Veterinary Medicine, Blacksburg, VA*.

11:45 AM 106

Sire and dam breed effects on postweaning growth of pasture-raised meat goat kids.
R. Browning, Jr.*¹ and M. L. Leite-Browning², ¹*Tennessee State University, Nashville*, ²*Alabama A&M University, Huntsville*.

12:00 PM 107

Liquid semen vaginal AI in three hair sheep breeds during transition to seasonal breeding.
S. Wildeus* and E. J. Chozu, *Virginia State University, Petersburg*.

12:15 AM 103

The performance of Spanish kids under mixed-species grazing system.
S. Gebrelul, L. Gray*, R. Marshall, Y. Ghebreyessus, V. Bachiredy, R. Payne, M. Berhane, E. Runles, and Z. Augustine, *Southern University Ag. Center, Baton Rouge, LA*.

12:30 PM 104

Effects of cattle and goat grazing practices on soil physical properties, and forage yield and quality.
Y. Ghebreyessus*, S. Gebrelul, V. Bachiredy, M. Berhane, R. Payne, R. Marshall, E. Runles, L. Gray, and Z. Augustine, *Southern University Ag. Center, Baton Rouge, LA*.

Meats
Chair: Ty Lawrence,
West Texas A&M University
Tangerine A

1:00 PM 46

Effects of on farm electrolyte supplementation on the hydration and meat quality of cull dairy cows.

T. S. Arp*, C. C. Carr, D. D. Johnson, and T. M. Warnock, *University of Florida, Gainesville.*

1:15 PM 47

There is no difference in the color and tenderness of commodity and natural beef.

C. A. Keys*, J. K. Apple, J. W. S. Yancey, R. J. Stackhouse, T. M. Johnson, and L. N. Mehall, *University of Arkansas, Fayetteville.*

1:30 PM 48

Effects of two systems for pasture grazing pigs on meat quality and sensory evaluation.

C. L. Bratcher*, D. L. Kuhlers, K. Nadarajah, C. R. Kerth, and W. F. Owsley, *Auburn University, Auburn, AL.*

1:45 PM 49

Effects of serial harvest of fall-born steers grazing warm- and cool-season forages on carcass characteristics.

C. R. Kerth¹, C. W. Rowe¹, R. B. Muntifering¹, K. R. Willian², and C. L. Bratcher¹, ¹*Auburn University, Auburn, AL*, ²*Tuskegee University, Tuskegee, AL.*

2:00 PM 50

The impact of citric acid marination pH on visual and instrumental color characteristics of dark-cutting beef.

R.J. Stackhouse*, J. K. Apple, J. W. S. Yancey, C.A. Keys, T. M. Johnson, and L.N. Mehall, *University of Arkansas, Fayetteville.*

2:15 PM 51

Effect of treating beef trim with lactic acid bacterial and Herbalox[®] or SYNTRx 3300[™] on ground beef color during retail display.

C. C. Carr¹, D. D. Johnson¹, L. E. Eubanks¹, R. P. Garrett², L. R. Malechek³, and R Allen⁴, ¹*University of Florida, Gainesville*, ²*FPL Food, LLC, Augusta, GA*, ³*Agri-West International, Inc, San Antonio, TX*, ⁴*Synergy Technologies, Inc, Shreveport, LA.*

**Small Ruminant Production III:
Feeds and Feeding Systems
Chair: Kenneth Andries,
Kentucky State University
Marathon**

1:15 PM 89

Effect of feeding system and breed on ω -3 polyunsaturated fatty acid content of lamb muscles.
G. Davila El Rassi^{*1}, V. Banskalieva¹, and M. Brown²,
¹*R. M. Kerr Food and Agricultural Products Center, Oklahoma State University, Stillwater,* ²*USDA-ARS, Grazinglands Research laboratory, El Reno, OK.*

1:30 PM 90

Effects of feeding sesame hulls on performance and carcass characteristics of Awassi lambs.
B. S. Obeidat* and B. H. Aloqaily, *Jordan University of Science and Technology, Irbid, Jordan.*

1:45 PM 91

Effects of high levels of zinc supplementation on growth performance, carcass characteristics, and blood metabolites of Boer-cross goat kids.
S. Solaiman, J. Bleach*, B. Min, N. Gurung, and C. Okere, *Tuskegee University, Tuskegee, AL.*

2:00 PM 92

Influence of dietary phosphorus content and the ratio of calcium to phosphorus on the formation of urolithogenic compounds in Boer-cross goats.
S. R. Freeman*, M. H. Poore, G. A. Young, and K. L. Anderson, *North Carolina State University, Raleigh.*

2:15 PM 93

Effect of level of supplementation in late gestation on performance of meat goat does and kids.
T. K. Hutchens^{*1}, M. K. Neary², and K. Andries³,
¹*University of Kentucky, Lexington,* ²*Purdue University, W. Lafayette, IN,* ³*Kentucky State University, Frankfort.*

2:30 PM 94

Consumption of free gossypol from whole cottonseed reduces antler weight but not other growth traits in red deer stags.
S. L. Morgan^{*1,2}, D. A. Neuendorff¹, A. L. Lewis¹, and R. D. Randel¹, ¹*Texas AgriLife Research, Overton,* ²*Texas AgriLife Research, College Station.*

2:45 PM 95

Carcass characteristics of sheep fed peanut skins.
G. Abdelrahim^{*1}, J. Khatiwada¹, D. Rankins², N. Gurung³, and J. Vizcarra¹, ¹*Alabama A & M University, Normal,* ²*Auburn University, Auburn, AL,* ³*Tuskegee University, Tuskegee, AL.*

Extension II
Chair: Matt Hersom,
University of Florida
Largo

2:00 PM 20

Feedlot performance and carcass traits for Southeast or Midwest calves.

W. D. Busby¹, D. Strohbehn¹, G. D. Fike*², and M. E. King², ¹*Iowa State University, Ames*, ²*Certified Angus Beef LLC, Wooster, OH*.

2:15 PM 21

Performance and carcass traits of pasture- vs. grain-finished steers in Florida.

J. M. B. Vendramini*¹, J. D. Arthington¹, C. Carr², F. Frigoni¹, P. G. M. A. Martins¹, M. M. Salin¹, and R. Cassiolato¹, ¹*University of Florida, Ona*, ²*University of Florida, Gainesville*.

2:30 PM 22

Demonstration and education for custom replacement beef heifer development.

J. D. Rhinehart* and J. A. Parish, *Mississippi State University, Mississippi State*.

2:45 PM 23

The impact of reducing the length of the calving season.

T. R. Troxel* and B. L. Barham, *University of Arkansas, Little Rock*.

3:00 PM 24

Impact of a dairy beef quality assurance program on producer cull cow management practices and meat quality knowledge.

A. Imler*, M. Hersom, C. Carr, T. Thrift, and D. Johnson, *University of Florida, Gainesville*.

3:15 PM 25

The impact of antibiotic administration in reducing somatic cell counts and improving udder health.

D. Tearney* and R. Natzke, *University of Florida, Gainesville*.