

59nd ANNUAL MEETING

of the **SOUTHWESTERN BRANCH** of the
ENTOMOLOGICAL SOCIETY OF AMERICA



and the **ANNUAL MEETING** of the
SOCIETY OF SOUTHWESTERN ENTOMOLOGISTS



7-10 MARCH 2011

AMBASSADOR HOTEL
AMARILLO, TX

SPONSORS

**We thank the following people and organizations for
their generous donations in support of Insect Expo
and other functions of the SWB-ESA meeting.**

DuPont Crop Protection

FMC Corporation

Trécé

Donut Stop

United Supermarkets

PROGRAM SUMMARY

TABLE OF CONTENTS

	PAGE
SPONSORS	ii
PROGRAM SUMMARY	1
MEETING INFORMATION	5
OFFICERS AND COMMITTEES	7
PROGRAM:	11
MONDAY, 7 MARCH	11
TUESDAY, 8 MARCH	12
WEDNESDAY, 9 MARCH	27
THURSDAY, 10 MARCH	35
PRESIDENTS AND CHAIRMEN OF SWB-ESA	36
MAP OF HOTEL	38
MAP TO PANHANDLE-PLAINS MUSEUM	39

MONDAY, 7 MARCH 2011

9:00 am – 1:00 pm	INSECT EXPO	Room: Rio Grande Ballroom
10:00 am – 1:30 pm	Registration	Location: Lobby
10:00 am – 12:00 pm	Southwestern Branch Executive Committee	Room: Sabine
12:00 – 1:00 pm	Society of Southwestern Entomologists Executive Committee	Room: Sabine
12:00 – 5:00 pm	Student Poster Set-up	Room: San Jacinto
12:00 – 5:00 pm	Presentation Preview Room	Room: San Antonio
1:00 – 2:00 pm	SOCIETY OF SOUTHWESTERN ENTOMOLOGISTS GENERAL MEMBERSHIP MEETING	Room: Sabine
2:00 – 5:00 pm	PALO DURO CANYON TOUR	Location: Meet in the Lobby
5:00 – 9:00 pm	WELCOME RECEPTION	Location: Panhandle-Plains Museum Canyon, TX

PROGRAM SUMMARY

TUESDAY, 8 MARCH 2011

7:00 – 8:00 am	Breakfast Room: Pre-function Garden
7:00 am – 5:00 pm	Registration Room: Lobby
7:00 am – 5:00 pm	Presentation Preview Room Room: San Antonio
7:00 am – 5:00 pm	Job Opportunity Room: Lobby
7:30 am – 5:00 pm	Entomological Foundation Silent Auction Room: Sabine
8:00 am – 4:00 pm	Student Poster Competition Room: San Jacinto
8:00 – 9:45 am	PLENARY SESSION: Room: Colorado / Canadian
9:45 – 10:00 am	BREAK Room: Pre-function Garden
10:00 am – 12:30 pm	SYMPOSIUM I: IPM Approaches for the Urban Landscape Room: Colorado
10:00 am – 12:00 pm	SYMPOSIUM II: Current Research in Arthropod Physiology and Molecular Biology Room: Canadian
12:00 – 1:00 pm	LUNCH (on your own)

PROGRAM SUMMARY

TUESDAY, 8 MARCH 2011 (cont.)

1:00 – 3:46 pm	Student Oral Competition (M.S.) Room: Canadian
1:00 – 4:00 pm	Student Oral Competition (B.S. and Ph.D.) Room: Colorado
4:30 – 6:00 pm	Student Poster Takedown Room: San Jacinto
5:00 – 7:00 pm	LINNAEAN GAMES (Prelims) Room: Rio Grande Ballroom
6:00 – 7:00 pm	Regular Poster Set-up Room: San Jacinto
7:00 – 10:00 pm	STUDENT MIXER Room: Pre-function Garden

WEDNESDAY, 9 MARCH 2011

7:00 – 8:00 am	Breakfast Room: Pre-function Garden
7:00 am – 5:00 pm	Registration Room: Lobby
7:00 am – 5:00 pm	Presentation Preview Room Room: San Antonio
7:00 am – 5:00 pm	Job Opportunity Room: Lobby

PROGRAM SUMMARY

WEDNESDAY, 9 MARCH 2011 (cont.)

7:00 am – 6:30 pm	Entomological Foundation Silent Auction Room: Sabine
8:00 am – 5:00 pm	Regular Poster Session Room: San Jacinto
9:00 am – 12:00 pm	SYMPOSIUM III: Irrigation Regimes and Pest Establishment Room: Colorado
12:00 – 1:00 pm	LUNCH (on your own)
1:00 – 3:10 pm	Regular Paper Session Room: Colorado
4:00 – 6:00 pm	LINNAEAN GAMES (Final Round) Room: Rio Grande Ballroom
7:00 – 10:00 pm	BANQUET AND AWARDS Room: Rio Grande Ballroom

THURSDAY, 10 MARCH 2011

7:00 – 8:00 am	Breakfast Room: Pre-function Garden
8:00 – 10:00 am	SWB-ESA FINAL BUSINESS MEETING Room: San Jacinto
10:00 am – 12:00 pm	SWB-ESA Executive Committee Meeting Room: San Jacinto

MEETING INFORMATION

REGISTRATION:

All persons attending the meetings or participating in the program must register. On-site registration fees for the SWB-ESA meeting are:

	<u>Full meeting</u>
Active ESA member	\$165
Student ESA member	60
Non-member	175
Spouse/Guest	50

Honorary/Emeritus – no charge, but we request that you register

The full-meeting fee includes admission to all functions, including the banquet.

ESA CERTIFICATION BOARD INFORMATION:

Information regarding the Certification Board of ESA is available at the Registration Desk.

SPONSORS:

We thank our sponsors for their generous support of activities such as the Insect Expo, student mixer, Linnaean Games, and breaks.

AUDIOVISUAL:

ONLY digital projectors with computers will be provided for oral presentations. Speakers must submit their presentations as Power Point files to the Presentation Preview Room one day before the session during which they will present.

PROGRAM SCHEDULE AND MODERATORS:

Speakers are limited to the time indicated in the schedule, and moderators have the responsibility and authority to enforce restricting time to that in the schedule. Moderators sign in at the Presentation Preview Room before the session.

JOB OPPORTUNITY BOARD:

The Student Affairs Committee of the SWB-ESA has a Job Opportunity Board available during the meetings. Employers should provide copies of available opportunities to post. Potential employees/students should bring multiple copies of resumes to leave during the meeting. Volunteers operating the Board will serve as liaisons to arrange interviews if needed.

LOST AND FOUND:

Articles should be turned in or reported to the Registration Desk or hotel main desk.

MESSAGES:

A message board is at the Registration Desk.

**ENTOMOLOGICAL SOCIETY OF AMERICA
SOUTHWESTERN BRANCH**

2010-2011 OFFICERS AND COMMITTEES

Tom A. Royer, President

Tom.royer@okstate.edu

Allen Knutson, Vice President

a-knutson@tamu.edu

Scott Bundy, Secretary-Treasurer

cbundy@nmsu.edu

Carlos Blanco, Past President

Carlos.a.blanco@aphis.usda.gov

Jesus Esquivel, Secretary-Treasurer Elect

Jesus.esquivel@ars.usda.gov

Bart Drees, ESA Governing Board Representative

b-drees@tamu.edu

AUDIT COMMITTEE

Jerry Michels (Chair)

Kevin Gardner

Gary Puterka

AWARDS AND HONORS COMMITTEE

Scott Armstrong (Chair)
Blake Bextine
Jesus Esquivel
David Kattes
Eric Rebek
Sonja Swiger
Dave Thompson
Jeff Tomberlin
Paulina Vega

BOARD CERTIFIED ENTOMOLOGIST

Brian L. Mount, BCE

BRANCH ARCHIVIST

Gregory Cronholm

IN MEMORIAM COMMITTEE (FORMERLY NECROLOGY)

James Reinert (Chair)
Phil Mulder
Dave Thompson

INSECT DETECTION COMMITTEE

Carol Sutherland (Chair)
Richard Grantham

INSECT EXPO COMMITTEE

Andrine Morrison Shufan (Chair)
Sarah Donelson
Trisha Dubie
Phil Mulder
Bonnie Pendleton
Dave Richman
Scott Russell
Carol Sutherland

LINNAEAN GAMES COMMITTEE

Scott Bundy (Chair)
Phillip G. Mulder, Jr., Gamesmaster
Blake Bextine
Jesus Esquivel
David Kattes
Mark Muegge
Bonnie Pendleton
Eric Rebek
Andrine Shufan
Kevin Shufan
Jim Woolley

LOCAL ARRANGEMENTS COMMITTEE

Jerry Michels (Co-Chair)
Bonnie Pendleton (Co-Chair)
Jody Gilchrest

MEMBERSHIP COMMITTEE

Jesus F. Esquivel (Chair)
John Burd
Bill Ree
Charles Suh
Justin Talley
Dough van Gundy

NOMINATIONS COMMITTEE

Carlos Blanco (Chair)
Greg Cronholm
Bonnie Pendleton
Tom Royer

PROGRAM COMMITTEE

Eric Rebek (Co-Chair)
Justin Talley (Co-Chair)
Henry Shreiber

PUBLIC INFORMATION COMMITTEE

Forrest Mitchell (Chair)
Bonnie Pendleton
Carol Sutherland

RESOLUTIONS COMMITTEE

Bill Ree (Chair)
Stan Carroll
Allen Knutson
Robert Miller

SITE SELECTION COMMITTEE

Scott Bundy (Chair)
Carlos Blanco
Greg Cronholm
Allen Knutson

STUDENT AFFAIRS COMMITTEE

Sam Lowry (Chair)
Erin Jones (Co-chair)
Apurba Barman
Trisha Dubie
Melise Schmidt
Henry Shreiber
Ram Shrestha

STUDENT RESEARCH PAPER AND POSTER AWARDS COMMITTEE

Bonnie Pendleton (Chair)
Scott Armstrong
Blake Bextine
Scott Bundy
Jack Dillwith
David Kerns
Jerry Michels
Emilio Nino
Jane Pierce
Eric Rebek
Justin Talley

YOUTH SCIENCE COMMITTEE

Carlos Blanco
Allen Knutson
Phil Mulder
Roy Parker
Bonnie Pendleton
Jane Pierce

PROGRAM

MONDAY, 7 MARCH 2011

9:00 am – 1:00 pm	INSECT EXPO Room: Rio Grande Ballroom
10:00 am – 1:30 pm	Registration Location: Lobby
10:00 am – 12:00 pm	Southwestern Branch Executive Committee Room: Sabine
12:00 – 1:00 pm	Society of Southwestern Entomologists Executive Committee Room: Sabine
12:00 – 5:00 pm	Student Poster Set-up Room: San Jacinto
12:00 – 5:00 pm	Presentation Preview Room Room: San Antonio
1:00 – 2:00 pm	SOCIETY OF SOUTHWESTERN ENTOMOLOGISTS GENERAL MEMBERSHIP MEETING Room: Sabine
2:00 – 5:00 pm	PALO DURO CANYON TOUR Location: Meet in the Lobby
5:00 – 9:00 pm	WELCOME RECEPTION Location: Panhandle-Plains Museum Canyon, TX

PROGRAM

TUESDAY, 8 MARCH 2011

7:00 – 8:00 am	Breakfast Room: Pre-function Garden
7:00 am – 5:00 pm	Registration Room: Lobby
7:00 am – 5:00 pm	Presentation Preview Room Room: San Antonio
7:00 am – 5:00 pm	Job Opportunity Room: Lobby
7:30 am – 5:00 pm	Entomological Foundation Silent Auction Room: Sabine
<hr/>	
8:00 – 9:45 am	PLENARY SESSION: Room: Colorado / Canadian
8:00 – 8:10 am	Call to Order and Welcome Tom Royer, SWB-ESA President
8:10 – 8:15 am	Welcome from the Society of Southwestern Entomologists Jesus Esquivel, President
8:15 – 8:30 am	Welcome to Amarillo Debra McCart, Mayor of Amarillo
8:30 – 8:40 am	Welcome from Texas AgriLife Research John Sweeten, Resident Director, Amarillo and Vernon

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

8:40 – 8:50 am	Welcome from West Texas A&M University Don Topliff, Dean of the College of Agriculture, Science and Engineering, Canyon
8:50 – 9:05 am	ESA President's Address Ernest S. (Del) Delfosse, ESA President
9:05 – 9:15 am	ESA Update C. David Gammel, ESA Executive Director
9:15 – 9:20 am	ESA Foundation Report Bradleigh Vinson, Board of Directors Entomological Foundation
9:20 – 9:25 am	Board Certified Entomologists Brian Mount, BCE Representative
9:25 – 9:30 am	In Memoriam Report James Reinert, Committee Chair
9:30 – 9:40 am	ESA Governing Board Report Bart Drees, Governing Board Representative
9:40 – 9:45 am	Announcements Program Chairs: Eric Rebek & Justin Talley
	Local Arrangements Bonnie Pendleton & Jerry Michels
9:45 – 10:00 am	BREAK Room: Pre-function Garden

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- 10:00 am – 12:30 pm **SYMPOSIUM I: IPM Approaches for the Urban Landscape**
Room: Colorado
Moderators: Scott Ludwig and Eric Rebek
- 10:00 – 10:05 am Introduction
Scott Ludwig
- 10:05 – 10:25 am Management of Western Flower Thrips on Ornamental Plants
Scott Ludwig
Texas AgriLife Extension Service
- 10:25 – 10:45 am Development of Phytosanitary Treatments to Facilitate Nursery and Floriculture Trade
Carlos E. Bográn¹, Terri Starman², and Catharine Mannion³
¹Texas AgriLife Extension Service
²Texas A&M University
³University of Florida
- 10:45 – 11:05 am Susceptibility of Genera and Cultivars of Turfgrass to Southern Chinch Bug
James Reinert, Ambika Chandra, and M. C. Engelke
Texas AgriLife Research

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- 11:05 – 11:25 am Target-Specific Lure and Switch Grid Spot Treatment Approach: Camp Bullis Karst Caves Project
Molly Keck¹, Bart Drees¹, Alejandro Calixto², and Natalie Cervantes¹
¹Texas AgriLife Extension Service
²Texas A&M University
- 11:25 – 11:45 am Seasonal Foraging Activity and Diet Preference of *Nylanderia* sp. nr. *pubens* (Hymenoptera: Formicidae)
Danny McDonald, Steve Cook, and Roger Gold
Texas A&M University
- 11:45 am – 12:05 pm Imported Fire Ant Management in Larger Landscaped Areas
Paul R. Nester¹, Alejandro A. Calixto², and Bastiaan M. Drees¹
¹Texas AgriLife Extension Service
²Texas A&M University
- 12:05 – 12:25 pm School IPM: Ignoring the Outside Can be “Grounds” for Failure
Tom A. Royer
Oklahoma State University

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- 10:00 am – 12:00 pm **SYMPOSIUM II: Current Research in Arthropod Physiology and Molecular Biology**
Room: Canadian
Moderator: Deborah Jaworski
- 10:00 – 10:30 am Termite Cuticular Hydrocarbons: Implications of Dietary Induced Modifications
Jack W. Dillwith, Ngan Nguyen Rawlings, Robin D. Madden, and Brad Kard
Oklahoma State University
- 10:30 – 11:00 am Tick Saliva Serine Protease Inhibitors (Serpins) at the Tick-host Interface
Albert Mulenga
Texas A&M University
- 11:00 – 11:30 am Is Bigger Bigger? Differential Responses to Temperature in Measures of Body Size of an Aquatic Invertebrate
Michael Reiskind
Oklahoma State University
- 11:30 am – 12:00 pm Tick-Host-Pathogen Acquisition/Transmission Models
Deborah Jaworski and Nalinda B. Wasala
Oklahoma State University

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- 8:00 am – 4:00 pm **Student Poster Competition**
Room: San Jacinto

BACHELOR'S STUDENTS

- SP-1 Determination and Rates of Parasitization of *Oomyzus gallerucae* (Hymenoptera: Eulophidae) on *Diorhabda* spp. (Coleoptera: Chrysomelidae) Eggs in Choice and Non-choice Scenarios. **Josh R Brown**, Kevin T. Gardner, and David C. Thompson, New Mexico State University
- SP-2 Community Composition of Native Entomopathogenic Nematodes (EPN) in Organic versus Conventional Wheat and Beef Production Systems in Oklahoma. **Xandra Robideau**, Carmen Greenwood, and Kyle Risser, Oklahoma State University
- SP-3 Sequencing of miRNA and siRNA in Potato Psyllids (*Bactericera cockerelli*). **Juan F. Macias**, Daymon Hail, and Blake R. Bextine, University of Texas-Tyler
- SP-4 Investigation of Imidacloprid Resistance Mechanisms in Western Blackmargined Aphids (*Monellia caryella*). **Amanda Peel**, New Mexico State University
- SP-5 Influence of SINV on Insecticide-Treated Red Imported Fire Ant. **Chris M. Powell** and Blake R. Bextine, University of Texas-Tyler

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- SP-6 Characterization and Comparison of Lsm Protein between Asian Citrus Psyllid (*Diaphorina citri*) and Potato Psyllid (*Bactericera cockerelli*). **Erin Ragsdale** and Blake R. Bextine, University of Texas-Tyler
- SP-7 Identification of *Delftia* sp. Amidase Production in Glassy-Winged Sharpshooter Hemolymph. **Lucas Shipman**, Daymon Hail, and Blake R. Bextine, University of Texas-Tyler
- SP-8 Laboratory Comparison of Flea Beetle (Coleoptera: Chrysomelidae) Feeding Preferences of Chili and Solanaceous Weed Species. **Melise Schmidt** and C. Scott Bundy, New Mexico State University

MASTER'S STUDENTS

- SP-9 Diagnostics Analysis of Phytoplasma in Plants and Insects. **Adam Booth** and Blake R. Bextine, University of Texas-Tyler
- SP-10 Development of mtCOI PCR Primers for Rapid Identification of High-Consequence *Bemisia tabaci* Biotypes. **Sharon Andreason**, Judy Brown, Jacque Fletcher, Francisco Ochoa-Corona, and Astri Wayadande, Oklahoma State University
- SP-11 Evaluation of *Lygus hesperus* Cold Tolerance, Overwintering Survivorship, and Spring Emergence. **Ezhilmathi A. J. Fernando**, Megha N. Parajulee, Owen W. McSpadden, Sam B. Shrestha, and Stanley C. Carroll, Texas A&M University

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- SP-12 Population Dynamics of Onion Thrips (*Thrips tabaci*) and Western Flower Thrips (*Frankliniella occidentalis*) in New Mexico Onions as Influenced by Insecticide Applications. **Rita K. Lloyd-Mills**, New Mexico State University
- SP-13 Characterization of Aquatic Macroinvertebrate Communities Exposed to Prescribed Burning and Grazing Land Management Practices in Oklahoma Cross Timbers Pastureland Ponds. **Anndrea Navesky** and Carmen Greenwood, Oklahoma State University
- SP-14 Entomopathogenic Nematodes (EPN) in Oklahoma Beef and Wheat Production Systems: Profile of Ecoregion and Management Practices Impacts on Abundance and Diversity of Native EPN Taxa. **Kyle Risser** and Carmen Greenwood, Oklahoma State University
- SP-15 Preliminary Life history and Laboratory Rearing of *Narnia* sp. (Hemiptera: Heteroptera: Coreidae). **Helen K. Vessels** and C. Scott Bundy, New Mexico State University

PH.D. STUDENT

- SP-16 Assessment of Blow Fly (*Lucilia sericata*) Resting Behavior on Plants Using a Newly Developed Model. **Rebecca Pace**, Justin Talley, Jacque Fletcher, and Astri Wayadande, Oklahoma State University

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- 1:00 – 4:00 pm **STUDENT ORAL COMPETITION**
Room: Canadian
- MASTER'S STUDENTS*
- SO-1 Effect of Cotton Phenology on the Intercrop
1:00 – 1:12 pm Movement Behavior of Convergent Lady
Beetle between Cotton and Alfalfa. **Anup**
Bastola, Ram Shrestha, Megha Parajulee, and
Stanley Carroll, Texas A&M University
- SO-2 Resistance to Feeding and Oviposition by Corn
1:12 – 1:24 pm Leafhopper along Maize's Evolutionary and
Domestication Gradients. **Edwin Bellota**,
Julio Bernal, and Tom Jondiko, Texas A&M
University
- SO-3 Artificial Infection of the Liberibacter Vectors,
1:24 – 1:36 pm *Diaphorina citri* and *Bactericera cockerelli*
(Homoptera: Psyllidae), by the Fungus,
Hirsutella citriformis. **Rebeca Casique-**
Valdez, Ana Yelly Reyes-Martinez, and Sergio
Sanchez-Pena, Universidad Autónoma Agraria
Antonio Narro
- SO-4 A Look at Population Migration in Potato
1:36 – 1:48 pm Psyllids Using Genetic Techniques. **Rebekah**
Chapman and Blake Bextine, University of
Texas-Tyler

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- SO-5 Metabolic Proteins and Their Transcriptional
1:48 – 2:00 pm Dynamics in *Manduca sexta* under Immunity
Challenge. **Ramesh Gunaratna**, Jack
Dillwith, and Haobo Jiang, Oklahoma State
University
- SO-6 A Preliminary Evaluation of Cantharidin Levels
2:00 – 2:12 pm of Common Blister Beetles (Coleoptera:
Meloidae) in New Mexico. **Sam Lowry** and C.
Scott Bundy, New Mexico State University
- SO-7 Detecting Spinose Ear Tick Presence Using
2:12 – 2:24 pm Host and Habitat Characteristics. **Christopher**
Niebuhr, Jeffrey Breeden, David Kattes, and
Barry Lambert, Tarleton State University;
Adam Eyres and Holly Haefele, Fossil Rim
Wildlife Center
- 2:24 – 2:34 pm **BREAK**
- SO-8 The Acari: Model Organisms for Studies in
2:34 – 2:46 pm Biodiversity. **Charity G. Owings**, Texas A&M
University
- SO-9 Effects of Condensed Tannins on House Fly
2:46 – 2:58 pm Emergence in Goat Manure. **Cassie**
Schoenthal, Barry Lambert, and David Kattes,
Tarleton State University
- SO-10 Multi-locus Sequence Analysis of Virulence
2:58 – 3:10 pm Genes in the Phytopathogen *Xylella fastidiosa*.
Henry L. Schreiber and Blake R. Bextine,
University of Texas at Tyler; Lisa D. Morano,
University of Houston-Downtown

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- SO-11
3:10 – 3:22 pm
Heterorhabditis bacteriophora and *Steinernema riobravo* Response to Soil Type for the Biological Control of Larger Black Flour Beetle in Cotton Gin Trash. **Bryan Stokes**, Texas Tech University; Christian Nansen, Texas Tech University and Texas AgriLife Research and Extension Center; Terry Wheeler, Texas AgriLife Research and Extension Center
- SO-12
3:22 – 3:34 pm
Eliciting Aggregation Behavior in *Cotinis nitida*. **Kimberly Thompson** and Roger Wittie, Tarleton State University
- SO-13
3:34 – 3:46 pm
Bellopius (Braconidae) Parasitoids of Neotropical Fruit-Infesting Tephritidae (Diptera). **Lauren Ward**, Bob Wharton, and Thomas DeWitt, Texas A&M University

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- 1:00 – 4:00 pm
STUDENT ORAL COMPETITION
Room: Colorado
- BACHELOR'S STUDENTS**
- SO-14
1:00 – 1:12 pm
Analysis of *Candidatus Liberibacter* within Potato Psyllid Tissue Cell Culture. **Janet Arras** and Chelsea Swatsell, University of Texas at Tyler; Wayne Hunter, USDA-ARS; and Blake Bextine, University of Texas at Tyler
- SO-15
1:12 – 1:24 pm
Seasonal Development of the Beet Leafhopper, *Neotalitrus tenellus* (Baker) (Hemiptera: Cicadellidae), on Desert Hosts in New Mexico. **Joni Blount** and C. Scott Bundy, New Mexico State University
- SO-16
1:24 -1:36 pm
A New Methodology for Small-Scale Studies on Two-Spotted Spider Mite, *Tetranychus urticae* Koch: Rearing and Sorting Life History Stages. **Lauren Kalns**, Justin Fiene, Marvin Harris, and Julio Bernal, Texas A&M University; and Christian Nansen, Texas Tech University and Texas AgriLife Research and Extension Center
- SO-17
1:36 – 1:48 pm
Chemical Repellents of the Spinose Ear Tick. **Sarah Mays**, Christopher Niebuhr, Jeffrey Breeden, David Kattes, and Barry Lambert, Tarleton State University

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

SO-18
1:48 – 2:00 pm
Differentiation of *Xylella fastidiosa* Subspecies via High Resolution Melting Temperature Analysis. **Cassie Skipper**, University of Texas at Tyler; Brittany Pierce, University of California-Davis; and Blake Bextine, University of Texas at Tyler

PH.D. STUDENTS

SO-19
2:00 – 2:12 pm
Within-Plant Distribution and Omnivory by Western Flower Thrips in Cotton: Implications for Scouting and Action Thresholds. **Justin Fiene** and Lauren Kalns, Texas A&M University; Xavier Martini, Texas AgriLife Research and Extension Center; Julio Bernal and Peter Krauter, Texas A&M University; and Christian Nansen, Texas Tech University and Texas AgriLife Research and Extension Center

SO-20
2:12 – 2:24 pm
Weight Loss and Germination Failure Caused by Psocids in Wheat. **Sandipa Gautam**, George Opit, Kristopher Giles, and Brian Adam, Oklahoma State University

2:24 – 2:34 pm
BREAK

SO-21
2:34 – 2:46 pm
Steps Toward *in vitro* Rearing of *Toxoneuron nigriceps*, a Koinobiont Parasitoid. **Ruth E. Henderson**, Indira Kuriachan, and S. Bradleigh Vinson, Texas A&M University

SO-22
2:46 – 2:58 pm
Molecular Basis of Plant Defense against Aphids: Role of Arabidopsis MPL1 Gene. **Joe Louis**, K-L Kukula, and Vijay Singh, Univ. of North Texas; John Reese, Kansas State Univ.; and Jyoti Shah, Univ. of North Texas

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

SO-23
2:58 – 3:10 pm
Nestmate Discrimination in the Harvester Ant *Pogonomyrmex comanche* (Hymenoptera: Formicidae). **Ann B. Mayo**, University of Texas-Arlington

SO-24
3:10 – 3:22 pm
Seasonal and Physiological Variation in Time of Arrival for Forensically Significant Blowflies in Texas. **Rachel Mohr**, Texas A&M University

SO-25
3:22 – 3:34 pm
Testing the Pulsed Stress Hypothesis on Plant-Insect Interactions. **Warren Sconiers**, Texas A&M University; Diane Rowland, University of Florida; and Micky Eubanks, Texas A&M University

SO-26
3:34 – 3:46 pm
Effects of Spider Mites, Drought Stress and Corn Genotypes on Silage Yield and Quality. **Amelia Jorge Sidumo**, Texas Tech University; Christian Nansen, Texas Tech University and Texas AgriLife Research and Extension Center; Kathy Vaughn and Patrick Porter, Texas AgriLife Research and Extension Center

SO-27
3:46 – 3:58 pm
Comparison of Sequences and Binding Patterns of *Manduca sexta* Peptidoglycan Recognition Proteins Associated with Insoluble Peptidoglycans and Bacterial Cells. **Xiufeng Zhang**, Niranji Sumathipala, and Haobo Jiang, Oklahoma State University

PROGRAM

TUESDAY, 8 MARCH 2011 (cont.)

- 4:30 – 6:00 pm **Student Poster Takedown**
Room: San Jacinto
- 5:00 – 7:00 pm **LINNAEAN GAMES (Preliminary Round)**
Room: Rio Grande Ballroom
- 6:00 – 7:00 pm **Regular Poster Set-up**
Room: San Jacinto
- 7:00 – 10:00 pm **STUDENT MIXER**
Room: Pre-function Garden

PROGRAM

WEDNESDAY, 9 MARCH 2011

- 7:00 – 8:00 am **Breakfast**
Room: Pre-function Garden
- 7:00 am – 5:00 pm **Registration**
Room: Lobby
- 7:00 am – 5:00 pm **Job Opportunity Board**
Room: Lobby
- 7:00 am – 5:00 pm **Presentation Preview Room**
Room: San Antonio
- 7:00 am – 6:30 pm **Entomological Foundation Silent Auction**
Room: Sabine
-
- 9:00 am – 12:00 pm **SYMPOSIUM III: Irrigation Regimes and Pest Establishment**
Room: Colorado
Moderator: Christian Nansen
- 9:00 – 9:05 am Introduction
Christian Nansen
- 9:05 – 9:25 am Corn Production on the Southern High Plains
David Gibson, Executive Director,
Texas Corn Producer Board
- 9:25 – 9:45 am Optimizing Irrigation: Efficient Irrigation Management in Integrated Production Systems
Dana Porter, Texas AgriLife Research

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

- 9:45 – 10:05 am Spider Mite Development on Cotton and Importance of Drought Stress
Xavier Martini, Natalie Kincy, and Christian Nansen
Texas AgriLife Research
- 10:05 – 10:25 am Spider Mites on Corn – Development and Detection
Christian Nansen, Amelia Sidumo, Kathy Vaughn, and Patrick Porter
Texas AgriLife Research
- 10:25 – 10:40 am **BREAK**
- 10:40 – 11:00 am Purshade and Its Effect on Spider Mite Development in Drought Stressed Corn
Kathy Vaughn, Patrick Porter, and Christian Nansen
Texas AgriLife Research
- 11:00 – 11:20 am Testing the Pulsed Stress Hypothesis on Plant-Insect Interactions
Warren B. Sconiers, Diane L. Rowland, and Micky D. Eubanks
Texas A&M University
- 11:20 – 11:40 am Greenbug Damage on Drought Stressed Wheat
Kristopher Giles, Norm Elliott, S. Dean Kindle, and Tom Royer
Oklahoma State University
- 11:40 – 12:00 pm Irrigation-Disease Interactions
Charlie Rush, Jacob Price, Fekede Workneh, Texas AgriLife Research

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

SUBMITTED POSTER SESSION:

8:00 am – 5:00 pm **Viewing**
Room: San Jacinto

BIOLOGICAL CONTROL:

- P-1 Update of Saltcedar Biocontrol in New Mexico.
Kevin Gardner, New Mexico State University
- P-2 Influence of Pecan Tree Size on Sentinel *Helicoverpa zea* Eggs in New Mexico. **Devin Bendixsen**, Jane Breen Pierce, Patricia E. Monk, and Derik Bendixsen;
New Mexico State University
- P-3 Impact of Alfalfa on Biological Control of Insect Pests in New Mexico. **Jane Breen Pierce** and Patricia E. Monk, New Mexico State University
- P-4 Evaluation of *Metarhizium anisopliae* Strains to Control the Grass Spittlebug, *Prosapia simulans*. **Ninfa M. Rosas-García**, Osvaldo Avalos-de León, Jesús M. Villegas Mendoza, and Alejandro Sánchez Varela; Centro de Biotecnología Genómica-IPN, Reynosa, Tamaulipas, Mexico

CROP PROTECTION:

- P-5 Interrelationship between Plants and Insects as the Basis for IPM Systems. **S. M. Greenberg**, J. J. Adamczyk, and J. J. Alejandro; USDA-ARS, Weslaco, Texas

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

- P-6 The Lethal and Sublethal Effects of the Single and Stacked Traits of *Bacillus thuringiensis* on Fall Armyworm (Lepidoptera: Noctuidae) Survival and Development. **John Scott Armstrong** and John. J. Adamczyk, USDA-ARS, Weslaco, Texas
- P-7 Pink Bollworm Trapping in the Southern Plains of Texas and New Mexico. **Tommy Doederlein**¹, Manda Cattaneo¹, Jane Breen Pierce², and Warren Multer¹; ¹Texas AgriLife Extension and ²New Mexico State University
- P-8 Cotton Cultivar Compensatory Response to Lygus-Induced Fruit Loss Under Low and High Irrigation. **W. Owen McSpadden**, Megha N. Parajulee, Ram B. Shrestha, Stanley C. Carroll, and Fajun Chen; Texas AgriLife Research
- P-9 Development and Infestation Characteristics of Yellow Sugarcane Aphid (Hemiptera: Aphididae) on Sorghum. **Zachary P. Eder** and Bonnie B. Pendleton, West Texas A&M University
- P-10 Use of Scanning Electron Microscopy and Energy Dispersive Spectroscopy to Correlate Resistance of Maize Weevil (Coleoptera: Curculionidae) to the Arrangement of Starch in Sorghum Grain. **Bonnie B. Pendleton**¹, Michael W. Pendleton², E. Ann Ellis², Gary C. Peterson³, Fernando M. Chitio⁴, and Suhas Vyavhare²; ¹West Texas A&M University, ²Texas A&M University, ³Texas AgriLife Research, and ⁴IIAM, Nampula Research Center, Mozambique

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

- P-11 Comparison of Sample Methods and Sample Plans for Thrips in Cotton. **Mark Muegge**, David Kerns, Megha Parajulee, and Monti Vandiver; Texas A&M University
- P-12 Damage and Economic Losses Associated with Different Spider Mite Infestations to Corn Grown for Silage. **Ed Bynum**, Jerry Michels, Johnny Bible, and Jim MacDonald; Texas AgriLife Research and Extension
- BIOLOGY/ECOLOGY/BEHAVIOR:**
- P-13 Effect of Landscape Characteristics on Lygus Abundance in Cotton. **Stanley C. Carroll**, W. Owen McSpadden, Ram B. Shrestha, Megha N. Parajulee, and David L. Kerns; Texas AgriLife Research
- P-14 Ecology and Identification of *Diuraphis* species in North America. **G. J. Puterka**¹, J. D. Burd¹, R. H. Hammon², F. Peairs³, Terri Randolph³, and W. R. Cooper¹; Texas Cooperative Extension, ¹USDA-ARS, ²Colorado State University Extension, and ³Colorado State University
- P-15 Localization of Disease Pathogens of Cotton in Southern Green Stink Bug. **Jesus F. Esquivel** and Enrique G. Medrano; USDA-ARS, College Station, Texas
- P-16 Effects of Elevated CO₂ on the Interspecific Competition between Two Sympatric Species, *Aphis gossypii* and *Bemisia tabaci*, Fed on Transgenic Bt Cotton. **Fajun Chen** and Megha N. Parajulee, Texas AgriLife Research

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

SYSTEMATICS/MORPHOLOGY/EVOLUTION:

- P-17 Challenges in *Lygus* Species Identification. **Kamala Adhikari**, Ram B. Shrestha, and Megha N. Parajulee; Texas AgriLife Research
- P-18 Amplified Length Polymorphism (AFLP): “The Ideal Marker” for Genetic Diversity Studies of *Lygus hesperus*. **Ram B. Shrestha** and Megha N. Parajulee, Texas AgriLife Research

MEDICAL/VETERINARY:

- P-19 Triatomine Bugs (Hemiptera: Reduviidae) in Southeastern New Mexico: A Survey for *Trypanosoma cruzi*. **Derik Bendixsen**, Jane Breen Pierce, Patricia E. Monk, and Devin Bendixsen; New Mexico State University

PHYSIOLOGY/TOXICOLOGY/BIOCHEMISTRY/MOLECULAR:

- P-20 Variance among Salivary Proteomes of *Diuraphis noxia* Biotypes. **Scott Nicholson** and Gary Puterka; USDA-ARS, Stillwater, Oklahoma

REGULATORY/EXTENSION/OUTREACH:

- P-21 *Hypothenemus hampei* at Emerging and Established Areas of Coffee Producers in Jalisco, Mexico. **Paulina Vega-Aquino**¹, Federico A. Perez-Mejia¹, Aureliano Canal-Contreras², and Sergio R. Sanchez-Peña³; ¹SAGARPA, Delegacion Estatal Jalisco, Tlaquepaque, Jalisco, Mexico, ²CESAVEJAL, Guadalajara, Jalisco, Mexico, and ³UAAAN, Saltillo, Coahuila, Mexico

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

SUBMITTED PAPER SESSION:

- 1:00 pm – 2:30 pm Room: Colorado
- 1:00 – 1:05 pm Welcome and Opening Remarks

BIOLOGICAL CONTROL:

- O-1 Is Ant Predation Impeding the Establishment of *Diorhabda* Leaf Beetles for Biological Control of Saltcedar? **Allen Knutson** and Mark Muegge, Texas AgriLife Extension
- O-2 Quantitative Analysis of Predation on Aphids by the Convergent Lady Beetle. **Norm C. Elliott**, USDA-ARS, Stillwater, Oklahoma

CROP PROTECTION:

- O-3 Developing a Method to Differentiate Stress Induced by *Diuraphis noxia* from Other Stress Causing Factors. **Georges F. Backoulou**¹, Norm C. Elliott², and Kristopher L. Giles¹; ¹Oklahoma State University and ²USDA-ARS, Stillwater, Oklahoma
- O-4 An Investigation of Possible Blackmargined Pecan Aphid Resistance to Imidacloprid in Texas Pecans. **Bill Ree**¹, Juan Lopez², Mohamed Latheef², and Nichole Boatman³; ¹Texas AgriLife Extension, ²USDA-ARS, Bryan, Texas, and ³Texas A&M University

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

BIOLOGY/ECOLOGY/BEHAVIOR:

- O-5
1:53 – 2:05 pm Specific Responses of Three Key Species of Rice Planthoppers to Elevated CO₂ and Temperature. **Fajun Chen** and Megha N. Parajulee, Texas AgriLife Research
- 2:05 – 2:15 pm **BREAK**
- O-6
2:15 – 2:27 pm Effect of Nitrogen Fertility on Arthropod Pests in Cotton. **Megha N. Parajulee**, R. J. Kelsey, R. B. Shrestha, S. C. Carroll, and D. L. Kerns; Texas AgriLife Research
- O-7
2:27 – 2:39 pm Importance of Odor in Nest Selection by a Lodger Bee, *Centris bicornuta*, in the Dry Forest of Costa Rica. **S. B. Vinson**¹, G. W. Frankie², and Asha Rao¹; ¹Texas A&M University and ²University of California-Berkeley

REGULATORY/EXTENSION/OUTREACH:

- O-8
2:39 – 2:51 pm Developing, Delivering, and Upgrading Pecan ipmPIPE on the Web. **Phil Mulder**¹, Alejandro Calixto², Marvin Harris², and Bill Ree³; ¹Oklahoma State University, ²Texas A&M University, and ³Texas AgriLife Extension
- O-9
2:51 – 3:03 pm On the Edge of Seed Mixtures: Transgenic Bt Corn Refuge Strategies and Compliance Issues. **Patrick Porter**, Texas AgriLife Extension

PROGRAM

WEDNESDAY, 9 MARCH 2011 (cont.)

- 4:00 – 6:00 pm **LINNAEAN GAMES**
Room: Rio Grande Ballroom
- 7:00 – 10:00 pm **BANQUET AND AWARDS**
Room: Rio Grande Ballroom
- Perspectives from Outside In, Inside Out**
Bill Clymer, Ph.D., BCE
Ag Training and Technology, Inc.

THURSDAY, 10 MARCH 2011

- 7:00 – 8:00 am **Breakfast**
Room: Pre-function Garden
- 8:00 – 10:00 am **SWB-ESA FINAL BUSINESS MEETING**
Room: San Jacinto
- 10:00 am – 12:00 pm **SWB-ESA Executive Committee meeting**
Room: San Jacinto

ABBREVIATIONS LIST

- O – Submitted Oral Presentation
P – Submitted Poster Presentation
SO – Student Oral Presentation Competition
SP – Student Poster Presentation Competition

PRESIDENTS AND CHAIRMEN OF SWB-ESA

President	Year	Location
Pres. Tom Royer	2010-11	Amarillo, TX
Pres. Carlos Blanco	2009-10	Cancun, Mexico
Pres. Bonnie Pendleton	2008-09	Stillwater, OK
Pres. Greg Cronholm	2007-08	Ft. Worth, TX
Pres. David Thompson	2006-07	Corpus Christi, TX
Pres. Bart Drees	2005-06	Austin, TX
Pres. Phil Mulder	2004-05	Albuquerque, NM
Pres. John D. Burd	2003-04	Lubbock, TX
Pres. Terry Mize	2002-03	Oklahoma City, OK
Pres. W. Pat Morrison	2001-02	Guanajuato, Mexico
Pres. Jim Reinert	2000-01	San Antonio, TX
Pres. James A. Webster	1999-00	Ft. Worth, TX
Pres. Carol Sutherland	1998-99	Las Cruces, NM
Pres. Ann Weise	1997-98	Corpus Christi, TX
Pres. Pete Lingren	1996-97	Oklahoma City, OK
Pres. Charles L. Cole	1995-96	Austin, TX
Pres. J. Terry Pitts	1994-95	Dallas, TX
Pres. Sidney E. Kunz	1993-94	Monterrey, Mexico
Pres. John G. Thomas	1992-93	Albuquerque, NM
Pres. Don Bull	1991-92	Tulsa, OK
Pres. Aithel McMahon	1990-91	College Station, TX
Pres. Russel E. Wright	1989-90	San Antonio, TX
Pres. Joyce Devaney	1988-89	El Paso, TX
Pres. Russ Andress	1987-88	Dallas, TX
Pres. Don Rummel	1986-87	Austin, TX
Pres. John E. George	1985-86	Monterrey, Mexico
Pres. Paul D. Sterling	1984-85	San Antonio, TX
Pres. H. Grant Kinzer	1983-84	Oklahoma City, OK
Pres. James R. Coppedge	1982-83	Corpus Christi, TX
Pres. Bill C. Clymer	1981-82	El Paso, TX
Pres. Horace W. VanCleave	1980-81	San Antonio, TX
Pres. Robert L. Harris	1979-80	Brownsville, TX
Pres. Jimmy K. Olson	1978-79	Houston, TX

President	Year	Location
Pres. J. Pat Boyd	1977-78	Lubbock, TX
Pres. Robert A. Hoffman	1976-77	Guadalajara, Mexico
Pres. Weldon H. Newton	1975-76	Oklahoma City, OK
Pres. Harry L. McMenemy	1974-75	El Paso, TX
Pres. Roger O. Drummond	1973-74	Dallas, TX
Pres. Dieter S. Enkerlin	1972-73	San Antonio, TX
Pres. Stanley Coppock	1971-72	Mexico City, Mexico

Chairman	Year	Location
Chm. C.A. King, Jr.	1970-71	El Paso, TX
Chm. Ted McGregor	1969-70	Brownsville, TX
Chm. Neal M. Randolph	1968-69	Dallas, TX
Chm. Walter McGregor	1967-68	Oklahoma City, OK
Chm. Harvey L. Chada	1966-67	San Antonio, TX
Chm. R.L. Hanna	1965-66	El Paso, TX
Chm. H.E. Meadows	1964-65	Austin, TX
Chm. Dial E. Martin	1963-64	Monterrey, Mexico
Chm. Manning A. Price	1962-63	Houston, TX
Chm. Sherman W. Clark	1961-62	Oklahoma City, OK
Chm. O.H. Graham	1960-61	San Antonio, TX
Chm. Clyde A. Bower	1959-60	El Paso, TX
Chm. Paul Gregg	1958-59	Dallas, TX
Chm. C.R. Parencia	1957-58	Houston, TX
Chm. J.C. Gaines	1956-57	San Antonio, TX
Chm. D.C. Earley	1955-56	Ft. Worth, TX
Chm. John M. Landrum	1954-55	Houston, TX
Chm. D.E. Howell	1953-54	Dallas, TX
Chm. P.J. Reno	1952-53	Galveston, TX
Chm. R.C. Bushland	1951-52	San Antonio, TX
Chm. H.G. Johnston*	1950-51	Dallas, TX

* Southwestern Branch, American Association of Economic Entomologists



Figure 1: Location of the Ambassador Hotel in Amarillo, TX.

FACILITIES FLOOR PLANS

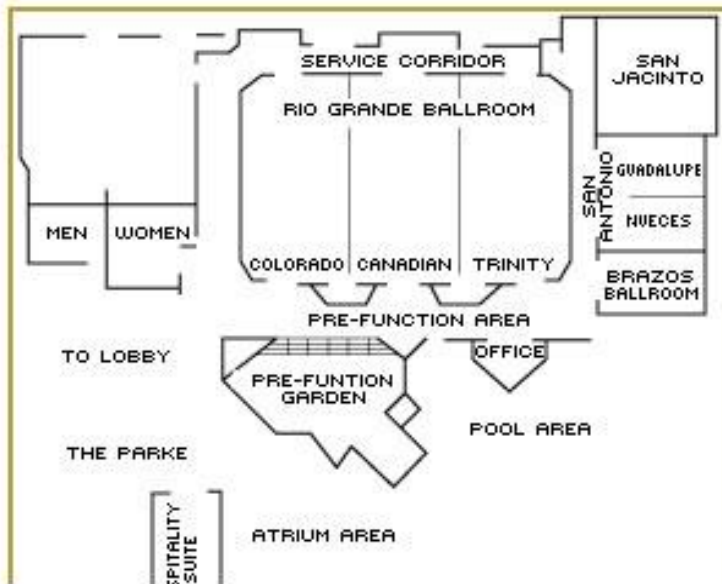


Figure 2: Meeting room locations within the Ambassador Hotel.



Figure 3: Location of Panhandle-Plains Museum in Canyon, TX.

Directions to Panhandle Plains Museum:

Drive South on I-27 from Amarillo to Canyon;
Merge onto US 87 via Exit 110 toward Canyon/Hereford;
Turn Left onto TX-217/4th Ave.;

The museum is on the North side of the street and parking is available on the South side of the street;

Driving time from the Ambassador to the museum is approximately 20 minutes or 16 miles.