52nd ANNUAL MEETING
of the SOUTHWESTERN BRANCH of the
ENTOMOLOGICAL SOCIETY OF AMERICA

and the ANNUAL MEETING of the
SOCIETY OF SOUTHWESTERN ENTOMOLOGISTS

in conjunction with

the ANNUAL MEETING of the HIGH PLAINS
ASSOCIATION OF CROP CONSULTANTS

23 – 26 FEBRUARY 2004
HOLIDAY INN PARK PLAZA
LUBBOCK, TEXAS

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.

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Monsanto
Pest Management Services, Dr. Jay Stone
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U.A.P. Southwest
Dr. Ann Weise
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PROGRAM SUMMARY

MONDAY, 23 FEBRUARY 2004

9:00 am – 3:00 pm
INSECT EXPO
Location: South Plains Fairgrounds

4:00 – 7:00 pm
SWB-ESA and HPACC Registration
Location: Second Floor West Foyer

2:00 – 3:30 pm
SWB-ESA Executive Board Meeting
Room: Mesquite

3:30 – 4:00 pm
Society of Southwestern Entomologists
Executive Committee Meeting
Room: Mesquite

4:00 – 5:00 pm
General Membership Business Meeting

5:00 – 8:00 pm
Presentation Preview and Collection Desk
Location: Second Floor Foyer

5:00 – 10:00 pm
Student Poster Set-up
Room: Mesquite

7:00 – 9:30 pm
Student Mixer
Room: Atrium Terrace

5:00 – 10:00 pm
Student Poster Set-up
Room: Mesquite

7:00 – 9:30 pm
Student Mixer
Room: Atrium Terrace
TUESDAY, 24 FEBRUARY 2004

7:00 am – 6:30 pm  SWB-ESA and HPACC Registration  
Location:  Second Floor West Foyer

7:00 – 9:00 am  Continental Breakfast  
Room:  Mesquite

8:00 am – 5:00 pm  Job Opportunity Board  
Room:  Mesquite

8:00 am – 5:00 pm  Presentation Preview and Collection Desk  
Location:  Second Floor Foyer

9:00 am – 5:00 pm  Spouse/Guest Function  
Meet at 9:00 am in Mesquite Room

8:00 – 9:15 am  Opening Session  
Room:  Mahogany

9:15 – 10:00 am  Plenary Keynote Address  
Room:  Mahogany

10:30 – 12:00 am  Sorghum Entomology Symposium  
Room:  Mahogany

Student Competitions:  
Poster Viewing  
Room:  Mesquite

1:30 – 4:30 pm  Oral Presentations  
Room:  Mahogany

5:00 – 7:00 pm  Linnaean Games  
Room:  Mahogany

7:00 pm  Banquet and Award Presentations  
Location:  Atrium Terrace

WEDNESDAY, 25 FEBRUARY 2004

7:00 am – 5:00 pm  SWB-ESA and HPACC Registration  
Room:  Second Floor West Foyer

7:00 – 9:00 am  Continental Breakfast  
Room:  Mesquite

8:00 am – 5:00 pm  Submitted Posters:  
Poster set-up  
Poster viewing  
Room:  Mesquite

8:00 am – 5:00 pm  Job Opportunity Board  
Room:  Mesquite

9:00 am – 5:00 pm  Spouse/Guest Function  
Meet in Mesquite Room

8:30 – 11:28 am  Submitted Oral Presentations:  
Session 1:  Crop Protection  
Room:  Mahogany

8:30 – 9:40 am  Session 2:  Ecology/Behavior and Urban  
Room:  Redwood

10:10 – 11:28 am  Session 3:  Biological Control, Medical/Veterinary, and Systematics  
Room:  Redwood

1:30 – 4:20 pm  Cotton Entomology Symposium:  
Meeting of the SWB-ESA and High Plains Association of Crop Consultants  
Room:  Mahogany

5:00 – 7:00 pm  Linnaean Games  
Room:  Mahogany
THURSDAY, 26 FEBRUARY 2004

8:00 – 10:00 am  SWB-ESA Final Business Meeting
                 Room: Mesquite

10:00 – 12:00 am SWB-ESA Executive Committee Meeting
                 Room: Mesquite

8:00 am – 5:30 pm Annual Meeting of the High Plains
                 Association of Crop Consultants
                 Room: Mahogany

12:00 – 1:00 pm  HPACC Luncheon
                 Location: Atrium Terrace

4:30 – 5:30 pm   HPACC Business Meeting
                 Room: Mahogany

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:

<table>
<thead>
<tr>
<th>Category</th>
<th>Full</th>
<th>One day only</th>
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</thead>
<tbody>
<tr>
<td>Active ESA member</td>
<td>$125</td>
<td>30</td>
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<td>Student ESA member</td>
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<td>Non-member</td>
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<td>Spouse/Guest</td>
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<tr>
<td>Honorary/Emeritus</td>
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</tbody>
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The full-meeting fee includes admission to all functions, including
the banquet. The one-day fee does not include the banquet.

SWB-ESA members may attend the Annual Meeting of the High Plains
Association of Crop Consultants, and vice versa, without
registering for the second meeting. However, members of the
High Plains Association of Crop Consultants must pay $25 to
attend the SWB-ESA banquet on Tuesday evening, and SWB-
ESA members must pay $15 to attend the luncheon of the High Plains
Association of Crop Consultants at noon on Thursday.

BANQUET:
The banquet will be in the hotel Atrium Terrace. Extra tickets
may be purchased for $25 at the Registration Desk.

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,
continental breakfast and breaks, spouse/guest functions, and
retirees’ luncheon.
AUDIOVISUAL:
ONLY digital projectors with computers will be provided for oral presentations. Speakers must submit their presentations as PowerPoint files on CD to the Presentation Preview and Collection Desk 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 and Collection Desk before the session and receive timers and laser pointers.

RETIREE AND SPOUSE/GUEST HOSPITALITY:
Retiree and spouse/guest information is available at the Registration Desk. Please meet in the Mesquite Room at 9:00 a.m. on Tuesday and Wednesday to select such sites to visit as the American Wind Power Center, Buddy Holly Center, Caprock Winery, Lubbock Lake Landmark State Park (archeological site and museum), National Ranching Heritage Center, Silent Wings Museum (WWII glider training), Texas Tech University, and South Plains Mall.

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

2003-2004 OFFICERS AND COMMITTEES

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Stan Carroll
John George
Allen Knutson
PROGRAM

MONDAY, 23 FEBRUARY 2004

9:00 am – 3:00 pm  INSECT EXPO
Location: South Plains Fairgrounds
Scott Russell, Chair of Insect Expo Committee

Exhibitors:
Lubbock Lake Landmark
Oklahoma State University
Science Spectrum
Tarleton State University
Texas A&M University
Texas Boll Weevil Eradication Foundation
Texas Cooperative Extension
District 2 4-H
Hale-Swisher IPM
Kidz Antz
Lubbock County 4-H
Texas Parks and Wildlife
Texas Tech University (TTU) Museum
TTU Plant and Soil Science Department
West Texas A&M University

4:00 – 7:00 pm  SWB-ESA and HPACC Registration
Location: Second Floor West Foyer

2:00 – 3:30 pm  SWB-ESA Executive Board Meeting
Room: Mesquite

Society of Southwestern Entomologists:
Executive Committee Meeting
General Membership Business Meeting
Room: Mesquite

3:30 – 4:00 pm
4:00 – 5:00 pm

5:00 – 8:00 pm  Presentation Preview and Collection Desk
Location: Second Floor Foyer
PROGRAM

MONDAY, 23 FEBRUARY 2004  (Continued)

5:00 – 10:00 pm  Student Poster Set-up  
Room: Mesquite

7:00 – 9:30 pm  Student Mixer  
Room: Atrium Terrace

PROGRAM

TUESDAY, 24 FEBRUARY 2004

7:00 am – 6:30 pm  SWB-ESA and HPACC Registration  
Location: Second Floor West Foyer

7:00 – 9:00 am  Continental Breakfast  
Room: Mesquite

8:00 am – 5:00 pm  Job Opportunity Board  
Room: Mesquite

8:00 am – 5:00 pm  Presentation Preview and Collection Desk  
Location: Second Floor Foyer

9:00 am – 5:00 pm  Spouse/Guest Function  
Meet at 9:00 am in Mesquite Room

8:00 – 9:15 am  SWB-ESA OPENING SESSION:  
Room: Mahogany

Opening:  SWB-ESA President, John Burd

Welcome:  Honorable James E. “Pete” Laney,  
Texas House of Representatives

President of ESA:  Kevin Steffey

ESA Foundation Report:  Frank Gilstrap

ESA Governing Board Report:  
Marvin Harris

SWB-ESA Presidential Address:  John Burd

Necrology Report:  Phillip Mulder
TUESDAY, 24 FEBRUARY 2004 (Continued)

9:15 – 10:00 am  PLENARY KEYNOTE ADDRESS:
BOLL WEEVIL IN THE HIGH AND
ROLLING PLAINS OF TEXAS: THE
BEGINNING OF THE END, Don Rummel,
Professor Emeritus, Texas Agricultural
Experiment Station
Room: Mahogany

10:00 – 10:30 am  BREAK

10:30 – 12:00 am  SORGHUM ENTOMOLOGY
SYMPOSIUM:
Moderator: Bonnie Pendleton,
West Texas A&M University
Room: Mahogany

SS-1  GRAIN SORGHUM OUTLOOK; Tim Lust;
10:30 – 10:45 am  National Grain Sorghum Producers

SS-2  BREEDING SORGHUM FOR RESISTANCE
TO STRESSES; Darrell Rosenow; Texas
Agricultural Experiment Station
10:45 – 11:05 am

SS-3  GENOMIC APPROACHES TO STUDY
GREENBUG-SORGHUM INTERACTION;
Keyan Zhu-Salzman; Texas A&M University
11:05 – 11:20 am

SS-4  SEED TREATMENTS FOR CONTROL OF
SORGHUM INSECTS; Gerald Wilde; Kansas
State University
11:20 – 11:40 am

11:40 – 11:50 am  IMPACT OF NEW INSECTICIDE SEED
TREATMENTS ON YELLOW SUGARCANE
APHID; Roy D. Parker; Texas Cooperative
Extension

11:50 – 12:00 am  EVALUATION OF PROTECTANTS FOR
STORED SORGHUM INSECT PESTS; Roy
D. Parker; Texas Cooperative Extension

12:00 – 1:30 pm  LUNCH (on your own)

1:30 – 4:30 pm  STUDENT ORAL PRESENTATION
COMPETITION:
Moderator: Bonnie Pendleton,
Chair of Student Research Paper and
Poster Awards Committee
Room: Mahogany

SO–1  IMPLICATIONS OF NATURAL ENEMY
STRAIN DIFFERENCES FOR BIOLOGICAL
CONTROL OF AQUATIC WEEDS (Salvinia
spp.); Jeremiah Dye¹, Kevin Heinz¹, and John
Jackman²; ¹Texas A&M University and ²Texas
Cooperative Extension
1:30 – 1:42 pm

SO–2  SUITABILITY OF PARASITIZED
GREENBUGS, Schizaphis graminum
(Rondani), AS A FOOD SOURCE FOR
PREDATORY COCCINELLIDAE; Makuena
Lebusa, Tom Royer, and Kristopher Giles;
Oklahoma State University
1:42 – 1:54 pm
SO–3   TRITROPHIC INTERACTION OF RESISTANT SORGHUM, GREENBUGS, AND LADY BEETLES; Murali Ayyanath¹, Bonnie Pendleton¹, and G. J. Michels, Jr.²; ¹West Texas A&M University and ²Texas Agricultural Experiment Station

SO–4   CHARACTERIZING THE OVERWINTERING EMERGENCE BEHAVIOR OF THE ADULT SQUASH BUG; Jesse Eiben and Jonathan Edelson; Oklahoma State University

SO–5   EFFECTS OF CONSTANT TEMPERATURES ON LIFE HISTORY CHARACTERISTICS OF Lygus elisus IN THE LABORATORY; Padma Latha Bommireddy, Megha Parajulee, and Dana Porter; Texas Agricultural Experiment Station

SO–6   PREDATION EFFICIENCY OF SELECTED COTTON ARTHROPOD PREDATORS OF BOLLWORM EGGS; Ram Shrestha¹, Megha Parajulee¹, and Carlos Blanco²; ¹Texas Agricultural Experiment Station and ²USDA-ARS-SIMRU

SO–7   PROTEINS IN THE VENOM SAC OF Solenopsis invicta QUEENS; Jilla HaghiPour and Richard Deslippe; Texas Tech University

2:55 – 3:30 pm   BREAK

SO–8   PRELIMINARY TRIAL FOR EFFECTIVENESS OF ALTERNATIVE CONTROL TREATMENTS FOR PECAN WEEVIL IN PECAN; Andrine Morrison and Phillip Mulder; Oklahoma State University

SO–9   BACTERIAL INDUCED MORTALITY IN THE RED IMPORTED FIRE ANT; David Melvin and Richard Deslippe; Texas Tech University

SO–10   INFLUENCE OF ARTIFICIAL GUIDELINES IN SOIL ON CHANNELING FORAGING SUBTERRANEAN TERMITES (ISOPTERA: RHINOTERMITIDAE); Kenneth Brown, Brad Kard, and Mike Doss; Oklahoma State University

SO–11   SURVEILLANCE FOR WEST NILE VIRUS IN LUBBOCK, TEXAS; Carrie Bradford, Marc Nascarella, Teresa Burns, and Eric Marsland; The Institute of Environmental and Human Health, Texas Tech University
SO-12  
ECTOPARASITE FLEAS (*Siphonoptera* spp.)  
OF COTTONTAILS (*Sylvilagus* spp.) AND  
PRAIRIE DOGS (*Cynomys ludovicianus*)  
INHABITING THE SOUTH PLAINS OF  
WESTERN TEXAS; **Marc Nascarella**, **Carrie Bradford**, **Teresa Burns**, **Stephen Cox**, **Eric Marsland**, **Christopher Pepper**, and **Steve Presley**; ¹The Institute of Environmental and Human Health, Texas Tech University and ²Texas Commission on Environmental Quality

10:00 am – 5:00 pm  
**STUDENT POSTER COMPETITION:**  
Students stand by posters during breaks  
Room: Mesquite

SP–1  
**BIOLOGICAL CONTROL OF Liriomyza huidobrensis IN CHRYSANTHEMUM:** **Amy Bader**, Kevin Heinz, and Bob Wharton; Texas A&M University

SP–2  
**EVALUATION OF AND FACTORS AFFECTING THE SUCCESS OF THE BIOLOGICAL CONTROL OF SALTCEDAR (*Tamarix* spp.) ON THE COLORADO RIVER IN TEXAS:** **Jeremy Hudgeons**, **Allen Knutson**, **C. Jack DeLoach**, and **Kevin Heinz**; ¹Texas A&M University and ²USDA-ARS

SP–3  
**HYBRIDIZATION BETWEEN SALTCEDAR LEAF BEETLES USED IN BIOLOGICAL CONTROL:** **Beth Petersen** and David Thompson; New Mexico State University

SP–4  
**EFFECTS OF OKRA-LEAF COTTON ON BENEFICIAL ARTHROPOD POPULATIONS IN NEW MEXICO:** **Tamara Booze** and Scott Bundy; New Mexico State University

SP–5  
**EVALUATION OF AFLATOXIN ACCUMULATION IN CONVENTIONAL AND TRANSGENIC BT CORN HYBRIDS:** **Steve Cox**, **Greta Schuster**, **Tom Isakeit**, and **Patrick Porter**; ¹West Texas A&M University and ²Texas Cooperative Extension

SP–6  
**TRANSGENIC CORN HYBRIDS FOR CONTROL OF WESTERN CORN ROOTWORM:** **Meagan Bedwell**, Greta Schuster, Tom Isakeit, and Patrick Porter; ¹West Texas A&M University and ²Texas Cooperative Extension

SP–7  
**WESTERN CORN ROOTWORM BEETLE POPULATIONS IN FIELDS PLANTED TO TRANSGENIC CORN:** **Amanda Schroeder** and Gerald Wilde; Kansas State University

SP–8  
**MORPHOMETRIC, MATING COMPATIBILITY, AND SOYBEAN RESISTANCE EVALUATIONS OF SOYBEAN STEM BORER (COLEOPTERA: CERAMBYCIDAE):** **Terutaka Niide**, **Bonnie Pendleton**, **Robert Bowling**, and **Roxanne Bowling**; ¹West Texas A&M University and ²Texas Cooperative Extension

SP–9  
**GENETIC EVALUATION OF THE ALFALFA WEEVIL IN NEW MEXICO:** **Stephanie Redman**, Scott Bundy, Stephen Hanson, and Dennis Sutton; New Mexico State University

SP–10  
**RESISTANCE OF STORED COWPEAS TO COWPEA WEEVIL (COLEOPTERA: BRUCHIDAE):** **Fernando Chitio**, **Bonnie Pendleton**, and **G. J. Michels, Jr.**; ¹West Texas A&M University and ²Texas Agricultural Experiment Station
SP–17 MOSQUITO SURVEILLANCE USED TO IDENTIFY POTENTIAL VECTORS OF THE WEST NILE VIRUS FOR THE EQUINE INDUSTRY IN THE TEXAS HIGH PLAINS; Alexis Adams¹, Greta Schuster¹, Jim Olson², and Justin Talley¹; ¹West Texas A&M University and ²Texas A&M University

SP–18 MONITORING POPULATION TRENDS OF HOUSE FLIES AND STABLE FLIES (DIPTERA: MUSCICAE) IN TEXAS HIGH PLAINS FEEDLOTS; Tara Sherrod, Greta Schuster, David Parker, and Justin Talley; West Texas A&M University

SP–19 EVALUATION OF THE EFFECTIVENESS OF EQUINE FLY CONTROL PRODUCTS AND THEIR EFFECT ON SKIN SENSITIVITY WHEN APPLIED AT VARIOUS RATES; Mariette Benage, Greta Schuster, John Pipkin, and Rebekah Bachman; West Texas A&M University

SP–20 DELINEATION AND MANAGEMENT OF AN AERIAL COLONY OF Reticulitermes sp.; Jerry Bowen and Brad Kard; Oklahoma State University

SP–21 THE IMPACT OF ROUNDUP READY CROPPING SYSTEMS ON SOIL-DWELLING MITE POPULATIONS; Michal Roberts and Gerald Wilde; Kansas State University

SP–22 COLEOPTERAN-SPECIFIC CRY3Ba1 TOXIN HAS NO ADVERSE EFFECT ON EARTHWORMS EXPOSED TO SOIL CONTAINING CORN ROOTS OR BIOMASS; Aqeel Ahmad, Gerald Wilde, and Kun Yan Zhu; Kansas State University
WEDNESDAY, 25 FEBRUARY 2004

7:00 am – 5:00 pm  SWB-ESA and HPACC Registration
Room: Second Floor West Foyer

7:00 – 9:00 am  Continental Breakfast
Room: Mesquite

8:00 am – 5:00 pm  Job Opportunity Board
Room: Mesquite

9:00 am – 5:00 pm  Spouse/Guest Function
Meet in Mesquite Room

SUBMITTED POSTER SESSION:

7:00 – 8:00 am  Set-up

8:00 am – 7:00 pm  Viewing
Room: Mesquite

BIOLOGICAL CONTROL:

P–1  INSECTS ASSOCIATED WITH SALTCEDAR, Baccharis AND WILLOW IN WEST TEXAS AND THEIR VALUE AS FOOD FOR INSECTIVOROUS BIRDS: PRELIMINARY RESULTS; Mark Muegge¹, Allen Knutson¹, Tim Robbins², and Jack DeLoach²; ¹Texas Cooperative Extension and ²USDA-ARS

P–2  FIRST RELEASE OF Diorhabda elongata ON SALTCEDAR IN NEW MEXICO; David Thompson and Kevin Gardner; New Mexico State University
P–3 A PRELIMINARY SURVEY OF THE SPIDERS OF COTTON IN NEW MEXICO; Scott Bundy, David Richman, and Paul Smith; New Mexico State University

P–4 BIOLOGICAL CONTROL OF ALFALFA WEEVIL IN NEW MEXICO; Jane Pierce, Scott Bundy, Patricia Monk, and Carol Sutherland; New Mexico State University

P–5 COLONIZATION OF WHEAT AND WHEAT-ALFALFA PLANTINGS BY APHIDS AND THEIR NATURAL ENEMIES IN OKLAHOMA; Mpho Phoofolo¹, Amber Kelley¹, Norman Elliott², and Kristopher Giles¹; ¹Oklahoma State University and ²USDA-ARS

P–6 DOES APHID-RESISTANT WHEAT AFFECT THE ABILITY OF LADY BEETLE LARVAE TO CONTROL APHIDS?; Roxanne Bowling¹, Bonnie Pendleton¹, Jerry Michaels², and Robert Bowling³; ¹West Texas A&M University, ²Texas Agricultural Experiment Station, and ³Texas Cooperative Extension

P–7 ALTERNATIVES TO ORGANOPHOSPHATES AND CARBAMATES FOR MANAGING APHIDS IN WHEAT AND SORGHUM; Roxanne Bowling¹, Bonnie Pendleton¹, Jerry Michaels², and Robert Bowling³; ¹West Texas A&M University, ²Texas Agricultural Experiment Station, and ³Texas Cooperative Extension

CROP PROTECTION:

P–8 BIOTYPIC COMPOSITION OF GREENBUGS COLLECTED FROM CULTIVATED AND NONCULTIVATED HOSTS; John Burd and David Porter; USDA-ARS

P–9 DISTINGUISHING SORGHUM GREENBUG BIOTYPES BY USING AFLP FINGERPRINTING; Keyan Zhu-Salzman¹, Haiwen Li¹, and Bonnie Pendleton²; ¹Texas A&M University and ²West Texas A&M University

P–10 CONTAMINATION OF REFUGES BY Bt GENES FROM TRANSGENIC CORN; Charles Chilcutt, Texas Agricultural Experiment Station

P–11 A PRELIMINARY REPORT ON RESPONSE BY FALL ARMYWORM AND WESTERN BEAN CUTWORM (LEPIDOPTERA: NOCTUIDAE) TO YIELDGARD® AND HERCULEX® CORN; Robert Bowling¹, Bonnie Pendleton², and Roxanne Bowling³; ¹Texas Cooperative Extension and ²West Texas A&M University
**P–12** RESPONSE BY WESTERN CORN ROOTWORM (COLEOPTERA: CHRYSOMELIDAE) AND SOUTHWESTERN CORN BORER (LEPIDOPTERA: CERAMBYCIDAE) TO YIELDGARD® ROOTWORM, YIELDGARD® PLUS, AND PONCHO 1250 SEED TREATMENT AND IMPLICATIONS OF IPM FOR MON863 ON ADOPTION OF ROOTWORM-PROTECTED CORN; Robert Bowling\textsuperscript{1}, Roxanne Bowling\textsuperscript{2}, and Bonnie Pendleton; \textsuperscript{1}Texas Cooperative Extension and \textsuperscript{2}West Texas A&M University

**P–13** EVALUATION OF NEW INSECTICIDES FOR CONTROL OF COTTON APHID IN THE COASTAL BEND AND LOWER RIO GRANDE VALLEY OF TEXAS; Roy D. Parker and John W. Norman; Texas Cooperative Extension

**P–14** COTTON FLEAHOPPER: EVALUATION OF NEW INSECTICIDES AND IMPACT ON COTTON LINT PRODUCTION; Roy D. Parker; Texas Cooperative Extension

**P–15** SCREENING COTTON FOR RESISTANCE TO COTTON FLEAHOPPER; Allen Knutson\textsuperscript{1}, Karthik Mekala\textsuperscript{2}, and C. Wayne Smith\textsuperscript{2}; \textsuperscript{1}Texas Cooperative Extension and \textsuperscript{2}Soil and Crop Sciences, Texas A&M University

**P–16** EFFECTS OF THE OKRA-LEAF TRAIT ON IMPORTANT COTTON PESTS OF NEW MEXICO; Scott Bundy, Tamara Booze, and Paul Smith; New Mexico State University

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**URBAN:**

**P–17** IMPACT OF REGROWTH COTTON ON BOLL WEEVIL SURVIVAL; Charles Suh and Dale Spurgeon; USDA-ARS

**P–18** FACTORS ASSOCIATED WITH ARTHROPOD PEST ABUNDANCE IN A 2-YEAR SURVEY OF WATERMELON PRODUCTION; Wenhua Lu and Jonathan Edelson; Oklahoma State University

**P–19** SURVEY OF CLEARWING BORERS IN EAST TEXAS NURSERIES; Scott Ludwig; Texas Cooperative Extension

**ECOLOGY/BEHAVIOR:**

**P–20** RESISTANCE TO FALL ARMYWORM (Spodoptera frugiperda) AMONG KENTUCKY BLUEGRASS (Poa pratensis) CULTIVARS; James Reinert\textsuperscript{1}, James Read\textsuperscript{1}, and Ron Myers\textsuperscript{2}; \textsuperscript{1}Texas Agricultural Experiment Station and \textsuperscript{2}USDA

**P–21** DETERMINATION OF Lygus SPECIES AND ASSOCIATED HOST PLANTS IN CENTRAL TEXAS; Jesus Esquivel; USDA-ARS-Areawide Pest Management Research Unit

**P–22** TRAP CATCHES OF Ryzopertha dominica (Coleoptera: Bostrichidae) IS INFLUENCED BY TRAP DESIGN; Peter Edde\textsuperscript{1}, Michael Toews\textsuperscript{2}, and Thomas Phillips\textsuperscript{1}; \textsuperscript{1}Oklahoma State University and \textsuperscript{2}USDA-ARS-GMPRC
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WEDNESDAY, 25 FEBRUARY 2004  (Continued)

P–23 USE OF COTMAN EXPERT SYSTEM SOFTWARE IN COTTON INSECT MANAGEMENT RESEARCH; Andy Cranmer¹, Megha Parajulee², James Leser¹, Ram Shrestha², and Padma Latha Bommireddy²; ¹Texas Cooperative Extension and ²Texas Agricultural Experiment Station

SYSTEMATICS:

P–24 THE GENUS Mecidea (HETEROPTERA: PENTATOMIDAE) IN NEW MEXICO; Scott Bundy¹ and J. E. McPherson²; ¹New Mexico State University and ²Southern Illinois University at Carbondale

P–25 A SECONDARY STRUCTURAL MODEL OF THE 28S rRNA EXPANSION SEGMENTS D2 AND D3 FROM ROOTWORMS AND RELATED LEAF BEETLES (COLEOPTERA: CHRYSOMELIDAE; GALERUCINAE); Joseph Gillespie¹, Jamie Cannone², Robin Gutell², and Anthony Cognato¹; ¹Texas A&M University and ²University of Texas

SUBMITTED ORAL PRESENTATIONS:

8:30 – 11:28 am Session 1: Crop Protection
Room: Mahogany

8:30 – 8:35 am Welcome and Opening Remarks, Tom Royer, Oklahoma State University

8:35 – 8:48 am THE EFFECTS OF SQUASH BUG FEEDING ON WATERMELON GROWTH; Jonathan Edelson; Oklahoma State University

O–1 INFLUENCE OF TEMPORAL ABUNDANCE AND SPATIAL PATTERNS OF THRIPS AND COTTON FLEAHOPPERS ON EFFECTIVENESS OF SAMPLING METHODS IN TEXAS HIGH PLAINS COTTON; Ram B. Shrestha and Megha N. Parajulee; Texas Agricultural Experiment Station
WEDNESDAY, 25 FEBRUARY 2004  (Continued)

O–3  9:01 – 9:14 am  COTTON ARTHROPOD SEASONAL ACTIVITY PATTERNS IN RELATION TO IRRIGATION MANAGEMENT; Padma Latha Bommireddy, Megha N. Parajulee, and Dana O. Porter; Texas Agricultural Experiment Station

O–4  9:14 – 9:27 am  HOST PLANT RESISTANCE TO WHITEFLIES, Bemisia tabaci (Gennadius), IN COTTON RACE STOCKS; Marvin Harris, Brandon Ripple, and C. Wayne Smith; Texas A&M University

O–5  9:27 – 9:40 am  RECENT RESEARCH ON STEM BORERS IN TEXAS RICE; Mo Way¹, Gene Reagan², and Francis Reay-Jones²; ¹Texas Agricultural Experiment Station and Texas Cooperative Extension, and ²Louisiana Agricultural Experiment Station

9:40 – 10:10 am  BREAK

O–6  10:10 – 10:23 am  POTENTIAL EFFICACY OF SPIDER MITE-RESISTANT GENES IN MAIZE TESTCROSSES; Edsel Bynum, Wenwei Xu, and Tom Archer; Texas Agricultural Experiment Station

O–7  10:23 – 10:36 am  REAL-WORLD SPATIAL DISTRIBUTION OF TRANSGENIC AND NON-TRANSGENIC CORN IN LARGE AREAS ON THE HIGH PLAINS OF TEXAS; Monti Vandiver, Gregory Cronholm, and Patrick Porter; Texas Cooperative Extension

O–8  10:36 – 10:49 am  EVALUATION OF NEW PYRETHROIDS AND INTREPID FOR CONTROL OF SOUTHWESTERN CORN BORER IN CORN; Gregory Cronholm; Texas Cooperative Extension

O–9  10:49 – 11:02 am  TANK-MIX ADJUVANTS, DROPLET SIZE, AND SPRAY DRIFT; Ivan Kirk; USDA-ARS

O–10  11:02 – 11:05 am  VACUUM AS A POSTHARVEST METHYL BROMIDE ALTERNATIVE FOR FRESH FRUITS: DISINFESTATION OF Rhagoletis pomonella IN APPLES; Thomas Phillips¹, Raj Hulasare¹, and Guy Hallman²; ¹Oklahoma State University and ²USDA-ARS

O–11  11:15 – 11:28 am  COMMERCIAL-SCALE EVALUATION OF INSECTOR: A REMOTE SENSING DEVICE FOR STORED GRAIN INSECTS; Edmond Bonjour¹, Thomas Phillips¹, Ron Larson², and Dennis Shuman³; ¹Oklahoma State University, ²OPISystems Inc., and ³USDA-ARS

SESSION 2:  ECOLOGY/BEHAVIOR AND URBAN

8:30 – 9:40 am  Welcome and Opening Remarks, Jesus Esquivel, USDA-ARS

8:30 – 8:35 am  Session Chair, Jesus Esquivel

8:35 – 9:40 am  EVALUATION OF NEW PYRETHROIDS AND INTREPID FOR CONTROL OF SOUTHWESTERN CORN BORER IN CORN; Gregory Cronholm; Texas Cooperative Extension

8:35 – 9:40 am  TANK-MIX ADJUVANTS, DROPLET SIZE, AND SPRAY DRIFT; Ivan Kirk; USDA-ARS

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WEDNESDAY, 25 FEBRUARY 2004  (Continued)

O–12  EVALUATING WEB SITE TRAFFIC FOR THE TAMU ENTOMOLOGY DEPARTMENT; John Jackman; Texas Cooperative Extension

8:35 – 8:48 am

O–13  BIOLOGY AND MANAGEMENT OF HIBISCUS BUD WEEVIL, Athonomus testaceosquamosus; Carlos Bogran; Texas Cooperative Extension

8:48 – 9:01 am

O–14  IMPACT OF RED IMPORTED FIRE ANT, Solenopsis invicta, ON DENSITY OF CORN EARWORM, Helicoverpa zea, IN CORN IN TEXAS; Manuel Campos¹ and Allen Knutson²; ¹Oklahoma State University and ²Texas Cooperative Extension

9:01 – 9:14 am

O–15  ERIOPHYID MITE PESTS IN TEXAS TURFGRASS; James Reinert; Texas A&M University

9:14 – 9:27 am

O–16  PERFORMANCE OF THE SENTRICON® SYSTEM WITH ESP® IN CENTRAL TEXAS WITH NOVIFLUMURON FOR CONTROL OF Reticulitermes flavipes (ISOPTERA: RHINOTERMITIDAE); Thomas Atkinson; Dow AgroSciences

9:27 – 9:40 am

9:40 – 10:10 am BREAK

10:10 – 11:20 am SESSION 3: BIOLOGICAL CONTROL, MEDICAL/VETERINARY, AND SYSTEMATICS Room: Redwood

Moderator: Scott Bundy, New Mexico State University

O–17  EFFECT OF NEEM-BASED INSECTICIDES ON BEET ARMYWORM (LEPIDOPTERA: NOCTUIDAE); Sasha Greenberg¹, Allen Showler¹, and Tong-Xian Liu²; ¹USDA-ARS-APMRU and ²Texas Agricultural Experiment Station

10:10 – 10:23 am

O–18  HOST RELATIONSHIPS OF THE PARASITOID Anisopteromalus calandrae (HYMENOPTERA: PTEROMALIDAE); Mukti N. Ghimire and Thomas W. Phillips; Oklahoma State University

10:23 – 10:36 am

O–19  BIOLOGICAL CONTROL OF SALTCEDAR: PROGRESS AND PLANS IN TEXAS; Allen Knutson¹, Jack DeLoach², and Mark Muegge¹; ¹Texas Cooperative Extension and ²USDA-ARS

10:36 – 10:49 am

O–20  USING THE BLACK SOLDIER FLY TO REDUCE DAIRY CALF WASTES; Jeffery Tomberlin; Texas Cooperative Extension

10:49 – 11:02 am
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<td>WHAT NOW? RECENT PEST DETECTIONS IN NEW MEXICO; Carol Sutherland; New Mexico State University</td>
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<td>11:28 am – 1:30 pm</td>
<td>LUNCH (on your own)</td>
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<td>COTTON ENTOMOLOGY SYMPOSIUM: Meeting of the SWB-ESA and High Plains Association of Crop Consultants</td>
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<td>Moderators: Megha Parajulee, Texas Agricultural Experiment Station, and James Leser, Texas Cooperative Extension</td>
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<td>SC–1</td>
<td>ECOLOGICAL DIFFERENCES IN Lygus BUGS AND MANAGEMENT CHALLENGES FOR THE TEXAS HIGH PLAINS; Megha Parajulee; Texas Agricultural Experiment Station</td>
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<td>WHAT IS THE ROLE OF AN EXTENSION IPM AGENT?; Brant Baugh; Texas Cooperative Extension</td>
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THURSDAY, 26 FEBRUARY 2004

8:00 – 10:00 am  
**SWB-ESA FINAL BUSINESS MEETING**  
Room: Mesquite

10:00 – 12:00 am  
**SWB-ESA EXECUTIVE COMMITTEE MEETING**  
Room: Mesquite

8:00 am – 5:00 pm  
**ANNUAL MEETING OF THE HIGH PLAINS ASSOCIATION OF CROP CONSULTANTS**  
Room: Mahogany

8:00 – 8:10 am  
**INTRODUCTION**

**HP–1**  
8:10 – 8:30 am  
**PLANT BUG DAMAGE AND COTTON COMPENSATION; James Leser; Texas Cooperative Extension**

**HP–2**  
8:30 – 9:00 am  
**PINK BOLLWORM THREAT AND CONTROL; Scott Russell¹ and Brad Lewis²; ¹Texas Cooperative Extension and ²New Mexico State University**

**HP–3**  
9:00 – 9:15 am  
**HELICOVERPA (BOLLWORM) RESISTANCE TO PYRETHROIDS; Patrick Porter; Texas Cooperative Extension**

9:15 – 10:00 am  
**MODERATED DISCUSSION: LYGUS BUGS, PINK BOLLWORM AND HELICOVERPA RESISTANCE TO PYRETHROIDS**

10:00 – 10:30 am  
**BREAK**

THURSDAY, 26 FEBRUARY 2004 (Continued)

10:30 – 10:50 am  
**BOLL WEEVIL ERADICATION, WHAT NOW?; Charles Allen; Texas Boll Weevil Eradication Foundation**

HP–5  
10:50 – 11:20 am  
**LIBERTY VS. ROUNDUP VS. CONVENTIONAL WEED MANAGEMENT SYSTEMS; Peter Dotray; Texas Tech University and Texas Cooperative Extension**

HP–6  
11:20 – 11:40 am  
**TECHNICAL SERVICE PROVIDER PROGRAM; James Powell; Powell Ag, Inc.**

HP–7  
11:40 – 12:00 am  
**NUTRIENT MANAGEMENT FOR HIGH YIELDING COTTON; Kevin Bronson; Texas Agricultural Experiment Station**

12:00 – 1:00 pm  
**LUNCH**  
Location: Atrium Terrace

HP–8  
1:00 – 1:20 pm  
**PLANT GROWTH REGULATORS IN PICKER COTTON; Dan Krieg; Texas Tech University**

HP–9  
1:20 – 1:40 pm  
**WATER STRESS RELATED TO COTTON VARIETIES; Randy Bowman; Texas Cooperative Extension**

HP–10  
1:40 – 2:00 pm  
**DRIP IRRIGATION RESEARCH; Jim Bordovsky; Texas Agricultural Experiment Station**

HP–11  
2:00 – 2:30 pm  
**SOURCING ZINC FOR AGRICULTURE; Peter Robinson; Ontario, Canada**

2:30 – 3:00 pm  
**BREAK**
THURSDAY, 26 FEBRUARY 2004 (Continued)

HP–12 3:00 – 3:30 pm
PRECISION AG TECHNOLOGY AND
PRACTICES; Jon D. Booker and Terry Wheeler;
Texas Agricultural Experiment Station

HP–13 3:30 – 3:50 pm
POD ROT IDENTIFICATION AND
CONTROL IN PEANUTS; Terry Wheeler;
Texas Agricultural Experiment Station

HP–14 3:50 – 4:30 pm
SAFARI HUNTS; Bill McMillan

4:30 – 5:30 pm
HPACC BUSINESS MEETING
Referee: Chris Locke
Room: Mahogany

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P  – Submitted Poster Presentation
SO – Student Oral Presentation Competition
SP – Student Poster Presentation Competition
SC – Cotton Entomology Symposium Presentation
SS – Sorghum Entomology Symposium Presentation

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*HP – High Plains Association of Crop Consultants Presentation (Thursday)

SC – Cotton Entomology Symposium Presentation (Wednesday afternoon)
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* Southwestern Branch, American Association of Economic Entomologists
The Ta-que-ne-whap Award (pronounced Ta-k-ne-wa) for Distinguished Leadership and Service honors members who for many years have contributed exceptional leadership and service to the Southwestern Branch of the Entomological Society of America. The name comes from the southern Comanche dialect and means Chief. The southern Comanche tribe dominated the heart of the Branch area before the coming of the Europeans. Comanches were fiercely independent but willing to defend their society, its interests and values regardless of personal risks. The cast bronze bust of an old Indian chief in full headdress symbolizes one who has led and cared for his society for many years, through good and bad times, giving of himself for the betterment of others. His service is etched in the wrinkles of his face, but his eyes look unblinkingly into the future. His full headdress depicts the many leadership roles, recognitions and honors he earned over the years, which validate his sage words of council and guidance. The pedestal is mesquite wood that grows throughout the area and is noted for its ability to survive harsh conditions and flourish under more favorable times. It is a tough wood that weathers well and retains its strength. Under its rough bark often is hidden an inner quality of beautiful grain and color. The base is tipu-tipuwana wood that was imported into the area. The tipu-tipuwana symbolizes one who is open to new concepts and ideas, which, although foreign to him, may have merit and value. Individuals worthy of this award are rare.

(excerpt from detailed description of award)