

# Mississippi Entomological Association (MEA)



**Newsletter**

**October, 2011**

**Happy October!** This newsletter is for and about YOU, the members. If you have an item to contribute, please contact me, Meg Allen [meg.allen@ars.usda.gov](mailto:meg.allen@ars.usda.gov). Newsletter articles should be relatively short (longer articles might be better suited to MidSouth Entomologist), concern current topics, and of course be relevant to entomology. Ideas for articles may include member achievements, student activities, cartoons or photos, short essays or poetry, updates from a location or project; be creative! Read about the latest from Dow AgroSciences and a 4-H Art Exhibition this month; and take a look at the preliminary agenda for the upcoming Annual Meeting!

## **Annual Meeting & 2011 MEA leadership:**

The 58th Annual Conference of the Mississippi Entomology Association will be held at the Bost Extension Center on the Mississippi State University Campus on October 24 and 25, 2011. We hope to see you there. A DRAFT of the Entomology portion of The Program (subject to minor changes...) is included on pages 6-8.

## **President's Message (from Clint Allen):**

The temperature is finally starting to drop, football season has started and there is a feeling of Fall in the air. I hope everyone involved in field research has had a productive year as harvest is in full swing. The MEA meeting is right around the corner and I hope that you are making plans to attend. We are in the stages of preparing a program with concurrent sessions with the Mississippi Weed Science Society and Mississippi Association of Plant Pathologists and Nematologists and hope to have that posted shortly. This is a great meeting to discuss entomological research and to keep track of old friends. Hope to see you October 24th and 25th.

The MEA committee chairs for 2011, approved by the executive committee include:

President – Clint Allen  
Vice-President – John Riggins  
Executive Vice-President – Scott Willard  
Secretary – Jeff Gore  
Treasurer – Fred Musser  
Directors – Angus Catchot, Melissa Siebert, Ryan Jackson, and Randy Luttrell

### Committee Chairs:

Local Arrangements – Kathy Knighten  
Nominations – Melissa Siebert  
Public Relations – Meg Allen  
Scholarship – Blake Layton  
Hospitality – Rusty Mitchell  
Membership and Rules – Chris Petersen  
Research and Education – Chris Daves  
Student Involvement – Will Scott  
Historical – Mike Williams/Randy Luttrell  
Legislative – John Gordon Campbell  
Publications – Don Cook



### News Article

#### Get to know a Mississippi Entomological Research Center:

**Dow AgroSciences Southern U.S. Research Center, Greenville, MS**

**By: Melissa Willrich Siebert, Field Station Leader**

**[mwillrichsiebert@dow.com](mailto:mwillrichsiebert@dow.com)**

The Dow Chemical Company has been actively involved in agriculture research and the development of agricultural products in the Mississippi Delta since 1953. Early on, land was rented on the Billups Plantation at Indianola and later, near the Indian Mounds at Winterville. Finally in 1961, 80 acres of land was purchased at Wayside (near Greenville) which is the present site of the Dow AgroSciences Southern U.S. Research Center. Dow AgroSciences, LLC, based in Indianapolis, IN is a wholly owned subsidiary of The Dow Chemical Company. Dow AgroSciences' research facility is the longest tenured privately owned research facility in the Mississippi Delta, which has a rich history of private industry presence.

The Southern U.S. Research Center (SRC) is one of 11 global Dow AgroSciences Research Centers located throughout the world. The mission of SRC is to provide evaluations of chemical and trait candidates coming from the Discovery laboratories under actual field use conditions. SRC serves a critical role in the characterization of new technologies, to develop and expand existing products, and gain and maintain registrations for active ingredients. Dow AgroSciences field research facilities are strategically located to be representative of major crop production areas and to provide diverse sets of soils, pests, and climatic conditions under which to test new and existing pest control technologies. The characteristics of global research facilities varies and thus insures that the products and formulations developed by Dow AgroSciences laboratories are evaluated under actual field conditions used by a grower and then once proven, a product is advanced to more extensive field development trials.

Today, the SRC is 120 acres in size and has diverse soil types (Loams: Silt, Sandy, Clay and Clays). The site also has full irrigation capabilities including overhead lateral, subsurface drip, micro sprinklers, furrow irrigation, and paddy flood. SRC cultivates all major row crops in addition to important leafy and fruiting vegetables. The diversity of crops grown at SRC is indicative of the diverse global product concepts that Dow AgroSciences is pursuing, which may not always be tied back to the local geography. As an example, while diamondback moth, *Plutella xylostella*, or green peach aphid, *Myzus persicae*, are not economically important insects pests to the Mississippi Delta region, they are key pests on a global level and are present in our local geography, thus providing an opportunity to screen early product leads. SRC is also used to showcase the performance of Dow AgroSciences product concepts and markets standards to growers and other customers.

SRC has expertise in the evaluation of insect, weed, and disease management technologies (chemical and traits). Products that SRC has been instrumental in developing include chlorpyrifos (Lorsban®), spinosad (Tracer®), spinetoram (Radiant®), Cry1Ac+Cry1F cotton (WideStrike® Insect Protection), Cry1F corn (Herculex®), SmartStax® corn, Sentricon® termite baiting system, triclopyr (Grandstand®), cyhalofop (Clincher®), penoxsulam (Grasp®), and pyroxsulam (PowerFlex®). Key

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projects that SRC is currently involved in include sulfoxaflor insecticide and the Enlist™ Weed Control System, in addition to numerous early stage projects.

The SRC is staffed with a Field Station Leader and Entomologist (Melissa Willrich Siebert), weed scientist (Hunter Perry), two technicians (Charles Simpson and Phil Sluder), and an Office Professional/Safety Specialist (Carron Womble). In addition, the SRC employs as many as eight summer interns annually.



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Lorsban is a federally Restricted Use Pesticide.

Always read and follow label directions.

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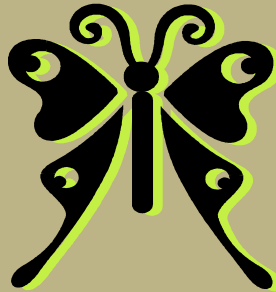


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**News Article**

**Entomology Art Exhibition**



**Announcing the  
4-H Art Exhibition and Photo Salon  
October 24 – November 30, 2011  
All Entries must be received by October 20, 2011**

## **Rules for Exhibition Photos:**

All photo exhibit entries must be submitted by October 20, 2011 to 4-H Entomology Art Exhibition, Clay Lyle Building, Box 9775, Miss State, MS 39762. Photos may be digital or traditional.

## **Combined Rules (digital and traditional)**

The 4-H member must photograph all entries submitted. The 4-H member does not have to be enrolled in the photography or the entomology project areas.

- No more than 5 entries per individual should be submitted. All entries must have an entomological theme.

### **Traditional 35 mm Camera –**

- For traditional film camera: Mount the regular size print (3" x 5" or 4" x 6") on **8 x 10 inch** white poster board
- Do not mat or cover the front of the poster board or picture in any way.
- On the back of the poster board include title of print, photographer's name, address (including city, state and zip code), **4-H age, Under the address please print your county name.**

### **Digital Camera –**

- You must submit an 8" x 10" (photographic) prints in a clear 8" x 10" or 8.5" x 11" page protector. In order to show the most detail in your final print. **Take your final edited image file to a film processor (such as Wal-Mart or Walgreens) to be printed, rather than printing the photo with an ink-jet printer.**
- On the back of the 8" x 10" prints, using a sticker or peel-off label, print or type: the title of print, photographer's name, address (including city, state and zip code), 4-H age. **Please print the county name under the address.** Do not write this information directly on the back of the prints as it will ruin the 8" x 10" prints.

**Photographs will be returned to exhibitors when the public exhibition closes in December.**

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### Rules for Art submissions:

All art should have an entomological theme but may take any form desired by artist.

- Paintings and drawings should be mounted on mat board for display.
- Each piece of art should be identified by a `title' and the artist's name, address, including county, and age. Sculptures or other objects should have a tag attached with the above information.
- Submissions should be designed for display.

**Art will be returned to exhibitors when the public exhibition closes in December.**

### Rules for Prose and Poetry Submissions:

All Prose or Poetry should have an entomological theme but may take any form desired by artist.

- Prose or poetry should be typewritten, double spaced, in at least a size 12 font.
- The submission should be included in a clear plastic folder and should have the title and author's name on the front.
- All submissions should have the author's name , address, and age.

All submissions will be exhibited at the Mississippi Entomological Association meeting October 24 -25, 2011 and then in the foyer of Clay Lyle Entomology for the month of November.

Selected submissions will be reprinted in the *Gloworm* newsletter and possibly other locations. The submissions will not be returned.

Adults are invited to submit entries to the 4-H Entomological Art Exhibition and Salon. Please indicate `Adult' in the age slot!

**Please send or bring submissions to:**

**4-H Art Exhibition and Photo Salon  
Clay Lyle Entomology Building  
Box 9775  
Mississippi State, MS 39762**

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## 58<sup>th</sup> ANNUAL CONFERENCE OF THE MISSISSIPPI ENTOMOLOGICAL ASSOCIATION

**Bost Extension Center**

October 24-25 2011

### Monday, October 24<sup>th</sup>

11:00 am – Executive Committee Meeting – Clay Lyle Conference Room

### Monday, October 24<sup>th</sup>

1:00-5:00 – Registration.

1:00 -4:00 – **Row Crop Roundtable**

1:00 -4:00 – **Medical/Veterinary Entomology Roundtable**

6:30 – **Industry Sponsored Mixer and Steak Supper**

### Tuesday, October 25<sup>th</sup>

7:30 Registration Opens

8:20 Call to Order – Clint Allen Presiding

8:30 **M.S. Student Competition (Bost Theater)**

8:30 Some Factors Affecting Seed Quality in Mississippi Soybean Production. **J. Jones**, F. Musser, A. Catchot, M. Tomaso-Peterson, T. Allen, J. Gore

8:42 Effects of Simulated Threecornered Alfalfa Hopper Injury to Soybean Yield. **E. Howard**, S. Akin, D. Cook, J. Gore, and S. Stewart

8:54 Impact of Time to Flood on the Efficacy of Insecticidal Seed Treatments in Rice. **A. Adams**, J. Gore, D. Cook, F. Musser, and G. Awuni

9:06 Integrated Pest Management Strategies for Tarnished Plant Bugs in Cotton in the Mississippi Delta. **B. Adams**, J. Gore, A. Catchot, D. Cook, D. Dodds, and F. Musser

9:18 Residual Toxicity of Selected Insecticides on Stink Bugs. **W. McPherson**, F. Musser, A. Catchot, D. Cook, and C. Allen

9:30 Two-Spotted Spider Dispersal in the Presence of Seed Treatments. **W. Scott**, A. Catchot, J. Gore, F. Musser, D. Cook

9:42 Ecology and Disease Potential of the Black-Legged Deer Tick, *Ixodes scapularis*, in Mississippi. **L. Goltz**, A. Varela-Stokes, and J. Goddard

9:54 **Break**

10:20 **Ph.D. Student Competition (Bost Theater)**

10:20 *Amblyomma maculatum* Host Bloodmeal Detection by Reverse Line-Blot. **G. Moraru**, J. Goddard, A. Varela-Stokes

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- 10:32 Contribution of Corn Earworm, *Helicoverpa zea* (Boddie), to the Overall Population Reared on VT3 PRO Field Corn. **B. Von Kanel**, A. Catchot, F. Musser, J. Gore, R. Jackson, D. Cook, M. Caprio
- 10:44 Impact of Defoliation on Group IV Soybeans in MS. **L. Owen**, A. Catchot, F. Musser, J. Gore, and D. Cook
- 10:56 Localization of Novel Rickettsiae in Gulf Coast Ticks, Vector of Human Rickettsiosis. **F. Girao**, J. Goddard, C. Paddock, A. Varela-Stokes
- 11:08 Impact of Rice Stink Bug, *Oebalus pugnax* (F.), (Hemiptera: Pentatomidae) on Grain Quality and Yield in Rice. **G. Awuni**, J. Gore, D. Cook, F. Musser, and A. Adams

### Paper Session (Bost Theater)

#### 11:20 General Paper Session

11:20 History of Entomology in Mississippi. **R. Brown**

11:32 Recent Activities and Advances at the National Biological Control Laboratory. **W. Jones** and E. King

11:44 Exploring the Health Effects of Bed Bugs. **J. Goddard**, J. Embers, A. Varela-Stokes, and K. Edwards

#### 12:00 Awards Luncheon

1:30 Crazy Ants, *Nylanderia pubens*, Invade Mississippi. **B. Layton** and J. MacGown

1:42 The Penetration of Five Termiticides into Gravel and Construction Fill Soil was Examined in Packed Columns in the Laboratory. **C. Petersen**

1:54 Utilization of pollen to examine insect foraging and movement. **C. Allen** and G. Jones

2:06 Comparative Benefit of Bt Technologies in the MS Delta. **R. Jackson**, C. Allen, and R. Luttrell

2:18 Acephate Resistance and Potential Mechanisms in the Tarnished Plant Bug. **Y. Zhu**

#### 2:30 MEA Business Meeting

### Poster Session

#### M.S. Competition

- 1 Native Siricid (Hymenoptera: Siricidae) Abundance in Various Forest Stand Types. **K. Chase**, K. Gandhi, and John J. Riggins
- 2 Evaluating the Impact of Corn Earworm on Yield of Field Corn. **J. Bibb**, A. Catchot, D. Cook, F. Musser, S. Stewart, R. Leonard, and D. Buntin
- 3 Techniques for rearing Two-Spotted Spider Mites. **W. Scott**, A. Catchot, J. Gore
- 4 Relationship Between Stink Bug Damage and *Phomopsis* Seed Decay in Mississippi Soybean Production. **J. Jones**, F. Musser, A. Catchot, M. Tomaso-Peterson, T. Allen, and J. Gore
- 5 Stink Bug Early Season Host Survey. **W. McPherson**, F. Musser, A. Catchot, D. Cook, and C. Allen



### Ph.D. Competition

- 6 To Treat or Not to Treat: Economic Injury Levels and Thresholds for Defoliation in Mississippi Soybeans. **L. Owen**, A. Catchot, F. Musser, J. Gore, and D. Cook
- 7 Population Dynamics of Rice Stink Bug (Hemiptera: Pentatomidae): The Role of Host Plants. **G. Awuni**, J. Gore, F. Musser, D. Cook, T. Allen, and W. Jones

### General Poster Session

- 8 Insecticide Application Method and Chemistry Evaluation for Sweetpotato Production in the Mississippi Delta. **L. Adams** and R. Luttrell
- 9 Spread of the Invasive Hairy Crazy Ant, *Nylanderia pubens* (Hymenoptera: Formicidae) in the United States . **J. MacGown** and B. Layton
- 10 Effect of *Beauveia bassiana* and the Insect Growth Regulator Diamond on Fecundity and Growth Inhibition of the Tarnished Plant Bug, *Lygus lineolaris*. **M. Portilla**, G. Snodgrass, and R. Luttrell
- 11 Genetic Characterization for Intraspecific Hybridization of an Exotic Parasitoid prior to its Introduction for Classical Biological Control (in France). M. Bon, X. Fauvergue, J. Malausa, C. Benvenuto, **W. Jones**, S. Warot, M. Thaon, M. Jeanneau, A. Blanchet, and N. Ris
- 12 A Summary of 13 Years of Monitoring for Insecticide Resistance in the Tarnished Plant Bug in the Mississippi Delta. **G. Snodgrass**
- 13 The Ant (Hymenoptera: Formicidae) Fauna of Cedar Glades and Barrens of the Central Basin of Tennessee. **J. Hill**