2007 National Soybean Rust Symposium

PROGRAM

December 12 – 14, 2007 • Louisville, KY

Presented by

United Soybean Board
USDA CSREES
National Plant Diagnostic Network
USDA ARS
Iowa Soybean Association
North Central Soybean Research Program
Bayer CropScience
Cheminova, Inc.
Monsanto Company
North Central Region IPM Center
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Valent USA Corporation
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American Soybean Association

In cooperation with
Welcome to the 2007 National Soybean Rust Symposium
We are pleased you are participating in this unique, highly focused symposium to collectively hear the latest results, assess progress, and share perspectives on soybean rust. This year’s symposium will examine the disease from virtually every angle. In addition to opportunities to network and explore new areas of investigation, there will be presentations, posters and discussions. We encourage your active involvement. Special thanks to all of our presenters, sponsors and technical committee members who helped make this program possible.
Raymond Schneider, Louisiana State University, 2007 National Soybean Rust Symposium Coordinator

2007 National Soybean Rust Symposium Program

Wednesday, December 12, 2007
5:00 PM Registration Opens / Marriott Ballroom Lobby
6:00 PM Poster Set-up
8:00 PM Poster Viewing Reception / Marriott Ballroom V / sponsored by
10:00 PM Poster Viewing Closes

Thursday, December 13, 2007
7:00 AM Registration Opens
7:00 AM Continental Breakfast / Marriott Ballroom V / sponsored by
8:00 AM Welcome, Introductions, Purpose and History / Marriott Ballroom VI
8:05 AM Keynote Address / Marriott Ballroom VI
Merle Pierson, Deputy Undersecretary for Research, Education and Economics, USDA
Eldon Gould, Administrator, USDA Risk Management Agency
8:25 AM General Session: Soybean Rust in 2007 / Marriott Ballroom VI
Moderator/Recorder: Raymond Schneider / John Rupe
- Overview of Soybean Rust in North America
  Carl Bradley, University of Illinois
- Overview of Soybean Rust in Argentina
  Dardo Escobar, Secretary of Agriculture, Livestock, Fish & Food
- Overview of Soybean Rust and Cropping Systems in Mexico
  Barrera Farias, Centro Nacional de Referencia Fitosanitaria
- Open Discussion/Q&A
10:00 AM Break / Marriott Ballroom Lobby / sponsored by
10:20 AM General Session: Disease Control / Marriott Ballroom VI
Moderator/Recorder: James Marois / Anne Dorrance
- Fungicides and Their Time of Application for Control of Soybean Rust
  Tristan Mueller, University of Florida
- Fungicide Application Technology
  Richard Derksen, USDA-ARS
- Fundamental Aspects of Development of Resistance to Fungicides
  Eric Tedford, Syngenta Crop Protection
- Management of Fungicide Resistance: A Case Study
  Gary Secor, North Dakota State University
- Open Discussion/Q&A
12:00 PM Lunch / Marriott Ballroom V / Poster Viewing, sponsored by
1:15 PM General Session: Advances in Biology of the Pathogen / Marriott Ballroom VI
Moderator/Recorder: Douglas Luster / Carrie Harmon
- Adhesion and Rainfall Washoff of Urediniospores on Soybean Leaves
  N. S. Dufault and Maria C. Velez-Climent, The Pennsylvania State University
- Spread of Soybean Rust Within a Field – What Happens After the Spores Arrive
  Dario Narvaez, University of Florida
- Winter Survival of Phakopsora pachyrhizi on Kudzu in Florida
  Wayne Jurick, University of Florida
- Latest Developments on Alternative Hosts
  Morris Bonde, Glen Hartman and Doug Luster, USDA-ARS
- Open Discussion/Q&A
2:55 PM  Break / Marriott Ballroom Lobby / sponsored by MONSANTO

3:15 PM  **General Session: Epidemiology, Physiology and Yield Loss Assessment** / Marriott Ballroom VI  
**Moderator/Recorder:** John Rupe / Scott Isard  
- **Crop Physiology: Yield, Maturity Groups, and Growth Stages**  
  Palle Pedersen, Iowa State University  
- **Development of a Yield Loss Prediction Model for Asian Soybean Rust**  
  Saratha Kumudini, University of Kentucky  
- **Physiology of Yield Loss: Examples with Other Rusts**  
  Greg Shaner, Purdue University  
- **Movement of Rust as Determined by Remote Sensing**  
  Forrest Nutter, Iowa State University  
- **Epidemiological Models of Spread of Soybean Rust in the Southeast**  
  Harald Scherm, University of Georgia  
- **Open Discussion/Q&A**

5:45 PM  **Reception, Sponsor Table Top Displays and Poster Viewing** / Marriott Ballroom V  
Authors present at posters (6:00-7:00PM)

7:30 PM  **Concurrent Evening Session A**  
**Policies and Potpourri** / Marriott Ballroom VII  
**Moderator/Recorder:** Keith Smith / Carl Bradley  
- **Current Perspectives from USDA-CSREES**  
  Marty Draper, USDA-CSREES  
- **The IPM-PIPE Program**  
  Don Hershman, University of Kentucky  
- **Asian Soybean Rust in the USA: Ag Industry Perspective**  
  James Bloomberg, Bayer CropScience  
- **Evaluation of Sentinel Plot Protocols and Plans for 2008**  
  Julie Golod, The Pennsylvania State University  
- **Open Discussion/Q&A**

7:30 PM  **Concurrent Evening Session B**  
**Report from the Front Line: Experiences from Veterans** / Marriott Ballroom IX  
**Moderator/Recorder:** Mark Halsey / Bob Kemerait  
- **Extension Specialist**  
  Tom Isakeit, Texas A&M University and John Damicone, Oklahoma State University  
- **Growers**  
  Ken Dalenberg, Illinois and Billy Wayne Sellers, Georgia  
- **Crop Consultants**  
  Kevin Black, Growmark, Inc. and Blaine Viator, Calvin Viator and Associates, LLC  
- **Open Discussion/Q&A**

Friday, December 14, 2007

6:45 AM  Registration Opens

6:45 AM  Continental Breakfast / Marriott Ballroom V / sponsored by CHEMINOVA

7:45 AM  **General Session: Sentinel Plots, Spore Trapping, and Disease Forecasting** / Marriott Ballroom VI  
**Moderator/Recorder:** Gary Bergstrom / Clayton Hollier  
- **Overviews and Value of Sentinel Plots for 2007**  
  Loren Giesler, University of Nebraska  
- **Spore Trapping Technology and Results from 2007**  
  Les Szabo, USDA-ARS  
- **Disease Forecasting and the SBR Ensemble Forecasting Program in 2007**  
  Scott Isard, The Pennsylvania State University  
  Zaitao Pan, St. Louis University  
  Joseph Russo, ZedX, Inc.  
- **Open Discussion/Q&A**

9:30 AM  Break / Marriott Ballroom Lobby
9:45 AM  **General Session: Disease Resistance and the Infection Process** / Marriott Ballroom VI  **Moderator/Recorder:** Anne Dorrance / Glen Hartman
- **Evaluation of Soybean Germplasm Collections for Disease Reaction and Prospects for Development of Disease Resistant Varieties**
  David Walker, USDA-ARS
- **Development of Disease Resistant Varieties in Brazil**
  Austeclinio L. de Farias Neto, Embrapa Cerrados
- **Resistance to Soybean Rust in Dry Beans**
  Talo Pastor-Corrales, USDA-ARS
- **Mapping Soybean Rust Single Gene Resistance**
  David Hyten, USDA-ARS
- **Rpp-Mediated Gene Expression in Resistant and Susceptible Rust Interactions**
  Kathy Schneider, USDA-ARS
  Martijn van de Mortel, Iowa State University
- **Proteomic Analysis of Resistant and Susceptible Soybean Lines**
  Zhiyuan Chen, Louisiana State University
- **Proteomic Analysis of Soybean Rust Urediniospores**
  Doug Luster, USDA-ARS
- **Open Discussion/Q&A**

12:30 PM  **Closing Comments** / Symposium Adjourns

**Posters and Special Demonstrations**
Posters will be on display throughout the meeting in the Marriott Ballroom V. See the enclosed Poster Abstract booklet for details. Additionally, the following three special demonstrations will be available in the same location:
- Soybean Rust Spore Deposition Animation: Comparison of NADP Collections, IAMS Output, and Disease Observations / Annalisa Ariatti, The Pennsylvania State University
- Demonstration of Diagnostic Techniques / Carrie Harmon, University of Florida
- New Spore Trap Technology / Raymond Schneider, Louisiana State University

**Special Thanks to the Symposium Sponsors**

**Special Thanks to the Program Organizers**
Special thanks to the Technical Committee Members and their organizations for their collaboration and support on this important event. Raymond Schneider, Louisiana State University (Coordinator), Gary Bergstrom, Cornell University; Carl Bradley, University of Illinois; Anne Dorrance, The Ohio State University; Marty Draper, USDA-CSREES; Reid Frederick, USDA-ARS; Mark Halsey, USB; Carrie Harmon, University of Florida; Glen Hartman, USDA-ARS; Don Hershman, University of Kentucky; Clayton Hollier, Louisiana State University; Scott Isard, The Pennsylvania State University; Bob Kemerait, University of Georgia; Jan Leach, Colorado State University; Jim Marois, University of Florida; John Rupe, University of Arkansas; David Wright, NCSRP/Iowa Soybean Association; and David Walker, USDA-ARS.

**Presented by**

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