Soybean Rust

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STRATEGIC PLAN TO
MINIMIZE THE IMPACT OF THE
INTRODUCTION AND
ESTABLISHMENT OF
SOYBEAN RUST ON SOYBEAN
PRODUCTION IN THE UNITED
STATES

ASIAN SOYBEAN RUST
Phakopsora pachyrhizi
Strategic Plan Elements:

- Protection
- Detection
- Response
- Recovery
Protection

Status of Scientific Evidence on Risks Associated with the Introduction into the Continental United States of *Phakopsora pachyrhizi* With Imported Soybean Grain, Seed and Meal
Real Time PCR Training
Members of the National Plant Diagnostic Network (NPDN) met recently in Beltsville, Maryland to participate in advanced diagnostic training. During the first week of February, eleven members of the NPDN participated in real time PCR, molecular analysis training to detect two select agent pathogens that cause the diseases known as Soybean Rust and Southern Wilt of Geranium or Brown Rot of potato.

The training was hosted by Dr. Laurene Levy and her colleagues of the USDA, PPQ, CPHST, National Plant Germplasm and Biotechnology Laboratory.

Real time PCR protocols were demonstrated and performed by representatives from the five regions that comprise the national network. Participants included Karen L. Snover-Clift of Cornell University, representing the Northeast Plant Diagnostic Network (NEPDN); Carrie Harmon of the University of Florida, Mary Ann Hansen of Virginia Tech, and Clarissa Balbalian of MS State University.
APHIS purchased 25,000 copies—distributed to extension specialists and integrated pest managers at 78 locations to give to soybean growers and crop consultants.
Detection

SBR ID card - Anne Dorrance, Ohio State Univ. (APHIS purchased 500,000)
Initial detection in Louisiana

Nov. 6, 2004
Production farm operated by LSU, while looking at Cercospora leaf blight

Federal, State, University coordinated ICS
Soybean Rust

“2005 Coordinated Framework”

1. SBR Surveillance and Monitoring Network

2. Decision criteria for fungicide application

3. Web-based decision support system

4. Predictive models

5. Outreach
Recovery

United States Department of Agriculture

Soybean Rust Information Site

Sign Up For Alerts
Oct 25, 2005

Observation

State Update Map

Chronology of Positive Detections
SBR Forecast (10/24/05) Wilma moves across Florida with some soybean rust transport and depositions. Click For Details...

Additional Links
Aerobiology Risk Analysis
American Phytopath.
Society Home Page
Animated Hurricane Maps
Soybean rust Identification card

Printable Map
National Map Commentary (updated: 10/24/05)
Alabama has reported 10 new counties as positive: Chamber, Randolph, Clay, Marshall, Cherokee, De Kalb, Etowah, Russell, Bullock, and Barbour counties (see state commentary for more details). There are also new county finds in Duval county, Florida and Evans county, Georgia. Pickens County in South Carolina is the farthest north location and Terry county SC is the farthest east location where soybean rust has been found in 2005. Pearl River County in Mississippi is the farthest west that rust has been found in 2005. Alabama now has 26 counties reported positive with rust, Florida has 23, Georgia has 30, Mississippi has two, and South Carolina has five. There were 35 counties that reported soybean rust in the month of August with ten reports for September and twenty-five so far in October [one of the reported counties was confirmed in September]. As the growing season has finished or nearly finished in most regions, the threat of rust has diminished. It may be expected that rust will continue to be found in more counties within states already reporting rust and in adjacent states without causing any economic damage.
USDA is Providing Tools to Help Growers Manage SBR in 2006

A *Cooperative Partnership Agreement* was signed September, 2005:

- Risk Management Agency (provided funds)
- CSREES
- Southern Region Integrated Pest Management Center at NCSU
APHIS – An Emergency Response Agency

National Framework for Crop Biosecurity

1. Prevention
2. Preparedness
3. Response
4. Recovery

SBR Strategic Plan

Protection
Detection
Response
Recovery