



NOAA

- **Welcome**
- Fourth National Soybean Rust Symposium
- Development of one of the best integrated multi-institutional & international efforts ever
- USB, NCSRP and state commodity boards
- Training and Education –
- Research – collaborations, Universities and Agencies

First: It's Manageable



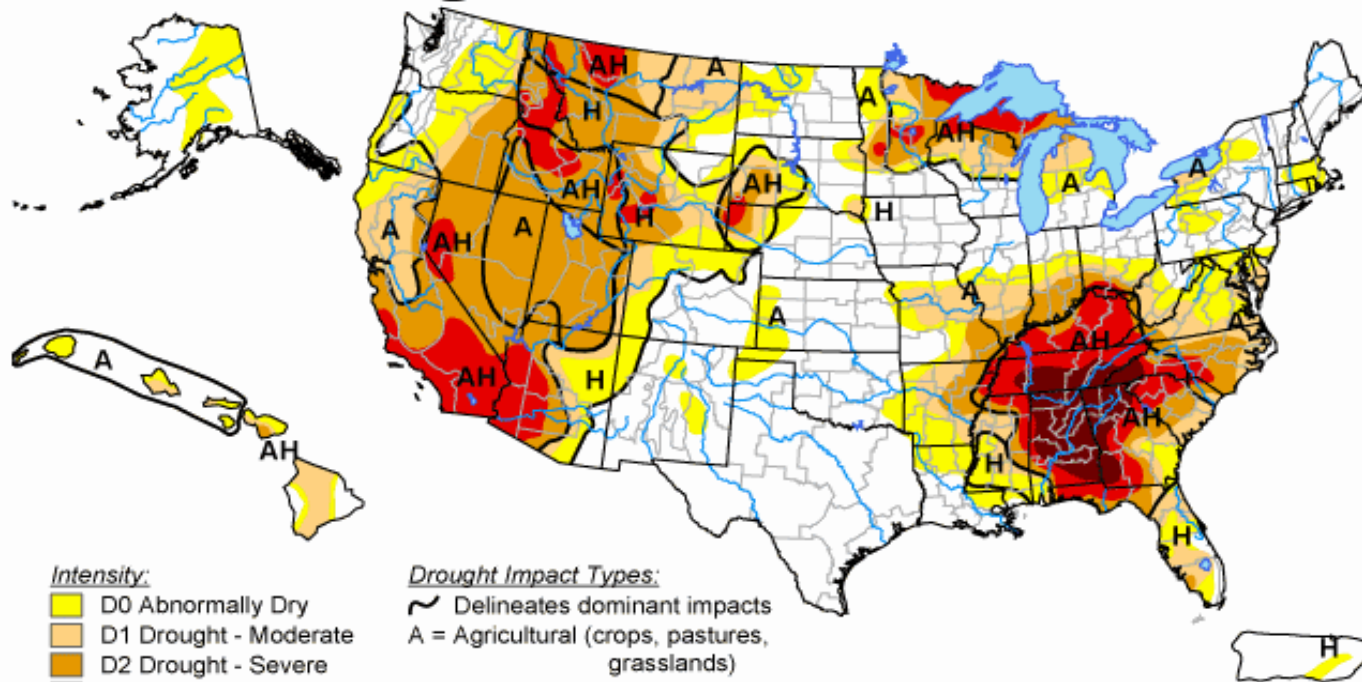
- Fungicides are effective
- Key is well timed application
- Numerous resources to track the movement of this pathogen

Fungicide trials from Univ. Florida, Quincy
Courtesy, Jim Marois

Why slow build-up during 2007

U.S. Drought Monitor

August 28, 2007
Valid 8 a.m. EDT



Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Drought Impact Types:

- ~ Delineates dominant impacts
- A = Agricultural (crops, pastures, grasslands)
- H = Hydrological (water)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, August 30, 2007
Author: Thomas Heddinghaus, CPC/NOAA

All Rust Epidemics Were Not Equal....



Bob Kemmerait, Univ. of Georgia - 2005

170 Publications since November 2004

- Choi, J.J. et al., 2008. Expression patterns in soybean resistant to *Phakopsora pachyrhizi* reveal the importance of peroxidases and lipoxygenases. *Functional and integrative genomics* 8:341-359
- Anderson et al., 2008. Development of simple sequence repeat markers for the soybean rust fungus, *Phakoposora pachyrhizi*. *Molecular Ecology Resources* 8:1310-1312.
- Scherm et al. 2009, *Crop Protection* 28:774-782 “... whereas presence of any disease at the first application had a negative effect on RⁿY (syn. Yield), even when disease pressure was low” – meta analysis of 71 uniform fungicide trials in Brazil



- 63 peer reviewed articles
 - *Phytopathology, Plant Disease, MPMI*
- <http://apsjournals.apsnet.org/>
- Open access – 2 years or older

Challenges

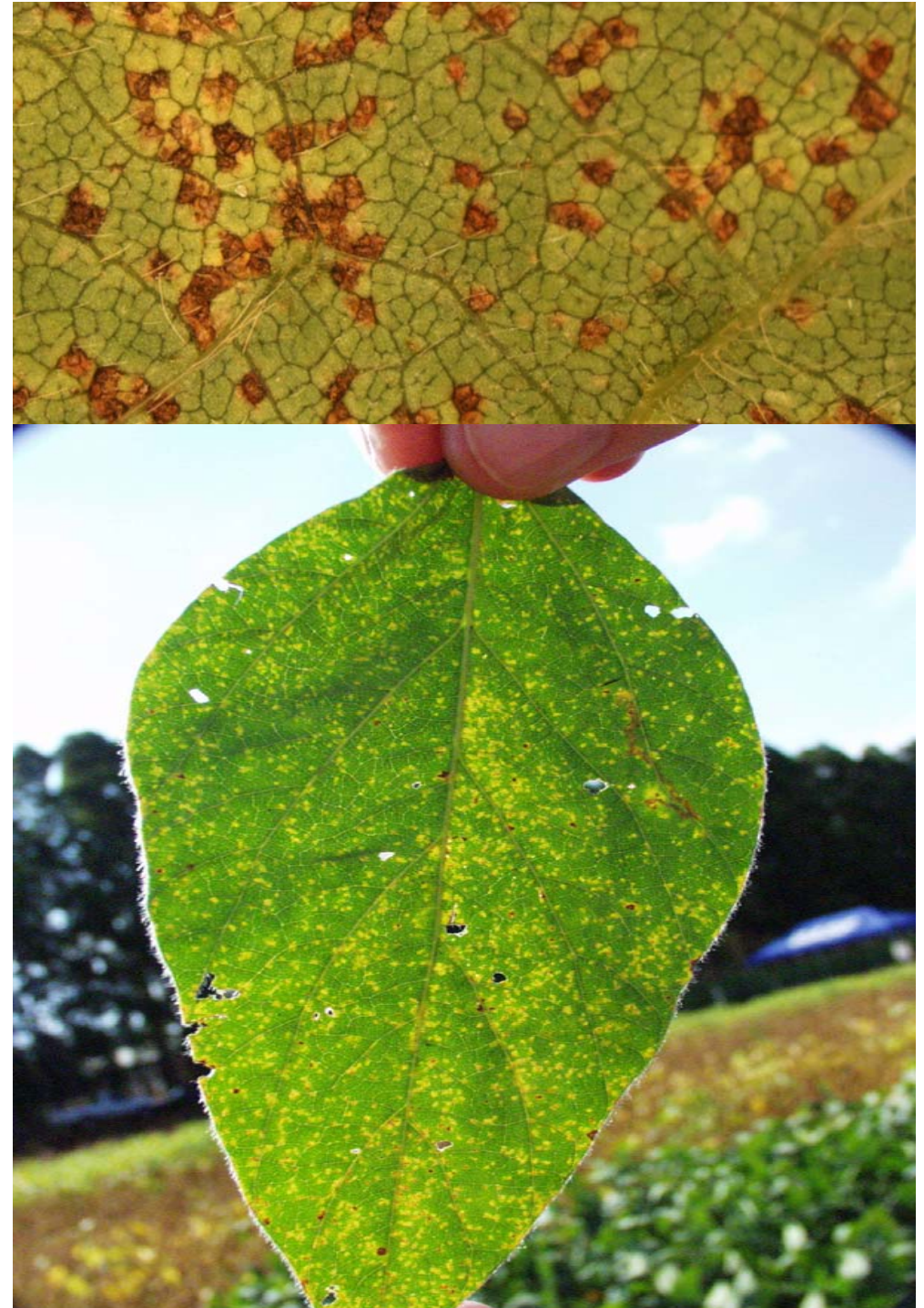
Posted 21 September 2009. Plant Health Progress.

Mississippi Has First Loss to Soybean Rust

Source: Mississippi State University Press Release.

www.cals.msstate.edu

Mississippi State, Mississippi (September 11, 2009)--A Noxubee County soybean field severely infected with soybean rust will represent the state's first yield losses to the disease that has been present in the state since November 2004.



More challenges to come...

- RIFs
- Retirements
- Burn-out
- Graduations





**THANK
YOU!!**

- Louisiana State University
- Florida State University
- University of Georgia
- Auburn University
- Mississippi State University
- Texas A&M

E. Sikora - Auburn

SBR-infected kudzu, Mobile, Alabama, 1-8-07