

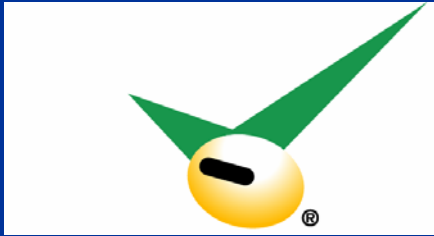
Plant  
Health Initiative



# *Asian Soybean Rust*



David L. Wright, PhD  
National Soybean Rust Symposium  
November 2006



# Overview

## Soybean Rust

What will happen if Asian soybean rust doesn't happen?

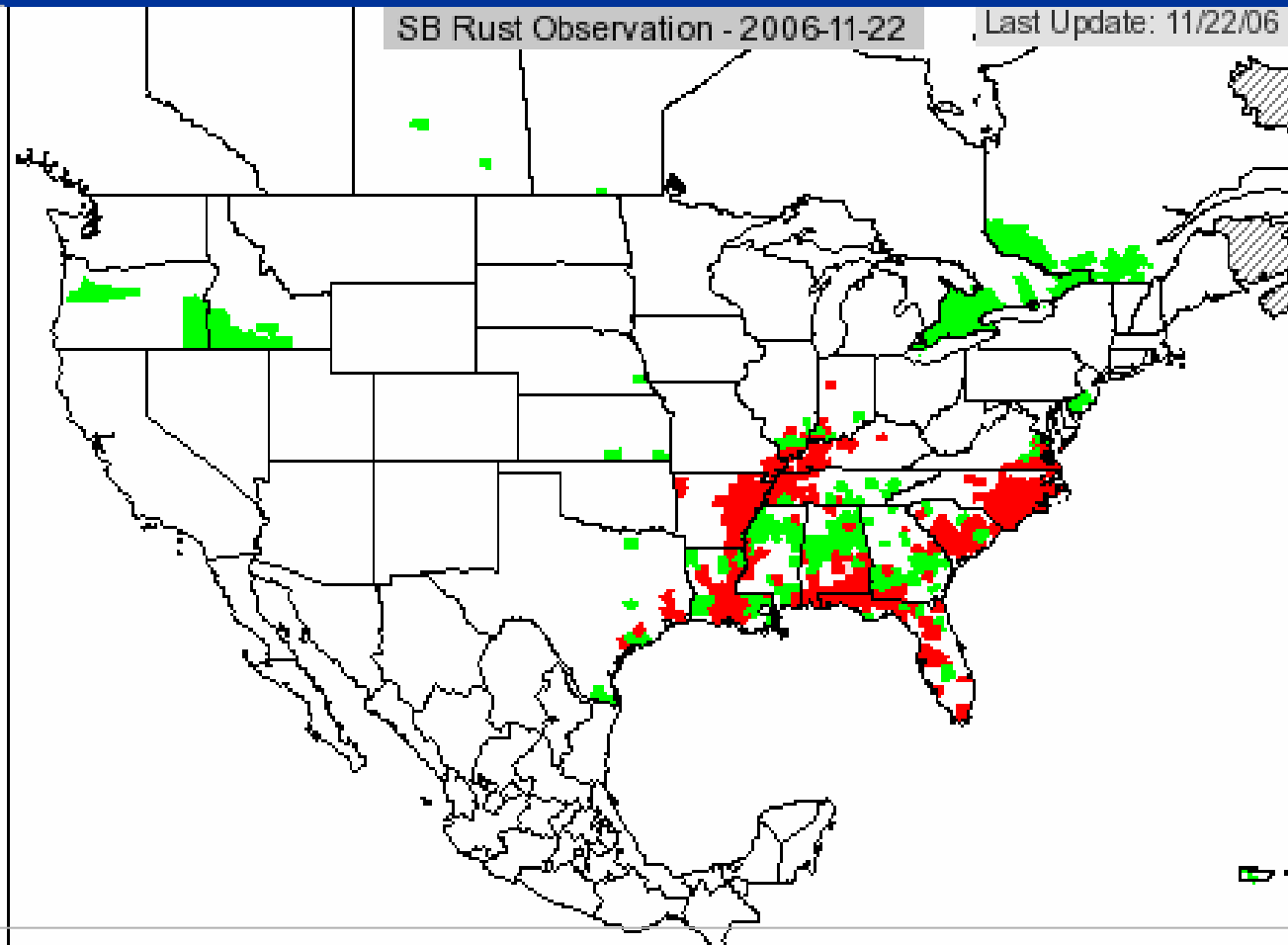


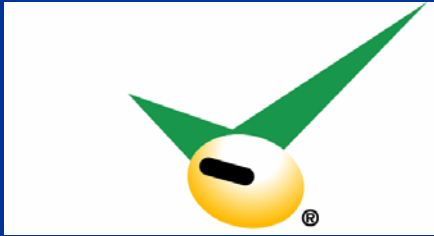


# Overview

## Soybean Rust

✓ Where is it?



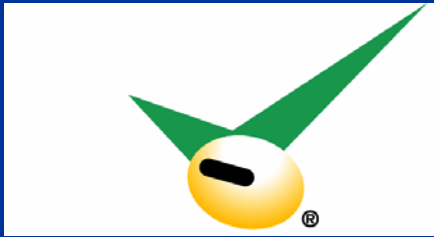


# Overview

## Soybean Rust

What will happen if Asian soybean rust doesn't happen?



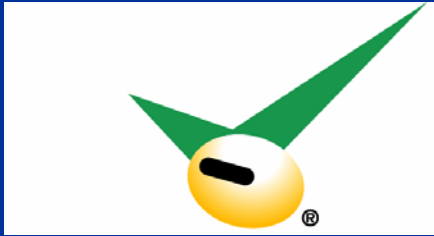


# Overview

## Soybean Rust

Leadership of soybean producers will remain . . .





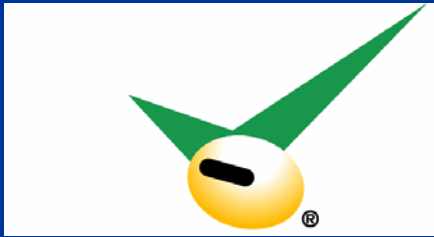
# Overview

## Soybean Rust

✓ Soybean  
leadership

As long as there is sound  
research to conduct.





## Soybean Rust

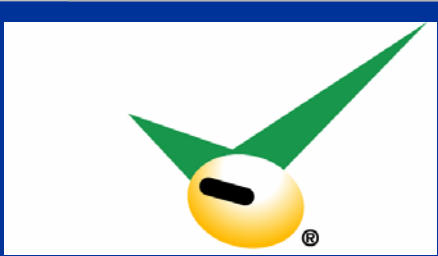
✓ Soybean  
research



© Copyright APS Press

# Checkoff-funded

- First rust symposium – 1994
- Cultivar and PI screening – 2001. US and International
- Much rust research co-funded by checkoff and USDA since 2001
- More than \$7.5 M

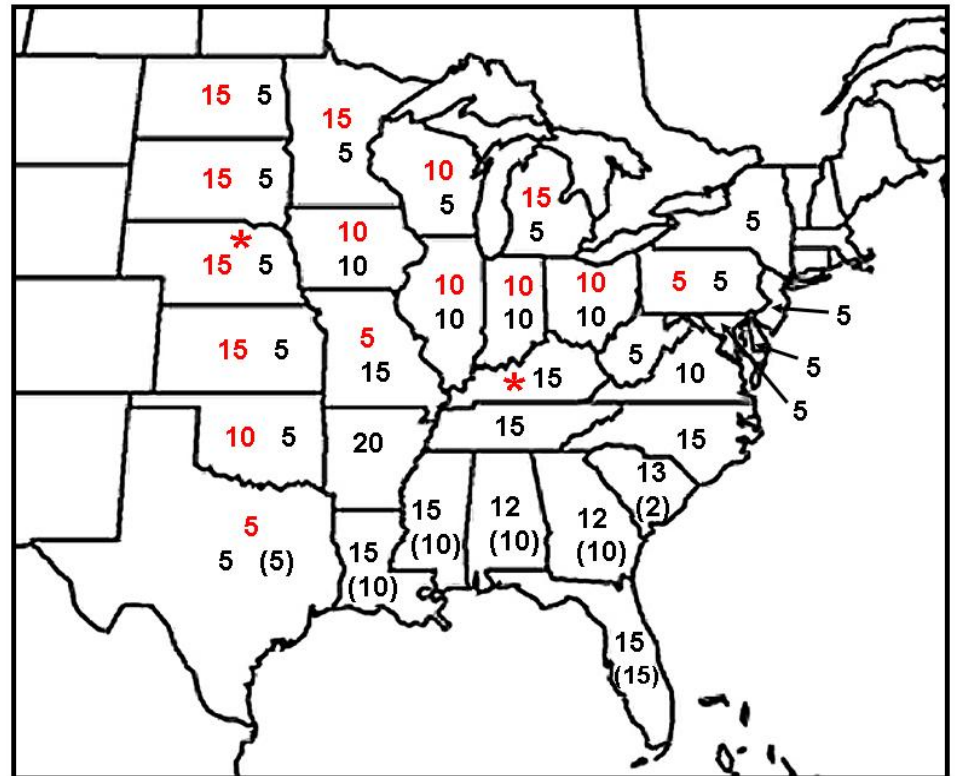


# Checkoff-funded

## Soybean Rust

✓ Soybean research

- Sentinel plots





# Checkoff-funded

## Soybean Rust

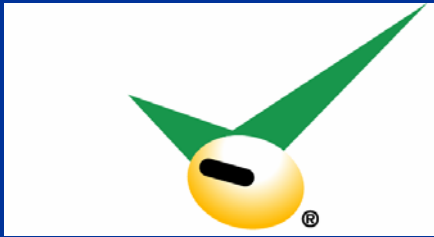
✓ Soybean  
research

A unique partnership with the  
University of Florida



© Copyright APS Press





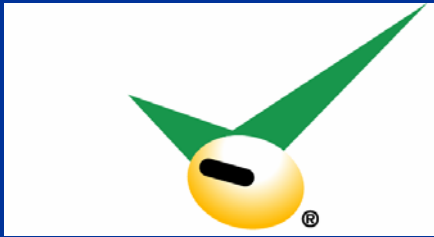
# Overview

## Soybean Rust

- ✓ Agriculture
- ✓ Sentinel plots

Our sentinel plot system is  
**NOT SUSTAINABLE.**





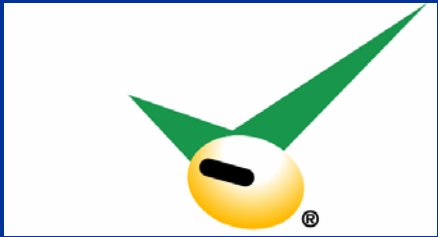
# Overview

## Soybean Rust

- ✓ Agriculture
- ✓ Sentinel plots

- Additional resources must be approved
- CSREES
- Other institutions



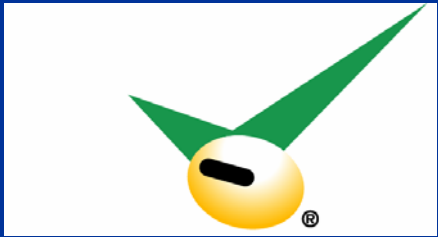


# Drivers of Success

## Soybean Rust

✓ Carrie  
Harmon





# Drivers of Success

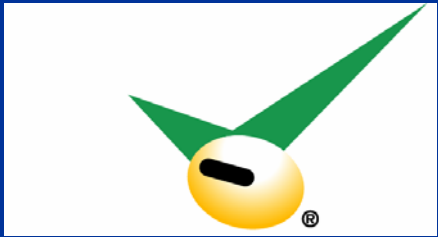
## Soybean Rust

✓ The famous mailbox



© Copyright APS Press





# Drivers of Success

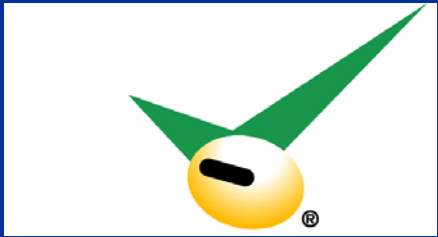
## Soybean Rust

- ✓ Tristen Mueller
- ✓ Over-wintering



© Copyright APS Press





# Drivers of Success

## Soybean Rust

✓ John Rupe



© Copyright APS Press





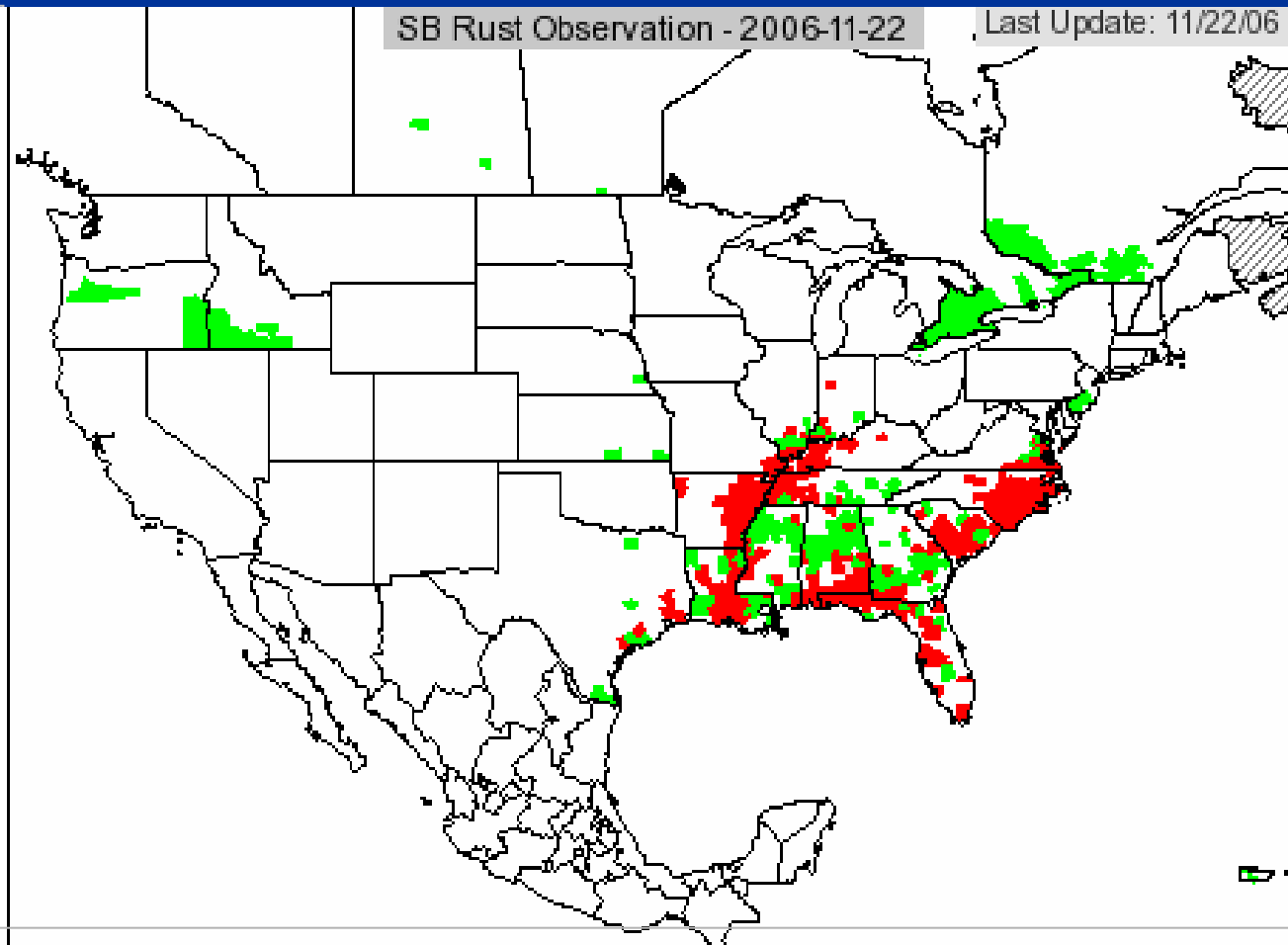
# The Future

## Soybean Rust

- ✓ Less reliance on sentinel plots



© Copyright APS Press





## Soybean Rust

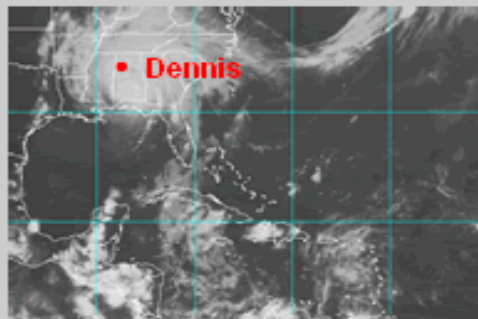
✓ More reliance on predictive models



© Copyright APS Press

# The Future

Tropical Storm Cindy and Hurricane Dennis



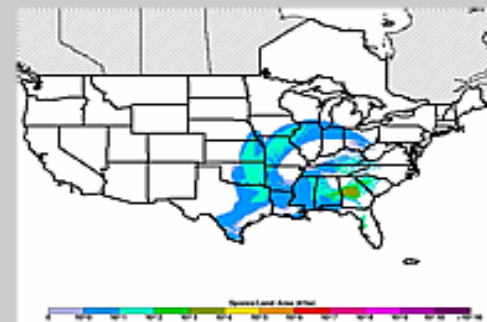
Date

July 11 2005

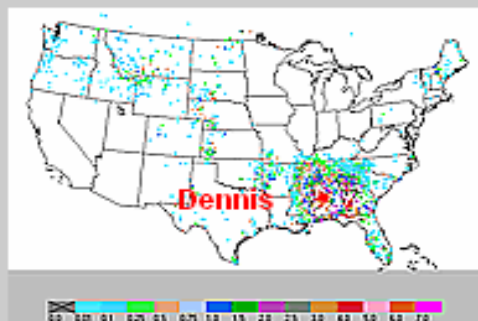
Start Animation

Stop Animation

Simulated Distribution of Viable SBR Spores in Atmosphere



Daily Precipitation



Cindy = dissipated

Dennis = tropical storm

July 05

Text

July 06

Text

July 07

Text

July 08

Text

July 09

Text

July 10

Text

July 11

Text

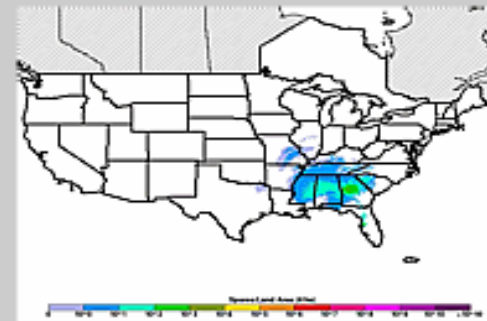
July 12

Text

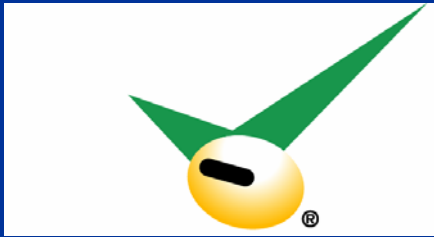
July 13

Text

Simulated Daily Wet Deposition of SBR Spores on Land



This animation was constructed by Annalisa Ariatti, Scott Isard and Joe Russo.



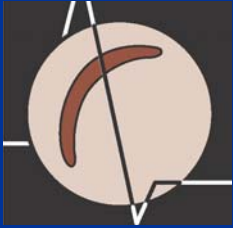
# Summary

## Soybean Rust

- ✓ Agriculture
- ✓ Sentinel plots

- Rust in major soybean growing areas is eminent
- Sentinel system is not sustainable
- Additional resources should be put into prediction systems





# Plant Health Initiative



# *Thank You*

