

# 2009 SMFD

## Managing New and Emerging Diseases, Insects and Weed Problems - Giesler

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# Managing New and Emerging Disease, Insect and Weed Problems

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2009SMFDDisease001

# Sudden Death Syndrome (SDS)



**SDS**

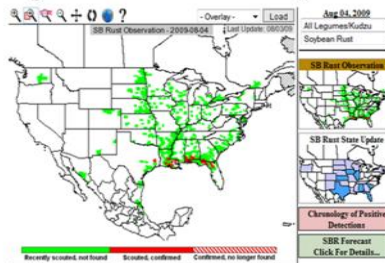


## Management

- Avoid early planting
- Variety selection
- Seed treatments have not shown to be effective.

2009SMFDDisease002

# Soybean Rust Update



United States Soybean Rust Commentary (updated: 08-02-09)  
On August 2nd, soybean rust was found in a kudzu patch in Blount County in the southern corner of Alabama. The disease had been found at this site earlier this year but had not been observed since January. Soybean rust scouting continues in the U.S. and Mexico. In 2009, soybean rust has been found in five states and 12 counties in United States, and in two states and five municipalities in Mexico.

[sbrusa.net](http://sbrusa.net)

2009SMFDDisease003

## Soybean Cyst Nematode

21 New Counties Identified (2005 - 2009)



2009CMDC-Giesler001

## WEED HOSTS

### Most Common:

- Henbit\*, Field Pennycress\*, Purslane
- Common Chickweed\*, Common Mullein, Pokeweed, Sericea Lespedeza, Wild Mustard\*
- \* - may grow as a winter annual

### Management:

- SCN-infested fields with the weeds listed above should be considered a priority for weed control measures.

2009CMDC-Giesler002

## Winter Annual Weed Hosts



2009CMDC-Giesler003

# \$25 Million...

## How Much Did YOU Contribute?

Nebraska  
Lincoln



2009CMDC-Giesler004

## UNL SCN RESEARCH

*2006 - 2008*

### Ave. yield: 12 infested sites

- Resistant varieties: **51.9 bu/A**
- Susceptible varieties: **46.1 bu/A**

### Ave. yield: 4 non-infested sites

- Resistant varieties: **57.1 bu/A**
- Susceptible varieties: **58.8 bu/A**

2009CMDC-Giesler005

## UNL SCN RESEARCH

*2006 - 2008*

### Egg counts at 12 infested sites

*(eggs per 100 cc's of soil)*

### Egg count: susceptible varieties

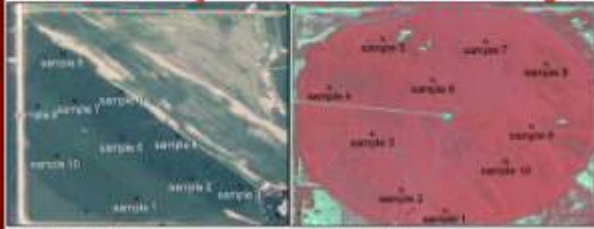
- Spring: **1,964 eggs**
- Fall: **4,515 eggs + 130%**

### Egg count: resistant varieties

- Spring: **2,578 eggs**
- Fall: **1,318 eggs - 49%**

2009CMDC-Giesler006

# Field Population Variability



Sample #	Population	Sample #	Population
1	500	1	500
2	1000	2	1000
3	1500	3	1500
4	2000	4	2000
5	2500	5	2500
6	3000	6	3000
7	3500	7	3500
8	4000	8	4000
9	4500	9	4500
10	5000	10	5000

2009CMDC-Giesler007