

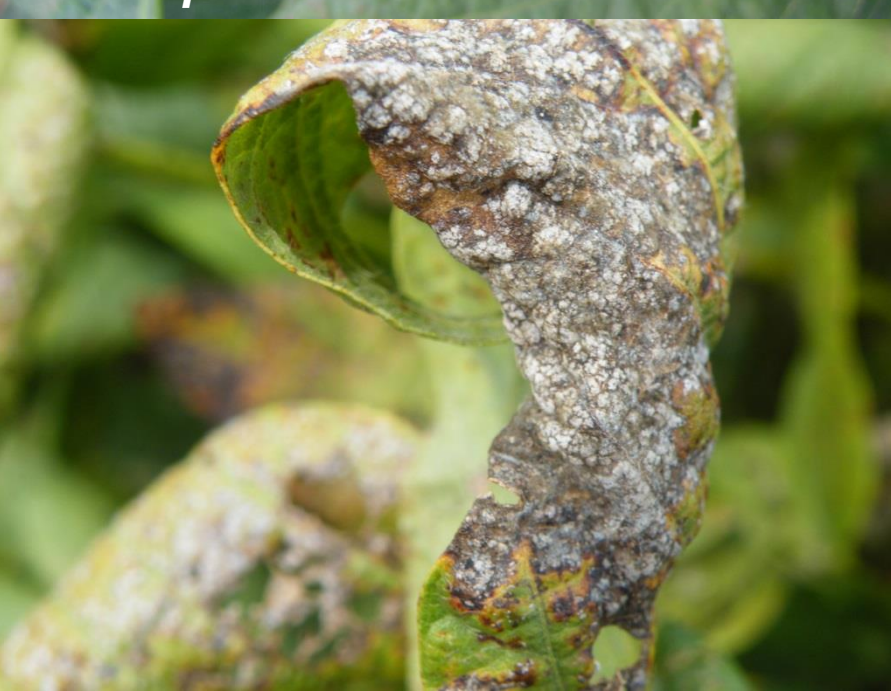
Soybean Disease Update



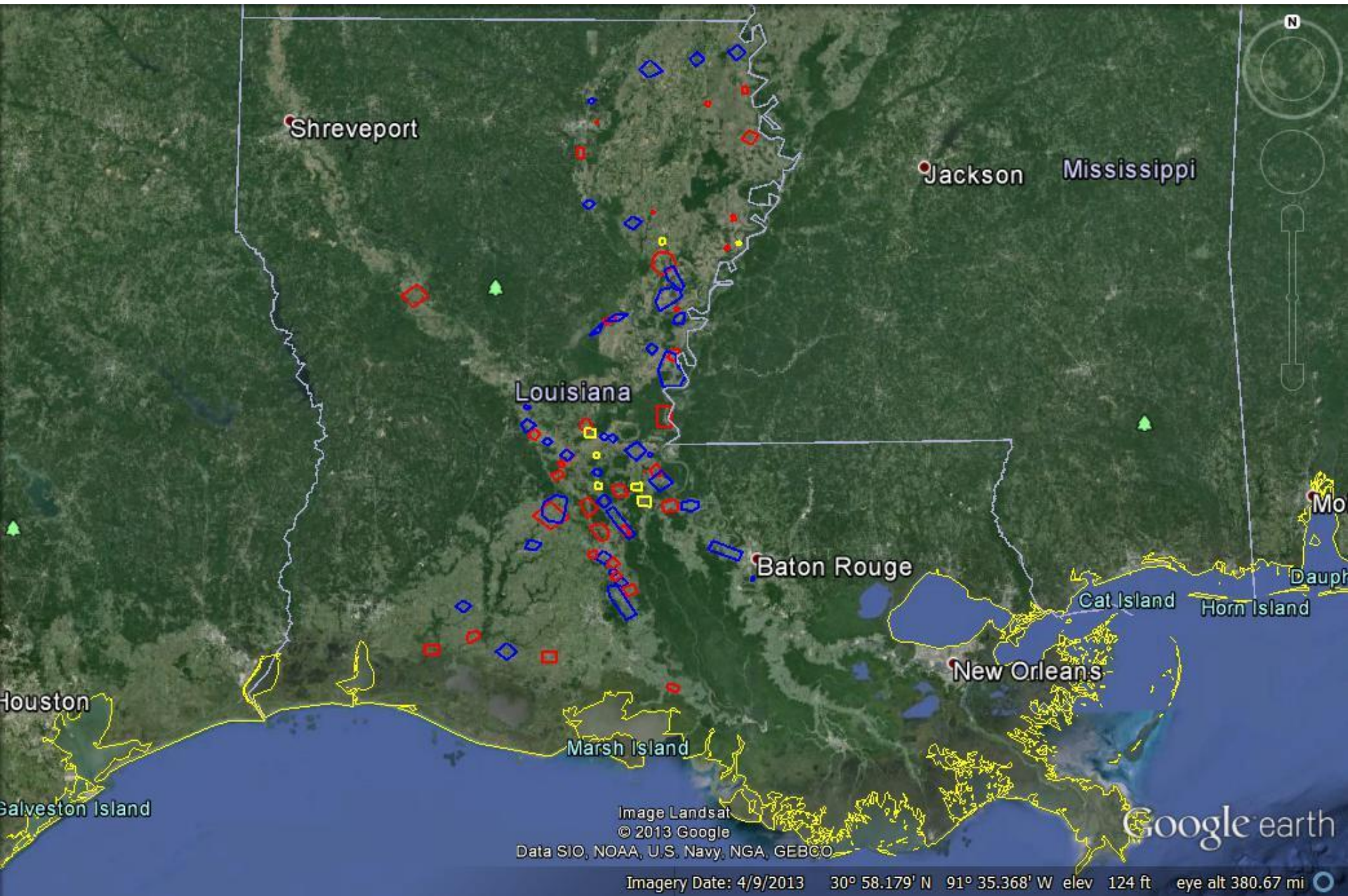
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318-238-9805 @ppp_trey



Cercospora kikuchii



Annual losses vary in LA
More of an issue in CENLA and SOLA
More often later-planted/maturing beans



Shreveport

Jackson Mississippi

Louisiana

Baton Rouge

New Orleans

Marsh Island

Cat Island

Horn Island

Dauphin Island

Houston

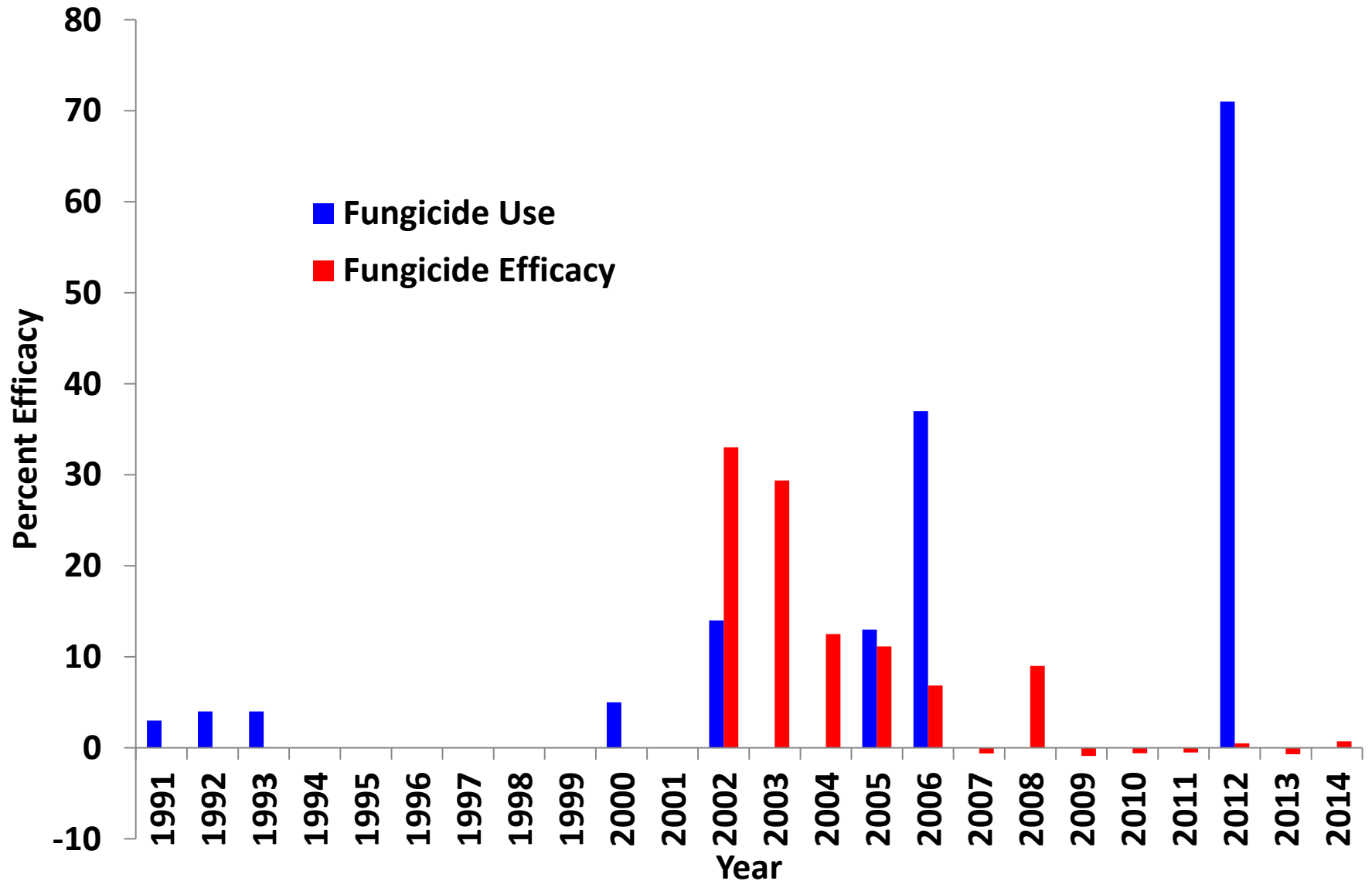
Galveston Island

Image Landsat
© 2013 Google
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

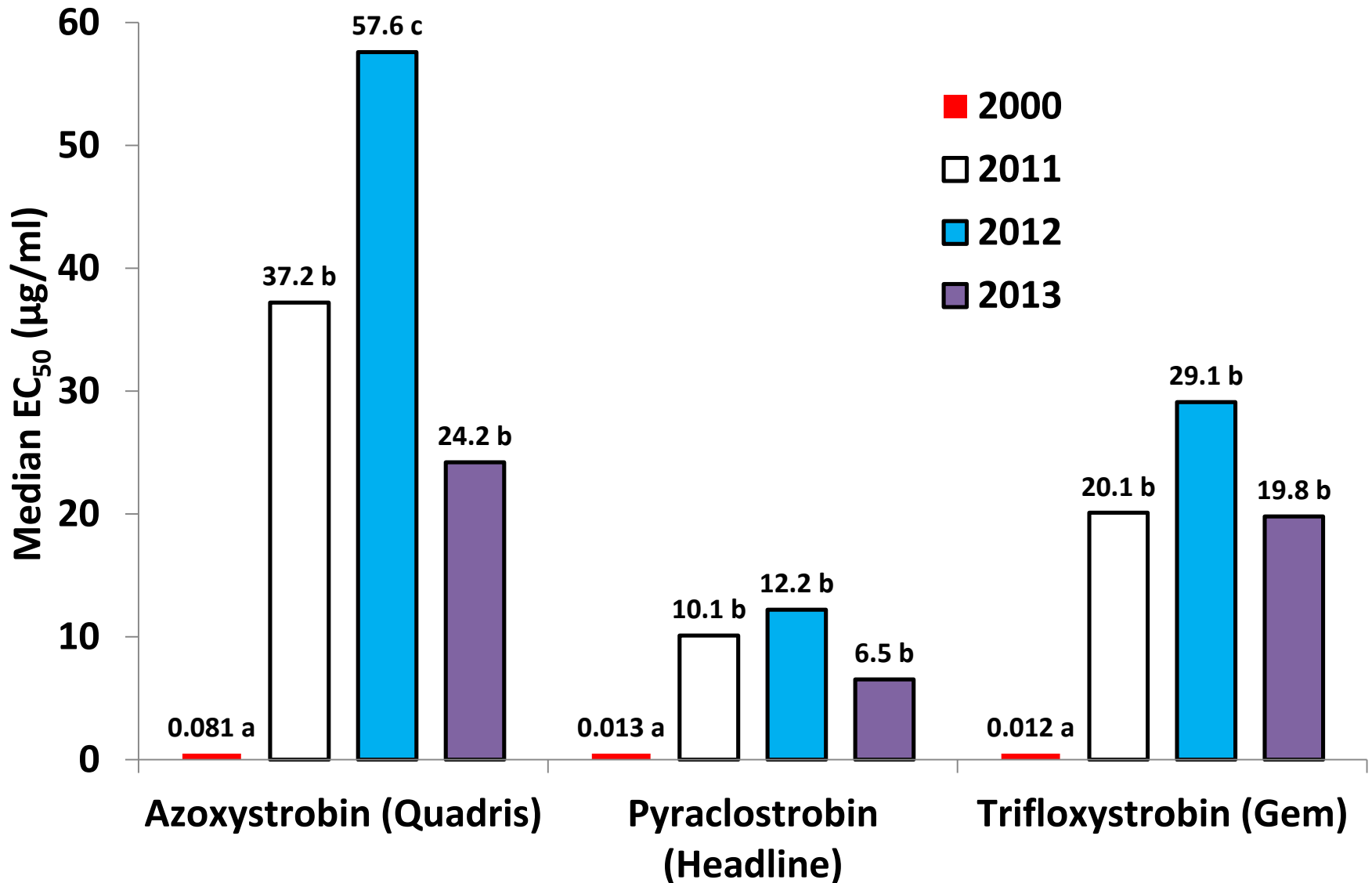
Google earth

Imagery Date: 4/9/2013 30° 58.179' N 91° 35.368' W elev 124 ft eye alt 380.67 mi

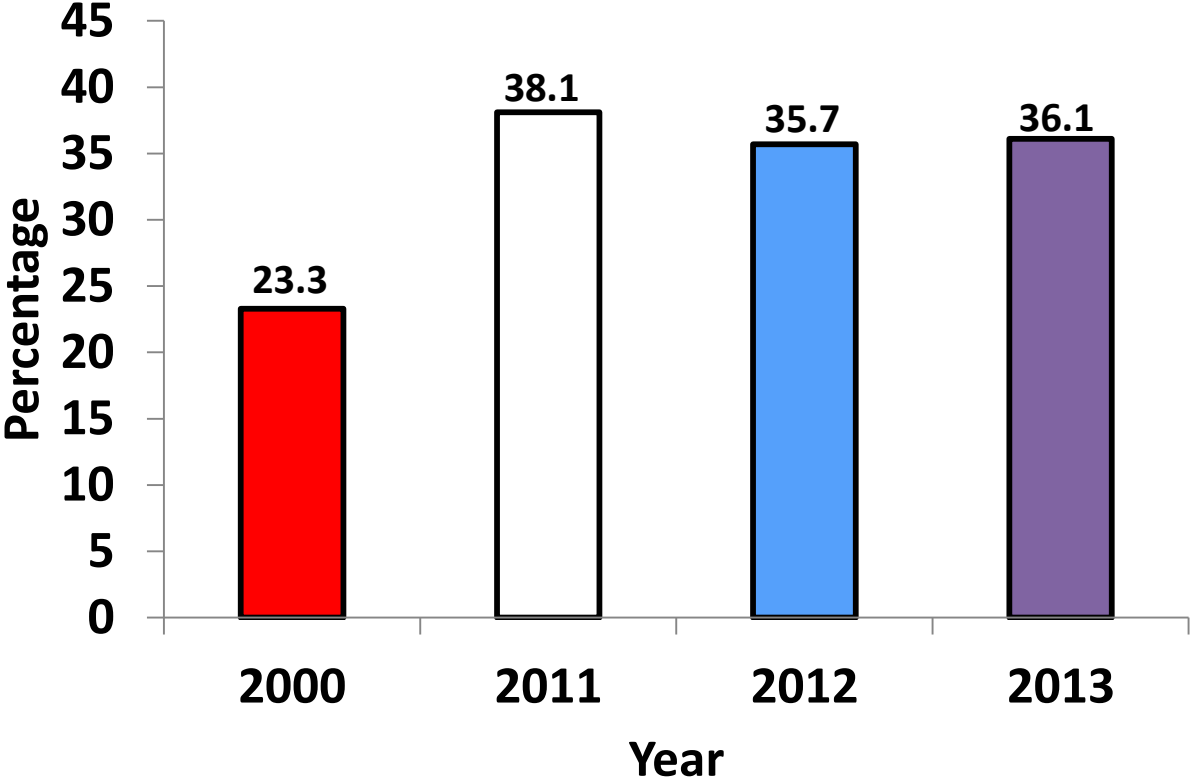
Fungicide Use and Efficacy on CLB



Strobilurin Resistance Summary



Thiophanate-methyl Resistance



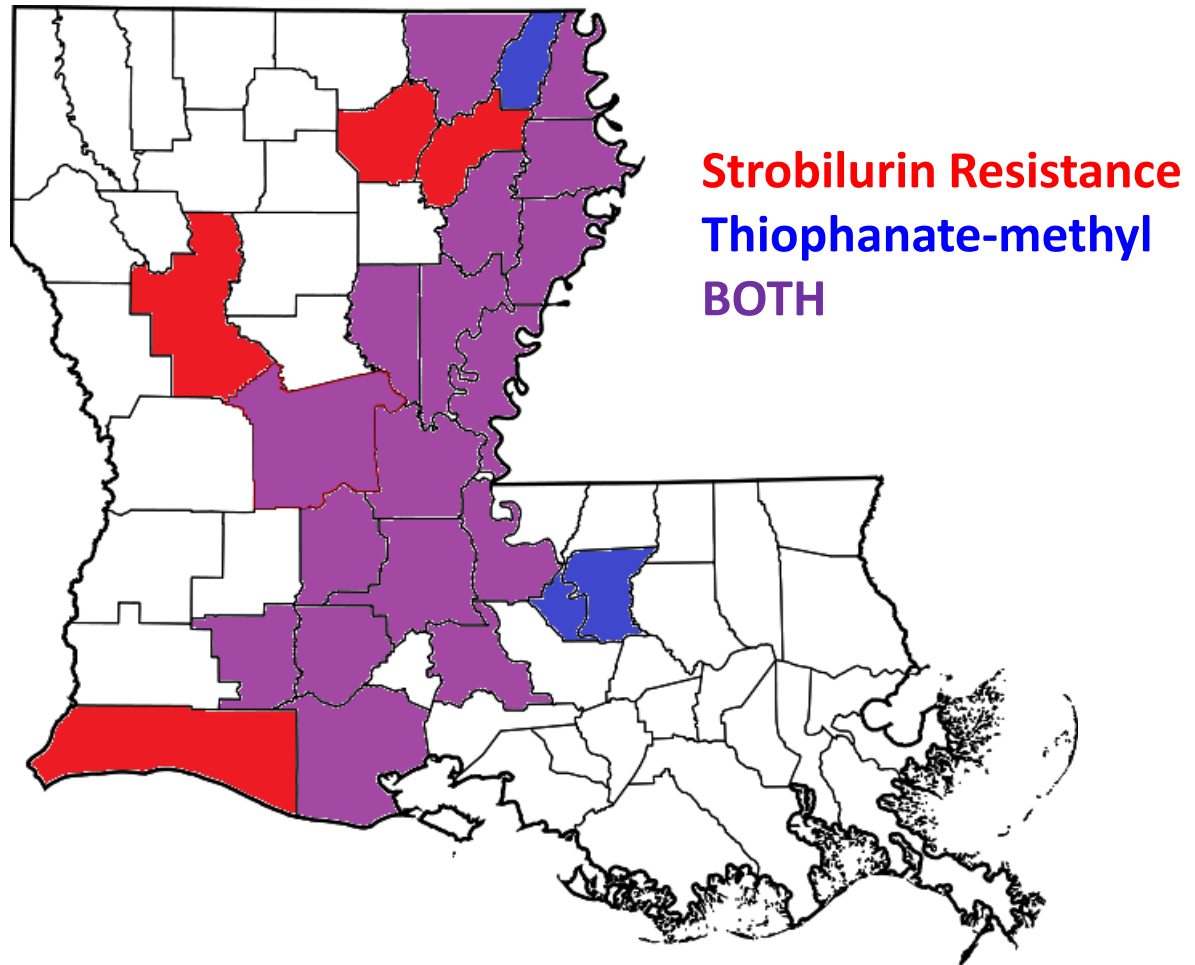
Cercospora Leaf Blight – Fungicide Resistance

~88% resistant to strobilurins

~35% resistant to thiophanate-methyl

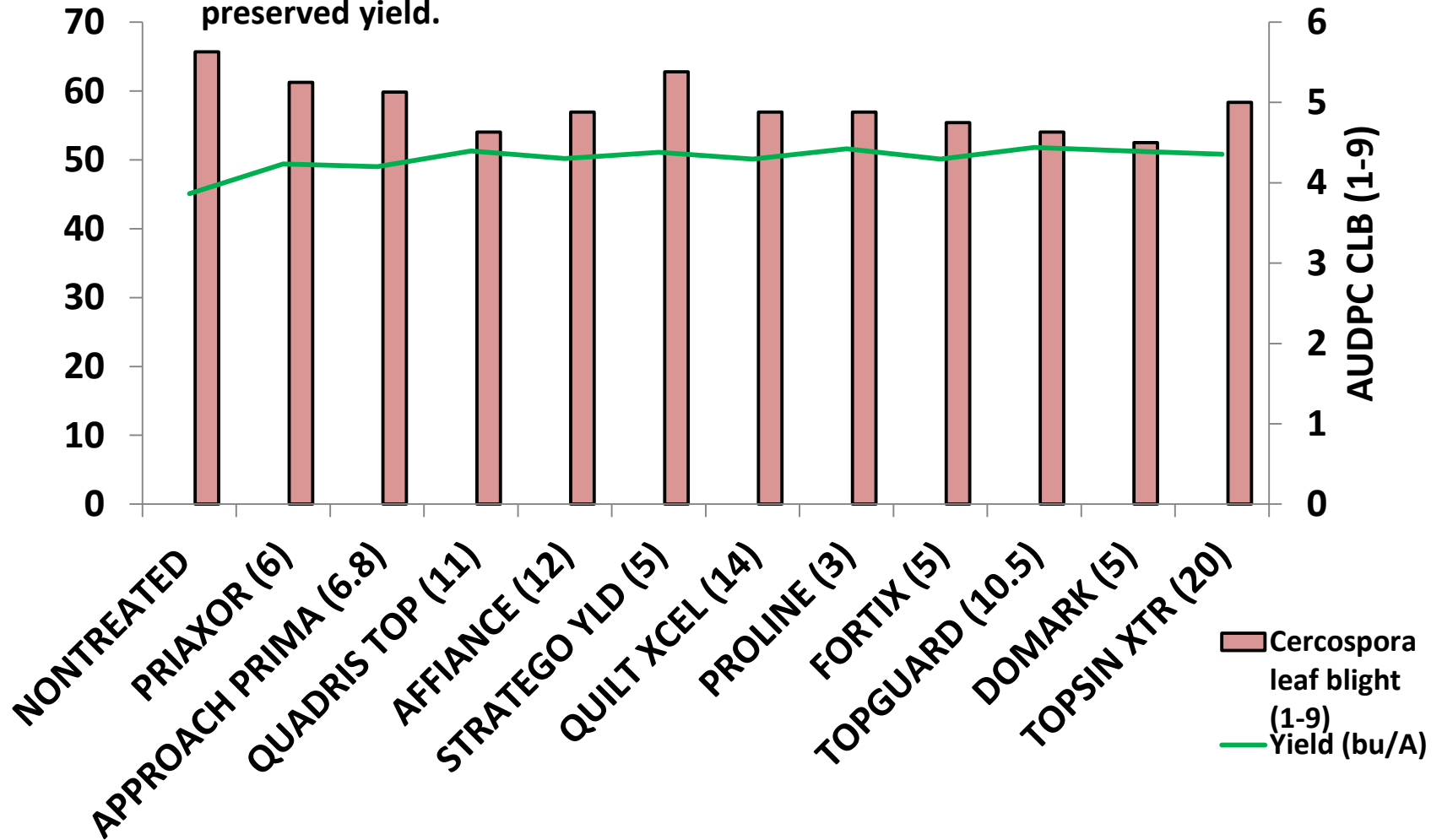
Currently monitoring triazoles.

Have initiated SDHI work.



CLB Fungicide Screening - DLRS

None of the treatments significantly slowed *Cercospora* blight or preserved yield.

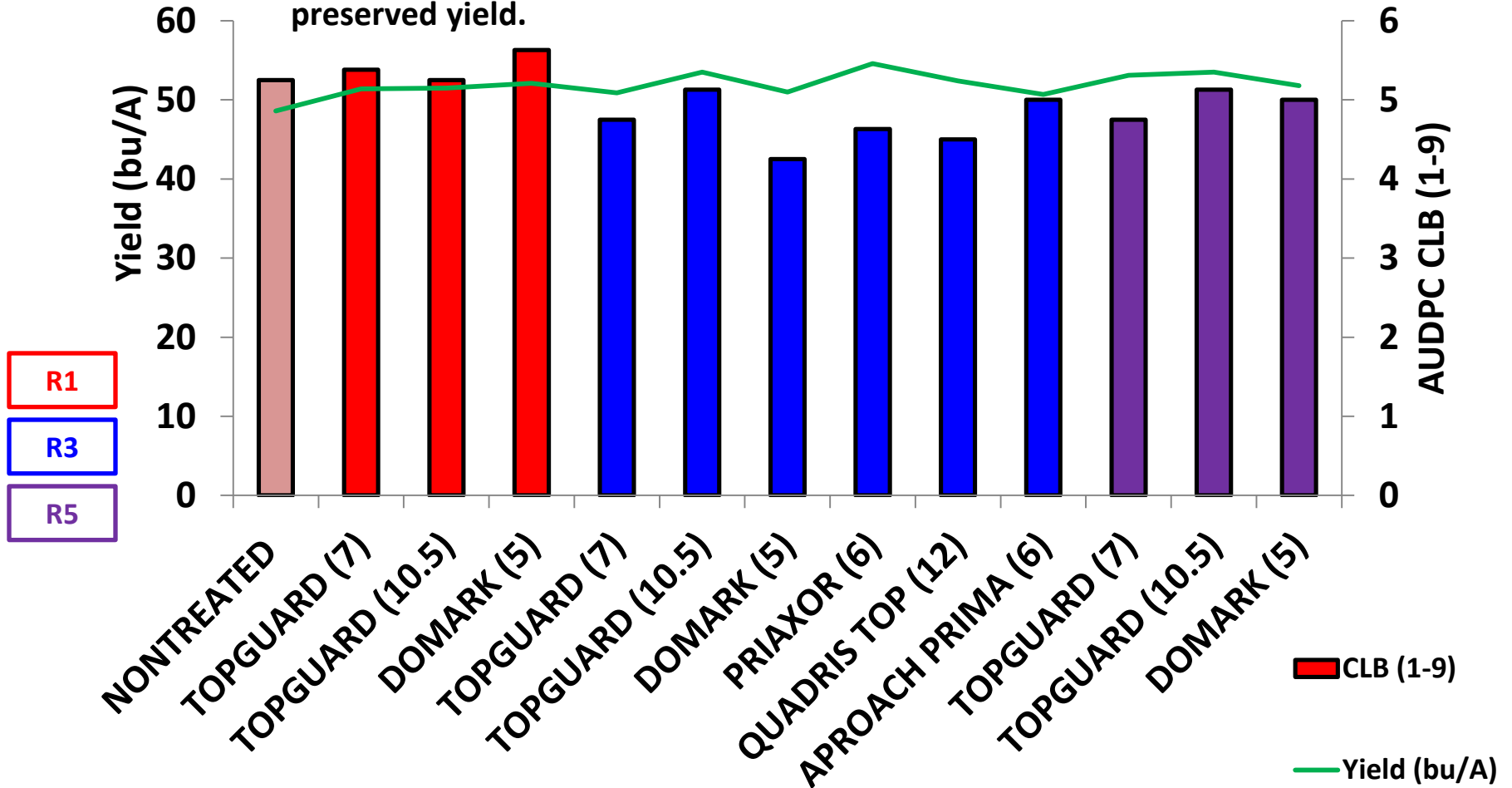


All applications at R3. Product rates in parentheses (fl oz/A).
 AUDPC = Average of three disease ratings.

Variety : PI 95Y61
 DLSB1403

Application Timing Trial – DLRS

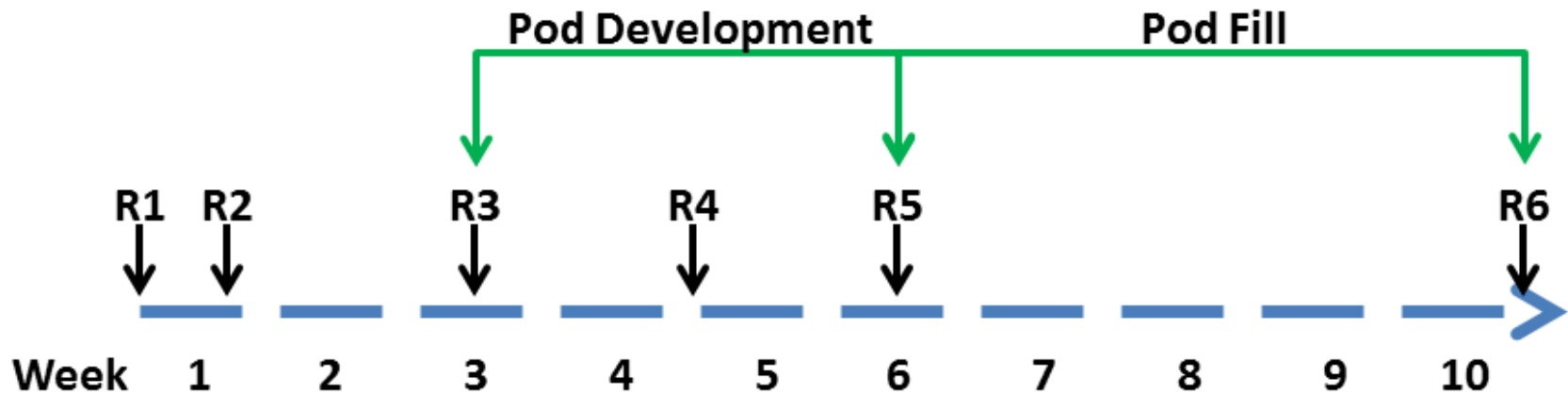
None of the treatments significantly slowed *Cercospora* blight or preserved yield.



Various application timings. Product rates in parentheses (fl oz/A).
 AUDPC = Average of three disease ratings.

Variety : PI 95Y61
 DLSB1402

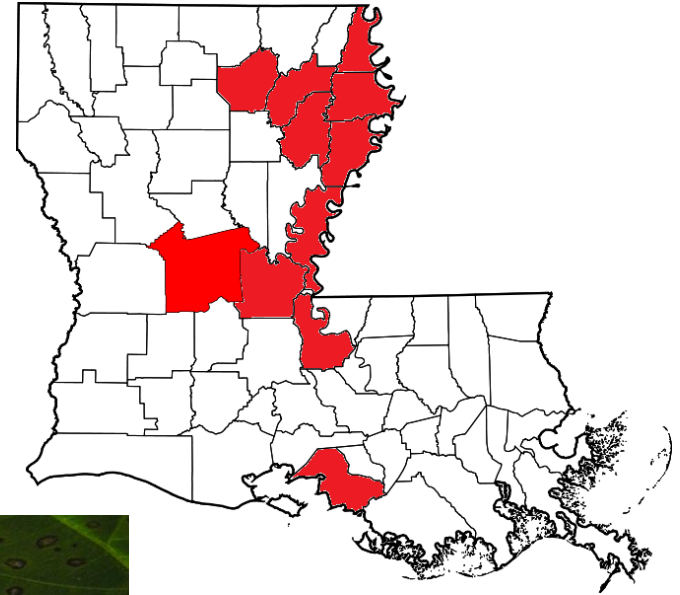
Timing Considerations



Strobilurin Resistance in *C. soja* - (Frogeye leaf spot)

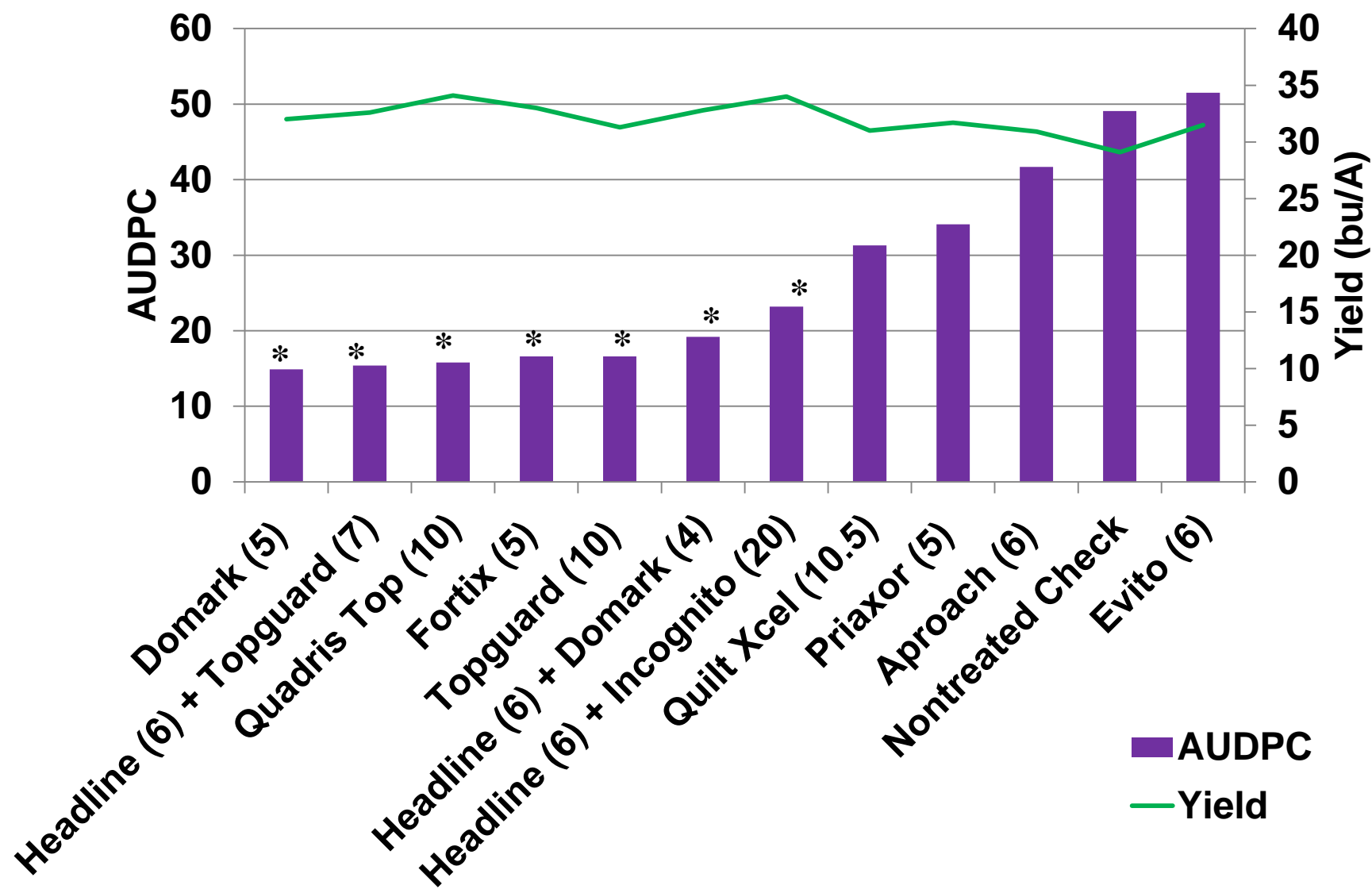
Cooperators – Carl
Bradley, University of
Illinois

Tom Allen/Jeff Standish
– Mississippi State
University

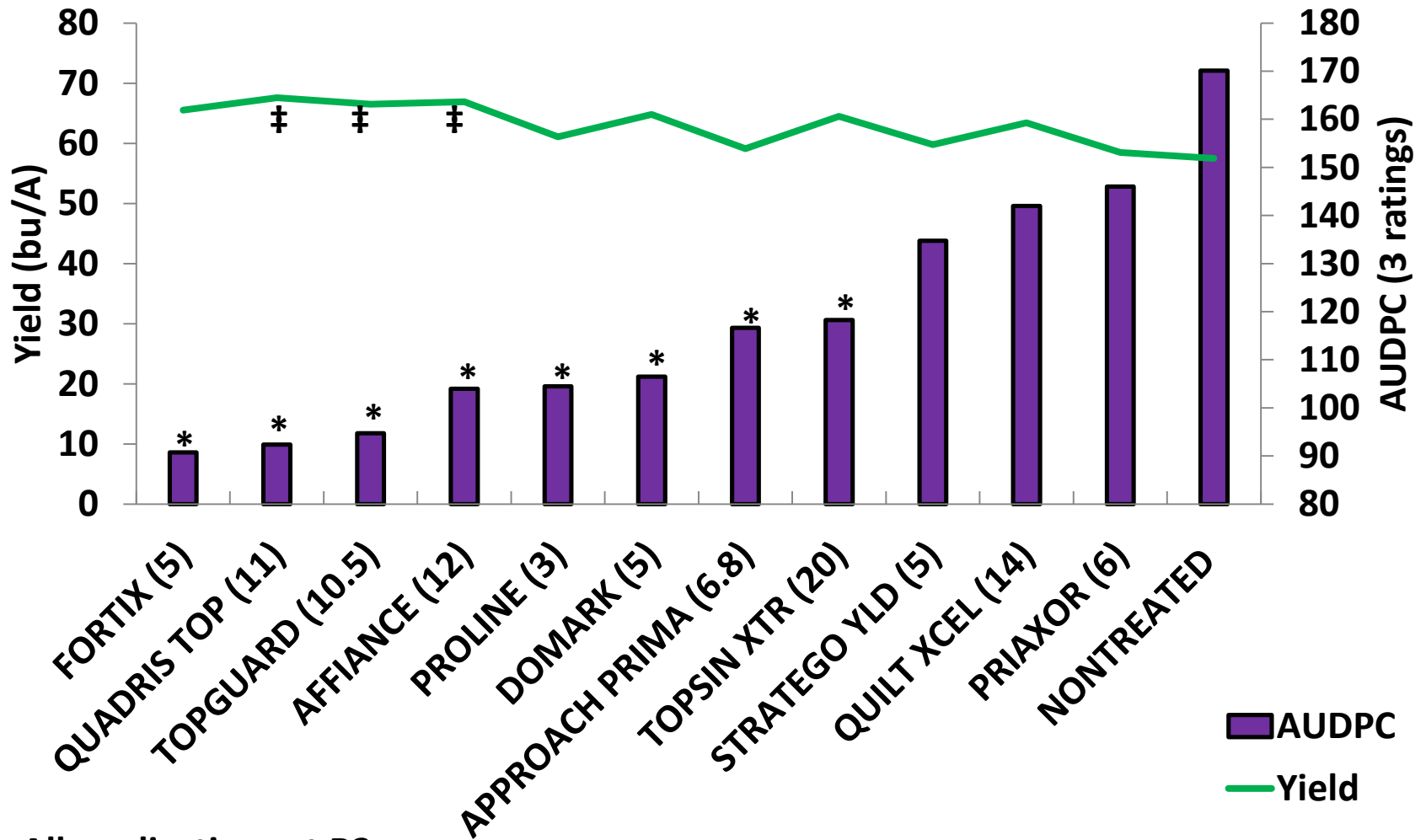


Fungicide Trial, Alexandria, LA 2013

Frogeye leaf spot (ranked by severity)

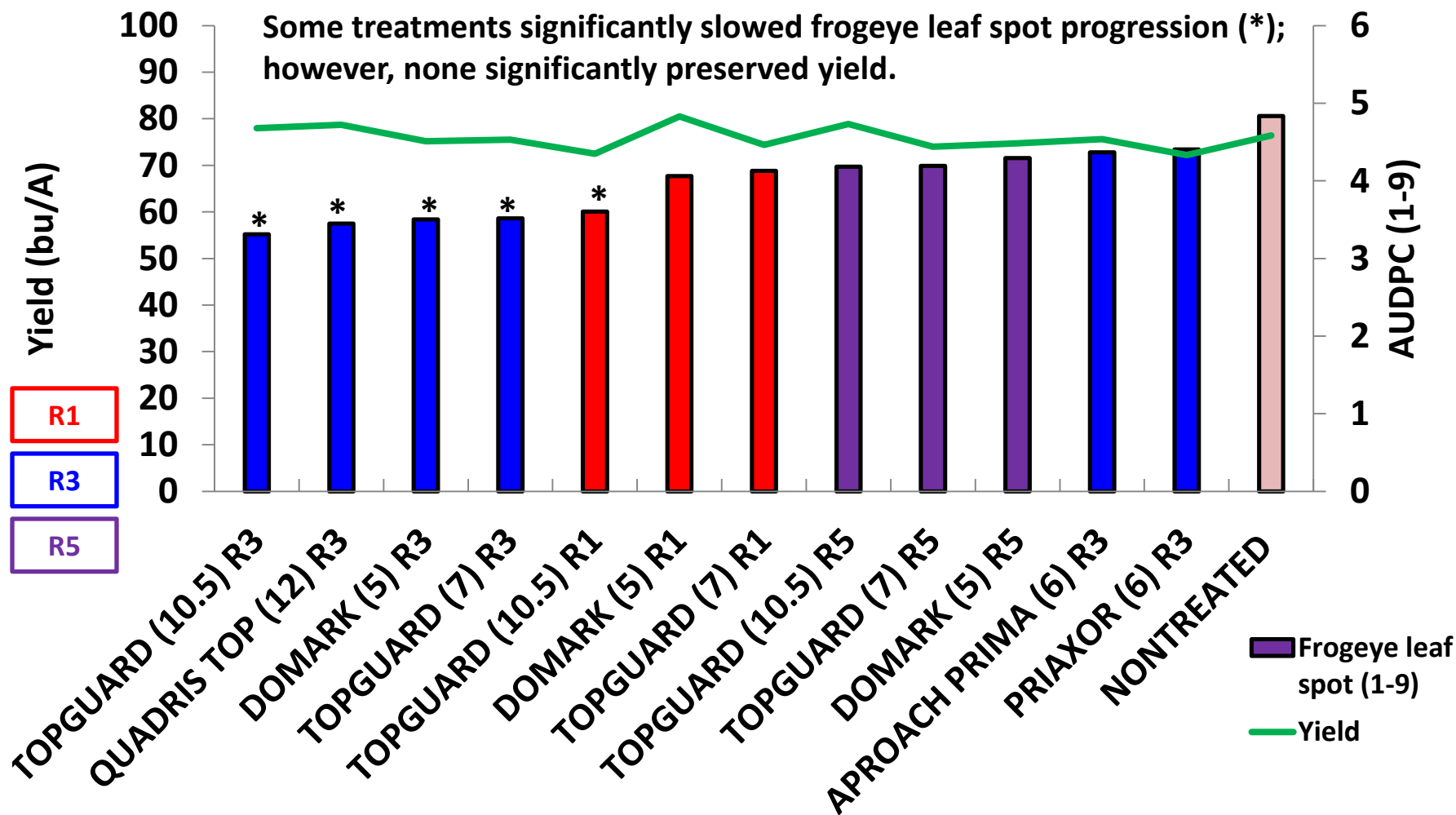


Fungicide Trial, St. Joseph, LA, 2014 – Frogeye leaf spot (ranked by severity)



All applications at R3.

Fungicide Timing Trial – NERS (ranked by severity)



Various application timings. Product rates in parentheses (fl oz/A).

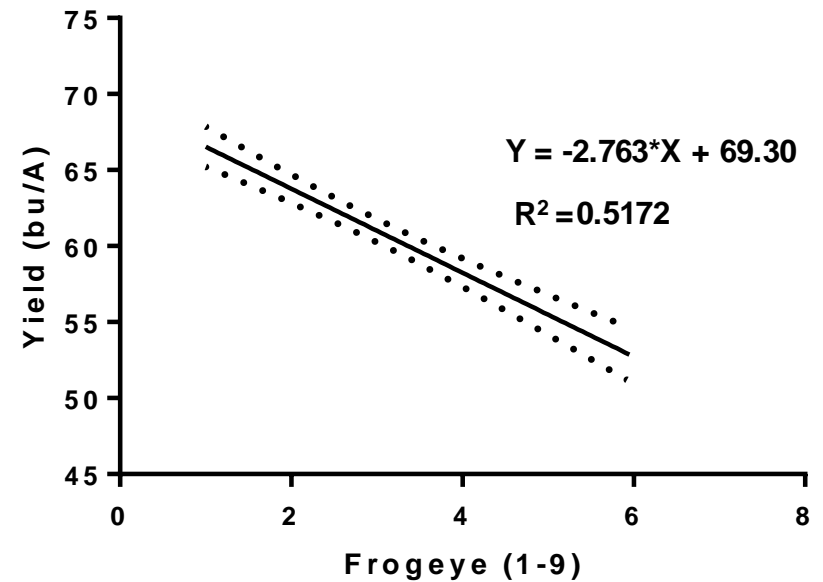
AUDPC = Average of three disease ratings.

Variety: PI 95Y61
NESB1401

Variety Trials – NERS 2014

Variety	Frogeye (1-9)	Yield (bu/A)	Rank
C4544R2	1	65.6	19
5N451R2	1	65.4	21
REV 49R94	1	67.8	8
REV 48R44	1	68.7	3
REV 47R34	1	67.2	13
REV 47R53	1	67.7	9
HALO 4:94 LL	1	69.1	2
S47-K5	1	70.5	1
P 4928 LL	1	63.9	40
AG 4632	1	64.4	36

← Top 10 Frogeye Resistant Varieties



Variety	Frogeye (1-9)	Yield (bu/A)	Rank
AX4470	5	53.8	89
46X04	5	56.5	78
AG 4934	5	54.7	85
AX4490	5.3	49.2	97
AG 4531	5.3	57.5	73
S09-6262	5.3	45.2	100
P4510RYS = Delta King	7	47.44 = Armor	48
DG 4930 RR2	5.7	49.7	98
R08-2797	5.7	46.5	99
48X34	6	50	96

← Croplan R2T4799S = DynaGro 37RY47
 20 to 10 Frogeye susceptible varieties

AND OTHERS

Estimated losses up to 18% in this trial.

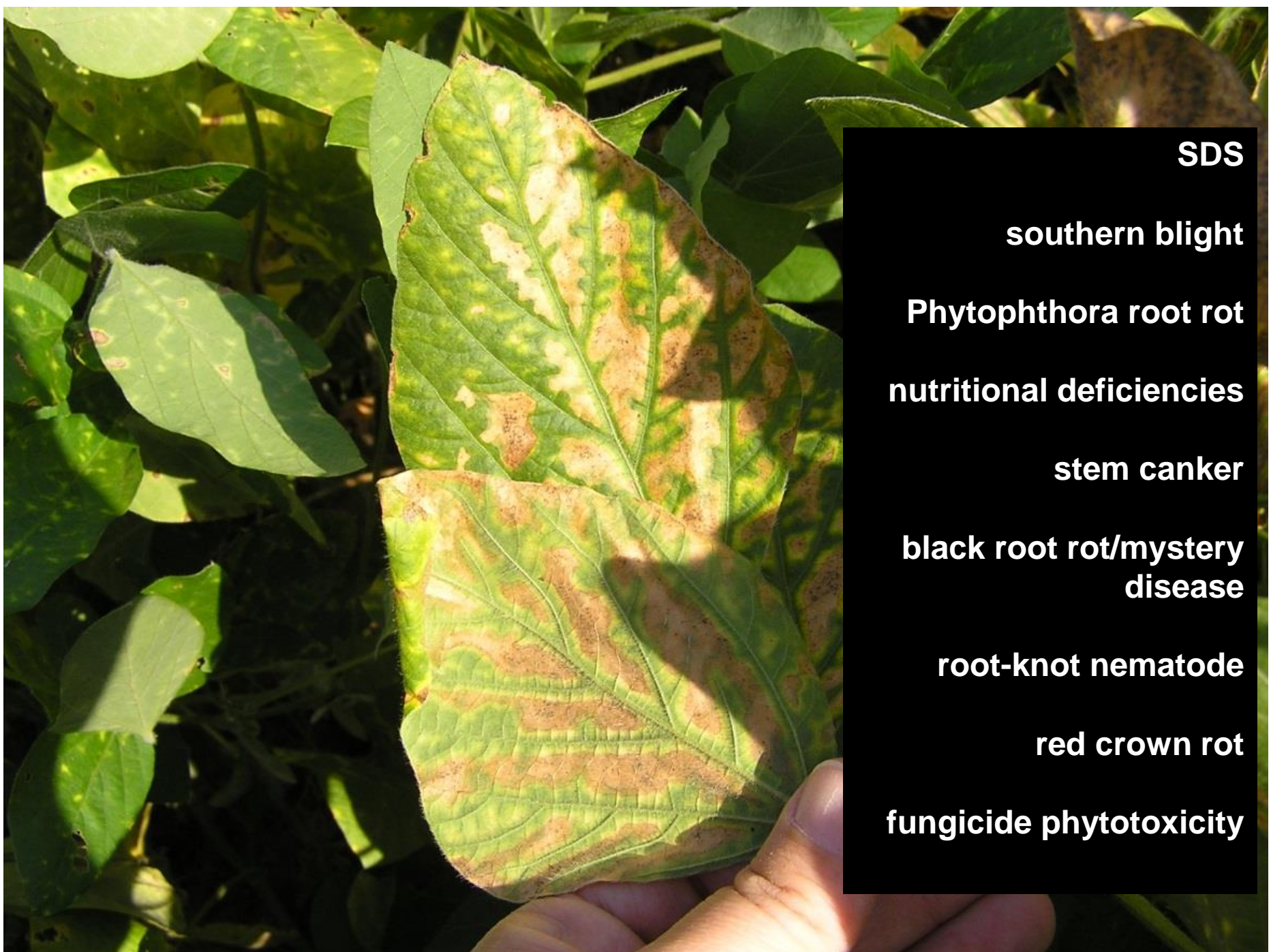
Foliar Disease Recommendations

- ✓ Unfortunately, no consistent products for Cercospora blight
- ✓ Triazoles are effective on frogeye (some more than others)
- ✓ Maybe CLB tolerant varieties in the pipeline?
- ✓ Plant frogeye-resistant varieties!
- ✓ Early planting date (early soybeans usually escape CLB)
- ✓ Don't use reduced rates of fungicides
- ✓ Good coverage is key (nozzles, pressure, total volume, etc...)
- ✓ Rotate chemistry types (this is a good practice with ALL pesticides)
- ✓ Avoid unnecessary applications!

Soybean Seedling Disease



- **Rhizoctonia, Pythium, Phytophthora, Fusarium, and others**
- **Cool, wet conditions soon after planting**
- **Seed treatments are effective**
- **Most of the time, seed treatments increase stand**
- **Usually do not result in significantly preserved yield**



SDS

southern blight

Phytophthora root rot

nutritional deficiencies

stem canker

**black root rot/mystery
disease**

root-knot nematode

red crown rot

fungicide phytotoxicity

SDS

Cooperator – Raj Singh

Suspected for many years

Confirmed in East Carroll in 2014

**Not a major issue in LA, but
worth monitoring (major issue
up north).**

**Have isolates of the pathogen
and planning to screen varieties**



Root Knot Nematode

Handful of resistant varieties

Rotate to sorghum to reduce population

S49RY25





OBSERVED with:
cyproconazole

difenoconazole

flutriafol

prothioconazole

tebuconazole

thiophanate-methyl

Fungicide Phytotoxicity

**Increased chance if fungicides
are applied during the heat of the
day.**

Most of the time, cosmetic issue

Black Root Rot (“Mystery Disease”)



Black Root Rot (“Mystery Disease”)



- **Prevalent in no-till**
- **Soybean monoculture**
- **Suspected seedborne**
- **Suspected debris borne**
- **Cultivation and/or rotation may help**

Black Root Rot (“Mystery Disease”)



Have isolated the suspected pathogen

Working to confirm pathogenicity

May be resistant varieties?

Thanks to all Collaborators!

Producers

Agents

Consultants

Industry

Dan Fromme

Josh Lofton

Beatrix Haggard

David Kerns

Scott Washam

Raj Singh

Eduardo Chagas

Clark Robertson

Clayton Hollier

Todd Yelverton

Ralph Sheppard

Charlie Overstreet

Boyd Padgett

John Stapp

Myra Purvis

Brandi Woolam

Randall Landry

Hunter Pruitt

Jerry Bartleson

Warren Ratcliff

Darrell Franks

Daniel Stephenson

Donnie Miller

Rick Mascagni

Steve Harrison

Kelly Arceneaux

Ray Schneider

Sebastian Albu

Don Groth

Tom Allen

Jeff Standish



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