

Feed Grains and Soybean Pest Management

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**3-4 Weeks
Pre-Plant**

Herbicide Applied 7 Weeks Pre-Plant





Lorsban 15G

Counter 15G

Aztec 2.1G

Force 3G

Poncho 250/1250

Gaucho (0.125-1.34)
Imidacloprid

Cruiser (0.125-1.25)



Dean River Farm: Macon, MS.

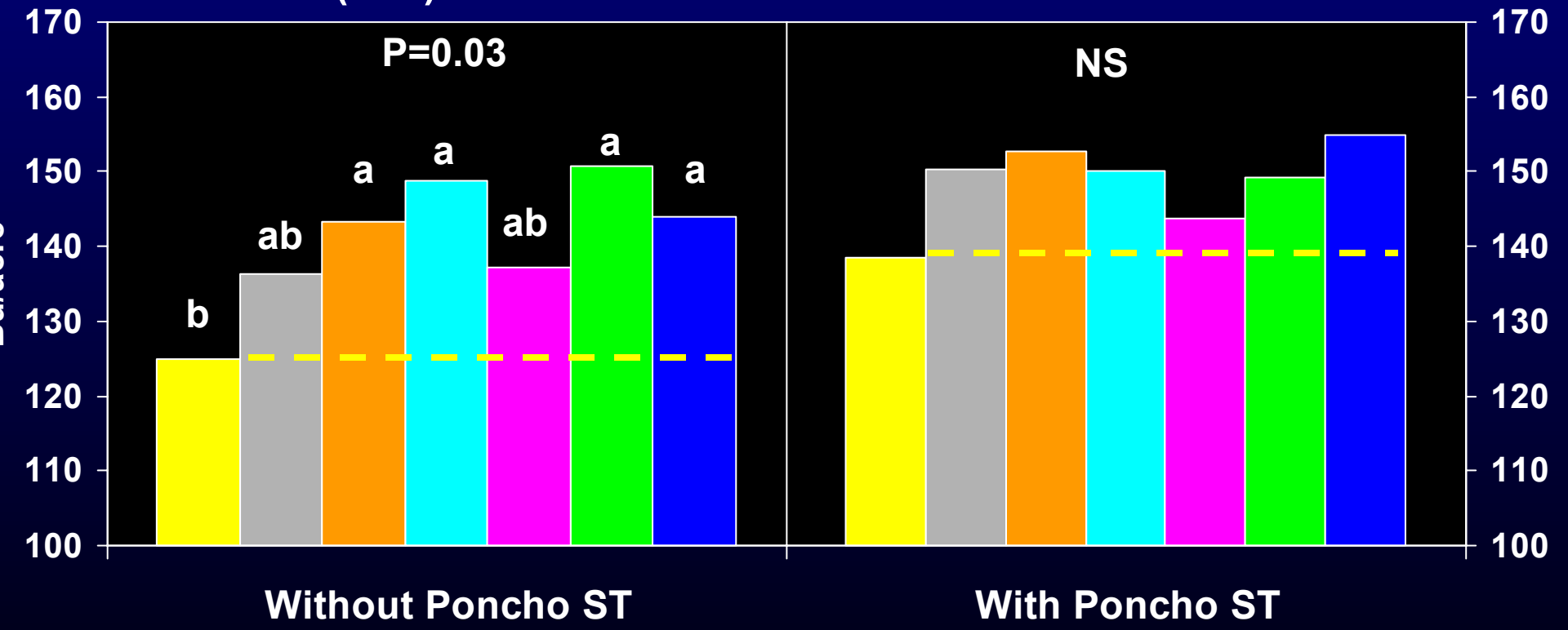
Non-treated



Photo courtesy of Chip Graham (Gustafson)

Post-Planting Insecticides + Poncho (0.25 mg ai/seed)

- Non-treated
- Aztec 2.1G (0.12¹)
- Fortress 2.5G (9.0³)
- Counter 15G (1.0¹)
- Capture 2EC (0.06¹)
- Regent 4SC (3.4²)
- Lorsban 15G (1.0¹)



¹ lb a/a
² oz/a
³ oz a/1000 row ft

At-Planting Insecticides Against Soil Insects (Field Corn)

Treatment	Rate/acre lb (AI)	App. method	Stand (no./acre)	Dead plants (#/70 ft)	Yield > UTC (bu/acre)
boncho	0.25 ¹	ST	22901bc	4.0ab	15*
boncho	0.45 ¹	ST	27342a	2.8abc	22*
boncho	0.65 ¹	ST	26365ab	2.0bc	23*
boncho	0.85 ¹	ST	24970abc	1.5c	24*
boncho	1.05 ¹	ST	26179ab	0.8c	27*
orsban 15G	1.0	IFGAP	24133bc	2.0bc	21*
on-treated	---	---	22459c	4.8a	-----
<i>(P>F)</i>			<0.01	<0.01	<0.01

¹mg a/seed

Preventative Cutworm Management



Insecticide Treatments
Pyrethroids (Any / All)





of feeding by southwestern corn borer and sugarcane borer in unfolded whorl tissue. First generation borers feed on the whorl tissue before entering stalks.

Photo: Boris Castro

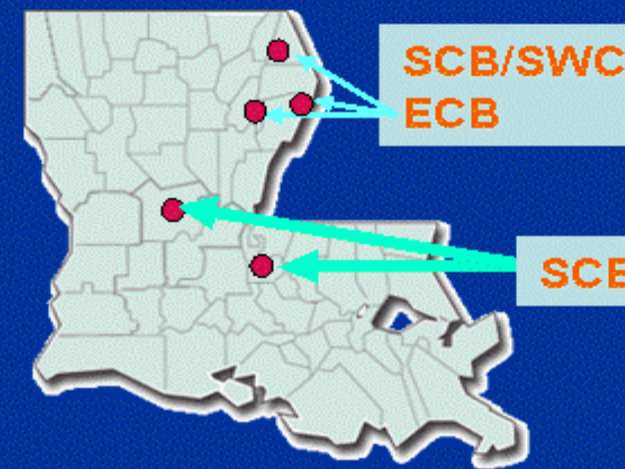


Louisiana corn borers

- Southwestern corn borer (SWCB)
- European corn borer (ECB)
- Sugarcane borer (SCB)

Year	SWCB	ECB	SCB	Total
2004	192	21	1,226	1,439
	13%	1.5%	85%	
2005	820	19	1014	1,853
	44%	1%	55%	

SCB is becoming a more common corn borer species across LA



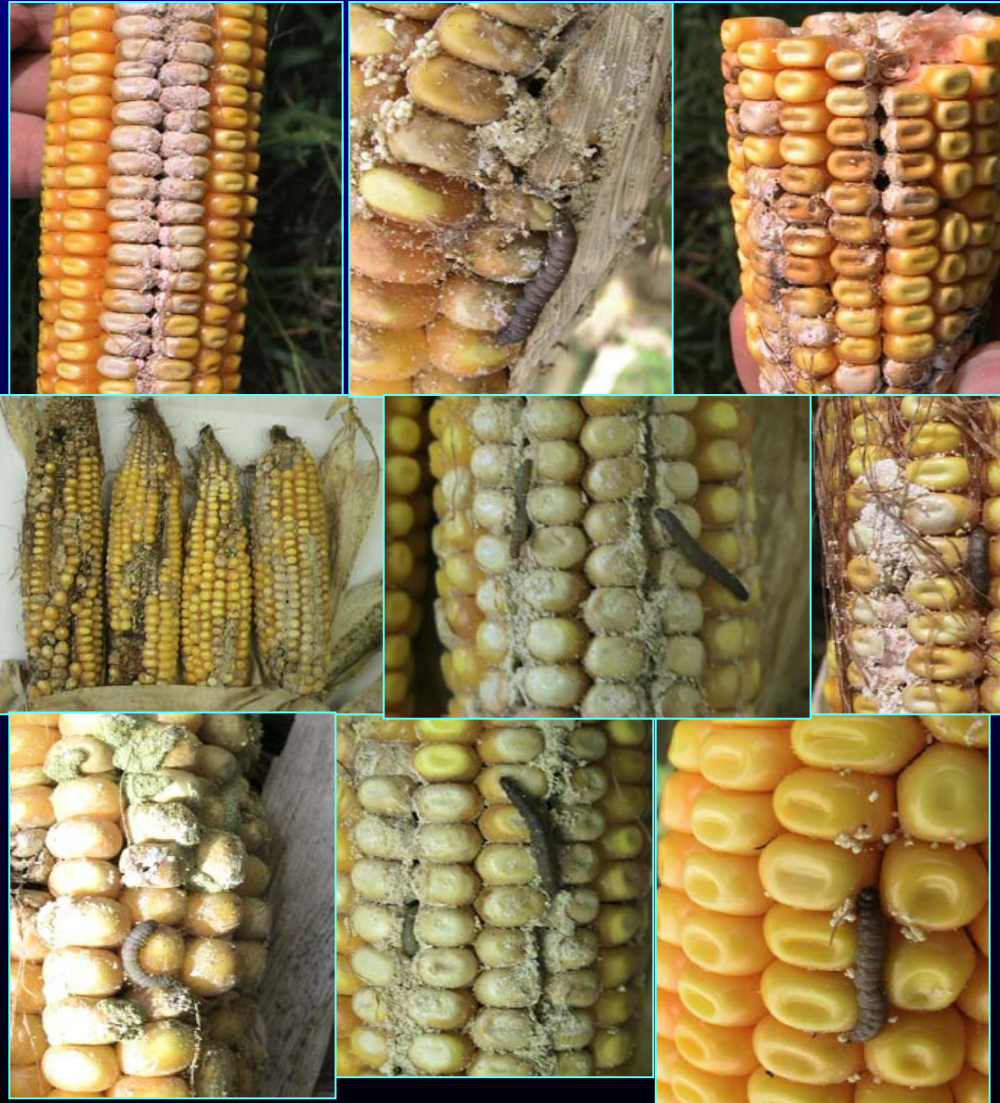
Summary

YieldGard vs Conventional Planting Date Studies 2003-2006

YieldGard-Rootworm Varieties

Ear symptoms damaged by *Moodna bisinuella*

- Introduced to the USA along with gama grass from Mexico in 1985.
- Feeds on developing grain
- Damaged ears were often infested by secondary pathogens.
- **Not Controlled with Bt.**







Poncho 250

Gaucho (0.125-1.34)
Imidacloprid

Cruiser (0.125-1.25)



A photograph of a sorghum field. The plants are in the foreground, showing large green leaves and several tall, golden-brown panicles. The background is a clear blue sky. The text is overlaid on the lower part of the image.

Sorghum Midge Management
2 Applications of Pyrethroids

Sorghum Webworm



~~Pyrethroids~~
Lannate
Tracer
Lorsban
Sevin



Winter Wheat Double-Cropping Options



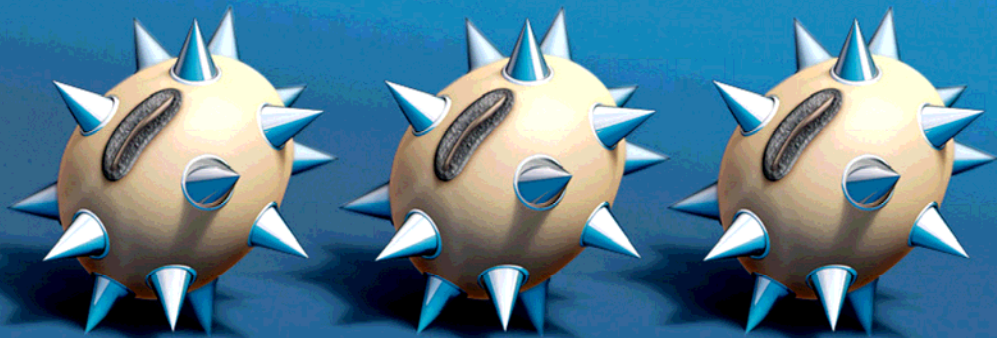
SCB Injury in Late-Planted Sorghum





Insecticide Seed Treatments (IST's) For Soybean in Louisiana



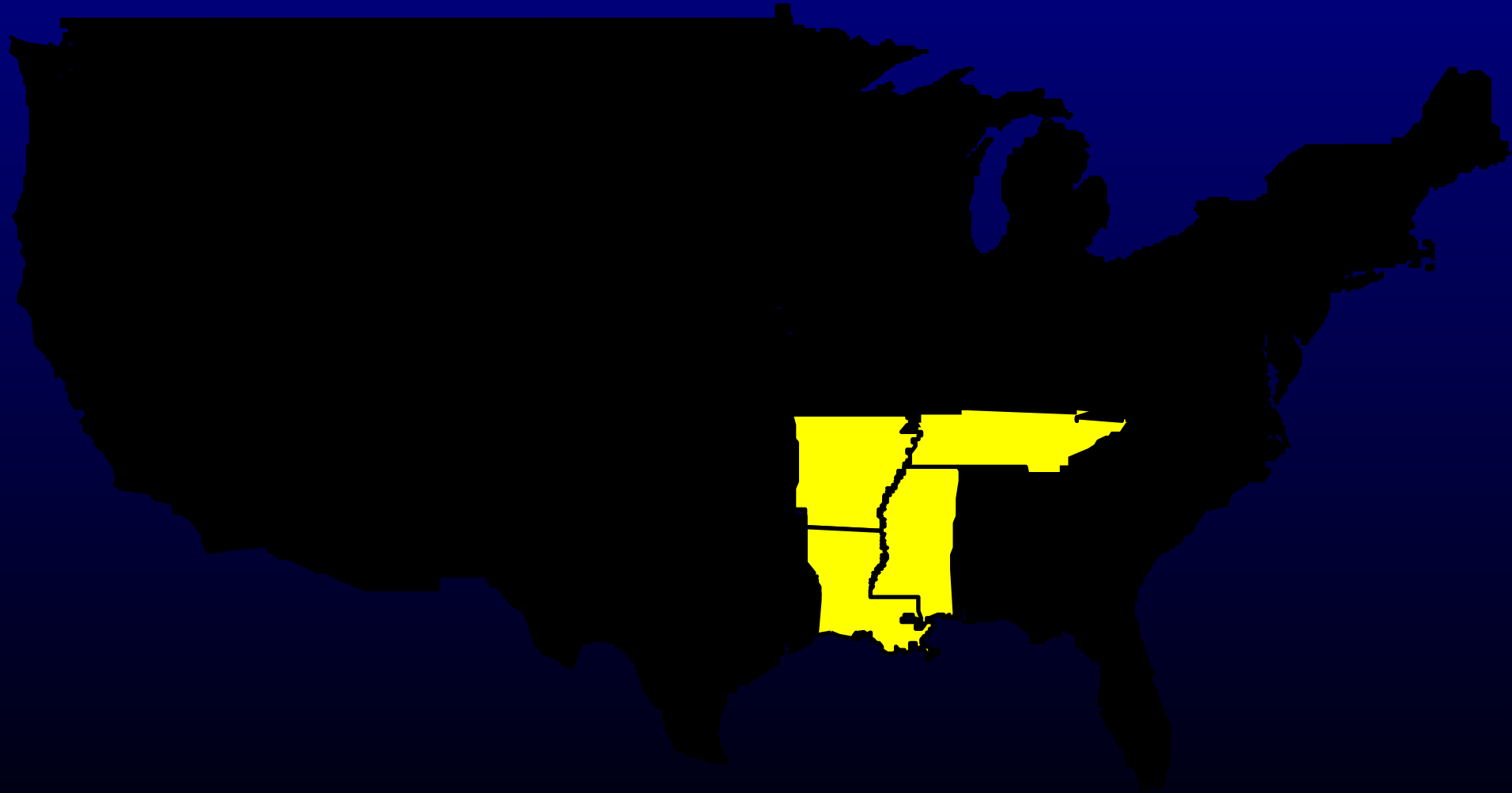


Doses/Rates for Soybean

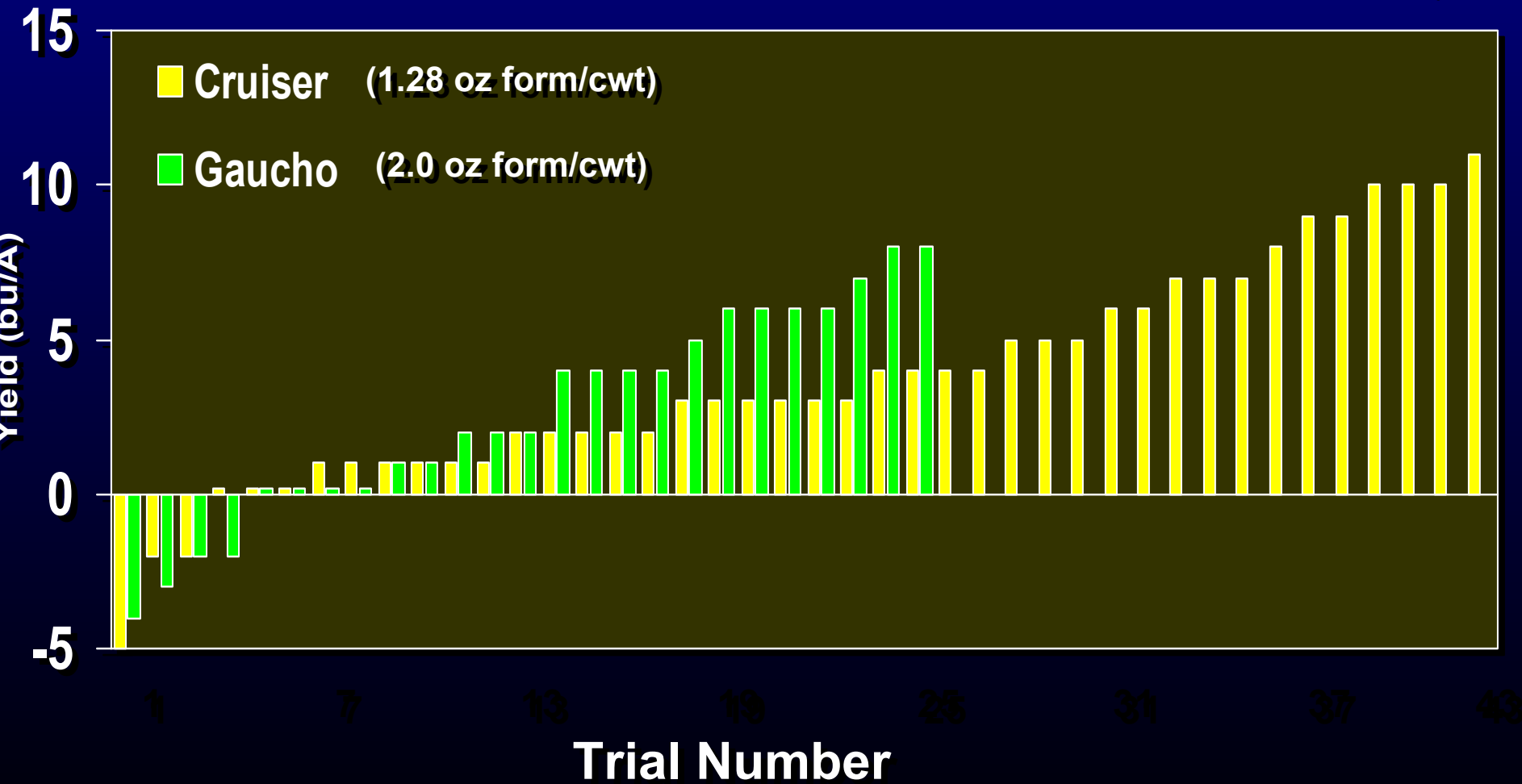
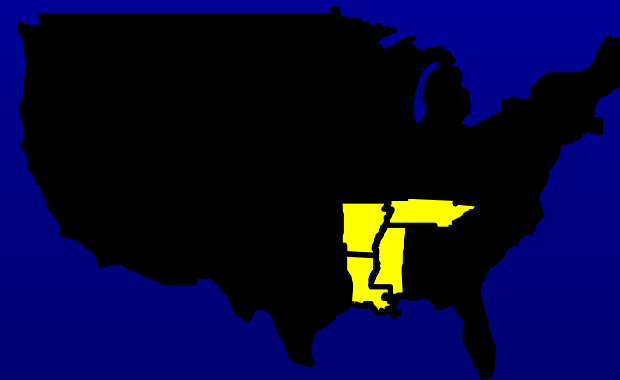
Cruiser 5F	1.28 oz [form]/cwt
CruiserMaxx	3.0 oz [form]/cwt
Gaucho 600	1.6-3.2 oz [form]/cwt

Soybean IST Performance

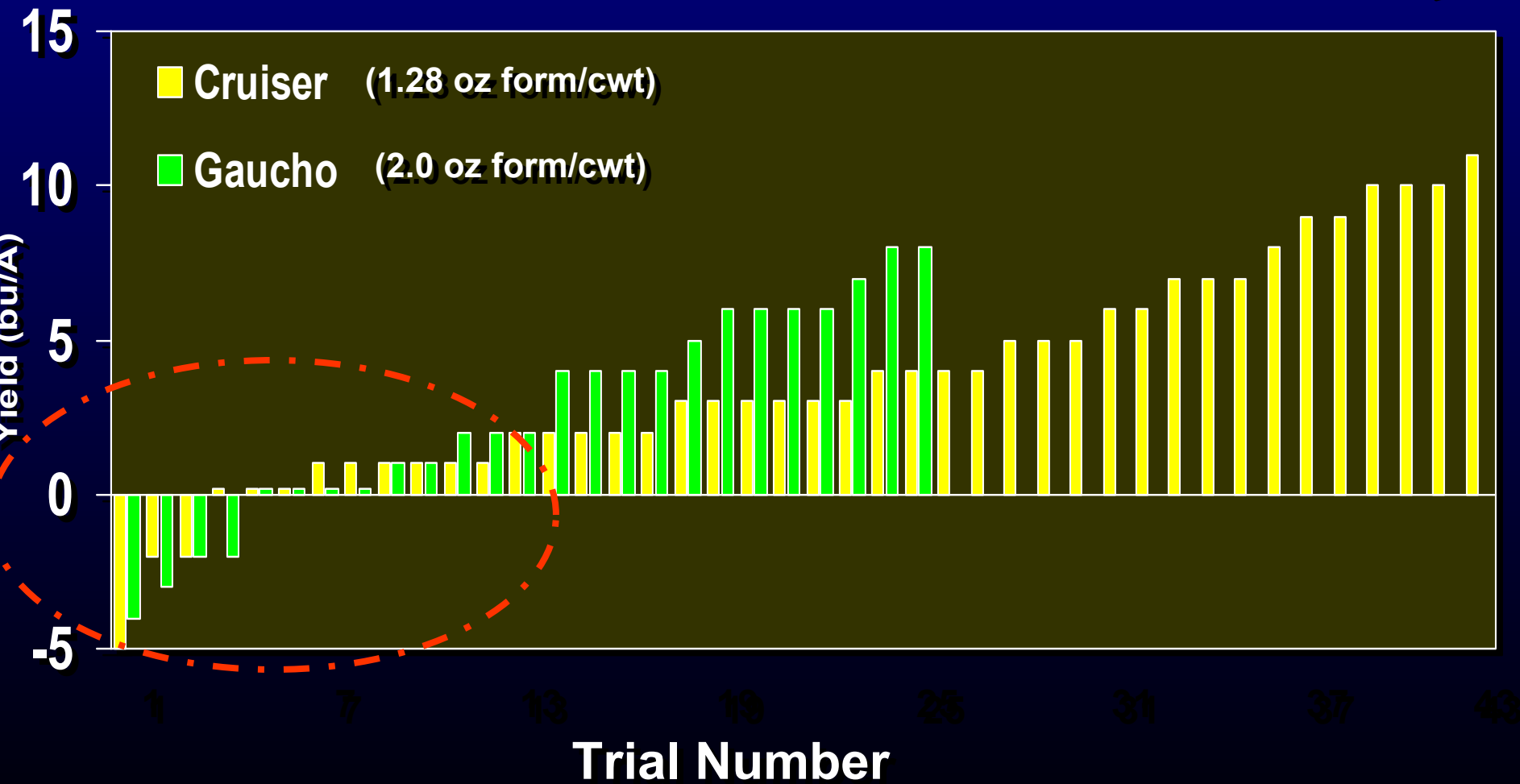
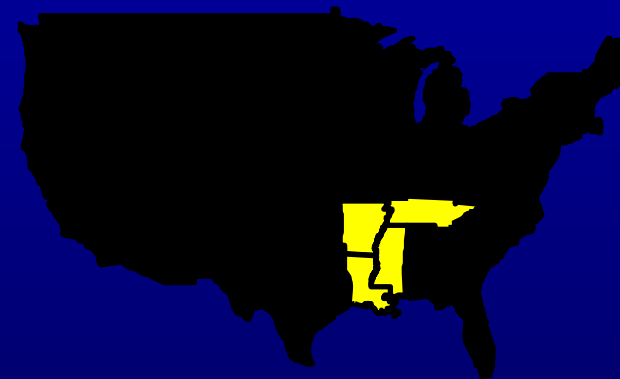
2003 - 2006



Soybean IST Performance (2003-2006)



Soybean IST Performance (2003-2006)





Control Soybean Insects – 2007

The roots and nitrogen-fixing nodules of soybean plants are damaged by several insects that inhabit the soil. This list includes beetle larvae, soybean nodule fly larvae, white grubs and wireworms, etc. No treatment thresholds have been determined yet, and control measures for this kind of damage are not recommended. **Seed treatments are currently being evaluated.**

Probability of Seed Yield Increase???



Consider Early Season Plant Stresses

- Soil Conditions For Seed Germ.
- Plant Residue
- Burn Down App. Timing
- Field History of Pests
- Field Yield Potential
- Producer Attitude For Inputs
- Risk Management

Species Composition and Identification

Successful control

Difficult control



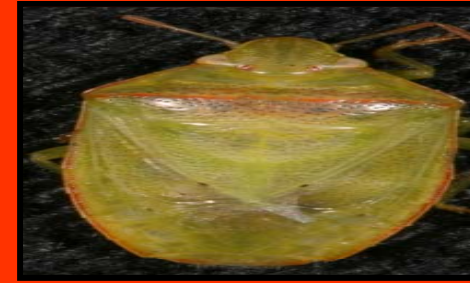
S. Green &
Green Stink Bug



Large, late-instar
nymphs



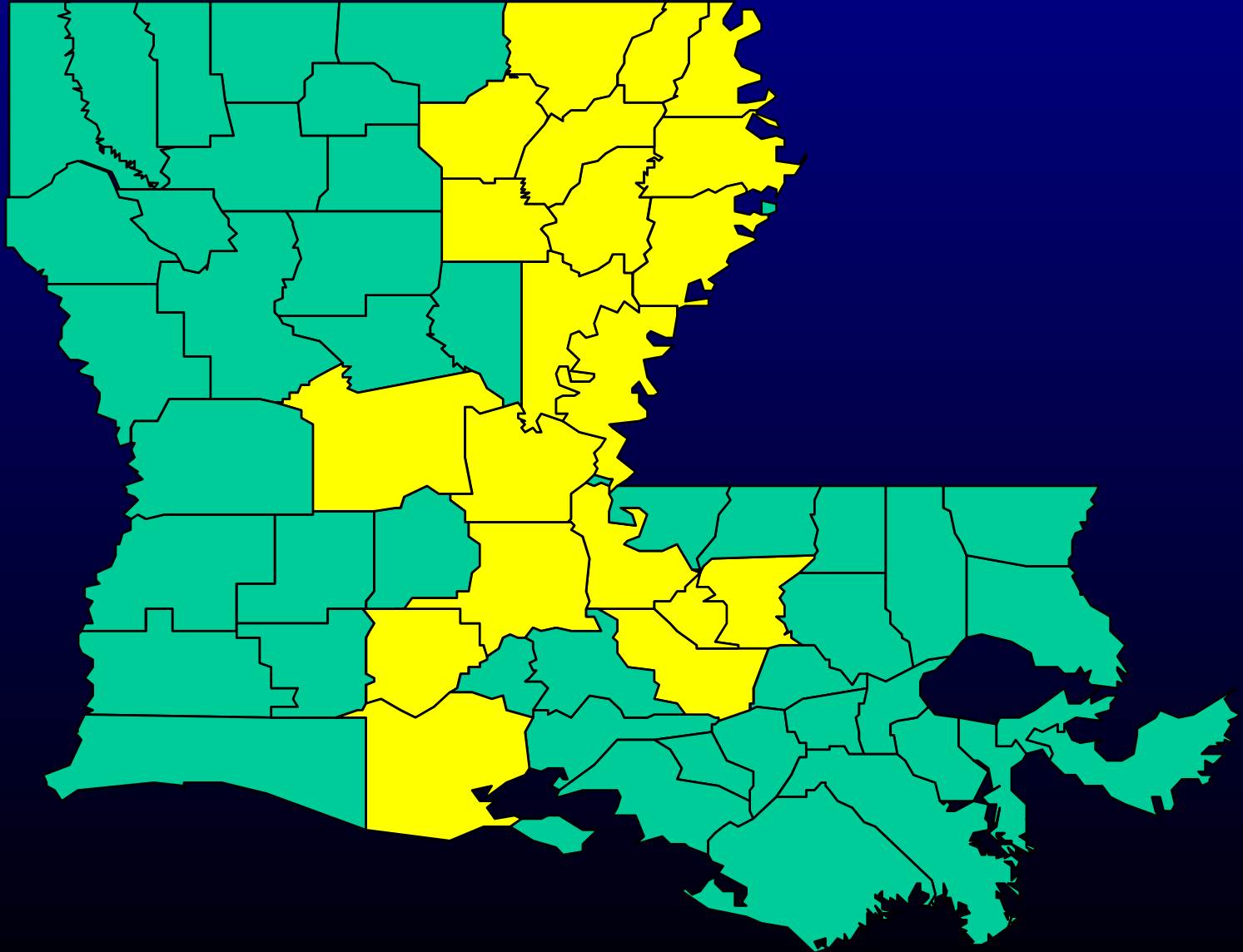
Brown Stink
Bug Spp.



Red Banded
Stink Bug

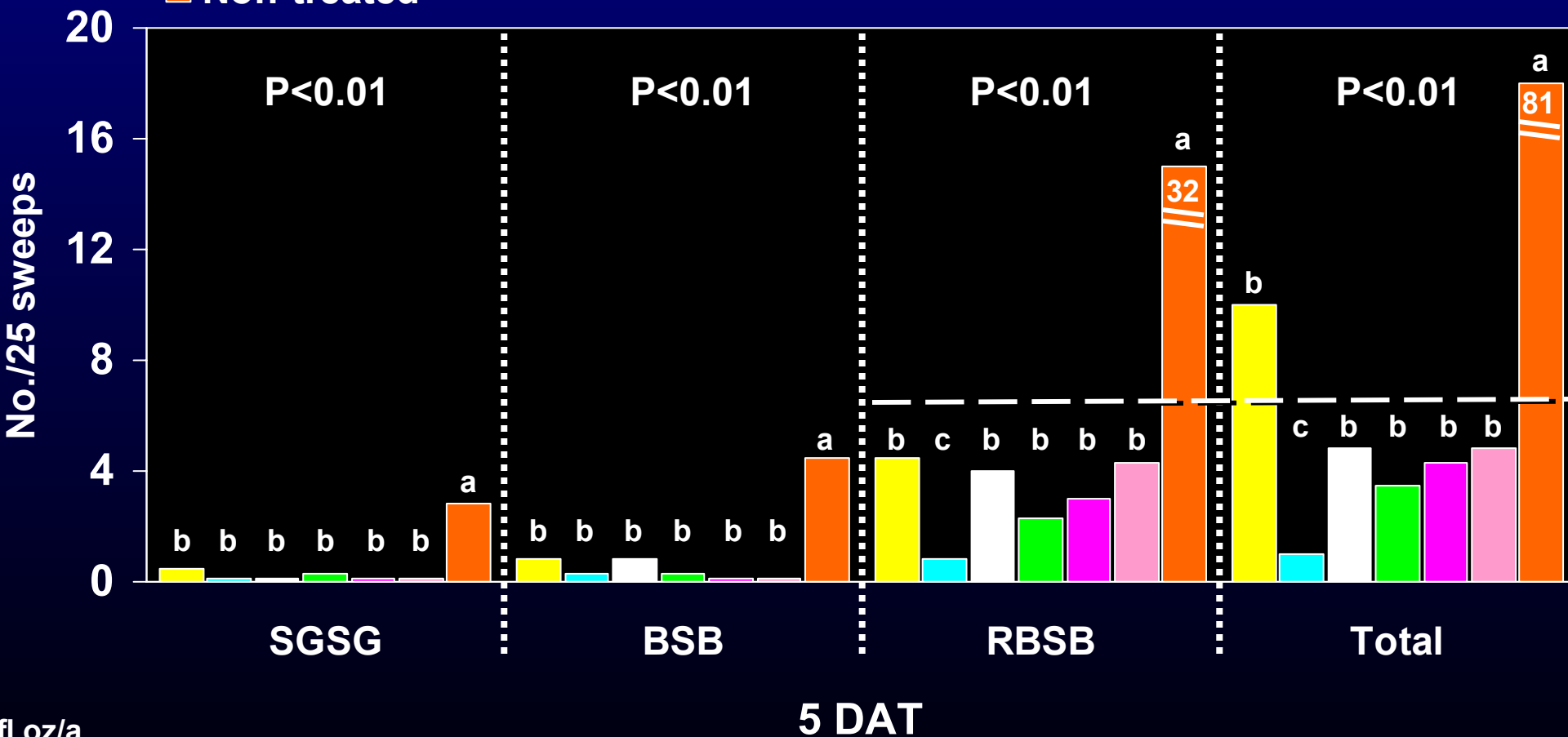
Piezodorus guildinii

2004-06 Distribution – Positive ID



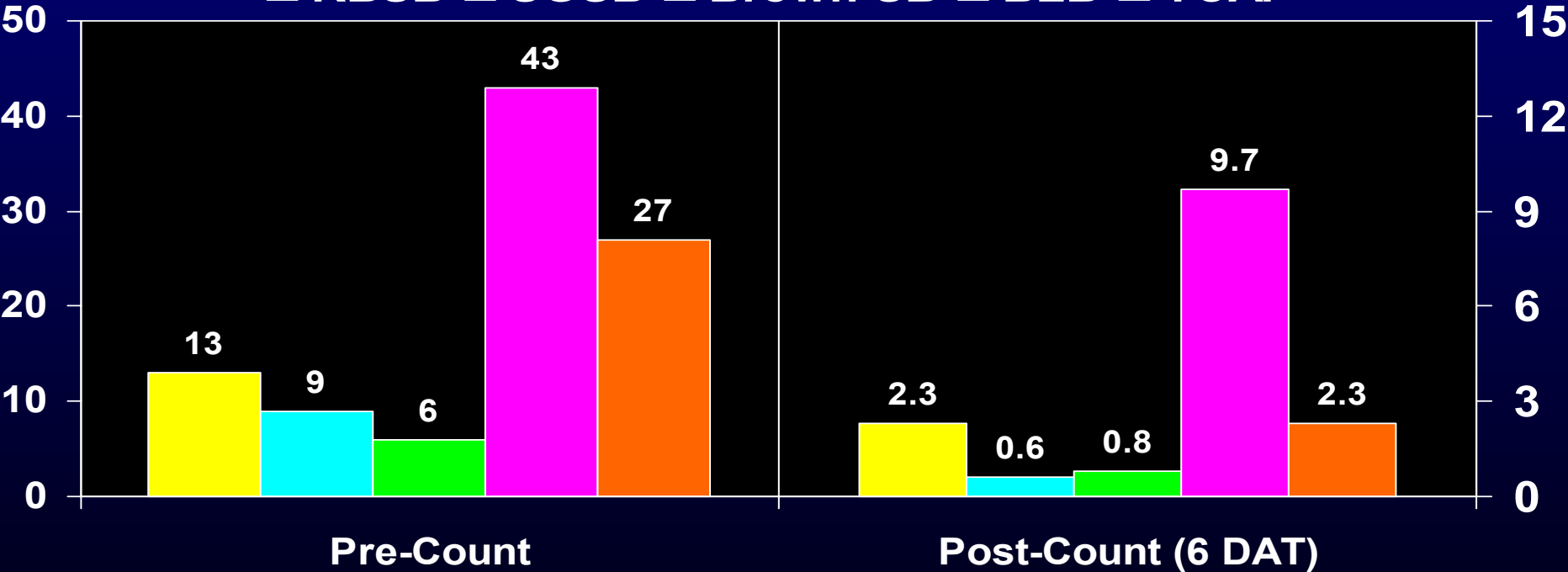
Stink Bug Control, 2006

- Karate-Z 2.08CS (2.56¹)
- Centric 40WG (2.5²)
- Discipline 2EC + Bidrin (2.5¹+ 4¹)
- Non-treated
- Engeo 2.06SC (5.0¹)
- Bidrin 4EC (8.0¹)
- SpitFire 90SP (12.8²)



Efficacy of Baythroid (1/60) + Orthene (0.5 lb) Against a Soybean Pest Complex Macon Ridge 2006 (5 DAT1)

■ RBSB ■ SGSB ■ Brown SB ■ BLB ■ TCAF



Stink Bug Recommendations - Soybean

Insecticide	Ib AI/acre	When to Treat (ET)
Cyfluthrin	0.025-0.044	After pods appear, 1 stink bug/row ft., or 24 - 36 in 100 sweeps
Methyl Parathion	0.25-0.5	
Mustang Max	0.02-0.025	
Karate-Z	0.025-0.03	
Prolex	0.0125-0.015	
Orthene (Acephate)	0.75-1.0	

Stink bug Damaged Seed

Most damaging during
pod fill

Unfilled, malformed or
shrunken pods

Aborted pods are a rare
event.....





Insecticide Treatment Termination for Stink Bugs

Treatment	Rate/acre lb (AI)	Yield (#/60 ft)	Moisture (percent)	100 seed wt. (grams)
Non-treated	----	4.7c	24.8a	8.9b
thene (R5 – seed pod)	0.8	8.8b	16.9b	10.6b
thene (R6 – full pod)	0.8	11.8a	15.2b	12.8a
thene (R7 – 1 brown pod)	0.8	11.3a	15.3b	13.3a
($P>F$)		<0.01	<0.01	<0.01

Started Sprays at Soybean Growth Stage – R4.

Treated Through R7



Non-Treated





Louisiana Soybean and Grain Promotion Board



Bean Leaf Beetle



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