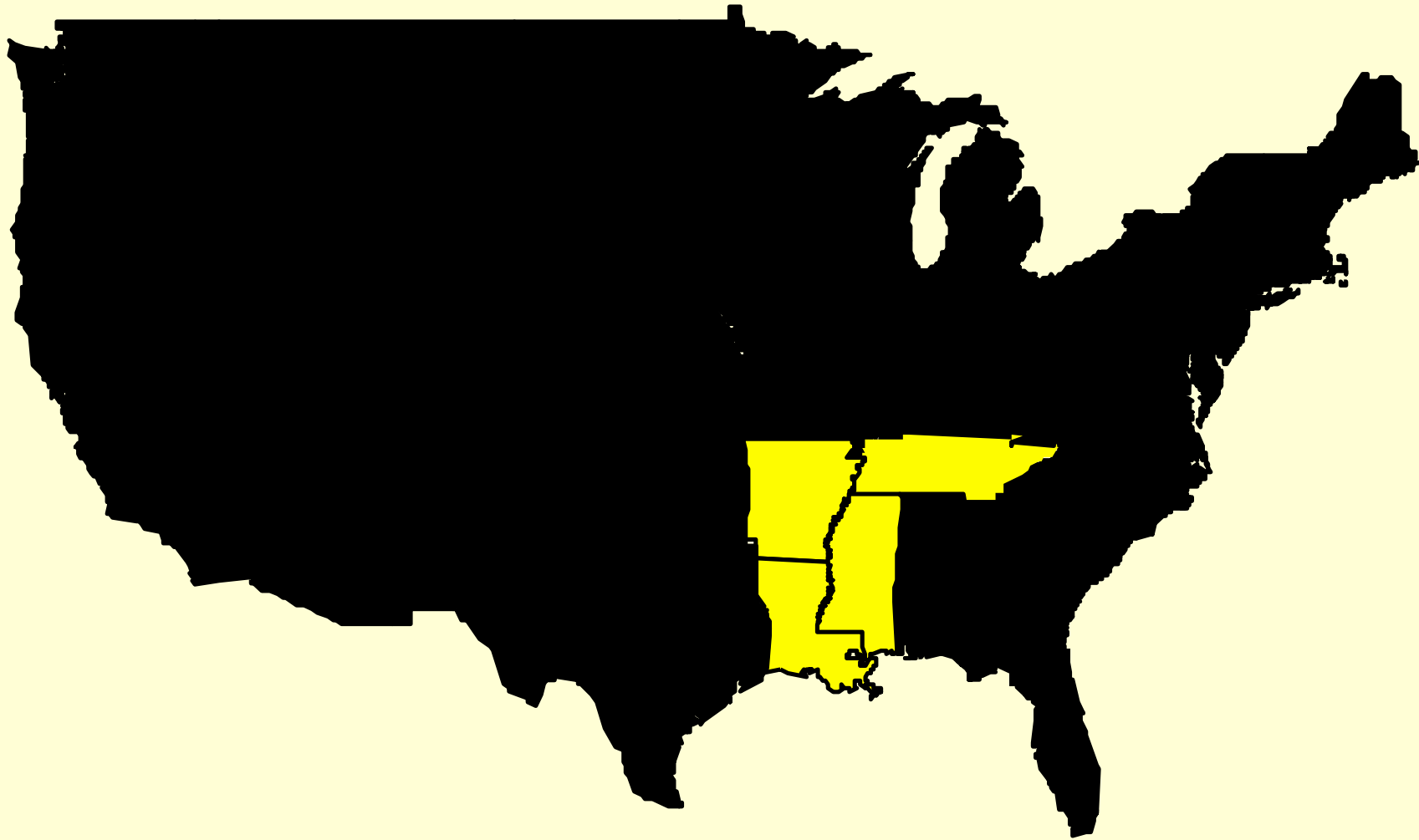


Soybean Insect Management Crop College 2007

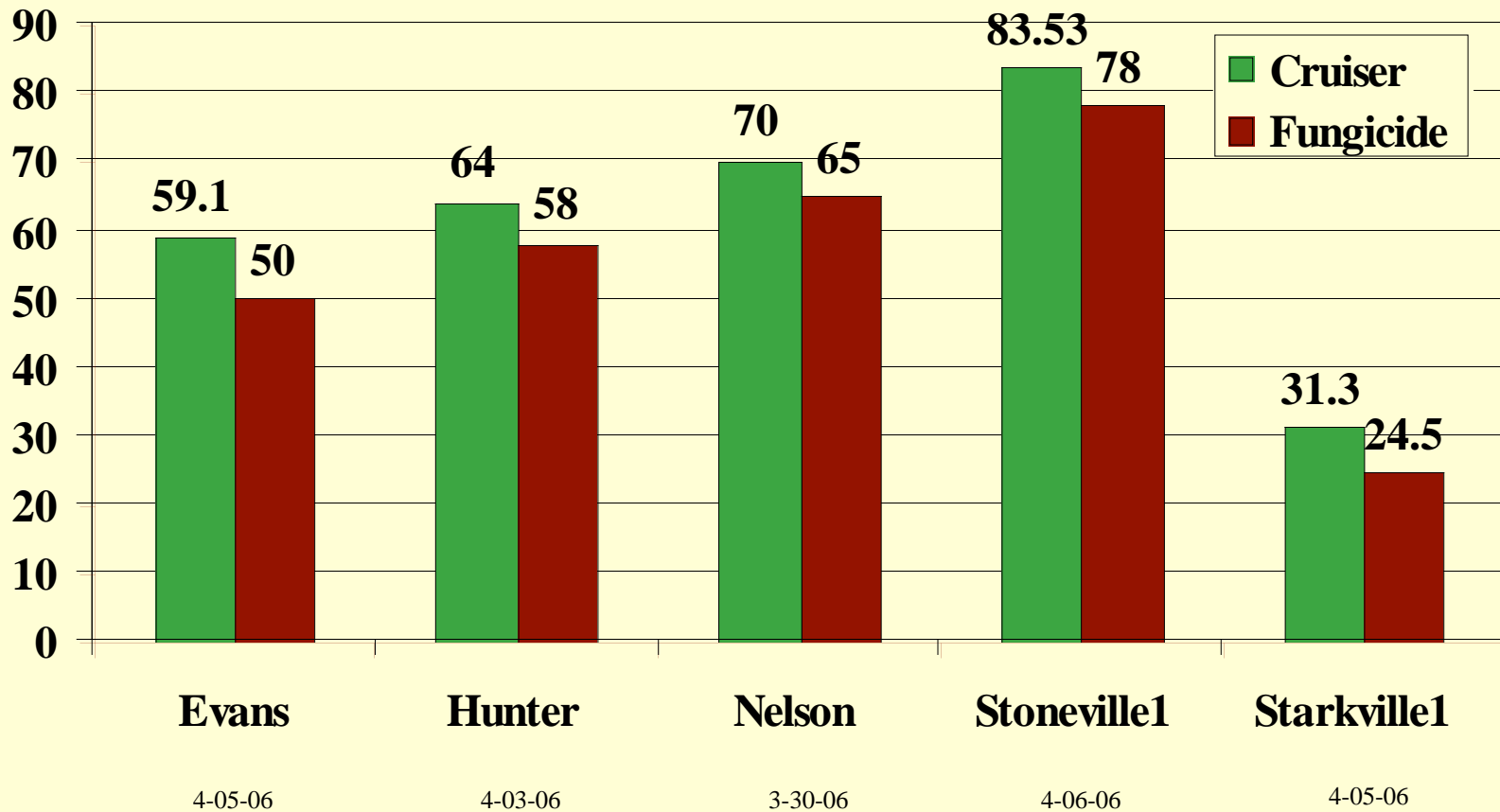
**Angus Catchot
Mississippi State University**



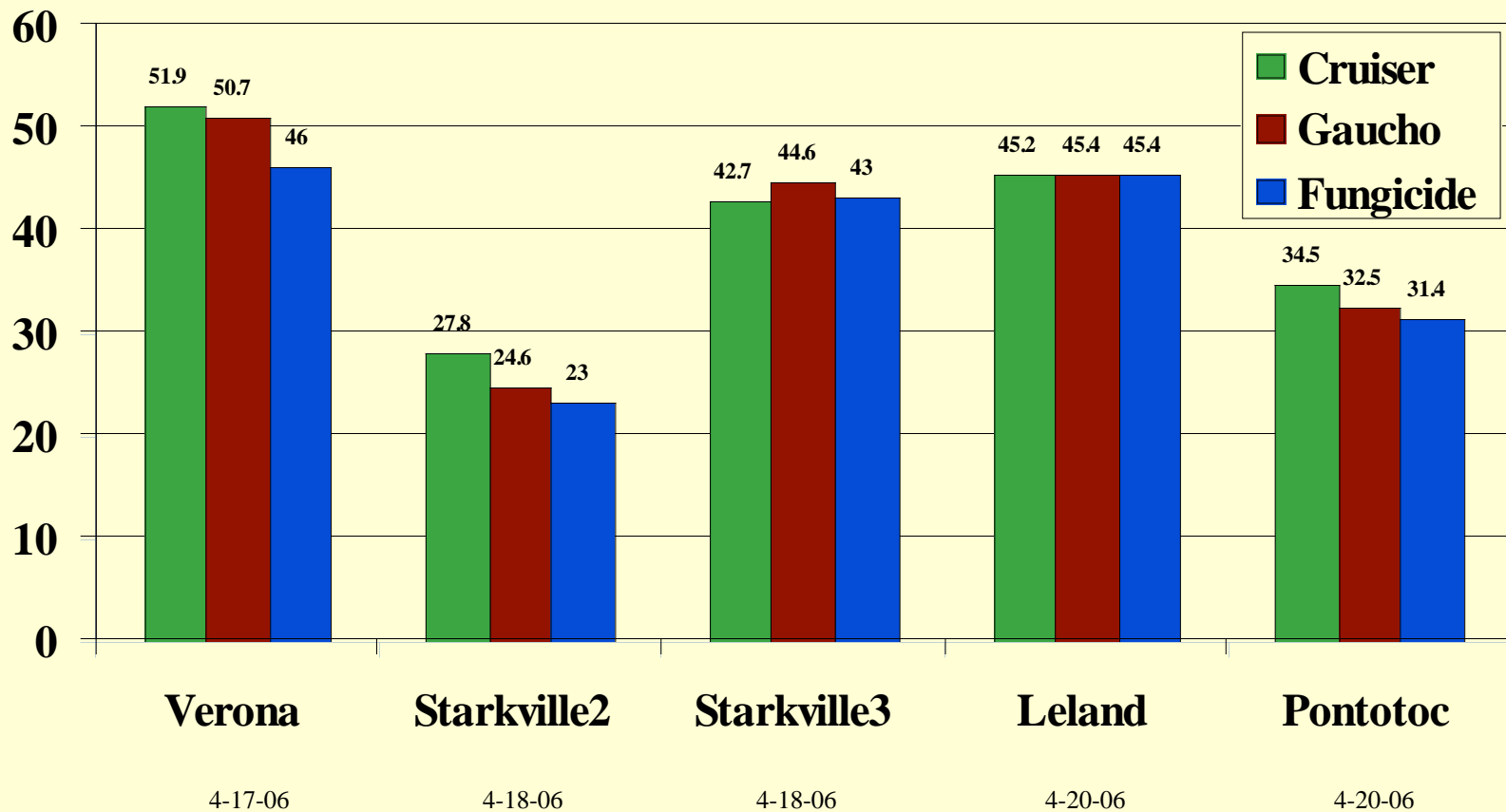
Soybean IST Performance 2003 - 2006



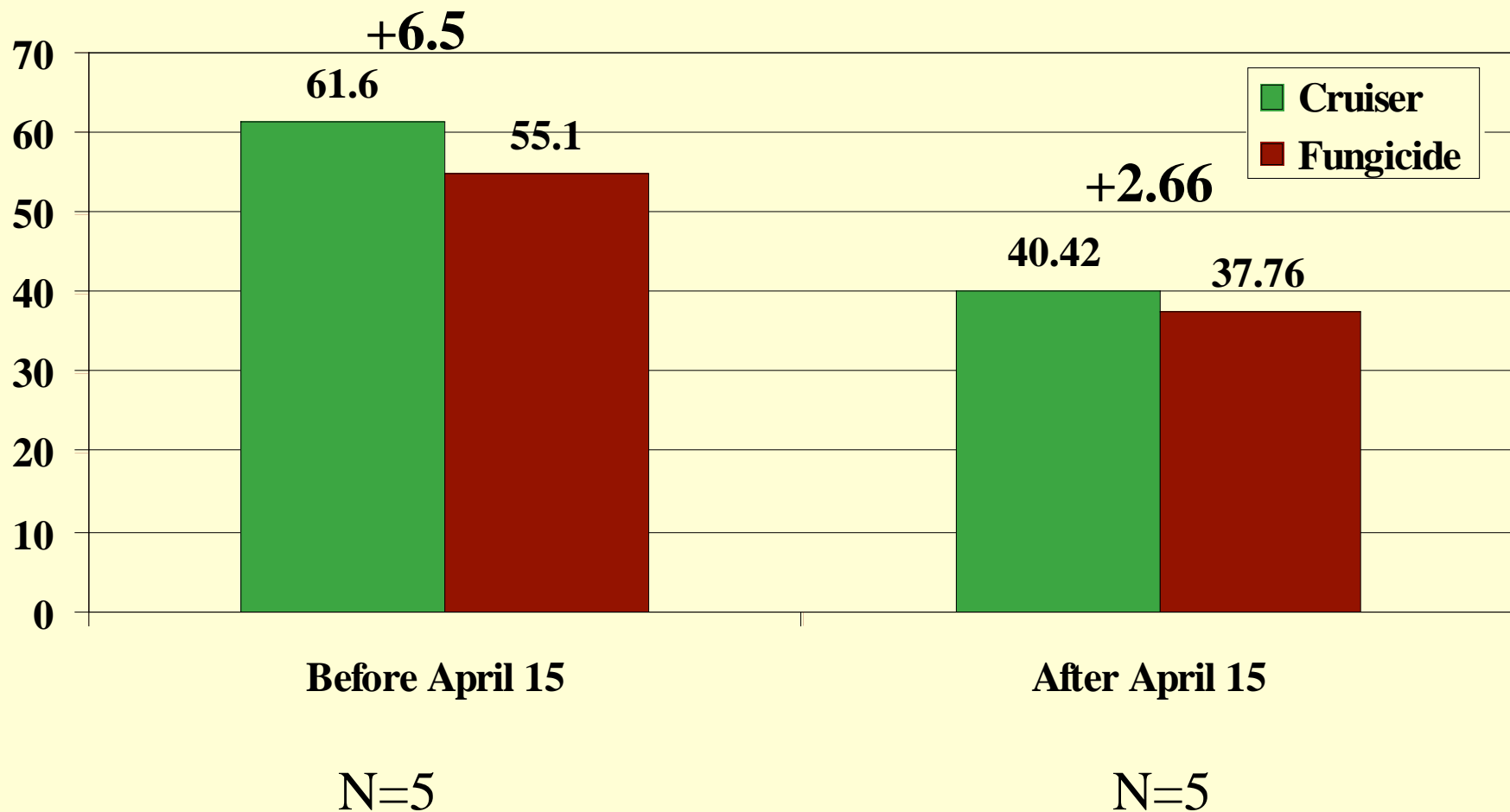
Cruiser Soybean Tests 2006



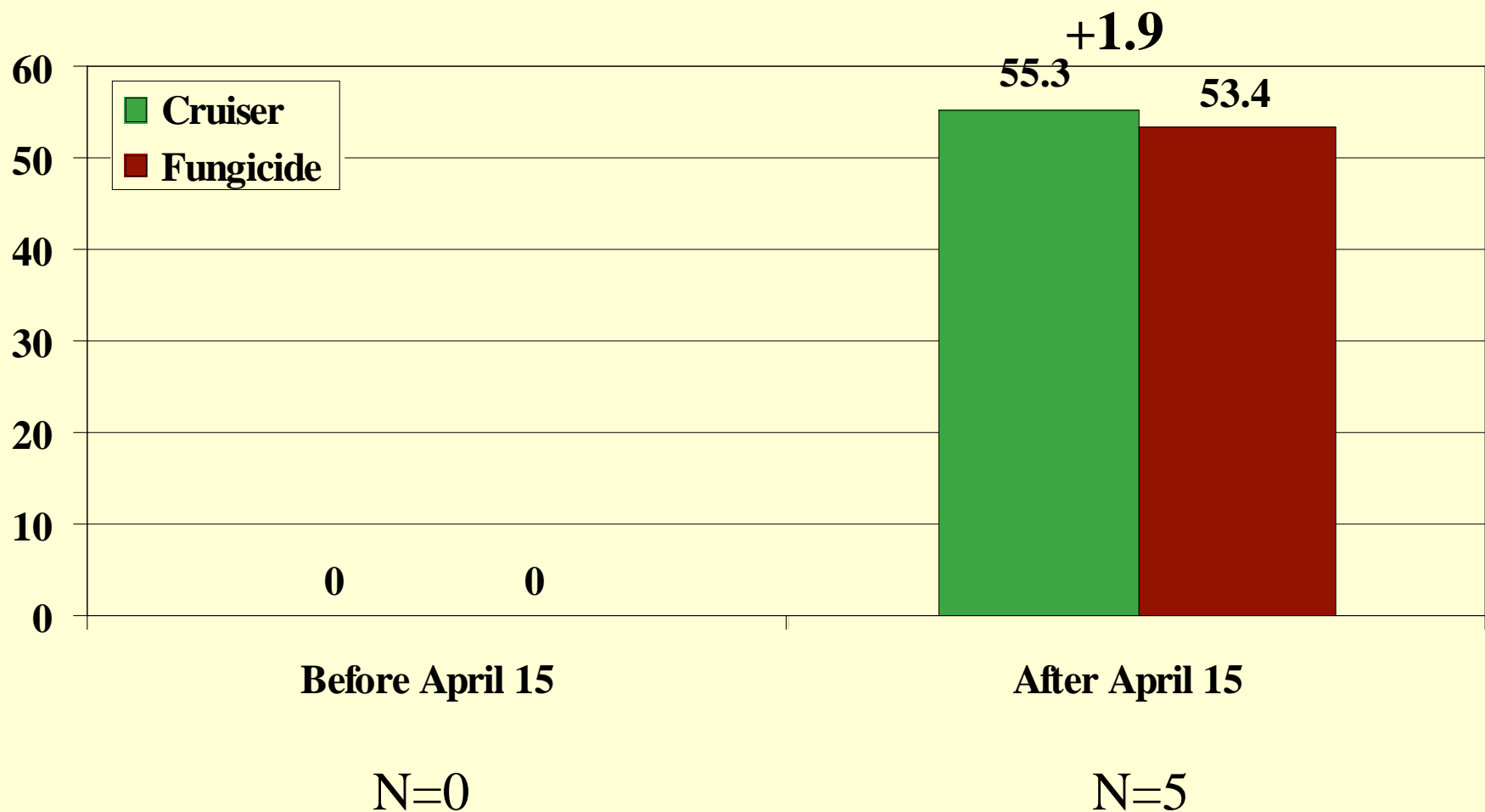
Cruiser and Gaucho Soybean Tests 2006



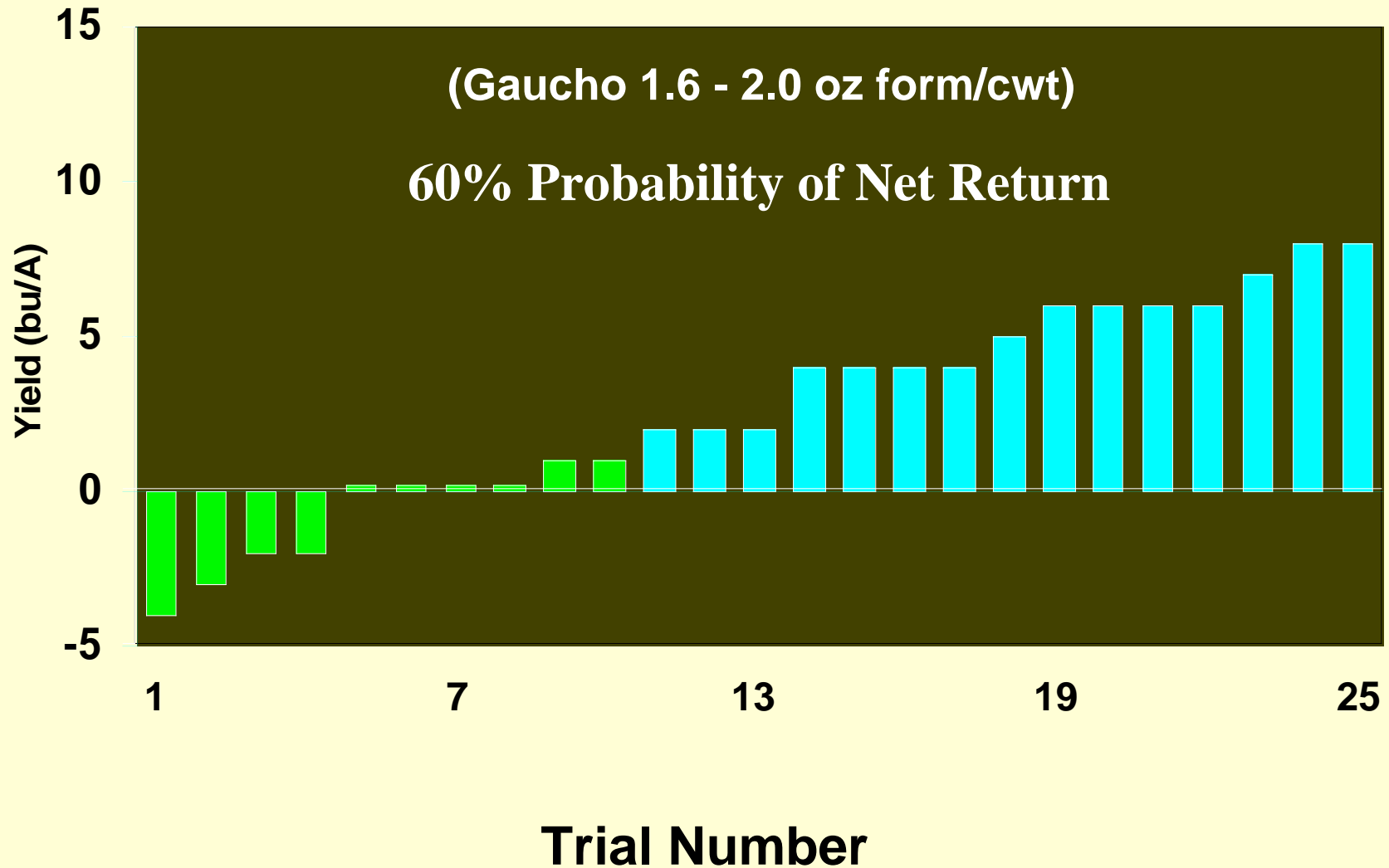
2006 Cruiser Soybean Seed Treatment Summary



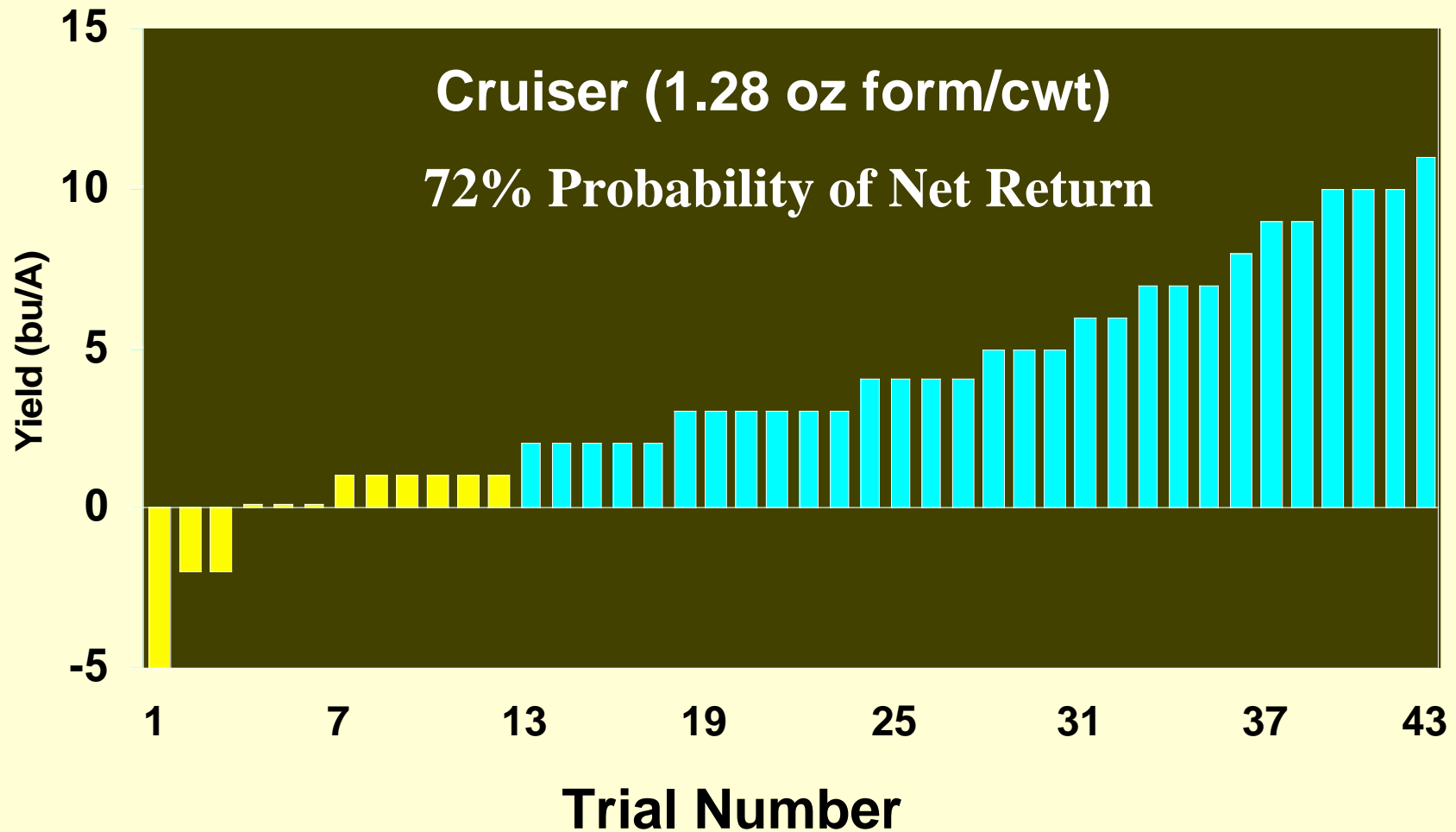
2005 Cruiser Soybean Seed Treatment Summary



Soybean IST Performance Mid-South 2003-2006



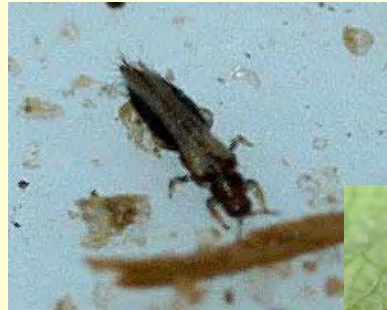
Soybean IST Performance Mid-South 2003-2006







Related to Plant Health - Insect Pest Complex



Defoliation Thresholds for Soybean

Pre-bloom

- **Foliage feeding- 35% prior to bloom**



Post-bloom

- **Foliage feeding- 20% when plants are blooming through filling pods**



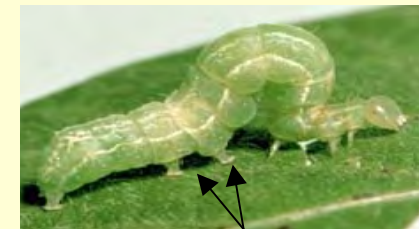
Bean Leaf Beetle

- **Several different color phases**
- **Damage caused by adults feeding on the foliage and occasional pod feeding**
- **Larvae feed on roots below the soil surface**
- **Threshold is defoliation before bloom and 2/sweep or 50/25 sweeps after bloom**



**Photographs taken by [Dr. Marlin E. Rice](#), Iowa State University Department of Entomology*

Foliage Feeding Caterpillars



<u>Drop Cloth</u> #/1 ft. of row	<u>Sweep net</u> #/25 Sweeps
<u>Before Bloom</u> 8	<u>Before Bloom</u> 75
<u>After Bloom</u> 4	<u>After Bloom</u> 38

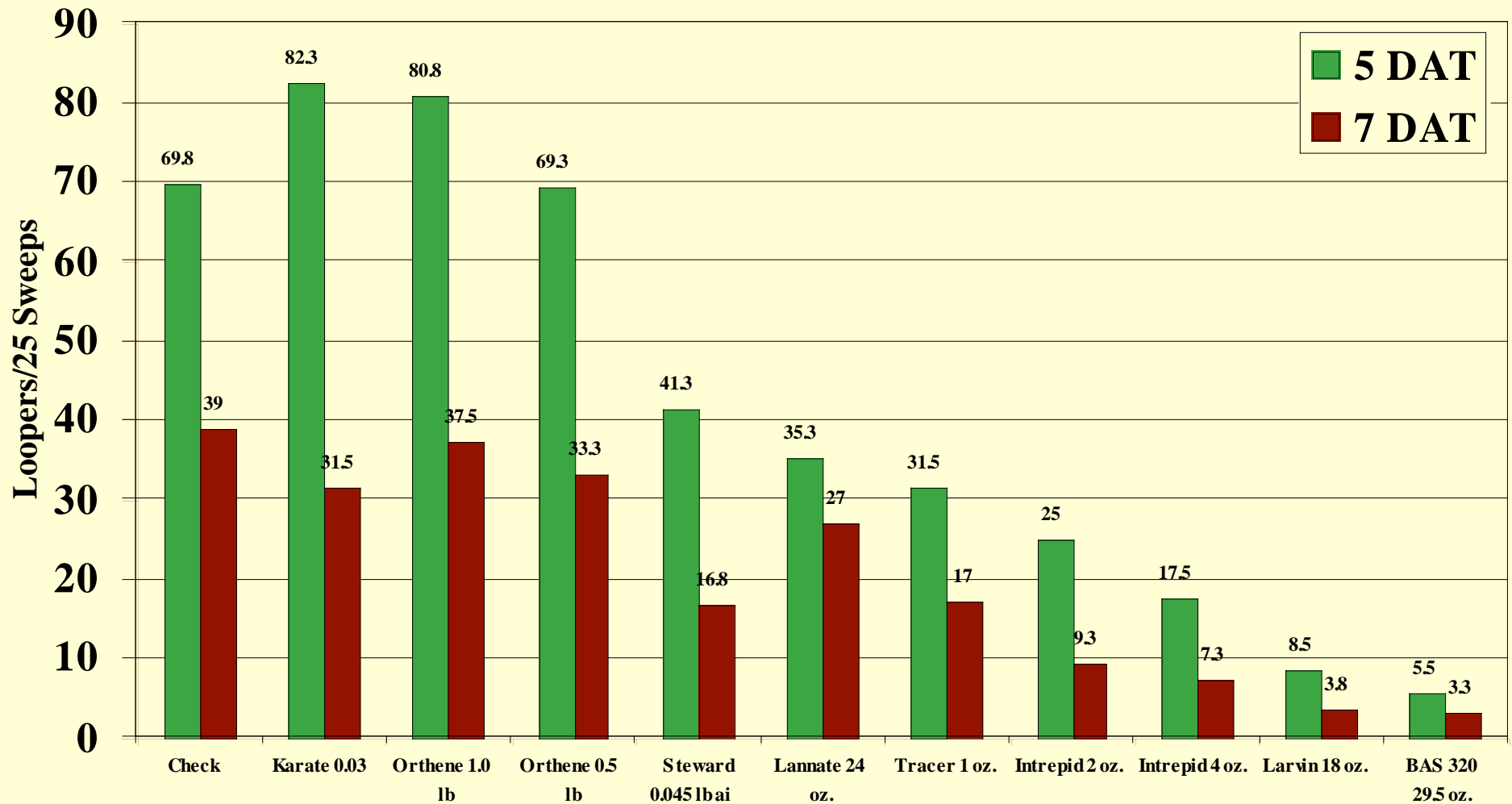
<u>Drop Cloth</u> #/1 ft. of row	<u>Sweep net</u> #/25 Sweeps
<u>Before Bloom</u> 8	<u>Before Bloom</u> 75
<u>After Bloom</u> 4	<u>After Bloom</u> 38

<u>Drop Cloth</u> #/1 ft. of row	<u>Sweep net</u> #/25 Sweeps
<u>Before Bloom</u> 8	<u>Before Bloom</u> 38
<u>After Bloom</u> 4	<u>After Bloom</u> 19

- When multiple species are present before bloom – Use threshold of 75 caterpillars per 25 sweeps and count each looper twice
- When multiple species are present after bloom – Use threshold of 38 caterpillars per 25 sweeps and count each looper twice

2006 Soybean Looper Trial

(Looper Trial) Greenwood, MS 8/31/06





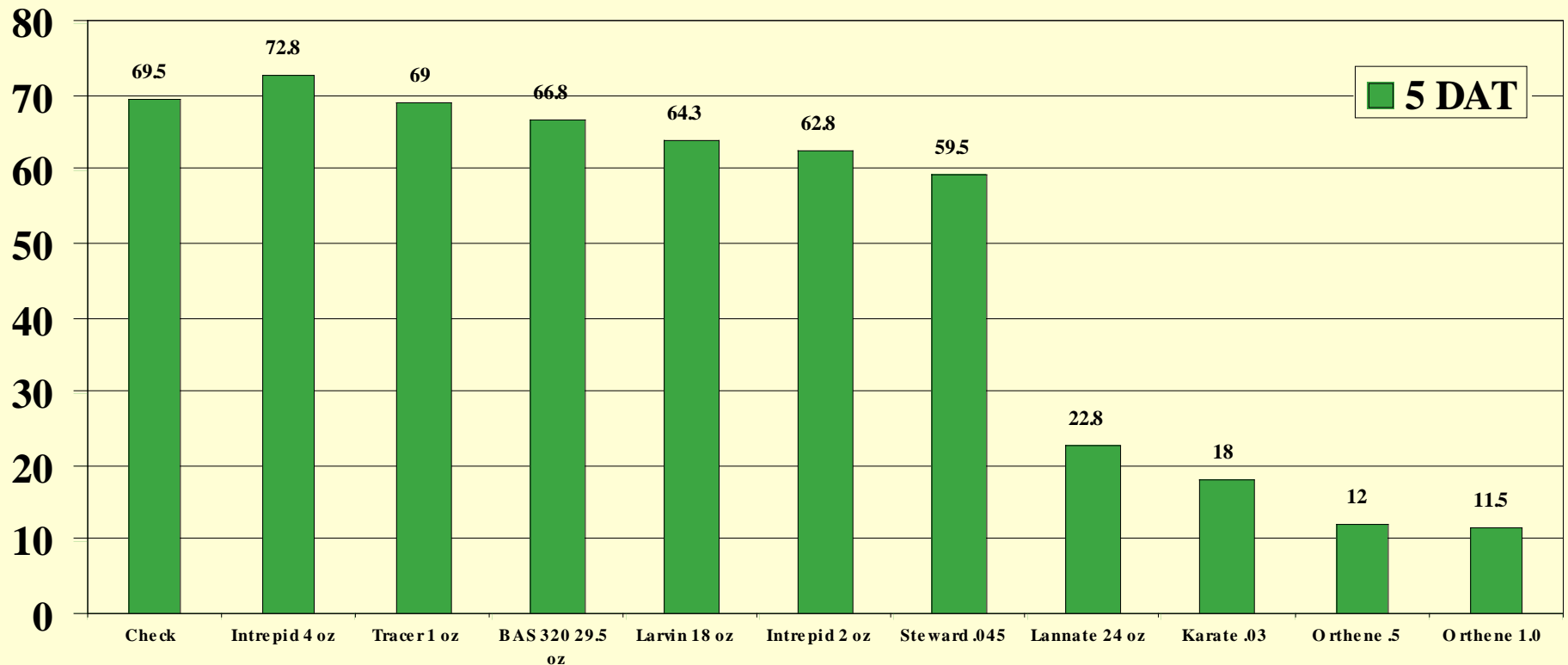
TCAH



TCAH Efficacy in Soybean 5

(Looper Trial) Greenwood, MS 8/31/06

TCAH/25 Sweeps



Stink Bugs



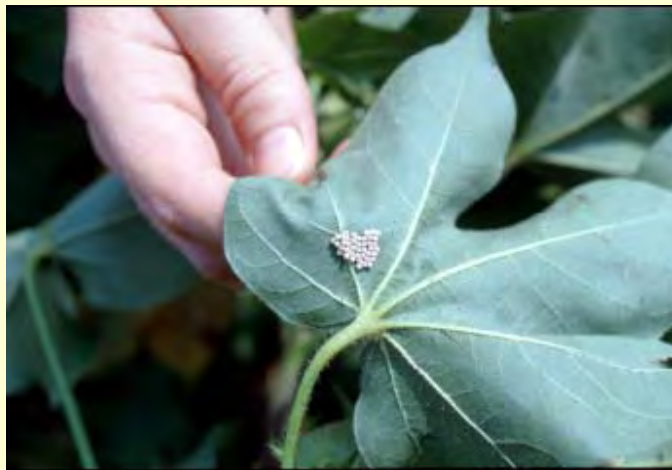
Stink bug Identification



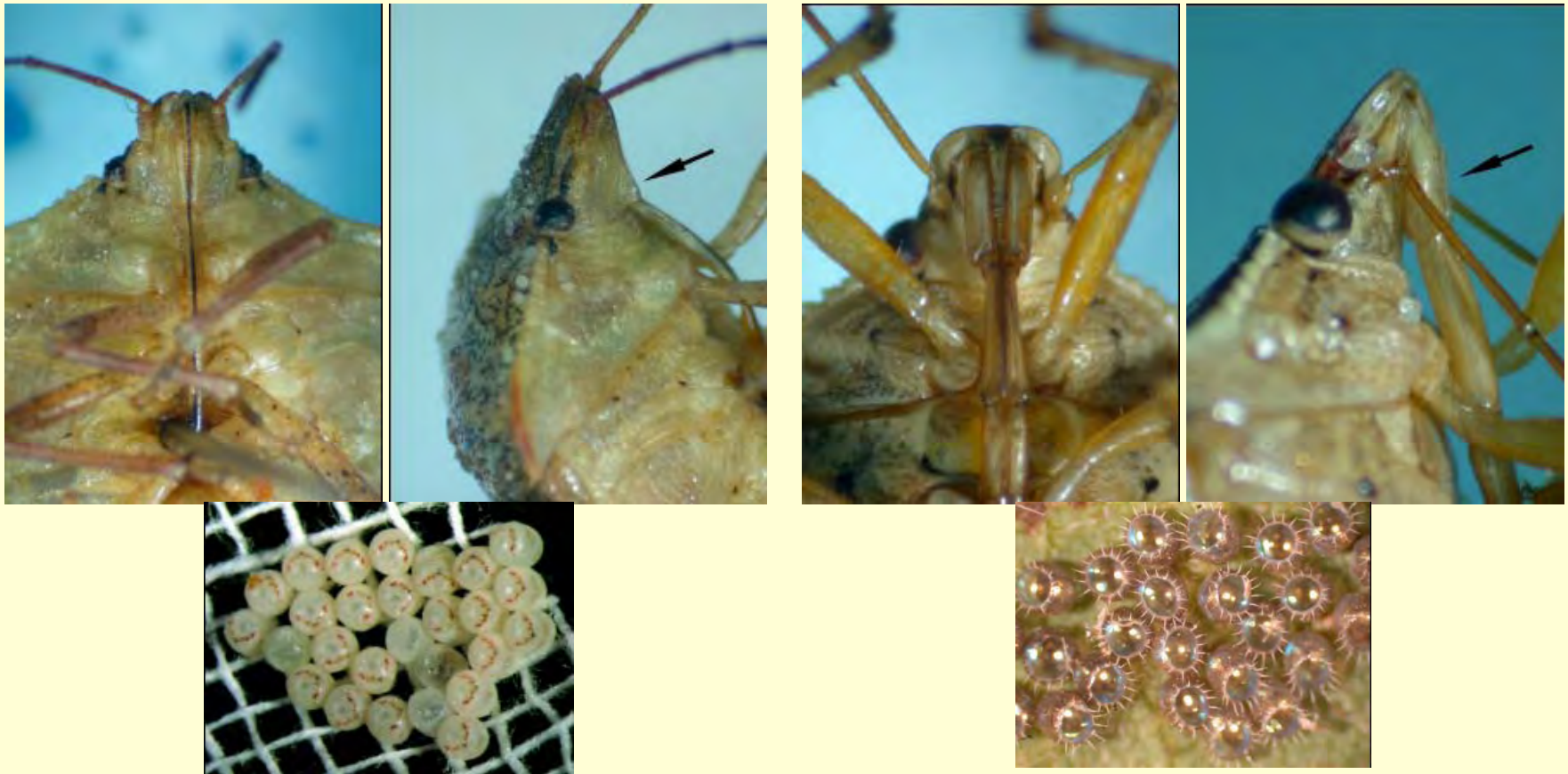
Green Stink bug



Southern Green Stink bug



Brown Stink Bug vs. Predacious Bug



***From: (EB 158) Identification and Management of Common Boll-Feeding Bugs in Cotton**

Jeremy K. Greene, C. Scott Bundy, Phillip M. Roberts and B. Roger Leonard

Redshoulderd Stink Bug

(Thyanta accerra)



***From: (EB 158) Identification and Management of Common Boll-Feeding Bugs in Cotton**

Jeremy K. Greene, C. Scott Bundy, Phillip M. Roberts and B. Roger Leonard

Redbanded Stink Bug (*Piezodorus guildinii*)



*From: (EB 158) Identification and Management of Common Boll-Feeding Bugs in Cotton

Jeremy K. Greene, C. Scott Bundy, Phillip M. Roberts and B. Roger Leonard

Stink bug Damaged Seed



Soybean Discount Schedule

Soybean Discount Schedule					
Test Weight	Per Bus	% Moisture	% of Gross Weight	Damage	Per Bus
54 lbs or more	0	13.1 - 13.5	1.00%	2.0 or less	0
53.9 - 53.0	1	13.6 - 14.0	2.00%	2.1 - 3.0	2
52.9 - 52.0	2	14.1 - 14.5	3.00%	3.1 - 4.0	5
51.9 - 51.0	3	14.6 - 15.0	4.00%	4.1 - 5.0	8
50.9 - 50.0	4	15.1 - 15.5	5.00%	5.1 - 6.0	11
49.9 - 49.0	5	15.6 - 16.0	6.00%	6.1 - 7.0	15
		16.1 - 16.5	7.20%	7.1 - 8.0	19
		16.6 - 17.0	8.40%	8.1 - 9.0	23
		17.1 - 17.5	9.60%	9.1 - 10.0	29
		17.6 - 18.0	10.80%		
Under 49lbs subject to rejection or such discounts as agreed upon by Buyer and Seller		Over 18% moisture subject to rejection or 1.5% each 0.5%		Over 10% damage subject to rejection or such discounts as agreed upon by Buyer and Seller.	

Heat Damage will be discounted in addition to total damage at the rate of 2 cents from 0.3% to 0.5%. Heat damage from 0.6% to 1.0% will be discounted at a rate of 3 cents for each additional 0.5% above 0.5%. Heat damage above 1.0% will be discounted at the rate of 4 cents for each additional 0.5%. Heat Damage in excess of 3% is subject to rejection or such discounts as agreed upon by Buyer and Seller.

Foreign Material - All foreign material in excess of 1% to be deducted from gross weight.

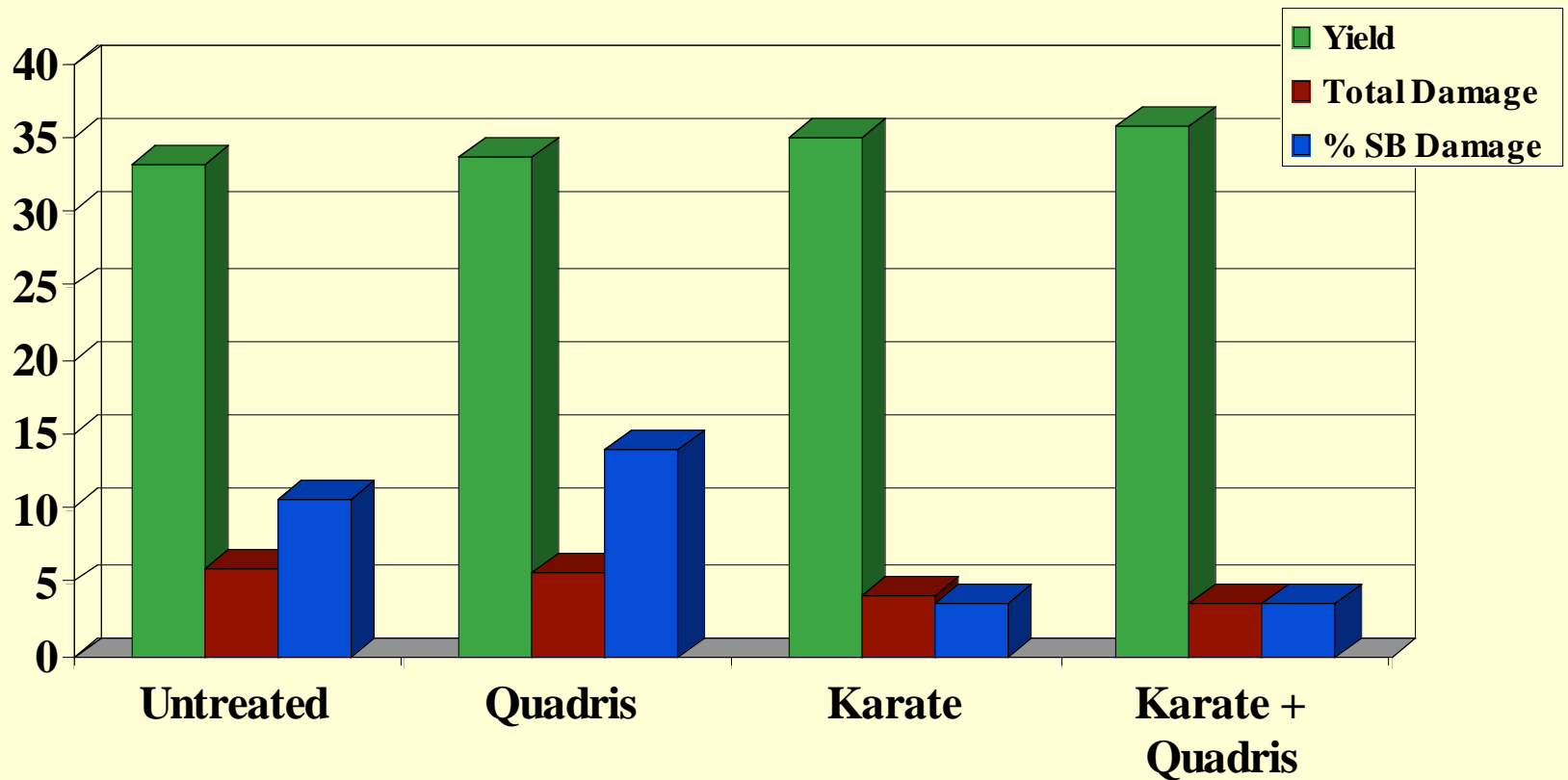
Splits in excess of 20% will be discounted 0.25 cents for each .05% in excess of 20%

Special Discounts

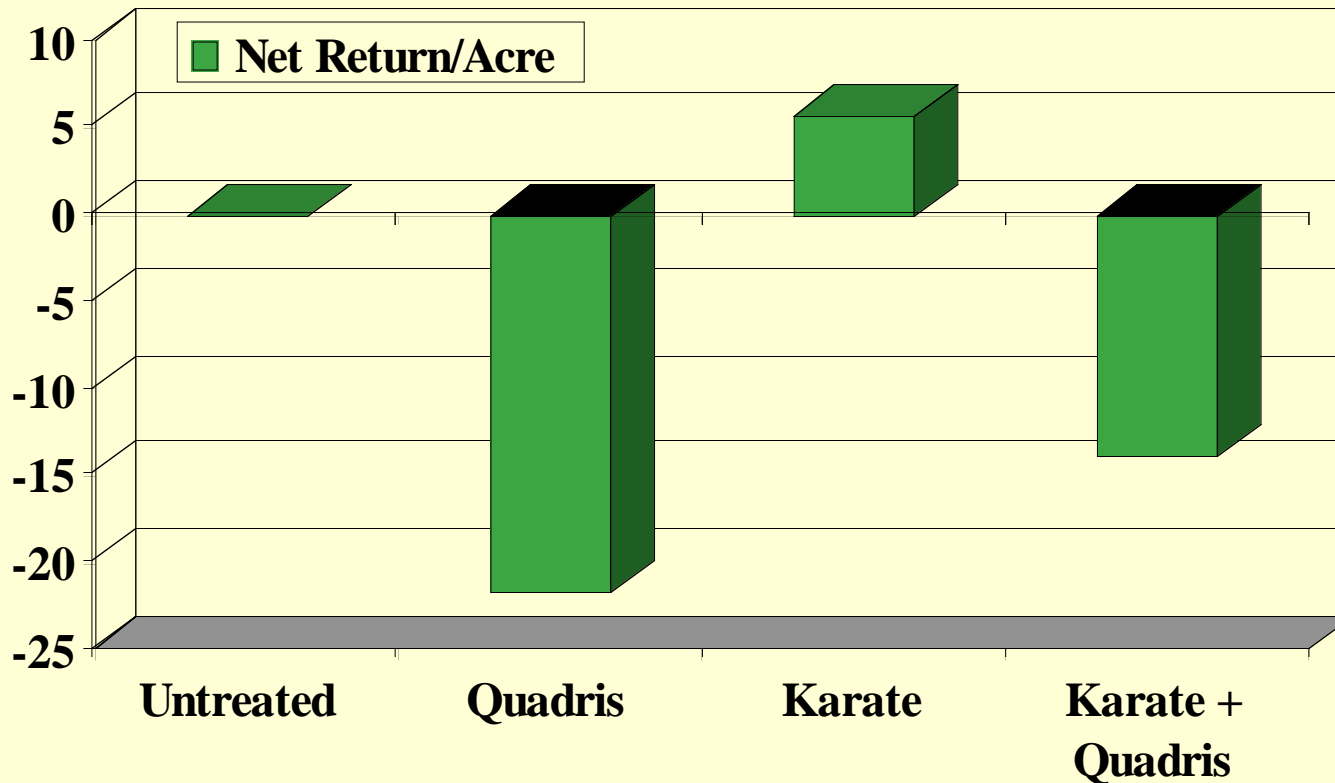
Musty 5 cents Heating 10 cents Sour 10 cents Hot 10 cents

Buyer reserves the right to reject any shipments of Sample Grade Beans, including, but not limited to, those which contain Crotalaria or Stones, or which are Hot, Heating, Sour, Musty or have COFO (Commercially Objectionable Foreign Odor); or are otherwise of distinctly low quality; or do not meet requirements of the FDA .

2005 Soybean Stink Bug Insecticide Termination Test Treatments at R7



2005 Soybean Stink Bug Insecticide Termination Test Treatments at R7

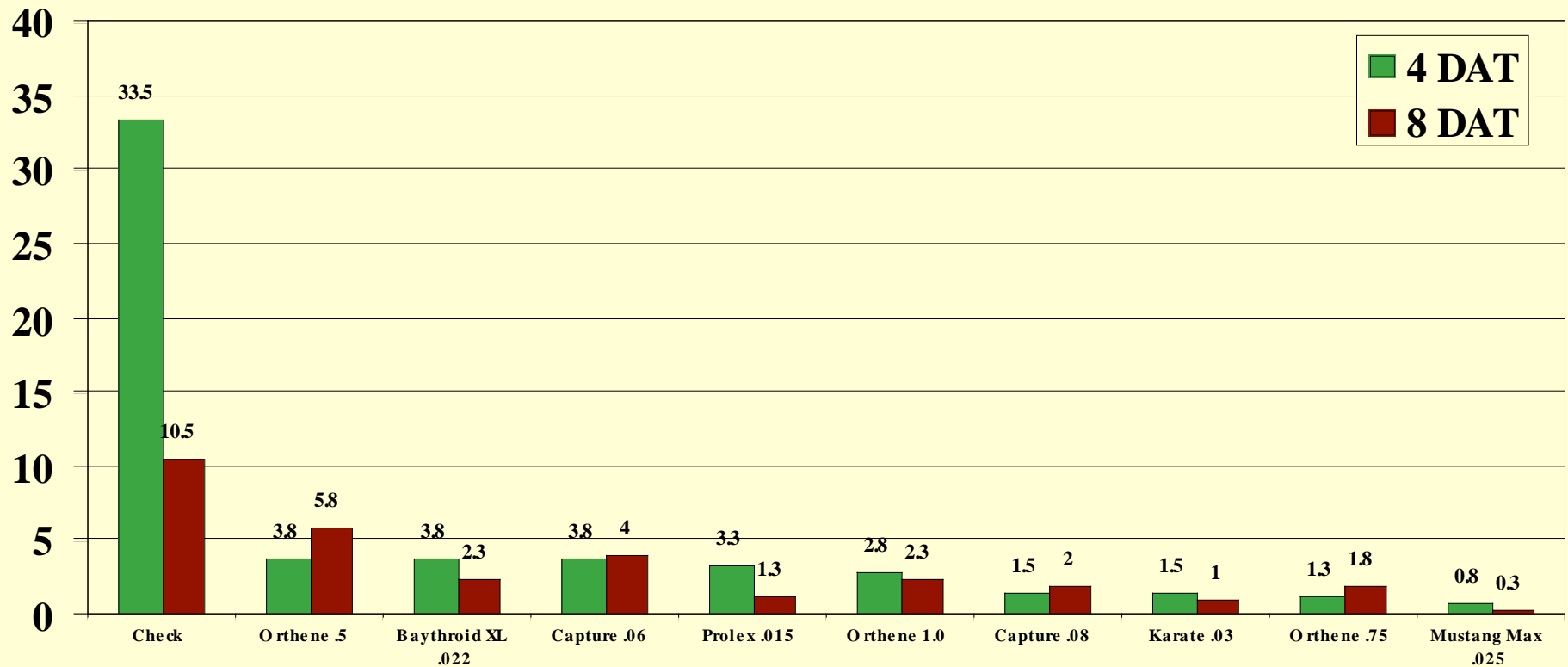


*\$5.75/bu., 12.2 oz. Quadris, 0.033 ai/Karate

Stink Bug Efficacy in Soybean 1

Starkville, MS 8/24/06

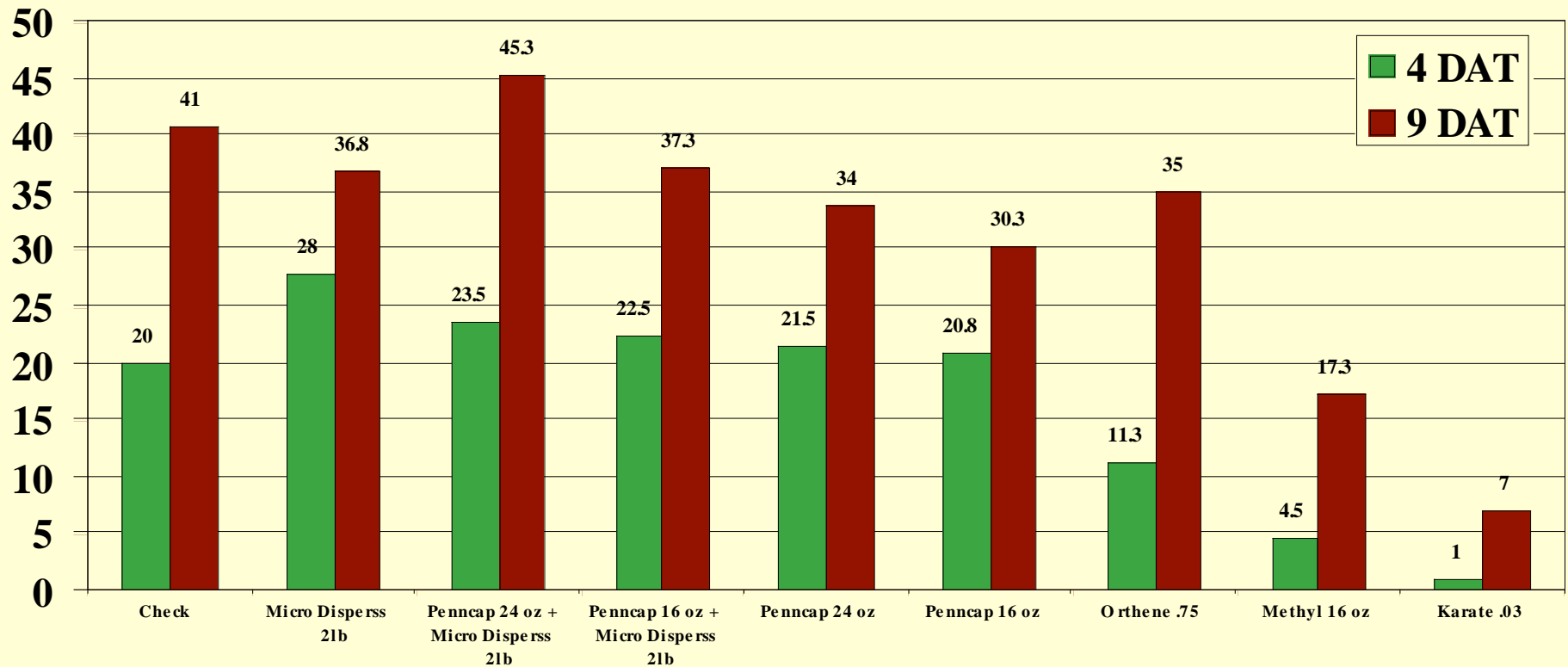
Stink bugs/25 Sweeps



Stink Bug Efficacy in Soybean 2

Starkville, MS 8/28/06

Stink bugs/25 Sweeps



*received 1.7" rain 4.5 hours after application

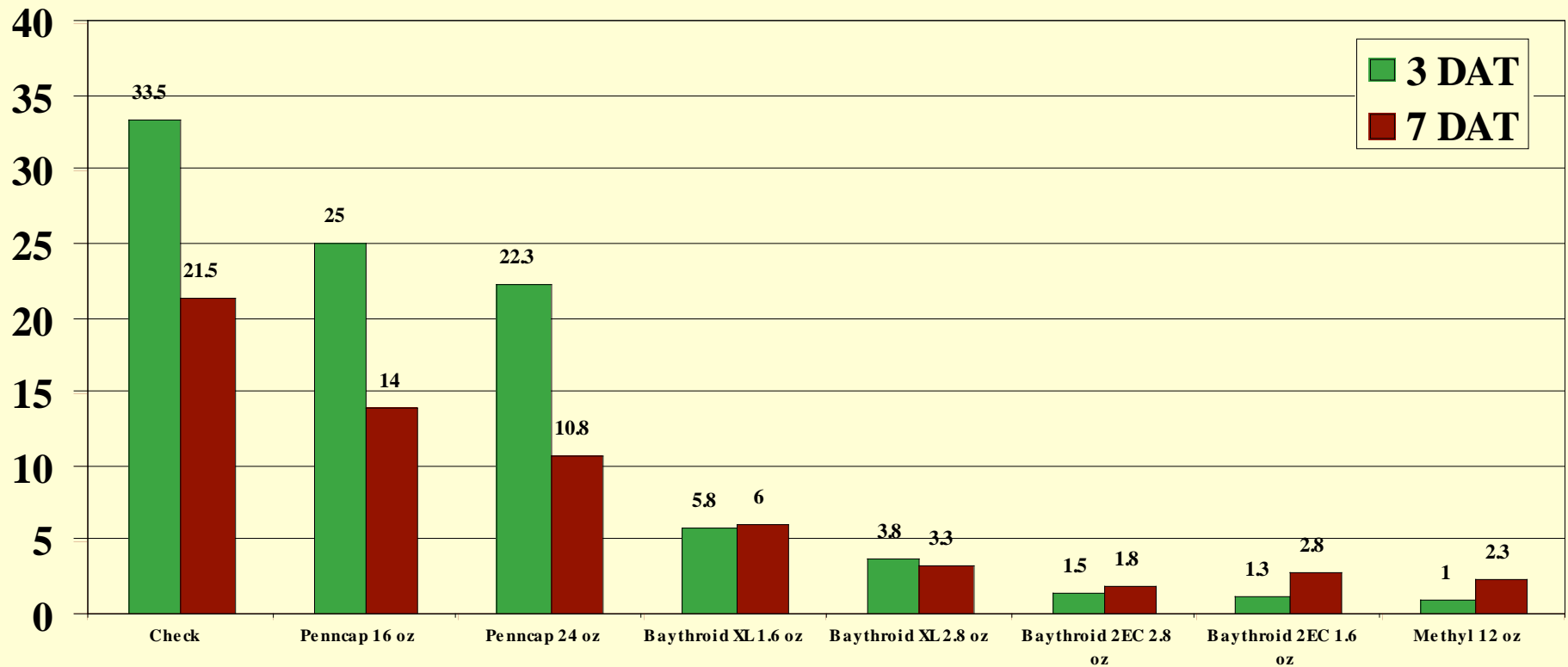
*received 0.7" rain 24 hours after application

*received 0.4" rain 48 hours after application

Stink Bug Efficacy in Soybean 3

Starkville, MS 9/8/06

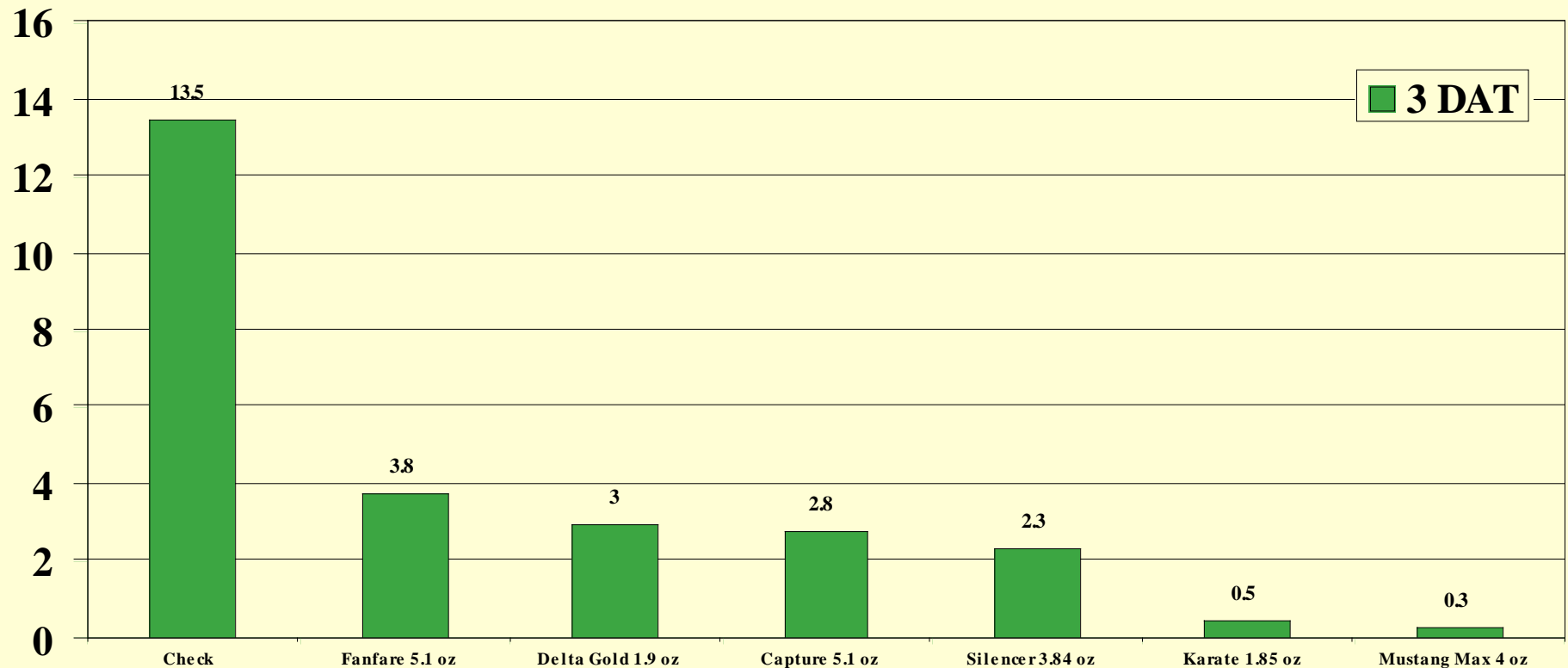
Stink bugs/25 Sweeps



Stink Bug Efficacy in Soybean 4

Starkville, MS 9/8/06

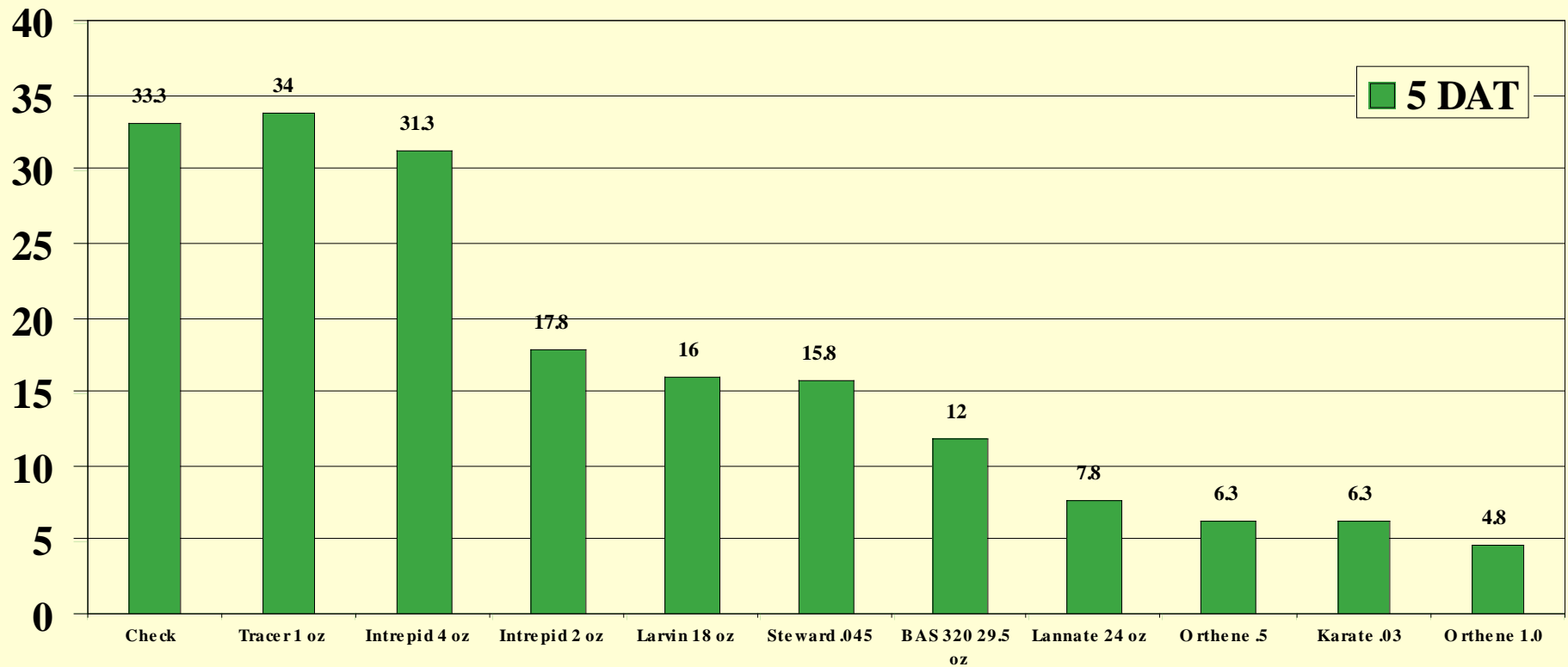
Stink bugs/25 Sweeps



Stink Bug Efficacy in Soybean 5

(Looper Trial) Greenwood, MS 9/8/06

Stink bugs/25 Sweeps



Thank you

