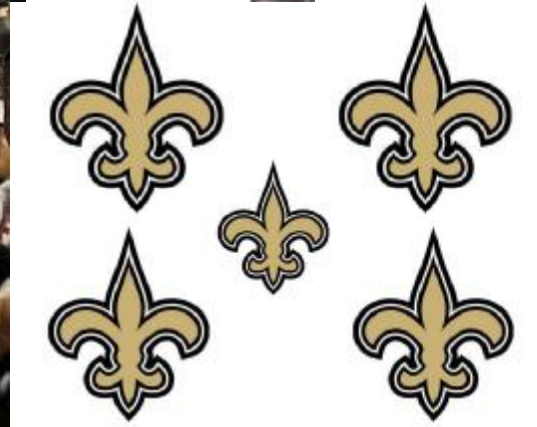
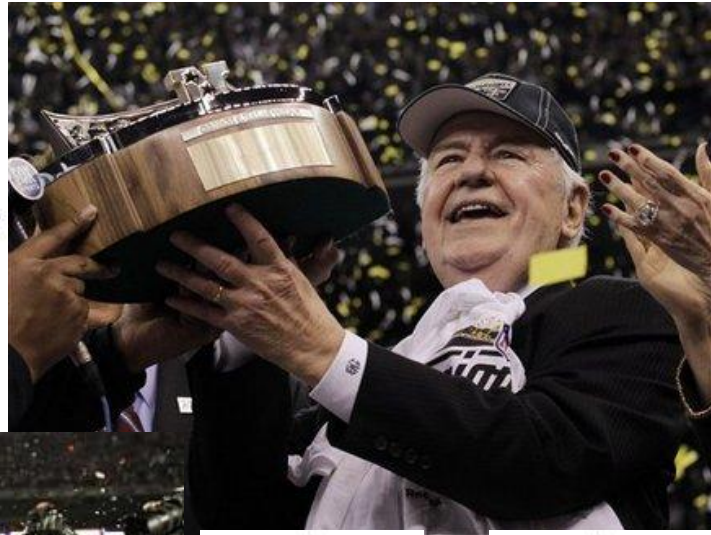


Product Update LACA - 2010

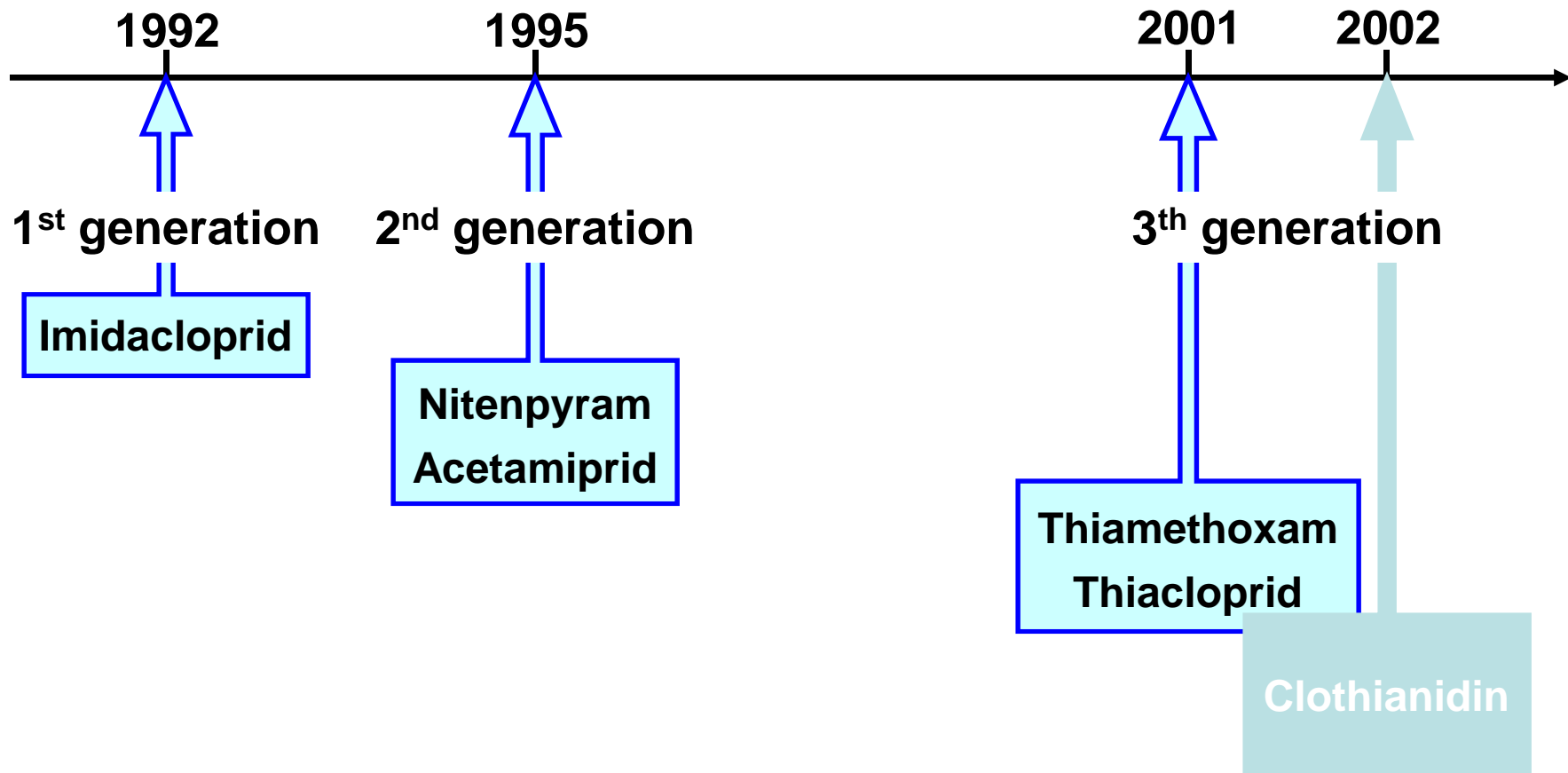


Bill Odle

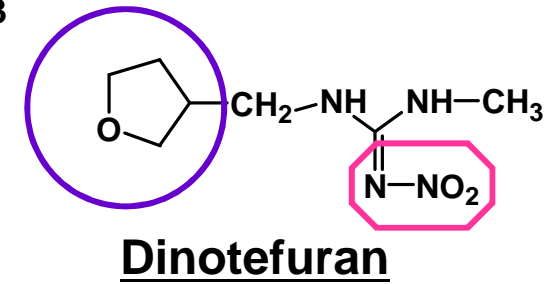
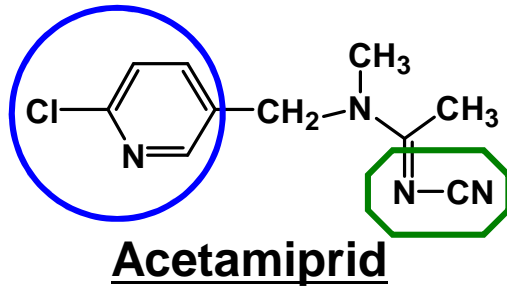
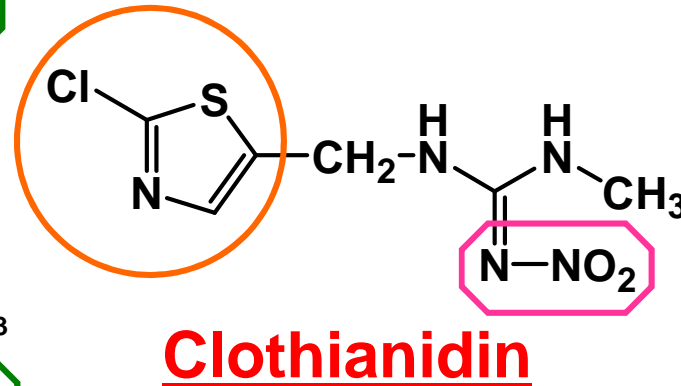
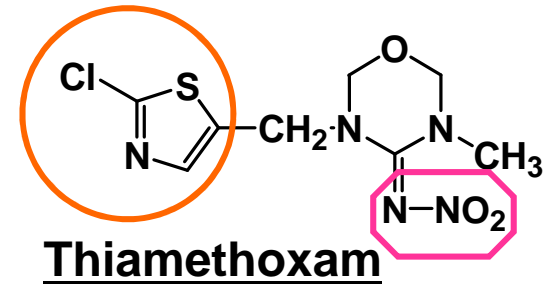
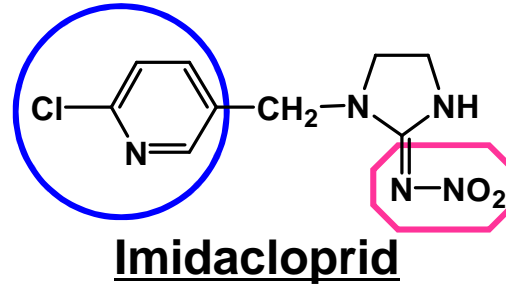
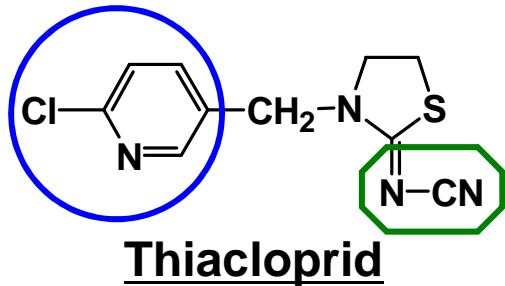
Products That Work, From People Who Care®



Clothianidin is the Newest Neonicotinoid



Neonicotinoide Insecticides



chlorothiazole ring

chloropyridine ring

tetrahydrofuran ring

nitroimino group

cyanoimino group

Unique Mode of Action



- I **Clothianidin is one of the new neonicotinoide insecticides.**
- I **Clothianidin is orally/dermally taken in the body of insect pests and binds to the acetylcholine (ACh) receptor on the post-synaptic membrane of synapse. Acting as **agonist** of ACh, it rapidly shows toxic/insecticidal activity.**
- I **Clothianidin can prevent insect pests from feeding / sucking / ovipositting, even if the dose does not reach the lethal level**

Mid-South Clothianidin Uses



2010 Introductions:

- § Soybean seed treatment
- § Cotton – foliar
- § Soybean – foliar
- § Sweet Potato – foliar & soil

2011 – 2012:

- § Rice – seed treatment & foliar
- § Wheat – seed treatment

Insecticidal Spectrum (1)



Clothianidin has a wide insecticidal spectrum, i.e. it is highly active against not only Homopterous insect pests but also Heteropterous, Coleopterous, Thysanopterous, Lepidopterous, Dipterous, Orthopterous, Isopterous and Siphonapterous insect pests.

- I Homoptera : Aphids, Whiteflies, Planthoppers, Leafhoppers, Scales, Mealybugs**
- I Heteroptera : Bugs**
- I Coleoptera : Weevils, Beetles**
- I Thysanoptera : Thrips**
- I Lepidoptera : Leafminers, Leafblotch miners, Fruit moth, Rice stem borer, Diamondback moth, Common cabbage worm**
- I Diptera : Leafminer flies**
- I Orthoptera : Grasshoppers**
- I Isoptera : Termites**
- I Siphonaptera : Fleas**





Soybean Seed Protection- INOVATE™ System



Products That Work, From People Who Care®



INOVATETM

System



INOVATE™ System



Consisting of:

§ **NipsIt INSIDE™ Insecticide from Valent**

Plus

§ **RANCONA® Xtra Fungicide from Chemtura**

NipsIt INSIDE Insecticide EPA registration approved for use on soybeans 11/30/09

INOVATE
System

INOVATE™: Superior soybean protection



3 super-systemic AI's

- § Clothianidin
- § Ipconazole
- § Metalaxyl

Broadest spectrum protection

- § Seed-borne diseases
- § Soil-borne diseases
- § Early season insect pests

State of the art system

- § Valent's proprietary Lock Tight™ Technology
- § Easy to use
- § Colorant included

INOVATE
System

Lock Tight™ Technology



§ Valent's proprietary Lock Tight technology

- Built in polymer system locks onto the seed for maximum performance in the field



§ Benefits for seed treater/conditioner

- Flows through equipment, provides excellent handling & worker safety, excellent plantability and seed safety, compatible with many fungicides, convenient to use, fewer containers to handle and dispose of, reduces down time

§ Benefits for grower

- Lock Tight technology translates into improved plantability, seed safety, works well in all planting equipment, stays on the seed for results in the field



Broadest spectrum seed protection



INOVATE™
System

Application Rate:
1.28 fl oz NipsIt INSIDE +
3.5 fl oz RANCONA Xtra
(4.78 fl oz/cwt total)

DISEASES

Rhizoctonia damping-off
Fusarium seed & seedling dieback
Sclerotinia seed/seedling dieback
Seed-borne fungi
(Phomopsis seed decay, Penicillium, Aspergillus)
Pythium seed/seedling decay

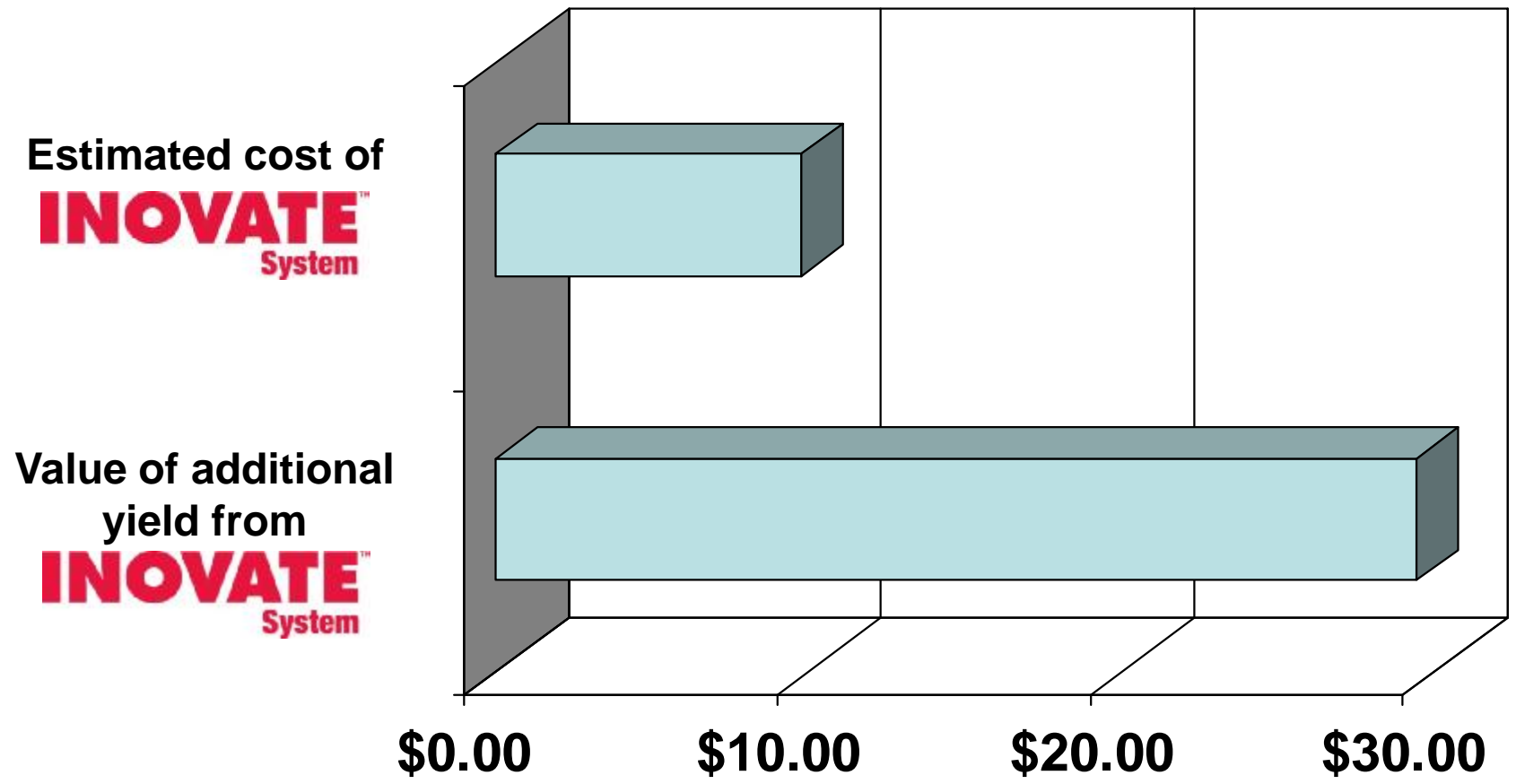
INSECTS

Aphids (early-season)
Bean leaf beetle
Grape colaspis
Leafhoppers
Pea leaf weevil
Seed corn maggot
Three cornered alfalfa hopper
Thrips
White grub
Wireworm

Return on Investment from **INOVATE** System



Based on a **3.1 bu/A** increase seen in demo trials



INOVATE provided over a **300%** return on investment

Estimated cost of INOVATE to grower - \$9.75/unit

Estimated price of soybeans - \$9.50/bushel

BELAY™

INSECTICIDE



Control for the Long Haul

Products That Work, From People Who Care®

Characteristics of Belay



- § Least water soluble neonicotinoid
- § Broad spectrum
- § Long residual
- § Systemic (soil applied)
- § Translaminar (foliar applied)
- § Low toxicity to mammals & the environment
- § Rainfast after 3 hours
- § Optimum water pH range 5.5 – 8.5
- § PHI 21 days, no crop rotation restrictions

BELAY™

INSECTICIDE



COTTON



Belay for Cotton –Foliar only



COTTON		
FOLIAR APPLICATION		
Pests	<i>Belay 2.13 SC</i> Insecticide Application Rates	Special Instructions
Aphids Lygus Stinkbugs Whiteflies (suppression)	3 to 4 fl oz/A (0.05 to 0.067 lb ai/A)	Apply <i>Belay 2.13 SC</i> Insecticide when threshold populations are observed. Do not wait until population beyond threshold has been established Apply <i>Belay 2.13 SC</i> Insecticide in sufficient water to ensure uniform and thorough coverage of foliage.
<ul style="list-style-type: none"> Do not apply more than 12 fl oz (0.2 lb ai) of <i>Belay 2.13 SC</i> Insecticide per acre per season. Do not apply treatments less than 7 days apart. Do not apply within 21 days of harvest. 		

BELAY™

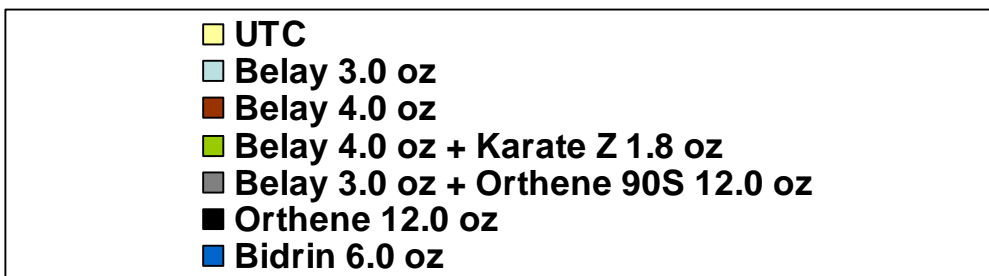
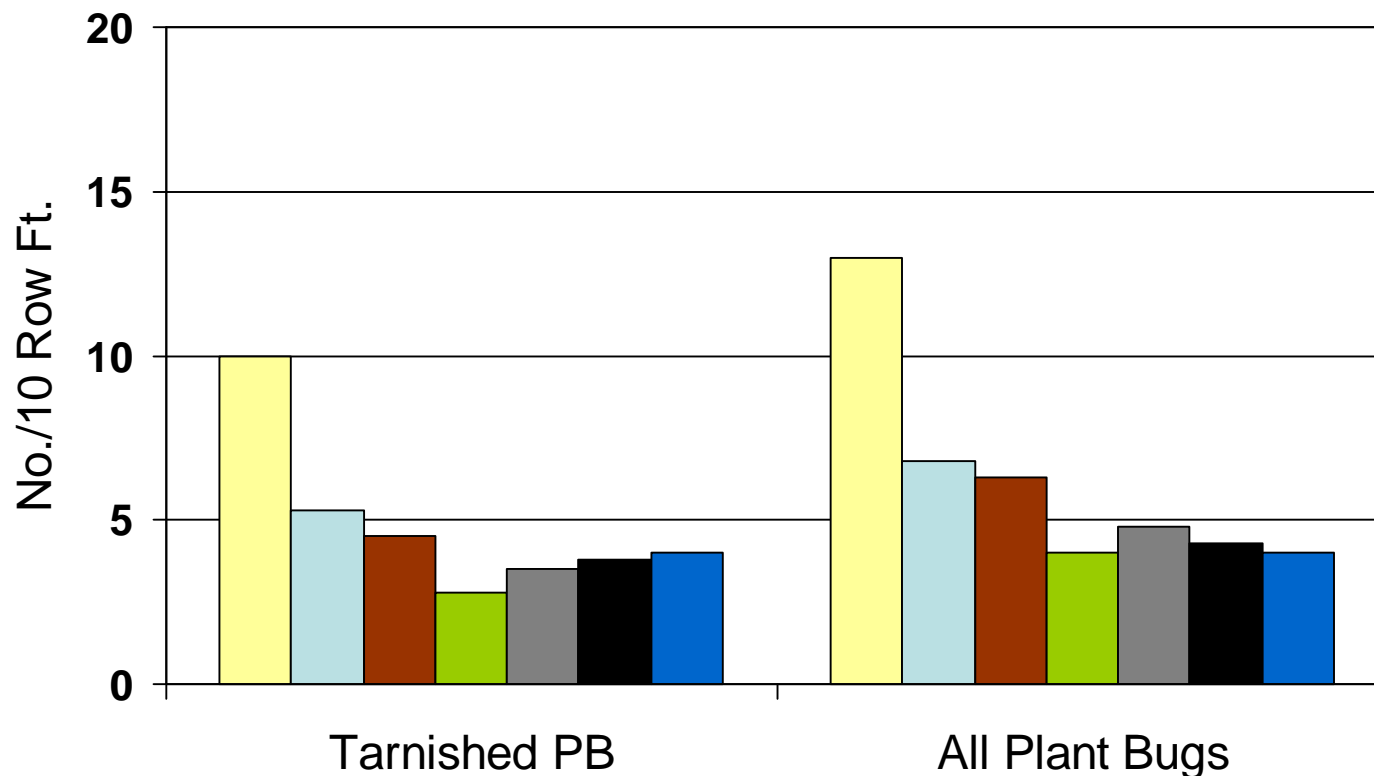
INSECTICIDE

Tarnished Plant Bug & Stink Bugs



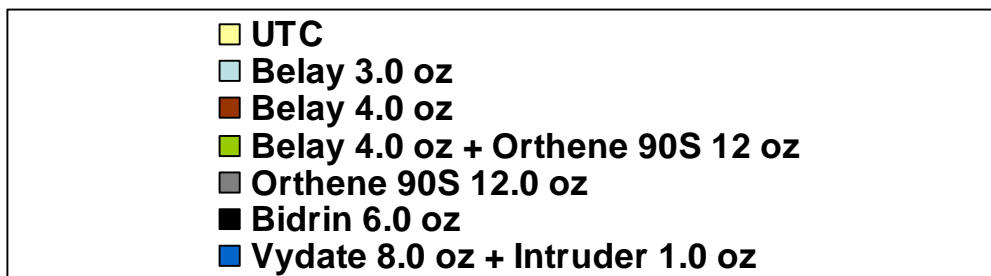
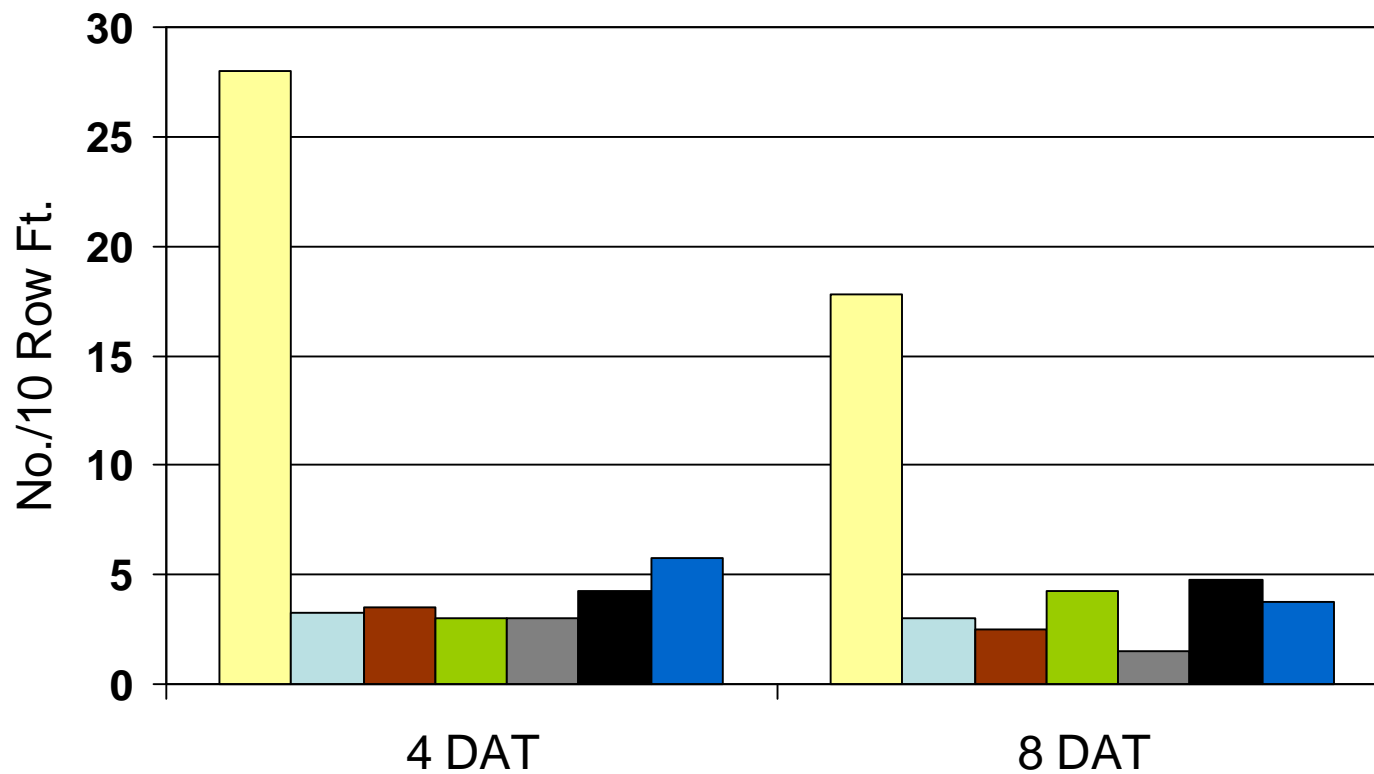
Products That Work, From People Who Care®

Plant Bug Control – 6 DAT



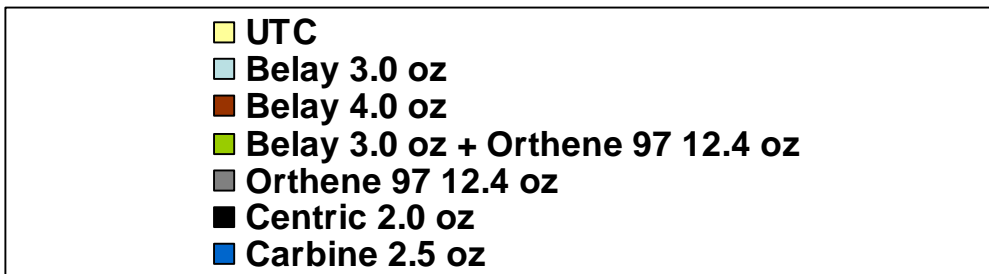
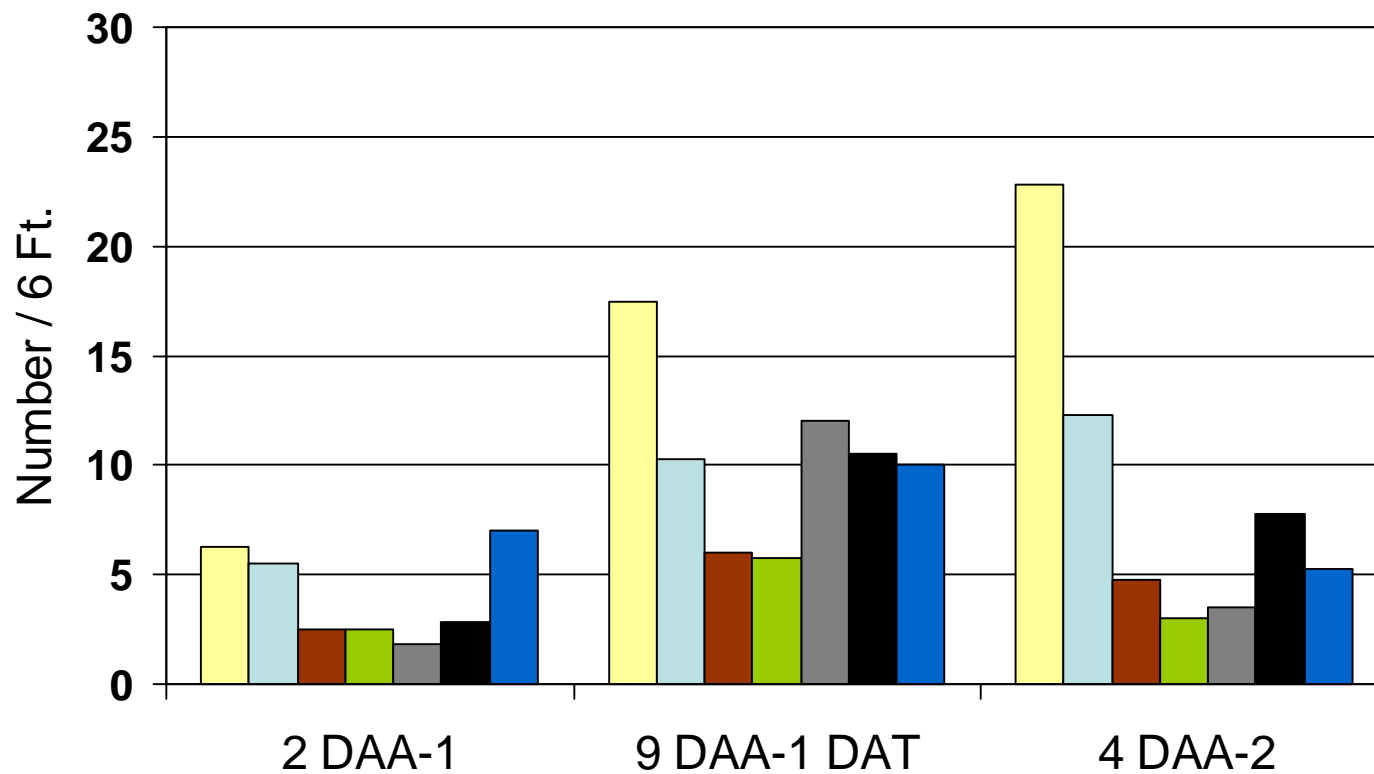
S. Stewart
Lauderdale,
TN

Tarnished Plant Bug Control



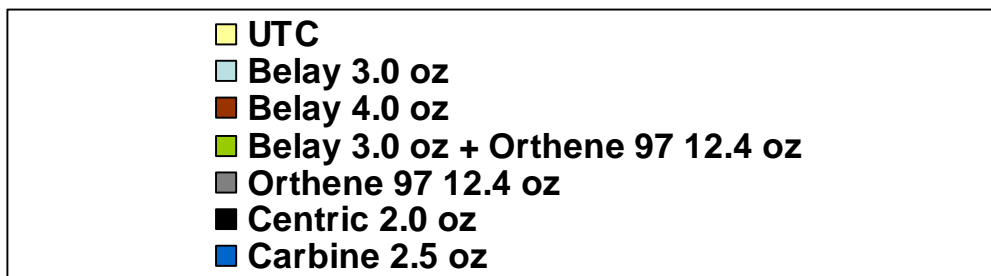
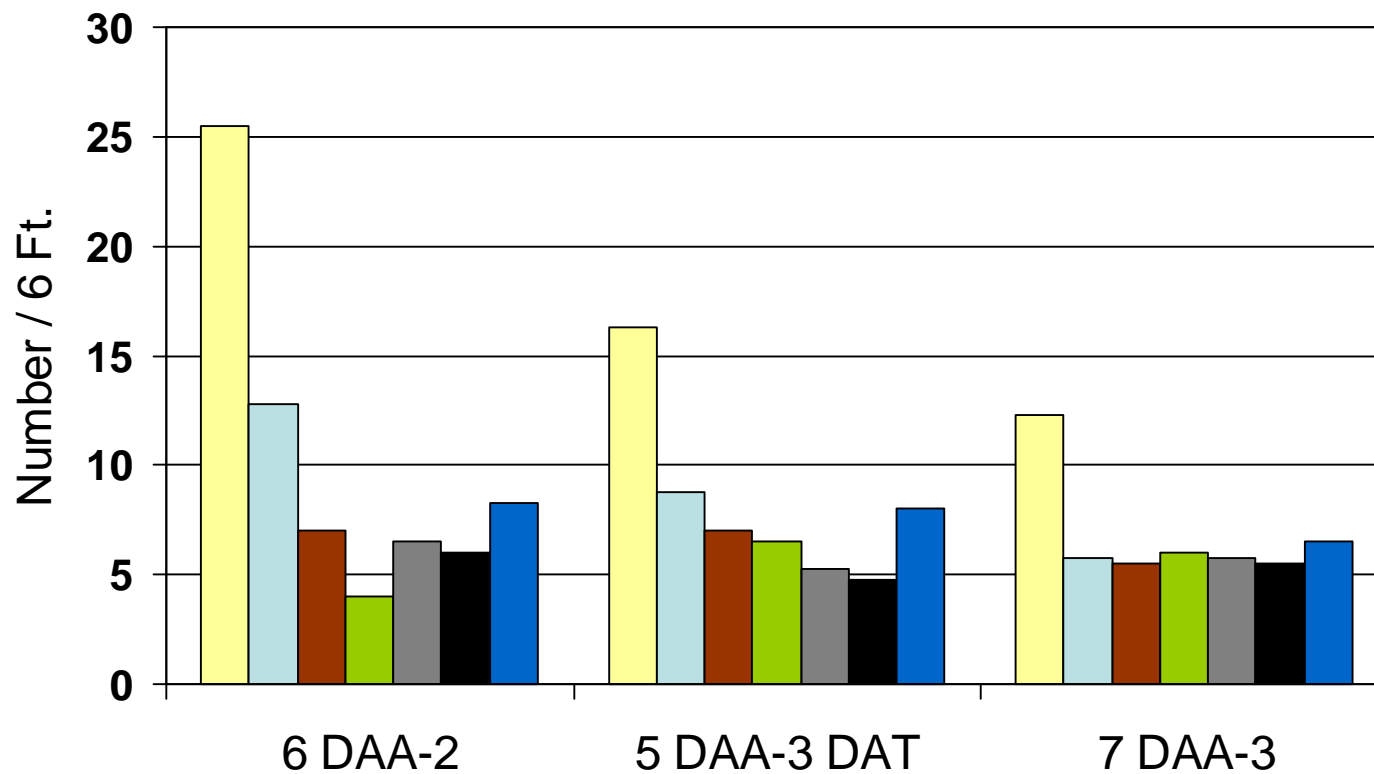
S. Stewart
Lauderdale,
TN

Tarnished Plant Bug (Nymphs)



R. Leonard
Winnsboro
Louisiana

Tarnished Plant Bug (Nymphs)



R. Leonard
Winnsboro
Louisiana

BELAY™
INSECTICIDE



SOYBEAN



Belay for soybeans –Foliar appl. only



SOYBEAN		
FOLIAR APPLICATION		
Pests	<i>Belay 2.13 SC</i> Insecticide Application Rates	Special Instructions
Aphids Bean Leaf Beetles Japanese Beetles Leafhoppers Lygus Stinkbugs Three Cornered Alfalfa Hoppers Whiteflies (suppression)	3 to 4 fl oz/A (0.05 to 0.067 lb ai/A)	Apply <i>Belay 2.13 SC</i> Insecticide as pest populations begin to build. Do not wait until population beyond threshold has been established. Apply <i>Belay 2.13 SC</i> Insecticide in sufficient water to ensure uniform and thorough coverage of foliage
<ul style="list-style-type: none"> Do not apply foliar treatments less than 7 days apart. Do not apply within 21 days of harvest. Do not make foliar applications of <i>Belay 2.13 SC</i> Insecticide in fields treated with a neonicotinoid insecticide seed treatment(s) within 45 days after planting. Regardless of formulation or type of application (foliar or seed treatment), do not apply more than 0.2 lb ai of clothianidin per acre per season. 		

Stink bugs



§ Stink bug species

- Brown
- Green
- Southern green
- Red shouldered
- **Red banded**



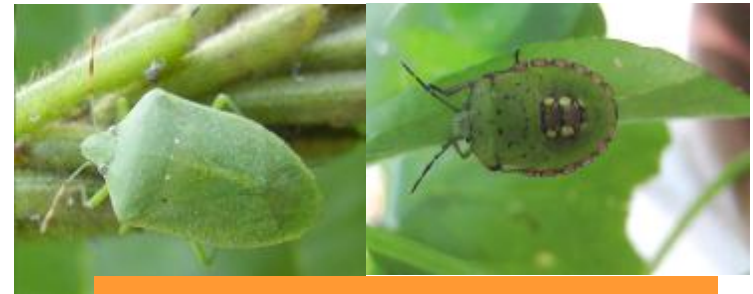
Brown stink bug



Green stink bug



Red banded stink bug



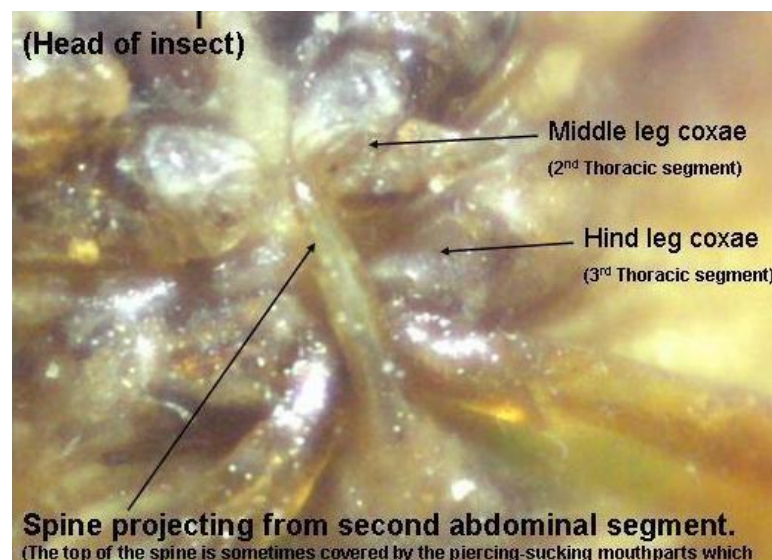
Southern green stink bug

Stink bugs



§ Red banded vs Red shouldered

- Red banded
 - ú Most difficult to control
- Red shouldered
 - ú Spine between thorax and abdomen



BELAY™

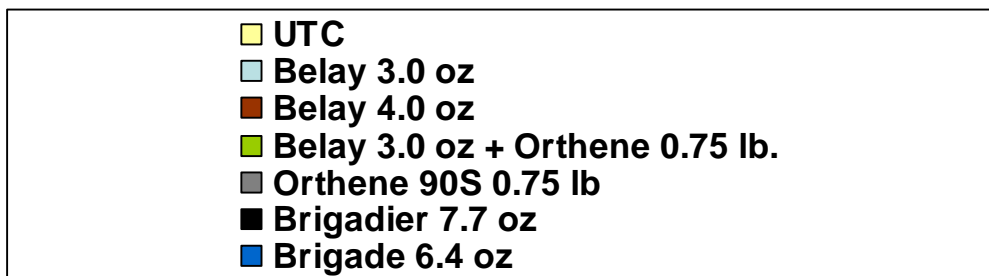
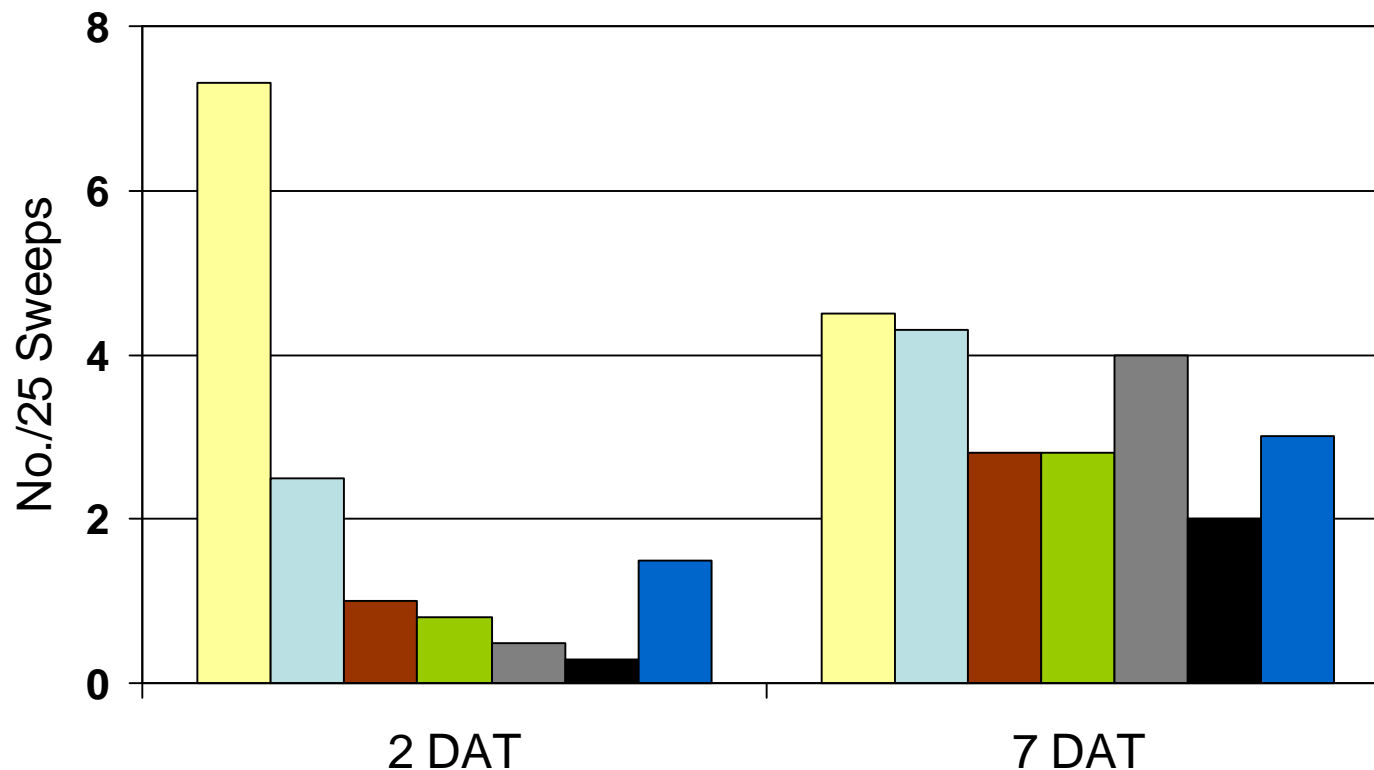
INSECTICIDE

Three Cornered Alfalfa Hopper



Products That Work, From People Who Care®

Three Cornered Alfalfa Hopper



R. Leonard
Winnsboro
Louisiana

BELAY™

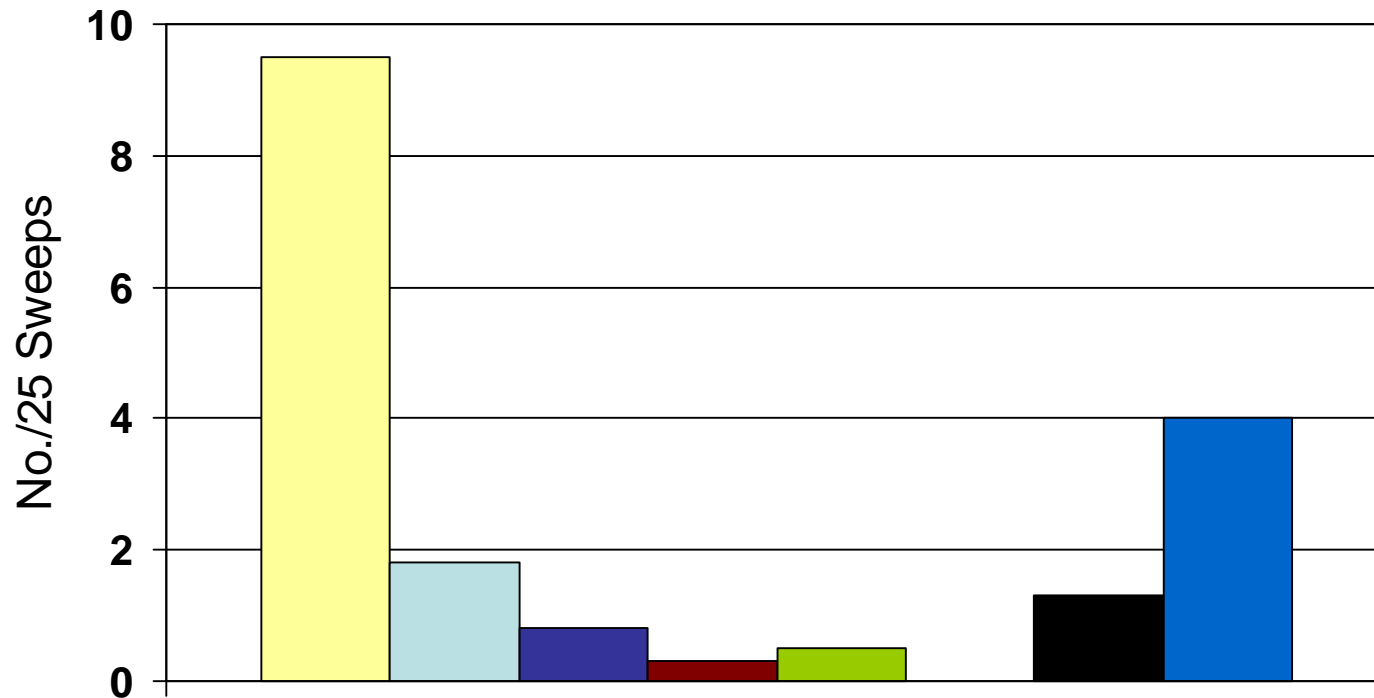
INSECTICIDE

Bean Leaf Beetle



Products That Work, From People Who Care®

Bean Leaf Beetle – 5 DAT

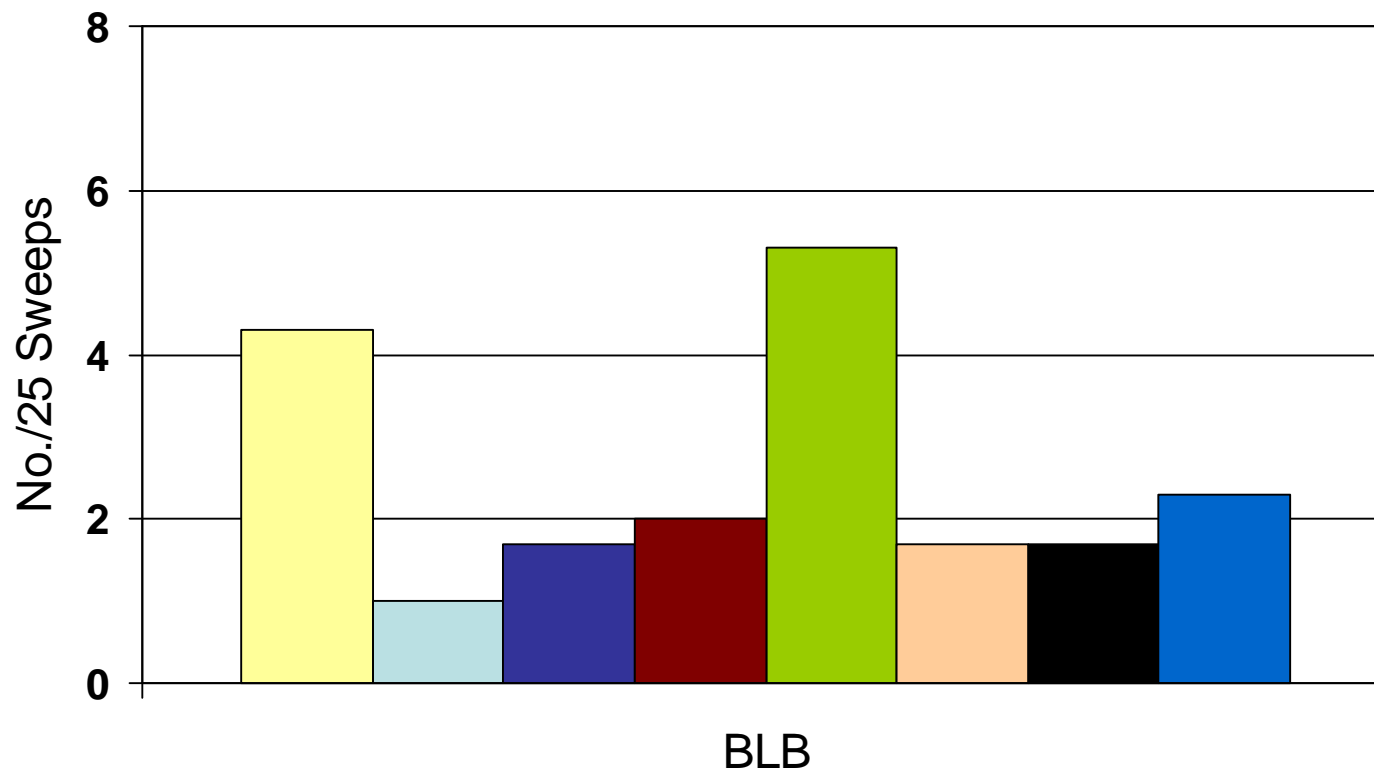


BLB



G. Lorenz
Jefferson Co.
Arkansas

Bean Leaf Beetle – 5 DAT



G. Lorenz
Phillips Co.
Arkansas

BELAY™

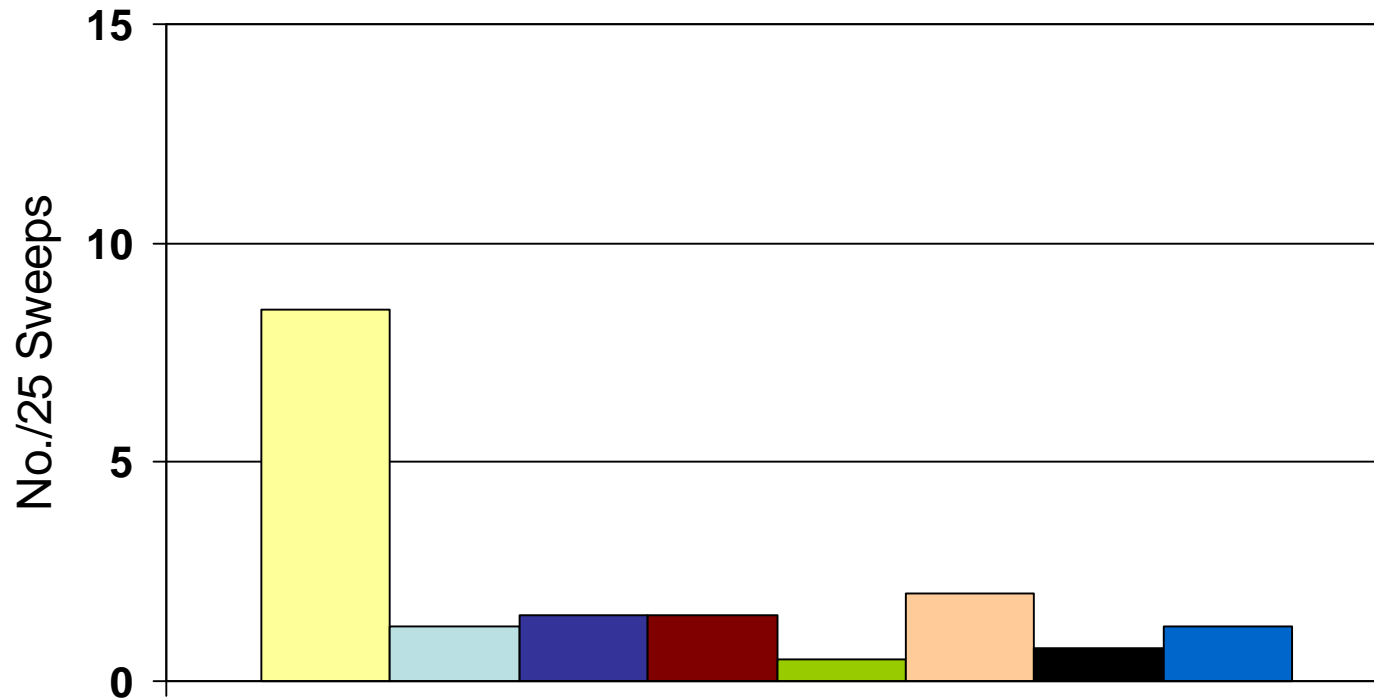
INSECTICIDE

Stink Bug Control



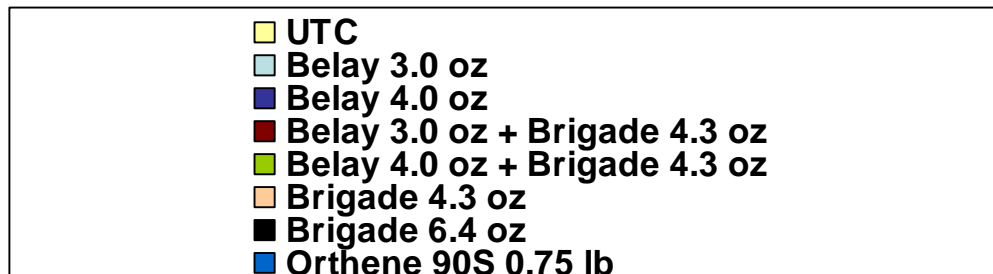
Products That Work, From People Who Care®

Green Stink Bug – 4 DAT



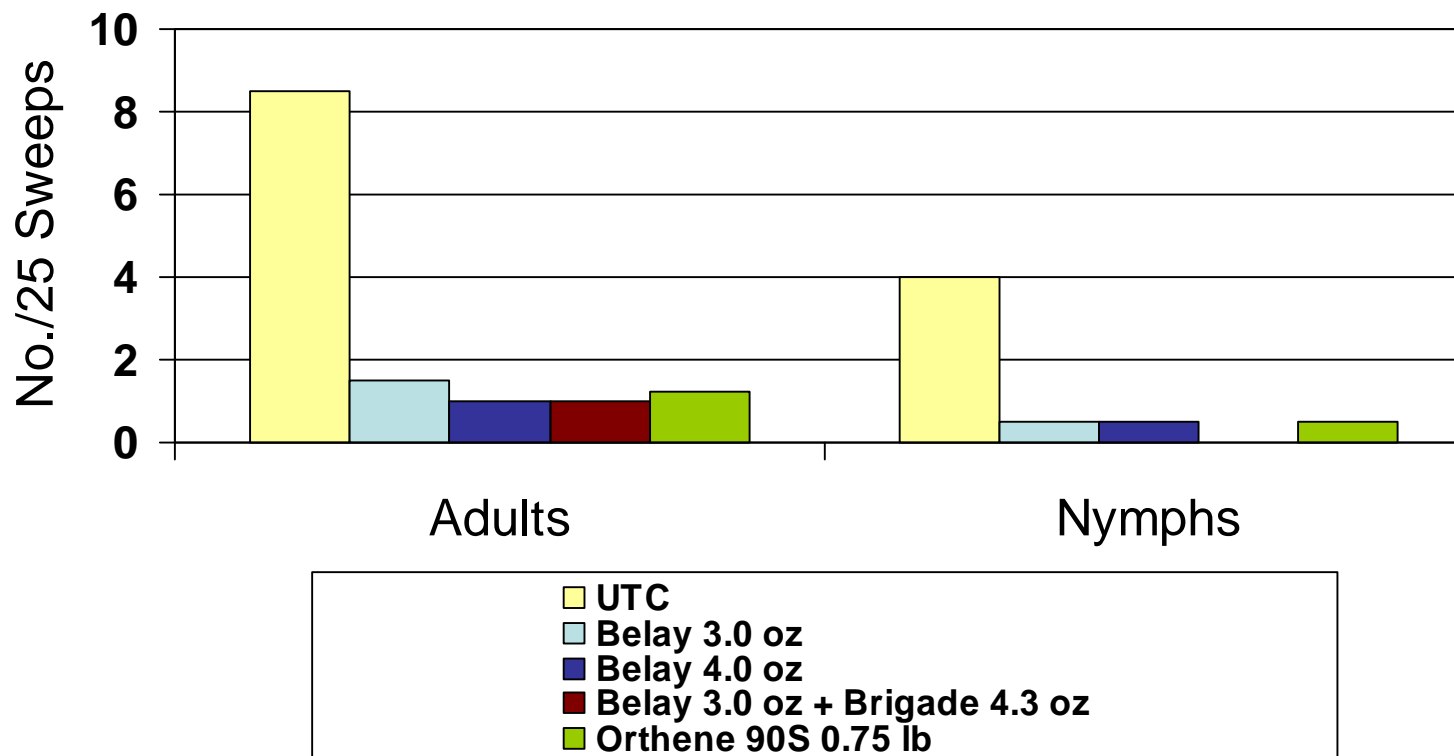
G.S.B Adults

Brown,
Green &
Red Banded
Stink Bugs



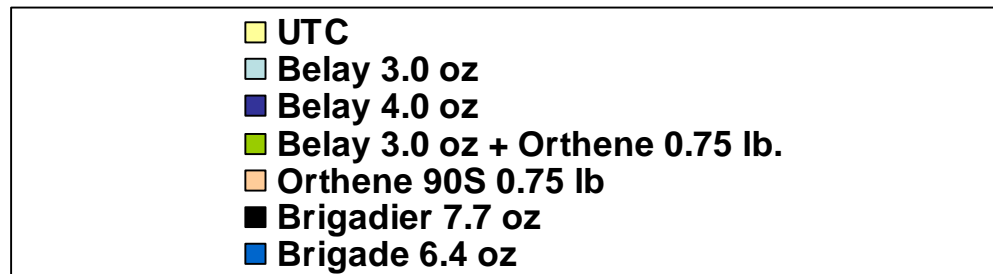
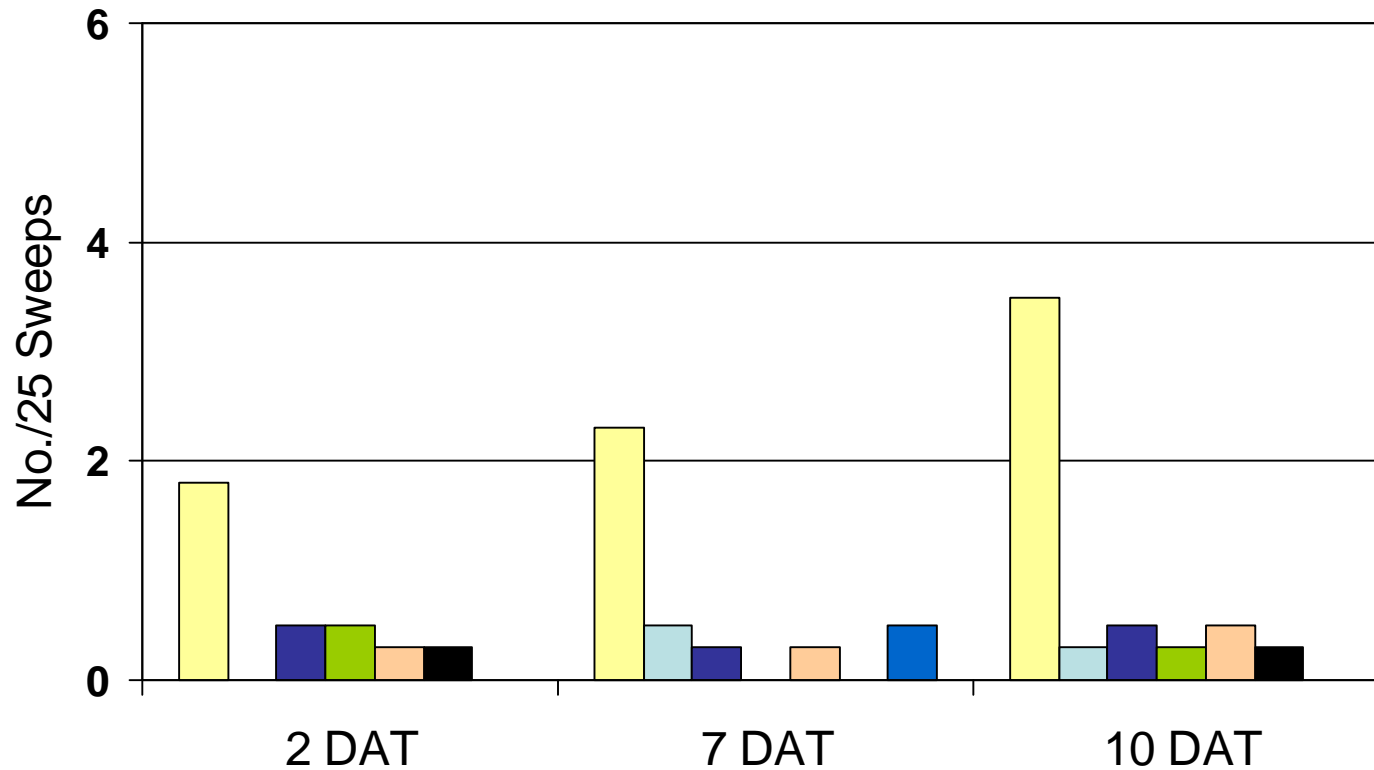
Don Cook
Mississippi
SB19-09

Green Stink Bug – 3 DAT



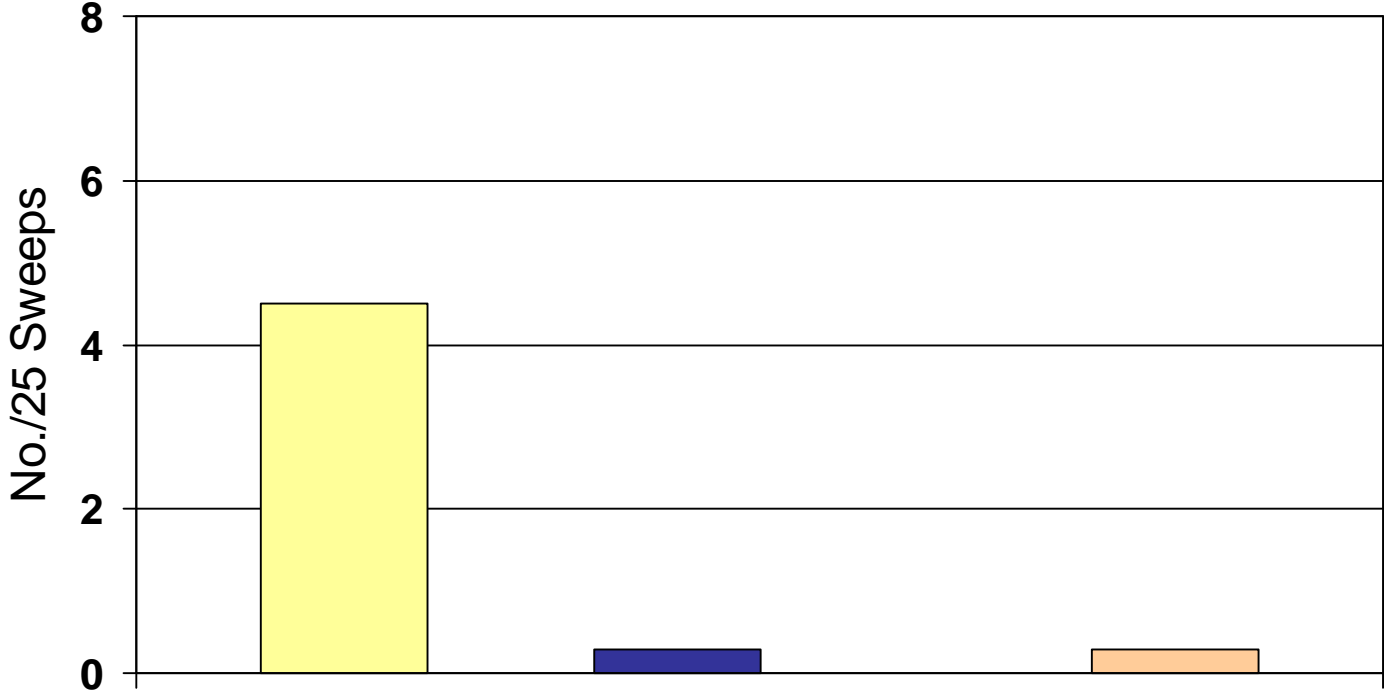
Don Cook
Mississippi
SB19-09B

Green Stink Bug



R. Leonard
Winnsboro
Louisiana

Red Shouldered Stink Bug

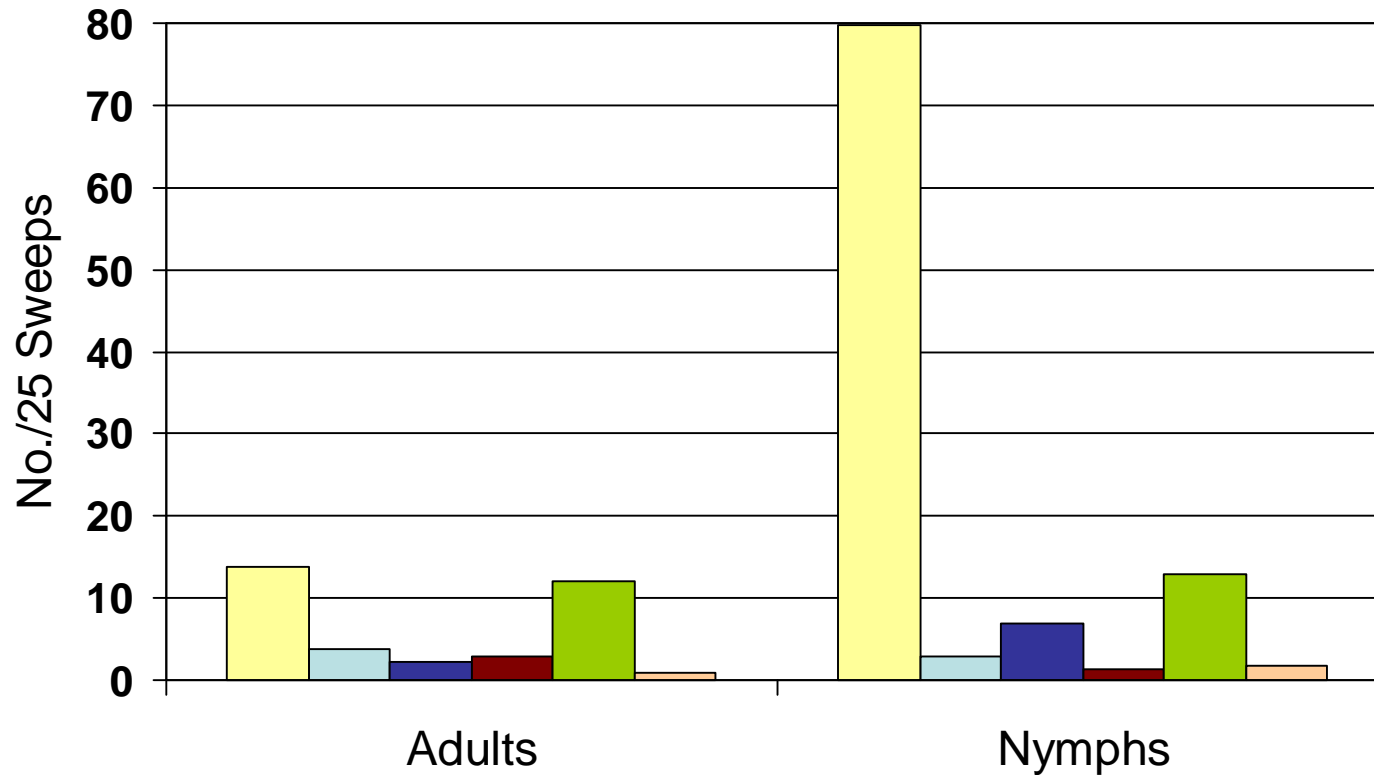


Red Shouldered S.B. - 7 DAT



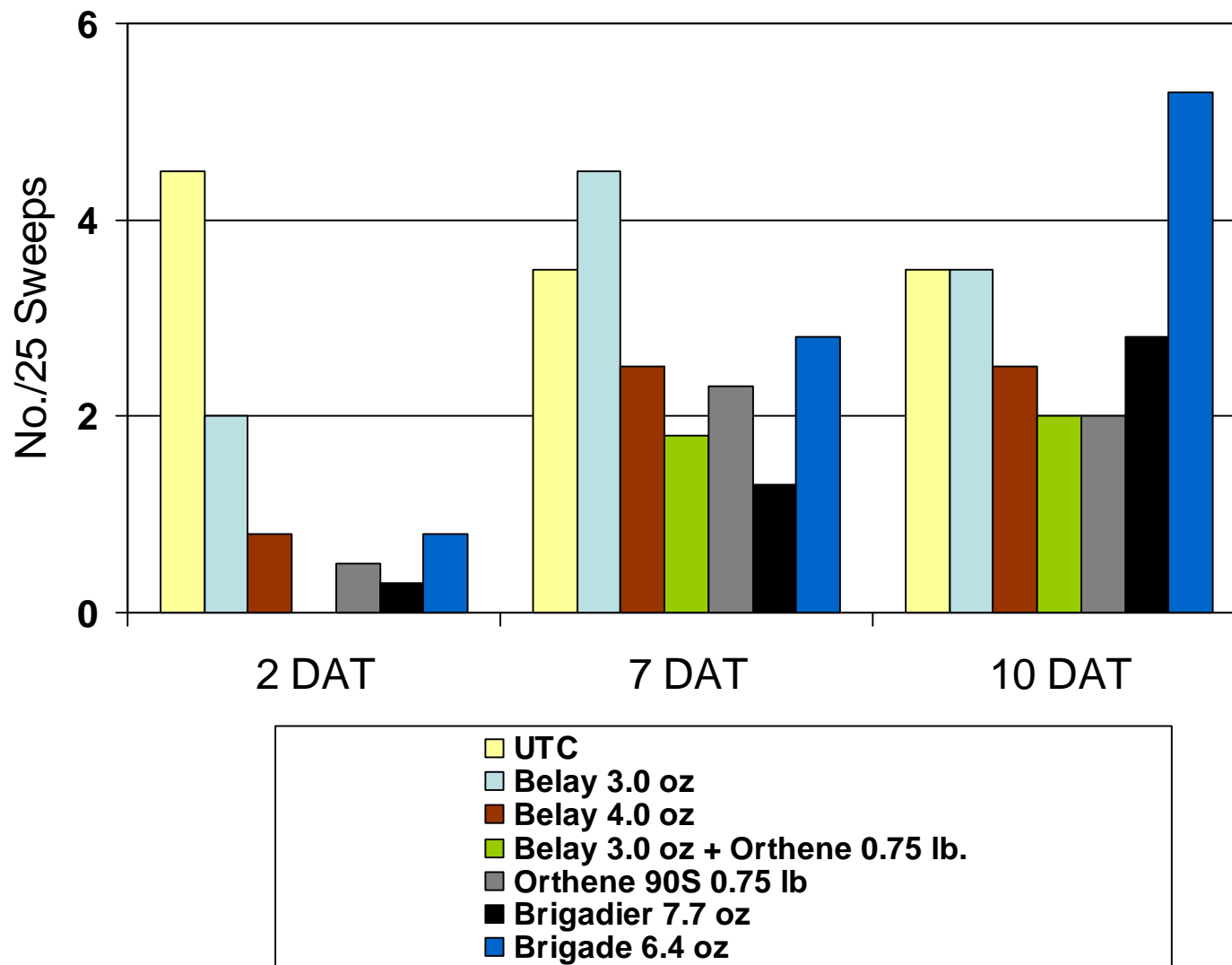
G. Lorenz
Arkansas

Red Banded Stink Bug – 3 DAT



G. Lorenz
Arkansas

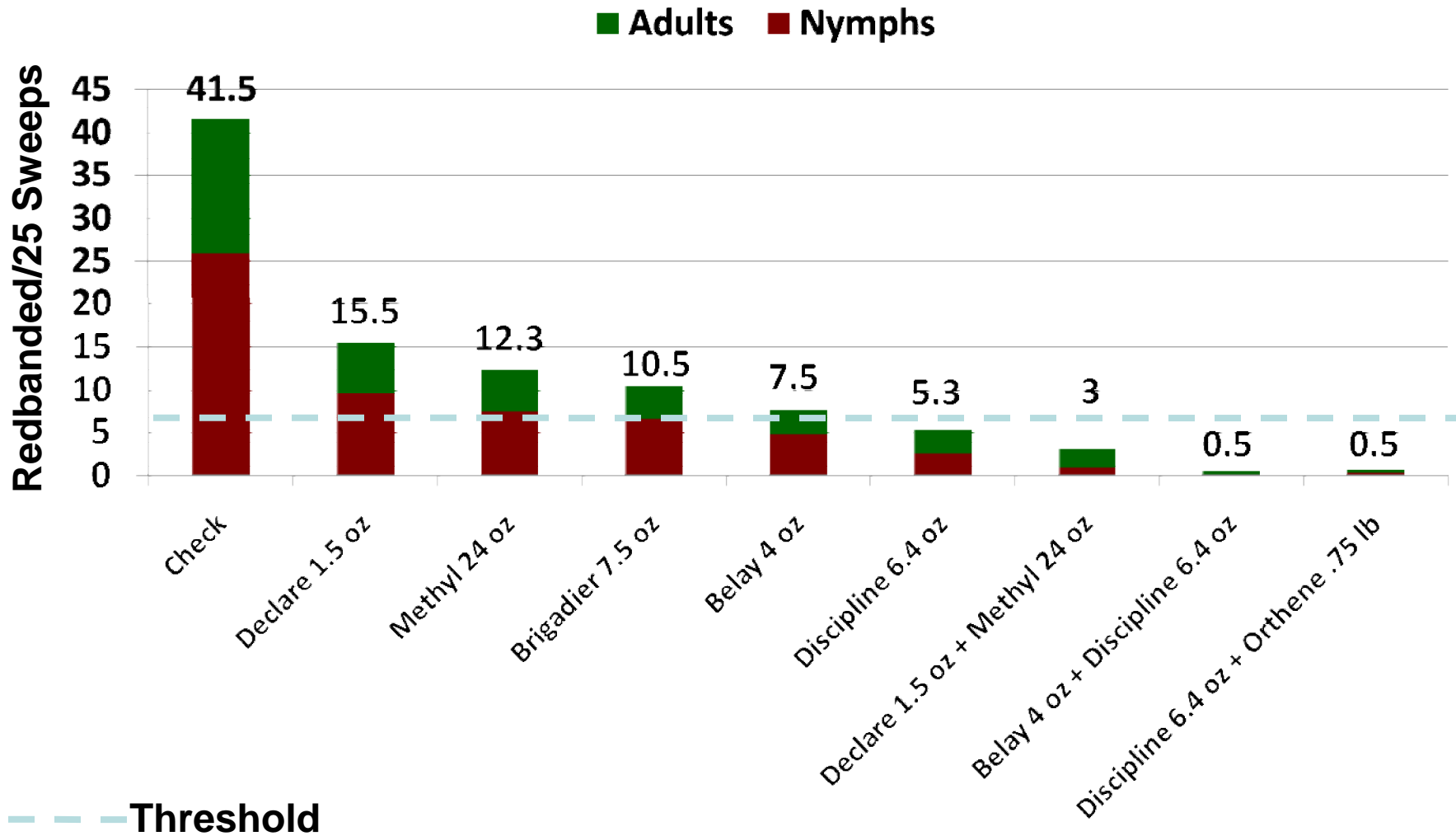
Red Banded Stink Bug



R. Leonard
Winnsboro
Louisiana

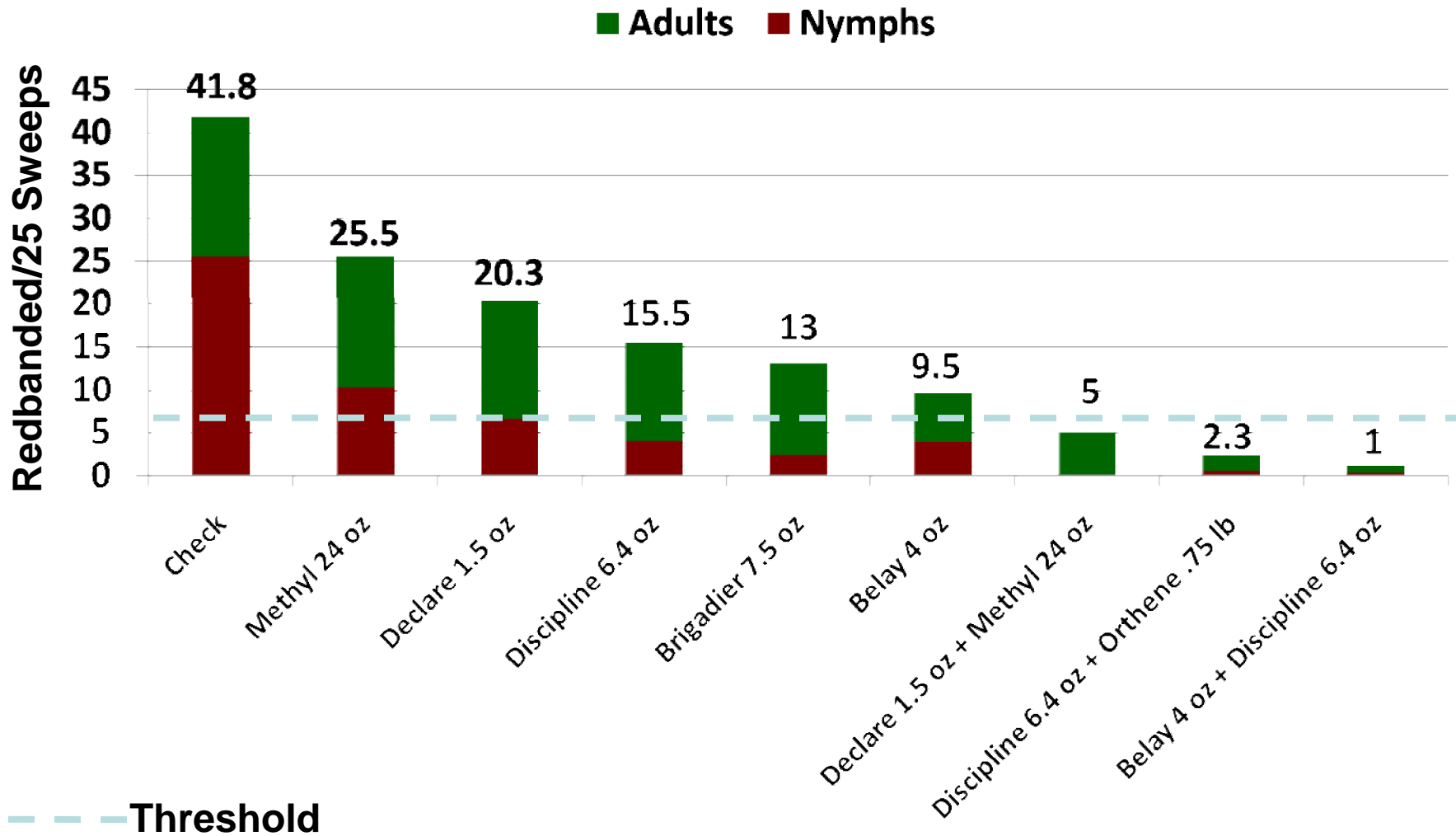
Redbanded Stink Bug (2)

Straight Bayou 2009
3 DAT

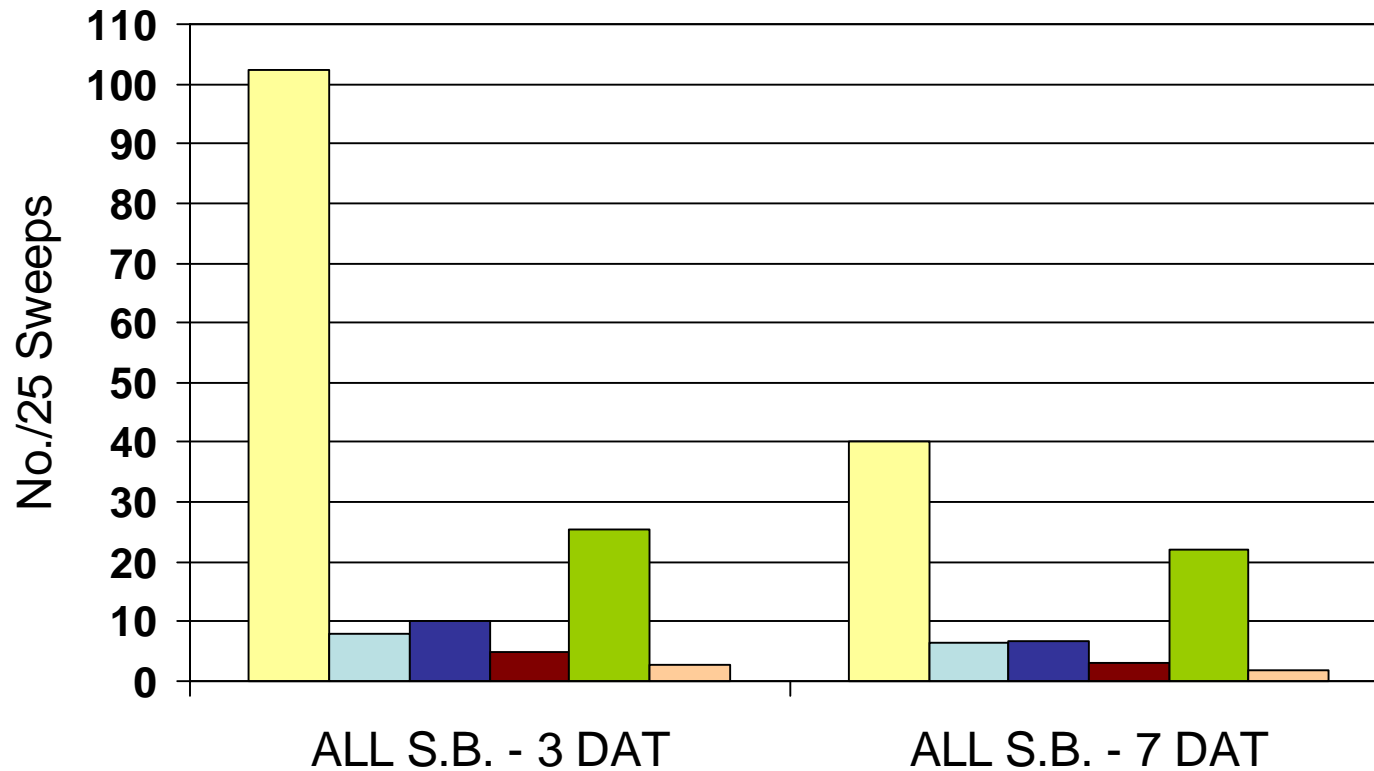


Redbanded Stink Bug (2)

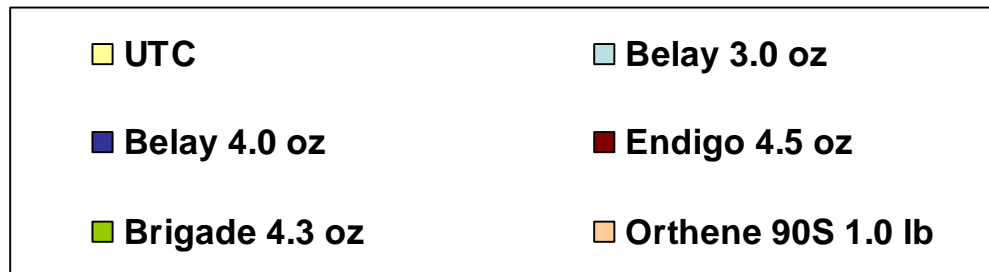
Straight Bayou 2009
6 DAT



Combined Stink Bug Control in Soybeans

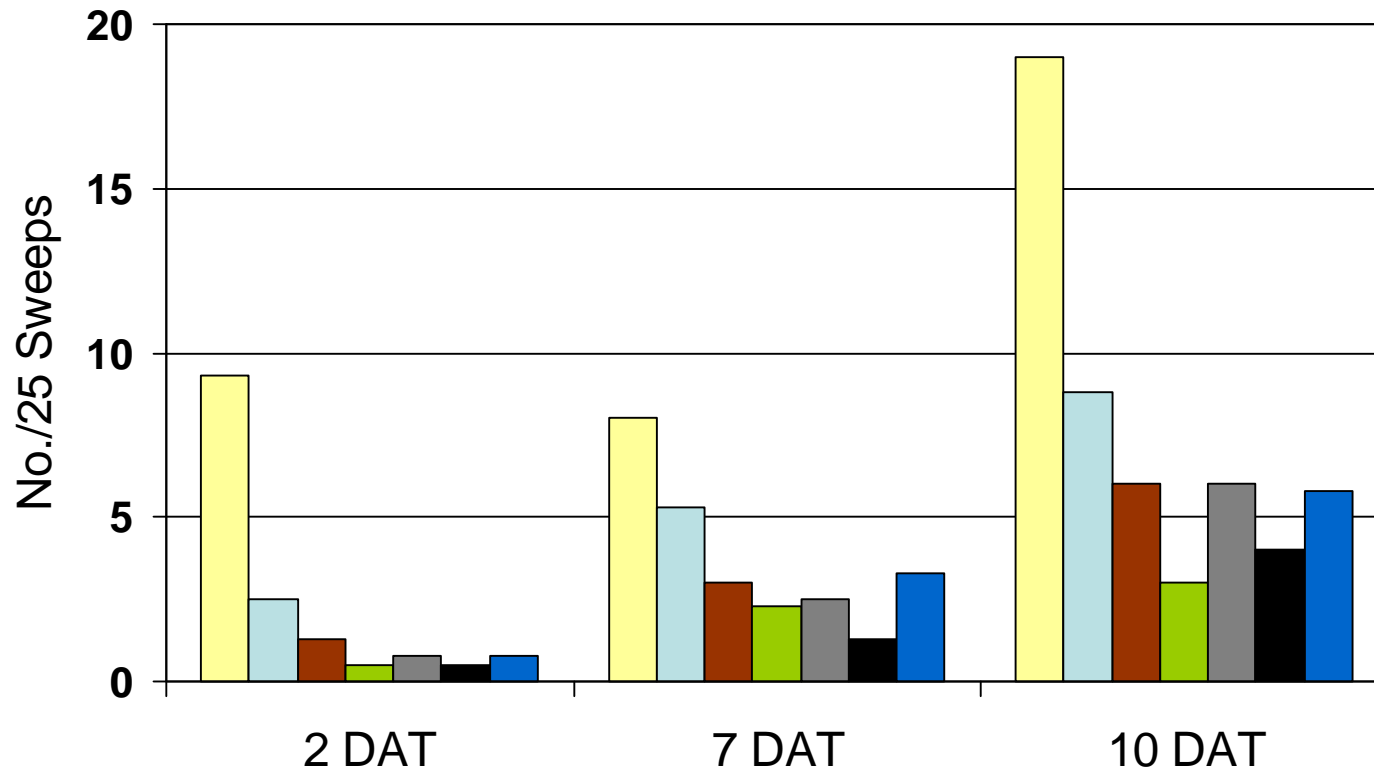


Brown, Green, Southern Green, **Red Banded & Red Shouldered** Stink Bugs

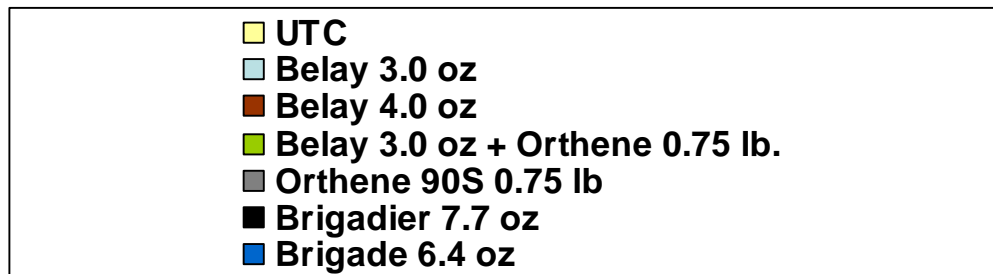


G. Lorenz
Arkansas

Combined Stink Bug Control



Brown,
Green &
Red Banded
Stink Bugs



R. Leonard
Winnsboro
Louisiana

BELAY™
INSECTICIDE



Sweet Potato

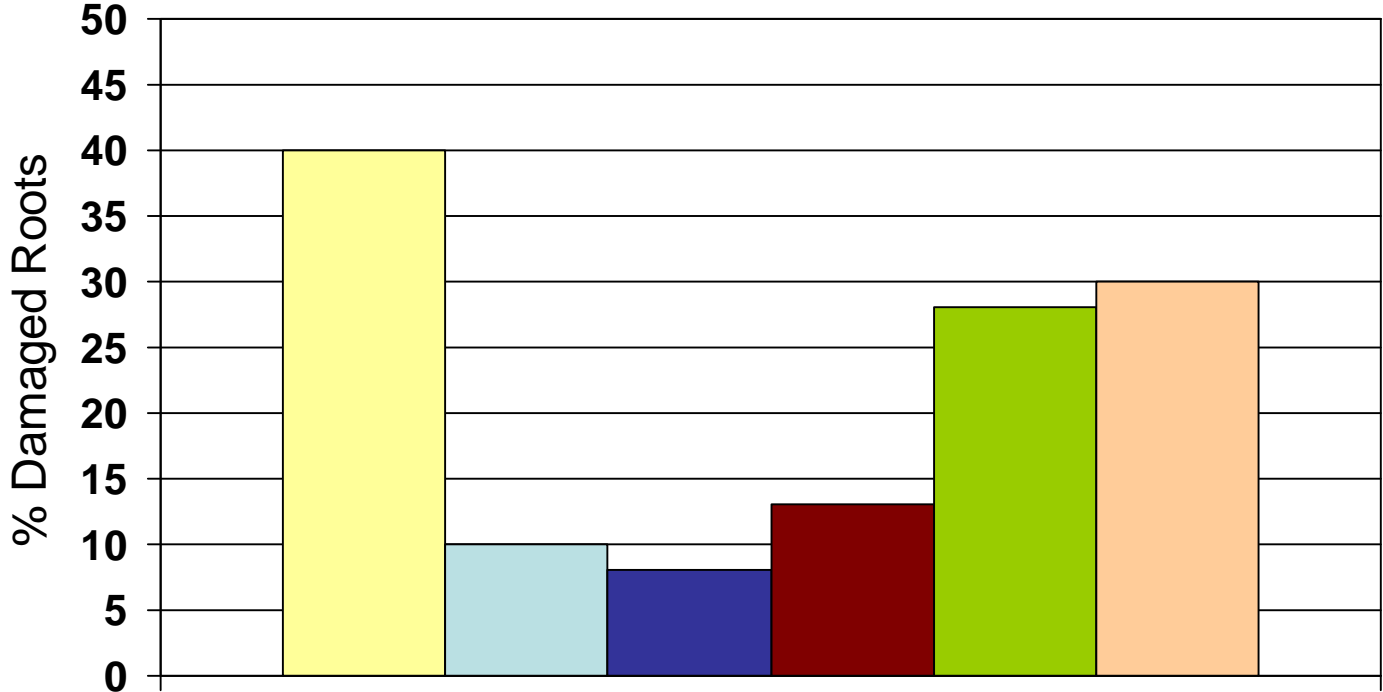


Delay for Sweet Potato

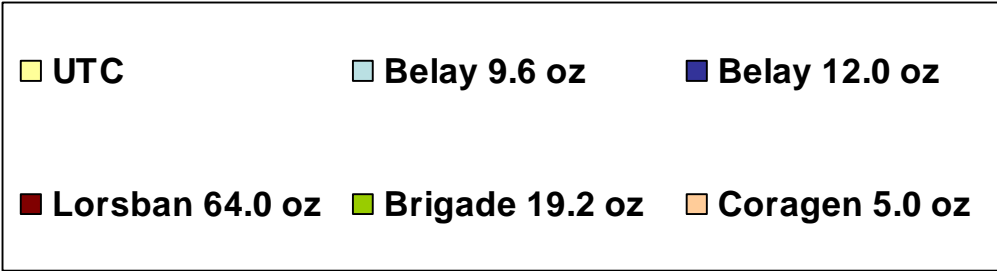


SWEET POTATO		
FOLIAR & SOIL APPLICATION		
Pests	V-10170 2.13 SC Insecticide Application Rates	Special Instructions
Foliar: Aphids Colorado Potato Beetles Flea Beetles Leafhoppers	2 to 3 fl oz/A	Apply V-10170 2.13 SC Insecticide as pest populations begin to build. Do not wait until population beyond threshold has been established. Apply V-10170 2.13 SC Insecticide in sufficient water to ensure uniform and thorough coverage of foliage
Soil at-plant or side-dress: Above insects plus: White Grubs Wireworms Sweet Potato Weevils Potato Psyllids (suppression)	6 to 12 fl oz/A	Apply in band over row and incorporate prior to planting or apply as side-dress on both sides of the row and incorporate at least three inches deep.
<ul style="list-style-type: none"> Do not apply foliar treatments less than 7 days apart. Do not apply within 14 days of harvest. Regardless of formulation or type of application (foliar or soil), do not apply more than 0.2 lb ai of clothianidin per acre per season. 		

Sugarcane Beetle Control in Sweet Potato



Pre-Plant Insecticide Treatments



Tara Smith
Chase, LA
2009



Valor SX Herbicide

New Corn Label

Valor Recommendation – Field Corn



§ 2 oz/A

§ 20 GPA of water; minimum 40 psi

§ No-till or minimum till

§ Program

	Preplant (14 days before planting)	In-Crop*	Crops
Program 1	<i>Valor</i> , Roundup, 2,4-D and Atrazine	Roundup	Corn Only
Program 2	<i>Valor</i> , Roundup and 2,4-D	Roundup and Atrazine	Corn or Soybeans

* In-crop assumes Roundup Ready corn is being planted.

Rotational Flexibility



Crop Flexibility	Valor Rate/A	Application Timing
Cotton Burndown	2 oz	No-Till 21 days; Conventional Till 30 days; Strip Till 14 days ¹
Cotton Layby	2 oz ²	16" cotton, direct to lower 2" of plant
Soybeans	2 oz ³	Preemerge to 3 days after planting
Peanuts	3 oz ⁴	Preemerge to 2 days after planting
Field Corn	2 oz	No-Till or Minimum Till 14 days before planting
Wheat	2 oz	30 days before planting
Rice	2 oz	30 days before planting
Sweet Potatoes	3 oz	Pre-transplant
Sugarcane	4-6 oz	4 oz Layby 6 oz Preemerge

¹ For the states of AL, FL, GA,NC, SC, VA only
² NIS only
³ For glyphosate-resistant weeds in soybeans, use 3 oz/A
⁴ 2 oz/A OK, VA, NC





Questions?

