

*No [one] can truly be called an entomologist,
sir; the subject is too vast for any single human
intelligence to grasp.*

*-Oliver Wendell Holmes,
The Poet at the Breakfast Table*

Stink Bug Species Found in Texas

1. *Acrosternum hilare*
2. *Apateticus lineolatus*
3. *Arvelius albopunctatus*
4. *Banasa euchlora*
5. *Brochymena arborea*
6. *Brochymena chelonoides*
7. *Chinavia marginata*
8. *Chlorochroa ligata*
9. *Edessa bifida*
10. *Edessa florida*
11. *Euschistus obscurus*
12. *Euschistus quadrator*
13. *Euschistus servus*
14. *Euschistus tristigmus*
15. *Halyomorpha halys*
16. *Holcostethus limbolarius*
17. *Hymenarcys nervosa*
18. *Loxa flavicollis*
19. *Mecidea* spp.
20. *Meneclis insertus*
21. *Murgantia histrionica*
22. *Nezara viridula*
23. *Oebalus pugnax*
24. *Orsilochides*
25. *Orsilochides stictica*
26. *Perillus bioculatus*
27. *Perillus splendidus*
28. *Piezodorus guildinii*
29. *Podisus acutissimus*
30. *Podisus maculiventris*
31. *Proxys punctulatus*
32. *Rhytidolomia osborni*
33. *Sphyrocoris obliquus*
34. *Stiretrus anchorago*
35. *Thyanta custator*
36. *Tylospilus acutissimus*

222 species found in North America

Crops Affected by Stink Bugs

- ⊙ Alfalfa
- ⊙ Corn
- ⊙ **Cotton**
- ⊙ **Grain Sorghum**
- ⊙ Pecan
- ⊙ Rice
- ⊙ **Soybeans**
- ⊙ Wheat
- ⊙ Fruit and Vegetable Crops

Stink Bug Identification

TEXAS A&M
AGRILIFE
EXTENSION

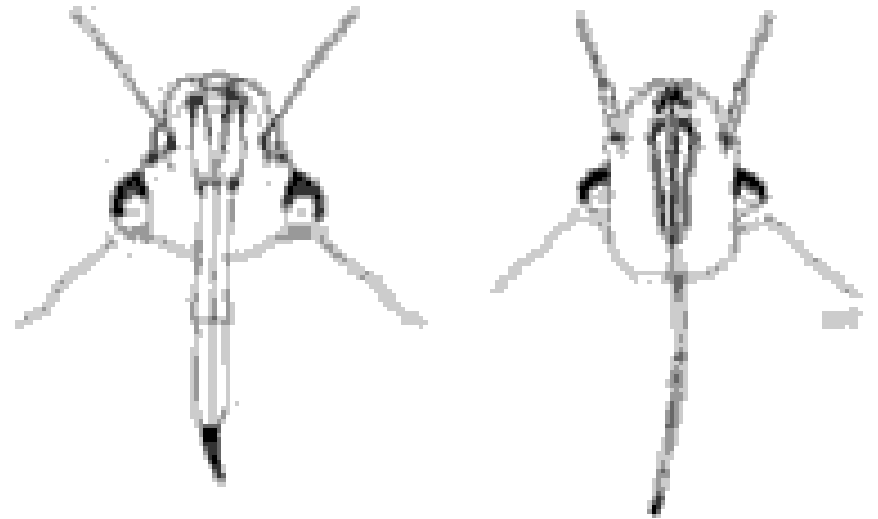


Most common and economically damaging stink bug species in Texas

- ⊙ Southern Green *Nezara viridula* (L.)
- ⊙ Green *Acrosternum hilare* (Say)
- ⊙ Brown *Euschistus servus* (Say)
- ⊙ Rice *Oebalus pugnax* (F.)
- ⊙ Red-banded *Piezodorus guildinii* (Westwood)
- ⊙ Conchuela *Chlorochroa ligata* (Say)

- ⊙ Leaf-footed Bug *Leptoglossus phyllopus*

Pest or Predator?



Predator



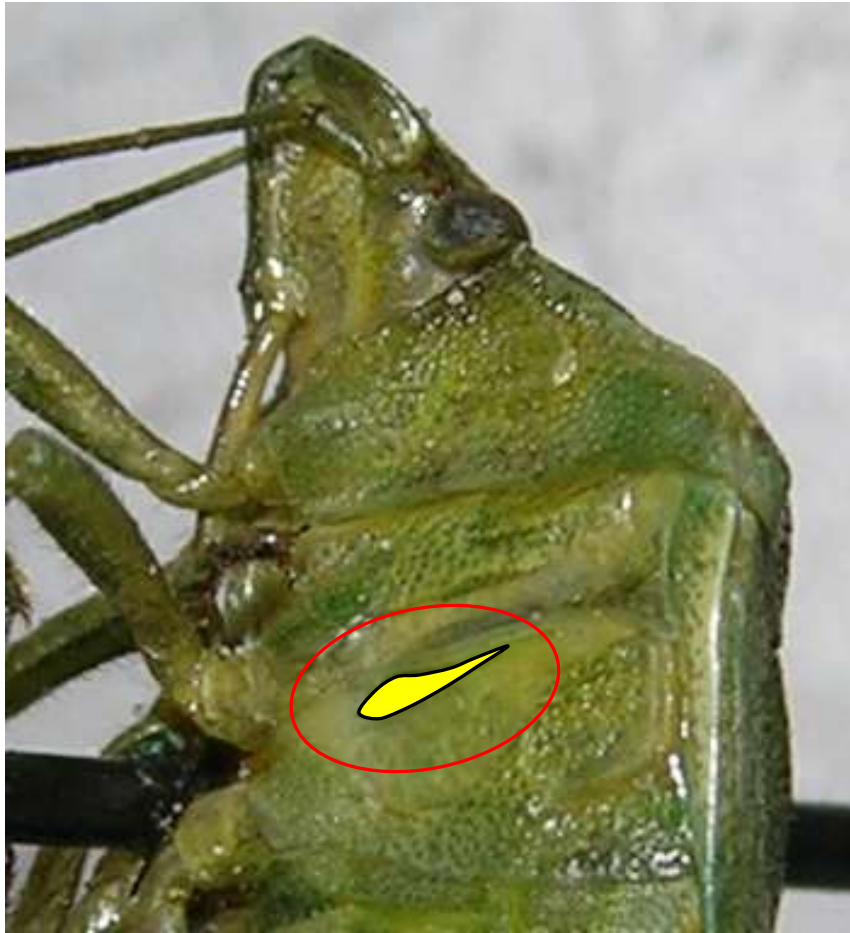
Pest



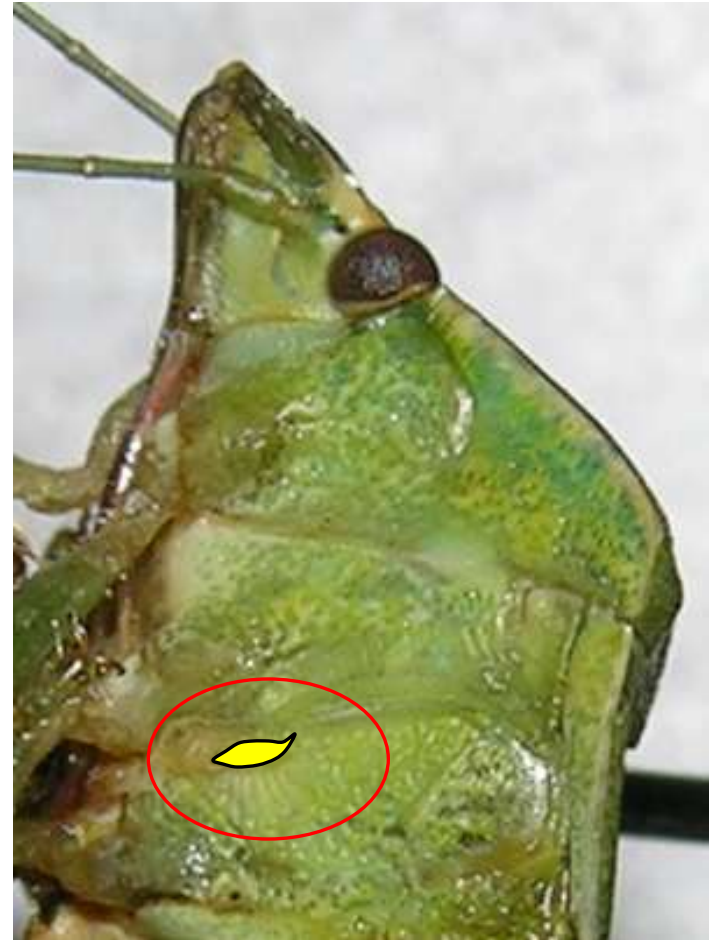
Green or Southern Green?



◎ Green Stink Bug



◎ Southern Green Stink Bug



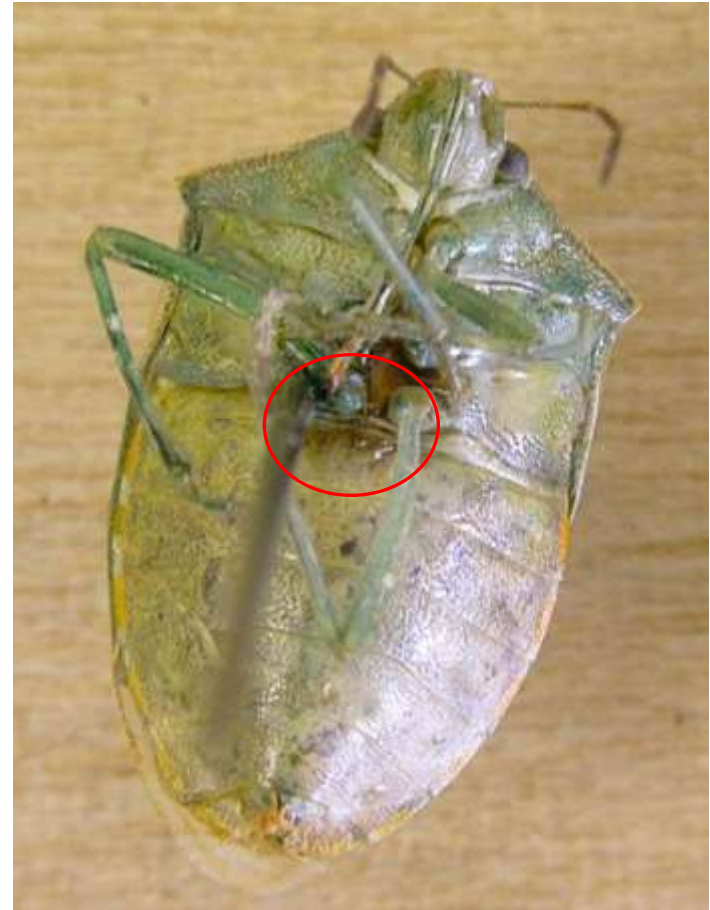
Red-Banded or Red-Shouldered?



⦿ Red-Banded Stink Bug
Bug



⦿ Red-Shouldered
Stink Bug



GREEN



SOUTHERN GREEN



RED-BANDED

GREEN



RED-BANDED

SOUTHERN GREEN



BROWN

BROWN STINK BUG

Euschistus spp.



Rice Stink Bug



Conchuela
Chlorochroa ligata



Stink Bug Management in Cotton

◎ Typical Species:

- ◎ Green
- ◎ Southern Green
- ◎ Brown
- ◎ Conchuela
- ◎ Leaf-footed Bug



Stink Bug Feeding





Stink Bug Management in Cotton

⦿ Sampling Methods

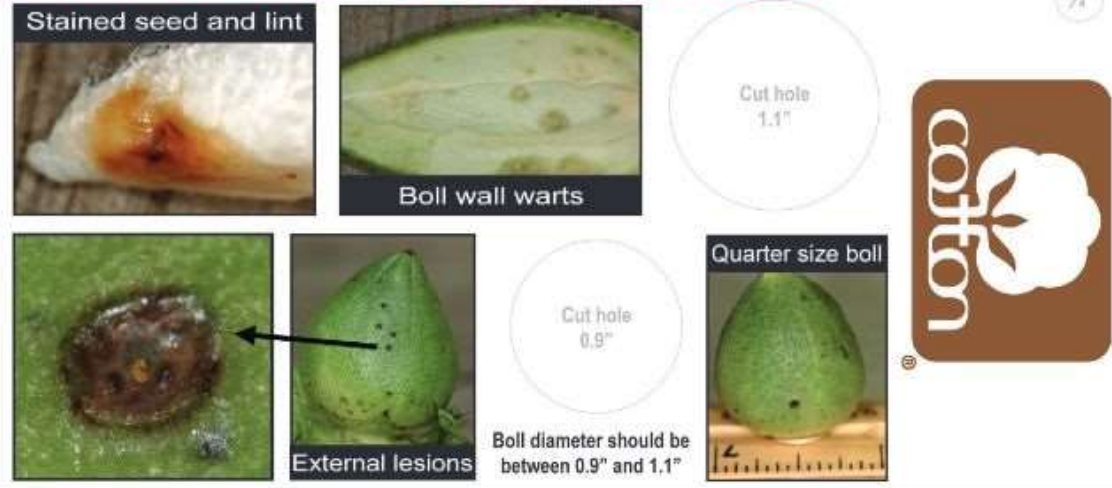
- ⦿ Drop Cloth
- ⦿ Evidence of Feeding

⦿ Economic Thresholds

- ⦿ Drop Cloth
- ⦿ 1 per 6 row feet
- ⦿ Evidence of Feeding



Decision aid for stink bug thresholds in cotton



Decision aid for stink bug thresholds in cotton

1. Pull random sample of quarter size diameter bolls, avoid field edges. (boll sizes between 0.9" and 1.1")
2. 1 boll / acre, no less than 25 / field.
3. Sort bolls into two piles: those with and those without, obvious external lesions.
4. Crack and inspect bolls with external lesions for internal damage (boll wall warts, stained seed or lint).
5. If threshold is not met for that week, (see chart) check the remaining bolls for internal damage.
6. Treat field only if the threshold is met for that week.

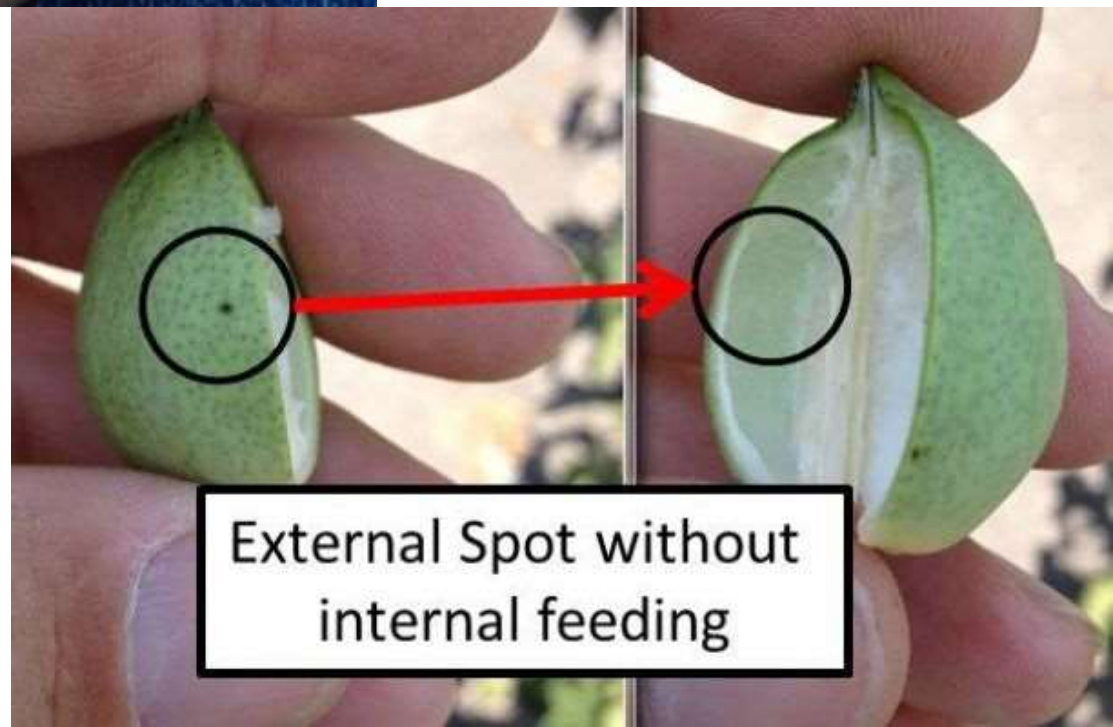
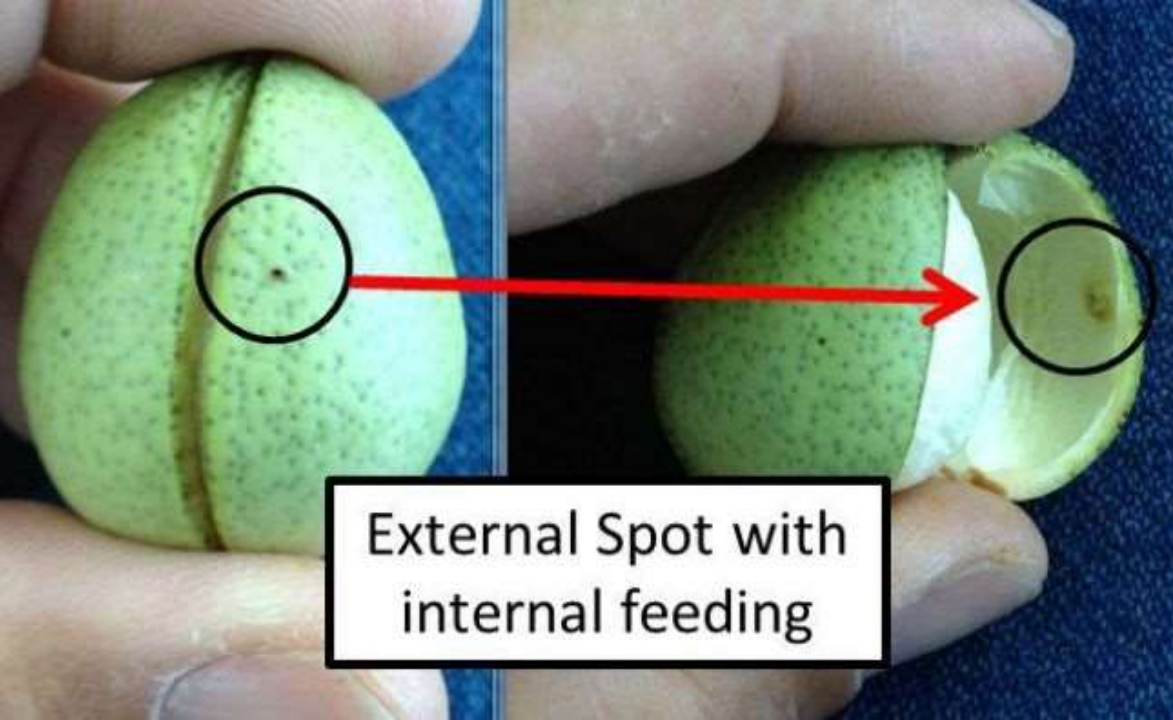


Bolls should fit through the large hole but NOT the small one.



Week of bloom	Threshold (% internal boll damage)
1	50%
2	30%
3	10%
4	10%*
5	10%*
6	20%
7	30%
8	50%

*Consult state guidelines for scouting intervals.



Summary of Boll Sampling 2012

	External Spots	External Spots And Internal Feeding	Internal Feeding	Total Internal Feeding
Total Bolls	80.8% 776/960	31.4% 301/960	0.8% 8/960	32.2% 309/960

Stink Bug Management in Grain Sorghum



Stink Bug Management in Grain Sorghum

◎ Typical Species:

- ◎ Rice
- ◎ Brown
- ◎ Green
- ◎ Southern Green
- ◎ Conchuela

◎ Sampling Methods

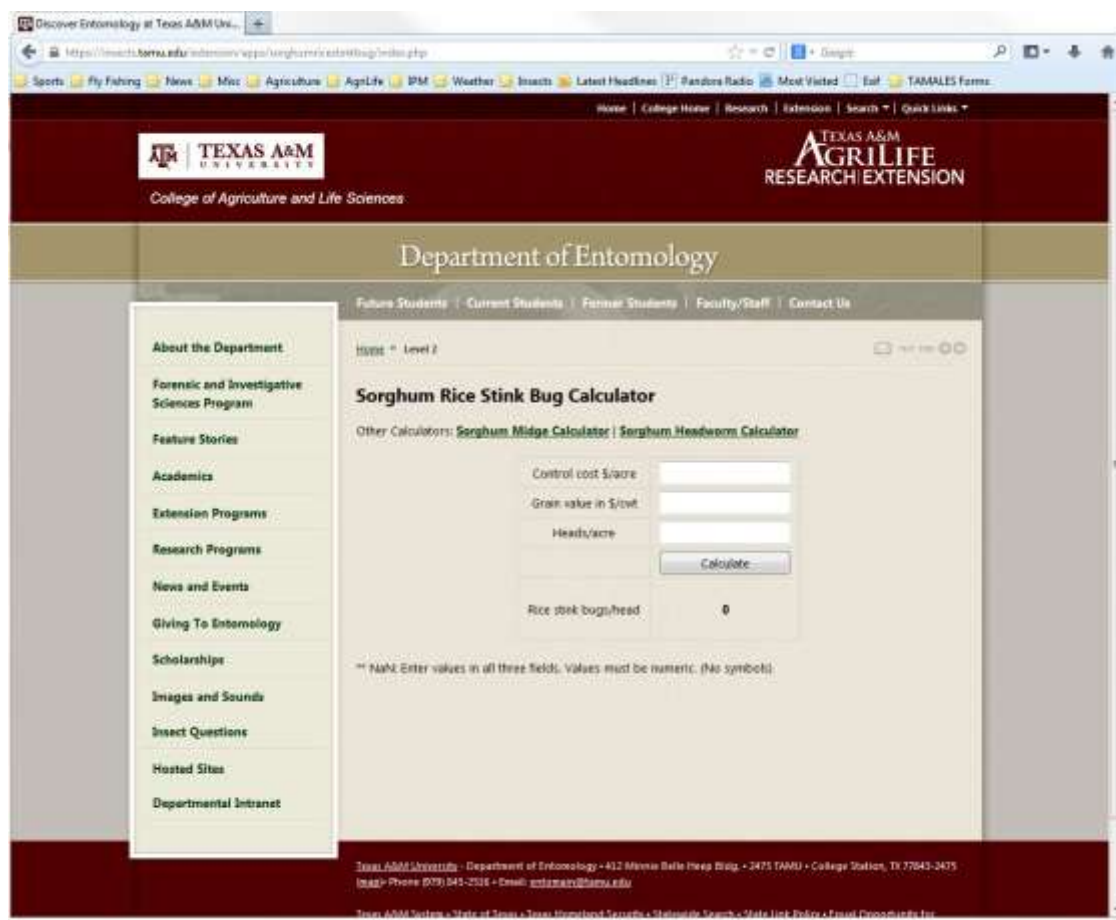
- ◎ Beat Bucket



Stink Bug Management in Grain Sorghum

⦿ Economic Thresholds

- ⦿ <https://insects.tamu.edu/extension/apps/sorghumricestinkbug/index.php>



The screenshot shows a web browser window displaying the "Sorghum Rice Stink Bug Calculator" on the Texas A&M University website. The page features a navigation menu on the left with categories like "About the Department", "Forensic and Investigative Sciences Program", "Feature Stories", "Academics", "Extension Programs", "Research Programs", "News and Events", "Giving To Entomology", "Scholarships", "Images and Sounds", "Insect Questions", "Hosted Sites", and "Departmental Intranet". The main content area is titled "Sorghum Rice Stink Bug Calculator" and includes a "Level 2" indicator. Below the title, there are links for "Other Calculators: Sorghum Midge Calculator | Sorghum Headworm Calculator". The calculator form has four input fields: "Control cost \$/acre", "Grain value in \$/bwt", "Heads/acre", and "Rice stink bugs/head". The "Rice stink bugs/head" field is currently set to "0". A "Calculate" button is positioned below the "Heads/acre" field. A note at the bottom of the form states: "N/A! Enter values in all three fields. Values must be numeric. (No symbols)". The footer of the page provides contact information for the Texas A&M University Department of Entomology, including the address (412 Menzies-Bell Insect Bldg., 2475 TAMU, College Station, TX 77843-2475), phone number (979) 845-2536, and email (entom@tamu.edu).

<https://insects.tamu.edu/extension/apps/sorghumricestinkbug/index.php>

Sorghum Rice Stink Bug Calculator

Other Calculators: [Sorghum Midge Calculator](#) | [Sorghum Headworm Calculator](#)

Control cost \$/acre	<input type="text" value="6"/>
Grain value in \$/cwt	<input type="text" value="8"/>
Heads/acre	<input type="text" value="65000"/>
	<input type="button" value="Calculate"/>
Rice stink bugs/head	0.35

** NaN: Enter values in all three fields. Values must be numeric. (No symbols)

Stink Bug Management in Grain Sorghum



Stink Bug Management in Soybeans

◎ Typical Species:

- ◎ Red-Banded
- ◎ Green
- ◎ Southern Green
- ◎ Brown
- ◎ Other

◎ Sampling Methods

- ◎ Drop Cloth
- ◎ Sweep Net
- ◎ Beat Bucket
- ◎ Visual

Stink Bug Management in Soybeans



- ⊙ Economic Thresholds
 - ⊙ 36/100 Sweeps
 - ⊙ 1 / Row ft.
 - ⊙ (1 / 3 row ft.) R3-R6
- ⊙ Red-Banded
 - ⊙ 24/100 Sweeps
 - ⊙ LSU research
 - ⊙ Dr. Jeff Davis (ESA)
 - ⊙ 8-16 / 100 sweeps
 - ⊙ May be 4 / 100 sweeps



Stephen Biles
Extension Agent – IPM
Calhoun, Refugio and Victoria Counties



I LAUGHED
SO HARD
TEARS RAN
DOWN MY LEG