

Improving Lives. Improving Texas.

INTEGRATED PEST MANAGEMENT
JUNE 3, 2009 VOLUME 5 ISSUE 4
CALHOUN VICTORIA REFUGIO

#### "New" Research Sprayer

A research sprayer has been completed and is now being put to work applying the pesticide treatments in our applied research trials. We used this sprayer for the first time on Tuesday to control weeds and insects in research plots.



Thanks to the organizations and people who made this possible. The sprayer, a Spider Sprayer, was acquired and donated by South Texas Cotton and Grain Association. Moreman Community Gin designed and built the spray boom and Danny May did the sandblasting, painting and built the yellow basket which will hold the spray containers.





## Soybeans

We are not finding stink bugs at treatable levels but continue to scout soybean fields. In the past several years, stink bug populations began to increase in early June and exceeded economic thresholds in mid-June. However, in 2004, stink bugs were at treatable levels in early June.

Soybeans are subject to damage from the time the bean pods start forming until the beans are mature. Protecting soybeans from injury during pod set and early pod fill will reduce the incidence of delayed maturity (green bean effect).

Treatment is justified from pod formation to bean maturity when populations equal or exceed one bug per row-ft., or 36 per 100 sweeps. Stink bugs should be 1/4 inch (6 mm) or larger. Some recommend the threshold be 0.3 bugs per row-ft. (12/100 sweeps) from bloom through mid- pod fill. I suggest using 36 bugs / 100 sweeps as the action threshold; lowering it to 24 / 100 sweeps if red-banded stink bugs are found.

#### **Grain Sorghum**

I have yet to find **sorghum midge** at treatable levels. As these fields mature beyond bloom, the crop will enter the damage window for stink bugs and headworms. Begin sampling for stink bugs and headworms soon after the field finishes flowering and continue at 5-day intervals until the hard dough stage. To sample stink bugs and headworms, grasp the stalk just below the sorghum head, bend the head into a clean, white, 5-gallon bucket, and vigorously beat the head against the side of the bucket. Insects will fall into the bucket where they can be seen and counted.

Small larvae (up to 1/4 inch) consume very little grain (about 10 percent of the total) and about 80 percent of them die in this stage. Therefore, small larvae should not be considered in determining the economic injury level. If most stink bugs and headworms are this size, sample the field again in 3 to 4 days.

The attached tables have the economic thresholds for stink bugs and headworms.

Table 16. Economic injury level for large (longer than  $\frac{1}{2}$  inch) corn earworm larvae shown as the number of larvae per acre. When the number of larvae per acre exceeds the number in the table at a given cost of control and value of grain per cwt, the value of the protected grain exceeds the cost of control.

Control cost	Grain value \$/100 lbs				
\$/acre	6.00	7.00	8.00	10.00	
6	9,750	8,500	7,250	5,750	
8	13,000	11,000	9,750	7,750	
10	16,250	14,000	12,250	9,750	
12	19,500	16,750	14,750	11,750	

<sup>&</sup>lt;sup>1</sup> This threshold table assumes all larvae will survive and complete development.

Table 17. Economic injury level for medium-size ( $\frac{1}{4}$  to  $\frac{1}{2}$  inch) corn earworm larvae shown as the number of larvae per acre. When the number of larvae per acre exceeds the number in the table at a given cost of control and value of grain per cwt, the value of the protected grain exceeds the cost of control.

Control cost \$/acre	Grain value \$/100 lbs				
	6.00	7.00	8.00	10.00	
6	51,500	44,750	38,250	31,250	
8	68,500	58,000	51,500	41,750	
10	87,750	73,750	64,500	51,500	
12	102,750	88,250	77.750	62,000	

<sup>&</sup>lt;sup>1</sup> This table assumes 81 % of the medium-size larvae will die in that stage and not contribute to additional yield loss.

Table 20. Economic injury level for rice stink bug as number of bugs per acre at the milk stage.

Grain value (\$/cwt)				
6.00	7.00	8.00	10.00	
30,500	27,000	23,000	18,500	
40,500	35,000	30,500	24,500	
51,000	43,500	38,000	30,500	
62,000	52,500	46,000	36,500	
	30,500 40,500 51,000	6.00     7.00       30,500     27,000       40,500     35,000       51,000     43,500	6.00         7.00         8.00           30,500         27,000         23,000           40,500         35,000         30,500           51,000         43,500         38,000	



#### SOME OF YOUR SUPPORTERS FOR THE IPM PROGRAM

Moreman Community Gin - South Texas Cotton & Grain Farmer's Coop of El Campo - Sorghum Partners Hlavinka Equipment Company - Vanderbilt Coop Helena Chemical Company - Danevang Farmer's Coop, Inc.

## **ROW CROP TOURS:**

# **Refugio County Row Crop Tours**

June 10, 2009 – 7:00 AM – Austwell / Tivoli 3:30 PM – Bonnie View Area Extension Office (361) 526-2825

### **Calhoun County Row Crop Tours**

**June 16, 2009** – 3:30 PM (361) 552-9747

# **Victoria County Row Crop Tours**

**June 18, 2009** – 1:00 PM (361) 575-4581



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