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# PEST MANAGEMENT NEWS

Calhoun, Refugio & Victoria Counties

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## Current Conditions

Rain fell over most of the farmland this week slowing harvest but providing needed moisture to the cotton, soybean and sesame fields. From what I have heard, grain yields range from average to slightly above average across the area.

Once harvest begins, it can be easy to forget about the insect pests in cotton and soybean. Continue to monitor these fields until they are safe from insect pests. Insect pressure continues to be relatively low but some problems fields are being found.

## Grain Sorghum

The few sorghum fields that have yet to reach hard dough should be monitored for both rice stink bugs and headworms.

- Economic threshold calculators: <https://insects.tamu.edu/extension/apps/>

## Cotton

Cotton fields range from mid-bloom to mature with open bolls. Cotton fields are “safe” once the field has reached **450 HU past cutout**. We accumulated 20 HU per day last week so cotton should be “safe” 23 days after cutout.

We have found some fields with more than 20% evidence of feeding from stink bugs, or more likely, **Verde Plant Bugs**.

Look for evidence of **stink bug and Verde plant bug** feeding in cotton by opening 1-inch diameter bolls. The size of these bolls is critical to using this threshold. If bolls sampled are too small or too large, the feeding will either not be found or could be older feeding.

In general, I believe the stink bugs will not feed on bolls until they have larger seed. This is why we can check the bolls that are 10-12 days old and not observe feeding from before 5-6 days ago.

On the contrary, the verde plant bug may feed on squares and young bolls up to 400 Heat Units after bloom. This may cause a problem in fields which have both stink bugs and verde plant bugs. I am currently researching the use of this method of monitoring for Verdes. Thus far, I think it will still work, but I would continue to scout plants for Verde plant bugs as well.

Table 1. Heat Units accumulated through July 10, 2013 at weather stations (<https://cwp.tamu.edu/>) to determine when cotton crops are “safe” from new insect pest infestations.

Date of Cutout (5 NAWF)	Heat Units Accumulated through July 10	
	Austwell	Victoria
June 20	657	638
June 25	536	545
July 1	383	368
July 5	295	283

## Soybeans

Soybean fields range from Mid-bloom to pod fill. Stink bugs are still being found in low numbers below treatment threshold. I have only found brown and green stink bugs and no red-banded stink bugs this year in soybean fields.

- Scout fields for stink bugs with either a drop cloth or sweep net.
- Treat when stink bugs exceed 36 stink bugs per 100 sweeps or 1 per foot of row with drop cloth.

## Natural Insect Control

The reason for the great difference in economic threshold (ET) between large (>1/2 inch) and medium (<1/2 inch) worms is natural control. Between predation and environment, the assumed value of mortality in medium sized worms on a sorghum head is around 80%.

For example, if you assume \$8 cost of control, \$7/ cwt and 60,000 heads per acre, the ET is 0.98 medium worms per head and 0.19 large worms per head. This difference is due to the assumption of natural mortality of the medium larvae.

One of the farmer's best friends can be the beneficial insects in the field. There are many different kinds of insects that feed on the insect pests found in our fields.

Pictured to the right are some hymenopteran parasitoids feeding on a corn earworm found in sorghum near Port Lavaca. These are external feeding wasp larvae sucking out the body contents of the host. They will later pupate into adults on the underside of the host caterpillar.



Wasp Larvae Feeding on a  
Corn Earworm

## Research Projects

Current field projects include:

- Sorghum planting rate, Refugio and Calhoun Counties
- AflaGuard use in corn for reducing aflatoxin, Refugio County
- Thrips control with foliar insecticides, Victoria County
- Fungicide use in grain sorghum, Victoria County
- Cotton Fleahopper control with foliar insecticides, Calhoun County
- Treating Bt cotton with insecticides for worm control, Calhoun County
- Evaluation of stink bug thresholds on stink bugs and Verde Plant Bug, Calhoun County
- Stink Bug control with foliar insecticides, Victoria County

Looking for locations for the following trials:

- Stink bug and/or headworm control in Sorghum (Still needed!)
- Fall armyworm control in bermudagrass pastures

I am interested in conducting research to solve pest management issues on your farm. Call me if you have something I should look into. 361-920-1138

## Support for the 2013 IPM Program comes from the following:

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