

# PEST MANAGEMENT NEWS

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## Cotton

Cotton maturity ranges from 1/3 grown square to blooming cotton with 4-9 nodes above white flower. Cotton should be scouted for cotton fleahoppers through the first week of bloom. We continue to find fleahoppers in populations ranging from 0 to 81 fleahoppers per 100 plants with an economic threshold of 15 fleahoppers per 100 plants.

Aphids are being found in plant terminals of some fields. I have yet to see these take off to populations exceeding 25 per leaf. The economic threshold of cotton aphids is when the average number of aphids per leaf on the top, middle and lower portions of the plant is greater than 50 aphids per leaf. If you find aphids exceeding this level, count the aphids in the field again in 2-3 days to see if the field population is increasing or decreasing. Aphid populations will often decline before damage occurs from their high numbers.

In cotton with maturing bolls, Verde plant bug (Creontiades) and Stink bugs can cause similar kinds of feeding evidence on the inside of cotton bolls. Both of these insects feed on the bolls by inserting their syringe-like mouthparts into the boll and sucking plant juices. The plant response to their feeding is to form a wart-like nodule on the inside of the boll wall. Thus, we can monitor for these insects by determining the percentage of 10 day old cotton bolls with evidence of feeding. If more than 20% of 10 day old cotton bolls have evidence of stink bug or verde plant bug feeding, treatment may be necessary to prevent economic loss.



## Grain Sorghum

Grain sorghum maturity ranges from sorghum that has not yet head to hard dough. Fields with blooming heads should be inspected for sorghum midge laying eggs in the florets of the heads. If one or more midge is found per head, treat the field with an insecticide. Pyrethroids are often the most economical insecticides for this purpose.

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

Control cost \$/acre	Grain value (\$/cwt)			
	6.00	7.00	8.00	10.00
6	30,500	27,000	23,000	18,500
8	40,500	35,000	30,500	24,500
10	51,000	43,500	38,000	30,500
12	62,000	52,500	46,000	36,500

Table 16. Economic injury level for large (longer than 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.<sup>1</sup>

Control cost \$/acre	Grain value \$/100 lbs			
	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>1</sup> This threshold table assumes all larvae will survive and complete development.

We have been finding Rice Stink bugs in most sorghum that has headed from bloom to hard dough. Treatment threshold for rice stink bug is 1 per 3 heads from bloom until hard dough.

The field is past the damage window once hard dough is achieved and insecticide treatment is no longer needed.

Headworms have been found in relatively low numbers in most fields but a few fields have as many as 52 corn earworms in 100 heads of sorghum. Treatment threshold for worms depends on the size of the worm. The economic threshold (ET) for large (> 1/2 inch) worm is one worm in about 6-7 heads and the for medium sized (1/4- 1/2 inch) worms the ET is one in 3 heads.

Table 17. Economic injury level for medium-size (1/4 to 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.<sup>1</sup>

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

If you intend on cutting Sorghum, haygrazer or other sorghum species for hay you will want to check the hay for high Nitrate levels. When the soil contains nitrate nitrogen but little soil moisture, nitrates are highly concentrated in the water plants take up. Plants don't have enough water to continue growing and nitrates accumulate. Three to 5 days of active growth are needed to significantly reduce nitrate levels in plants.

To sample standing forage, create a composite sample from plant parts taken from at least 10 to 15 areas with the same fertility and moisture conditions. Do not mix plants from "good" and "bad" parts of the field. Create different composite samples for these areas. Ship samples to the laboratory in clean paper sacks. Do not use plastic bags because the high moisture content will cause the samples to mold, which interferes with the nitrate analysis.

For more information on Nitrates in forages, call me at 920-1138 or go to the Soil, Water and Forage Testing Lab on the internet: <http://soiltesting.tamu.edu>




## 2012 CROP TOUR SCHEDULE

JUNE 13, 2012	REFUGIO COUNTY	For information call 361-526-2825
JUNE 19, 2012	CALHOUN COUNTY	For information call 361-552-9747
JUNE 20, 2012	VICTORIA COUNTY	For information call 361-575-4581

Calhoun County will be offering Texas CCA CEU's – 1.0 – Pest Management; .50 – Crop Management

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