

PEST MANAGEMENT NEWS

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Mid Coast IPM Program

The Mid-Coast IPM Program will conduct activities in Calhoun, Refugio and Victoria Counties. These activities will include applied research projects on pest management and crop production issues identified through contacts with producers. The primary crops of interest are Corn, Grain Sorghum, Cotton and Soybeans, but issues in other crops will be investigated as they are identified.

Current plans for 2013 include the following topics:

- 1) Aflaguard in corn to reduce Aflatoxin
- 2) Seeding rate in sorghum
- 3) Insecticidal control of insects on sorghum heads
- 4) Stink bug management in Sorghum, Cotton and Soybeans
- 5) Insecticide sprays for bollworm control in Bt cotton

If you have a topic you would like to have me look into, call me at 361-920-1138.

IPM Newsletter

Anyone wishing to receive this newsletter can be added to the email list by contacting my office at 361-552-3324 or biles-sp@tamu.edu.

Grain Sorghum

Sorghum fields are now susceptible to two kinds of aphids; the **yellow sugarcane aphid** and the **corn leaf aphid**. The yellow sugarcane aphid is usually lemon yellow, 2 mm long, covered with short, black spines, and has two double rows of dark spots on its back. Cornicles are very short. Winged and wingless forms live in the colony. Yellow sugarcane aphids feed on the underside of lower sorghum leaves and inject toxin. Aphids cause purple-colored leaves on seedling sorghum and yellow leaves on more mature plants.

The presence of yellow sugarcane aphids must be determined soon after sorghum plants emerge. The presence of purple-colored seedling plants is a possible indication of a yellow sugarcane aphid infestation; however, leaf purpling also can be caused by cold weather and other factors. Sorghum plants should be inspected beginning the first week of plant emergence and twice weekly until plants have at least five true leaves.

The corn leaf aphid is a dark, bluish-green aphid, 2 mm long, oval in shape, with black



Yellow Sugarcane
Aphid



Corn Leaf Aphid

legs, cornicles, and antennae. There are winged and wingless forms. The whorl leaf can be pulled from the plant and unrolled to detect aphids when numbers are low. However, this insect rarely damages sorghum.

Sorghum Downey Mildew

This is the time to inspect sorghum fields for Sorghum Downey Mildew (SDM). It is easier to find diseased plants when they are small, before they get crowded out by uninfected plants. Therefore, inspect fields before the crop this week.

Please refer to the attached factsheet for a refresher on the disease process. The systemic, yield-limiting phase of the disease happens before the seedlings emerge. Once you have a few true leaves, you can assess this phase of the disease. It won't increase during the season. It might even decrease, as some of the infected seedlings may die.

I have heard a report of SDM showing up in a Calhoun County field. In the past few years, we have found SDM in Victoria and Refugio Counties resistant to fungicidal seed treatments so it would be logical that the occurrence in Calhoun County is resistant as well.

Management of SDM is accomplished through crop rotation and planting resistant sorghum hybrids. If you find SDM in one of your fields, the damage is done and additional fungicidal application will not affect yield.

Cotton

Cotton is susceptible to **thrips**. Last year I conducted an insecticide trial to determine the effect of thrips on cotton that contained insecticidal seed treatments. We had high numbers of thrips but effectively treating at the 3-leaf stage did not affect lint yield on 700 lb. cotton (Table 1). This may have been due to the seed treatments preventing losses, good growing conditions or treating after the damage was done.

The current dry soils and cool temperatures are not conducive to rapid plant growth and could result in cotton fields being more susceptible to insect pests like thrips. The economic threshold is to treat cotton fields when thrips numbers exceed one thrips per true leaf.

Table 1. Thrips counts and lint yield of seed treated cotton sprayed with insecticides for thrips control. (Victoria County, 2012).

		Total Thrips per plant 3 DA-A	Lint Yield Lbs/A 103 DA-A
1	Untreated Check	12.5 a	713.9 a
2	Acephate 90 3 oz./A	2.6 b	711.2 a
3	Intruder 0.8 oz./A	4.4 b	716.9 a
LSD (P=.05)		7.12	137.49
Standard Deviation		3.14	60.66
CV		48.39	8.5
Treatment Prob(F)		0.0370	0.9933

Means followed by same letter do not significantly differ (P=.05, LSD)