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# PEST MANAGEMENT NEWS

Calhoun, Refugio & Victoria Counties

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## General Conditions

Variable amounts of rain fell this week on parts of Calhoun, Refugio and Victoria Counties with totals ranging from 0-6 inches. Much of the higher amounts fell north of Victoria. This rain should finish off the corn and sorghum but the cotton crop will need additional rain in a few weeks when bloom begins.

## Grain Sorghum

Most sorghum fields are blooming or beginning to bloom. Insect pests of grain sorghum in bloom include **Sorghum Midge** and aphids. We have not found high numbers of sorghum midge in the fields yet. I expect the midge populations to increase with time and later planted sorghum will be more prone to having problems with sorghum midge.

Follow this link for the Sorghum Midge Economic Threshold Calculator. (Table 1)  
<https://insects.tamu.edu/extension/apps/sorghummidgecalculator/index.php>

**Table 1.** Sorghum Midge per Head Economic Thresholds (assumed crop value: \$8.00/cwt).

		Cost of Control (\$/ Acre)		
		\$6	\$7	\$8
Bloomin g heads per acre	40,000	0.62	0.73	0.83
	50,000	0.50	0.58	0.67
	60,000	0.42	0.48	0.55
	70,000	0.36	0.42	0.48

Other potential insect pests of grain sorghum include aphids, stink bugs and headworms.

We continue to find **corn leaf aphid**, **yellow sugarcane aphid** and the **sugarcane aphid** in sorghum fields. Sugarcane aphids are in low numbers in many fields across the area.

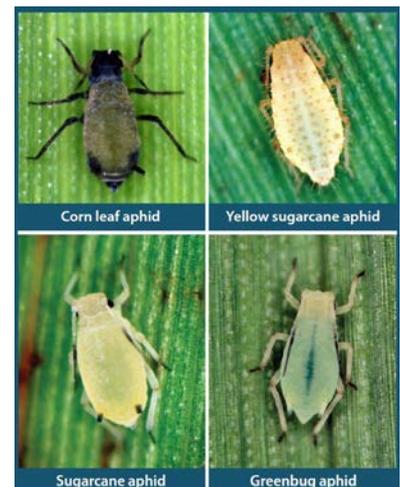
The sugarcane aphid has not yet been studied enough to have confidence in an economic threshold (ET) but we can make some educated guess as to where the treatment threshold should be. The sugarcane aphid does not inject a toxin into the plant like the Yellow Sugarcane Aphid.

We have seen that this aphid will develop into high numbers on 1-2% of the plants before spreading to the plants in the rest of the field.

In the Lower Rio Grande Valley, Extension Entomologists are suggesting a treatment threshold of 40% infested plants. An infested plant is a plant containing one or more sugarcane aphids. While this may be the best threshold for the valley, I am not convinced this is the ET we should use in the Mid-Coast.

I suggest one of two methods for determining if a field should be treated.

1. Treat when 40% of the plants contain a certain number of aphids such as 100 aphids.
  - a. I like this because I don't want to treat a field having only 40 aphids per 100 plants.



**Figure 2.** Aphid species that affect grain sorghum. All aphids reared by Scott Armstrong, USDA-ARS Lab Stillwater, OK, and photographed by Rick Grantham, Oklahoma State University Insect Diagnostic Lab, Stillwater.

- b. The drawback to this ET is the clumping nature of this aphid. Some plants may be overwhelmed before the ET is met.
- 2. Treat based on the greenbug ET (but remember the SA does not inject a toxin):
  - a. Preboot treat before entire leaves on 20% of plants are killed.
  - b. Boot to heading, treat at death of one functional leaf on 20% of plants.
  - c. Heading to hard dough, treat when aphids cause death of two normal-sized leaves on 20% of plants.

If honeydew production is the concern, treat if aphids are in the head and producing honeydew, but remember, a rainfall event of more than ½ inch could clean up the honeydew.

If I was growing sorghum and sugarcane aphids were in my field, I would get the insecticide I intend to use and put it in my barn. (Suggested insecticides include Transform, Dimethoate and Chlorpyrifos.) I would then continue to closely monitor the aphid population every 2-3 days and treat when I thought the numbers were at a critical level to my field.

The next potential insect pests in sorghum are stink bugs and headworms. Treating for these insects with a pyrethroid may cause the aphids to flare up. This influence in the aphid population may warrant a change from the pyrethroid to an alternative chemistry such as dimethoate for stink bugs, which will have a positive effect on the aphids.

## Cotton

Cotton fields are squaring and have 10-14 nodes per plant. First fruiting sites are at nodes 6-8, except for the cold damaged cotton plants which have higher fruiting initiation. I expect to see the first bloom with 9 nodes above the white flower. I think we will have first bloom when the plants have 15-17 nodes and the plants will add one node every 3 days. Thus, we should see the first blooms in 2-3 weeks.

We are finding cotton fleahoppers at treatable levels and aphids are in some fields in low populations. Treat cotton fleahopper when populations exceed 15 fleahoppers per 100 on cotton.

For aphid populations that exceed 50 aphids per leaf, return to the field after 2-3 days to see if the aphid population is increasing or decreasing. Most of the time, the aphids will crash and will not reach a damaging level.

## Crop Tours

Refugio County (Tivoli a.m., Bonnieview p.m.)	11 June	361-526-2825
Victoria County (Dacosta Hall)	12 June	361-575-4581
Calhoun County (Port Lavaca)	17 June	361-552-9747

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

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