

PEST MANAGEMENT NEWS

Calhoun, Refugio & Victoria Counties

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Grain Sorghum

The earliest planted sorghum fields are beginning to bloom but much of the sorghum crop will not be heading for a week or two. Sorghum fields which have begun to bloom should be monitored for **sorghum midge**.

Sorghum midge adults can be seen crawling on or flying about flowering sorghum grain heads. The simplest and most efficient way to detect and count sorghum midges is to inspect carefully and at close range all sides of randomly selected flowering grain heads.

Inspect plants along field borders first; particularly those downwind of earlier flowering sorghum or johnsongrass. If no, or few, sorghum midges are found on sorghum grain heads along field edges, there should be little need to sample the entire field. If you find more than one sorghum midge per flowering grain head in border areas of a sorghum field, inspect the rest of the field. Sample at least 20 flowering grain heads for every 20 acres in a field. For fields smaller than 20 acres, sample 40 flowering grain heads.

Follow this link for the Sorghum Midge Economic Threshold Calculator.

<https://insects.tamu.edu/extension/apps/sorghummidgecalculator/index.php>

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

The three aphids we are finding in sorghum are **corn leaf aphid**, **yellow sugarcane aphid** and the **sugarcane aphid**. All three of these aphids can be found in the sorghum fields of the mid-coast.

Some alarm has been sounded in the Rio Grande Valley due to high numbers of sugarcane aphids in sorghum fields. I received several calls and emails about what I thought about the pest status of this aphid and what economic threshold (ET) I would use.

First, the sugarcane aphid (SA) is not an aphid that is known to inject a toxin into the plant like the yellow sugarcane aphid (YSA). As such it will not cause leaf injury like the YSA does. High populations of aphids can result in reduced seed fill caused by the insect feeding and general plant decline possibly resulting in plant death when extreme populations are present.

In 2013, SA was documented causing yield losses primarily due to honeydew contamination of the heads. This honeydew has the potential to cause harvest equipment problems which was the problem in affected fields in East Texas and Louisiana last year.

Scout fields weekly until you find SA in the field. Mark areas where the aphids are present and increase the frequency of checking these areas of the field.

If leaf death occurs I would treat based on the greenbug ET (but remember the SA does not inject a toxin):

- Preboot treat before entire leaves on 20% of plants are killed.
- Boot to heading, treat at death of one functional leaf on 20% of plants.
- 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 could clean up the honeydew

Fungicide use in sorghum

Fungicide use in grain sorghum has been suggested by some as having the potential to reduce yield losses or “enhance” sorghum yield. Dr. Tom Isakeit, Extension Plant Pathologist, said grain sorghum is very resilient and plant diseases rarely cause economic loss greater than the cost of a fungicide application. Research he conducted has not shown yield increases from fungicide applications to grain sorghum.

Last year, we conducted a trial in Victoria County looking at the fungicide Quilt XCel applied at 50% bloom to a sorghum field. The fungicide was applied without evidence of disease on the plants and no disease developed in the untreated plots. Eleven replications in the field were harvested with a combine and we used the yield monitor to measure grain yield (Table 1).

Table 1. Grain yield from a fungicide trial applied to grain sorghum in the absence of disease.

	Grain Yield (lbs/A)
Quilt XCel at 50% bloom	6105
Untreated	6307



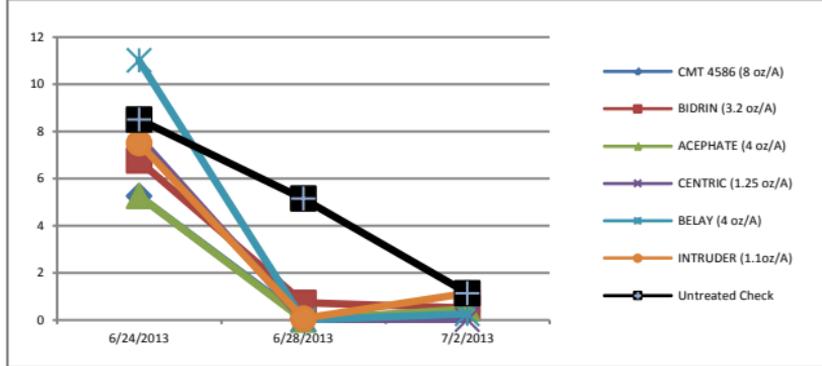
Sorghum Midge,
Courtesy of Danielle Sekula

Cotton

Many cotton fields are squaring and should be scouted for cotton fleahoppers and cotton aphids. We are currently finding low numbers of fleahoppers and aphids are not noticeable.

The economic threshold for cotton fleahopper is when populations exceed 15 fleahoppers per 100 on cotton with more than 3 fruiting sites. Most of the insecticides available for fleahopper control are effective in controlling this pest. (Figure 1)

Figure 1. Cotton Fleahopper numbers per 10 plants for various foliar insecticide applications at -1, 3 and 7 days after treatment (2013).



Crop Tours

Refugio County (Tivoli a.m., Bonnieview p.m.)	10 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:

Woodsboro Farmer's Cooperative	South Texas Cotton and Grain Association
Moreman Coop	Helena Chemical
Hlavinka Equipment	Welfab
Numerous Producers	

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