



TEXAS COOPERATIVE EXTENSION

SOUTHERN BLACKLANDS

# PEST MANAGEMENT NEWS

WILLIAMSON AND MILAM COUNTIES

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## GENERAL SITUATION

Isolated rain showers fell across the area on Mother's Day with accumulations ranging from 0-0.5 inches. Currently, the Southern Blacklands is in pretty good shape from a moisture stand point, especially considering the conditions we were in just over a month ago. However, we are coming to the time where the corn will reach its highest water demand, so any additional rainfall between now and early next month could go a long ways into helping to boost grain yields. The earliest grain sorghum is beginning to head out. The maturest cotton is at 1/3 grown square.

## GRAIN

As the grain sorghum begins heading out, it is important to remind folks about **sorghum midge**. Due to the drier conditions earlier in the spring, there does not appear to be as much johnson grass growing around our area, and this could help prevent the midge levels from building up as rapidly and as numerous as usual.

Sorghum midge are gnat-like insects and are orangish-red in color. As a rule of thumb, it takes an average of one midge per head to cause significant damage. Inspect the blooming portion of the sorghum head where the bright yellow anthers extending out of the spikelets are located. Close-range inspection for midge is the most efficient detection technique, but clear containers (i.e., glass jar or plastic bag) can be placed over the head. Then by shaking the panicle, midges can be counted as they fall into the bag or container.

The need for insecticide is based on the number of adult midges during the flowering period. *Use the economic injury levels for susceptible or resistant sorghum hybrids as presented in the following table.* The density of adults per panicle that would justify chemical control can be determined by first estimating the per acre value of the crop, which is based on the condition of the current crop, and historical experience. Second, determine the per acre cost of control, which includes both the cost of the insecticide and cost of application.

Read down columns for cost of control. The density of adult midges at that point in the table would cause damage sufficient to warrant the cost of control. If adults are still present 3 to 5 days later, immediately apply a second treatment. Several insecticide applications at 3-day intervals may be justified if the yield potential is high and midges are abundant.

**ECONOMIC INJURY LEVELS FOR  
 SORGHUM MIDGE-SUSCEPTIBLE HYBRIDS**

Control cost (\$) per acre	Market value (\$) per acre						
	100	120	140	160	180	200	220
3.00	1.2*	1.0	.9	.8	.7	.6	.6
4.00	1.6	1.3	1.1	1.0	.9	.8	.7
5.00	2.0	1.7	1.4	1.3	1.1	1.0	.9
6.00	2.4	2.0	1.8	1.5	1.3	1.2	1.1
7.00	2.7	2.3	2.0	1.8	1.6	1.4	1.3
8.00	3.0	2.7	2.3	2.0	1.8	1.6	1.5

\*Number of midges per panicle

**COTTON**

Cotton ranges from just planted to one-third grown square. The majority of the cotton is between match-head and one-third grown square. Cotton development has slowed somewhat, which is due to the cooler nighttime temperatures which have been getting down into the 50's. As temperatures warm and soils dry, cotton development should resume at a rapid pace.

**Thrips** populations have managed to hang on over the past week in many areas, along with the cooler temperatures, have led to additional damage and more treatments continue to be needed to help protect fields with less developed cotton. Numbers are ranging over 6-8 thrips per plant (4-6 true leaf cotton) in some fields.

**Aphid** levels have increased rather noticeably over the past week. Many of the fields where the increase in infested plants are being found are ones that were just recently sprayed with an acephate product for thrips. Levels of aphid infested plants are ranging from 0-22 per 100 plants checked. In addition, the Boll Weevil Eradication Foundation spraying will also negatively

impact our beneficial levels in fields being sprayed and therefore can lead to a situation conducive for the rapid build-up of aphid populations. Therefore, consider using one of the products that control aphids (such as Centric, Intruder, or Trimax Pro, etc.) when needed or with your insecticide and/or plant growth regulator treatments if aphid levels require treatment.

Higher levels of **beneficial insects** are appearing in many fields, especially fields that are developing higher levels of aphids. We continue to see lady beetles and more minute pirate bugs, but this past week, more scymnus lady beetles and parasitic wasp are being found in many of these fields.

Pre-blooming cotton fields should not be treated for aphids unless a heavy infestation has been present for 7 to 10 days and no sign of their rapid decline exists. A heavy infestation is when aphids exceed 50 per leaf. To determine aphid levels in a field, a total of 60 leaves divided between the top, middle and lower portion of the plant should be sampled from plants across the field.

**Insecticide control of cotton aphids should be delayed until infestations exceed 50 aphids per leaf.** If you think you need to treat after you have had a heavy infestation for the prescribed amount of time, postpone your treatment for another 48 hours and monitor the progress of aphid suppression by beneficial insects. If aphid numbers are down or increased parasitism has occurred, re-evaluate your decision to treat at that time. Aphid numbers could be headed down in a very short time.

Cotton fleahopper levels have slightly increased over the past week, but numbers still remain relatively low. Last year, fleahoppers started off relatively slow and increased in numbers through early June. Currently, fleahoppers are ranging from 0-9 per 100 plants monitored with most fields averaging less than 5 per 100 plants. Some of the fields of earlier planted cotton have the higher of the counts at this point.

The thresholds for fleahoppers are: **during the first three weeks of squaring, 10-15 fleahoppers per 100 terminals may cause economic damage. Be sure and carefully monitor fields for adult and nymph fleahoppers.**

Some recommended insecticides to manage fleahoppers include Bidrin at 1gal/40 ac, Centric at 2 oz/ac, Dimethoate 4E at 1 gal, Intruder 0.6 oz./ac, 1/16 Orthene (90S) at 4 oz/ac, Trimax Pro 1.0 to 1.5 oz/ac.

**Southern Blacklands Boll Weevil Eradication Program**  
**Trap Count Information for Week ending May 14, 2006**

	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
YTD	.0139	.0214	.0919	.0478	1.2028

- Avg # of boll weevils per trap

<u>Week Ending</u>	<u>2006</u>	<u>2005</u>	<u>2004</u>	<u>2003</u>	<u>2002</u>
4/16/06	.0056	.0411	.0405	.0212	.5756
4/23/06	.011	.0135	.0119	.024	1.3687
4/30/06	.0072	.0273	.0653	.0305	.5341
5/7/06	.0071	.0229	.1859	.0663	1.6593
5/14/06	.0442	.0148	.0529	.0371	1.4014

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