

TEXAS COOPERATIVE EXTENSION
SOUTHERN BLACKLANDS
PEST MANAGEMENT NEWS
WILLIAMSON AND MILAM COUNTIES

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GENERAL SITUATION

After receiving ample rainfall the week before, this week has been relatively dry over the Southern Blacklands. Folks on the eastern edge did catch some rainfall on Tuesday and Wednesday, but the bulk of the area missed the rainfall this time. The corn and grain sorghum crop look great at this point. The cotton is producing a lot of vegetative growth at this point and most growers are trying to stay on top of the growth by applying growth regulators to the crop. Square set in most fields did decline following the cloudy weather that the area experienced last week, but the newly developing squares in the terminal are setting at a high percentage now and I expect that trend to continue as we approach the first official day of summer on June 21.

GRAIN SORGHUM INSECTS

Sorghum midge is the pest that growers with blooming grain sorghum need to be thoroughly monitoring for. Sorghum midge levels are ranging from 15 to over 100 midge per 100 heads. In last weeks newsletter, I put in detailed information about the biology, scouting, and thresholds for sorghum midge. Growers who have fields on the edge of the treatment window need to also consider that the chances of flaring secondary pest behind an insecticide application for sorghum midge is high. It is not for certain, but generally, growers can expect to have **sorghum headworm** populations develop behind midge or stink bug applications. However, there are times when headworm populations develop to treatable levels in sorghum that has not been previously treated with an insecticide.

Below is a table that list the economic injury levels for sorghum headworm in grain sorghum.
Table 1. Economic injury levels based on number of sorghum headworm larvae per sorghum grain head.

Control Cost (\$) per acre	Crop market value (\$) per acre								
	100	125	150	175	200	225	250	275	300
	Number of headworms								
6	1.5	1.2	1.0	0.9	0.8	0.7	0.6	0.6	0.5
8	2.0	1.6	1.3	1.1	1.0	0.9	0.8	0.8	0.7
10	2.5	2.0	1.6	1.4	1.2	1.1	1.0	1.0	0.9
12	3.0	2.4	1.9	1.7	1.5	1.4	1.3	1.2	1.1

COTTON

Cotton ranges from match-head square to third week into bloom. Small square loss was fairly significant in many fields over the past week. This was not unexpected however, following the cool, cloudy, saturated conditions that the area experienced last week. However, the small squares in the terminal and secondary positions on the reproductive branches are holding on well and therefore square set should get back to where it was headed earlier when fruit retention remained very high. Square set this week ranges from 65% - 92% with most fields ranging between 74-80 percent.

Cotton fleahoppers range from 2 - 32 per 100 plants checked with most fields in the range of 8-12 per 100 plants. Overall, numbers are lighter this week than they have been in a few weeks. Part of this may be due to the fact that the **Eradication Foundation** has been spraying all of the cotton in the two work units located around Taylor.

With this additional spraying, growers need to pay attention to secondary pest levels. The one pest that has showed up in moderate levels in most fields at least one time or another this season is the **cotton aphid**. Currently aphids are light in the majority of fields. Some fields have moderate levels and a few with high levels of aphids. Most growers have been using some type of insecticide to help with aphids as they have gone across the fields for fleahoppers and/or application of plant growth regulators.

In an **IPM** approach, I do not think it is not to one's best interest to eradicate all the aphids in a field of cotton, which is fairly easy to do with the chemistry we have these days with products like Centric, Intruder and Trimax. Those products work great at controlling aphids, even at reduced rates. By maintaining a light population of aphids, this will provide a host for many beneficial predators and parasites that can provide some natural control of other secondary pests of cotton such as the worm complex and future buildups of aphids. I am not advocating trying to manage the cotton crop to have excessive numbers of aphids which will impact yield. However, it is clearly evident that fields that have some food host for beneficials have much higher levels of these insects than fields that are aphid free. These beneficials include lady beetles, big-eyed bugs, green lacewing, spiders, syrphid flies and other predators and parasites.

Cotton bollworm/budworm eggs range from 0-4 per 100 plants checked, with most fields ranging between 0-2 per 100 plants. Small worm larvae and damaged squares are ranging from

