TEXAS COOPERATIVE EXTENSION

SOUTHERN BLACKLANDS

PEST MANAGEMENT NEWS

WILLIAMSON AND MILAM COUNTIES

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GENERAL SITUATION

The Southern Blacklands received more scattered showers over the past week. The majority of the area received less than 0.5 inches, but some areas were fortunate to receive upwards to 3 inches. That moisture should help the younger cotton. Some corn and grain sorghum harvest has started and should pick up pace rapidly as the weather clears out.

COTTON

Cotton ranges from early bloom to open boll. Based on how fast the crop has been opening in the southern part of the state, I expect this cotton to mature out very quickly.

Cotton aphids and spider mites remain at very light levels across our area. The numbers began to decrease prior to the first set of showers that were received two weeks ago, and have remained light since.

Beneficial insect levels range from light to moderate. We continue to find relatively good numbers of lady and sycmnus beetles, minute pirate bugs, green lacewings, and spiders. In some fields, fire ants have reappeared in high levels and appear to be helping reduce potential bollworm problems.

Speaking of cotton bollworms, egg counts are ranging from 0-68 per 100 plants checked. Bollworms range from 0-15 per 100 plants. The higher worm activity is coming from the Thrall/Thorndale area, some areas around Granger and in Milam County. We evaluated a set of worm eggs from a field in Rices

Crossing and one field at the Stiles Farm on July 14 using the Hel-ID kit from Agdia to determine the species composition. We tested 22 eggs from each location. 43 of the eggs tested positive for cotton bollworm and 1 was positive for tobacco budworm.

Remember that Bt cotton, especially the original Bollgard technology, is somewhat less effective on bollworms than budworms. So, those of you that have some late Bollgard cotton and are seeing some bollworms surviving on it, that is not unusual. It is still possible that some fields of conventional and/or Bollgard cotton could develop enough worms to require an insecticide treatment.

Also, keep in mind on fields of non-Bt cotton that if worms reach treatable levels, be sure to avoid using pyrethroid insecticides due to the resistance level in the bollworm population as discussed in last week's newsletter.

Beet armyworm populations continue to remain active in some fields of later cotton. Although I have not seen any treatable levels over the past week, I have seen some new "active hits".

The Williamson-Milam County trap line has not caught any weevils for two weeks now. In addition, data from the Eradication Foundation indicates that number of acres being sprayed has decreased over the past two weeks. However, it will not be long before I would expect trap catches to begin to increase again, if they are going to increase, once cotton begins to be sprayed with harvest aids probably within the next 7-14 days.

Williamson County Boll Weevil Trapline

Week Ending	2004	**2005**
6/27	0	**2**
7/4	0	**0**
7/11	0	**0**

Average number of weevils/trap/week

Week Ending	2005	2004
June 26	.0851	.0388
July 3	.0429	.0424
July 10	.0132	.058

Weekly Acreage Treated

Week Ending	2005	YTD
June 26	36,387	189,827
July 3	38,029	227,856
July 10	28,862	256,718

I have had several questions regarding cotton fiber properties as a result of the extreme dry conditions we experienced throughout this season and the various amounts of rainfall we have received as of late. So the following is an article by Dr. Robert Lemon, Extension State Cotton Specialist, has just wrote for Cotton Farming Magazine on this issue.

MICRONAIRE ISSUES IN THE 2005 CROP

In 2004 we received an abundance of rain in the spring, with record rainfall for June. This season, "mother nature" dealt us just the opposite scenario. Across most of the central and southern regions in 2005 rainfall in April was about 30% of normal, May about 50% of normal and June was very, very dry, with only about 5 to 10% of normal precipitation. The warm temperatures and sunshine (and excellent insect management, especially in the absence of boll weevils) fostered rapid and uniform fruit set. And then the rains came in July. The question on most folks mind is how will this impact fiber quality, primarily micronaire? Cotton fiber develops in a uniform fashion. Fiber length is established in the first three weeks after bloom and is influenced by variety and the environment. Elongation of the fiber is driven by internal water pressure, much like the expansion of a balloon. Water stress and high temperatures can lead to shorter fiber length. During the remaining period of boll development, the fiber thickens. A very simple way to think about this is that the individual fibers are like a straw and each day cellulose will be deposited within the straw. These are sort of like "tree rings", except the rings are laid down inside rather than outside the center. Generally, two scenarios can lead to high micronaire problems – short fiber and/or ample food reserves to mature bolls. Unfortunately, both scenarios have occurred this season. When fiber is shortened, micronaire tends to increase because the same quantity of carbohydrates will be deposited over a shorter length allowing for thicker daily rings, resulting in coarser fiber. Similarly, micronaire also tends to increase when high levels of carbohydrates are available to feed bolls. When supply is greater than demand, the rings will be thicker, once again causing coarser fiber development. Most of the crop has a uniform boll set that shed young bolls in the upper portion of the plant as well as distal positions. With the resurgence of growth following the July rains, conditions favor an abundant supply of carbohydrates to feed bolls. Without the younger bolls to blend lower micronaire fiber and the potential for shorter staple, conditions will favor high micronaire development. However, one thing in our favor is that we're growing several varieties that genetically possess a lower micronaire characteristic and that should help the situation.