TEXAS COOPERATIVE EXTENSION

SOUTHERN BLACKLANDS

PEST MANAGEMENT NEWS

WILLIAMSON AND MILAM COUNTIES

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WHEAT FIELD DAY

A **Wheat Field Meeting** will be held **Wednesday, February 8 at 8:30 am** at the **Williamson County Grain Meeting Room in Taylor**. The purpose of this educational event is to discuss the yield potential of the 2005-2006 field crops. Such items as stand, growth stage, tillering and yield potential will be covered. Speakers for this event will be Ron Leps, Williamson County Extension Agent and Dr. Gaylon Morgan, Extension Agronomist. For more information contact the Williamson County Extension Office at (512) 943-3300.

USEFUL WEBSITES

Remember that this and all upcoming Southern Blacklands Pest Management Newsletters can be found at our County Web site:

http://williamson-tx.tamu.edu

You can also find links to copies of newsletters from the previous two seasons. In addition, you can find the Crops and Livestock Newsletter, and newsletter from all the Williamson County

Staff. Also, there is plenty of information on Pest Control, Horticulture, Landscape Management, Gardening, CEU Opportunities, 4-H and Family and Consumer Sciences, etc.

Other Useful Links:
Texas A&M Entomology Dept. -http:// insects.tamu.edu
TPMA - http://www.tpma.org
Stephenville A&M Center - http://stephenville.tamu.edu

GENERAL SITUATION

Extreme dry conditions have persisted since last August across the Southern Blacklands. The area was fortunate to receive some rainfall last week during two rainfall events. Although, not as much rain fell as was desired, but maybe it was a start of more rain to come in the near future.

SMALL GRAINS

Unfortunately there is not really much to discuss concerning small grains. Limited acres were planted due to the dry conditions last fall and most of what stands were planted and established have suffered from drought conditions and has either had limited growth or has died off. Some fields did have populations of winter grain mites, but due to the lack of rainfall, very few fields were treated.

Now the decision that producers with wheat stands are facing is weather to top-dress the wheat crop or to disc it up and possible prepare the field for an alternative crop that can be insured.

GENERAL CORN INSECT MANAGEMENT GUIDELINES

When making decisions regarding the management of soil insects and chinch bugs in corn and sorghum, there are several key factors to consider.

1. **Previous Crop** - What was on that land last year? Have you planted the same crop on the same land for several consecutive years? Was the land not planted to a crop last year?

Depending on the answers to the above question, one can begin to make decisions regarding what type of management (products) does one need. Often times, southern corn rootworm (SCR) is an insect that many growing first year corn overlook. This insect is one that undergoes multiple generations a year and often migrates into fields after planting and lays eggs, which can result in stunted plants or stand loss. This pest often results in greater loss to fields planted on cotton or wheat ground where producers did not put down enough or the right soil insecticide/seed treatment to control this pest.

Producers who have grown corn for consecutive years know that they have to exercise extra care in order to try to control Mexican Corn Rootworm (MCR). Generally light to moderate populations can be suppressed with many soil insecticides/seed treatments, however, under heavy infestations, it is very important to use products at full labeled rates or transgenic technology designed for MCR, higher seed treatment concentrations. In addition, liquid applied soil-insecticides generally do not appear to hold up as well against heavy MCR population as granular materials. So keep this in mind as you are making your decisions.

2. **History of Insect Pests** - Has that field had problems with insect pests in the past, stand problems, etc.

Some fields are more prone to pest problems because of their location. For example, fields that had previous white grub problems are more at risk to be re-infested by this pest than fields that have never had grub problems.

3. **Surrounding Habitat** - What is surrounding the field? Other fallow crop land, pasture, small grain, residential property, etc.

There may be some type of over-wintering habitat or host plants growing nearby that traditionally support higher populations of specific pests than a field in a different area. Remember, as eluded to above, that not all insects stay in the field. Many, especially the ones that have multiple generations a season and ones that are not confined to the soil, can move into a field from a nearby habitat, once the crop is in the susceptible stage.

4. **Field Monitoring** - Monitoring is one of the key components of any type of IPM Program. There are different monitoring strategies for the various types of pests. For example, the presence of adult Mexican Corn Rootworm (MCR) beetles during and shortly following corn tasseling on the previous year will give you an indication if you may encounter this pest during the upcoming season. You can find information regarding the monitoring of corn and sorghum in the extension publications

B**-1366, Managing Insect and Mite Pests of Corn and B-1220, Managing Insect and Mite Pests of Sorghum.** These publications can be found on the internet at http://insects.tamu.edu/extension/publications/crops.html or http://williamson-tx.tamu.edu**.**

5. Management Strategies/Products Available - Once you have reviewed the above items, you can then begin to formulate your corn soil insect pest management strategies. If you determine that insect pressure has the potential to be very severe for the given crop, you may choose to plant another crop. However, what is more likely is that you will still plant the intended crop, but will need to make proper choices on the type of insecticide/seed treatment/transgenic technology to use. For this you will need to rely on past experience, review research data from Extension trials and any other reliable source you can find. Also, the cost of these products add up, therefore it is important to utilize full label rates if you intend to have companies to back the product.

One last point that you do not want ot forget. Remember that there are two types of transgenic Bt technology in corn available for producers. The original Bt technology for lepidopterous insect pest such as corn borer and earworm. 2004 is the first year for Bt technology for corn rootworm. Each technology is specific for certain pests. In addition, more companies have their own commercially available proprietary technologies as compared to only one company having all the technologies. So if you are wanting transgenic Bt corn for corn rootworm be sure to specify "rootworm" because if you just say Bt corn you might not get what you had wanted.
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WHEAT VERNALIZATION

Vernalization issues: One concern for wheat emerging in late-December and January in Central and South Texas will be adequate chilling days (vernalization) for the winter wheat. Winter wheat varieties require between 5 to 45 days of accumulated exposure to temperatures between 45to 32 F at the growing point to vernalize. Without adequate vernalization, winter wheat plants will remain vegatative and will not produce grain. Fields that are inadequately vernalized exert heads later than normal and heading is very erratic. Vernalization requirements are different for each variety. The exact number of vernalization days for most wheat varieties are not know. However, below are some vernalization ratings for the 2005 Uniform Variety Trial that was conducted in Castroville, Texas **(Vernalization Table).**

Variety	Vernalization (0-5)✳✳	Variety	Vernalization (0-5)✳	Variety	Vernalization (0-5)✳
Longhorn	3	Stanton	3	TAM 202	3
Ogallala	2	2145	4	TAM 110	2
Coronado	3	Overley	5	Lockett	3
Thunderbolt	1	OK 101	0	TAM 111	3
Cutter	3	OK 102	1	Sturdy 2K	1
Dumas	2	Endurance	1	TAM 303	2
Jagalene	2	Deliver	1	TAM 112	4
Fannin	4	TAM 101	2	Cisco	1
Jagger	5	TAM 105	3	HG-9	1
Trego	3	TAM 107	2		

✳ Ratings by Dr. Jackie Rudd, Wheat Breader, Amarillo, TX.
✳✳ 0 = spikelets did not develop
5 = fully vernalized

Enclosed with this newsletter is a leaflet entitled Integrated Pest Management in Williamson and Milam Counties.

The IPM program will be offering crop monitoring services in both cotton and grain sorghum for the upcoming 2006 crop season. The services that we provide are similar to a professional crop consultant, but our management strategies differ depending on the information collected and the grower's input. We are truly independent and utilize information obtained from applied research, including many of our own Extension trials performed locally to assist growers in making sound pest management decisions.

Because the IPM Program strives to have one employee for every 1500-2000 acres, the program has adequate manpower to inspect each field enrolled in the program thoroughly. There are often differences in insect pressure between fields, even ones that are adjacent to one another and have been managed the same through the season.

Scouting takes time to do a thorough job, and because our acres are maintained at a set level, we can ensure that we have adequate time to inspect each field as needed.

My ultimate goal with the IPM program is not my bottom line but it is to provide you with timely accurate information, and with my education and field experience, assist you with making sound management decisions based on proven information.

Therefore, I encourage you to contact me at
(512) 943-3300 (office) if you have any questions about the IPM Program.

WHEAT VERNALIZATION

Enclosed is some data from 2005 that most have already seen, but for those who have not, I have enclosed it. That is the Cotton Seed Treatment Trial and Williamson and Milam County Cotton Variety Trials from 2005.

Table 1. List of Insecticides used for control of thrips and aphids. Stiles Farm Foundation, Williamson County, TX. 2005

Treatment	Rate (formulation)
Temik	3.5 lbs/ac
Gaucho Grande	12.8 oz/100 lbs seed
Cruiser5FS	7.7 oz/100 lbs seed
Orthene 90S	8.0 oz/100 lbs seed
Untreated	

Table 2. Mean Plants Stand Counts, number of thrips, cotton aphids infested plants per 10 plants, and thrips injury rating, for four sampling dates, April 27, and May 4. Stiles Farm Foundation. Williamson Co., TX. 2005

	April 20	April 27		May 4	
Treatment	**Plant Stand Counts**	**Thrips/ 10 Plants[1]**	**Aphids/ 10 plants**	**Thrips/ 10 Plants1**	**Aphids/ 10 plants**
Temik	38.3	0.0 b	30.8	1.0	24.8
Gaucho Grande	33.0	0.3 b	36.5	1.8	17.3
Cruiser	40.8	0.0 b	9.3	1.0	1.0
Untreated	33.5	2.0 a	15.0	3.0	8.3
Orthene	36.0	1.5 a	48.0	1.0	14.0
LSD (P=0.05)	8.24	0.74	70.90	2.49	32.01
P>F	0.27	0.001	0.7553*	0.587	0374*

[1] Means followed by the same letter are not significantly different (P=0.05, LSD)

Table 3. Mean Thrips damage rating and Yield Stiles Farm 2005

Treatments	Mean Plant Damage Rating (1 - 5 Scale)			Lint Yield
	Apr. 27	May 4	May 11	lbs lint/ac
Temik	1.8	2.38	2.50	605.5
Gaucho Grande	1.8	2.63	2.25	555.8
Cruiser	1.5	2.50	2.13	554.3
Untreated	1.8	3.00	2.88	506.5
Orthene	1.8	2.88	2.88	495.8
LSD (P=0.05)	1.07	1.007	0.909	156.41
P>F	0.979	0.651	0.297	0.456

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