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PEST MANAGEMENT REPORT

NEWS ABOUT INTEGRATED PEST MANAGEMENT IN GLASSCOCK, REAGAN AND UPTON COUNTIES

GENERAL SITUATION

Rainfall this week ranged from 0-2.5 inches on area farms. Cotton is progressing rapidly with some of the older at 2 nodes above white flower and the latter with more water available at 6-7 nodes above white flower. No insects are at economic levels at this time.

BOLLWORMS

- Eggs ranged from 0-4000 per acres or 0-10 per 100 plants
- Small worms ranged from 0-1800 per acre or 0-4 per 100 plants.

All small worms found were in red bloom tags. Most fields had no worms found.

PECAN WEEVILS

The earlier pecans such as Pawnees and some seedlings are at the gel stage where they are susceptible to egg-lay and weevil survival while the majority of Western And Wichita lack a few days being that far along.

Sevin 80S[®] at from 1.25-3 lbs per 100 gallons of water is the suggested control for weevils.

WORMS IN SORGHUM & LATE CORN

Below is an excerpt from the *Focus on Entomology* newsletter from Lubbock written by Dr. Pat Porter about worm pests in sorghum. The information is similar for corn, but Dr. Porter said he would be more aggressive about control in this crop. Several of you have been asking about these problems. Dr. Porter also said the best product for

control right now would be a pyrethroid mixed with Lorsban[®].

Sorghum Insects

The Worm-Orama goes on. We currently have small, medium and large larvae on sorghum, and we are expecting a fairly abundant flight of fall armyworm adults next week. This is a situation where we have overlapping generations of fall armyworm (and corn earworm), so fields must be scouted frequently.

The question of the week has been whether there is a need to treat sorghum for the high numbers of fall armyworm and corn earworm larvae being found in many fields. Here are some thoughts that might help with the decision, and I'm taking a shotgun approach because we have sorghum growth stages all the way from five leaf to well past heading.

Small sorghum is not immune from significant damage. Very young plants, those in the five leaf stage (approximately 3 weeks after emergence) to growing point differentiation (about one month after emergence and 7-10 leaf stage, depending on maturity class) are at risk. These growth stages correspond to stages 2 and 3 in How A Sorghum Plant Develops. We do not have formal thresholds for caterpillar pests on sorghum at these stages. However, Dr. George Teetes, retired TAMU sorghum entomologist, used a personal "worry level" of two medium sized larvae per plant and something like 50-70 percent of plants infested with live larvae.

Stage 4 is what we normally think of when we talk about "whorl stage" sorghum, and is when the flag leaf is visible in the bottom of the whorl. Plants can withstand much

more foliar damage at this time. Our threshold is when larval feeding reduces leaf area by more than 30 percent OR when larval feeding is damaging the growing point within the whorl. Leaves can withstand a lot of damage, the growing point cannot. Don't make decisions based solely on leaf damage. It is important to unwrap plants to inspect the growing point.

Stage 5, boot stage, is at risk because even one large larva can do a lot of damage to the young head while it is compacted in the whorl.

Headworms are what we get at Stage 6 (half-bloom), Stage 7 (soft-dough), and even Stage 8 (hard dough). The thresholds for headworms were recently revised by Greg Cronholm and Allen Knutson, and there are different thresholds depending on whether the larvae are mostly small, mixed in size or large in size. Refer to Managing Insect and Mite Pests of Texas Sorghum for a complete explanation of headworm thresholds and scouting.

Control Questions

- How can I get good control in very young plants?**
A small leaf area and tight whorl make it very difficult to get insecticide down into the whorl where larvae are feeding. The best choice would be to chemigate the insecticide. If you can't do that, then the next best choice would be to use a ground rig. If aerial application is the only course, expect less than good control unless it rains shortly after application. Brant Baugh and I just conducted an insecticide trial on very small sorghum, and his latest newsletter presents the results of the trial.
- I have one to eight small worms per plant in small sorghum, and seventy percent of my plants are infested. What is going to happen?**
This is hard to answer. With several larvae per plant, you can expect most of them to die before reaching one-half inch long. I have seen three medium-sized larvae in six-leaf sorghum, and sixty percent of the plants were infested with one to three larvae. If you accept George Teetes' "worry level" of two larvae per small plant and fifty to seventy percent of the plants infested, then an insecticide application would be justified, especially via chemigation or ground rig. An aerial application would be less effective. Not controlling these larvae could allow the very tiny growing point to be damaged, and the sorghum head

is ultimately at the very tip of the growing point.

TRI-COUNTY CROP TOUR

TUESDAY, SEPTEMBER 9
2:30 PM

MEET AT ST. LAWRENCE HALL
SOCIAL & MEAL TO FOLLOW TOUR

BOLL WEEVILS

No boll weevils have been caught this season in the St. Lawrence Zone.

STINK BUGS

We are still finding an occasional stink bug, but numbers remain fairly low. There is a plant bug that is grayish-black with orange markings like a conchuela stink bug that is longer and narrower in shape. They do not cause damage to cotton as far as we know.

IRRIGATION TERMINATION

Remember to watch for cutout (4-5 NAWF) and begin counting heat units. When 400-500 heat units after cutout are reached, you can terminate irrigation.

TURNROW MEETINGS

Tuesday, Aug 19	9:00 am Glasscock Coop
Wednesday, Aug 20	9:00 am Midkiff Coop
Tuesday, Aug 26	9:00 am Glasscock Coop
Wednesday, Aug 27	9:00 am Midkiff Coop

HEAT UNITS

Heat units averaged 22 per day the past week. Heat units since 5-10, 5-20, 5-30 and 6-9 are compared with last year and a five year average in the table below.

DATE	5/10	5/20	5/30	6/9
2008	1747	1655	1623	1388
2007	1468	1425	1317	1149
5 YEAR AVERAGE	1755	1649	1503	1309

WEATHER DATA

Weather data for the past two weeks is included in the table that follows:

DATE	HIGH TEMP	LOW TEMP	RAIN	AVG WIND SPEED	SOIL TEMP
7/31	99	65	0	5	86
8/1	98	67	0	5	86
8/2	91	66	0	5	83
8/3	96	64	0	6	83
8/4	97	63	0	5	84
8/5	98	68	0	4	84
8/6	86	65	0	3	84
8/7	92	73	0	7	84
8/8	95	65	0	6	84
8/9	98	69	0	8	85
8/10	101	73	0	8	86
8/11	88	68	.87	4	85
8/12	92	69	0	4	84
8/13	92	66	0	4	83

Growth Interval	Calendar Days		Accumulated heat units (DD60's from planting required*)
	Mean	Range	
Planting to:			
Stand Establishment	7	5-13	78
First true leaf	16	11-25	
Squaring	36	29-41	526
1/3-grown square	44	36-49	
First bloom	61	45-81	1064
Peak bloom	79	59-102	
First open boll	96	88-106	1641
95% mature bolls	146	129-163	2271

Boll development:

Fiber length established:	First 18-45 days
Fiber micronaire and Strength determined:	Next 20-60 days

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Cotton development by calendar days and heat units.