

Stephen Biles

186 CR 101

Port Lavaca, TX 77979

PEST MANAGEMENT NEWS

Calhoun, Refugio & Victoria Counties

(o) 361-552-3324

(m) 361-920-1138

biles-sp@tamu.edu

VOLUME 10

ISSUE 2

April 17, 2014

Grain Sorghum

Leaf injury on sorghum is visible in many sorghum fields. Some fields were injured by the cool temperatures of the past week while others have evidence of iron chlorosis or sorghum downy mildew. Iron Chlorosis can be identified by the interveinal yellowing on leaves of plants. Many fields in the area have iron chlorosis problems when sorghum is grown.

Attached is an Extension document on managing Iron Chlorosis in Sorghum. Last week's newsletter dealt with sorghum downy mildew so refer back for information on SDM.



Iron Chlorosis in a Victoria County sorghum field in 2012.

To our south, I have been told of white grubs feeding on sorghum resulting in stand loss. Little can be done to control this pest once the crop is planted. Seed treatments or planter box insecticides are useful in control white grubs.

Fall armyworm moths have been captured in high numbers at the Corpus Christi Research Center. Be on the lookout for armyworms in sorghum, haygrazer and pastures.

Insect Warning

Continue to monitor fields for aphids. The aphids we should be on the lookout for include Sugarcane, Yellow Sugarcane and Corn Leaf Aphids. I continue to find all three of these aphids on Johnsongrass.

The corn leaf aphid is good in that it does relatively small amounts of feeding but provides a food source for beneficial insects such as lady beetles, syrphid fly larvae and green lacewing larvae.

Sugarcane aphids feeding can be much more damaging. I have seen seedling johnsongrass killed by sugarcane aphids this winter and I believe they can also kill seeding sorghum and stunt older sorghum. The bright spot is that insecticidal seed treatments appear to control them for 3 weeks after planting. These seed treatments will be wearing off or may already be gone in older sorghum fields.

The yellow sugarcane aphid is damaging in that it injects a toxin into the plant. This toxin can cause leaf death and economic thresholds are based on leaf damage because low numbers can cause extensive damage. Below are economic threshold tables for Yellow Sugarcane Aphid in younger sorghum from Extension Publication B-1220 Managing Insect and Mite Pests of Texas Sorghum.

Table 5. Estimated yield loss based on damage by yellow sugarcane aphids to three true-leaf stage sorghum plants.

Description	% Loss/plant
No discoloration	0
Localized discoloration	8
Less than one entire leaf discolored	11
One entire leaf discolored	31
More than one leaf discolored	54
More than two leaves discolored	77
Dying/dead plant	100

Table 6. Economic injury levels for yellow sugarcane aphid based on percentage of seedling plants infested at the one true-leaf stage.

Control cost (\$) per acre	Crop market value (\$) per acre							
	100	150	200	250	300	400	500	600
	Percent infested plants							
6	15	10	8	6	5	4	3	3
8	20	13	10	8	7	5	4	4
10	25	17	12	10	9	6	5	5
12	30	21	14	12	10	7	6	5

Table 7. Economic injury levels for yellow sugarcane aphid based on percentage of seedling plants infested at the two true-leaf stage.

Control cost (\$) per acre	Crop market value (\$) per acre							
	100	150	200	250	300	400	500	600
	Percent infested plants							
6	26	18	13	11	10	7	6	5
8	35	24	17	14	13	9	7	7
10	43	29	22	17	16	11	9	8
12	51	35	26	20	18	13	10	9

Table 8. Economic injury levels for yellow sugarcane aphid based on percentage of seedling plants infested at the three true-leaf stage.

Control cost (\$) per acre	Crop market value (\$) per acre							
	100	150	200	250	300	400	500	600
	Percent infested plants							
6	67	44	33	27	24	17	14	12
8	89	60	44	36	32	22	18	16
10	*	76	55	44	39	28	22	20
12	*	92	66	53	44	33	27	22

*Do not treat.

Cotton

Continue to monitor cotton fields for thrips. The economic threshold for thrips in cotton is 1 thrips per true leaf when weather conditions are not conducive to plant growth such as the cooler weather we have had in the past week. Neonicotinoid seed treatments should protect the cotton for 21-28 days after planting. As temperatures warm and soil moisture is available, this threshold can be raised.

Extension Entomologist position for the Texas Coastal Bend

Interviews for the Extension Entomology position for the Texas Coastal Bend will begin next week. Four finalists have been selected. The schedule for interviews at the Texas A&M Research and Extension Center, Corpus Christi is as follows:

Each interview will begin at 8:30 with a seminar followed by a stakeholder meeting at 9:45

April 23, Wednesday, Dr. Manuel Campus, Research Associate, Department of Entomology, Texas A&M AgriLife Research and Extension Center, Weslaco

April 24, Thursday, Dr. RB Shrestha, Postdoctoral Research Associate, Department of Entomology, Iowa State University

May 6, Tuesday, Mr. Suhas Vyavhare, Ph.D. candidate, Department of Entomology, Texas A&M University, College Station

May 7, Wednesday, Dr. Robert Bowling, Field Agronomist, Pioneer HiBred, Amarillo, TX

Field Research

We currently have 4 cotton trials and 6 sorghum trials planted on topics ranging from seed treatment insect control in cotton and sorghum, sugarcane aphid control, and seeding rate in sorghum. If you have a topic that needs my attention, call me at 920-1138.

IPM Newsletter

Anyone wishing to receive this newsletter can be added to the email list by contacting my office at 361-552-3324 or biles-sp@tamu.edu.

Support for the 2013 IPM Program comes from the following:

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