Texas Cooperative EXTENSION
The Texas A&M University System

TEXAS IPM
Partners with Nature

Volume XXVIII No. 15 June 6, 2003

PEST CAST

The Integrated Pest Management (IPM) Newsletter for the Row Crops in the Lower Rio Grande Valley

2401 East Highway 83
Weslaco, Texas 78596
Telephone (956)968-5581
Fax (956) 969-5639
WebSite: http://entowww.tamu.edu
TPMA Newsletter Website: www.tpma.org
District 12 Website: http://agfacts.tamu.edu/D12

John W. Norman, Jr.
Extension Agent-IPM

GENERAL SITUATION: This week saw a slight change in the weather. Some spots received in excess of 1 inch of rain. Most of the area received less than 1/4th inch by Friday morning, June 6th. Much of the area's irrigated cotton and grain sorghum had been irrigated or was being irrigated at the time of the rains. More rain was needed on dryland farms. Good moisture now could enhance what started out as one of the better looking crops in the last several years. Due to the extreme heat and dry conditions in May, yields have been reduced, even in irrigated fields. However, rains this weekend or next week could increase cotton boll size and the setting of a few more bolls. Insect activity was hectic, but no panic, yet.

Boll Weevils Incorporate More Fields

Boll weevils increased their coverage this week. Many fields which had started to be trimmed for initial weevil damage a couple of weeks ago were sprayed on a whole field basis this week. Punctured square counts ranged from 0 to 10 per 100 plants. Irrigated fields had the highest counts as was expected based on past year's experiences. Only a few dryland fields were committed to any weevil treatments this week. That may change next week following the rains this week. Trap counts stayed low.

Creontiades (The Valley's Lygus bugs)

A few fields in the eastern part of Cameron county were reported to have *Creontiades* species of plant bugs this week. The *Creontiades* adult (often referred to as a lygus, though it is not a lygus) is a pale green, 1/4 inch long plant bug and has the rapid movements of a fleahopper. The immature stages can often be mistaken for the large fleahopper nymphs because of color and movement. Damage from *Creontiades* can appear as square loss up to full grown squares and small bolls. *Creontiades* can feed on larger bolls and cause unusual boll curl and black feeding spots on the outside which go through the boll carpel wall into the seed or lint inside the boll. *Creontiades* activity can often be detected by the yellow liquid drops which often appear on squares following feeding by the pest.

We have discussed this pest over a number of years in this newsletter. No threshold exists for treatment of *Creontiades*, but use of the one for lygus may be appropriate. Use of a sweep net is the best sampling method for *Creontiades*. When a count of 20 to 30 *Creontiades* per 50 sweeps has been found, treatment is probably in order.

Aphids Up in Some Fields

Cotton aphids increased in a few fields this week. Spraying for aphids and/or combinations of worm, weevil and aphids was conducted in numerous fields this

week. No reports of aphid control failure were received this week.

Bollworms Mostly Lower

Bollworm activity was generally light across the LRGV this week. A few fields experience increased egg lays which ranged from 0 to 4 per 100 plants. Worm counts in infested fields ranged from 1 to 5 per 100 plants. Most other fields had no eggs and very few worms per 100 plants. Egg counts may start to increase in some fields depending on field moisture and availability of bollworm moths to lay the eggs.

Headworms Continued

Headworms were detected in more fields at treatable levels this week. Headworm (corn earworm/bollworm) was the primary species found in sorghum fields. Worm numbers ranged from 1 per head to less than1 per 10 heads. Continued sampling and use of the threshold chart, which was sent in last week's *Pest Cast* newsletter, to determine the need for spraying is in order.

In last week's newsletter, we failed to include Asana insecticide for the headworm complex control. Asana XL is registered for use in grain sorghum for headworms and midge but was not included in our guide because at the time that B-1220 was published, Asana was not registered for use on sorghum. Texas A&M Cooperative Extension data received this week shows that Asana does perform to control corn earworm in sorghum heads and thus we wanted to include it as part of the insecticide selection choices available to producers.

Beneficials Heavy

Beneficial insects and spiders were noted to be heavy in most sorghum fields this week. Large numbers of minute pirate bugs, lacewing eggs and larvae, big eyed bugs and various spiders were detected in fields sampled this week. Movement of the beneficials from sorghum to cotton is ongoing and could assist in keeping various pests such as bollworms and aphids in check. When scouting fields for pests, look for beneficials as well.

Rice Stink Bugs

A few rice stink bugs were detected in scattered fields across the LRGV this week. Rice stink bugs generally are not at levels which require treatment in the LRGV. However, as with other pests already found in sorghum this season, careful scouting should be executed to determine if rice stink bugs are at the threshold shown in the chart below. The chart below is from the same publication on grain sorghum insects (# B-1220) as was mentioned in last week's newsletter.

Plant bugs suck juices from developing sorghum kernels and, to a lesser extent, from other grain head parts, and may cause economic damage. The extent of damage depends on number of bugs per grain head, duration of infestation, and stage of kernel development when infestation occurs. Bugs cause more damage early during kernel development and less as grain develops to the hard-dough stage. Both nymphs and adults can reduce grain weight, size and seed germination. Fungioften infect damaged kernels, causing them to turn black and further deteriorate in quality. Damaged kernels rarely develop fully and may be lost during harvest.

Grain head-feeding bugs tend to congregate on sorghum grain heads and sometimes within areas of a field. Use the beat-bucket technique to estimate abundance. Shake sorghum grain heads vigorously into a 5-gallon bucket, where bugs can be seen and counted more easily. However, adult bugs will fly from the sampled plant or the bucket. Count those that fly from sorghum grain heads or from the bucket and those on plant leaves. Sample at least 30 plants from a field. Take at least one sample per acre in fields larger than 40 acres.

To determine the profitability of controlling an infestation of rice, southern green, or conchuela stink bugs or of leaffooted bugs, consult economic injury Table 20. The number of bugs per sorghum grain head that will reduce grain yield varies depending on bug species and stage of grain development when infestation occurs. Determine the grain development stage at time of sampling and refer to the appropriate table. If the grain development stage is hard dough and the infestation per grain head is 16 or fewer bugs, an insecticide application likely is unjustified.

Table 24 contains suggested insecticides for use against rice stink bugs.

Table 20. Economic injury levels based on number of rice stink bugs er sorghum grain head beginning at the milk stage of kernel development.

Control cost ($) per acre	Corp Market value ($) per acre								
	100	125	150	175	200	225	250	275	300
Number of stink bugs									
6	7	6	6	5	5	5	4	4	4
8	8	7	6	6	6	5	5	4	4
10	8	8	7	7	6	6	6	5	5
12	9	8	8	7	7	6	6	5	5

Table 24. Suggested insecticides for controlling grain head-feeding bugs.

Insecticide (listed alphabetically) Toxicant per gallon or pound	concentrate per acre	Days from last application to: Harvest	Grazing
Carbaryl			
(Sevin®)			
(4f)	32-64 oz.	21	14
(80s or 80 WSP)	1.25-2.5 lb.	21	14
(50W)	2-4 lb.	21	14
(4XLR+®)	32-64 oz.	12	14
Cyfluthrin		See remarks	
(Baythroid® 2E)	1.3-2.8 oz.		14
Cyhalothrin		See remarks	
(Karate® 1E)	2.56-3.84 oz.		
Parathion (ethyl)		See remarks	
(4E)	12-16 oz.	12	12
(8E)	6-8 oz.	12	12

Remarks

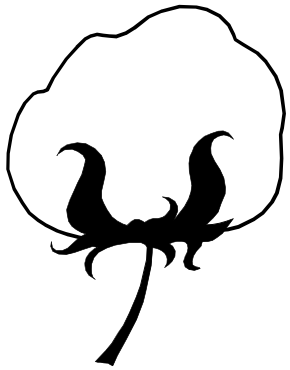
Carbaryl. Direct spray into heads for optimum control
Cyfluthrin. If one or two applications are made, green forage may be fed or grazed on the day of treatment. If three applications are made, allow at least 14 days between last application and grazing.
Cyhalothrin. Do not graze livestock in treated area or harvest for fodder, silage or hay.
Parathion. Aerial application only. Do not substitute methyl parathion.

Still No Midge Reported

No midge were reported to us this week. The possibility of midge infestations goes higher each time a new field of sorghum matures. What few midge may have been in the older field will likely multiply once the females start laying eggs in the newly blooming sorghum. Check those fields carefully.

Cotton Heat Unit Accumulation Table

Planting Dates	Accum. H.U.	Planting Dates	Accum. H.U.
2/15	1667	3/15	1503
3/01	1635	4/01	1348



Rio Farms, Inc.

Trap Line Data - 2003 - Boll Weevils per trap per day

Trap Lines	June 3	June 10	June 17	June 24	
Taco Baja	n/a				
Edinburg Area					
KURV	0.17				
Hans	0.00				
Fike Home	0.00				
Hill	0.00				
Bobby	0.00				
Seminary Rd.	0.14				
Delta Area					
L V-N. Sugar Mill	0.02				
La Sara	0.19				
MA North	0.00				
MA S. West	0.00				
Hargil	0.10				
DL South	0.07				
KSOX - E. DL	0.10				
Raymondville Area					
Ray West	0.05				
Ray East	0.02				
Southmost Area					
Florida	0.14				
Docberry	1.14				
Alaska	0.12				
Arkansas	0.06				
S. Oklahoma	0.00				
Santa Rosa Area					
Peterman	n/a		End of Season		
Santa Rosa	n/a				
Dillan	n/a				
River	n/a				

Rio Farms, Inc. Trap Line Data - 2003 - Boll Weevils per trap per day					
Trap Lines	June 3	June 10	June 17	June 24	
Progreso Area					
Nogales	0.05				
Las Palomas	0.12				
Santa Anna	0.17				
Las Milpas	0.07				
Progreso Gin	0.19				
Bridge	0.05				
Sebastian Area					
Armandice	0.00				
Santa Rosa Lake	0.00				
Rio Hondo Area					
Airport	0.02				
Parker Rd.	0.00				
Paredes Line Rd.	0.02				
777	0.00				
Mercedes Area					
Valley Acres Lake	0.05				
SRS - HQ	0.02				
Ross	n/a				
Rangerville Area					
Turner Rd.	n/a	--	--	--	--
Tanimachi	n/a	--	--	--	--
Chinaberry Rd.	n/a	--	--	--	--
McCook Area					
Davis	n/a	--	--	--	
Citrico	0.19				
Wells	0.05				
Starr County					
Starrco	0.00				
La Casita	0.00				
Los Puertos	0.00				