

Mississippi Crop Situation

June 14, 2007

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<http://www.msucare.com/newsletters/pests/cis/index.html>

Crop Situation: (For the week ending June 10, 2007)

Cotton was 28% squaring. Corn was 72% silked and 5% dough. Soybeans were 29% blooming. Rice was 100% emerged. Wheat was 100% mature and 72% harvested. Sorghum was 1% heading. Peanuts were 100% planted. State average air temperature was 79 degrees (2 degrees above normal). Weekly rainfall was 0.35 inches (0.81 inches below normal).

News and Announcements

Last Scout School TODAY June 14th in Starkville from 4:00 p.m. to 7:30 p.m. in the main conference room at the entomology department. We will be providing pizza and drinks since it will be late in the evening. Hope to see you there. Topics will be cotton, soybean, and corn.

Insects

Cotton: Tarnished plant bug numbers have increased substantially in many delta counties in the last 7 – 10 days. In our Stoneville plots we went from nearly none 10 days ago to averaging 31 per 100 sweeps and average square retention of 69%. These hot spots are mostly associated with corn areas. We sampled corn in Stoneville to get an idea of what the numbers were and averaged 36 plant bugs per 100 stalks sampled. This is a conservative number since it is difficult to search visually 10 ft. tall corn. Many cotton fields in these areas have 2 applications on now and several with 3 with the earliest cotton still 7 - 10 days away from bloom. This can make for a long year coming off of heavy thrips numbers and spider mite sprays. We have also been finding higher than normal numbers of cotton fleahoppers in our sweeps. There has been some discrepancy on how to count fleahoppers in your totals. Some feel that they should count as ½ of a tarnished plant bug but most agree that in the prebloom period they should be counted the same as tarnished plant bugs. It is critical to take square retention counts in cotton prior to bloom. Square retention counts can influence the decision you make about treating plant bugs. It is often very difficult to determine what kind of control you get after a plant bug application this time of year when so many adults are on the move. Square retention counts can often help you evaluate the effect of your application better than actual bug numbers this time of year, especially with some of the newer compounds like Carbine, that deter feeding and takes a longer time to actually kill the bug. If you are finding high numbers of plant bugs after a treatment but square retention is still running high, you are protecting fruit and it is not necessarily a product failure but rather more adults moving into the field. On the other hand, when square retention counts start dropping below 80% and bugs are still present it may be necessary to tighten the



Cotton fleahopper

threshold some especially on early season varieties that do not have the luxury of compensating as well as the full season varieties.

Table 1. Prebloom Tarnished Plant Bug Sweep net Thresholds for Cotton in Mississippi

First two weeks of squaring	8 bugs per 100 Sweeps
Third week of squaring until first Bloom	15 bugs per 100 Sweeps

Many have been asking what the best approach for managing plant bugs is given the increased levels of pyrethroid and acephate resistance throughout the delta region of the state. We have limited rotation options for controlling plant bugs in MS. We have traditionally relied heavily on the neonic class of chemistry to provide early season plant bug and aphid control. This class includes Centric, Trimax Pro, and Intruder. Recently, FMC has introduced Carbine, which is somewhat similar to a neonic but actually is a different class of chemistry (Pyridine Carboxamide). Like neonics, this product has efficacy on plant bugs and aphids. Test across the mid-south show that it has good activity but is slow acting. The full effect of this product is not seen until 5 –7 days after application. Also, there have been many questions about Vydate. Vydate belongs to the carbamate class of chemistry, which is different from acephate and Bidrin, which are both organophosphates. Unless something changes from a resistant standpoint, Vydate fits into a rotation schedule both before and after bloom. A typical approach may be to work Vydate in when the target is only plant bugs and the neonics and Carbine when the target is plant bugs and aphids prior to first bloom. After bloom, begin to bring in the organophosphates, which can be rotated on a limited scale with the neonics and Carbine if aphids are at treatment levels. We also should consider tank-mixing Diamond going into bloom. We have evaluated this compound extensively the last several years with very good results. Test show that we get better results with Diamond when we begin to see nymphs develop rather than waiting until populations explode in mid July, so if we are at threshold and have nymphs showing up we should consider working it in as we enter bloom.

Trap Lines

Several of Ryan Jackson’s numbers this week are based on single trap catches. Apparently someone thought his traps would make good minnow traps and stole the tops off five of them.

Ryan Jackson USDA Trap line			
June 8, 2007	Total		
County	Bollworm	Budworm	BAW
Washington	11	3	-
Sharkey	78	10	67
Humphreys	9	-	-
Yazoo	6	3	52
Holmes	20	34	-
Leflore	24	9	22
Tallahatchie	11	20	-
Coahoma	11	3	42
Bolivar	38	5	-
Sunflower	89	2	95

Pheromone Traps Captures – Don Cook, Chris Daves, and Fred Musser. Week of June 11th

County	Bollworm	Budworm	Beet Armyworm
Bolivar	26	37	70
Coahoma	8	26	24
Humphreys	20	16	104
Leflore	12	43	65
Tunica	4	45	-
Chickasaw	7	51	29
Grenada	3	4	19
Hinds	2	15	105
Lee	25	21	33
Lowndes	21	20	-
Madison	1	2	40
Noxubee	1	8	60
Prentiss	0	15	17
Union	2	14	45

Southwestern Corn Borer- Chris Daves June 8-14, 2007

County	Avg per Trap	County	Avg per Trap
Adams	0	Leflore	0
Alcorn	0	Lowndes	0
Attala	-	Madison	0
Bolivar	1	Monroe	0
Calhoun	0	Montgomery	-
Carroll	0	Noxubee	0
Chickasaw	0	Panola	6
Clay	1	Perry	0
Coahoma	1	Pontotoc	0
Copiah	0	Quitman	0
Covington	0	Rankin	0
Desoto	35	Scott	3
Forrest	0	Sharkey	0
George	0	Sunflower	1
Grenada	0	Tallahatchie	1
Hinds	0	Tate	0
Holmes	-	Tunica	0
Humphreys	1	Union	-
Issaquena	0	Warren	0
Itawamba	1	Washington	0
Jackson	0	Webster	0
Jefferson	0	Winston	0
Lafayette	1	Yalobusha	1
Lee	0	Yazoo	0



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