

Mississippi Crop Situation

June 8, 2007

Editor: Angus Catchot

Number 9

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

Crop Situation: (For the week ending June 3, 2007)

Cotton was 100% planted and 98% emerged, and 9% squaring. Corn was 40% silked. Soybeans were 99% planted and 95% emerged, and 9% blooming. Rice was 100% planted and 99% emerged. Wheat was 95% mature and 42% harvested. Sorghum was 100% planted and 96% emerged. Peanuts were 95% planted. State average air temperature was 76 degrees (1 degree above normal). Weekly rainfall was 0.53 inches (0.68 inches below normal).

News and Announcements

Last Scout School next week 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.

NEW Insect Video Gallery Update: New video posted on the website! I have posted a new video showing chinch bugs moving out of wheat into corn. When I post these videos they have to reduce the size of the file so we do not fill up the server. In doing so, we lose some of the quality. The video starts a little slow but toward the end you can see it better. If you choose to go to the google link instead of watching it on the window at the msucare website the quality is a little better. The direct sight is <http://msucare.com/insects/videos/index.html> or you can go to msucare.com click on Insects/Plant Diseases/Pesticides then click on Insects then click on Insect Video Gallery. **One note:** If you open the file from google video's actual home site rather than off of the msucare google box that shows up and it appears enlarged and out of focus, in the bottom right hand corner of the screen there will be an arrow facing down. Click on it then click on "original size" and that should fix it.

Insects

Corn: As you will see on the video mentioned above, if you have corn or sorghum next to wheat fields watch them closely for chinch bugs. There have been several reports of extremely high numbers of chinch bugs moving out wheat into corn and grain sorghum. The infestation where this picture was taken only affected about 20 rows adjacent to the wheat. Watch these areas closely. This is what was left 24 hours after an application that appeared to provide about 50% control.



Cotton: Because of the length of the newsletter this week I will keep my comments brief. We are treating more and more acres for mites each day. The hot dry conditions have been ideal for mite numbers to increase. This is still mostly confined to the south delta but I have had a couple of consultants report mites in the hills and some isolated fields in the north delta. Plant bug numbers have increased over the last week with some treatments being made. Generally when it is hot and dry plant bug numbers are low, however, I have found more plant bugs in corn while sampling for corn borers than in recent years. Dr. Jeff Gore in Stoneville also reported finding high numbers of plant bug nymphs on the silks of some cornfields. Dr. Gordon Snodgrass's spring resistant monitoring program from this year is indicating that many populations have overwintered with acephate resistance. I would encourage trying to hold off of acephate, Bidrin, and other organophosphate materials until after first bloom for plant bug control.

Soybean: (Northeast MS, Dr. Don Cook)

Thrips are active in cotton especially in places that have not received rain. Some fields have been treated more than once. Little insect activity to report in corn. Some soybean fields have low numbers of three-cornered alfalfa hoppers and bean leaf beetles. One soybean field did have a very large infestation of blister beetles in a small area as seen in the picture below.



Cotton Weed Control

At planting control of Horseweed (aka marestail). I know we are well past worrying with burndown applications, but I felt it is as good a time as any to share some of the things we have seen this spring with respect to managing glyphosate-resistant horseweed (aka marestail). I have never seen horseweed in as many fields as I have this spring and early summer. We are hard pressed to find a field of really any crop that doesn't have a horseweed plant or two to a thick infestation. I have seen horseweed in fields where we have never seed horseweed before. This may be due to the fact that horseweed seed is wind blown, that an individual plant can produce up to 500,000 seed, and that the dry spring probably resulted in a late flush coming up after burndown.

Over the past month we have had a lot of calls regarding how to control horseweed just prior to planting cotton or right after planting but before the crop emerges. In most cases, the

horseweed was really big (12-24 inches tall) and there was a lot of it. We don't have many options to control horseweed at planting. We are all familiar with the use of dicamba (Clarity or Banvel) or 2,4-D in a burndown program to control glyphosate-resistant horseweed. However, dicamba must be applied at least 21 days before planting and 2,4-D at least 90 days before planting cotton and you are supposed to get some rainfall between the dicamba application and planting if you go with the 21 days before planting guideline. Currently, Ignite (glufosinate) or Gramoxone Inteon (paraquat) are really our only "at planting" or "just before the crop emerges" options to control horseweed. We have seen a lot of inconsistent control of really big horseweed with paraquat. Small horseweed that is still in the rosette growth stage before it bolts is easily controlled with paraquat. However, once horseweed bolts or goes from a rosette to having a stem we are seeing a lot of inconsistent control with Gramoxone Inteon. We are controlling some populations that have bolted with a 2 to 3 pint/A application of Gramoxone Inteon, but in some fields we burn off the bottom of the plant but the growing point (top of the plant) doesn't die and the plant resumes normal growth within a week or two (see figure 1).



Figure 1. Gramoxone Inteon (3 pt/A) at 14 days after treatment. Growing point not controlled on most plants. Plants were 14-20 inches tall at time of application.

We have seen excellent control of horseweed at time of cotton planting with Ignite 280 SL at 29 ounces of product/Acre (Figure 2). We often see inconsistent control of many weeds with Ignite when it is applied in early spring (February through March) due to cool conditions at time of application. Ignite resembles MSMA with respect to the effect of temperature on herbicide activity. Both Ignite and MSMA work better the hotter the temperature. MSMA however does not work well on horseweed no matter how hot it is.

Ignite at 29 ounces/A will cost around \$12.00/A. This is not a cheap option, but it is the best option at cleaning up a horseweed problem before the cotton comes up. We don't have any options that provide good control of horseweed once the cotton comes up outside of growing Liberty Link cotton where we can apply Ignite over the top. So in fields where we have a lot of horseweed at time of cotton planting, Ignite is a good option for managing this weed that is very difficult to impossible to control inseason in Roundup Ready cotton. Horseweed is extremely competitive on small cotton, so in cases where we have a thick stand of horseweed they are going to compete significantly with the cotton.



Figure 2. Ignite 280 SL (29 oz/A) at 14 days after treatment. 100% control.

In the north part of the delta where glyphosate-resistant horseweed has historically been worse than in other parts of the state, we have had quite a few growers grow Liberty Link cotton over the past several years so that they have an inseason option to control glyphosate-resistant horseweed. This system allows for multiple inseason applications of Ignite to not only control glyphosate-resistant horseweed but most other problematic weeds. This system, however, just like glyphosate in Roundup Ready cotton, does not provide residual weed control. So residual herbicides should be utilized in Liberty Link cotton just like they should be in Roundup Ready cotton.

On a separate issue, we have seen the addition of Direx, Cotoran, Caparol, Goal, or Valor to a glyphosate+2,4-D or glyphosate+dicamba burndown program improve control of small glyphosate-resistant horseweed and other difficult to control winter weeds (Figures 3 and 4). Most of us have seen the benefits of an early burndown program (early February to early March). The addition of one of these residual herbicides often improves overall winter weed control when added to a glyphosate based burndown program.

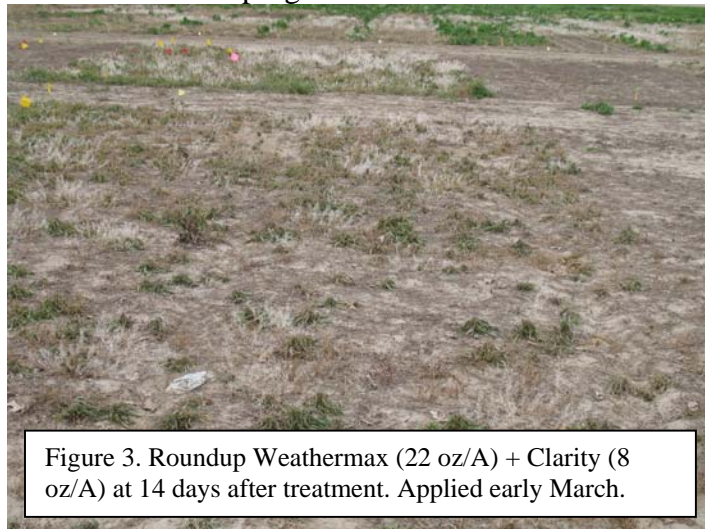


Figure 3. Roundup Weathermax (22 oz/A) + Clarity (8 oz/A) at 14 days after treatment. Applied early March.

Over the past couple of springs, which have been particularly dry, we have often seen inadequate control or slower control of glyphosate-resistant horseweed with glyphosate + dicamba or glyphosate + 2,4-D applied at burndown. We typically don't see this inadequate control in normal wet springs, but the plants are more difficult to control during dry conditions, thus the addition of a residual herbicide like Direx, Cotoran, Caparol, Goal, or Valor improves the control of glyphosate-resistant horseweed at burndown. The residual herbicide also provides residual control of horseweed that may come up between burndown and time of cotton planting.

One thing to keep in mind if any of these residual products other than Valor are used in the burndown program, you are locked into planting cotton that year. You can plant soybean at least 60 days after a Goal application. Valor can be applied up to 30 days before planting corn or rice and can be applied up to 14 to 21 days or 30 days (conventional till) before planting cotton. Valor can be applied PRE (immediately after planting) to soybean. Refer to the Valor label for more guidelines (<http://www.cdms.net/LabelsMsds/LMDefault.aspx?t>).

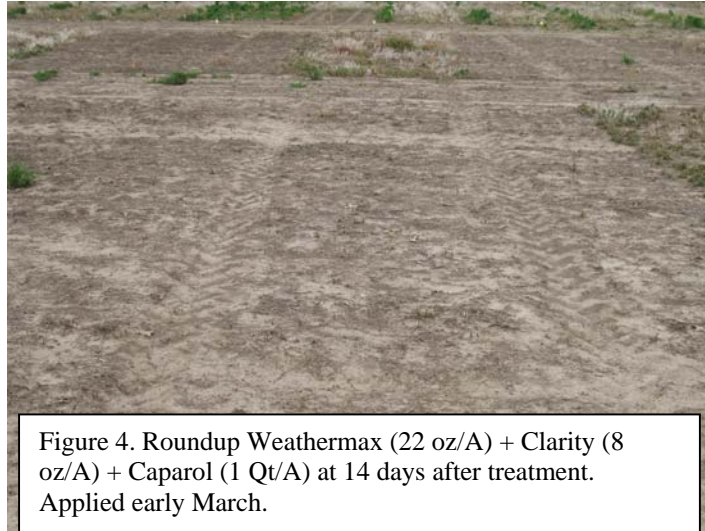


Figure 4. Roundup Weathermax (22 oz/A) + Clarity (8 oz/A) + Caparol (1 Qt/A) at 14 days after treatment. Applied early March.

S.M.A.R.T Program

Billy Moore, Ben Spinks, Mitt Wardlaw, Alan Henn, and Brian Ward

There have been reports of rust in Mississippi. This is **NOT** true as of June 8, 2007. We have scouts that are exclusively looking for soybean rust on a weekly basis across the state. In addition, individuals of the SMART team are also looking for soybean rust and we have found **NONE**. There is absolutely no reason for concern at this time and **NO** need for an application of fungicides used exclusively to control soybean rust. We will continue to monitor soybean production fields, sentinel plots (kudzu and soybeans), and SMART fields.

If you have any questions regarding soybean rust, please do not hesitate to call one of us.

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Trap Lines

Pheromone Traps Captures – Don Cook, Chris Daves, and Fred Musser.

County	No. of Traps	Species	Total all traps	County	No. of Traps	Species	Total all traps
Bolivar	4	Beet Armyworm	64	Lee	2	Tobacco Budworm	12
Bolivar	4	Bollworm	16	Leflore	3	Beet Armyworm	185
Bolivar	4	Tobacco Budworm	9	Leflore	3	Bollworm	14
Chickasaw	1	Beet Armyworm	9	Leflore	3	Tobacco Budworm	13
Chickasaw	1	Bollworm	9	Lowndes	2	Bollworm	11
Chickasaw	1	Tobacco Budworm	13	Lowndes	2	Tobacco Budworm	3
Coahoma	3	Beet Armyworm	29	Madison	2	Beet Armyworm	11
Coahoma	3	Bollworm	7	Madison	2	Bollworm	0
Coahoma	3	Tobacco Budworm	0	Madison	2	Tobacco Budworm	0
Grenada	2	Beet Armyworm	47	Noxubee	4	Beet Armyworm	0
Grenada	2	Bollworm	5	Noxubee	9	Bollworm	3
Grenada	2	Tobacco Budworm	5	Noxubee	9	Tobacco Budworm	20
Hinds	1	Beet Armyworm	0	Prentiss	1	Beet Armyworm	6
Hinds	1	Bollworm	0	Prentiss	1	Bollworm	0
Hinds	1	Tobacco Budworm	0	Prentiss	1	Tobacco Budworm	7
Humphreys	1	Beet Armyworm	35	Tunica	1	Bollworm	2
Humphreys	1	Bollworm	8	Tunica	1	Tobacco Budworm	0
Humphreys	1	Tobacco Budworm	2	Union	1	Bollworm	0
Lee	2	Beet Armyworm	27	Union	1	Tobacco Budworm	0
Lee	2	Bollworm	24				

Southwestern Corn borer Trap Counts for the week of June 1-7, 2007- Chris Daves

County	Total Traps	Total SWCB Caught	Avg # SWCB/trap	County	Total Traps	Total SWCB Caught	Avg # SWCB/trap
Adams	4	0	0	Leflore	19	11	0.6
Alcorn	2	21	10.5	Lowndes	3	3	1.0
Attala	2	1	0.5	Madison	16	3	0.2
Bolivar	4	0	0	Monroe	10	2	0.2
Calhoun	4	0	0	Montgomery	3	0	0.0
Carroll	6	3	0.5	Noxubee	31	1	0.03
Chickasaw	2	0	0	Panola	3	37	12.3
Clay	2	1	0.5	Perry	2	0	0.0
Coahoma	4	1	0.3	Pontotoc	4	0	0.0
Copiah	4	2	0.5	Quitman	2	0	0.0
Covington	2	0	0	Rankin	1	0	0.0
Desoto	6	20	3.3	Scott	1	0	0.0
Forrest	2	0	0	Sharkey	4	0	0.0
George	2	0	0	Sunflower	15	8	0.5
Grenada	4	0	0	Tallahatchie	16	14	0.9
Hinds	6	0	0	Tate	4	2	0.5
Holmes	4	0	0	Tunica	2	0	0.0
Humphreys	10	4	0.4	Union	5	1	0.2
Issaquena	4	1	0.3	Warren	9	0	0.0
Ittawamba	2	0	0	Washington	14	9	0.6
Jackson	2	0	0	Webster	2	0	0.0
Jefferson	4	0	0	Winston	2	0	0.0
Lafayette	4	3	0.8	Yalobusha	4	2	0.5
Lee	12	2	0.2	Yazoo	7	1	0.1

Ryan Jackson USDA Trap line

County	June 5, 2007		
	Bollworm	Budworm	BAW
Washington	5	0	-
Sharkey	14	4	10
Humphreys	6	6	-
Yazoo	8	2	1
Holmes	8	5	-
Leflore	7	0	8
Tallahatchie	3	1	-
Coahoma	1	1	7
Bolivar	6	0	-
Sunflower	1	0	15



IPM SCOUT SCHOOLS

Each IPM Advanced Training (Scout School) session is free of charge and open to anyone. MEETING CAN BE USED TO RENEW THE ENTOMOLOGY PART OF CONSULTING LICENSES. Feedback from previous scout schools indicated a need to move these later into May and early June to allow school kids time to get out of school and begin work.

These are the Scout Schools we have scheduled to date. There will likely be a couple more scheduled in the future.

2007 IPM Scout Schools

County	City	Site Contact Information	Focus	Date	Time
Oktoberbeha	Starkville	Mississippi State University Clay Lyle Building (662 418-8163)	Cotton, Corn, and Soybean	June 14	4:00 – 7:30 p.m.
George	Lucedale	Mike Howell (601) 795-1425	Cotton and Peanut	July 9th	8:00 – 2:00 a.m.

IF YOU WOULD LIKE TO BE TAKEN OFF OF THE LIST, UPDATE YOUR ADDRESS, OR BE ADDED TO THE EMAIL DISTRIBUTION LIST PLEASE CONTACT SHERRY MCMULLIN AT (662) 325-2085 OR EMAIL HER AT: smcmullin@entomology.msstate.edu WITH **CIS NEWSLETTER** IN THE SUBJECT LINE TO BE ADDED TO THE ELECTRONIC NEWSLETTER LIST OR MAKE ANY CHANGES.

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