

IPM NEWSLETTER

Update for Field Crops and Their Pests

No. 4

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Past Newsletters and other information can be found at UTCrops.com

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Reminder: Cotton Scout School, West Tennessee Research and Education Center (Jackson), May 26th Registration begins at 8:30 AM. No pre-registration or fee is required.

Five Day Cotton Planting Forecast (Larry Steckel and Scott Stewart)

Despite a couple of cool days predicted next Tuesday and Wednesday, overall temperatures are forecasted to provide good DD60 accumulation over the next 5 days. Growers were starting to ask about dry planting, but with this widespread rainfall, that tune will change. There is a warm weather predicted by the end of next week, and planting will likely begin in earnest as the soil begins dry.

North Tenn. (Dyersburg): Predicted DD60 accumulation over the next 5 days: 31 (Good).
Temperatures will range from the mid 80s to lower 40s over the next 5 days.

Central Tenn. (Jackson): Predicted DD60 accumulation over the next 5 days: 29 (Good).
Temperatures will range from the mid 80s to lower 40s over the next 5 days.

South Tennessee (Memphis): Predicted DD60 accumulation over the next 5 days: 43 (Good).
Temperatures will range from the mid 80s to upper 40s over the next 5 days.

Forecast DD60s after planting	Estimated Planting Conditions
<10	Very Poor
11-15	Poor
16-25	Marginal
25-50	Good
>50	Very Good

Burndown Consideration (Larry Steckel, Assistant Professor)

Glyphosate-resistant horseweed burndown is by far the number one topic of the week. I have walked many fields over the past 10 days and this is what we know. All burndown applications applied from early March until the last few days of March provided very good control of horseweed. Burndown applications that went out around April 1 have been very inconsistent in some areas. What has been surprising to me is that applications that worked so consistently



well in research and across thousands of acres over the past several years, namely glyphosate + dicamba or Gramoxone + dicamba + Direx or Caparol or Cotoran, have looked shaky in some fields. Thinking back though one must remember that those burndown applications that were successful in the past were made during a more typical spring environment, mainly cool and wet. That is why I think the atypical heat and lack of soil moisture in early April is probably a contributing factor for the inconsistent performance this spring. The counties along the Mississippi River seem to be the area with the most problems. Other counties in Tennessee, though there are some exceptions, have had better results from burndown applications. Soil moisture may be a reason for the location differences as well.

Some folks have pointed to the generic dicambas as one reason for the erratic horseweed control. Walking over some of the problem fields the past week it has in a case or two looked like the Clarity salt has shown slightly better control. However, it is very hard to tell if that is a real or perceived factor as one can so rarely find an apple versus apple comparison.

Regardless of the reason for the poor horseweed control the question is what now? The rain Friday should activate the Cotoran, Caparol and Direx that are tank-mixed into many of these burndown treatments. In many cases horseweed in these fields are really struggling. The activated soil residual herbicides may very well finish the job. Moreover, the very dry conditions should have allowed the dicamba to persist and with some moisture move from the soil into the horseweed. We should be able to tell by early to the middle of next week if these fields will need to be retreated. By that time horseweed will have either regressed or will show some new regrowth, typically as lateral branching. If they need to be resprayed we do have some options.



Close to Cotton Planting Burndown Options

There are several options for follow-up burndown treatments for GR horseweed just prior to cotton planting. Most of the horseweed in these fields are in rough shape and either Gramoxone Inteon or Ignite 280 should be able to finish them off. Ignite 280 at a rate of 23 oz/A should control them. If Cotoran or Caparol or Direx was not used in the initial burndown adding one of these photosystem II inhibitors to Ignite will help with the control plus provide some residual. Gramoxone Inteon is also an option but remember to add either Cotoran or Caparol or Direx to any resprays.

Late Season Burndown Options for Soybean

Horseweed regrowth in soybean burndown acres can be managed with either Ignite or Gramoxone. Adding 4 oz of Sencor is recommended with either of these applications for good control. Another option is to wait until the horseweed begins to show some good regrowth and spray with FirstRate.

Horseweed Control in Corn

Again this year we are finding out that glyphosate + 2 lbs of atrazine will not burndown horseweed. The most economical control of GR horseweed at the current corn growth stage is Clarity. The rate can go as high as 16 oz/A until the corn reaches 8" tall. After the corn gets above 8 inches the Clarity rate that can be used is 8 oz/A until corn reaches 36". Once horseweed has grown above 12" tall our data would suggest that Callisto at 2 oz/A is more consistent than Clarity at 8 oz/A.



True Armyworms? (Scott Stewart, IPM Specialist)

Last weeks newsletter discussed the possible threat of this insect to wheat, pastures and other crops based on some predictions and observations made by the University of Kentucky. Nothing has really changed, and there are no widespread problems at this time. Just stay alert for true armyworms for the next 3-4 weeks. Having said this, there appears to be some confusion about this pest.

True armyworms usually have a light colored head and a dark, horizontal band on each proleg (pictured right). The larvae have only fine hairs on their bodies, and color can vary. I've included some web sites that provide more detail.



True armyworm web sites

- <http://www.ent.iastate.edu/imagegal/lepidoptera/armyworm/069armyworm.html>
- <http://muextension.missouri.edu/explore/agguides/pests/g07115.htm>
- <http://www.gaipm.org/top50/truearmy.html>
- <http://ipm.ncsu.edu/AG295/html/armyworm.htm>
- <http://www.omafra.gov.on.ca/english/crops/pub811/5trarmy.htm>
- <http://www.farmassist.com/agronomic/library/pestDetailsPrint.asp?PestID=33239>

I also am getting calls about another caterpillar being seen crawling across sidewalks, up the sides of houses and in people's yards. This is not an armyworm but a rather hairy caterpillar that is most likely the eastern tent caterpillar. This caterpillar poses no real threat to crops, but it can defoliate cherry, apple and other trees. It is commonly seen moving about in relatively high numbers during the spring, particularly as they migrate around looking for a place to pupate. As you can see, the two species don't really look alike.



Bt Cotton Refuge (Scott Stewart, IPM Specialist)

I've been asked by Monsanto to re-emphasize the EPA requirement for a non-Bt cotton refuge for Bollgard and Bollgard II cotton. A recent EPA's review of refuge compliance indicates that, despite a generally good understanding of the requirements, there are still problems. Two particular areas need improvement: 1) refuge size and 2) refuge treatment. Requirements for 2006 are the same as for 2005 and are the same for Bollgard, Bollgard II and WideStrike cotton varieties. Like it or not, there is an obligation to plant the appropriately sized refuge and manage it according to the guidelines. Several refuge options available to growers. These options and other requirements are outlined at the following web site.

Refuge Options

http://www.monsanto.com/monsanto/us_ag/content/stewardship/irm/2005/bollgard.pdf

Monsanto is obligated by the EPA to promote, monitor and enforce Bollgard and Bollgard II refuge requirements. Thus, expect some increased emphasis in all these areas. It may never be possible to prove current refuge requirements will delay the development of resistance to Bt cotton by bollworm or tobacco budworm. However, from an insect resistance management perspective (IRM), a refuge can only help. If you are unclear about any of the refuge requirements, feel free to contact me or a Monsanto representative.

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The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914. Agricultural Extension Service, Charles L. Norman, Dean.

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