



Blacklands IPM Update



GENERAL:

Another good area wide rain event came this week and brought as much as 3” to parts of the area. Prior to the rain insect activity in cotton was starting to increase as I was starting to find fields at the economic threshold for either thrips or spider mites. While the moisture was needed, the amount of rain received may slow crop development down until we get the warm weather this coming week. The area wheat crop may see some lodging, especially in fields that were heavily infested with Hessian fly, but most of the wheat in the area I have checked is not far enough along to cause premature sprouting or even reduced kernel weights. Cotton in the area ranges from just replanted to as far along as 4 true leaf stage with a handful of fields running over one thrips per true leaf, and a couple of fields with over 40 percent of plants infested with spider mites. The area corn crop really needed the moisture from the rain and is progressing nicely given the dryer weather pattern over the last 6 months. The rain will be beneficial to the corn crop as most of the corn in the area I have seen is at the point where ear size, kernel rows, and the number of kernels per row are being determined.

WHEAT:

Our wheat crop is maturing rapidly, and harvest operations will probably begin being in about 3 weeks. Rust has picked up in the area with recent rains and warmer temperatures, but our crop is past the point you can apply a fungicide to the crop. The recent rains will help finish the later maturing crop and have a minimal impact on the wheat that is a little more mature. One issue that could arise following this rain is lodging, particularly in fields planted with varieties with a weak stalk or fields that were heavily infested with hessian fly. Most of the fields I have check so far have not dried down enough to see issues with sprouting in the head or reduced bushel weight from kernel swelling and shrinking. Hopefully, we can get some favorable weather in the area between now and harvest to avoid the issues we saw with last years wheat harvest.

COTTON:

The area cotton crop is doing well with some fields being replanted. Our crop ranges from just emerging to as las as the 3-4 true leaf stage. Insect issues have picked up over the last week. Thrips populations are starting to increase, and currently averaging between 0.3 and 1.6 thrips per true leaf. Thrips need to be closely monitored because their damage can delay square initiation in and crop maturity (**Figure 1 & 2**). Most of the fields that are near the economic threshold are either at the 2 true leaf stage, or the seed had a base seed treatment and did not receive and in-furrow insecticide application. Thrips are not hard to control, but spray coverage is key since the plants are small. There are a handful of insecticides recommended including acephate (Orthene and generics), Bidrin, spinetoram (Radiant/Intrepid Edge), and dimethoate. I was recently notified those supplies of both acephate and dimethoate are tight at this time, and we may need to start looking at other insecticides like Bidrin or a spinetoram product. Bidrin is not my go to insecticide for thrips, because we are limited on the amount we can apply, and I would much rather keep Bidrin for aphids or stinkbugs later in the season.



Figure 1. Thrips feeding damage in cotton. Photo credit: John C. French Sr., Retired, Universities: Auburn, GA, Clemson, and U of MO, Bugwood.org



Figure 2. Adult thrips, commonly found feeding on young cotton plants. Photo credit: David Kerns, Texas A&M AgriLife Extension

With the recent rains, weeds will likely start emerging across the area. As we start spraying for weeds. For those that planted PhytoGen cotton this year, remember that there are counties in the Texas Blacklands where Enlist One and Enlist Duo cannot be applied at this time. I asked Matt Matocha, Extension Program Specialist for the Southern Blacklands to put together some information about early season weed control in cotton. The following is what he put together. There are a number of options growers can use to manage weeds in the early season. If you know your fields history, and that you indeed have glyphosate (or Roundup resistant weeds) then you may also choose to plant one of the newer technologies available in cotton in order to better manage these resistant weeds. The two synthetic auxin technologies, Enlist(2,4-D) and XtendFlex (dicamba), when used properly can allow a farmer to manage glyphosate resistant weeds effectively. These products are also tolerant to both Roundup (glyphosate) and Liberty to allow flexibility when deciding which would be better to use given field conditions, weed species and density. It is always important to remember that Roundup is more forgiving than Liberty when it comes to weed sizes at application. It is best to target 3" or less when using Liberty so that you ensure getting good coverage and control. It is also important to remember that if you know you have at least some of your broadleaf weeds in your field(s) that survive an application of glyphosate, you must then decide what is your best option after that. Depending on the technology you have (Enlist or XtendFlex), you need to plan to begin spraying when the weeds are small so that, ideally, you can cover your acres before they get any larger than 3-4 inch. It is also always a good idea to rotate chemistries, ie, Enlist or XtendFlex first, followed by a Liberty shot, and vice a versa. In addition, when you plan either an early post or mid-post application to cotton, you really should consider using a residual or preemerge tank mix partner so that you can extend your residual control of both grassy and broadleaf weeds until your crop can get some size and begin to shade out at least some of the future weeds that may or may not come up. This "Post" tank mix partner is a good idea so that you may have overlapping residuals since you have applied a preemergence application. Just remember, you must include a knockdown herbicide in tank mix with any residual herbicide. Be sure to follow all product labels and restrictions with the suggestions below as this table is a brief synopsis of such products.

Product	Component(s)	Rate/acre per appl.	Timing	Number of App.'s
Sequence	Glyphosate + S-metolachlor	3.5 pt	PRE/POST	2 shots
Dual Magnum	S-metolachlor	1 pt	POST	1 shot
Tavium	Dicamba + S-metolachlor	3.53 pt	PRE/POST	2 shots
Warrant	Acetochlor	3 pts	PRE/POST	2 shots
Outlook	Dimethenamid	10 to 14 oz	PRE/POST	Max of 21 oz
Prowl H2O	Pendimethalin	1 to 2 pts	PRE/POST	POST – between 4 and 8 leaf cotton
Roundup PowerMax 3	Glyphosate	30 oz	PRE/POST	Total 3.75 qts from all in crop through harvest
Generic – Glyphosate	Glyphosate	Multiple	PRE/POST	Refer to label
XtendiMax*	Dicamba	22 oz max	PRE/POST	Preplant/PRE – 44 oz total In crop –44 oz total
Engenia**	Dicamba	12.8 oz	PRE/POST	PRE/PREplant 12.8 oz In crop 12.8 (25.8 oz total)
Enlist DUO***	Glyphosate + 2,4-D choline	76 oz	PRE/POST	PRE – max 76 oz POST – Two max 76 oz apps
Enlist One****	2,4-D choline	2 pts	PRE/POST	PRE – max 2 pts POST – max 2 appl.
Liberty	Glufosinate	32 oz	PRE/POST	PRE/POST – 29 to 43 oz, max of 87 oz/yr

Aphids were still present in area cotton fields prior to the rain with colonies growing, but still well below the economic threshold. The recent line or storms that moved through on Thursday, likely washed the aphids off the plant, but fields should still be monitored for aphid populations. Spider mites are present in area fields, which is not uncommon. What is shocking is I found a few fields in Southeastern Hill County that was above the economic threshold for spider mites (**Figure 3**). Much like the aphids situation, if you had field with spider mite populations growing, they were likely slowed down and even possible eliminated from the field by the recent rains. If you had a field that was seeing spider mite populations growing prior to the rain, I would let the fields dry out a little and get into the field and reevaluate the spider mite population prior to spraying.



Figure 3. Spider mites infesting cotton leaf.
Photo credit: Tyler Mays, Texas A&M
AgriLife Extension Service

Blacklands IPM Update is a publication of Texas A&M AgriLife Extension IPM Program in Hill & McLennan Counties.

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