Texas A&M AgriLife Extension

Plains Pest Management

August 15, 2014

General Status

The statement was made this morning as the Plains Cotton Growers biweekly meeting wound down this morning, "It seems that the folks that have the boots on the ground are the most confused about the current situation (in the region)." The person who made the statement must remain anonymous because I could not note who said it. Even anonymously, the statement rings true as the situation at least remains hard to describe as it is so variable in stage and many times for yield estimates. Region wide, crops are just as varied as the August rains have been. Those of us in Hale & Swisher that have caught something of a rain during August have dryland that looks pretty good, but could really use some more soon to better hold on to more of the field's potential. Those of us that did not catch any of those rains are almost past desperate for dryland sorghum and hay crops while the window for benefiting the still passable dryland cotton is slamming shut in a matter of days.

On the more scrutinized irrigated side, things are not quite as variable in quality, just in stage and maturity, particularly in the grass crops. Limited pumping capacity fields, those that waited on a missed rain or some weed control a few days too long before firing up their irrigation systems for the critical 'crunch time' can certainly be found as the lack of deep moisture and August heat have taken their toll. The same factors actually seemed to help the 'late' cotton crop mostly reach absolute cut-out at or just about a regular time. Early rains, crop and irrigation management for maturity, and light insect pressure also helped our cotton's fruit set remain abnormally high. This high fruit retention in the cotton should prove to be important as the fields are short a few weeks of development and thusly have fewer fruiting site compared to a normal season. All totaled the irrigated crops have come through pretty well, but there is a long way to go for the late sorghum and corn. These late corn and particularly sorghum fields also look to be where most of our real pest problems will be for the season.

Cotton

August 20th is generally considered the last date that we can with 100% accuracy assume that a cotton bloom will successfully make a harvestable boll. This is an outstanding target date to manage our cotton to reach absolute cut-out of 3.5 NAWF (nodes above white flower) and finish out for the year with all dollars spent on making those quality bolls. Many of us in Hale & Swisher actually try to manage cotton for an August 24th absolute cut-out date when we can assume a 90-95% chance of a bloom making a harvestable, high quality boll. In most seasons that certainly seems like a reasonably good bet but with a high enough load we usually hit the August 20th anyway. With this season's rough start and general 'lateness' of the crop many of us were managing, crunching, and hoping for an August 27th date when there is roughly a 70% chance of a bloom successfully making a harvestable boll. One of my biggest fears for the cotton season earlier in the year was that the surviving irrigated cotton would only start 'looking' good by August 15th and producers would not start pushing it until then, counting on a September 7th date when there is only a 15% chance or so of making a harvestable boll. For all but a handful of fields, that seems like a moot point now.

Rough Start, slightly early cut-out, good boll load, Hale County August 19, 2014

Our program cotton this week ranged from 5.6 NAWF through to absolute cut-out. All but a few fields were below 4.6 NAWF and more than half were at or past absolute cut-out. We have not found any open bolls to date. Boll set remains high for the most part unless water availability became an issue recently and even those fields seemed to retain more bolls than a cotton field usually does when stress, peak bloom, and cut-out all occur at once.

As I write this on August 22nd most of our program fields should be setting some of their very last 'plant holdable' bolls just a few days behind a target August 20th date and right on time for the 24th target date. Those later fields that are still running 4.5 NAWF or higher this week look to be following the lead of the earlier maturing fields. Boll load, plenty of heat units, and timely irrigations combined with light pest pressure should set a high percentage of squares to bolls that will draw those fields down toward cut-out very soon, which will be just a touch late but near our once hoped upon target of August 27th. I do urge producers not to push fields too hard well into September. Once fields reach absolute cut-out and set their last harvestable boll, water needs drop to

only boll fill levels. Any additional water above that point sets the plant to regrowth which only makes the plant hard to kill for harvest aids, hard to strip, and trashy at the gin. Likewise, if there are late fields out there that fly past our last emergency target cut-out date of August 27th, they would need to be reined in pretty hard to avoid too much of the same problems.

'Drier' field with decent boll load, Hale County August 19, 2014

It has been a quiet week for pests in our program cotton. We still have a few Lygus turning up, the highest was from the Edmonson area just this morning where our scouts found 1 Lygus per 3 row feet. This nears our economic threshold (ET) but was not on it yet and there was not enough Lygus induced fruit damage and loss in the field to justify the expense of treatment. We will continue to monitor that situation closely. In the same area this morning we found a few fields with bollworm eggs, the highest being 22,000 eggs per acre. Earlier in the week we discovered a small but building cotton aphid population near Hale Center. These two factors are certainly worth keeping an eye on and could easily develop into a problem, especially if the two pests develop to economic levels in the same non *B*t cotton field. Our predator counts remain high this week and I am optimistic that these hot spot bollworm and aphid fields will not reach ET. We will need to continue scouting to make certain.

Corn

Our earlier program corn ranges in stage from early dent to 'only now needs to dry down for harvest.' All of these fields were treated for spider mites in July. We can still find mites in these fields on the lower leaves. The treatments and good predator populations continue to limit the mites to the lower leaves in populations that are a small fraction of what they once were. We found no other pests on note in our earlier corn fields this week and mostly fielded questions about irrigation returns and termination.

Our programs later corn ranged from early tassel to dough this week. Most fields were sporting green silks in an early dough stage. Spider mites remained very light with a 1 rating being the highest and 0-1 more common but we were able to find their colonies more consistently compared to previous weeks. Key mite predators remained good in these fields as well, helping to hold the population in check quite well. These fields continue to be a 'sink' crop for the majority of bollworms, or corn earworms if you prefer that name.

2012 Reed Consulting and 2013 Plains Pest Management field scout Demi Loya says she misses you all, but not checking corn.

The bollworm's crop preference is typically corn and they generally will choose to lay eggs in tasseling or silking corn if given that option. Here in the corn they are of minimal economic concern. Of a larger concern will be the fall armyworms (FAW). The FAW population has been high throughout the season and has grown with each generation of larva. Thus far the FAW have shown a preference for the late sorghum, but that does not mean this preference will continue. We have found a small number of FAW in the ears of some of our late corn. I recommend we remain vigilant in our scouting for FAW egg masses in this late corn. If the FAW are found at a high enough rate they will do economic damage to the crop, especially to non *B*t or single trait varieties. Studies are currently under way by Dr. Pat Porter to better understand an economic threshold for FAW in corn and the pest's interactions with all of the differing traits and refuge.

Sorghum

Our earlier sorghum ranged in stage from dough to hard dough. I made note of one of our producers greasing up the combine this week getting ready for sorghum harvest. He might not be too far off but no field was quite past economic insect concerns yet. For the first time in a few weeks we had no field reach ET for spider mites in sorghum this week. We also found just a few headworms, all bollworms in this case, in a few fields. These worms were well below ET. Our most consistent find was yellow sugarcane aphids (YSCA) on lower leaves and Lygus in maturing sorghum heads with just a touch of stink bugs intermingled with the Lygus from time to time. Our highest YSCA rating was 3-4 and nearing economic concern. We rated most YSCA fields 0-1 or 1-2. Our highest Lygus / stink bug count was 7.9 per head. Under the Reed Consulting banner, I conducted a Lygus in sorghum ET study in 2001 under a pressing need to know at the time. To my knowledge this is the only effort made toward this pest in sor-

-ghum. The results of that one-year study indicated that the ET for Lygus in sorghum should be about 12-14 per head crop value depending. By default this is a useable threshold for this pest until a full multi-year study can be conducted, hopefully soon.

All of the pest 'excitement' is falling to the late sorghum again this season. Our late sorghum ranges in stage from flag to soft dough with the majority of fields falling between boot and 15% bloom. The fields in bloom are now within the sorghum midge window and the midge have reached ET in a number of our program fields this week. The highest level of midge we have found is 2.11 midge per head but others were over the midge ET of 1 per head and required treatment. Not all fields we checked required treatment and most of our fields ranged from 0 to 0.32 midge per head. This underscores the need to check in bloom sorghum midge daily. While midge only live as adults for a short time, they are quite mobile and can infest a previously clean field within a day causing economic damage.

Old FAW feeding with undamaged heads nearing bloom, Swisher County August 21, 2014

We have also picked up some headworms in these blooming fields. In this case, the majority were small FAW. So far these worms have been below ET. Gary Cross', CEA-Hale, FAW moth traps increased this week and I feel we can expect the FAW larva finds to increase rapidly soon. These FAW should be a consideration for any field reaching ET for sorghum midge. I would urge producers to choose their midge control products carefully. Pyrethroids have proven to give excellent midge control with substantial residual that can last throughout bloom. These pyrethroids will not control FAW and certainly will not cover any FAW egg lay with residual, but will take out any predators that could lessen the soon to be coming FAW. For this reason we are recommending in our program acres requiring midge treatment a mix of a pyrethroid and a good FAW product or perhaps and maybe preferably a premix of the two products.

Our other sorghum pests in the later sorghum were very similar to the older sorghum. This could be another consideration in product choice when targeting the midge or FAW. The spider mite population has been slowly growing in the later sorghum. Almost all later fields have some level of mites present. If the predators were removed, we would have potential secondary pest issues, such as spider mites or YSCA on the increase. There are some excellent FAW products that are very predator friendly available now. In situations like these, those type products should look very attractive.

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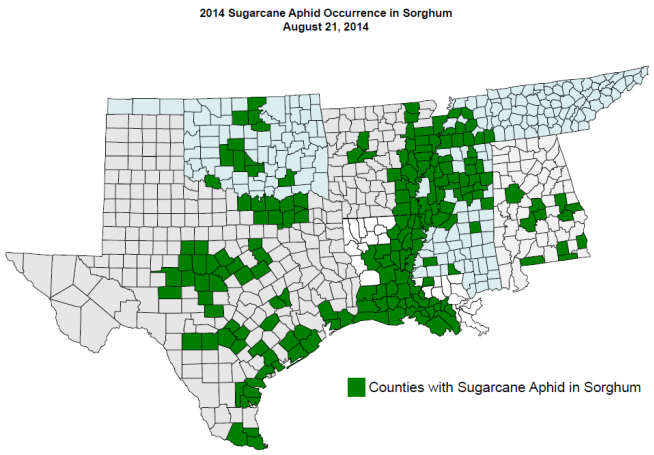
We're on the air…

"Tuesday's with Blayne" from 6:00—7:00 AM & from 12:30—1:00 PM on the 1090 Agri-Plex Report on 1090 AM KVOP-Plainview.

"IPM Wednesdays" from 1:00-2:30 PM on The Fox Talk 950 Ag Show. Fox Talk 950 AM - Lubbock.

Melanaphis Aphid-the 'white' sugarcane aphid

For most of the season I have avoided mentioning the white sugarcane aphid from a desire not to stir up panic over a pest that may or may not even visit this area. It is also one that I feel can be economically controlled if we maintain a good scouting program and utilize sound IPM strategies. This tropical aphid pest invaded sorghum along the gulf coast region up through Louisiana and some of Oklahoma last season. Unlike the green bug or YSCA, it does not inject a nasty toxin into infested sorghum leaves killing them outright. It does attack with a remarkable reproductive capability that can outpace predation and parasitism and suck the life from whole sorghum plants. It appears to attack very late in sorghum's life cycle and caused a tremendous amount of harvest trouble through gumming up machinery in the lower Rio Grande Valley up to Corpus Christi during 2013. Nonetheless, we have kept a vigilant lookout for this species in our area sorghum fields and Johnson grass patches. The following is the white sugarcane aphid's current known 2014 distribution and photos comparing the white sugarcane aphid with common aphid pests of sorghum in this area.




Corn Leaf Aphid


Sugarcane Aphid


Yellow sugarcane aphid

If you find this pest, please contact me as soon as possible. Treatments of the product Transform have proven to be affective and economical against this invasive pest through Texas A&M AgriLife product trials in South Texas and Louisiana over the past two seasons. The success of Transform against this aphid prompted a section 18 release for Transform in Texas grain sorghum.

Thanks,

Blayne Reed