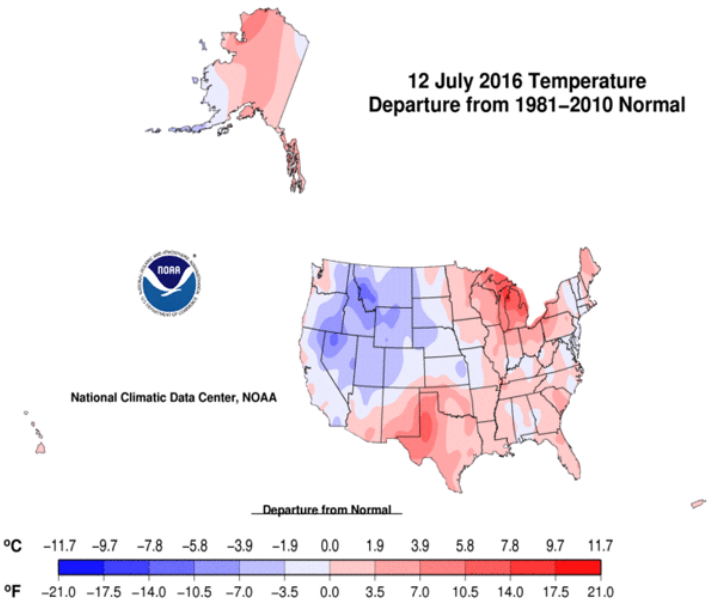
TEXAS A&M AGRILIFE EXTENSION

Plains Pest Management

JULY 15, 2016

General Situation

Ridiculously hot and drying out fast. This heat is happening at a very critical time for our earlier planted corn with many fields entering the critical pollination stage under this heat stress. All factors considered and the crops seem to be generally holding up well for now but irrigation systems are or are about to be spurred for everything they have. It remains doubtful that if the hot and dry trend continues that our irrigation capacities can keep up for long. In the areas with the least amount of rainfall through the spring and early summer, the dryland crops are desperate and about to fail on a large scale without moisture. Areas that have had more moisture in spring and early summer are hanging on better. While some areas of Floyd did get some welcome relief and some moisture late yesterday, I do not have any reports of it being very much moisture received. I am not aware of any damaging weather from the storm last night, but there could have been.



With heat units blurring in faster than they can be tabulated by super computers, as long as crops have had adequate soil moisture this week to contend with the demands, crop progress has been advancing very well. We have even spotted our first cotton blooms in our program this week.

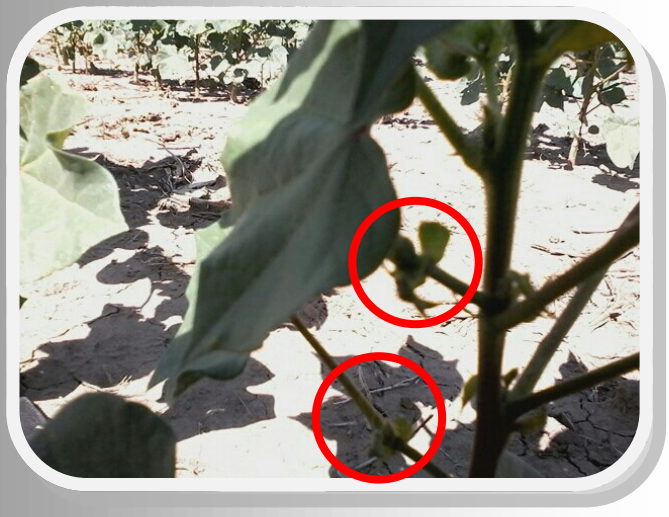
The pests don't seem to mind the heat so far. Some, such as grasshoppers, are flooding into our crops as pastures and other non-irrigated sites dry down and causing some serious edge problems we need to address. From our scouting program this week, no major pest is area wide but we do have economically spotty fleahoppers in cotton across our area, sugarcane aphids moving into regional sorghum, spotty yellow sugarcane aphids in sorghum, spider mites increasing with the heat in tasseled corn, and some fall armyworms stirring up in sorghum and non-Bt corn. All totaled, there is some serious pest we need to be watching for in every major area crop this upcoming week.

Cotton

Central Swisher Cotton Field. 2016.

Our program cotton ranged from matchhead square up to 1st bloom stage this week. Most fields fell between 1/2 grown square and 9/10 grown square that should be blooming next week. The few fields that did reach 1st bloom began blooming at 7 to 10 NAWF (nodes above white flower) but I did note a dryland corner near one of our fields at 5 NAWF with the 1st bloom. Our square retention remains good, not phenomenal like last year, but still very good with most fields falling between 3% and 17% fruit drop unless too young to experience much loss (0%) or economic fleahopper population aided (31.4%).

Fleahoppers continue to be an issue across our scouting program but the problem remains specific and field by field depending upon pest pressure, movement, and beneficial populations. In our program, we are now up to 14% of our cotton fields that needed treatment for fleahoppers. It requires extreme vigilance in scouting to determining the fields requiring treatment from the majority of those that do not in these situations. Missing an economic population of square robbing fleahoppers or Lygus on an already late pre-bloom cotton field could doom that field's profitability for the season with limited time to make up for lost fruiting sites. When scouting for fleahoppers or Lygus, please consider the pest population, square loss for the field, and beneficial population's potential to control the pests. Lygus remain very light in our program acres, but I am aware of some area cotton requiring treatment.



Several Missing Squares from fleahopper damage. Central Hale 2016.

Sorghum

Northwestern Hale seed milo. 2016

This week our program sorghum ranged between V5 and boot. Pests remained fairly light with yellow sugarcane aphids being the most notable, but well below any economic level. I am aware of some sorghum in the region that did require treatment for the yellow sugarcane aphid. We are also seeing a farther increase in fall armyworm (FAW) activity, but all damage remains well below ET.

The sugarcane aphid's arrival in the area steals the highlights for sorghum. The following was released on our blog (Plains Pest Bugoshere at : http://halecountyipm.blogspot.com/) earlier this week. So far, we have not been confirmed in any in our program sorghum, but they are expected day by day.

SUGARCANE APHID IN FLOYD COUNTY - SCA IPM

Several of our outstanding independent crop consultants found sugarcane aphids (SCA) in Floyd County late last week and early this week. So far, the populations are very light, hard to find, and as of this morning, only along the 'waterways' leading westward up the caprock or on the very few fields off the caprock farther east. These draws do cut a pretty good way westward into the caprock region including Floyd, Swisher, and Hale Counties. One of the fields confirmed with SCA today was actually in southwestern Floyd at the edge of one of these draws. It is very likely we have SCA farther west right now than we realize, but at a level very difficult to find without a fleet of entomologist in every field. At face value, this looks like the same infestation pattern we have had for the two previous years with the aphids either flying on the easiest route or pushed by wind up these 'funnels' and drawn to the irrigated sorghum fields on the edges of the draws. In terms of population today, the amount of infested plants are all well <1% with less than 10 aphids per found colony. We all know how fast this can change. There are not many winged aphids in these fields yet, but we will be watching closely.

We have been expecting the arrival of this aphid for sometime. Now that it is here, lets review our sugarcane aphid IPM for the Texas High Plains to make sure our sorghum remains profitable.

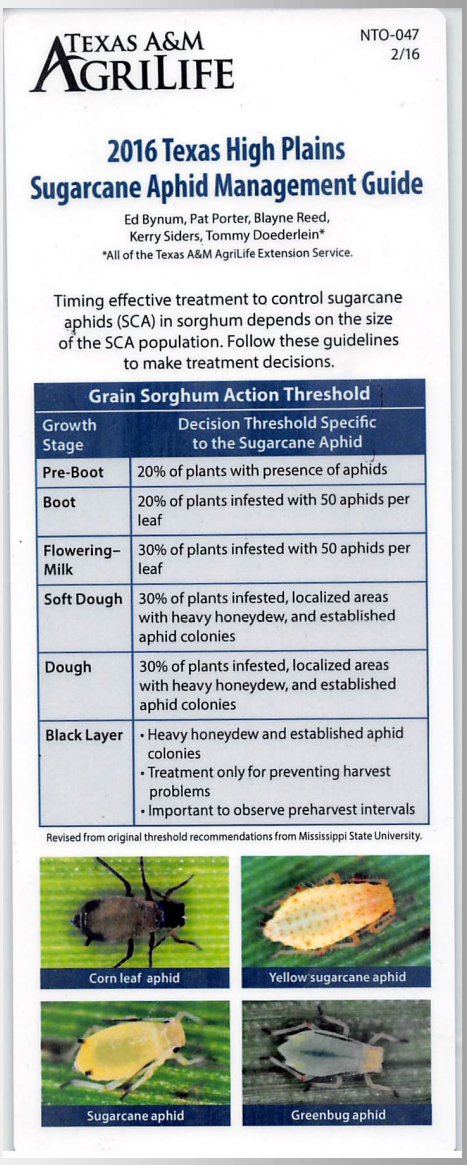
The following was written by Dr. Pat Porter just for this purpose:

MANAGING SUGARCANE APHID ON THE TEXAS HIGH PLAINS

Now that sugarcane aphid has been found in Floyd County it is safe to assume that we will shortly find it in surrounding High Plains counties. We all went through the aphid invasion last year and there is no need to go in to great depth on scouting and management, so I will just hit the highlights from lessons learned last year. If you want to read our complete 2016 sugarcane aphid management publication it is here.

Early planting is going to pay off

The earlier the aphid arrives during crop development, the more damage it can do. Infestations prior to boot can cause sterile panicles and decrease yields to essentially zero. Infestations at or after flowering, while still very serious, are somewhat less potentially damaging. This is why our treatment thresholds vary by crop stage.



TEXAS A&M AGRILIFE NTO-047 2/16

2016 Texas High Plains Sugarcane Aphid Management Guide

Ed Bynum, Pat Porter, Blayne Reed, Kerry Siders, Tommy Doederlein*
*All of the Texas A&M AgriLife Extension Service.

Timing effective treatment to control sugarcane aphids (SCA) in sorghum depends on the size of the SCA population. Follow these guidelines to make treatment decisions.

Grain Sorghum Action Threshold

Growth Stage	Decision Threshold Specific to the Sugarcane Aphid
Pre-Boot	20% of plants with presence of aphids
Boot	20% of plants infested with 50 aphids per leaf
Flowering–Milk	30% of plants infested with 50 aphids per leaf
Soft Dough	30% of plants infested, localized areas with heavy honeydew, and established aphid colonies
Dough	30% of plants infested, localized areas with heavy honeydew, and established aphid colonies
Black Layer	• Heavy honeydew and established aphid colonies • Treatment only for preventing harvest problems • Important to observe preharvest intervals

Revised from original threshold recommendations from Mississippi State University.

Corn leaf aphid | Yellow sugarcane aphid | Sugarcane aphid | Greenbug aphid

Treatment threshold:

Pre-boot: 20% of plants with aphids.

Boot: 20% of plants infested with 50 aphids per leaf.

Flowering to Milk: 30% of plants infested with 50 aphids per leaf.

Soft dough through dough: 30% of plants infested, localized areas with heavy honeydew, and established aphid colonies.

Black layer: Heavy honeydew and established aphid colonies with treatment only for preventing harvest problems.

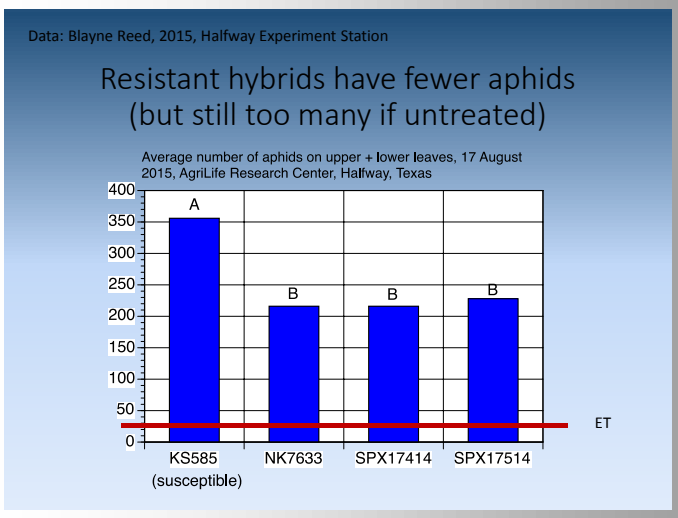
Our earlier planted sorghum has either finished flowering or is now flowering and has moved to the place it can withstand more aphids. In part this might matter because we have a relatively high number of beneficial insects in the system, and they have a better chance of keeping populations below treatment thresholds when those thresholds are higher. And even if one insecticide application is necessary, the need for a second application is far less likely in a much more mature crop.

Weekly scouting is a must

Under hot, dry conditions, the reproductive capacity of this aphid (which is born pregnant) is something approaching Shock And Awe, and everyone who went through the 2015 season will agree. Missing a weekly scouting might mean missing populations low enough to be brought under control with insecticides. In 2015 we had many fields that were sprayed too late and adequate control was not achieved without a second application. Once the aphid has been found in a field, then twice-weekly scouting is important. Last year I would have linked to our guide to recognizing the sugarcane aphid, but this year I think we all know what the enemy looks like.

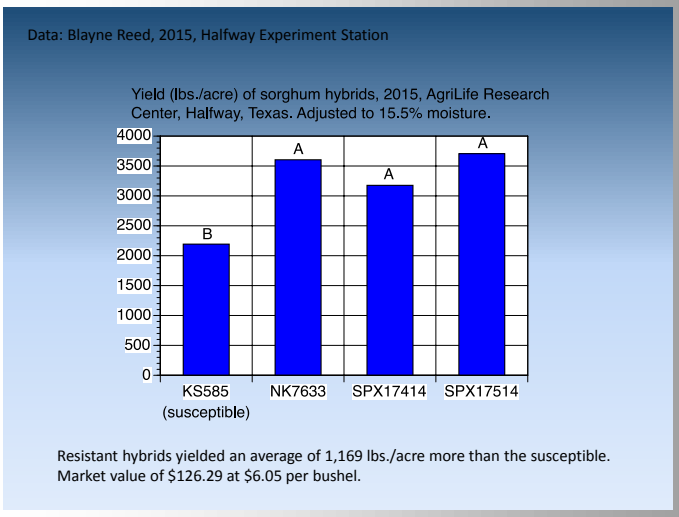
"Tolerant" hybrids are susceptible hybrids

There are a few hybrids with resistance to sugarcane aphids, although the seed industry chooses to call these "tolerant" hybrids because they rightly don't want to give the impression they are bulletproof. Our best resistant hybrids are what could be called moderately resistant, and this won't stop the aphids from reaching treatment thresholds. It may slow them down, and it may let the beneficial insects have more time to exert control, but all other things being equal it is merely a delaying action. Fields of "tolerant" hybrids should be scouted and sprayed based on the treatment threshold just like fields of completely susceptible hybrids.



Insecticide choice matters - a lot

Last year saw everything in the book, and some things not in the book, being thrown at sugarcane aphids. Many of these insecticide products were our old aphid standards, and what we found was that they were not very good at killing aphids, but they were very good at killing beneficial insects (the big guns in aphid control after an application). Our insecticide trials confirmed this; we had massive aphid resurgence where we killed the beneficial insects. There are only two good insecticide choices for sugarcane aphid: Sivanto and Transform. Both of these provide high efficacy with minimal impact on beneficial insects.



Make the first application count

Last year we observed insecticide applications of Sivanto and Transform made with high rates and plenty of carrier volume most often did such a good job of control that the few surviving aphids were cleaned up by beneficial insects. Conversely, we observed that fields sprayed with lower rates and/or insufficient carrier volumes frequently did not get control and required a second application.

Experience is a good teacher

This pest is manageable. Last year was a bit of trial and error, but after one growing season of intense aphid pressure we are much better equipped in 2016.

Posted by Pat Porter

Thanks Pat!

Corn

Our program corn ranged in stage from V5 up to blister with the younger grouping of corn typically falling between V6 and VX and the older fields at tassel and green silk. It is a little too early to tell how well the pollination is going in this heat for the older corn. I feel our producers have been doing a pretty good job of keeping the corn as wet as possible through this heat but the situation remains a concern.

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For quicker pest alerts-

Plains Pest Bugoshere:

http://
halecountyipm.blogspot.com/

Pest Patrol Hotline, registration at:

www.syngentapestpatrol.com

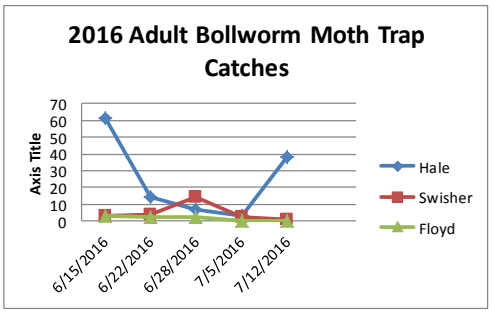
We're on the air…

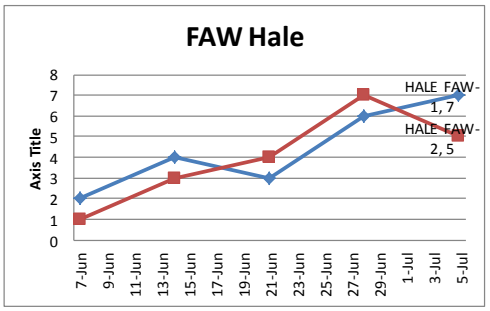
"Tuesday's with Blayne" from 6:30—7:00 AM on the HPRN network on 1090 AM KVOP-Plainview.

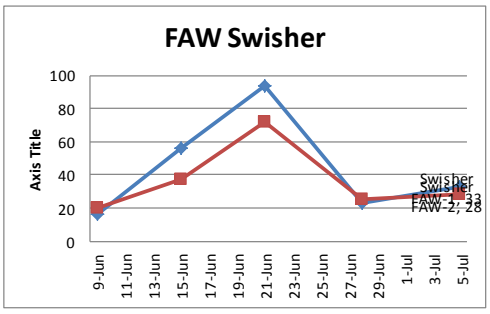
"IPM Wednesdays" from 1:00-2:30 PM on The FoxTalk 950 Ag Show. FoxTalk 950 AM - Lubbock.

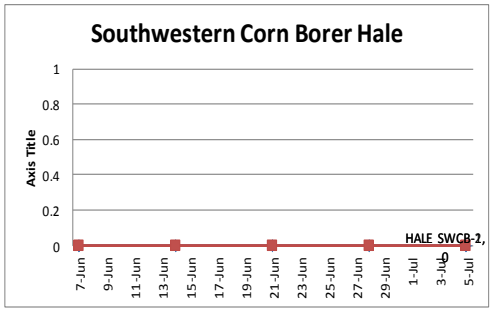
"IPM Report with the Bruiser" from 7:06-7:15 PM on 1470 AM KDHN - Dimmit.

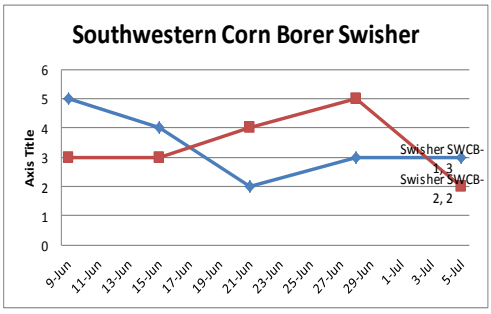
We noted a return of sub economic mite populations in our corn fields this week after they had dropped off the radar for several weeks. Our mite specific predators are still short to stop a major increase in mite populations. Spider mites are proven to increase in post tassel corn that is slightly drought stressed in hot and dry conditions. The mite populations we found this week were within a pivot track or two of field edges close to grass or other bridge host plant and not though out our fields yet. The highest rating we gave mite populations in a field this week was a 0.89 on the Texas A&M Mite Damage Rating Scale 0-10 scale with a 3.5 to 4 rating being our local threshold.

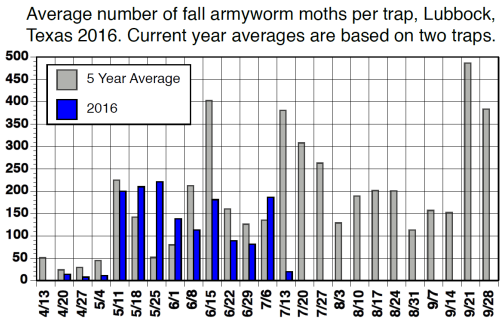












Blayne Reed