Texas A&M AgriLife Extension

Plains Pest Management

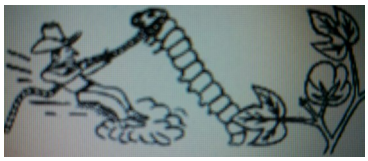
August 21, 2015

General Status

The sugarcane aphid (SCA) has taken center stage again this week but spider mites, almost exclusively banks grass mites (BGM) is 'quietly' still a major point of interest in corn and sorghum, and cotton is finishing up its 'crunch time' and hopefully setting the last of its bolls, if not this week, then hopefully over the next few days. Lygus and bollworms (CEW) in cotton will be a concern next week as will headworms (CEW) in sorghum and fall armyworms (FAW) in corn.

Sugarcane Aphid Update

I think I can describe the SCA situation best by making use of some old local 'cow puncher' phrases I am familiar with. We do not have this aphid 'worked and branded' yet but with some of the adjustments we have made this past week, 'we have been ridding hard, turned the herd and have this pest heading in the direction of the corral.' Personally, I will feel a lot better when we get these guys 'in the crowd pen and up the alley toward the chute' because I am not sure how far off the corral is and there might be a few ' breaks and gaps' between here and there. I am re-posting the following from the Plains Pest Bugoshere blog release earlier today:

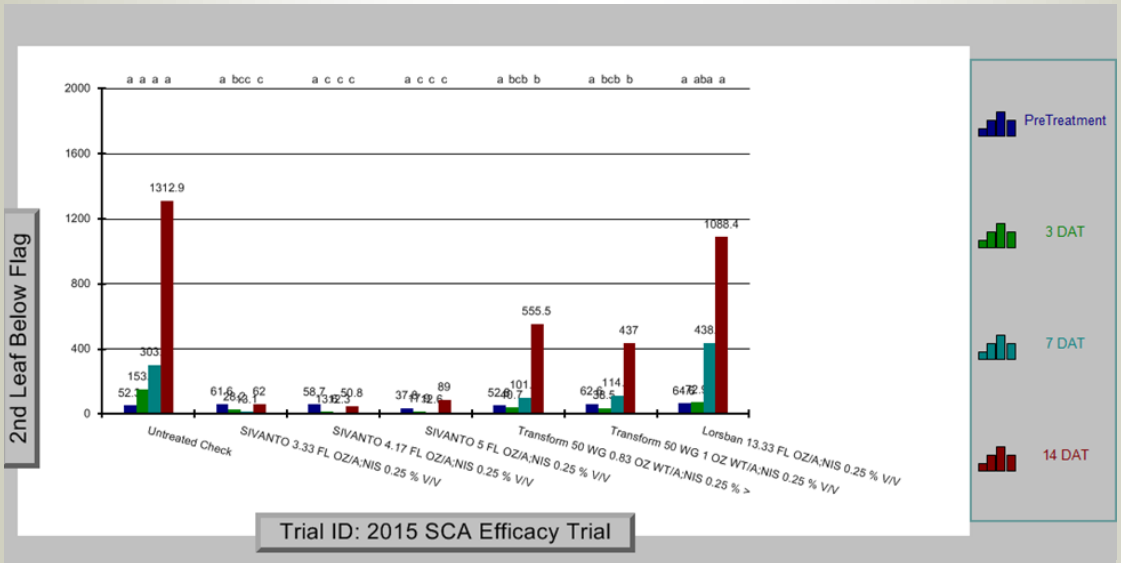


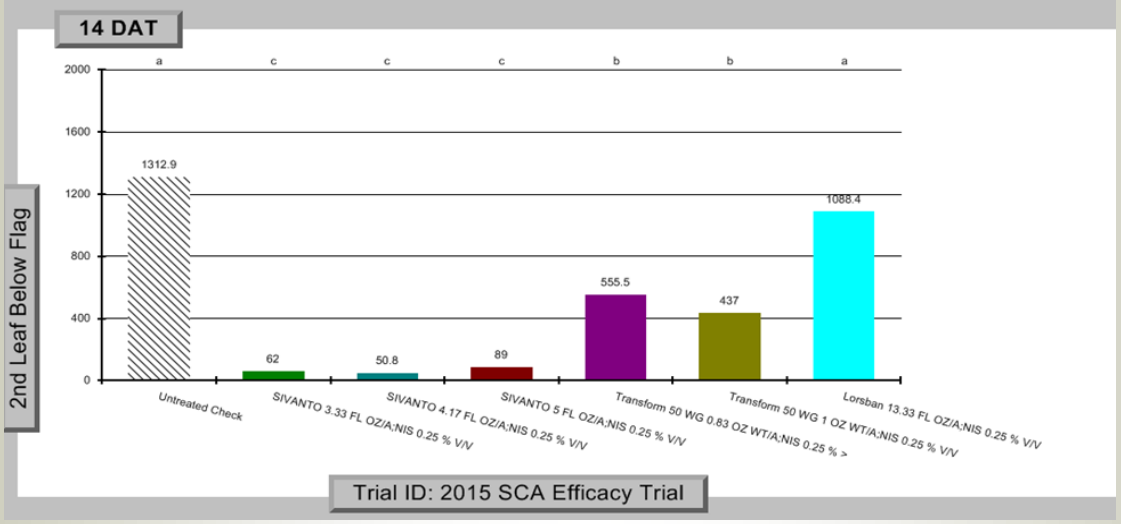
SCA Status & 2015 Sugarcane Aphid Efficacy Trial – 14 DAT Counts

The sugarcane aphid (SCA) is still having a heavy handed impact on the region. In the field it does seem we are performing better in terms of knockdown and control with our treatments with several factors playing key roles. The adjusted action threshold seems to me a better fit for the High Plains and hits these prolific aphids before they get their population built up too high. Producers, consultants, and applicators seem to have a better understanding of the coverage needed

via air or ground (air - 5 GPA minimum, 10 GPA preferred / ground – 15 GPA minimum, 20 GPA preferred) and the change of adjuvants to something heavier, such as an MSO or silicone based product, to better pull the treatment down lower into the canopy for control on the lower portion of the plant.

On August 19, 2015 we gathered our 14 DAT counts from our SCA Efficacy Trial. I have just now had the time to get the data analyzed and this information released. This trial is an RBD and has 4 replications. Due to noted differences in control between the upper leaves and lower leaves, we have calculated differences in aphid numbers in terms of upper and lower leaves in addition to total aphids averaged per leaf. Despite using 16.5 GPA, a standard rate of 0.25% NIS was utilized as an adjuvant, a standard practice for all treatments applied in this area and what was recommended for this research protocol. We did not get good control on the lower leaves and no differences were found on those leaves. This is one of the factors that lead us to recommend an adjuvant change with company agreement for all commercial applications. For this trial, continuing to count the lower leaves was proving pointless and quite time consuming. As a result we opted to only count the upper leaf for the 14 DAT counts. This upper leaf is actually the second leaf below the flag leaf.





Questions about rainfastness

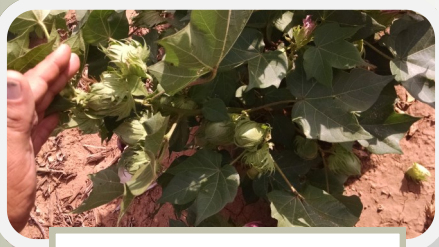
Questions about the rainfastness of these two leading products Transform and Sivanto are common this season. All I can speak of is this trial and what appears on the company label, which might not be mentioned specifically. In addition, there are questions about Transform's performance in this trial.

Applications for this trial were made on August 5, 2015. Treatments began with the low rate of Sivanto at 9 am and continued down the treatment list until Lorsban was applied at 11 am. We then gathered our pretreatment aphid counts in the untreated border rows from each plot. Almost immediately following our leaving this trial location, a heavy 0.75 inch rain began at 4:15 pm.

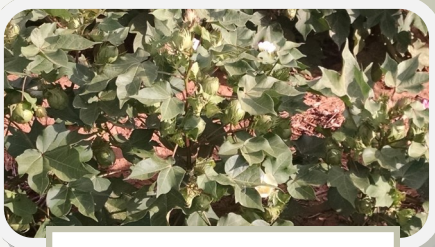
Dr. Mike Lovelace, Dow, toured this trial with us as we made our 14 DAT counts. Quoting from our discussion with Dr. Lovelace, "This is a good trial and I can see the differences it is showing… This is the first instance with Transform I have seen that control that was not a premium and I feel we have a stronger product than this… The rates are off due to the mistake in calibration, but all treatments are off the same… There must be some outside reason for Transform's lackluster performance here… The trial methodology is strong and there is no research bias here but right now I am looking at the rainfall that occurred after treatment of these plots as the culprit."

Cotton

This week our scouting program cotton ranged in stage from 5 nodes above white flower (NAWF) to absolute cutout at 3.5 NAWF or less with most fields having recently reached cutout. Fruit retention still looks good as the **average** last effective bloom date of August 24 fast approaches. I am concerned about the small stature of the crop and the short effective bloom window we have had for most of these fields that have been in cutout for a week or more but the boll set percentage remains high. Of the fields that reached cutout earliest, boll fill looks pretty good and appears to be sporting as many bolls as these 'diminutive' plants can possibly hold. Plants recently reaching cutout will need as much water as possible to hold as much fruit as they can hold for a while longer.



Boll Load, Southern Hale, August 20, 2015



Boll Load, Southern Hale, August 20, 2015

We had one cotton field near Tulia with economic Lygus problems again this week. In this instance, a neighbor swathed and bailed adjacent CRP, apparently chasing the healthy Lygus population into the irrigated cotton. We are picking up ultra-light mites and cotton aphid in a few data set here and there.

Lygus Adults

Corn

Our corn stages remain grouped into the three growth stages. Our oldest corn fields are all in dent with a few starting to show a 10-15% starch line. Our mid-group is in dough to late dough stage while our late corn is between tassel and blister stage. Each of these three groups has a differing set of issues now and over the upcoming weeks. All stages continue to look good in general with good yield potential.

The mites, BGM, on our oldest program corn looks to be crashing after a long hard control battle. In addition to the six spotted thrips for predator help, we are finally seeing predatory mites join the mix while the mite destroying lady beetles remain mysteriously absent for the most part. The crashing of mites through treatment and predation has finally put these older fields 'on the short rows now.' We should have one or two more weeks of spot checking just to make sure, but once these fields reach 15-25% starch line, they should only need to dry down for harvest.

In our mid-maturity corn grouping the mites are another issue. We have already needed to recently treat 95% of our program fields in our southern scouting area from Plainview south and we are experiencing a rapid increase this week in mite pressure for this stage of corn in our northern area throughout Swisher with about 45% already requiring treatment. Many of these northern program area producers have never grown corn before and have never faced the BGM challenges. We remain hopeful that cooler temperatures over the past few days will help hold the BGM from progressing farther.

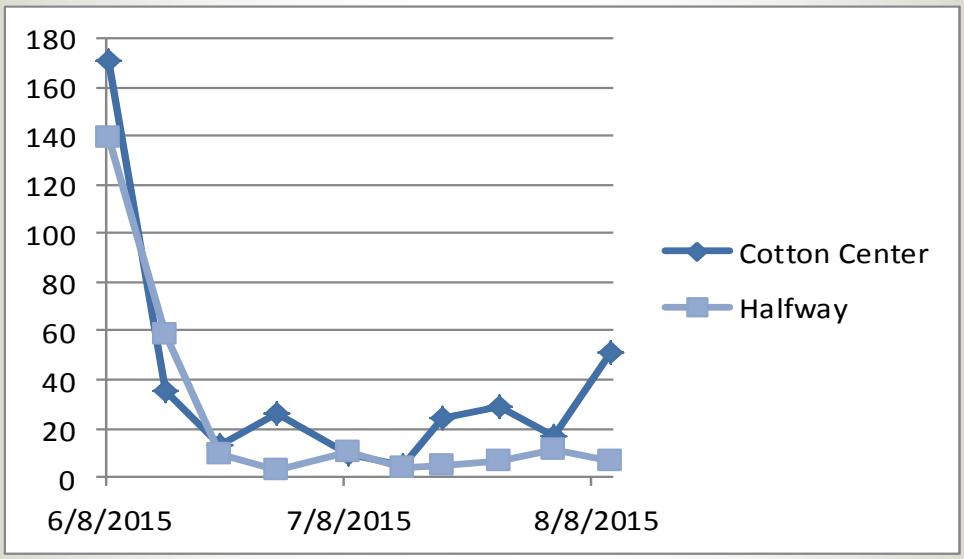
Guide for Assessing SM Damage

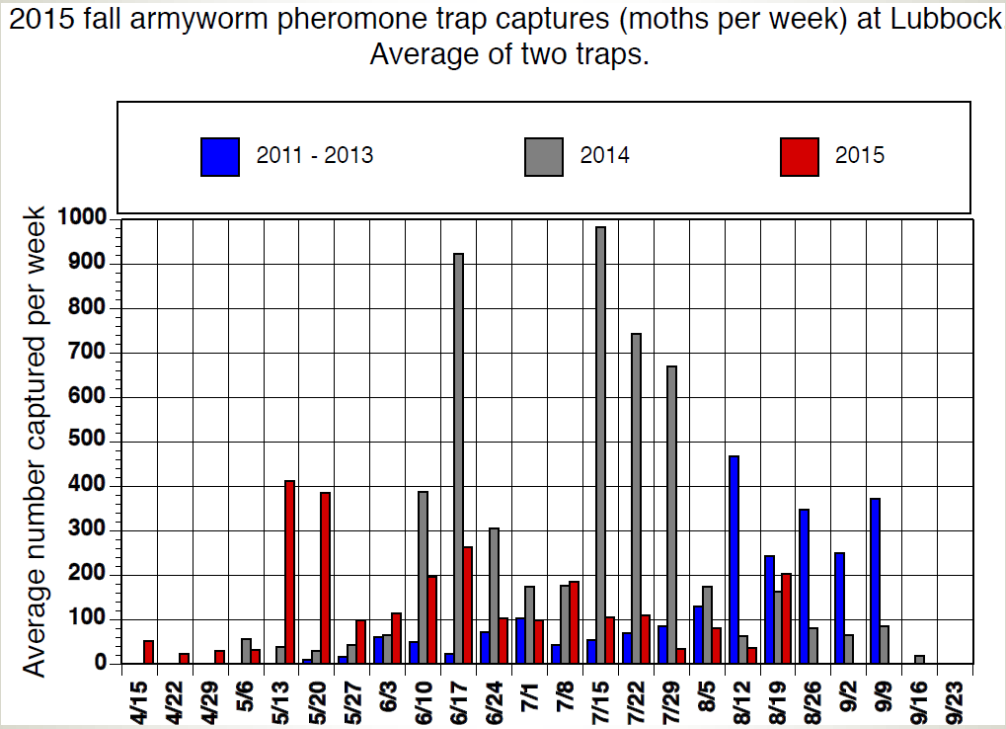
Mite damage rating scale used to estimate spider mite feeding damage on corn.

Rating	% leaf area damage per plant	Description of Damage
1	1-10	A few small mite colonies and associate damage (chlorotic spots) along the midrib of the lowest leaves
2	11-20	Mite colonies and damage spread along the midribs on the lowest leaves on a plant
3	21-30	Mite colonies and damage spreading out from the midrib on the lowest leaves and small colonies may occur on leaves up to the ear.
4	31-40	Mites and damage cover most of the leaf area on the 1-2 lowest leaves and mite colonies and damage extend along the midrib to the ear leaf.
5	41-50	Mites have killed one leaf, bottom 2-3 green leaves heavily infested and damaged, and mite colonies on 1-2 leaves above the ear.
6	51-60	Mites have killed or nearly killed the bottom two leaves and colonies and damage extend beyond the midribs on two leaves above the ear.
7	61-70	Mites have killed or nearly killed the bottom three leaves, all leaves up to the ear significantly damaged, and mite colonies and damage found on most to all leaves on the plant.
8	71-80	Mites have killed or nearly killed all leaves up to the ear and mites and damage occur on most to all leaves on the plant.
9	81-90	Most leaves on the plant killed by mite feeding and only leaves in upper third of plant alive.
10	91-100	Very little green area left on plant or plant dead.

The BGM remains low on our latest corn maturity group, but if the mite trend continues, we should be scouting thoroughly for mites in these fields over the next few weeks as these fields move into dough stage. As fall nears, the amount of daylight per day decreases, temperatures decline, and the amount of 'dew' increases, all factors that can hinder mite populations. These later fields have the best chance of avoiding mite issues for these reasons, but for the same reasons these fields have the most risk of corn disease problems. This week our corn disease ratings did not significantly increase.

This week our FAW moth trap catches increased for Hale Southern County and in Lubbock County. We should remain vigilant, if not preventative for FAW in any later non-Bt or lesser Bt traited corn this week. Older fields might not be as attractive to the FAW, but that is no guarantee.





225 Broadway, Suite 6
Plainview, TX 79072

Tel: 806.291.5267
Fax: 806.291.5266
E-mail: Blayne.Reed@ag.tamu.edu

WEB

http://
hale.agrilife.org

For quicker pest alerts-

Plains Pest Bugoshere:
http://
halecountyipm.blogspot.com/

Pest Patrol Hotline, registration at:
www.syngentapestpatrol.com

We're on the air…

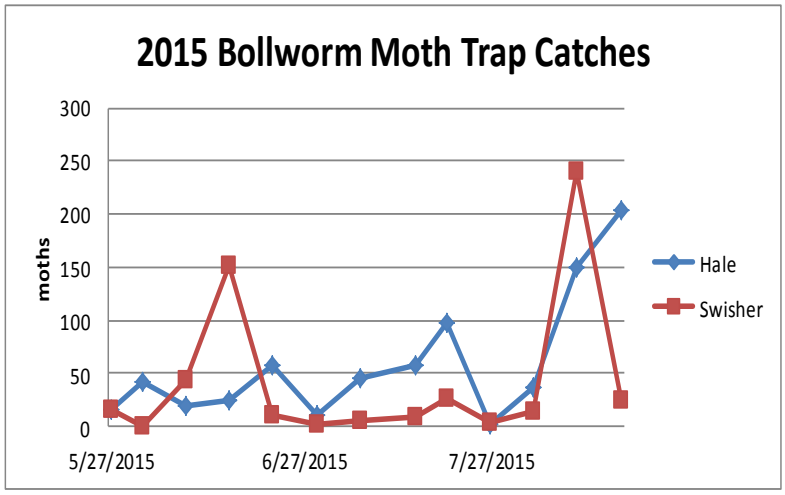
"Tuesday's with Blayne" from 6:30—7:00 AM on the HPRN on 1090 AM KVOP-Plainview.

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

Sorghum

Our program sorghum ranged in stage from 50% bloom to soft dough. In addition to SCA issues, we are steadily finding BGM in fields. While none of our program sorghum fields have reached an action threshold for mites, I have independent consultant reports that show some area fields have. None of the insecticides required to treat SCA have any impact on BGM, but they are also beneficial soft that has allowed the predatory mites and six spotted thrips to feed on the mites unimpeded. If needed, there are two labeled and proven products for mite control in sorghum that are also beneficial soft Onager and Comite II. Use of these products should not interfere with aphid control. Please consult labels for any treatment mixing needs.

This week we also started finding a few headworms, all of which are CEW, in sorghum heads. We will be watching closely for any economic concerns as the bollworm population looks to be making their 'end of summer spike' at this time. We would expect many of these eggs to be lain in the latest corn fields, but sorghum or cotton is not immune and could prove very attractive to high numbers of egg laying moths.



Blayne Reed