

SEPTEMBER 12, 2014

General Status

I remember mentioning last year that 2013 was just about as close to a pest free growing season as we could ever hope for or likely to ever see in Hale & Swisher Counties. 2014 has seen a much higher population of insects in general and more than its fair share of oddities, but on the crop pest side, it has been even lighter economically than 2013. It is true that the jury is still out for our late corn and sorghum crops that still need all the growing season they can get. In fact, pest 'excitement' could yet be brewing, particularly in the late sorghum, much like it did last season with the headworm complex. We remain on the lookout for pests in our later and replanted crops. We should also now have a significant reason to watch late sorghum and sorghum type hay crops very carefully over the next few weeks. I feel all of our program's cotton and early planted sorghum and corn are past economic pest damage. I have noted some limited corn harvest in the area before the cold front and rains hit during the latter part of this week. On the weather front, few are complaining about any additional moisture that this system is bringing. With very few open bolls in our area cotton, and so many sorghum and corn fields just now in early dough stage, each day of heat unit accumulation (greater than 80°F) counts. We may not see 80°F again until next week.

Cotton

This week, we only 'spot checked' most of our program acres for pests and crop status. All fields are now past absolute cut-out and economic pest damage, cotton aphids aside. The very light population of aphids we observed last week has all but completely vanished through predation and parasitism. We found no additional bollworm eggs or larva in any field. Our Lygus population seems to be trending toward dough stage sorghum at this time and the majority of fields have developed all but the last of the top crop past potential Lygus damage.

Our cotton's fruit retention has been very good this season. I sliced several bolls this week. Even much of the bottom and middle bolls seem on the young side compared to what we would expect for early to mid September. We also are not seeing very many open bolls yet. We probably need to keep one eye on the weather forecast and one eye on boll stage to make sure we do not get caught with an exceedingly frost damaged and immature crop this fall. Hopefully warmer weather will return and stay for another month or so. I would expect that much of the cotton bolls within the fields would mature rapidly, or in quick succession. This would follow the boll set pattern.

Corn & Sorghum

Our program's late corn ranged from early dough to dent this week while our late sorghum ranged from bloom-early dough through dough-hard dough. The corn and sorghum pests were mostly quiet again this week. It is still easy to find bollworms (corn earworms / sorghum headworms) in most of our late corn. Our headworm counts in sorghum crept slightly higher again this



Small bollworm / headworm in Blayne's beat-bucket, 2014

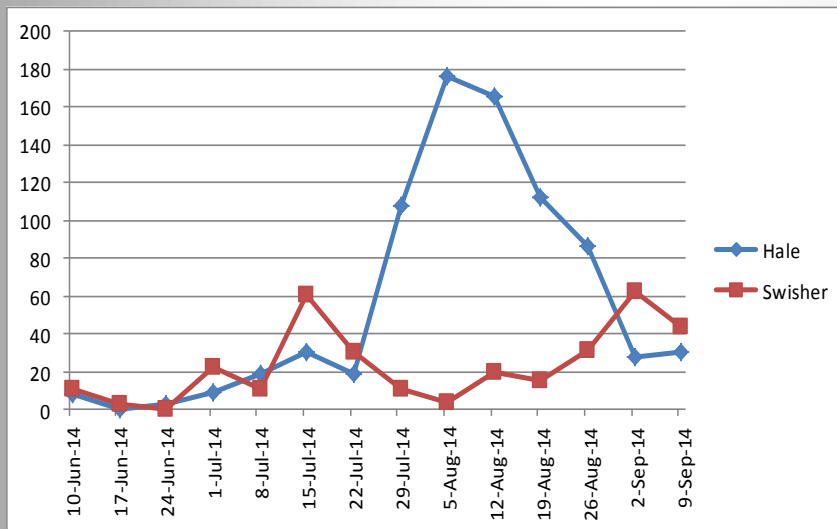
week, but remains below economic threshold (ET). This includes the missing fall armyworms that were so high when this sorghum was in whorl stage. Our spider mite populations in both crops dropped significantly from last week as predator counts remained good. The predators also seem to have turned the corner for the persistent yellow sugarcane aphids that have been riding very close to ET for several of our program fields. There are still a few fields that I consider at risk for this native pest this next week. Sorghum midge are still out in force, but not concentrated enough on any blooming sorghum to warrant treatment this week. I noted a few 'sucker' heads popping out in an earlier planted sorghum field that had experienced notable sub-ET midge earlier in the season. Those few 'sucker' heads had 7 midge per head and the hard

dough stage main head had dozens of midge in what looked like a holding pat-

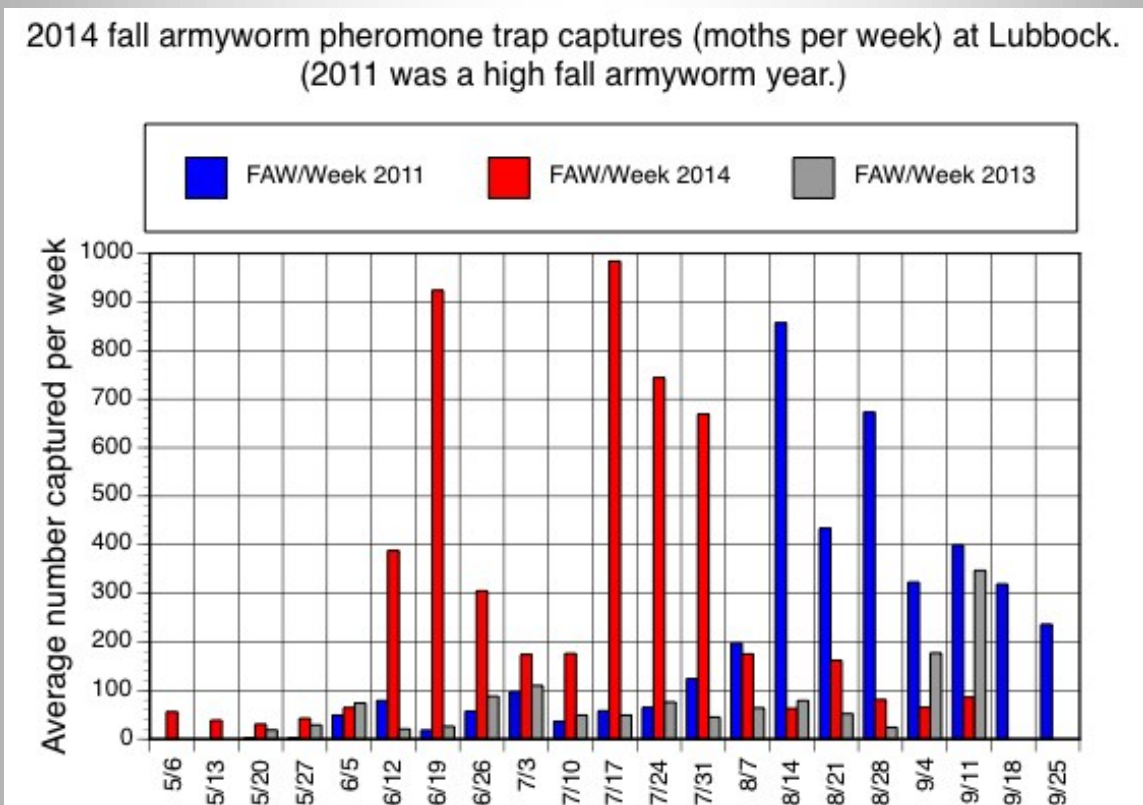
tern looking for blooms. Any very late blooming sorghum remains at high risk for midge damage.



sub-ET midge damage on field margin now showing, Swisher County, 2014



Blayne checking for headworms and midge, 2014



This week we helped in confirming a new aphid pest to the area that has been making quite a splash the past two seasons in sorghum from Mississippi to northern Mexico. **The following is a write up several Texas A&M AgriLife Extension entomologists have been working on this week.**

The sugarcane aphid arrives on the southern High Plains

Blayne Reed, Patrick Porter and Ed Bynum

We have been watching for the possible arrival of the sugarcane aphid, *Melanaphis sacchari*, on the High Plains, and we must now report that it has been found. Clay Golden, an independent crop consultant serving the area, discovered a small pocket of the aphids on soft dough stage sorghum in an extreme northwestern portion of Floyd County on September 9, 2014. Upon his find Clay enlisted the aid of Blayne Reed, EA-IPM Hale & Swisher counties, who supported Clay's identification of the aphid. Dr. Pat Porter and Dr. Ed Bynum were then presented with aphid samples and confirm the identification.

Given the proximity of this aphid population to neighboring counties; ½ mile from Briscoe, 2 miles from Swisher, and 7 ½ miles from Hale, combined with some possible smaller and unconfirmable sugarcane aphid hits in nearby sorghum in Swisher and Hale and that this aphid is often dispersed by prevailing winds, it is logical to assume that it is present over a wider area encompassing small portions of all four counties. Many of the aphids in Clay's sample were at the developmental stage just prior to becoming winged adults, so we expect that further dispersal is happening now.

After Clay's discovery, we asked for some help and perspective from our downstate colleagues who have been dealing with this pest since last year. Here is a summary of information from Raul Villanueva, Robert Bowling, Stephen Biles and Mike Brewer.

- 1) It takes ten days to two weeks for isolated aphids to establish significant colonies on sorghum. So scouting should be concentrated on finding the first few infesting aphids in the field on lower leaves.
- 2) Stephen Biles, Extension Agent IPM in Victoria, has done some very recent work on an action threshold in sorghum in the reproductive stage. Stephen's work suggests that a good action threshold for treating is an average of 100 aphids per leaf. He suggests sampling 10 plants per location within a field (several locations) and picking the leaf below the flag leaf and an additional leaf from the middle of the plant. If there are an average of 100 aphids per leaf (2,000 total on all 20 leaves), then come back in two days and re-sample to see if the population is increasing. If the numbers are going up then consider treating. If the numbers are not going up then don't treat but continue to monitor. Observations of this aphid from downstate have shown that some populations can crash very quickly. We don't know how to predict which populations will crash and which will increase.
- 3) Transform (available under a Section 18 exemption) is the most effective insecticide. It can be used at a rate of 0.75 to 1.5 ounces per acre. Our downstate colleagues have had good results at the 0.75



225 Broadway, Suite 6
Plainview, TX 79072

Tel: 806.291.5267

Fax: 806.291.5266

E-mail:

Blayne.Reed@ag.tamu.edu

Blog:

<http://halecountyipm.blogspot.com/>

Pest Patrol Hotline,

registration at:

www.syngentapestpatrol.com

WEB

<http://hale.agrilife.org>

Educational programs by the Texas A&M AgriLife Extension Service serve people of all ages regardless of socioeconomic level, race, color, religion, sex, disability or national origin.

The information given herein is for educational purposes only. References to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by the Texas A&M AgriLife Extension Service is implied nor does it imply its approval to the exclusion of other products that also may be suitable.

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.*

ounce rate, but good coverage is essential at this rate. They strongly recommend 10 gallons of carrier volume per acre by ground and, if this can't be achieved with aerial application, they recommend a bare minimum of 5 gallons per acre and a minimum rate of Transform of 1.0 ounces per acre. (Which is to say the 0.75 oz rate of Transform may not work by air at 5 gallons per acre.) We do not know if a 1.0 oz rate can be put out at less than 5 gallons per acre. Our colleagues have also said that Dimethoate is not a good option because it is not a consistent performer.

This aphid is not going to be Atilla the Hun on the High Plains. Invasive species often do the most damage in their first year or two of invasion before natural enemies can respond to the new pest. For this year at least, the aphid is arriving late in the season and will not be infesting whorl stage plants which will be limiting the aphid in time to build into an economic problem. We also have products that have proven to control this aphid. This, combined with the implementation of good scouting techniques, give us confidence that this aphid can be effectively controlled if necessary. The Section 18 allows for two applications of Transform (1.5 oz maximum per application), with the total application for the season not exceeding 3.0 ounces. There is also a mandatory 14-day waiting period between the first and second application. So this gives us six weeks of good control, assuming 14 days of activity from each application. This should be sufficient to carry us through harvest.

It is not known whether the sugarcane aphid can overwinter on the southern High Plains; it is a subtropical species and overwintering survival is very much in doubt. We also do not know how fast the sugarcane aphid can reproduce given the predicted cooler temperatures in this week's weather forecast. We will have to watch for it next year when our sorghum is in the whorl stage, but for this year we can handle the problem if it arises.

The sugarcane aphid is fairly easy to recognize and distinguish from our other common aphids. Look for black-tipped antennae and legs. Dr. Ed Bynum recently posted an article on identifying the sugarcane aphid: <http://amarillo.tamu.edu/files/2010/11/PPU-V6i6-5-23-2014.pdf>. Our publication Sugarcane Aphid: A New Pest of Sorghum is available here: <http://www.agrilifebookstore.org/product-p/ento-035.htm>. We will of course keep you informed of new developments.

Blayne Reed