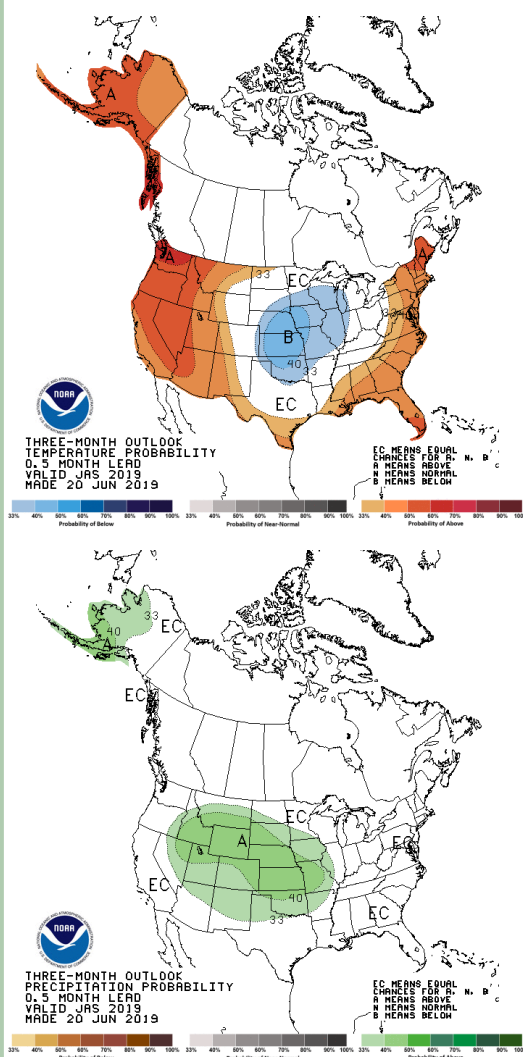


JULY 5, 2019

## General Status

For the first week since the start of planting season, we did not have a damaging weather event. It was not too cold, too windy, or too wet and we did not have a major hail or flash flood event that I am aware of. We are starting to rack up some heat units, but highs have not been on the outrageous side yet. There was some moisture in the area this week in the form of something that could actually be described as cotton showers. Most rain amounts range from a trace up to nearly 1" for a lucky few fields with plenty of areas that missed all the moisture. It seems that most fields that caught the rain had around 0.3". Quite a bit of field work not involving replants were finally ongoing with regularity. Despite several weeds being larger than we would like, control still looks pretty good. In the absence of harsh weather and with good temperatures our cotton is developing well but remains late. Our grain crops, many replanted and technically late also,

continue to develop well with a few older area fields entering key developmental stages and peak water use just as the summer heat and the usual drought conditions it brings become more widespread. Area dryland fields not catching higher amounts of the earlier moisture or rainfall this week are showing the early signs of real stress. Pests are active enough in our scouting program fields that is suspect some area fields likely need to be treated but none have not reached ET (economic threshold) in our fields yet.



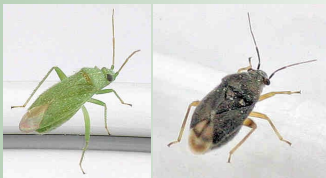
Plainview Heat Unit Calculator			
Cumulative Heat Unit Calculator			
Start Date		End Date	
4/24/2019	Corn	9/10/2019	
Total Heat Units		1309.35	
Start Date		End Date	
5/29/2019	Cotton	11/1/2019	
Total Heat Units		450.20	
Calculate			

## Cotton

Not surprisingly, no July 4<sup>th</sup> blooms were in sight for our scouting program cotton. It did range in stage from a very late 4<sup>th</sup> true leaf stage up to an optimistic ¼ grown square with most fields now sporting pinhead and match-head squares. Fleahoppers were our main pest of concern with thrips either being behind us as plants develop past susceptible stages or with populations too light to be a concern for the latest of our fields. We found fleahoppers of both the usual green and black type we became familiar with last season in about 1/3 of our fields with the highest populations coming in at about 20% terminal infestations. We also found square drop in most fields. Most of this drop is weather related, but there was a notable increase where the fleahoppers were present. In our highest fleahopper fields, the plant bugs were in pockets where drop could reach as high as 25% but they did not cover the whole or even majority of these fields with ample areas sporting none or less than 5% drop. Unless beneficial populations intervene, the fleahoppers may very easily spread across these whole fields very soon. Currently I do not see

enough predators in our cotton fields to prevent plant bug issues if this trend continues. Lygus, despite some misidentification from our field scouts, remain absent from our fields at this time. This can change rapidly once plant bug movement is initiated. To help in the field, here are several images of our target pests and some imposters.

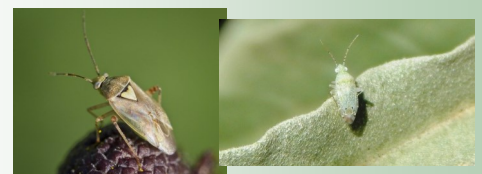
Inconsequential seed bug examples



Beneficial big eyed bug and minute pirate bug



Target Pests—Lygus and fleahopper



### From the same PPM field this week;

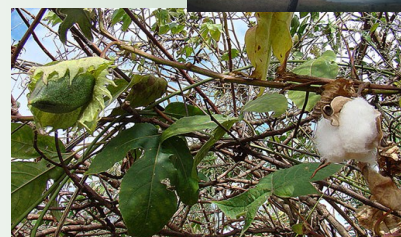
Top: From a fleahopper infested pocket with first position fruit loss in the form of **blasted squares** this week on multiple fruiting branches.

Bottom: From the majority of the field without fleahopper damage and **normal fruit set** at matchhead square stage.

With the recovery and development of our surviving cotton, I am getting quite a few questions about “speeding the late crop up” with PGRs. While we might very well be a bit more aggressive with PGRs this season, this is a good time to review what they actually are and what they can and cannot do.

### **PGR use in Cotton...**

First off, PGRs do not increase lint yield or advance maturity in and of themselves. PGRs are synthetic plant hormones, period. Gibberellins are the most utilized or targeted plant hormone in most PGRs. Naturally occurring gibberellins regulate vegetative growth and promote cell division and expansion. With larger synthetic applications of PGRs, gibberellins are reduced in the plant for a time, which then prevents the newly developed and developing cells from elongating to their full potential length during rapid growth periods when water is abundant. In essence, PGRs can prevent cotton, a true tree by nature, from rapidly growing and competing to become ‘the tallest tree in the forest.’ This can leave a more uniform and compact plant that can have a more desirable and uniform balance of vegetative and reproductive growth in cotton. This can focus a cotton plant, who as a tree thinks it has many years to live, from getting too tall in vegetative growth for our single growing season’s purposes. This now potentially shorter and humanly desirable plant has the potential of being more efficient in maturing fruit retaining and has somewhat more potential in retaining more of that fruit, especially if heat or other stresses occur later in the growing season.



**Cotton Trees / shrubs growing wild.**

Just in case you didn’t notice, there were quite a bit of ‘potentials’ and ‘cans’ in that previous paragraph. The bottom line is this. Cotton plants left to themselves in ‘good’ conditions will grow away and become ‘rank.’ Cotton plants will always be selfish. Cotton will sacrifice its fruit to save its self every time excessive stress is applied. This is opposite from most of the crops we grow that will sacrifice everything to produce the next generation. This is because cotton remains a tree that thinks it has years of fruit production ahead, not the few months we know it has. For our single growing season’s purposes, a shorter cotton plant has more potential to be more efficient in fruit retention and maturation than a taller ‘rank’ plant does.

PGRs, with over 30 years of research trials and use on High Plains cotton, have never proven to increase yields or quality just because they were applied. There is no magic fairy dust of any type applied to cotton at any stage that will ‘guarantee’ yield increases or quicker maturity in cotton. When used properly, with the only goal being keeping developing internodes shorter, they can be a piece of cotton management inputs alongside other, more direct and possibly important inputs such as water management, fruit retention, fertilizer management, weed control, and pest control, cotton can be successfully managed for yield and maturity.



## Corn and Sorghum



**Replant corn still emerging this week in Hale.**

Our corn and sorghum continue to develop quite well with the largest issue being timely weed control with so many various field needs to overcome. Our stages ranged between the still to be planted due to the last round of weather believe it or not up to V11 stage. This is the widest range in stages I can recall for a single season and we might be pushing the end line for the latest planted fields. Several of our earlier corn fields are nearing tassel stage and I have noted some area fields already in

pollination. The same can be said about our sorghum with some area fields already in bloom.

Pest issues remain light but increasing. As fields near green silk we will need to keep close tabs on the adult corn root worm population so they will not interfere economically with pollination. This week there was another increase in fall armyworm whorl feeding that yet remains hard to spot in most fields but now is in most fields. Spider mites continue a minor increase that remains on the lower leaves but is spreading through most fields. These mites could be setting the stage for an economic run once tassel stage is reached and pollination begins, especially if hot and dry conditions continue. Disease in-



**Earlier planted corn nearing tassel in Hale this week.**



**Typical sorghum midge damage to an individual sorghum head.**

creased again this week despite dry conditions with common rust and even southern rust being found in most corn fields. These issues also remain well below ET but need to be monitored. For any sorghum field already in bloom, sorghum midge checks should begin and continue daily until bloom stage ends. This pest typically arrives in the Plainview area in force on average about August 4<sup>th</sup>. This is no guarantee they will wait and any field in bloom is at risk.



**Common rust on older Hale corn this week.**



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hale.agrilife.org](http://hale.agrilife.org)

For rapid pest alerts and  
updates-

*Plains Pest  
Bugoshere:*

[http://  
halecountypm.blogspot.com/](http://halecountypm.blogspot.com/)

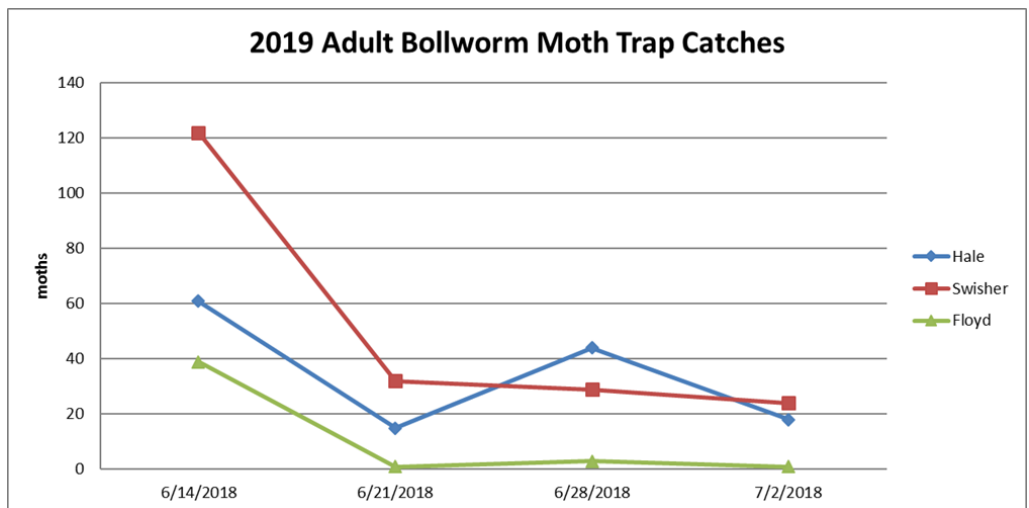
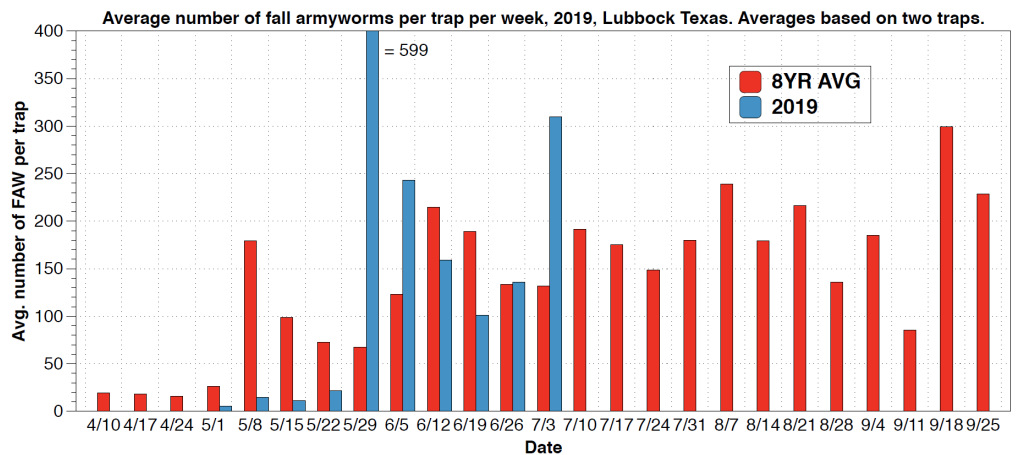
***Pest Patrol Hotline,  
registration at:  
[www.syngentapestpatrol.  
com](http://www.syngentapestpatrol.com)***

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Have a great weekend!

*Blayne Reed*