

JULY 28, 2023

General Status

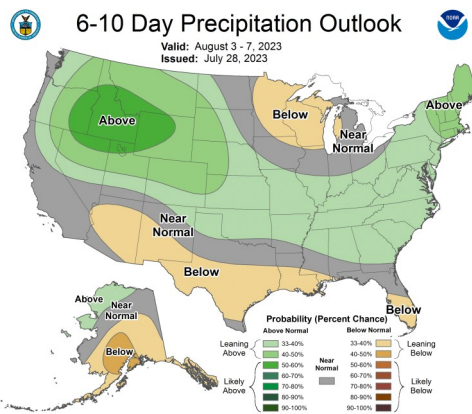
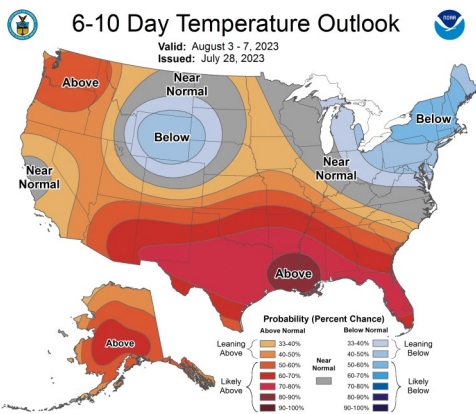
At the surface level, things seem fairly quiet in our area fields but there is plenty going on in our area fields this week. So much so, that it is difficult to touch on and attempt to educate on all issues we are seeing. There are few pests, diseases, or issues that attack or plague our commodity



SW Hale sorghum near flag leaf and SE Swisher cotton sporting decent size boll.

crops at the stages we have at this time that I can think of that we are not seeing. Thankfully, most of these pests or issues are only at detectable levels, growthy cotton or fields with surviving weed issues aside. Most of the issues and pests we are detecting are either moving into the rear-view mirror and behind us or are showing on the horizon as potential issues.

We will have to stay vigilant to find out what materializes and what evaporates. Meanwhile, heavy field work continues with fertilizer application, weed battles, and earnest, widespread irrigations kick off. Rain has left the immediate forecast as our green and growthy crops seem to have the expectation that the rain will continue, or expect a larger irrigation capacity than we have left here in 2023.



Cotton

Our Plains Pest Management scouting program cotton ranged in stage from the hopeful dryland just entering pinhead square up to 6 nodes above white flower (NAWF). Most of our fields ranged between 7 NAWF and 1st bloom at about 8-9 nodes with a notable minority of fields between 2/3 grown square and candle. For the first week in 3 weeks we did not have any fields reach ET for fleahoppers. With consistent blooms in most fields this week and having been a widespread issue, fleahoppers have either been controlled or are more drawn to the easier to feed on pollen of the blooms where they are not an issue. Overall, we likely treated over 90% of our cotton fields. In hindsight, the only fields we did not have high fleahoppers in were fields excessively set back by adverse weather early. It is supposed that as the fleahoppers were moving from weed hosts to establish in cotton, these fields may not have been sporting squares yet. But, for whatever reason, these fields never sported much of a fleahopper population and certainly nothing like the rest of the fields had for the previous month. Fruit set, following successful control, seems to be back on track and rebounding from excessive



SE Swisher field that experienced 37.49% fruit drop from fleahoppers 2 weeks ago, recovering after treatment to 20.61% this week.



Figure 36. Southern green stink bug adult.



Figure 37. Green stink bug adult.



Figure 38. Brown stink bug adult.



Figure 39. Conchuela stink bug adult.



Figure 40. Conchuela stink bug nymph.

drop from the pests. Most fields are holding between 10% and 18% fruit drop after several jumping to well over 30% under the recent plant bug pressure.

We are still noting the occasional Lygus but most fields remain clear of this pest with our highest population running about 1 Lygus / 9 row feet. Stink bugs remain a consistent find in our area cotton. This is something of a newer pest problem for our region but not a invasive issue. Most of the stink bugs we are finding are green stink bugs, but all notable species of this pest can easily turn up in any of our fields, often as a mixed species population. We have had nothing reach economic levels yet, but with fields so far behind, I do not recommend allowing boll damage from these pests to accumulate. It is troubling to see them so active this early in our crop's development. I recommend when dealing with any unfamiliar pest we consult our Managing Cotton Insects in Texas guide: [https://](https://lubbock.tamu.edu/files/2022/07/managing-cotton-insects-in-texas.pdf)

lubbock.tamu.edu/files/2022/07/managing-cotton-insects-in-texas.pdf

Stink bugs certainly are an unfamiliar pest for us to deal with on the High Plains. Luckily our friends in the Coastal Bend area deal with this issue annually and we have solid Texas thresholds and Texas experience to draw from. I suggest we lean on that experience today for this pest, which may include adapting some of our scouting techniques to find the actual threshold for stink bugs in our field. The stink bug thresholds are based around percent actual boll piercing damage, which is done via boll dissection on a high number of bolls weekly. This is not done in most field High Plains field scouts and can be very time consuming until experience is gained. I suggest utilizing drop cloths, sweep nets, and whole plant inspections to detect the pest (per your usual preferred method), then once a significant population is found, then employing the research proven boll dissection threshold determination technique. I had to do that for one of our fields this week when I found 1 stink bug per 6 row feet, an alarming level, and I then re-

Table 6. Dynamic boll injury threshold for stink bugs

Week of bloom	Threshold (% internal boll damage)
1	50%
2	30%
3	10%
4	10%
5	10%
6	20%
7	30%
8	50%



Measuring the terminal growing point elongation for PGR/irrigation needs this week. This plant is looking to go rank soon without PGRs.

luctantly started dissecting bolls for internal stink bug wart damage. I found our field was at 2% damage, a concerning amount this early, but below ET so far.

We are still finding a notable population of cabbage loopers and true armyworms in most non-Bt fields, but these were much lower than last week, likely due to a healthy beneficial population keeping them in check. As for action and treatments in our cotton fields, we have recommended quite a few PGR (plant growth regulator) treatments this week. Our plant measurements from our recommended fields have been coming in showing the plants are already a tad growthy and getting ready to enter even faster vegetative growth now that irrigations are kicking off. This is happening with peak water use (5

NAWF) just around the corner and as our weather forecast shows heat and lack of natural moisture forthcoming. It is tempting to allow the heat and load to slow the plants down, and we are doing just that in some fields, plant measurements, NAWF stage, fruit load, and water availability depending. For many fields, they will need this treatment.

PGR Use thoughts...

Cotton plants, as trees, think they have many years to grow and reproduce. They never plan for the future or save for a time of need, especially if they are already showing a rapid vegetation growth pattern starting. They will grow tall, quickly, and expect more moisture as it needs it, using all we can apply and never realizing it could ever want for all the water it can use. Now, I remind you that PGRs are simply synthetic hormones that keep new cell development, at the growing point, short. They do not make the plant more efficient or increase yield. They only keep the new cells from fully elongating for a short time while the hormone remains present in the plant. If we are reading our plant measurements correctly, we should be applying these PGRs as these cotton trees strive to use all the water it is given to become the tallest tree in the forest, sacrificing short term fruit production for long term vegetative growth it does not realize it will never be able to take advantage of. These PGR treatments, in this situation, then have the potential to make the future plant shorter overall and potentially more efficient in moving available water and nutrients to fruit production, if that moisture is available at that time.



With heavy rain in this field's past and heavy irrigation in its future, a light boll load this week and additional PGR treatments are needed.

Please note that water is almost impossible to bank in actively growing cotton in the High Plains any longer. Both the plant's natural tendencies and our modern pumping capacity strongly work against us here. It is far better economically and agronomically to try and practically match the plant's water needs as they occur while managing the plant for efficiency from an integrated approach.

Corn

Our PPM corn has been pretty quiet again this week. Our stages ranged from V5 to late blister this week with most fields coming in between silk and late blister. We are finding tiny colonies of sub threshold Banks grass mites with a touch more regularity in fields and common diseases are a bit easier to find. Both remain very far below ET. We have found no Lepidopteran pests in any field, save a few corn earworms starting in ears, this week. The corn earworm moth trap numbers increased this week and was just about the only moth activity of note from our Texas Corn Producers moth traps. The level of worms found does not match the level of moth pressure so far, but corn remains the only real focus of the pest again this week. One western bean cutworm was found in the Center Plains area again this week.



Very light patch of common rust this week.

Sorghum

There was quite a bit more activity in sorghum than corn this week, but nothing reaching economic levels yet again this week. Our PPM sorghum ranged in stage from V5 through 30% bloom with most fields showing the first few flag leaves peaking out, but a full week away from truly entering that stage. In our blooming sorghum fields, we started sorghum midge checks, but have not found any yet. Sorghum is only susceptible to midge during bloom stages. This pest must migrate from sorghum field to field and Johnson grass patch to patch from the south every year. Adults only live for less than one day after emerging from grain and die shortly following laying eggs into a new sorghum bloom.



Sorghum midge adult

Our average midge arrival date is August 4th in the Plainview area, but this is an average date. Fields should be checked for midge while in bloom daily for best control options. Please check out our how to scout video from a few years ago: <https://www.youtube.com/watch?v=K4Flf4AdeNw&t=1s>

[v=K4Flf4AdeNw&t=1s](https://www.youtube.com/watch?v=K4Flf4AdeNw&t=1s)



Sorghum aphid colony establishing on the Hale / Swisher line this week.

The sorghum aphid (formerly the sugarcane aphid) was officially found in Swisher county this week. These found colonies were establishment size only. We only found these aphids in 18% of our sorghum fields and never more than 2.36% of the plants were infested with colonies that truly only consisted of a winged aphid and a few young. This is a long way from economic levels, but we know this pest has an amazing reproductive capability that can overcome even solid beneficial populations quickly. We will be watching this pest closely again.

Lepidopteran pests are almost undetectable in our sorghum regardless of stage. The very few found were almost entirely fall

armyworms, representing the very few fall armyworm moths we have trapped this year. We did have one surprising field in early bloom stage with a rapidly increasing population of Banks grass mites that came in at a 2.89 average damage rating on our 0-10 rating scale with 3.5 be-

ing threshold levels. Last week this rating was at 0.48. If this trend continues, this field could be at treatable levels soon. No other sorghum field held mites at a rating level above 0.05 and were barely detectable if they could even be found.



Blooming head in SW Swisher this week at 30% bloom stage.



AgriLife Extension Service / Texas Pest Management Association

225 Broadway, Suite 6
Plainview, TX 79072
Tel: 806.291.5267
Fax: 806.291.5266

E-mail: Blayne.Reed@ag.tamu.edu

We're ONLINE



find current and past

Newsletters and IPM Reports

as well as out latest

High Plains Weekly IPM

"Radio" Podcast

at *Plains Pest Bugosphere*

[https://](https://halecountyipm.blogspot.com)

halecountyipm.blogspot.com

For quicker pest alerts register at

Pest Patrol Hotline

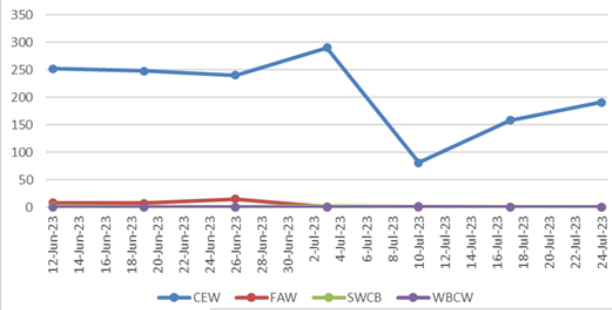
www.syngentapestpatrol.com

Listen to us on the Radio

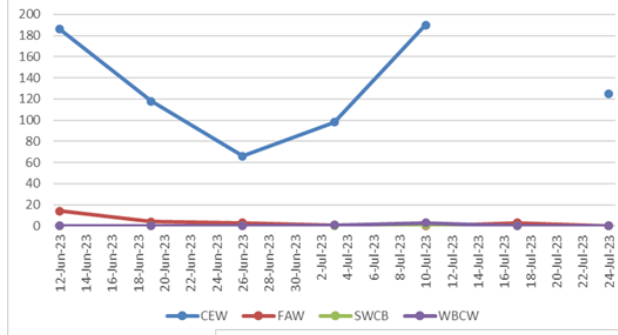


The members of Texas A&M AgriLife will provide equal opportunities in programs and activities, education, and employment to all persons regardless of race, color, sex, religion, national origin, age, disability, genetic information, veteran status, sexual orientation or gender identity and will strive to achieve full and equal employment opportunity throughout Texas A&M AgriLife. 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.

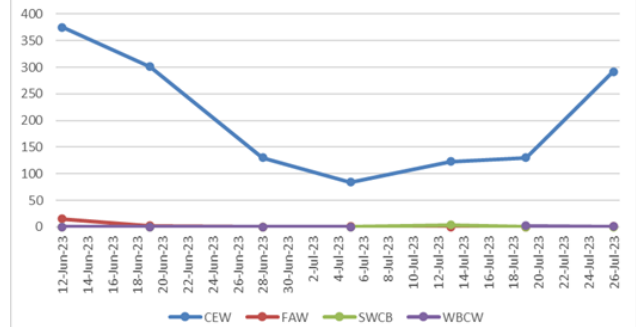
Cotton Center Corn Pest's Moth Traps



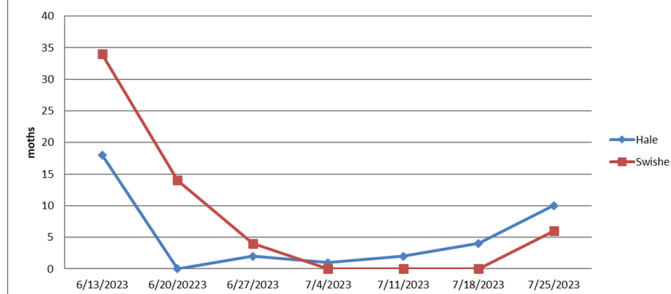
Halfway Corn Pest's Moth Traps



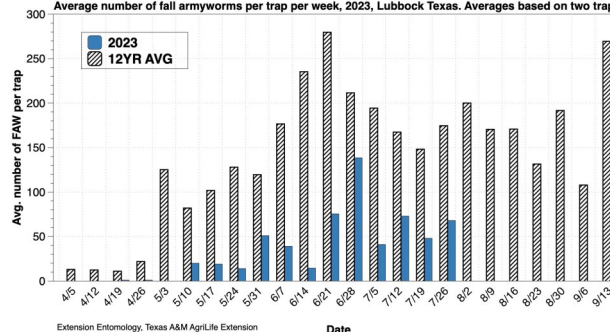
Center Plains Corn Pest's Moth Traps



2023 Adult Bollworm Moth Trap Catches Set Locations



Average number of fall armyworms per trap per week, 2023, Lubbock Texas. Averages based on two traps.



Blayne Reed

This work is supported in part by the Crop Protection and Pest Management, Extension Implementation Program [award no. 2021-70006-35347/project accession no. 1027036] from the United States Department of Agriculture (USDA) National Institute of Food and Agriculture.