TEXAS A&M AGRILIFE EXTENSION

Plains Pest Management News

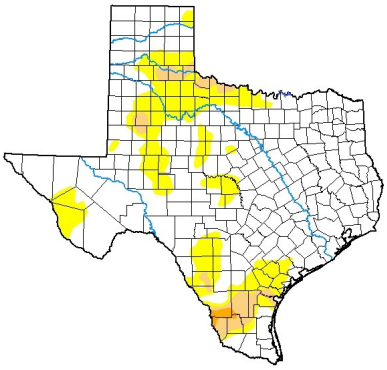
AUGUST 2, 2019

General Status

Hot and dry week. While plenty of fields are showing stress, particularly some dryland fields, area-wide fields are holding up pretty well with heat units coming in droves. We are primed for a timely rain. A good drink for any field out there as peak water use is upon us or very near would be one of those million-dollar rains. Without much in the forecast, we will do what we can with the water we have, hopefully making the most with each drop.

Cotton pests have quieted this week as we start watching for the annual bollworm migration to start in earnest soon, but corn and sorghum are getting more activity. We even had a few sorghum fields reach economic levels for a rapidly increasing sugarcane aphid population. Unfortunately, SCA are not all that is increasing in our grain crops at this time.

ET SCA hot spot on a Hale Seed Milo Field this week.



July 30, 2019
(Released Thursday, Aug. 1, 2019)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	76.49	23.51	4.31	0.42	0.00	0.00
Last Week 07-23-2019	89.88	10.12	1.99	0.66	0.00	0.00
3 Months Ago 04-30-2019	87.27	12.73	1.46	0.00	0.00	0.00
Start of Calendar Year 01-01-2019	92.99	7.01	1.32	0.00	0.00	0.00
Start of Water Year 09-25-2018	57.46	42.54	20.19	7.03	0.96	0.00
One Year Ago 07-31-2018	21.82	78.18	59.26	35.93	8.48	0.00

Intensity:
None · D0 Abnormally Dry · D1 Moderate Drought · D2 Severe Drought · D3 Extreme Drought · D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

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National Drought Mitigation Center

droughtmonitor.unl.edu

Plainview Heat Unit Calculator

Cumulative Heat Unit Calculator

Start Date		End Date
4/24/2019	Corn	9/25/2019
Total Heat Units		2176.05
Start Date		End Date
5/29/2019	Cotton	10/10/2019
Total Heat Units		1026.90

Calculate

Extended Forecast for
Plainview TX

This Afternoon	Tonight	Saturday	Saturday Night	Sunday	Sunday Night	Monday	Monday Night	Tuesday
Hot	Partly Cloudy	Mostly Sunny	Partly Cloudy	Mostly Sunny	Partly Cloudy	Mostly Sunny	Mostly Cloudy	Mostly Sunny
High: 99 °F	Low: 71 °F	High: 91 °F	Low: 65 °F	High: 88 °F	Low: 66 °F	High: 93 °F	Low: 67 °F	High: 95 °F

Auxin Drift Trial Highlight

These images are from a handout we used today to show results of the Herbicide drift demonstration that highlighted our Halfway Field Day this morning. The results show a strong need to manage spray drift when making applications with these herbicides. The Enlist damaged cotton showed more damage, but the Enginia showed a slight tendency to volatize. Neither herbicide 'got away from us' in the 8 MPH winds the applications were made in nor did the results show any unacceptable volatility. This proves that with careful application, **drift can be managed with either product for successful weed treatments**.

Auxin Drift Trial Set Up

2-48 row blocks of each cotton traited variety

13.3'X38' treated plots in each block

Plots treated with 'wrong' herbicide

Within treated plot, on adjacent rows, and downwind at 13', 30', and 60' were placed coverings and jugs

-keep direct spray off certain plants inside treated area

-removed within 30 minutes of treatment to measure volatility

Soybeans were hand planted in all 4 directions of treated plot area at 13' and 30'

Potted conventional cotton and conventional soybeans were placed into treated area and downwind from treated area within 30 minutes of treatment .

Treated plots, covered plants, potted plants, adjacent covered plants and areas, and all areas downwind were evaluated for damage at 3, 10, and 16 DAT on a 0-10 damage rating scale.

Auxin Drift Trial Results

0-10 Damage Rating Scale

Treated Plot Area Damage Ratings

10 DAT Totals

	Enlist	Engenia
Treated Plot	7	5.6
Jugs	0.36	1.16
Covered	0	2.8

16 DAT Totals

	Enlist	Engenia
Treated Plot	7.67	5.67
Jugs	0.4	2.06
Covered	0	1


Enlist edge 16 DAT


Enginia Covered 16 DAT


Enginia close up 16 DAT

Adjacent Downwind Row (40" away) Damage Ratings

10 DAT Totals

	Enlist	Engenia
adjacent downwind jugs	0	0.16
adjacent downwind covered	0	0.1
adjacent row	0.92	1

16 DAT Totals

	Enlist	Engenia
adjacent downwind jugs	0	0.17
adjacent downwind covered	0	0.13
adjacent row	0.93	0.93

Downwind Damage Ratings

10 DAT Totals

	Enlist	Engenia
downwind covered 13.3'	0	0.24
downwind row 13.3'	0.1	0
downwind covered 30'	0	0
downwind row 30'	0	0.3
downwind covered 60'	0	0.3
downwind row 60'	0	0.4

16 DAT Totals

	Enlist	Engenia
downwind covered 13.3'	0	0.1
downwind row 13.3'	0.17	0.23
downwind covered 30'	0	0.1
downwind row 30'	0	0.4
downwind covered 60'	0	0.1
downwind row 60'	0	0.3


Full rate of Enlist damage on non-Enlist cotton at 16 DAT

Cotton

Late Swisher about to bloom soon this week.

This week our Plains Pest Management scouting program cotton ranged in stage from 9/10 grown square stage to a thirsty 5 NAWF (nodes above white flower) with most fields still coming in between 6 NAWF and 8 NAWF. Notable pest populations for fleahoppers, cotton square borers, stink bugs and a few Lygus were found, but all were well below economic levels with most fields moving past fleahopper damage and into consistent blooming. Fruit retention and boll set remain good to excellent with few shed bolls yet. Some of the driest fields did move quickly from 8 NAWF to 5 NAWF in 7 days indicating some stress, but boll set for those critical first-positions were good and boll development looks on par so far. For these fields moving that rapidly into 5 NAWF stage, which is also peak water use, this is a level of stress that does not need to last very long. Without relief soon, these fields could easily reach absolute cut-out as soon as next week. Even with decent boll set, fields will slam into premature absolute cut-out far too early, capping yield for the year. On the other end of the spectrum, we have fields running above 8 NAWF for 2 weeks already with little sign of slowing yet. In many of these fields, our plant growth measurements are indicating a need for some limited PGR applications. Our pest focus will be shifting to bollworms, stink bugs, and Lygus.

Southern Hale Field well into its second week of blooming this week.

Kate Harrell, EA-IPM Wharton, made a really good how-to-scout for bollworm video this month. Here is the link to that awesome video: https://www.youtube.com/watch?v=7zqna5OpkCI&feature=youtu.be

Corn

This week our program corn ranged in stage from V7 to late dough. We continue to find bollworms in most ears, but few fall armyworms among them. While not economic, we found one western bean cutworm in our data set in southwestern Hale. This is noteworthy as this pest is not common, and it establishes regularly, could spell a meaningful change in corn IPM for the area. WBCW, due to its biology, develops resistance to Bt types handily, goes through its early larval stages near the tassel where detection is hard, and moves to attack the middle of the ear later in larval stages where damage will be profound both from feeding and fungal entry to the ear. We should keep a vigil for this pest sneaking into our area.

Assorted WBCW larva.

Spider mites, primarily Banks grass mites did increase in post-tasseled corn this week with the heat, a BGM favorite situation. Only a few fields are nearing ET, but that can change rapidly for any field. Without an increase in mite predation to match the increasing mite population, I expect to have to recommend treatment for a few fields soon. Our most recent mite product efficacy trials indicate that most products are still working well in this area at labeled rates if needed.

BGM hot spot in some Hale corn this week.

There has been a mite issue brewing in corn production north of Amarillo for the past few seasons. A 'possibly new, possibly differing but similar' species of red mites (possibly a biotype of two-spotted mites) causing issues in that region. In an effort to help with the situation, we traveled to the Dalhart area and with the assistance of local crop consultants collected examples of this mite. It remains unconfirmed just what this mite is, but we have been working with all of our district entomologists and State IPM personnel in mounting these mites on slides and getting them to a mite expert for proper ID. The concern for the region is that these mites seem a bit harder to control than the standard two-spotted mite or the Banks grass mite. Increasing concerns for this area are that there is unconfirmed reporting of a few of these mites here in Hale, Swisher, & Floyd. If you come across a colony of red mites, please collect them and get them to this office or the district entomologists offices of Dr. Suhas Vyavhare or Dr. Pat Porter soon.

The mite in question from Dalhart. Slide mounting and micro-photo by Dr. Suhas Vyavhare.

Sorghum

This week our scouting program sorghum ranged in stage from V6 to 75% bloom with most of our sorghum being a re-planted late field somewhere in the vegetative whorl stages. While in bloom, sorghum midge should be a primary issue. A few weeks ago, we found one midge, but this week we found none. The Average arrival date for the migratory midge population is August 4th for the Plainview area. We also found no headworms to speak of in booted sorghum but some light but common fall armyworm activity in whorl stage sorghums. Apparently, most if not all of the few bollworms active in the area are much more attracted to post-tasseled corn at this time.

Some dough stage heads can be found in our earlier planted seed milo fields this week due to the staggered and haggard start during May these fields had. So far, pollination has been adequate.

Despite stage specific pest scouting needs, the secondary pests were a much more economic issue in our program this week. In our post-booted sorghum, the sugarcane aphid went from being an occasional and hard to spot pest to economic in 7 days. One of our seed milo fields was found over ET for SCA this week. We will be watching all sorghum fields closely with this pest and their potential for a quick turnaround from light to life sucking destruction. With this pest still in mind, I urge everyone that if the need arises to treat for midge or headworms, please utilize a predator safe insecticide for those pests. The beneficials will never solve a SCA problem for us, but we cannot solve it without them. Both of our good and labeled pesticides for SCA do need excellent coverage and beneficial help to finish them off with only one treatment.

Surprisingly, the BGM are increasing quite rapidly in our post boot sorghum faster than in the corn. This might be due to a lower mite specific predator population in the sorghum, but all our mite populations in this situation are flaring rapidly. If the trend continues, there are just a few mite products labeled in sorghum. Onager and Comite II are the only newer and predator safe products on this already limited list and both have proven to offer control of BGM in our mite in sorghum trials. Please consult our Texas A&M AgriLife Sorghum Insect Guide for the full list of mite products. Also keep a watch for mite efficacy trial data from us over the next few weeks. We have been able to place one in sorghum and one in corn. In our sorghum trial, all labeled products are being tested.

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For rapid pest alerts and updates-

Plains Pest Bugoshere:

http://
halecountyipm.blogspot.com/

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

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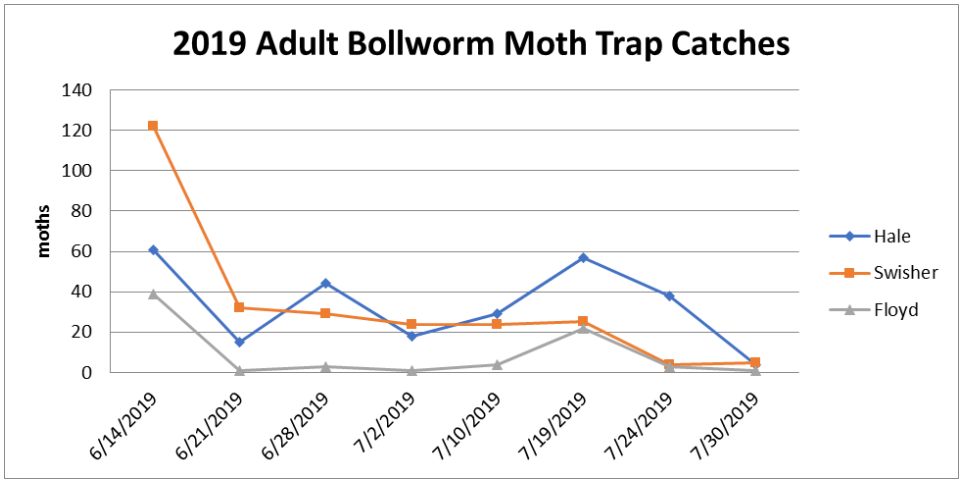

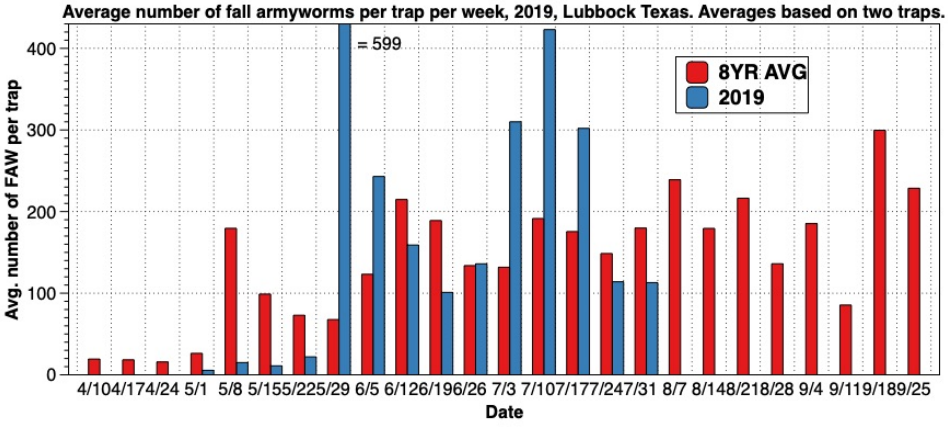

Thanks to everyone for a great field day this morning!

Blayne Reed