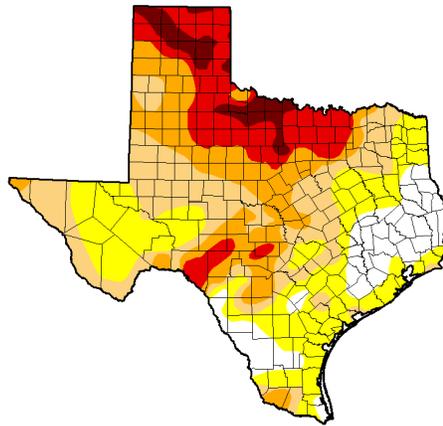


JULY 11, 2014

General Status

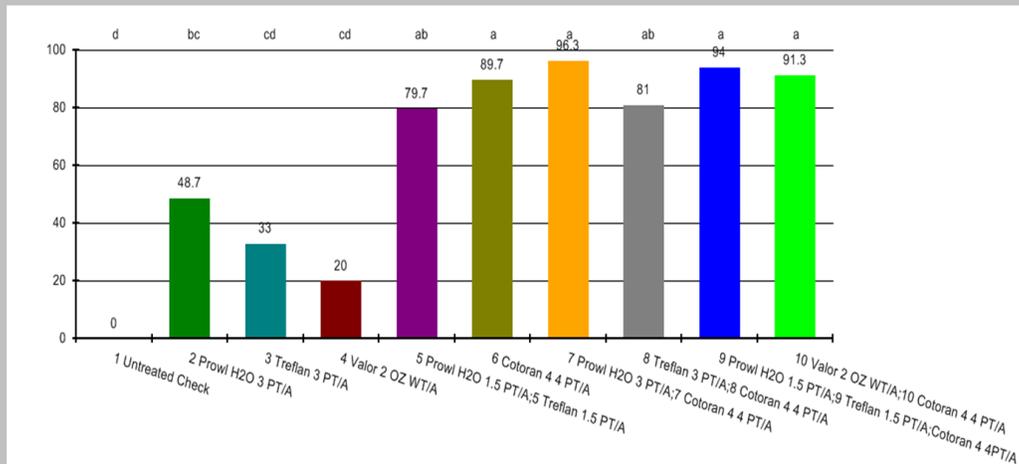
Crops are “blowing and going” across Hale & Swisher County this week. So much so, that it is almost easy to forget about the calendar date. I estimate 75% or higher of our area’s irrigated crops are behind what most would call a normal stage. The battle with weeds remains top priority as producers pull double and triple shifts to also finalize any replanting, harvest wheat for grain, manage crop fertility, while keeping all the equipment, field and now irrigation, running full speed. Irrigations in suddenly thirsty tasseled corn and booting sorghum are going out while weather reports give a good chance for additional rains next week.



Weeds

We have talked up the need for residual herbicides pretty hard these past few seasons, and we are seeing the fruits of some of that effort. While weed pressure is again very high this season I have noted that fields that have had multiple MOA (modes of action) with special attention to pre-plant residuals have a greatly reduced amount of surviving weeds. This week I am again sharing results from our residual herbicide trial. This should be the final evaluation of the trial. We will be in the field discussing the trial on July 16 for our Hale/Swisher Mobile Field Day. Numbers presented today are in percent control compared to the untreated check while previous data has been generated by actual weed counts. I should also note that no glyphosate has been applied to any plot. Field was ‘rod-weeded’ before planting cotton on May 14.

July 7 Evaluations



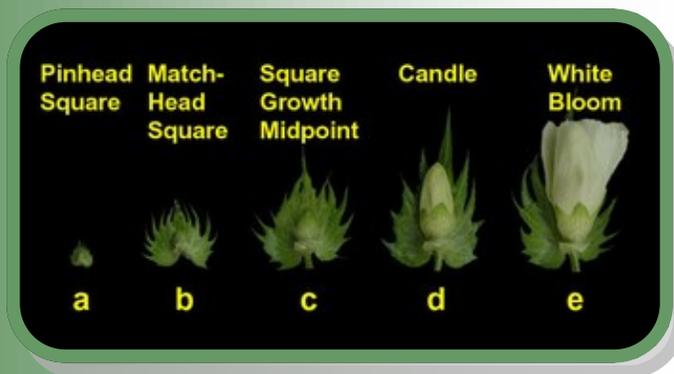
The big question today is, “How do I control the surviving weeds I have now?”

Even the cleanest of our fields seem to have some surviving weeds to be dealt with. Let me assure everyone based upon what I am seeing in our program cotton, if a weed is surviving in cotton that has been sprayed with glyphosate, IT IS RESISTANT. In most of these fields I find dead weed carcasses nearby and upon close inspection, the surviving weed looks very slightly damaged. I urge producers to get that weed dead before it is allowed to seed out. That is easier said than done, especially if the field is full of the surviving weeds.

Our options to control surviving weeds are few at this point. Those that planned for this scenario with Liberty Link cotton (Ignite tolerant) have that option. Ideally, we like to see the glyphosate applied first, followed within 10 days or less by Ignite. I have noted a 50-85% reduction in surviving pigweed behind Ignite treatments thus far this season. This is certainly an improvement but the larger pigweeds are always troublesome for Ignite ‘fry’ from top to bottom with no regrowth point. If rotation to a grass crop next season is not an issue, Staple is a fine option that gives knockdown plus additional residual. Other regions have problems with ALS herbicide resistance (the main active ingredient in Staple) also and this could be an issue, although it is not believed to be a widespread problem here. As it stands today, those are the only herbicide options for treating glyphosate resistant weeds over-the-top in cotton. The only other options left deal with ‘iron and cold steel.’ Cultivators are being set and hoes are being sharpened throughout the area.

Cotton

Our program's cotton this week ranged in stage from pinhead square to half-grown square. A lot of progress has been made in cotton since our last newsletter, but we are still weeks away from seeing blooms. Many fields, especially later dryland fields, might not see blooms until the second week in August. With this in mind, the wider use of plant growth regulators (PGRs) in cotton comes into play.



There has been quite a bit of testing done on PGRs over the years. Here is a quick rundown of what they do. PGRs DO NOT increase yield in any direct way. They are synthetic plant hormones that mostly control cell elongation. When applied to actively growing cotton, PGRs will maintain a reasonable cell length which in turn

provides a reduction in the potential internode length or the area between branches. This makes for a potentially shorter plant that is more likely more efficient, especially once or if drought stress occurs later. This (Blayne named) 'efficiency' has proven to mature cotton faster, something I feel should be a real consideration as we look at an area wide late cotton crop. PGRs also do not stay within the plant to continue working for any length of time. They act as any hormone would. They control the length of cells, when that cell is formed and only those cells that are developing when they are applied. For extremely growth cotton or cotton that is predicted to be late maturing for whatever reason, subsequent applications of PGRs would be required.

The pests in our program cotton were fairly quiet again this week, but not all together quiet. In most fields we are finding fleahopper nymphs at sub-economic levels. One irrigated field in northern Swisher did reach economic threshold (ET) and required treatment. As the fleahoppers seem to be on the rise, and we are lowering their preferred weed host as the days go by, I do expect to see a few more fleahopper hot spots that require treatment in the next 10 days.



The ET for fleahoppers in squaring cotton is 35/100 (35%) terminals infested with a % square retention consideration. For cotton at the ¼ grown-square stage, any amount of square loss above 10% (90% retention)



Blasted square

should be an attention getter. Our field in Swisher that required treatment exhibited 40% infestation with a 85% square retention rate.

Corn

Our program corn ranged from V3 to early dough stage. This week we surprisingly found a couple of post tasseling corn fields with spider mite populations nearing ET. This was not a widespread problem with fields at or near ET for us, but mites were found in every corn field that had reached tassel stage. Of the fields that are very close to ET were fields where we had found mite colonies very early in the field's development.

Today, and for the past few weeks, I see very few of our key mite targeting predators. There is a high likelihood of an expanding spider mite problem this season unless the predator population rebounds quickly. Dr. Pat Porter and Dr. Ed Bynum are also reporting a slip in the six-spotted thrips and mite destroyers in the area. Dr. Bynum reports that crop consultants are finding these key predators north of Amarillo, so there is a chance their populations will rebound and give us some much needed aid in mite control.

To determine the spider mite population in corn, please utilize the following chart, sent to us today courtesy of Dr. Bynum.

| 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. |

Archer et al., 1989. Techniques for screening maize for resistance to mites. In: Toward Insect Resistant Maize for the Third World: Proceedings of the International Symposium on Methodologies for Developing Host Plant Resistance to Maize Insects. (Ed: Mihm, J. A.) CIMMYT, Mexico D.F., pp. 178-183.

The ET for tasseled corn when by making use of this chart is a rating of 3 to 4. We have not found any mites in replanted or late corn this week. Fall armyworm larva and corn earworm larva have been fairly light so far in all corn stages.



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.

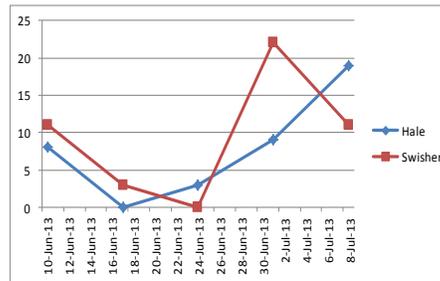
We're on the air...

"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.

Sorghum

Our program sorghum ranged from emerging to boot stage. Our sorghum pests have been fairly light also. It is easy to find caterpillar feeding in most fields, both from bollworms and FAW. This feeding has thus far only been superficial with a maximum of 5% plants infested with most fields still with less than 1%. The high expected FAW outbreak predicted by the much higher than normal moth trappings has not materialized yet. That could also be due to a high amount of replanted acres stretching the pest population.



2014 Bollworm trap data

Much like the corn, there was an increase in spider mite population in our area sorghum this week. All populations in sorghum were sub-ET, but it is something to keep a close eye on.

Region-wide there is sickly looking, stunted, yellowish, and purpled replanted sorghum fields. Today there is still much debate as to the cause. At this time I do not feel it is glyphosate related. None of the symptoms match glyphosate damage. Neither does the damage lineup with Dual or atrazine damage. Whatever is the cause, it is still suspected to be herbicide / heavy rain / leaching into the soil related but these and other causes cannot be ruled out. From the fields I have surveyed, I feel that at least 80% or better of the fields will pull through to make solid yields. To make that assessment in your field, I recommend dissecting the plant down to the growing point. Even if the exact growing point cannot be seen with the naked eye, if the tissue in that vicinity is healthy (not mushy), then that plant has a good chance to recover.

Please call or come by with any questions,

Blayne Reed