

WEST  
PLAINS  
IPM  
UPDATE

News about  
Integrated Pest  
Management in  
Hockley and  
Cochran  
Counties from  
Kerry Siders

July 22, 2014

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### Current Crop and Pest Situation

Well unless you are in the mountains where it may be cooler, I would say summer has finally arrived. Just what the doctor ordered - more heat units!

**Peanuts** have been noted with a few foliage feeders. Nothing near threshold in terms of foliage damage and no damage to developing pods have been found. Leaf spot has been found in a few fields, but with this current temperature conditions I would monitor it and see if irrigation may cause it to develop more. We are also nearing that time when pod rots begin to develop. I would not find fault in taking a proactive stance in limiting this rot in fields with history.

**Cotton** continues to make progress. Some progress has been slow. I want to be optimistic about the prospects of everyone having good cotton yield potential. Let us look at an average cotton plant right now: 14 total nodes; first fruiting node at 7<sup>th</sup> node; +90% retention of squares; those fields which have entered bloom stage are doing so at 8 nodes above white; and is 15" tall for a 1.1" height to node ratio. This is a good plant physiologically. This is an average so 50% of cotton fields are more advanced, while 50% are not as advanced. Many fields are looking like it may be the end of this week -first of next before first bloom.

This is not entirely a bad thing, just that we have about four more weeks of effective bloom period or that time in which a bloom can realistically make a harvestable boll. But as usual, I will remind you that **WE WILL MAKE COTTON IN AUGUST!**

Fleahoppers are not of much concern in blooming cotton. Lygus are still not easily detected in fields or even margins. I suspect as cotton gets larger and develops more bolls then we may see increased activity. Cotton aphids are also very few and far between.

**“Huskie Herbicide Damage”**, there I said it. Now let me finish my thoughts. I have seen Huskie damage to cotton, in some cases with or without atrazine. This damage came from applications made last summer on late planted grain sorghum. This has been noted on both dryland and drip irrigated cotton acres. At first I was concerned that this really good broadleaf herbicide we like to use in sorghum was banging up our cotton crop. But when you realize the situation in which it was used and then conditions which occurred since application there really is no surprise that we are seeing this.

Continued next page.

## Continued from page 1.

Here is the list of red flags we should have recognized last year, this year, and for future reference:

- Late applications (July 1, too close to planting broadleaf crop under conditions below)
- Little or no rainfall (helps activate and breakdown herbicides over time)
- No surface applied irrigation (dryland and drip)
- Limited soil tillage (trying to prevent erosion in drought, and too dry in some cases for tillage)
- Let me remind you that we have been in a drought and still are.

Those conditions conspired to not allow sufficient breakdown of the Huskie in the soil. Most all herbicide which provide soil residual control of weeds have this potential under these conditions. Enough said.

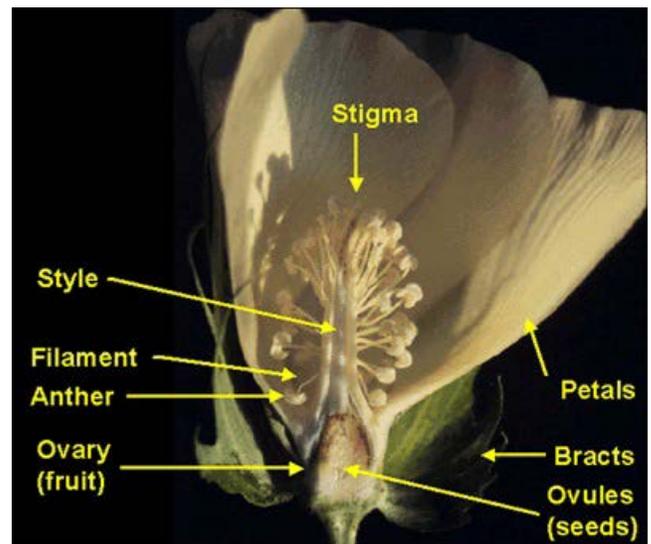
## My priorities this next week are:

1. Irrigate, adjust accordingly to weather, crop needs, and costs.
2. Be wrapping up all fertilizing, with exception of some light fertilizer in irrigation water, over the next 10-14 days.
3. Keep close watch on aphids, Lygus, cotton bollworms over next 3-4 weeks.
4. If weather changes to cloudy, bit cooler, and higher humidity or some precip then begin preventative foliar fungicide applications in peanuts.
5. Maintain our good square set going into flowering and maintain a good boll set with limited damage and losses.

## Cotton 101 - The Blooms

The cotton plant develops in an orderly, predictable pattern. If you are familiar with the fruiting stages, their sequence, and the time required for each stage, you can tell if your crop is on schedule. For example, you should spot the first white bloom 60-80 days from planting. That will be from 20 to 27 days (23 days average) after the square or bud develops. It will take about 3 days between the opening of a flower on one fruiting branch and the opening of the bloom in the same position of the bloom in the same position on the next higher fruiting branch.

That's known as vertical flowering. About 6 days pass between the appearance of two consecutive blooms on the same branch (horizontal flowering). The cotton bloom is a perfect flower. It has both male parts (pollen-producing stamens, each with a double-lobed anther) and female parts (stigma, style, and ovary) in the same flower. The ovary has 4 to 5 carpels or locks. Each lock contains 8 to 12 ovules that may develop into seed. Flowers open during the morning, and pollination usually occurs within a few hours. Pollen grains from the anther drop to the sticky surface of the stigma. Fertilization – the union of a male reproductive cell from a single pollen grain and a female cell in the ovule – normally takes place within 24 to 30 hours after pollination. The fertilized ovule develops into a seed. Some of the ovules may not develop fully or are aborted. If a majority of the seed abort, the boll will fall off the plant within 7 to 10 days after flowering. Cotton flowers usually are self-pollinated. However, bees or other insects may increase the frequency of cross-pollination. Temperatures above 100°F and moisture – rain or high humidity – reduce pollination. A bloom will not pollinate after the first day. The white petals of the flower turn pink after 24 hours and shed within a week as the fertilized ovules of the ovary grow into a boll. The effective bloom period occurs from early July to mid-August. Stress during this period will cause the largest loss of yields. Research shows that in the High Plains, about 85% of the total bolls are set during the first three weeks of blooming, 10% during the fourth week, and less than 5% from the fifth through the seventh weeks.



## Upcoming Meetings:

### **Pesticide Applicators Training**

**Required to obtain private pesticide applicators license from Texas Department of Agriculture**

**July 24, 1 PM, Extension Office - Levelland**

**Cost \$60. Please call the day before training to reserve your spot! 806 894-3159**

## See You On The Radio

**IPM Radio Program Ag Talk on Fox Talk KJTV, radio 950 AM, on Wednesdays from 1:00 to 2:15 pm.**

**Texas A&M AgriLife Extension in Hockley County Report on KLVT Levelland, High Plains Radio Network, radio 1230 AM, Wednesdays from 7:30 am to 7:45 am.**

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