

# AgriLIFE EXTENSION

Texas A&M System

## WEST PLAINS IPM UPDATE

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



**June 30, 2010**  
Vol. 15 - No. 3



*Partners with Nature*

### GENERAL SITUATION

The weather pattern continues this week with some scattered and general rainfall and moderate temperatures. In general the rain has been a welcome blessing. It will help the irrigated acres and for certain the dryland acres. If you are interested in tracking heat units try this link: <http://www.weather.com/outlook/agriculture/growing-degree-days/>

### COTTON

Based on the IPM Scouting Program cotton fields the average number of total nodes is 11 (range 5 to 13); the 1<sup>st</sup> fruiting branch at 7 (range 5-8); 93% (range 69-99%) square retention of 1<sup>st</sup> position; node length is 0.8" (range of 0.5"-1.5"), and plant populations average 40,400 per acre (range 22,000 to 63,000). I have not seen a bloom so far but do anticipate that by July 5<sup>th</sup> I will. Based on average plant mapping data and going into bloom with 8 nodes above white flower, we should generally begin bloom around July 13<sup>th</sup>. This also means that 50% of the acres could bloom before this date and 50% will bloom after this date. I suspect a majority of the acres in Hockley county will begin blooming around July 18-22. This is earlier than what we have seen the past few years. With a last effective bloom date of August 20, that gives us a full month for effective blooming. So prospects are good.

Cotton pests are generally quiet at the present. Plant growth regulators (PGR's) and weed control has been the order of the day for the past several days. Under current conditions, cotton producers need to consider those varieties which need help from a PGR in balancing vegetative growth with reproductive growth.

Cotton fleahopper numbers continue to remain very low, with some fields nearing threshold. Lygus adults have become more frequent this week. No cotton aphids have been noted this week but beneficials are hanging around fairly well so I suspect that there are a few aphids lurking. No bollworm eggs or larvae have been found thus far this week in scouting fields.

### PEANUTS

Peanuts are doing very well under current conditions. Most all fields are well into bloom and are beginning to set pegs. Weed control still remains as pest priority number one. Only concern this week has been the yellowing or light green color. This would be due to the cloudy/rainy weather. Remember, iron chlorosis occurs as interveinal chlorosis, not complete leaf chlorosis. Once the sun comes back out they will green back up. This is a normal situation on chalky soils after a rain or even irrigation. So be careful not to spend too much on trying to correct this. You can't buy sunlight. Do pay attention to crown and foliar disease possibilities.

### GRAIN SORGHUM

Sorghum ranges from still in the bag to almost boot stage. Limited whorl feeding by larvae pest has really just begun. This has not been near as severe as last years whorl damage. Also limited are aphids in general - greenbugs, yellow sugar cane aphids and cornleaf aphids. Beneficial insect and spiders are present in most fields with numbers dependent on limited food source.

## Lygus Bugs

The western tarnished plant bug (*Lygus hesperus* Knight) is one of several *Lygus* species that feeds on cotton terminals, squares and small bolls. Adults are 1/4 inch long, have a conspicuous triangle in the center of the back, are winged, and vary in color from pale green to yellowish brown with reddish brown to black markings. Immature lygus bugs are called nymphs. They are uniformly pale green with red-tipped antennae; late instars have four conspicuous black spots on the thorax and one large black spot near the base of the abdomen. The nymph's wings are not developed, but nymphs can move rapidly and are difficult to detect in cotton foliage. Small nymphs may be confused with aphids, cotton fleahoppers and leaf hopper nymphs. Plant bugs prefer legumes to cotton and usually are found in large numbers in areas of alfalfa or potato production or areas providing wild hosts such as clovers, vetches, mustard and dock. Lygus bugs are attracted to succulent growth; their feeding results in shedding of squares and small bolls, stunted growth and boll deformation. Feeding damage to small bolls is often characterized as small black spots or small, sunken lesions. The feeding that causes these spots or lesions may or may not penetrate the boll wall and damage developing seeds or lint. Damage to blooms appears as black anthers and puckered areas in petals.

**Management and decision making.** The need for lygus bug control is determined by their abundance in relation to the fruiting condition of the cotton plants. Fields should be inspected for lygus bugs at 4- to 5-day intervals using a drop cloth (see discussion on page 7).

**During the first week of squaring, the economic threshold is one lygus bug adult or nymph per 3 feet of row combined with less than 90 percent square set. In the second week of squaring, the economic threshold is one lygus bug adult or nymph per 3 feet of row combined with less than 85 percent square set. In the third week of squaring, the economic threshold is one lygus bug adult or nymph per 3 feet of row combined with less than 75 percent square set. After the third week of squaring, the economic threshold is two lygus bug adults or nymphs per 3 feet of row with less than acceptable fruit retention. After peak bloom, begin treatment when drop cloth counts exceed two lygus bug adults or nymphs per 3 feet of row and plants have failed to retain squares and set bolls normally during the first 4 to 5 weeks of fruiting.**

Research in Arizona and California indicates that the western tarnished plant bug (*Lygus hesperus*) may be more difficult to control with insecticides and may require the use of higher labeled rates of suggested insecticides.



## Suggested Insecticides for control of cotton fleahoppers and Lygus.

Insecticide	Formulated amount per acre	
	Fleahopper	Lygus
Address® 75S	4 - 5.33 oz.	10.66 - 21.33 oz
Address® 90S	3.34 - 4 oz	9 - 17.77
Orthene® 90S	3.34 - 4 oz	9 - 17.77
Orthene® 97	3.10 - 3.71 oz	8 - 16 oz
Intruder 70 WP	0.6-1.1 oz	----
Capture® 2E	----	2.6 - 6.4 oz
Baythroid® 2E	----	1.6 - 2.6 oz
Leverage® 2.7SE	----	3.75 oz
Karate® 1E	----	2.56 - 3.84 oz
Karate® 2.08 CS	----	1.28 - 1.92 oz
Ammo® 2.5 E	----	2 - 5 oz
Decis® 1.5 E	----	1.11 - 1.62 oz
Lorsban® 4E	6 - 16 oz	----
Bidrin® 8E	0.8 - 3.2 oz	8 oz
Dimethoate® 2.67E	5.3 - 10.5 oz	10.7 oz
Dimethoate® 4E	4 - 8 oz	8 oz
Dimethoate® 5E	3.2 - 6.4 oz	6.4 oz
Asana XL® 0.66E	----	5.8 - 9.6 oz
Proaxis 0.5 E	----	2.56 - 3.84 oz
Prolex 1.25 E	----	1.02 - 1.54 oz
Provado® 1.6F	3.75 oz	3.75 oz
Trimax 4F	1.5 oz	
Steward® 1.25SC	9.2 - 11.3 oz	----
Lannate® 2.4LV	6 - 12 oz	0.75 pt
Methyl Parathion 4E	3.2 oz	1 - 2 pts
Vydate® 2L	1 pt	1 pt
Vydate® 3.77 C-LV	8.5 oz	12.7 - 34.0oz
Centric 40 WG	1.25-2.5 oz	
Parathion 8E	----	8 - 16 oz
Scout®X-tra 0.9E	----	2.28 - 2.84 oz
Fury® 1.5 E	----	2.99 - 4.26 oz

The use of synthetic pyrethroid insecticides may increase cotton aphid numbers

WEST PLAINS IPM UPDATE is a publication of the Texas AgriLife Extension Service IPM Program in Hockley and Cochran Counties.

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