



Current Crop and Insect Situation:

Fleahoppers numbers have increased where ever moisture has occurred either due to rain or irrigation. A second application to control this pest is warranted in several fields especially those that have mixed growth stages. Most cotton is still prebloom, the only blooms I have observed is in dryland cotton that has been stressed and has already cutout.

Beneficial Insects

MINUTE PIRATE BUG / INSIDIOUS FLOWER BUG:



Minute pirate bug and insidious flower bug are used interchangeably referring to two species as if they were one. For information to separate the two, see TAMU **Recognizing the Good Bugs in Cotton – B-6046**.

Minute pirate bugs as the name suggests, are tiny bugs (1/8" long), oval-shaped, black with white wing patches. Nymphs are small, wingless, teardrop-shaped, ranging in color from yellow orange to brown in color.

Nymphs and adults have piercing-sucking mouthparts within a long beak.



Both adults and nymphs feed on a variety of insects including thrips, spider mites, aphids, insect eggs and small caterpillars. They are effective searchers, with voracious appetites. A pirate bug can eat 30 or more spider mites a day. The pirate bug holds the prey in its front legs while inserting its beak into the



host body, often several times until the prey is empty. Minute pirate bugs overwinter as adults in leaf litter. They emerge about mid-April and begin feeding and remain active into October. Two or three days after mating, the females lay eggs within plant tissue and hatch within 5 days. The nymphs take about 20 days to become adults. Adults live about 35 days, during which the females lay an average of 129 eggs. Several generations occur during the growing season. The last generation of adults overwinter.

**FIELD SURVEY
JULY 3, 2006**

Irrigated		
Jackson County		
	Plant Stage	Pest
1	Match head - 1/3 grown square	26 % Fleahoppers
2	Match head - 1/3 grown square	22 % Fleahoppers
3	Match head - 1/3 grown square	24 % Fleahoppers
Harmon County		
1	Match head - 1/3 grown square	28 % Fleahoppers
2	Match head - 1/3 grown square	30 % Fleahoppers
3	Match head - 1/3 grown square	26 % Fleahoppers
Dryland		
Tillman County		
1	Match head	1 % Fleahoppers
2	Match head	1 % Fleahoppers
3	Match head	1 % Fleahoppers
Greer County		
1	Match head	11 % Fleahoppers
2	Match head	15 % Fleahoppers
3	Match head	14 % Fleahoppers

MOTH TRAPS:

Week of	Bollworm			
	Altus	Hollis	Manchester	Tipton
June 10	4	3	NA	3
June 17	9	6	NA	11
June 24	16	21	5	24
July 1	24	31	37	32
	Budworm			
	Altus	Hollis	Manchester	Tipton
June 10	0	0	NA	0
June 17	0	2	NA	1
June 24	2	1	0	10
July 1	6	4	0	9
	Beet Armyworm			
	Altus	Hollis	Manchester	Tipton
June 10	1	0	NA	0
June 17	0	0	NA	3
June 24	1	2	11	3
July 1	6	4	0	15

GROWING DEGREE DAY:

A Growing Degree Day (GDD) is defined as 24 hours of time in which the temperature is one degree above the lower temperature threshold (60°F - 100°F). By using this range and the high and low temperatures for each day of the growing season, the amount of heat available to the cotton, measured in day degrees, can be calculated. The heat unit data is collected from *Mesonet weather network weekly*.

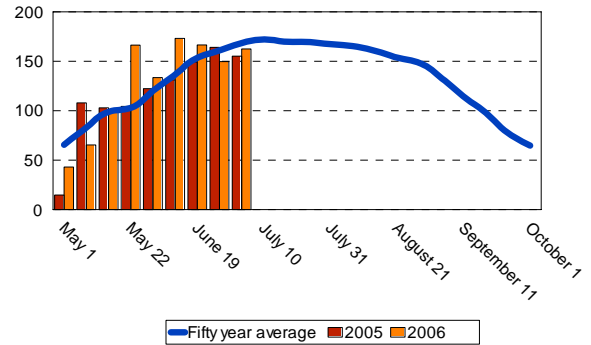
Cotton Growth Timetable

<u>Stage of Growth</u>	<u>GDD</u>	<u>Days</u>
Emergence	50 - 60	3 - 4
Pinhead Square	425 - 500	25 - 45
First Bloom	725 - 825	41 - 67
Open Boll	1575 - 1925	102 - 127
Defoliation	2150 - 2300	120 - 140

Altus

Growing Degree Days (GDD)

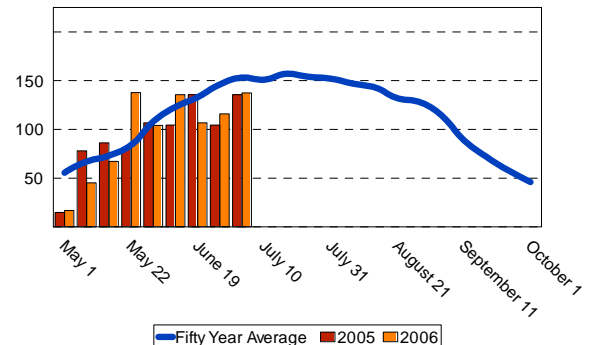
Week of	50 year	2005	2006
May 1	65.5	14.7	43.1
May 8	82.9	107.9	65.3
May 15	98.6	102.9	99.7
May 22	102.9	104.4	166.3
May 29	120.2	122.3	133.4
June 5	136.4	131.2	173.1
June 12	153.4	149.3	166.4
June 19	160.7	164.1	149.7
June 26	168.4	155.4	145.67
Total	1,089.0	1,052.2	1,142.67



Blackwell

Growing Degree Days (GDD)

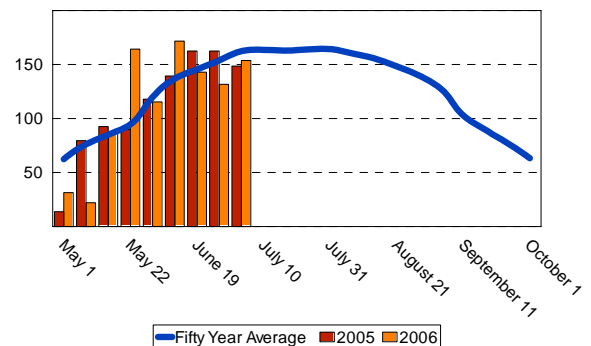
Week of	50 year	2005	2006
May 1	55.6	14.9	16.8
May 8	67.5	78.0	45.2
May 15	73.2	86.2	67.1
May 22	84.3	81.2	137.8
May 29	108.4	106.8	104.1
June 5	123.7	104.5	135.6
June 12	133.4	135.7	106.7
June 19	146.4	104.5	115.9
June 26	153.7	135.7	137.4
Total	946.2	847.5	866.6



Hobart

Growing Degree Days (GDD)

Week of	50 year	2005	2006
May 1	62.3	13.8	31.4
May 8	76.2	79.6	22.4
May 15	84.9	92.6	86.2
May 22	94.7	89.9	164.2
May 29	119.8	117.9	115.3
June 5	136.9	139.4	171.7
June 12	145.6	162.5	142.9
June 19	153.6	162.5	131.6
June 26	162.3	148.6	153.7
Total	1,036.3	1,006.8	1,019.4



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