



Current Crop and Insect Situation:

Cooler temperatures and rain have increased cotton potential this year. Most irrigated cotton is now fruiting which means blooms will not be far away. For foliar fertilizer application or growth regulators please contact:

J.C Banks 580-482-2120 or
Shane Osborne 580-482-2633

Beneficial Insects

LACEWINGS:

Green Lacewing Adult



Lacewings are a widely known beneficial insect. There are several species of green lacewings commonly found in cotton. The brown lacewing is also present, but normally not as common as green lacewings.

The adult stage is a pale green insect with large, clear, highly veined wings that are held over the body when at rest. Adult green lacewings primarily feed on nectar and other fluids, but some species also consume a few small insects.

Green lacewings lay a distinctive stalked egg. Lacewing larvae emerge in three to seven days. These larvae, sometimes called aphid lions, are voracious predators capable of feeding on insect eggs, small caterpillars, and beetles as well as aphids and other insects. Lacewing larvae are alligator-shaped, light brown with long sickle-shaped mandibles projecting from the head. These mandibles act like straws to suck up its prey's internal juices.

Brown Lacewing Adult



Brown lacewing adults are smaller, brown and hairy. Unlike the green lacewing the brown lacewing does not lay eggs on stalks rather eggs are laid on the undersides of leaves. Larvae are reddish brown with two to four white spots in the middle of their body. Unlike the green lacewing larvae,

brown lacewing larvae have a characteristic side to side head-wagging behavior.

Adults lay several hundred eggs. Eggs hatch 3 to 7 days. Larvae feed for 2 weeks then pupate and adults emerge in about 2 weeks. Several generations occur during the growing season.

Green Lacewing Egg



Green Lacewing Larvae



NABID OR DAMSEL BUG:

Also known as nabids, damsel bugs are slender, winged insects, brownish in color and 3/8-inch to 1/2-inch long. Long thin legs and



antennae are characteristic, as is a pronounced beak for feeding and enlarged front legs for grasping prey. They pack a mean and painful bite that will get your attention. In cotton fields, adults and nymphs feed on many soft-bodied insects, including aphids, spider mites, leafhoppers, insect eggs and small caterpillars. Nymphs resemble adults, except they are smaller and have no wings. Damsel bugs overwinter as adults in protected places and appear in the field in April. Adults begin laying eggs soon after emergence. Eggs are deposited in soft plant tissues. Eggs hatch into nymphs, which feed on small insects or eggs. There are numerous, overlapping generations during the season.

**FIELD SURVEY
JUNE 27, 2006**

Irrigated		
Jackson County		
	Plant Stage	Pest
1	Match head	2 % Fleahoppers
2	Match head	1 % Fleahoppers
3	Match head	1 % Fleahoppers
Harmon County		
1	Match head	1 % Fleahoppers
2	Match head	1 % Fleahoppers
3	Match head	1 % Fleahoppers
Dryland		
Tillman County		
1	Match head	1 % Fleahoppers
2	Match head	1 % Fleahoppers
3	Pinhead	4 % Fleahoppers
Greer County		
1	Pinhead	1 % Fleahoppers
2	Pinhead	4 % Fleahoppers
3	Pinhead	1 % 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	NA	24
	Budworm			
	Altus	Hollis	Manchester	Tipton
June 10	0	0	NA	0
June 17	0	2	NA	1
June 17	2	1	NA	10
	Beet Armyworm			
	Altus	Hollis	Manchester	Tipton
June 10	1	0	NA	0
June 17	0	0	NA	3
June 24	1	2	NA	3

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*.

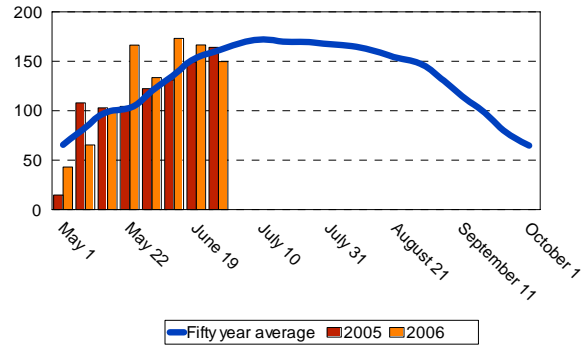
Cotton Growth Timetable

Stage of Growth	GDD	Days
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)

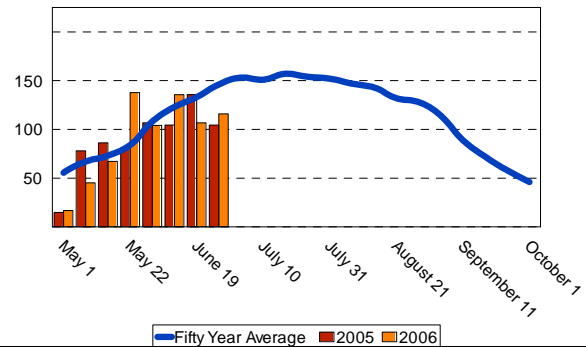
Week of	50 year	2005	2006
May 1	65.5	14.7	43.1
May 8	82.9	107.9	65.3
May 15	98.6	102.9	99.7
May 22	102.9	104.4	166.3
May 29	120.2	122.3	133.4
June 5	136.4	131.2	173.1
June 12	153.4	149.3	166.4
June 19	160.7	164.1	149.7
Total	920.6	896.8	997.0



Blackwell

Growing Degree Days (GDD)

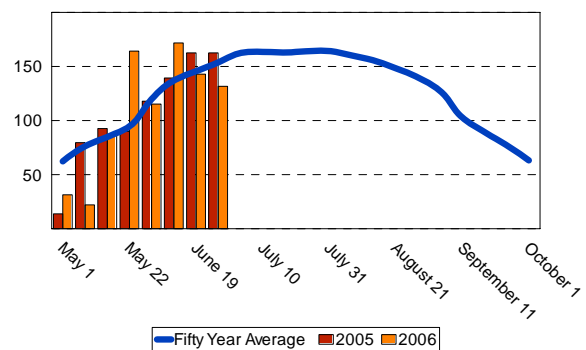
Week of	50 year	2005	2006
May 1	55.6	14.9	16.8
May 8	67.5	78.0	45.2
May 15	73.2	86.2	67.1
May 22	84.3	81.2	137.8
May 29	108.4	106.8	104.1
June 5	123.7	104.5	135.6
June 12	133.4	135.7	106.7
June 19	146.4	104.5	115.9
Total	792.5	711.8	729.2



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
Total	874.0	858.2	865.7



FOR FURTHER INFORMATION CONTACT:

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