



Current Crop and Insect Situation:

We are at or past the 1st bloom stage in almost all cotton fields at this time. “At this point fields will no longer be vulnerable to cotton fleahoppers once they begin to bloom”. At this writing we have reached that stage and it’s time to look to mid-season insects.



Pre Bloom



1st Bloom

We are seeing high numbers of bollworm moths but as we all know current cotton varieties contain the Bt gene and it’s not vulnerable to yield limiting worm damage. Now it’s time to start looking at mid-season insects.

Mid-Season Pests

Two pests that occasionally occur in cotton, especially after insecticide treatments, are cotton aphids and spider mites.



Cotton Aphid

Cotton aphids are small, soft-bodied insects commonly referred to as “plant lice”. Aphids occasionally occur on cotton in such high numbers that control measures should be implemented. Build ups are localized and usually occur after cool damp weather or during the season after the use of certain insecticides. The insects are found on the underside of leaves and along the terminal stem, causing misshapen leaves with a downward curl and stunted plants. The insect damages cotton directly by sucking juices from the plant and indirectly by secreting honeydew. The honeydew is sticky and can lower the grade of lint. A sooty mold can grow on the honeydew further damaging the lint.

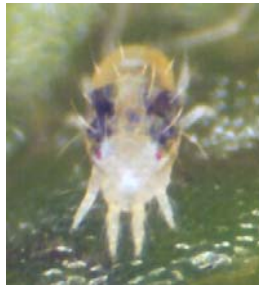


Cotton Aphid Damage

Cotton Aphids can be controlled with chemical applications, but the number of beneficial insects should be taken into consideration before using a spray. It is often best to determine the aphid population level and also count the number and type of beneficials. The following week similar counts should be made. If the aphids are not increasing in numbers then allow the beneficials to do their job. If the aphids are increasing 2-5 times the last count then a chemical application should be applied. If you used a seed treatment insecticide

do not apply the same class of chemistry (such as Centric, Provado and Trimax). Use of the same class of chemistry can result in poor control and additional spray applications. In addition, use the highest rate suggested to obtain good control and avoid the use of pyrethroids as they can cause aphid outbreaks by removing of beneficials.

Spider mites can be distinguished from insects by their having eight legs rather than six.



Spider mite adult

Spider mites often attack cotton when insecticides have destroyed the beneficial insects. Infestations are generally aided by hot, dry weather. In most cases, infestations will be localized in a field. Spider mites damage cotton by feeding on the plant juices. Foliage will turn a reddish or yellowish color under a heavy infestation. Mites are small in size and are generally found on the underside of the leaves. A close inspection is necessary to determine if mites are present.

Chemical control should only be used after determining there is a population increase that is not being held by the beneficial insect population. Products that are registered for spider mites in cotton include: Bidrin, Capture, Comite, Cygon (Dimethoate), Curacron, Kelthane, Zepher and Oberon. Oberon has been recently approved for mites on cotton and reports indicate it has been effective.

Consult your county agricultural educator on products and their use. In addition, always read and follow the directions on the product label.



Spider mites, eggs, larvae and webbing

MOTH TRAPS:

Week of	Bollworm			
	Altus	Hollis	Manchester	Tipton
June 5	3	17	NA	7
June 12	2	3	NA	5
June 19	0	TD	NA	3
June 26	-	-	2	-
July 3	-	-	7	-
July 10	0	70	2	256
July 15	0	34	0	45
	Budworm			
	Altus	Hollis	Manchester	Tipton
June 5	0	0	NA	2
June 12	0	0	NA	0
June 19	0	0	NA	0
June 26	-	-	0	-
July 3	-	-	1	-
July 10	0	3	0	0
July 15	0	0	0	0
	Beet Armyworm			
	Altus	Hollis	Manchester	Tipton
June 5	0	0	NA	0
June 12	0	0	NA	0
June 19	0	0	NA	0
June 26	-	-	2	-
July 3	-	-	0	-
July 10	-	-	0	-
July 15	-	-	0	-

TD – Trap down 70 mph

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

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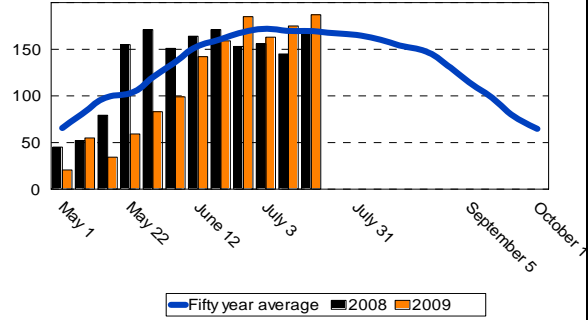
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GROWING DEGREE DAY:

Altus

Growing Degree Days (GDD)

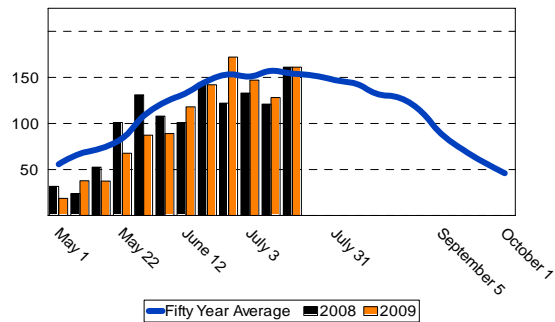
Week of	50 year	2008	2009
May 1	65	45	28
May 8	82	52	68
May 15	98	79	48
May 22	102	155	85
May 29	120	171	100
June 5	134	151	99
June 12	153	164	142
June 19	161	171	159
June 26	168	153	185
July 3	172	156	163
July 10	170	145	175
July 17	170	169	187
Total	1595	1611	1439



Blackwell

Growing Degree Days (GDD)

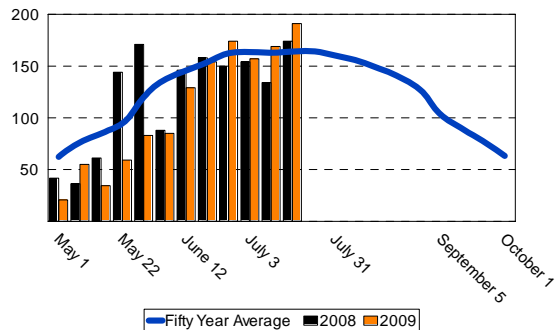
Week of	50 year	2008	2009
May 1	55	31	19
May 8	67	23	38
May 15	73	52	38
May 22	84	101	68
May 29	109	131	87
June 5	123	108	89
June 12	133	101	118
June 19	146	144	142
June 26	153	122	172
July 3	151	133	147
July 10	157	121	128
July 17	154	161	161
Total	1405	1228	1207



Hobart

Growing Degree Days (GDD)

Week of	50 year	2008	2009
May 1	62	41	21
May 8	76	36	55
May 15	84	61	34
May 22	94	144	59
May 29	120	171	83
June 5	137	88	85
June 12	146	146	129
June 19	154	158	154
June 26	162	150	174
July 3	164	154	157
July 10	163	134	169
July 17	164	174	191
Total	1526	1457	1311



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