



Current Fleahopper Situation on Oklahoma Cotton

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CROP CONDITION: We are currently at the 4 to 8 leaf stage on cotton. May plantings will be in the process of forming pin-head squares next week. The bulk of cotton acres are at this stage in southern Oklahoma. If you normally make your fleahopper insecticide application at the pin-head growth stage, next week or the following weeks could be the time.

FLEAHOPPER CONTROL: Fleahoppers are the last of the early season pests (figure 1). The cotton fleahopper has become the number one pest in Oklahoma.



Figure 1 - Cotton Fleahopper Adult

Fleahoppers should be controlled when thresholds are exceeded to protect beneficial insects since these will help control later occurring pests.

Populations are very high on volunteer cotton and these fleahoppers will move to planted cotton. Check your fields and control these early populations. Spray decisions should be based on the squaring rate and level of cotton fleahopper infestations. Usually when cotton fleahoppers (adults and nymphs) reach or exceed 40 per 100 terminals, squaring rates begin to decline, justifying treatment. However, if cotton fleahopper numbers build slowly, fields can tolerate higher numbers of cotton fleahoppers before a reduction in squaring rate will occur. In most cases, fields will no longer be vulnerable to cotton fleahoppers once they begin to bloom. After July 25th, the control of cotton fleahoppers generally is not economical due to Oklahoma's short growing season.

CHEMICALS FOR CONTROL: Chemicals that are approved for use to control the cotton fleahopper include: Bidrin, Dimethioate (Cygon), Centric, Intruder, Orthene, Steward, Thiodan, Trimax, and Vydate. **Please note:** The Bidrin 8 label changed this past year. New requirements have been added to the label. The new requirements are that Bidrin 8 can be used up to 0.2 lb of active or 3.2 fluid ounces of product before first bloom. From first bloom until 30 days before harvest, no more than 16 fl oz per acre can be applied during the growth period. Consult your local OSU County Age Educator in specific chemicals. Always consult the label for details, restrictions and limitations.

MOTH SURVEY AND TRAP CATCHES

Moth trap catches are reported to provide an early warning of moth egg lay and resulting worm feeding on plants. Currently transgenic cotton has been safe from worm damage but it is important to monitor your fields to confirm continual worm control. Moth trap catches for the week of June 12th-19th are shown as follows:

MOTH TRAP CATCHES:

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
	Budworm			
	Altus	Hollis	Manchester	Tipton
June 5	0	0	NA	2
June 12	0	0	NA	0
June 19	0	0	NA	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

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

A GROWING DEGREE DAY (GDD)

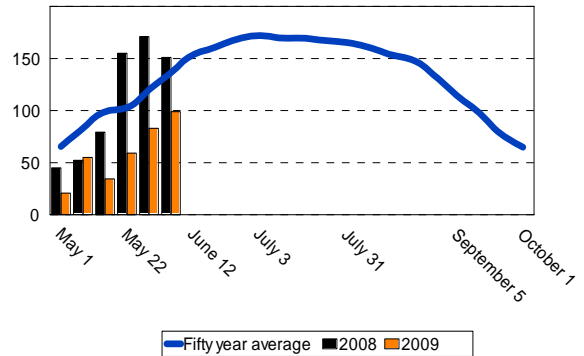
is defined as 24 hours of time in which the temperature is one degree above the lower temperature threshold (60°F - 100°F). By using this range and the high and low temperatures for each day of the growing season, the amount of heat available to the cotton, measured in day degrees, can be calculated. The heat unit data is collected from *Mesonet weather network weekly*. We have posted the current GDD value compared to the historical average at the end of this report. The GDD for Altus, Blackwell and Hobart will be updated weekly through the growing season.

GROWING DEGREE DAY:

Altus

Growing Degree Days (GDD)

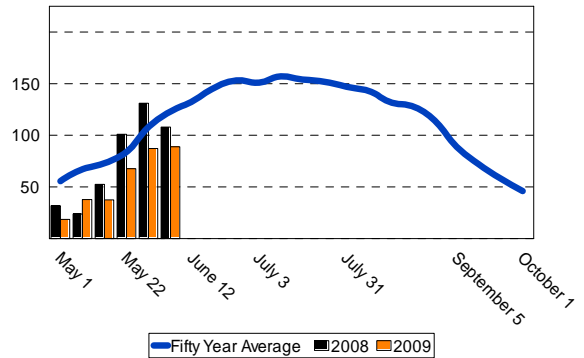
Week of	50 year	2008	2009
May 1	65	45	28
May 8	82	52	68
May 15	98	79	48
May 22	102	155	85
May 29	120	171	100
June 5	134	151	99
Total	467	653	428



Blackwell

Growing Degree Days (GDD)

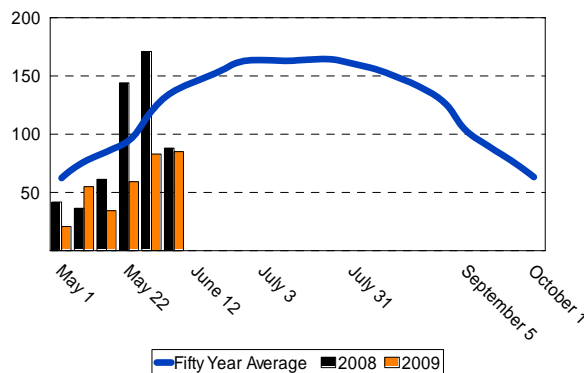
Week of	50 year	2008	2009
May 1	55	31	19
May 8	67	23	38
May 15	73	52	38
May 22	84	101	68
May 29	109	131	87
June 5	123	108	89
Total	388	446	339



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
Total	436	541	337



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