



## Current Crop and Insect Situation:

As more seasonable temperatures return this year's crop should respond and growth should increase. Although the calendar says the first week of June most of the fields look like the middle May. The growth stage should be monitored very closely as pinhead applications for Fleahoppers should start soon on early planted cotton.

**The following is an excerpt from "Talking Cotton" by J.C Banks. J.C.'s weekly update of the Oklahoma cotton season can be found at <http://ntokcotton.org/>.**

The cooler weather that slows cotton growth also favors growth of weeds. We are learning the value of a yellow preemergence herbicide, even when we are in a Roundup Ready program. The wet weather has not allowed timely spraying of Roundup and weeds are growing much faster than the cotton. One of our weed problems that is much worse this year is horseweed (also called mares tail). This weed can be managed when it is small, but when it gets over six inches tall it is difficult to kill. It is really difficult to kill in no-till conditions if it was not controlled prior to planting. The best control programs have involved phenoxy herbicides alone or tank mixed in early to mid April about one month prior to planting.

At planting or soon after planting, a treatment of Roundup will usually control the small weeds before they get large enough to be difficult to control. Continued Roundup treatments in the summer should be as needed to the weeds when they are small. If the weeds, (especially horseweed) are over 6 inches tall, the maximum labeled rate of Roundup should be used. Be sure to condition the spray solution with ammonium sulfate prior to adding the Roundup and set spray boom height and pressure to obtain maximum deposition on the weeds.

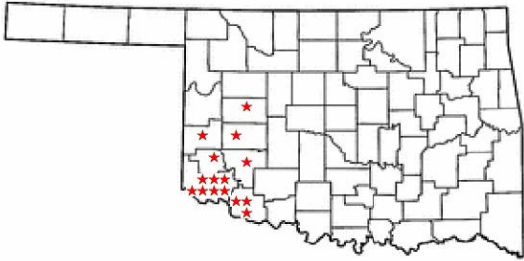
For morningglory control in irrigated areas, Staple has been effective, but application needs to be made after the water furrows are made to avoid moving an untreated layer of soil on top of a band of Staple.

### State of Oklahoma cotton.



Ready to start growing with the return of more typical "Oklahoma Weather".

## OSU Extension Cotton Variety Trial Locations



Established as of June 6, 2007.  
For more information please contact  
your local county office.

## Early Season Pest



Fleahoppers are the last of the early season pests. Since the introduction of Bt cotton and boll weevil eradication the cotton fleahopper has become the number one pest in Oklahoma. The cotton fleahopper usually feeds on young



succulent weeds such as croton, goatweed,

and horsenettle in early spring. These weeds also provide an overwintering site for eggs. As the weeds mature, adults migrate to cotton which is beginning to develop pinhead squares. Fleahoppers insert their sucking mouthparts into the small squares. These damaged squares later turn brown and are shed from the plant.



In addition to squares, the cotton fleahopper will also feed on other parts of the plant. If heavy infestations exist, new growth will be abnormal and whip-like in appearance. All stages of the life cycle will feed on the plant as long as it remains succulent. As cotton matures, these insects migrate to weeds or other host crops. In southwest Oklahoma, the highest population generally occurs in cotton in early August, although it is not generally a problem that late in the season.

The life cycle begins with the female placing her eggs into the plant tissue by means of an ovipositor. The eggs hatch in approximately 1 week, and small nymphs (which are similar to the adults, except for being wingless) undergo five molts before reaching the adult stage. Egg to adult takes approximately 3 weeks with six to eight generations per year. The cotton fleahopper adults are approximately one-eighth inch long, winged, and pale green in color. They are covered with small black spots and have four characteristic black spots near the wing tip. The nymphs are about one-twenty-fifth inch long, wingless, and pale green in color.



Numerous chemicals are registered for control of fleahoppers. Fleahopper should be controlled only when thresholds are exceeded to protect beneficial insects since these will help control later occurring pests. After July 25, the control of cotton fleahoppers generally is not economical due to Oklahoma's short growing season.

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 number 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.

## 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

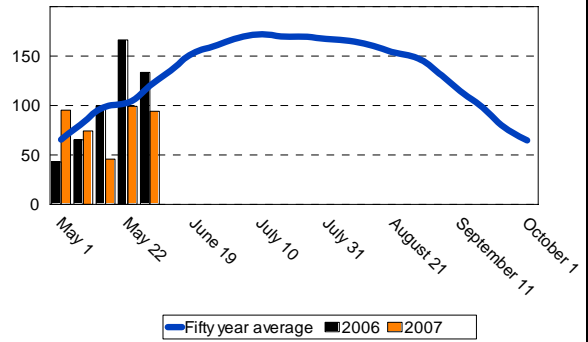
### FOR FURTHER INFORMATION CONTACT:

**Jerry Goodson**  
**Extension Assistant**  
**16721 U.S. Hwy 283**  
**Altus, Oklahoma 73521**  
**Office: 580-482-8880**  
**Mobile: 580-471-8969**  
**E-mail: [jerry.goodson@okstate.edu](mailto:jerry.goodson@okstate.edu)**

## Altus

**Growing Degree Days (GDD)**

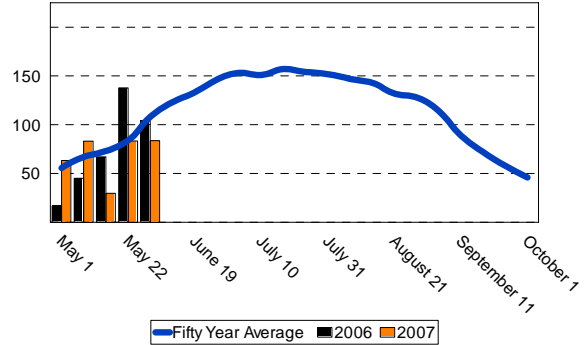
<u>Week of</u>	<u>50 year</u>	<u>2006</u>	<u>2007</u>
May 1	65.5	43.1	95.3
May 8	82.9	65.3	74.2
May 15	98.6	99.7	45.8
May 22	102.9	166.3	99.2
May 29	120.0	133.4	94.2
<b>Total</b>	<b>469.9</b>	<b>507.8</b>	<b>408.7</b>



## Blackwell

**Growing Degree Days (GDD)**

<u>Week of</u>	<u>50 year</u>	<u>2006</u>	<u>2007</u>
May 1	55.6	16.8	63.4
May 8	67.5	45.2	83.1
May 15	73.2	67.1	29.6
May 22	84.6	137.8	83.3
May 29	108.8	104.1	83.6
<b>Total</b>	<b>389.7</b>	<b>371.0</b>	<b>343.0</b>



## Hobart

**Growing Degree Days (GDD)**

<u>Week of</u>	<u>50 year</u>	<u>2006</u>	<u>2007</u>
May 1	62.3	31.4	76.2
May 8	76.2	22.4	65.4
May 15	84.9	86.2	32.3
May 22	94.7	164.2	86.4
May 29	119.8	115.3	76.7
<b>Total</b>	<b>437.9</b>	<b>419.5</b>	<b>337.0</b>

