



Current Crop and Insect Situation:

Excessive heat has once again returned to Oklahoma. Dryland acres that had limited moisture are now past the point of having potential for any more yield. Some irrigated acres are also showing the effect of limited moisture. The old adage of “ONLY SPRAY WHEN YOU HAVE MOISTURE” should be followed now.

Mid Season Pests

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



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.



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



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.



FIELD SURVEY JULY 17, 2006

| Irrigated | | |
|----------------|-------------------|---|
| Jackson County | | |
| | Plant Stage | Pest |
| 1 | 6 NAWF | 1% Bollworm larvae 3 % damaged squares 3 Beet armyworm hits |
| 2 | 6 NAWF | 1% Bollworm larvae 5 % damaged squares 2 Beet armyworm hits |
| 3 | 7 NAWF | 1% Bollworm larvae 2 % damaged squares |
| Harmon County | | |
| 1 | 7 NAWF | 1% Bollworm larvae 3 % damaged squares 1 Beet armyworm hits |
| 2 | 7 NAWF | 1% Bollworm larvae 2 % damaged squares 1 Beet armyworm hits |
| 3 | 7 NAWF | 1% Bollworm larvae 2 % damaged squares |
| Dryland | | |
| Tillman County | | |
| 1 | Terminated | |
| 2 | Terminated | |
| 3 | Terminated | |
| Greer County | | |
| 1 | 6 NAWF | 1% Bollworm larvae 2 % damaged squares |
| 2 | 6 NAWF | 1% Bollworm larvae 2 % damaged squares |
| 3 | 6 NAWF | 1% Bollworm larvae 3 % damaged squares |
| Kiowa County | | |
| 1 | 6 NAWF | 1% Bollworm larvae 1 % damaged squares |
| 2 | 7 NAWF | 1% Bollworm larvae 1 % damaged squares |
| 3 | Pre-bloom | 1% Bollworm larvae 1 % damaged squares |
| Washita County | | |
| 1 | Pre-bloom | 1% Bollworm larvae 1 % damaged squares |
| 2 | 7 NAWF | 1% Bollworm larvae 1 % damaged squares |
| 3 | Pre-bloom | 1% Bollworm larvae 1 % damaged squares |

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 |
| July 8 | 75 | 89 | 10 | 56 |
| July 15 | 31 | 54 | 2 | 41 |
| | 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 |
| July 8 | 9 | 16 | 0 | 25 |
| July 15 | 15 | 11 | 0 | 19 |
| | 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 |
| July 8 | 12 | 6 | 0 | 21 |
| July 15 | 16 | 15 | 4 | 19 |

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*.

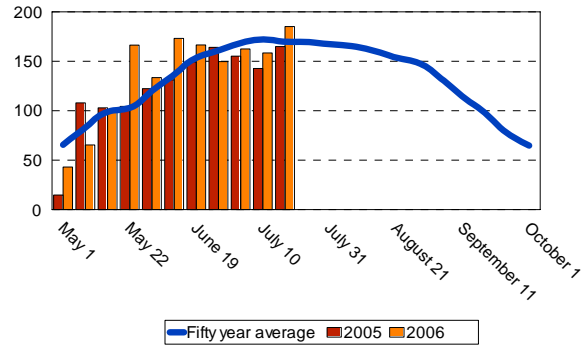
Cotton Growth Timetable

| <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)

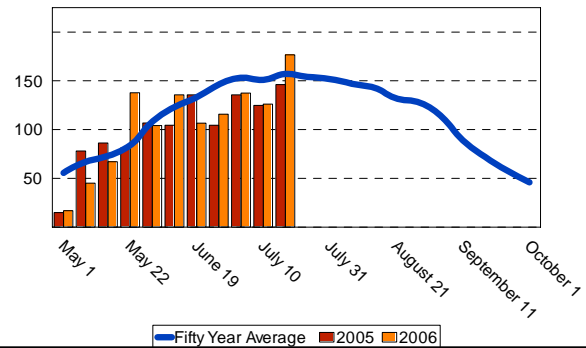
| Week of | 50 year | 2005 | 2006 |
|--------------|----------------|----------------|----------------|
| May 1 | 65.5 | 14.7 | 43.1 |
| May 8 | 82.9 | 107.9 | 65.3 |
| May 15 | 98.6 | 102.9 | 99.7 |
| May 22 | 102.9 | 104.4 | 166.3 |
| May 29 | 120.2 | 122.3 | 133.4 |
| June 5 | 136.4 | 131.2 | 173.1 |
| June 12 | 153.4 | 149.3 | 166.4 |
| June 19 | 160.7 | 164.1 | 149.7 |
| June 26 | 168.4 | 155.4 | 145.6 |
| July 3 | 171.9 | 142.7 | 158.4 |
| July 10 | 169.7 | 164.9 | 185.1 |
| Total | 1,430.6 | 1,359.8 | 1,486.1 |



Blackwell

Growing Degree Days (GDD)

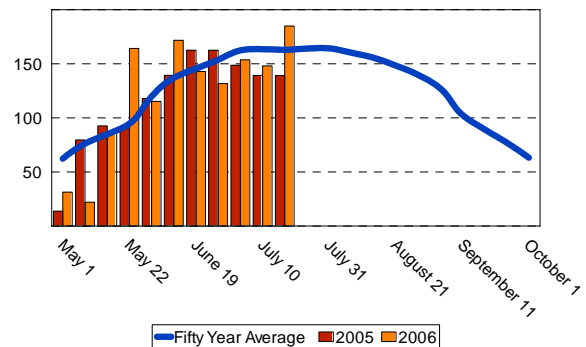
| Week of | 50 year | 2005 | 2006 |
|--------------|----------------|----------------|----------------|
| May 1 | 55.6 | 14.9 | 16.8 |
| May 8 | 67.5 | 78.0 | 45.2 |
| May 15 | 73.2 | 86.2 | 67.1 |
| May 22 | 84.3 | 81.2 | 137.8 |
| May 29 | 108.4 | 106.8 | 104.1 |
| June 5 | 123.7 | 104.5 | 135.6 |
| June 12 | 133.4 | 135.7 | 106.7 |
| June 19 | 146.4 | 104.5 | 115.9 |
| June 26 | 153.7 | 135.7 | 137.4 |
| July 3 | 151.3 | 124.9 | 126.1 |
| July 10 | 157.3 | 146.2 | 176.7 |
| Total | 1,254.8 | 1,118.6 | 1,169.4 |



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 |
| June 26 | 162.3 | 148.6 | 153.7 |
| July 3 | 163.5 | 139.2 | 148.6 |
| July 10 | 162.9 | 141.3 | 184.9 |
| Total | 1,525.0 | 1,435.9 | 1,506.6 |



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: jrg@osu.altus.ok.us