
Gaines County Cotton/Peanut News

September 26, 2006
Vol. I No. 7

Clyde R. Crumley EA-IPM
101 S. Main Rm. B-8
Gaines County Courthouse
Seminole, TX 79360

crcrumley@ag.tamu.edu
Phone: 432-758-8193
Fax: 432-758-4031

Connie Lambert - Secretary

clambert@ag.tamu.edu

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General Situation

This will conclude the 2006 IPM newsletters, but do not hesitate to call if you have questions.

The 2006 crop is finishing at a steady pace with high temperatures in the 80's and a dry forecast for the upcoming week. The majority of the cotton has open bolls and is finishing out rapidly. Timing of harvest aid applications is next in line for the

cotton crop and information from Dr. Randy Boman is provided below.

Factors that increase the performance of harvest aid chemicals include:

- Warm, calm, sunny weather
- Soil moisture relatively low but sufficient to maintain cotton plant in active growth without moisture stress
- Soil N levels relatively low
- Leaves active and uniformly expanded on plants

-Little or no secondary growth evident on plants
 -Plants with a high percentage of open bolls that have reached “cutout” and shed some mature leaves
Factors that negatively affect harvest-aid chemicals include:

- Applications made under cool (below 60°F), cloudy
- Prolonged periods of wet weather following treatment
- Plants in vegetative growth state with low fruit set
- Plants severely moisture stressed with tough, leathery leaves at time of treatment
- High soil moisture and N levels which contribute to rank, dense foliage and delayed maturity
- Improper calibration of application rates and poor spray coverage

A few area peanut fields have been dug and reports of below average yields have been reported. Whereas, the majority of the fields in Gaines County will be dug, depending on the weather, within the next week or so. Diseases are still being picked up in program fields but at this point Post Harvest Interval’s (PHI) may limit the application of fungicides depending on what you’re after. Be sure to read labels and follow all directions and harvest intervals.

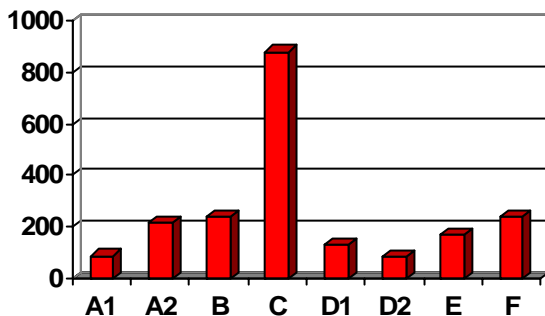
What’s Happening in the Cotton

Pink Bollworms (PBW):

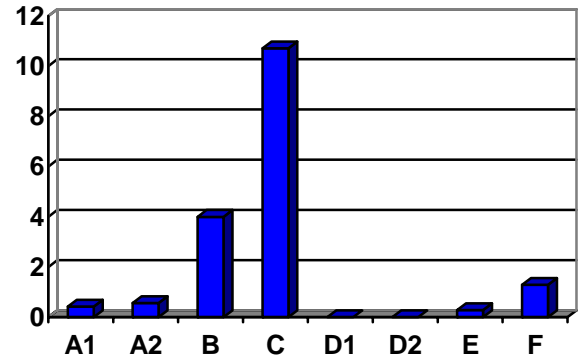
Numbers are from traps set on April 25 and have been run weekly since. Locations of the traps are as follows in each section of Gaines County.

A: NW	B: N	C: NE
D: SW	E: S	F: SE

The graph below depicts the total number of PBW moths caught in each trap to date in Gaines County since trapping began.



The graph below depicts the number of PBW moths caught per night in each trap for the week of September 18th. **Please note that in northeastern Gaines County, just south of the Loop community, numbers continue to be high!**



Using a heat unit model we are able to predict when we should see initial emergence after overwintering, as well as when we will reach peak emergence and when we should see new generations. The heat unit model is based on temperature readings beginning on January 1st.

Pink Bollworm Development Based on Heat Unit Accumulation

PBW	Avg. HU Accumulation
Emergence	500
50% Emergence	1180
95% Emergence	1950
Complete Over Winter Emergence	2200
2 nd Generation (1 st infield)	1930
3 rd Generation (2 nd infield)	2680
4 th Generation (3 rd infield)	3430

Second (and subsequent) generations may be called “peak moth flights” referring to their captures in pheromone traps. Peak moth flights are usually seen over a 2-3 day period, with significantly higher numbers showing up in the traps at those times, they may even overwhelm the traps.

We reached 500 HU (emergence) in Gaines County on May 7th, 1180 (50% emergence) on June 15th, 1930 (2nd generation) on July 21st, 1950 (95% emergence) on July 22nd, and have currently accumulated 3002 HU as of September 21st. ***(Please note that these HU figures are being gathered since the beginning of the year, whereas the total HU since May 1st is 2578).*** In cotton fields that are blooming you need to be checking for rosetted blooms. This will not tell you if a treatment is

What We are Seeing in Peanut

necessary but will let you know you have activity and need to cut bolls as they mature. **The economic threshold for PBW is 10-15% infested bolls.** The only sure way to find out what level of infestation you have is by cutting bolls and looking for **PBW** entries and larvae. To sample for **PBW** you need to collect and examine 40 to 50 small bolls per field. Bolls about the size of a quarter should be pulled from the plant and carefully cut and examined for this pest. Newly infested bolls have a small clear bump or wart on the inside of the bur wall at the site where the larva entered the boll. The developing lint surrounding the wart is depressed or sunken in to accommodate the wart. The tiny, threadlike white worm can be found in the depressed area. The black head and movement of the larvae will make them easier to spot. Sampling bolls this size indicates the current status of the infestations. **DO NOT CONTINUE TO USE TRAP NUMBERS TO MAKE MANAGEMENT DECISIONS.**

While on balance PBW has not been a serious pest this season I can assure you it will be back next season. This late season increase in activity this year was not a one year phenomenon so plan accordingly starting with harvest this year. Bolls do not become safe from damage due to this pest until they reach **650** heat units (this is a fairly mature boll). **Bollgard cotton is 99% effective against this destructive little pest.**

Management Strategies

- >Terminate cotton as early as possible to reduce hostable material
- >Eliminate overwintering sites by destroying green bolls
- >After harvest plow cotton to a depth of at least 6 inches
- >Bollgard and Bollgard II cotton are 99% effective against pink bollworm infestations. I would highly encourage producers to make use of this available resource.
- >For more information contact my office.

Cotton Bollworm:

Populations in all program fields remain below economic threshold. After a boll has gained 450 heat units it is relatively safe from worm damage. It is also very difficult for a worm population to become established in cotton that has only larger bolls present.

Spider Mites are continuing to be found in Gaines County at low levels in a few fields. It appears that two separate, yet similar species are infesting these fields, the two-spotted mite and the carmine mite, both of which are essentially the same biology.

Often a good irrigation or heavy rain can reduce mite populations however, eggs usually go unaffected and at least some mites are sheltered by upper canopy leaves. Chemical control should be considered only when defoliation is taking place or appreciable populations are present. **Coverage when using chemicals for control of spider mites is essential. It has been my experience that Comite will do a good job by ground with high water gallonage, however by air, failures could be expected.** Now a relatively new product, Danitol was labeled for spider mite control on peanut in Texas several years ago, which also appeared to do a good job by ground when used at the higher rates.

Southern Corn Rootworms (SCR) are continuing to be found in a handful of peanut fields in the area. So far, this has occurred in a low percentage of fields and by no means have we found or have we had reports of widespread infestations, however area growers need to scout their fields carefully for **SCR** now. If you would like more information regarding **SCR** in peanuts, please contact my office.

Early Leafspot, Web blotch and **Pepper Spot** are continuing increasing steadily in numerous peanut fields locally. Area growers that have been on a regular fungicide schedule are not experiencing serious problems however, in lieu of a continuing rainy weather pattern and the combination of foliar and soil borne diseases such as *Rhizoctonia* or *Pythium*, **I would strongly encourage all area peanut growers to stay on a fungicide schedule in accordance with the label regarding harvest restrictions until the crop is finished this year. Also, if your crop is thoroughly infected with these diseases, no amount of fungicides will help. So, please remember that fungicides are preventative and not curative in their mode of action.**

Leafspot



Sclerotinia Blight is continuing to be seen in peanut fields in Gaines County over the past several weeks. You need to be aware of its potential as a serious plant pathogen and the devastation it can cause. If you are aware of this problem in one of your fields, you need to hinder its ability to move into your other fields. This can be accomplished by good sanitation practices. If you enter or use a tool (shovel, your shoes, implements) in one of these fields, clean them before moving on. This should be done by using a high pressure washer or other means that can remove all dirt particles from the possibly contaminated object. Research in the past year has shown that a **Bleach solution does not** do a satisfactory job of sanitizing equipment. So far, Omega 500F and Endura have held up well in keeping this disease in check when used at the proper labeled rates and application(s). Also, please remember the PHI's when using these products; Omega 500F has a 30 day PHI and Endura has a 14 day PHI.

Additionally, we are also seeing noticeable amounts of Botrytis blight in a number of fields locally. Dr. Jason Woodward, D-2 Plant Pathologist, did an excellent job of discussing this disease in the September 4th issue of Focus on Entomology. The following quote was taken from this issue: "Sclerotinia blight (*Sclerotinia minor*) and Botrytis blight (*Botrytis cinerea*) typically occur during the later part of the growing season when cooler temperatures (65-77 °F) and high relative humidity are present. Both *S. minor* and *B. cinerea* are capable of infecting vines, stems as well as pods. To further complicate issues, the two diseases exhibit similar symptoms and can be easily confused in the field. Infected stems or limbs initially appear wilted, and may have a bleached or shredded appearance. Specialized structures (sclerotia) are produced by both *S. minor* and *B. cinerea* as infected tissues are consumed. Differences in the color of the fungal growth (mycelia) can occasionally be used to distinguish the two. Under optimum environmental

conditions, *B. cinerea* may also produce numerous seed-like spores, which can become airborne. Botrytis blight is not typically considered a major peanut disease; however, it has been identified in fields in the region. There is little information available regarding Botrytis blight development, distribution, and/or control in West Texas.

Cultivar selection can directly or indirectly influence disease development. Cultivars with moderate levels of Sclerotinia blight resistance such as Tamrun OL 01 and Tamrun OL 02 are currently available, and material with improved resistance is being evaluated. The upright growth habit in certain market types (primarily Spanish) allow air movement in the lower canopy, resulting in a less conducive environment for the disease."

[Upcoming Events & Announcements](#)

Area Field/Crops Tours

> Crosby County Crop Tour-Sept 29th

Industry Field Days

> Americot-Sept 28th

[Acknowledgements](#)

Funding for the IPM program is provided by donations from local agribusinesses. Money goes towards postage, travel, and wages for scouts. We are still in need of funding so if you know someone you think would be interested in donating please contact them or call our office. The IPM staff would like to thank these businesses that donated to the program and encourage producers to support their business as they have supported the producers.

AG Aero

Ag Texas Farm Credit Service

Birdsong Peanut

Bobby King Jr. Pump Service

Carter and Company Irrigation

First United Bank

Helena Chemical

McKinzie Insurance

Moore-Haralson Agency

Nolen Ag

Peters Irrigation

Pioneer Gin

**Stateline Gin
Valley Irrigation and Pump Service
West Texas Center Pivots
West Texas National Bank
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