



## Gaines County IPM Newsletter

Volume VI, No. 6

### General Situation

Weather patterns have started to take a turn for the better in portions of Gaines County. Fields that have received a couple of good rainfall events, that didn't include hail, during the last month are showing signs of improved crop growth and development. However, the rainfall has not been consistent throughout the county and some producers have commented that *"this year is worse than 2011 because they have not received any significant rainfall."*

There is a lot of variation in cotton stages, development, and damage. The most advanced fields are starting to bloom, while fields on the other extreme are sitting at 4-6 true leaves. These late maturing fields are still struggling against the elements, and they will likely only have a very small window to set bolls in August.

Continue scouting cotton for square damaging insects, such as bollworms and fleahoppers.

Peanut plants are starting to peg and form small pods. Overall, the peanut crop seems to be on track for a good crop.



### Weeds & Results from a Herbicide Trial

Weeds continue to plague several of our fields. Hoing crews have already started working the fields trying to take out the weeds that were not controlled by herbicides.



The abundance of weeds reinforces the value of preplant & at-planting residual herbicides. The herbicide trials conducted this year in Gaines County have proven that

weed control can be obtain. Starting cleaning and staying weed free is key, and this can be obtain with properly timed and incorporated residual herbicides.

Below are pictures from one of the 2013 Herbicide Trials that Rand Merchant, *Texas A&M AgriLife Extension Service Weed Management Research Assistant*, has applied in Gaines County.



This picture captures the amount of weed pressure present in 2012 in this particular field.

The next set of pictures are from the herbicide trial conducted in the same field in 2013.

The first two pictures show the effectiveness of a pre-plant incorporated residual herbicide **plus** an at-planting residual herbicide (*plot 303*).



*Pictures taken on June 27, 2013*

Compared to a pre-plant incorporated residual herbicide alone (*plot 301*).



*Pictures taken on June 27, 2013*

The recent rainfall (which we are all very thankful for) will bring about more headaches and frustration for producers who did not have residual herbicides in place.

**Root-knot Nematode Management and Results from a Nematode Trial**

Southern Root-knot Nematodes are beginning to show their presence in some of our cotton fields. At this point there are not a lot of options to control nematodes in the 2013 crop. However, it is very important to note which fields have nematodes. This will help you in selecting cotton varieties for your 2014 crop. Selecting varieties which are tolerant/resistant to root-knot nematodes remain key to nematode management.

This year we are working with Dr. Terry Wheeler, Texas A&M AgriLife Research Plant Pathologist, to evaluate which varieties and chemical treatments are most effective in root-knot nematode management in Gaines County. On June 28, 2013 we collected roots from each of the research plots, and Dr. Wheelers counted the number of nematode galls on the roots. Below are the results.



**Table 1. Average Number of Galls per root for four different varieties.**

Variety	Galls per root
FM 9160B2F	38a
ST 5458B2F	26b
FM 2011GT	18bc
ST 4946GLB2	10c

*Numbers with the same letter are not significantly different.*

The results from this trial show that there are clear varietal differences when it comes to root-knot nematode management. ST 4946GLB2 had significantly fewer root-knot nematode galls on its roots compared to the FM 9160B2F and ST 5458B2F.

**Table 2. Average Number of Galls per Root for Five Different Chemical Treatments.**

Chemical Treatment	Galls per root
No Treatment	32a
Cruiser	30a
Avicta	32a
Cruiser + Vydate	25a
Avicta + Vydate	32a
Temik 15G	3b

*Numbers with the same letter are not significantly different.*

Additionally, in this trial the seed treatments, and seed treatments plus Vydate did not reduce the amount of root-knot nematode galls in comparison to the untreated seed (Table 2). Temik 15G was the only chemical treatment that reduced the number of nematode galls.

**Peanut Leaf Spot**

The intermittent cooler wet conditions are conducive for leaf spot. However, these cooler wet conditions last only a short amount of time, and our overall climate remains hot and dry. Therefore, I would caution producers on pulling the trigger to quickly for leaf spot control.



The small canopy and our overall dry conditions are not favorable for leaf spot development. Additionally, we have **not** picked up any leaf spot in our scouting fields.



Please feel free to contact me if you think that you have found leaf spot. Having the spots correctly identified can save you money, if a fungicide is not justified.

**Creating a Favorable Environment for Peanut Blooming, Pollination, & Pegging**

Peanuts are blooming, setting pegs, and forming small pods. Peg penetration into the soil requires adequate

moisture. Once active pegging and pod formation have begun, it is recommended that the pegging zone be kept moist, even if adequate moisture is present in the soil profile. Failure of pegs to penetrate soil and develop pods can result from low relative humidity and high soil temperatures. Therefore, it is extremely important to supply additional moisture during pegging, even if deeper soil moisture is adequate.

One thing to note, is that higher humidity and moist conditions which create favorable environment for pollination and pegging, also creates a favorable environment for disease development. Therefore, scouting fields on a regular basis will help you to identify the onset of peanut diseases.

### Plant Growth Regulators

A majority of the cotton fields will likely not need a Plant Growth Regulator (PGR) application this year. However, there are a few cotton fields that have above normal pumping capacities and they are starting to show signs of excessive growth (long internodes).

The internode (the portion of stem between the nodes) is very sensitive to environmental and plant conditions, making the length of the internodes a reliable indicator

of plant growth. A long internode indicates favorable conditions and the potential for excessive growth. A short internode shows that the plant was stressed when the internode was developing.

Plant growth regulators (PGR) are used to limit vegetative growth and produce a more compact plant. Since PGRs reduces plant growth, do not apply it if the plants are already under stress.

Determining whether or not a field needs a PGR application is difficult. There are several factors that need to be taken into consideration. First, is there excessive growth present and is this a variety that has high growth potential (visit with your seed company representative to determine which varieties should be watched closely for PGR needs)? Second, applications should begin when 50% of the plants have one or more matchhead squares (see specific product label for more information). Third, it is best to get a handle on excessive growth potential early if conditions favor excessive growth. Fourth, will the conditions for excessive plant growth be present for an extended period of time, or will mother nature apply a natural PGR (high temperatures and no rainfall)? July and August have been known to be pretty brutal on the High Plains.

### Special Thanks to the 2013 Gaines County TPMA Scouting Program Sponsors

Platinum

Carter & Co. Irrigation, Inc.      Oasis Gin, Inc.  
TriCounty Producers Coop

Gold

Nolen Ag Services, Inc.

Silver

Ag AERO      BASF Corporation  
Doyle Fincher Farms      Golden Peanut Company  
Sanders, Inc.

Bronze

Ag Texas Farm Credit Services	Anderson Welding, Pump & Machine Service, Inc.
Baucum Insurance Agency	Birdsong Peanuts
Cheuvront Farms	Commercial State Bank
Pioneer Gin, Inc.	South Plains Implement, Ltd.
Keith & Carol Addison	Lynn & Leca Addison
Ten Hi Gin, Inc.	Valley Irrigation & Pump Service, Inc.
West Gaines Seed, Inc.	West Texas National Bank

Sponsors

L.D. Cope Farms      McKinzie Insurance Agency



Manda Anderson  
101 S. Main Rm 111  
Seminole, TX 79360  
Phone: 432-788-0800  
mganderson@ag.tamu.edu

Gaines County IPM Blog  
<http://agrilife.org/gainesipm/>

Gaines County Website  
<http://gaines.agrilife.org/>

Educational programs conducted by Texas A&M Agrilife Extension serve people of all ages regardless of socioeconomic level, race, color, sex, religion, handicap or national origin. The information given herein is for educational purposes only. References to commercial products or trade names is made with the understanding that no discrimination is intended and no endorsement by Texas A&M Agrilife Extension is implied.