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Texas IPM Partners With Nature

Texas A&M AgriLife Extension

Gaines County IPM Newsletter

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Bollworms in Non-Bt Cotton

We are picking up treatable levels of bollworms in some non-Bt cotton fields. At this point we have not picked up bollworms in varieties with the Bt or Widestrike technologies. However, all fields should be scouted on a weekly basis to determine if pest are present and causing economic damage.

When scouting for bollworms, the entire plant should be searched for bollworms and fall armyworms. A proper sample includes squares, white blooms, pink blooms, bloom tags, and bolls. Scouting intervals should be reduced to 3 to 4 days during periods of increasing bollworm egg laying, especially during peak bloom. Treatment should not be triggered by the presence of eggs alone or the presence of moths.

A range of treatment thresholds is provided since many factors in addition to density of larvae and square damage determine the need to treat non-Bt or Bt cotton with insecticides.

Bollworm Action Threshold Based on a Plant Population of 40,000 to 60,000 Plants Per Acre

Cotton Stage	Worm Size	Non-Bt	Bt
Before Bloom	All	≥30% damaged squares and worms are present	
After boll formation	≤ 1/4 inch	10,000 worms/acre	Do not treat
	>1/4 inch	5,000 worms/acre	5,000 worms/acre with 5-15%

To determine worm populations, divide a 120 acre cotton field into four quarters. Make **whole** plant inspections of at least ten randomly selected cotton plants in each quarter. Count the number of eggs, worms, and key predators, and use the formula below to estimate the number of eggs, worms, or key predators per acre.

Number of Worms per Acre = (Number of worms ÷ Number of plants checked) X (Number of Plants per Acre)

For example: If you inspect 10 plants and found 3 bollworms in a field that has a plant population of 41,000.

Number of Worms per Acre = (3/10) X 41,000

Number of Worms per Acre = 12,300

Please refer to the June 24, 2013 edition of the Gaines County IPM Newsletter for results from insecticide trials conducted in Gaines County. Also, please contact me if you are finding bollworms. We are looking for a location to apply a small plot insecticide trial.

Garden Webworms

During the last couple of years we have found populations of garden webworms feeding on pigweed and cotton. Pigweed seems to be the preferred host, however,

the garden webworms will also feed on cotton. This year, the garden webworms are being found in fields south of Seminole. We have not seen any square loss as a result of garden webworm feeding.

Garden webworms are green, have several black dots along their sides, a light stripe down the back, and a narrow light tan head. In comparison to a beet armyworm, garden webworms are a thinner worm. The webworms mainly feed on leaves. They skeletonize leaves and chew large holes in the leaves. There is extensive webbing associated with the webworm feeding and lots of black frass. Some garden webworms draw leaves together and form a web between the leaves.

Cotton can withstand a lot of defoliation, therefore you probably would want to avoid treating unless you are seeing around 50% defoliation. Please feel free to contact me if you are debating on whether or not to treat garden webworms.

Peanut Disease Update

By Dr. Jason Woodward, Extension Plant Pathologist-State Peanut Specialist

While the rainfall and cooler temperatures discussed in the Current Peanut Situation are greatly welcome, these same conditions are conducive for the development of several peanut diseases. With the continued formation of pegs and development of pods in much of the peanut crop, it is time to consider fungicide options for applications for soilborne diseases. Many producers have been or will be making fungicide applications to protect the crop from the pod rot complex. Two different fungi (*Rhizoctonia solani* and *Pythium* spp.) are capable of inciting pod rot. These fungi may occur alone, but are often found together. Positive disease identification is necessary to ensure maximum economic returns for chemical applications. Subtle differences between symptoms caused by the two can be observed. *Pythium* infections may include blackened decay with a greasy appearance; whereas, *Rhizoctonia* infections may have more of a dry-textured appearance. Laboratory confirmation is often required for a complete diagnosis. Preventative fungicide applications are generally administered 60 to 75 days after planting with subsequent applications made 30 days later; however, early initial applications may result in the need for an additional application late in the season if conducive environmental conditions persist. Several factors must be considered when applying pod rot fungicides:

1.) Pathogen pressure- proper identification of which pod rot pathogen(s) you are dealing with will dictate which fungicide(s) are available for use;

2.) Fungicide selec-tion- there are more fungicides available for management of *Rhizoctonia* compared to *Pythium.* The principle fungicide for pod rot is Abound (24.5 fl oz/A), which has activity on both *Rhizoctonia* and *Pythium*. Other fungicides, such as Artisan and Convoy (both with the same active ingredient, flutolanil) have activity against only *Rhizoctonia*. Other fungicides such as Folicur (as well as other generic formulations of tebuconazole) and Provost are labeled for *Rhizoctonia* pod rot, but are more appropriate for use against the manifestation of limb rot (symptoms also associated with *Rhizoctonia*); however, their labels specify that applications are made in a 4-block regime with rates that are not effective against pod rot. Fungicide options for Pythium other than Abound are limited to various formulations of Ridomil;

3.) Application timing– initial applications should be made 60 to 75 days after planting. Earlier applications may limit the amount of product deposited to the pods; whereas, later applications will be tied up in the plant canopy also affecting the amount of fungicide reaching the pegging zone;

4.) Application method- the activity of these products can be increased substantially when applied via chemigation as the increased carrier volume can be used to penetrate the canopy and foliage. Furthermore, the banding of initial applications are often more cost effective and concentrates the fungicides directly where the taproot crop will develop. Broadcast applications result in fungicide treating bare ground which may be wasteful. Increasing carrier volumes (>20 gallons per acre) will improve deposition into the lower canopy. Administering irrigation soon after fungicide applications will also help to redistribute fungicides deposited on the foliage and increase concentrations delivered to the pegging zone. Application of fungicides at night when the foliage is folded allows for improved deposition and should increase activity. If you have any questions

regarding peanut pod rot call me at 806-632-0762; or jewoodward@ag.tamu.edu.

The cool and rainy conditions experienced recently were ideal for the development of Sclerotinia blight, caused by *Sclerotinia minor*. Initial symptoms of Sclerotinia blight include a yellowing and/or wilting of lateral branches. A closer examination within the plant canopy will reveal a cottony, white, moldy growth; which is most commonly observed early in the morning. As the disease progresses, infected stems have a bleached appearance and become shredded. Small, black, irregu-lar-shaped structures (sclerotia), which serve as over-wintering structures, may be produced on or within infected tissues. Sclerotinia blight is very de-structive and can develop quickly, especially when there is lush growth and a dense canopy. Management of Scle-rotinia blight is achieved through the use of resistant varieties, such as **Tamrun OL07** and **Tamrun OL11** (runners) or **Jupiter** (virginia), and preventative applications of the fungicides **Omega** or **Endura**. Several experimental fungicides are being evaluated for activity against Sclerotinia blight.

Prior to the rain events, several re-ports of leaf spot were made. While these reports have not been confirmed, scouting should be conducted to monitor disease development. Initial symptoms of leaf spot generally occur in the lower canopy and consist of small, chlorotic flecks on the leaf surface. These lesions may be easily confused burns caused by herbicide dam-age. As the disease progresses lesions be-come evident throughout the canopy. The production of microscopic fungal seed, called spores, within lesions (pictured be-low) can be used in the diagnosis of leaf spot. Spores from these lesions are disseminated by wind, rain, or irrigation. Under favorable conditions, leaf spot can develop quickly with new lesions appearing every 10 to 14 days. For more information on peanut diseases or fungicides contact Jason Woodward at 806-632-0762 or jewoodward@tamu.edu.

This information was obtain from the July 2013 edition of Peanut Progress. Below is a list of the other topics included in the Peanut Progress newsletter:

- Current Peanut Situation
  - Acreage Report and Crop Condition
  - Variety Trends and Performance
- Weed Control Update
  - Peanut Herbicides

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Gaines County IPM Blog
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