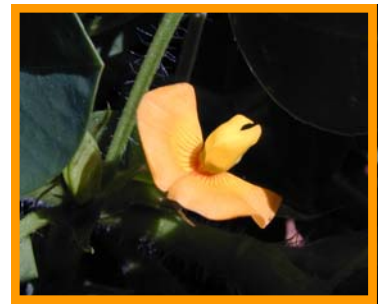


August 3, 2010

Volume 4, Issue 4



PEANUT PROGRESS

PEANUT CROP UPDATE



Todd Baughman
State Extension Peanut Specialist

The peanut crop is in full swing now with the crop setting a heavy pod load. As I have mentioned in previous articles, maintaining irrigation will be the key to successfully fulfilling the yield potential of this crop at this stage of the season. With the increase in daytime highs we are already starting to see the crop exhibit signs of stress (upturned leaves and a silver cast to the field). In addition with the heavy rainfall this year nitrogen stress is showing up in many of our fields. If you are considering applying

additional nitrogen, don't apply more than 30 lbs/A in one application and do not apply any nitrogen too late in the season. High application rates of nitrogen or late applications can lead to increased pod rot and decreased maturity issues. Disease management will continue to be of the utmost importance as we move into the final turn of this growing season. We do not want to let a promising crop be decimated by late season leaf spot or soil born disease problems. Finally, as Manda Cattaneo discusses worm issues in peanut, we again want to make sure to not over react and flare spider mites. Anyone who has dealt with spider mites realizes in most cases that these are a far worse pest to try to control than worms. While the US peanut crop appears to be progressing right on par with past crops some areas are getting hot and dry.

The latest report indicates that the two largest peanut production districts in Georgia are 70% plus short to very short on top-soil moisture. While the VC area did receive rain this past week only 32% of the crop is rated good to excellent. Both areas are experiencing heavy worm pressure with reports of some fields having to be sprayed three times.

As always if you have any additional questions or issues with this year's crop feel free to contact me or one of the other members of the AgriLife Extension Peanut Team. tbaughma@ag.tamu.edu or 940.552.9941 ext. 233.



PEANUT PEGS & PODS

PEANUT DISEASE UPDATE



Jason Woodward,
Extension Peanut Pathologist

What a difference rain can make.

The abundant rainfall we have had the early part of July has aided in the development of several foliar and soilborne diseases in peanut. The most noticeable is Sclerotinia blight, caused by the soilborne fungus *Sclerotinia minor*. While, the distribution of this disease is limited to western portions of Gaines County, Central Texas, the Rolling Plains and a few fields in

South Texas, extensive yield losses may occur if left unmanaged.

The terminals of plants exhibiting symptoms of Sclerotinia blight appear wilted, with bleaching and shredding noticeable on the lower limbs.

The presence of fluffy, fungal growth (mycelia) and small irregular shaped survival structures

PEANUT DISEASE UPDATE – Cont.

(sclerotia) are characteristics of the disease. The use of partially resistant cultivars (such as Tamrun OL07) is beneficial in managing this disease.



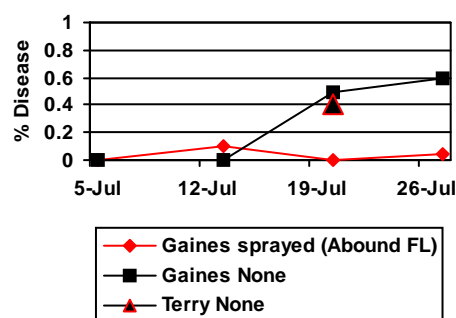
Bleached and shredded stems typical of *Sclerotinia* blight.

Note: presence of black, irregular shaped sclerotia.

Preventative applications of fungicides (such as Omega and Endura) are often needed to maximize yields, especially under highly conducive environmental conditions.

Verticillium wilt, caused by *Verticillium dahliae*, is becoming more and more evident in peanut fields as pods continue to develop. This disease is most prevalent in west Texas; however, several fields exhibiting symptoms were noted in Collingsworth County in 2009. The fungus infects peanut plants early in the season, but initial symptoms are not observed until pod fill. Leaves of infected plants will have a dull-gray appearance, and a marginal necrosis will develop as the disease progresses. A close inspection of the lower stem or petiole will reveal a dark brown to black discoloration of the vascular tissue. Unlike most other fungal diseases of peanut there are no chemical fungicides available to manage Verticillium wilt, likewise, the use of foliar fertilizers will be ineffective at correcting the disease. Close attention should be paid to fields expressing Verticillium wilt, as infections may compromise the integrity of vines, resulting in the need to dig prematurely.

The pod rot complex, caused by several fungi including *Rhizoctonia solani* and *Pythium* spp., is the most widely distributed disease issue in Texas. The first step in the management of pod rot is proper diagnosis. This is often difficult due to the fact that symptoms caused by pod rotting pathogens are similar. While subtle differences may be observed on infected pods, laboratory examinations are often required to properly diagnose the correct causal agent. To further, complicate this issue fields may be infested with both *R. solani* and *Pythium* spp., each of which may show up during different times throughout the growing season. Efforts are currently underway by Dr. Terry Wheeler and Extension IPM Agents Scott Russell and Manda Cattaneo to monitor pod rot development throughout the growing season and to develop a threshold system that can be used in making fungicide decisions as well as application timing.



Progress of peanut pod rot in two fields (Gaines and Terry County).

Note: similarities between the two fields as well as the low level of disease with the Abound treatment. Fungicide applications were made at the Terry County location this week, and comparisons between treated and non-treated areas will be available in future issues.

Recent results from this project indicate that pod rot is developing in a similar fashion in both Gaines and Terry County regardless of planting date, market-type, or pathogen. In all, disease incidence (%) is below 1% in these two fields; however, there is essentially no pod rot in areas of the field receiving fungicides (Abound FL).

We will continue to monitor these fields and evaluate various fungicide programs as the season progresses. This information will be summarized and distributed when available.

Rhizoctonia solani is also capable of infecting peanut limbs that are in contact with the soil. The resulting disease, referred to as limb rot, can be easily diagnosed by the bulls-eye-shaped lesion on the limb.



***Rhizoctonia* limb rot lesion on a lower branch.**
Note: bulls-eye appearance of the lesion.

While all of the fungicides used for *Rhizoctonia* pod rot are active against limb rot, other options may be available if pod rot is not being observed.

We are seeing moderate levels of early leaf spot across the region. Early leaf spot, caused by *Cercospora arachidicola*, is the predominant leaf spot in most fields. Several questions have been made regarding post-infection (i.e. after leaf spot lesions are observed) fungicide options for leaf spot.

Work conducted by Dr. Albert Culbreath at the University of

PEANUT DISEASE UPDATE – Cont.

Georgia, Coastal Plain Experiment Station in Tifton indicates that several fungicide options are available for post-infection situations.



Early leaf spot lesions in lower peanut canopy.

Note: yellow halo around the lesion.

Headline (9.0 fl oz/A) provided adequate control of leaf spot under post-infection conditions; however, use of Headline in such a manner would not be recommended for fields where Abound is being used in pod rot programs.

This is due to the potential for development of fungicide resistance to strobilurin fungicides in the leaf spot pathogen. The addition of Topsin 4.5FL (5.0 fl oz/A) as a tank-mix partner with other fungicides, such as Folicur or other tebuconazole formulations, Tilt/Bravo or other propiconazole/chlorothalonil formulations, or Provost has performed similar to Headline. Despite the activity of Topsin 45FL at 5.0 fl oz as a tank-mix partner, applications of Topsin alone are not recommended due to the potential for insensitive populations. Furthermore, no more than two tank-mixes comprised of Topsin should be used within a season, due to concerns for fungicide resistance development.

Best management options for minimizing the development of leaf spot resistance include alternating chemical classes (i.e. fungicide

groups), utilizing fungicides with multiple modes of action, and properly timing fungicide applications. In addition to early leaf spot, leaf scorch, caused by *Leptosphaerulina crassica*, is common in many peanut fields. While the same fungus is responsible for causing pepper spot which can result in defoliation, the scorch symptom causes only minor damage and does not warrant any fungicide applications. Detailed descriptions of diseases that affect peanut, along with summary tables of fungicides can be obtained in the Texas Peanut Production Guide (<http://peanut.tamu.edu/pdfs/productionguide07.pdf>).

If you have any questions related to peanut diseases or fungicide use feel free to give me a call at **806-632-0762**, or send me an **E-mail at jewoodward@ag.tamu.edu**.

LEPIDOPTERA LARVAE BEING FOUND IN PEANUT



Manda Cattaneo
Extension Agent
IPM Gaines County

Anyone scouting peanuts will not have to look hard to find bollworms and yellow striped armyworms in the foliage. Both of these pests are feeding on the leaves and causing noticeable leaf loss.

Worm counts range from zero to four per foot of row, with several fields



averaging around one bollworm per foot of row. We have not observed any fields that warrant an insecticide treatment. Most of the worms that we found this week were one inch or larger and are fixing to cycle out. This means that we may get another heavy egg lay within the next two weeks.

Peanut plants can tolerate extensive foliage loss before there is a significant yield loss. Spanish and Valencia peanuts can tolerate

approximately 6 to 8 medium to large larvae per foot of row. Runners and Virginias have more foliage area and can tolerate 10 to 12 worms per foot of row. Be sure to scout your fields to determine if an economically damaging population is present.

If chemical control measures become necessary, apply when worms are small. After insecticides are applied be sure to continually monitor the field for secondary pests such as spider mites.



There is a link to a survey that we would like for each of you to fill out.

<http://peanut.tamu.edu>

The Survey asks several questions to help us to recognize and improve on this newsletter for the 2010 season.

Please answer the 18 questions on the survey. At the top of the survey there is an option to reset form and/or print form to be mailed.

When you have completed the form, please click the Submit by Email button at the bottom of the survey or print and mail to us at
P.O. Box 2159, Vernon, TX 76385.

TEXAS PEANUT PROGRAM on the web

<http://peanut.tamu.edu>

TEXAS AGRILIFE EXTENSION
SERVICE

Todd Baughman

P.O. Box 2159

11708 Highway 70 South

Phone: 940-552-9941 X 233

Fax: 940-553-4657

E-mail: tbaughma@ag.tamu.edu

Improving Lives, Improving Texas.



Newsletter sponsored by:



**Texas Peanut
Producers Board**