

SPECIAL
POINTS OF
INTEREST:

- **Peanut Production Update**
- **Peanut Disease Update**



Peanut Production Update

*Todd Baughman –
Extension Peanut
Specialist*

Reports from North Carolina and Georgia indicate that the crop prospects are excellent. Recent rains have aided the peanut crop in the southeast. Digging and harvesting are in the preliminary stages so actual

production predictions may change. As always once combines start running we will have a real



Todd Baughman

feel for the crop. The Texas crop currently looks good as a whole.

Two potential pitfalls are maturity and disease development. There is little we can do about maturity at this stage. However, disease management is still of paramount importance. Take heed of Jason Woodward's suggestions in the following article. We would hate to lose an outstanding crop at this point in the season.

Peanut Disease Update

*Jason Woodward –
Extension Plant
Pathologist*

My phone has been ringing off the hook the past couple of weeks with questions about late-season disease control issues. Most questions have centered around foliar disease control, pod rot, and Sclerotinia blight. I have seen several foliar diseases in peanut fields throughout the southern High Plains. With the cool, wet weather

conditions experienced the last couple of weeks and temperatures expected to be below normal this coming week, there is a potential for an increase in disease; however, several other factors, such as market-type, disease severity, and pre-harvest intervals may impact potential management options. Early and late leaf spot are the most prevalent foliar diseases out there; however, web blotch and pepper spot can be found at lower levels. In general, Spanish, Valencia,

and Virginia peanuts are inherently more susceptible to leaf spot than Runners; whereas, web blotch can be more readily observed on Valencia and Spanish. Pepper spot has been observed on Valencia's planted in fields with a high pH. Many of the symptoms associated with foliar diseases are similar; however, subtle differences can be used to distinguish one disease from another. Early leaf spot can be characterized by light to dark brown lesions that are oftentimes

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Early leaf spot causing defoliation of Spanish peanuts

accompanied by a chlorotic or yellow halo around the lesion. Late leaf spot lesions have a dark brown to black colored lesion. Furthermore, the early leaf spot pathogen

(*Cercospora arachidicola*) produces spores on the upper leaf surface; whereas, the late leaf spot pathogen (*Cercosporidium personatum*) sporulates on the lower leaf surface. Historically, late leaf spot has been more aggressive and more difficult to control. Web blotch lesions can be confused with late leaf spot; however, failure of the lesion to show



Top: Web blotch lesion on upper leaf surface



Bottom: Failure of lesion to show through on lower leaf surface.

through on the lower leaf surface can be used to differentiate the two. Many of the questions regarding foliar disease

issues pertain to defoliation from leaf spot.

Overall, peanut plants can tolerate some level of defoliation. The main concern this late in the season is the preservation of plant integrity. In addition, pegs should be protected from potential infections from the leaf spot pathogens that may result in the shedding of pods at harvest. While leaf spot control is optimized with preventative fungicide applications, late-season 'salvage' applications are often warranted. Several fungicides are labeled for leaf spot. Formulations of chlorothalonil (Bravo, Equus, Echo, etc.) are effective at minimizing further disease development; however, combinations with systemic products may enhance control. Propiconazole and chlorothalonil combinations (Tilt/Bravo, Echo/Propimax, etc.) are most widely used. If other fungicides with a single site mode of action, such as tebuconazole (Folicur, Orius, Uppercut, etc.) are being considered, I would recommend tank-mixing with chlorothalonil to minimize the risk of fungicide resistance. Headline is a very effective fungicide for leaf spot; however, it is not recommended for use

late in the season (as the last treatment), or in conjunction with fungicide programs where Abound was the primary fungicide used throughout the season for pod rot control, due to similar resistance issues.

Pythium and *Rhizoctonia* pod have been quite severe in some fields this season. Fields may be infested with *Pythium* spp. or *Rhizoctonia solani* alone or in combination. In either case it is important to have a proper diagnosis of the fungus causing the disease. Pods infected with *Pythium* spp. have a greasy, wet appearance with soil adhering to the pod. A white 'moldy' growth may also be present on infected pods. Symptoms associated with *Rhizoctonia* are similar; however, pods tend to have more of a dry-textured, dull appearance. Overall, the pod rot complex is poorly understood, and is difficult to control. As with leaf spot, preventative fungicide applications tend to provide better levels of disease control. Information regarding the efficacy of late-season fungicide applications is lacking. Abound is the current commercial standard. The Abound label recommends a 24.5 fl oz/

Peanut Disease Update - Cont.



Signs of Sclerotinia blight.

Results from field trials this season indicate that preventative applications Endura or Omega provide superior control when compared to applications that were delayed until after the observation of symptoms. Many producers have already made two applications this season and are inquiring about a third application. Labels of both Endura and Omega indicate these products have excellent residual activity (up to 28 days); however, excessive rainfall could shorten this window. When considering another application, one must take into consideration the time until digging, the return on investment of fungicides, and potential label restrictions. Depending on where you are in the season an additional application may be warranted; however, I have been extremely pleased with the level of control we

extremely conducive for Sclerotinia

have achieved with two in-season applications (~75 and 105 days after planting) in fields with moderate to high disease pressure. I would encourage anyone who is thinking about a late-season application consider the following 1) the overall disease history within a field, 2) the time since the last fungicide application, 3) the current condition of the vines, and/or 4) the time the crop will require to mature, before doing so. Additional label restrictions that may impact this decision include the maximum rate of product per season. A total of three applications of either fungicide can be made within the season. A total of 4 pints of Omega per acre or 30 ounces of Endura per acre can be applied per season. As with any pesticide application, refer to the label instructions prior to application. If you have any specific questions regarding these, or any other late-season disease management issues please contact Jason at 806.632.0762 or via e-mail at jewoodward@ag.tamu.edu.

acre rate which provides Rhizoctonia control and Pythium suppression. Applications of Abound should be made within 14 days of harvest. Various formulations of Ridomil are available solely for Pythium pod rot. Additional restrictions must be considered for Ridomil, primarily the method of application and a much longer pre-harvest interval. Due to the nature of pod rot, the cost of chemical treatments, and the variability of pod rot control I am hesitant to recommend late-season applications. If applications are made, I would suggest leaving several untreated areas throughout the field for comparisons.

Weather conditions over the last few weeks have been

Weather conditions over the last few weeks have been extremely conducive for Sclerotinia blight.



Rhizoctonia pod rot. Note dull, dry appearance.



Pythium pod rot. Note wet, greasy appearance.



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