TEXAS COOPERATIVE EXTENSION

Peanut Progress

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SPECIAL POINTS OF INTEREST:

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

Peanut Production Update

Todd Baughman – State Peanut Agronomist

This edition of Peanut Progress is dominated by information put together by Jason Woodward the Extension Plant Pathologist located at Lubbock. Jason has hit the ground running and has a lot of interesting research in the fields this year. We are very lucky to have Jason as part of our extension peanut team, and I for one have appreciated having him on board. Two important things you will glean from the Sclerotinia trials that Jason is reporting on is 1) the importance of knowing and keeping a good record of the history of your fields and 2) timeliness. The first (having a good working knowledge of your fields) often aids in the second issue (timeliness). Knowing previous problems with a field will often let us be pro-active rather re-active in regards to controlling pest and other problems. While Jason is discussing disease issues this will also be the case with weeds, disease, fertility, water, and a host of other production issues. In many cases, we can prevent a problem from happening that cannot be fixed once it is identified later in the season. So as we move in to the back half of the season keep a diligent eye on this year's crop and continue to maintain good records for future crops. If you have any production questions contact Todd Baughman @ 940.552.9941x233.

Peanut Disease Awareness

Jason Woodward – Extension Plant Pathologist

Over the past few weeks, we have been seeing an increasing amount of foliar and soilborne diseases in peanuts throughout the region. With this in mind, I want to reiterate the importance of fungicide timing. I also want to emphasize the importance of properly diagnosing the pathogen(s) causing disease. This information is key when it comes to fungicide selection. Soilborne diseases (primarily pod rot and Sclerotinia blight) are a major focus for many producers in portions of the western production area. However, you don't want foliar diseases such as leaf spot, pepper spot, or web blotch to catch you by surprise. If left unmanaged, foliar diseases can result in premature defoliation (Fig. 1) negatively impacting yield and grade. It is also important to know the strengths and weaknesses of available fungicides prior to selection. In addition, label information such as residual activity, mode of action, resistance management strategies, and pre-harvest intervals must be considered when comprising effective fungicide programs. Chlorothalonil, the active ingredient in products such as Bravo and Echo (and tank mix combinations such as Bravo-Tilt and Echo-PropiMax) is an excellent material for control of foliar diseases, but provides little if any suppression of soilborne diseases. Many of the products registered for Rhizoctonia pod rot (Fig. 2) such as Abound, Artisan, and Provost also offer control of foliar diseases. Additional products such as Headline, Stratego, Folicur, Topsin-M, and Endura have activ-

Peanut Disease Awareness Continued

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Jason Woodard—Extension Plant Pathologist

ity against leaf spot; however, certain label restrictions may apply. Control of Sclerotinia blight (Fig. 3) can be achieved only through the use of Omega or Endura. Regardless of the disease being controlled or the fungicides selected, the most effective results will be achieved when applications are made preventatively. Results from a field study being conducted in western Gaines County illustrate the benefits of timely applications (Table 1). On July 27, Sclerotinia blight was in excess of 25% in non-fungicide treated plots; whereas, preventative applications of either Omega or Endura significantly reduced disease incidence to less than 2%. Substantially higher levels of disease (6 to 8%) were observed in plots where applications were made after the onset of disease (curatively). Additional studies are also being conducted comparing pod rot management strategies. In these studies, the performance of several fungicides, varying carrier volumes and broadcast versus banded applications are being evaluated. Most fungicides are applied in a broadcast application, in 10 to 15 gallons of water per acre. Higher volumes (20+ gallons of water per acre) may be required to achieve maximum soilborne disease control. In addition, banded applications (directing a 16 to 18 inch band over the row) may also maximize disease control by concentrating fungicides where they are needed. Finally, several producers have indicated they are having trouble obtaining Sclerotinia fungicides (primarily Endura). If you have any questions regarding peanut diseases or their control, please contact Jason Woodward at 806.746.6101.

Table 1. Effect of fungicide timing on control of Sclerotinia blight.

Treatment [X]	Fungicide rate (timing)[Y]	Sclerotinia blight (%)[Z]
1	Endura 10 fl oz / A (preventatively)	1.8 C
2	Endura 10 fl oz / A (curatively)	7.6 B
3	Omega 1.0 pint / A (preventatively)	1.4 C
4	Omega 1.0 pint / A (curatively)	6.8 B
5	Omega 1.5 pint / A (preventatively)	0.8 C
6	Omega 1.5 pint / A (curatively)	6.7 B
7	Control (no fungicide)	26.2 A

[X] Treatment represents fungicide program. Initial applications were made on 4-July. Treatments 1,2,4,5 & 6 received only 1 application prior to rating, whereas, treatment 7 received two applications (14 days apart).
[Y] Fungicides applications were made on either a calendar basis (preventatively) 75 days after planting, or after the observation of Sclerotinia blight symptoms (curatively).
[Z] Represents the percent of plants within a plot exhibiting signs or symptoms of *Sclerotinia minor* causal agent of Sclerotinia blight. Numbers within columns are the means of five replications. Means followed by the same letter are not significantly different.

Figure 1. Severe leaf spot infection on peanut foliage.

Figure 2. Symptoms of Rhizoctonia pod rot.

Figure 3. Sclerotinia blight of peanut (note white fungal growth, bleached and shredded stems and black sclerotia).

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