



PEANUT PROGRESS

Peanut Production Update



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While we are slowly getting to the end of the growing season staying on top of our crop is still a must. Removing as much stress as possible and pushing the crop as hard as we can are still essential to producing high yielding peanut. Irrigation requirements do decrease in peanut as we reach maturity, however we are not at that stage yet.

With peanut, we are still in a high to very high water demand period when peanut are still developing and need not stress due to lack of irrigation. In many cases we may in fact have numerous small pods that will take significant time and water to fully mature. Irrigation can be scaled back as the pods mature but we do not want to do that too much or too early. We want to push the plants as hard as we can to properly fill the load that we have developed. Traditional irrigation curves from other production areas may not fit as well in many parts of Texas due to the longer growing

season required to completely mature our peanuts. In fact, if we have another hot spell in September, daily water demand will likely be over 0.25 inches per day. The last thing we want to do is hurt our self on the back end of this crop by slowing down irrigation too much or too early. Another point to consider is that research several years ago indicated a negative effect on yield when irrigation was pulled completely more than 2 weeks prior to digging. If you have any additional questions please e-mail ta-baughman@tamu.edu or call at 940.552.9941 ext. 233.

Late Season Disease Observations



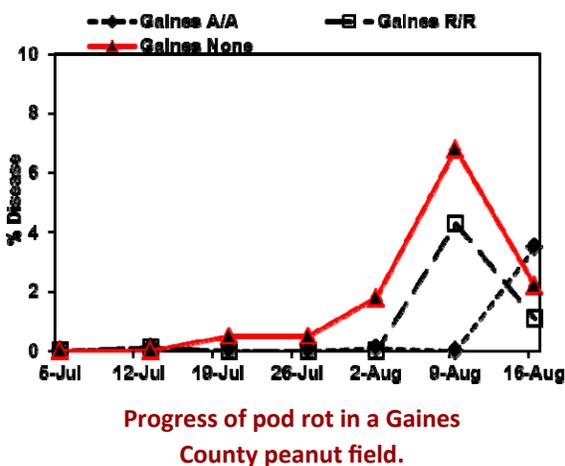
Jason E. Woodward
Extension Peanut Pathologist

Grower expectations and yield potential are still high; however, a good rain would sure help everyone sleep a little easier. There are several things that need to be discussed as it relates to late season disease issues. Pod rot continues to be a major point of interest as the season

progresses. As mentioned in the previous issue of *Peanut Progress*, Dr. Terry Wheeler and Extension IPM Agents Scott Russell and Manda Cattaneo are monitoring pod rot development throughout the growing season in hopes of developing a threshold system to improve upon the ap-

Late Season Disease Observations — Cont.

plication of fungicides. While disease development was steady several weeks ago under non-treated conditions (where treated plots had low levels of pod rot), recent observations reveal that the disease is developing significantly under all of the different treatments we are evaluating.



Note: increases in disease incidence (%) beginning 2-Aug and 9-Aug for plots treated with twice with Ridomil (R), or Abound (A) compared to the non-treated control (Red line).

It is likely fungicide applications that were made 3 weeks ago are tapering off, thus not providing adequate control of pod rot. Such results indicate that subsequent applications may be needed within the next week. Forecasts call for generally hot and dry conditions over the next few days, which may impact disease development.

Treatment decisions should be made on a field-by-field basis depending on disease pressure, previous application timing, irrigation capacity, and time to harvest (as pre-harvest intervals may come into play in some situations). Extensive scouting should be conducted to adequately estimate disease development within a given field.

I have only heard of a few cases of fields that have been or need to be treated for Sclerotinia blight. Fields with a history of this disease that were treated preventively with Omega or Endura are not showing signs of new infections; however, they should continue to be monitored over the next few weeks. In addition, close attention should be paid to fields exhibiting symptoms of Verticillium wilt. Symptoms may become more apparent later in the season, as the demand for water to fill pods increases. Infected plants are unable to adequately transport water through the vascular system as the fungus that causes this disease clogs the water conducting channels. While there are no fungicides labeled for

control of Verticillium wilt, special considerations regarding digging may be needed if vines deteriorate as a result of severe infections.



Symptoms of early leaf spot in the lower peanut canopy.

Leaf spot is still noticeable in many fields throughout the southern High Plains. I have observed active sporulation of both early and late leaf spot lesions in samples collected from untreated areas. While conditions are relatively dry (from a precipitation standpoint), the ambient relative humidity (RH) is rather high compared to long term averages. Weather data over the past few days has shown RH levels of 30-45%. Keep in mind that RH levels on the surface of leaves in the lower canopy can be considerably higher, especially in fields with lush growth which receive high amounts of irrigation.

On a recent trip to Collingsworth County, I visited several fields exhibiting symptoms of root-knot nematode.

Late Season Disease Observations — Cont.

Several species of root-knot are capable of infecting peanut.



Symptoms of root-knot nematode damage (early season).

The peanut root-knot nematode (*Meloidogyne arenaria*) and the northern root-knot nematode (*M. hapla*) are most prevalent; however, there has been a new species (*M. haplanaria*) identified in that particular growing region. Symptoms of root-knot nematode include stunting and an overall yellowing. Severely infested areas may show limited ground

coverage. Numerous galls can be seen on infected roots, pegs, and pods. The size and appearance of these structures may vary depending on the species involved. The galls arise from within the root, whereas, *Rhizobium* nodules (which serve to fix nitrogen) are formed on the side of roots. Galls of *M. hapla* are generally smaller, often occur on root tips and may be confused with injury caused by yellow herbicide. There are a few cultivars commercially available that possess partial resistance; however, this resistance is only effective against *M. arenaria*. The cotton root-knot nematode (*M. incognita*) is not capable of infecting peanut and the species that infect peanut are not able to reproduce on cotton, therefore, crop rotation between the two crops may be a viable option.

Symptoms of root-knot nematode include stunting and an overall yellowing. Severely infested areas may show limited ground coverage.

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



Symptoms of root-knot nematode damage (late season)



Peanut root-knot nematode galls on pods.

Below is a link to a survey that we would like for 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>

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