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Texas A&M System

PEANUT PROGRESS

Current Peanut Situation & Production Update

Todd Baughman
State Peanut Agronomist

There have been recent reports of outbreaks of Southern Corn Rootworm (SCRW) larvae in peanut. While this is unfortunate there is nothing we can do to effectively control this population of SCRW larvae. In visiting with Dr. Jay Chapin at Clemson University he indicated that insecticide applications now would be ineffective in controlling an established population of SCRW. While Lorsban 15G is labeled for control of SCRW larvae in peanut it must be applied as a preventative application. Lorsban is a very immobile pesticide and will not move very deep in the soil even with irrigation. The way it works as a preventive application is by providing an insecticide barrier right at the soil line that controls SCRW larvae either before or as they initially hatch and enter the soil. Once the SCRW larvae are in the pod development zone they are below the level of the insecticide barrier and thus will not be adequately controlled by the insecticide. This is why the application must be made prior to the establishment of SCRW in the pod zone. The other reason that we do not want to make a virtually inefficacious rescue treatment is the very good possibility that we will flare spider mites.

SOUTHERN CORN ROOTWORM LARVAE

SOUTHERN CORN ROOTWORM DAMAGED PODS

We have mentioned in several Peanut Progress newsletters the need to be very judicious with insecticide applications in peanut because of this risk and the difficulty in controlling spider mites. With the current hot dry conditions that we are experiencing we do not want to risk developing an economically damaging population of spider mites. For additional information in regards to pest management see the Texas Peanut Production Guide at http://peanut.tamu.edu. If you have any production questions feel free to contact Todd Baughman @ 940.552.9941x233 or ta-baughman@tamu.edu.

South Texas update

Mark Black,
Extension Plant Pathologist

Spotted wilt caused by TSWV.

I've completed initial evaluations of plots established by/for peanut breeders in Frio County (Dilley & Pearsall 8-10-10) and Lavaca County (Yoakum 7-19-10). I found no spotted wilt at Dilley, a few symptomatic plants at Pearsall, and numerous infected plants at Yoakum.

We anticipate significant disease in susceptible breeding lines by harvest time at the Yoakum site where James Grichar planted 1) spinach in winter to maintain off-season populations of the virus and insect vectors and 2) highly susceptible Tamrun88 peanut a few weeks before plots were planted.

South Texas update— Cont.

The south Texas drought of 2007-2009 apparently reduced survival of *Tomato spotted wilt virus* by eliminating most annual and short-lived perennial vegetation in non-crop areas.

The virus and both thrips insect vectors (tobacco thrips & western flower thrips) need living plants year round to bridge among peanut, susceptible vegetables (spinach, potato, green bean, pepper, tomato), weeds, and certain wildflowers. Following those dry winters, few growers had spotted wilt problems in their peanut fields. Rains from September 2009 to July 2010 increased the opportunities for TSWV.

TSWV resistant cultivar (left) and susceptible cultivar (right).

We continue evaluating TSWV reactions among Texas breeding lines because TSWV has the potential to surge again if susceptible varieties are again used in south and central Texas, and genetic drift would occur without these data.

Leaf spots. Early leaf spot has developed in some south Texas fields, as expected with 2010 rains. With additional rains in the region after vines have lapped, ELS may increase and may occur simultaneously with late leaf spot and rust. Most growers have/are applying preventative fungicides for managing both foliar diseases and pod rots. A hot and dry August has also helped slow foliar disease progress. If we receive rains from tropical storm systems in the next 6 to 8 weeks, areas near pivots, poorly drained areas, and areas with overhead obstructions to the aerial applicator should continue to be scouted frequently. Rust spores typically arrive on tropical systems, but ELS and LLS overwinter in crop debris and spores are easily moved on local winds.

TSWV peanut ringspot and twisted petiole

Mid-to-Late Season Peanut Weed Control

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With the recent rains the south Texas crop is looking good and with continued good moisture, weeds are becoming more of an issue. Peanuts have several unique features that contribute to challenging weed management.

For example, most peanut cultivars grown in Texas require 140 to 160 days to reach optimum maturity, depending on cultivar and geographical region. Because of this long growing season, soil-applied herbicides may not provide season-long control and mid-to-late season weed infestations requiring postemergence herbicides are common. Secondly, peanut has a prostrate growth habit, a relatively shallow canopy, and is slow to shade the inter-row area allowing weeds to be more competitive with the peanut plant. With conventional row spacing, complete ground cover may not be attained until 8 to 10 weeks after planting. In some areas of Texas, complete canopy closure may never be attained, thus exposing bare ground and increasing the likelihood of late-season weed problems. I will concentrate on the postemergence control of grassy weeds in this issue since I have had more questions on these weeds the past few weeks. This is probably due to the early season rainfall across much of the state which provided good growing conditions for weeds during the early part of the season.

Annual grasses including barnyardgrass, broadleaf signalgrass, southern crabgrass, and Texas panicum (often called Coloradograss) are common problems in many fields across the state while the perennial grasses, common bermudagrass, and to a lesser extent, Johnsongrass, can also become an issue. Fusilade DX, Poast Plus, and Select Max can be

used to control these grassy problems. All three of these herbicides provide good to excellent control of annual grasses while Fusilade DX and Select Max do a better job controlling perennial grasses. If Poast Plus is used for control of perennial grasses, repeated applications will probably be necessary. Under certain conditions, repeated applications may also be necessary with Fusilade DX or Select Max.

Remember that for all postemergence herbicides to be effective and provide a good kill of existing weeds several things must be taken into consideration: 1) these herbicides need to be applied when growing conditions are good and not under any moisture stress so that the herbicide can be taken up by the plant, 2) apply when weeds are small (preferably less than 6 inches tall) since taller weeds are harder to control and herbicides may provide erratic control, and 3) always add a nonionic surfactant or crop oil concentrate to provide good leaf coverage, reduce surface tension, and prevent herbicide run-off from the leaves. Just remember that none of these postemergence grass herbicides provide any residual control so repeat (sequential) applications may be necessary if adequate soil moisture is available due to irrigation or rainfall.

Fusilade DX was labeled for use in peanut during the latter part of the 2009 growing season. Fusilade DX at 10 to12 fl oz/A will provide good to excellent control of the annual grasses; however, for perennial grasses 16 to 24 fl oz/A is required. Applications to annual grasses should be done when they are no greater than 4 to 6 inches in height with the exception of Texas panicum which can be treated with Fusilade up until it is 8 inches tall. Bermudagrass should be treated when runners are no greater than 8 inches in length while Johnsongrass should be treated when it is not greater than 18 inches in height. Restrictions for Fusilade DX use in peanut include; 1) do not apply more than 48 fl oz/A per growing season, 2) do not apply more than 24 fl oz per application, 3) maintain a minimum of 14 days between applications, 3) do not feed green immature growing plants to livestock or harvest above ground plant tissue for livestock, and 4) do not harvest peanuts within 40 days of the last Fusilade application.

Just remember that none of these postemergence grass herbicides provide any residual control so repeat (sequential) applications may be necessary if adequate soil moisture is available due to irrigation or rainfall.

Poast Plus provides excellent annual grass control; however, control of perennial grasses, especially bermudagrass, can be erratic at times. The use rate for annual grass control with Poast Plus is 1.5 to 2.25 pt/A depending on location and annual grasses should not exceed 8 inches in height. The maximum size for the initial Poast Plus treatment of bermudagrass is a 6-inch runner while rhizome Johnsongrass can be treated up until 25 inches tall. Sequential applications to bermudagrass or Johnsongrass should be done before the grasses are 4 inches in length or 12 inches in height, respectively. Poast Plus use rates for perennial grass control are 2.25 to 3.75 pt/A with sequential applications of 1.5 to 2.25 pt/A depending on location. Restrictions for Poast Plus use in peanut include; 1) maximum use rate per application is 2.25 pt/A, 2) maximum use rate per growing season is 3.75 pt/A, 3) the hay cannot be fed to livestock, and 4) the post-harvest interval is 40 days.

Select Max provides excellent control of both annual and perennial grasses. For annual grass control, the grasses should not exceed 8 inches in height with a use rate of 9 to 16 fl oz/A depending on location and weed size. Bermudagrass should not exceed 6 inches in length while rhizome Johnsongrass should not be greater than 24 inches tall with a Select Max use rate of 8 to 16 fl oz/A. Restrictions for Select Max use in peanut include: 1) do not apply more than 32 fl oz/A at a single application, 2) do not apply more than 64 fl oz/A in a growing season, 3) a minimum of 14 days should be allowed between repeat applications, and 4) the post-harvest interval is 40 days. Several generic versions of clethodim (the active ingredient in Select Max) are available for growers use. These include Arrow produced by Makhtshim Agan, Tapout by Helena Chemical Co., and Volunteer produced by Tenkoz. Other generic products may be on the market that the author is not aware of; therefore, the user should carefully read labels to make sure that peanut is on the label for the specific herbicide.

Dr. Peter Dotray, Dr. Jason Woodward, A. J. Jaks, and I have done extensive work with tank-mixing Poast Plus and Select with the fungicides Folicur, Provost, and Headline to study the response of these tank-mixes for grass control and foliar disease development. No antagonism has been noted with respect to grass control or disease development when Poast Plus or Select has been applied in combination with the three above mentioned fungicides.

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

http://peanut/.tamu.edu.index.php

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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