

IPM NEWSLETTER

Update for Field Crops and Their Pests

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Announcement: Cotton Scout School will be held, as usual, on the last Friday of May (29th) at the West TN Research & Education Center. More details will be announced later, but please mark your calendars. This will be a morning program with an after lunch, go-to-the-field session for those interested. Preregistration is NOT required.

Wheat Diseases (Melvin Newman, Extension Plant Pathologist)

Wheat head scab caused by the fungus *Fusarium* spp. might be a problem in the coming few days. Infection occurs when wheat is in the flowering stage (Feeke's scale 10.5.1). Most wheat fields are probably now at this stage or even later. Continuous wet weather for several days is usually required for severe infection. Foliar fungicides such as Folicur, Prosaro and Carmaba are labeled for *suppression* of head scab. However, head scab control data is very limited in Tennessee for any of these fungicides. If producers still have not sprayed their wheat for diseases and would like to spray, it would now be the time to apply one of the above fungicides for head scab since wet weather is on the way (according to the weather man). But, don't expect complete control of head scab, since it is very difficult to get the right timing and weather conditions for even some control.

Remember: Most foliar fungicides require a 30 day minimum time from application to harvest (PHI). Be sure to read the label for specific requirements. Foliar fungicides recommended for wheat are listed at http://www.utextension.utk.edu/fieldCrops/wheat/wheat_pdf/WheatFoliarFungicides2009.pdf.

Weed Control (Larry Steckel, Weed Specialist)

Soybean Weed Control. I am encouraged by all the interest in pre applied herbicides in soybeans. I have talked to quite a few folks over the last month who have not used a pre in soybeans for over 10 years that will use one this year. I hope most growers will go this route as it is the only option we have to curtail glyphosate-resistant Palmer amaranth. The herbicides I get the most questions on to manage this problem really center around three herbicides – those containing Valor, Dual Magnum or Authority. There are other pre-applied herbicides that will provide residual control of Palmer amaranth like Prowl H2O and Intro but these seem to have less grower interest.

In this area, the herbicides I get the most calls on are those containing Valor. These include Valor SX, Valor XLT (Premix: Valor + Classic) and Envive (Premix: Valor + Classic + Harmony). One of the main questions is what can be tankmixed with Valor SX to help its spectrum. A herbicide I commonly tell folks to consider particularly in fields with giant ragweeds is metribuzin (Sencor). Other

herbicides that can be tankmixed with Valor SX are Scepter and FirstRate (they also will provide some residual giant ragweed control). In our research residual grass control was better with the Valor + Classic or the Valor + Classic + Harmony premixes (Valor XLT or Envive) over Valor alone.

Another good option is the Dual Magnum containing products. These include Prefix (Premix: Reflex + Dual Magnum), Sequence (Premix: Touchdown + Dual Magnum) and Boundary (Premix: Sencor + Dual Magnum). We have seen excellent residual control of grasses and small seeded broadleaf weeds like Palmer amaranth with these premixes. The Boundary premix can be applied pre plant to pre emergence while Sequence and Prefix can be applied pre plant through post emergence through the 3rd soybean trifoliolate. I prefer Sequence and Prefix to be applied post emergence in order to get extended residual control further into the growing season. Dual Magnum may also be applied post emergence up through the 3rd soybean trifoliolate.

The Authority containing products include a premix Authority MTZ (Premix: Authority + Sencor). We have seen comparable residual broadleaf weed control to the other premixes mentioned. The recrop back to cotton after an Authority MTZ application has been reduced from 18 months to 12 months.

Ryegrass Control in Corn. I number of folks have called about poor control of ryegrass in corn fields. There is documented glyphosate-resistant ryegrass in Mississippi but to date we have not found any here. However, even glyphosate-susceptible ryegrass is typically very hard to control from late March to May. Ryegrass is most easily controlled with glyphosate when it is very small or when it is headed out. Glyphosate will typically provide inconsistent control of ryegrass between these two stages. In corn fields where the ryegrass pressure is not heavy this will not be a problem but in fields with heavy pressure yield loss could result. Accent or the premix Stout (Accent + Harmony) by themselves or mixed in with glyphosate will typically provide the best control of ryegrass in corn. With the rain and heat this week the corn will grow very rapidly and will quickly pass the 6th collar stage of development. Accent and Stout cannot be sprayed beyond 6 collar corn or they could cause yield loss.

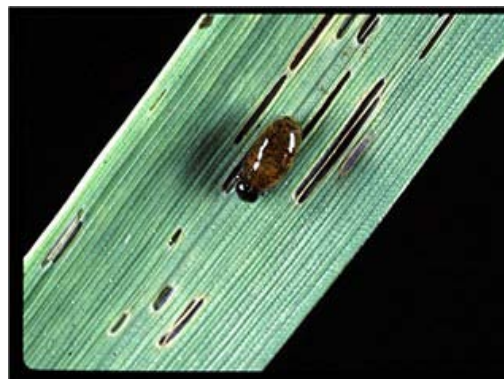


Weed Control in Grain Sorghum. The wet weather delays have some folks thinking about switching from corn to grain sorghum. The question from these growers has been about using 2,4-D or dicamba as a burndown before planting the grain sorghum. 2,4-D is not labeled preplant in grain sorghum and dicamba has a 15 day plant back restriction. My experience with both these herbicides in grain sorghum is that they can wash down into the slot with the seed and hinder germination. The best option is to wait until the grain sorghum has emerged and then apply either 2,4-D or dicamba.

Insect Control Considerations (Scott Stewart, IPM Specialist)

Wheat. Aphid populations have pretty much crashed in most fields as natural enemies have taken effect. I've seen evidence of barley yellow dwarf virus in some fields that did not receive an early application of insecticide or a seed treatment, but this is variable (as will be its effect on yield). We are also starting to see true armyworms and cereal leaf beetles in fields but nothing has been reported at

treatment level. Continue to monitor for true armyworm and treat if 6-8 larvae per square foot are present if wheat is still in (or partially in) the milk stage. It is unusual to treat for cereal leaf beetle, but the slime-covered larvae will sure make your pants nasty. The treatment threshold for cereal leaf beetle is one larva or adult per stem. *Pictured: larvae of cereal leaf beetle*



Cutworms. I've had a few more calls than usual about cutworms and most appear to be black cutworms. Very large populations of cutworm larvae are being found in parts of middle Tennessee in some counties bordering Kentucky, but these may be isolated occurrences. There is some variation and debate about black cutworm biology. It is generally believed that they overwinter no further north than Tennessee. They may overwinter as larvae or pupae. Some sources indicate black cutworms overwinter primarily as pupae in Tennessee, but I believe we sometimes plant into a field infested by the overwintering generation of larvae. Black cutworms have several generations per year, but it is the first two that are most likely to affect seedling crops.

Pictured: larvae of black cutworm



Regardless, be on the alert for cut plants, especially if a preventative application of insecticide was not used close to planting (within 7-14 days). Corn is one of the more sensitive crops to cutworms because it does not compensate well for stand loss. Treat cutworm infestations in corn if 3-5% of plants are cut or 2 or more larvae are found per 100 plants. Keep in mind that low lying areas of the field are often hot spots, and spot treatments can sometimes be used to clean up a problem. Infestations of black cutworm can be effectively controlled with pyrethroid insecticides (e.g., Karate/Warrior, Mustang Max, Baythroid XL, Asana XL, Brigade, Prolex, etc.). **Remember:** Larvae mostly feed at night and will be found under the soil, often near a cut plant, during the day. It is the larger larvae that do the cutting. Small larvae generally feed on the foliage.

Corn Earworm/Bollworm Prognostication. The vast majority of our corn crop is late, just like the previous two years. This is not ideal for corn yields, but on the upside, I suspect the big corn earworm (a.k.a. bollworm) flight that typically comes from corn during late July will begin 2-3 weeks later. Thus, early maturing cotton may miss the brunt of this flight. Once again we may get off easy, especially considering the amount of Bollgard II and WideStrike cotton planted in Tennessee. On the downside, late maturing beans may be at relatively high risk to corn earworm infestations.

Farm Management (Chuck Danehower, Area Specialist - Farm Management). As in 2008, wet weather has slowed planting, particularly corn planting. There is probably not a more critical or important farm operation than planting. Planting on a timely basis generally means planting when the soil temperature and soil moisture are at an optimum level. Do you have enough planter power to get your planting done during the optimum time period? This is one question producers should ask themselves, particularly if there has been a change in their cropping plan, or acres farmed.

In 2009, there will be producers who get behind because of weather and have a tendency to want to try to catch up, and get in too big of a hurry planting. Research has shown that for most planters, the

optimum speed for planting is 5 - 6 mph. Planting faster than that, often results in poor seed placement which can affect yield.

If after mapping out your planting plan, and you think there may be part of your crop that won't be planted during the optimum period or during planting season you find yourself behind on planting, it may be time to consider having some of your crop custom planted. The reverse could also be true for a producer who finishes planting early – hire out to do custom planting. We always get calls for how much should I pay or how much I should charge for custom planting. The UT Crop Budgets list the total cost for a 12 row planter and 215 HP tractor as \$9.45 acre at \$2.00 gallon diesel. The University of Kentucky has a 2008 Custom Rate publication that compiles custom rates from 5 states. Their custom rates are based on \$4.00 diesel. I will adjust the rate for \$2.00 diesel. Another custom rate guide is from Iowa where Iowa State has recently released their 2009 Custom Rate Survey.

Summarizing these two guides can give some ranges for custom planting. A no-till planting rate for corn (cotton would be comparable) averages around \$14.00 to \$17.60 acre depending on attachments. Soybeans that are drilled range from \$14.20 acre on conventional tilled to \$15.10 acre in no-till. A producer just wanting to cover the cost of planting would need at least \$10.00 acre (depending on age and size of equipment) while the going market rate is in the \$14 - \$18 per acre range depending on planter attachments. Some adjustments should be made depending on the efficiency and skill of the operator. A producer with updated equipment, skilled person on the planter, and one who does an above average job is worth it. In most cases, yield increases from timely planting during the optimum planting window will offset the custom rate cost. Closely evaluate your planter and use the information to make adjustments for not only this year, but 2010.

Custom Rate Guides On-line:

Kentucky - http://www.uky.edu/Ag/AgEcon/pubs/ext_aec/2008-01.pdf

Iowa - <http://www.extension.iastate.edu/Publications/FM1698.pdf>

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The University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating in furtherance of Acts of May 8 and June 30, 1914. Agricultural Extension Service, Tim Cross, Dean.

DISCLAIMER STATEMENT

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