# LONOKE COUNTY

Crop Update August 2016

#### **Drain Time Approaching Rapidly**

With heading for many fields in full swing it will be time to drain fields before we know it. As we all know 'draining season' is a time for celebration – work, but celebration. Before we get in too big a hurry to celebrate, let's try to make sure we get it right.

The basic recommendations for draining are 25 days after 50% heading on long-grain cultivars and 30 days for medium-grain cultivars. These are the number of days built into the DD50 program.

However, depending on temperatures, rainfall, and overall environmental conditions, drain timing is a moving target. As a result, drain timing is as much an art as a science.

A general guide for determining relative grain maturity: if nearly all kernels are straw colored (field is safe to drain regardless of soil type); if nearly 2/3 of kernels are straw colored, it is safe to drain on a silt loam soil; and if 1/3 of kernels are straw colored, it would be close to safe drain timing on a clay soil.

When choosing when to drain – always edge on the side of caution. Draining too early can sacrifice some late grain fill and hurt yield. Use a combination of the days after 50% heading guideline (25-30 days) and the relative grain maturity in the field to make your drain decisions.

#### Management Key:

When draining rice, always assume it's never going to rain again after draining. If the rice couldn't make under those conditions, then hold the flood on the field.



Range of panicle maturity in the same field, making draining decisions difficult

#### Salt, Salt, Salt

As some of the fields that have been drained refuse to dry down with high humidity and heavy dew, some are starting to consider the use of sodium chlorate to desiccate those fields. Remember that sodium chlorate is a tool – it can help when used properly, but it can hurt when used improperly. Sodium chlorate should only be applied once grain moisture falls below 25%. Do not apply if grain moisture is below 18%. Once an application is made and foliage begins to dry out, so do the grains. Up to 5% grain moisture reduction can occur in just a few days after application - so be ready to harvest 4-7 days after application. In a year like this where many fields are experiencing uneven heading, grain moisture content may vary widely from one panicle to the next – this makes applying sodium chlorate a very risky proposition because many panicles may be at a high moisture and grain fill incomplete. Use caution when considering the use of harvest aids - we don't want to lose any of the crop we had a difficult year making.



## Soybean disease update and management: Frogeye leaf spot

Frogeye leaf spot (FLS) is one of the most common foliar diseases of soybean in Arkansas. As with all foliar disease, some degree of leaf wetness and favorable temperatures are needed for disease development. Here are some important topics when considering a fungicide to control FLS on susceptible varieties.

Climatic conditions that favor FLS development consist of warm temperatures (77 to 86°F) and prolonged dew periods or light rain. These conditions enable the fungus to infect expanding soybean leaves, which are the most susceptible leaves on a susceptible soybean. As these conditions persist, multiple infection and sporulation events can occur in a few days, thus increasing disease severity. Symptoms are often observed after 7 days, so FLS can develop relatively rapidly when conditions are favorable. Alternately, dry and hot conditions suppress disease development, which has been the case for the majority of the state. Typically, various stages of FLS maturity can be detected in the field (Fig. 2). Immature lesions on expanding leaves look similar to mature lesions; however, they lack the pronounced maroon or purple edge surrounding the lesion (Fig. 2) and have yet to sporulate. Alternately, immature lesions on fully expanded leaves often appear as unexpanded smaller spots or purple specks with faint tan center. These small specks are observed on beans at later reproductive stages of growth.

Based on the results from the 2016 UA variety testing program, 75% of soybean varieties are resistant or moderately resistant to frogeye leaf spot. However, in-season decisions are concerned with protecting those susceptible and moderately susceptible varieties from excessive disease development. Given that strobilurin-resistant FLS is widespread across the state and Mid-South, a triazole fungicide is needed to manage these strains. There are several options when it comes to soybean fungicides, so consult the MP 154 for the most up to date information on fungicide efficacy. Unfortunately, there is no economic threshold to trigger a fungicide application, but decisions should be made on a field by field bases. Fungicides have been effective at protecting yield potential on susceptible or moderately susceptible varieties when there is at least 9 FLS per leaf (tri-foliate) found at fairly regular stops in the field AND weather conditions favor disease development. If FLS is relatively uniform in the field and conditions are reported to favor disease development most fungicides are more effective when applied preventatively. In contrast, if hot dry conditions are in the forecast continue to scout fields with FLS and monitor disease development. Finally, refrain from applying fungicides in the absence of disease as such practices lead to the development of fungicide-resistant pathogens.

## Soybean Irrigation Termination

Our early season soybeans are nearing the finish line to maturity while our late season crop has several more weeks to go. Producers should make sure irrigation needs are met for both crops to squeeze out those last few bushels of production

R6.5 growth stage (about 10-14 days after beans touch in pod ) is the University's recommendation for irrigation termination of soybeans, as long as good soil moisture exists in the soil profile, if not another irrigation would be beneficial to your crop.

Early season soybeans are indeterminate (Maturity Group III and IV varieties set flowers/pods on the plant over an extended period of time) which may require a producer to irrigate one more time to help fill out late setting pods. In addition, early soybeans generally mature under more extreme temperatures during August when soil moisture can readily be zapped by several days of hot weather.

Full season determinate (Maturity Group V and VI varieties set flowers/ pods on the plant at same time) soybeans, generally mature under milder weather conditions during September and October. Make sure not to cut water needs short for your crop this close to the season buzzer!

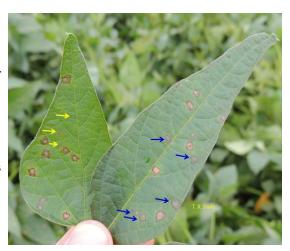


Figure 2. Frogeye leaf spots at various stages of maturity; actively sporulating (no arrow), immature spots (right arrows) and faint water soaked spots (left arrows) on

### **Put Safety First**

With harvest time just around the corner, things will start to get a little crazy around the farm. In between running around and trying not to pull your hair out, don't forget about the most important thing on the farm... SAFE-TYI

When getting your equipment ready for the field, always make one adjustment at a time. Don't get in a hurry. Always make sure that shields and covers are in place and in good condition. Do not engage power before all guards and shields are in place. Don't fail to give ladders and overhead work your full attention. Falls are one of the most common farming accidents. They may cause lifetime paralysis and have caused death to a number of farmers

After you get to the field and get rolling, it never fails that something is going to get clogged up or broke down. Never attempt to manually remove obstructions or perform maintenance with anything still running. It doesn't take any time to make sure you've turned everything off. Never work under a combine header without securely blocking the lift cylinder. Men have been crushed under a header making adjustments when the hydraulic system failed. Others have been pinned when someone else bumped the header lift control. Also be aware of what's around you. Watch the picker baskets and the power lines. And when moving from field to field, always use auxiliary flashing lights and make sure your SMV (slow moving vehicle) decal is in place.

We here at the Lonoke County Extension office want everyone to have a safe and injury free harvest season. For more tips or questions about farm safety, please give us a call.

#### Fall Armyworm in Rice

There are numerous reports of fall armyworm in heading rice this week, following on the heels of similar reports in Mississippi. As a general rule we don't treat for fall armyworm in rice. Most often they're moving in from grasses on field edges. Occasionally eggs are laid directly in rice fields.

The main concern with fall armyworm in rice is the protection of the upper canopy leaves (flag leaf and next leaf down) and the panicles themselves. Most reports have been of damage to lower canopy leaves which we aren't concerned with at this point. However, once they begin to feed on or specifically 'clip' the flag leaves off – we have a problem. Of even greater concern is when they move into rice during grain fill and move to the panicle to feed directly on the high moisture, filling grains.

If they aren't affecting the heads or flag leaves it's best just to let them go. In some cases their presence may coincide with the need for an insecticide application for rice stink bug control – in which case the pyrethroid will control them both.

Scout around the field and determine whether the problem is field-wide or confined to certain areas or edges. Treat only where needed and save the rest. Younger rice still weeks from heading can have the foliage eaten back to the waterline but so far that hasn't been reported yet this year. Keep an eye out in the field and in your sweep net as we try to finish this crop on the money side.



Fall armyworm eating rice foliage back to waterline.



Fall armyworms are showing up in scattered

### **Bollworms Continue to Plague Soybeans**

Bollworms in soybeans continue to be a problem across the state. Pressure has been constant now for the last three weeks and has spread to the farthest corners of the state. Finding treatment-level bollworms is not a problem if you know where to look. The worms continue to be the worst on fields that are blooming and/or beginning to set pods and have not achieved lapping or canopy closure, although it seems like we are getting more reports of treatment-level on fields that are already lapped or even fields that haven't started blooming yet. While most folks are aware of the situation, we continue to get reports of pyrethroids not achieving an adequate level of control. To remind everyone, the following is a list of recommendations to help achieve control: Suggestions for Bollworm Control in Soybeans:

- To insure adequate application, we recommend a minimum of 5 gallons per acre (GPA) by air and 10 GPA by ground. Also, consider the addition of an adjuvant, such as crop oil, with your insecticide application. For high populations, 2X threshold or greater, if using a pyrethroid, consider adding 0.5 lb/ A of acephate. Tank mixing the pyrethroid and acephate should improve both residual and percent control. Maintain a higher-end rate with the pyrethroid. In other words, don't cut the rate. We continue to get reports of good control with this tank mix. The tank mix appears to be providing control for 7-8 days before bollworms are at treatment level again where pressure is constant.
- Consider other insecticides. Belt at 2 oz/ acre and Steward at 1 gal/ 20 acres. The advantages to these products are that they both provide good control of caterpillars in soybeans, and they have little impact on beneficial insects. However, they provide no control for stink bugs and other non-caterpillar pests of soybean. Based on our observations, these products have provided the most consistent control of bollworms. Belt's registration has been CANCELED. However, if you or your co-op still has it, you CAN use existing stock!
- Scout fields closely following application to make sure adequate control was achieved and for subsequent problems with bollworms and other pests.

#### Feel free to call us at anytime!

#### **Dates to Remember!**

August 10, 2016: Rice Expo, RREC, Stuttgart.

**August 18, 2016:** 2016 Soybean College. Newport Extension Center, 649 Jackson Road 917, Newport, AR 72112. CCA's will be available.

Please call the Lonoke County Extension Office with any questions. 501-676-3124

Thank you,

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