RICE

Pest Survey Results in Low Numbers

During July, a weekly pest survey was started by the Greene County Extension Service. The main goal with this effort is to allow for unbiased data collection and monitoring of major pests found on rice produced in this region. These data are valuable in helping farmers and their crop advisors determine what action, if any, is needed to manage key insects and diseases.

The survey includes 10 fields, with a wide variety of genetics and production systems, scattered throughout Greene County. Some are planted to conventional varieties, and some to hybrids. About half the fields are planted to Clearfield rice. Some fields are drilled, some broadcast, and some water seeded.

So far, disease on survey fields has been lighter than what would have been expected with our recent damp weather. Only 4 fields developed Sheath Blight to a level that required fungicide application. All these fields included varieties rated susceptible to sheath blight, except for one field of RT 745, rated moderately susceptible.

Considering other diseases, so far, neither blast nor bacterial panicle blight have been found. Some of the survey fields did show low to moderate levels of stem rot and should be checked for potassium deficiency by taking soil samples.

A fungicide application was made on some of the survey fields and many other commercial fields in the county for kernel smut suppression. The grower should carefully consider whether a boot stage fungicide application is needed for kernel smut. Does the field have a history of the disease? Is the variety planted susceptible to kernel smut? How much nitrogen fertilizer was used? Some fields may be getting automatic fungicide applications for kernel smut that will not benefit from this expense.

Most survey fields have headed and should out run yield loss from sheath blight and blast. Meanwhile, we have turned our attention to checking for stinkbugs. Numbers so far have been a lot lower than expected considering what the media was reporting. At this writing, none of the survey fields had reached threshold level for an insecticide treatment. Fields checked on August 7th averaged only 1/2 stinkbug per sampling unit (10 sweeps). The threshold is 5 bugs/10 sweeps when rice is in the flower/milk stage (weeks 1 & 2 of heading) and 10 bugs/10 sweeps during the dough stage (weeks 3 & 4 of heading).

Most local crop advisors are seeing similar light disease & stinkbug pressure. We realize they are in and out of fields all week long. We value and appreciate their input. We also want to remind you the survey included just a few fields. We realize some of your fields may have had more disease and insect pressure, requiring treatment.

In closing, remember that automatic fungicide and insecticide treatments may add unneeded business expense, reduce beneficials in the field, and promote development of pesticide resistance. The message: SCOUT your fields weekly to know what critters are present.

We try to send a text update summary of current week pest survey observations to those who have requested e-updates. If you would like to be included, make sure to get us your name, cell number, and cell provider.

Grain Drying Tips

How about some helpful tips on harvesting, drying, and storage on the farm? Visit the following website to view new fact sheets on these topics, prepared by Dr. Samy Sadaka, Extension Engineer for Grain Drying/Safety/Energy with the U of A, Division of AG. We would also be happy to mail you copies of the fact sheets, just fire us an email or give us a call.

http://www.aragriculture.org/storage_drying/default.htm
Wheat

Planting Time Coming Soon

According to Dr. Jason Kelley, Arkansas Extension Feed Grains Specialist, one of the key decisions a wheat producer faces to achieve top yields, is which varieties to grow. University trials provide an objective source of information for producers to help sort out the best varieties for their operation.

Go to U of A’s Arkansas Variety Testing website at www.arkansasvarietytesting.org to review results of the Arkansas Small Grain Performance Tests. One year yield data is available for varieties entered into the trails last year. Two year yield averages may also be studied for many varieties being sold by checking out the data found at the website.

Be sure to plant at least 2-3 different varieties for risk management. Plant several acres to varieties which have performed well on your farm. In addition, try a few acres of new varieties which show up in the top grouping in the University trials. Finally, pay close attention to the disease package of the varieties you plant. When considering budget, to reduce the need for foliar fungicides in the Spring, check to see if a variety is rated resistant to leaf rust, stripe rust, and Septoria leaf blotch.

We will mail you Extension’s “2014 Wheat Update” when it arrives in our office. It contains a summary of yields, disease reactions, and agronomic data of varieties entered into the University trials. You may also want to check out the results from variety trials conducted by the University of Missouri in the bootheel region. Go to this website: http://varietytesting.missouri.edu/wheat/results.htm

October is just a few weeks away. It is the prime time to plant wheat is this region.

SOYBEANS

Asian Soybean Rust,

Dr. Travis Faske, Arkansas Extension Plant Pathologist, alerted us that Asian Soybean Rust (ASR) was found in Desha County on Wednesday, August 7th. We are still a long ways away from it being a treat here in Northeast Arkansas and do not recommend you apply a fungicide for it at this time.

Soybeans rust spores are wind blown, so we expect it will eventually move this way as fronts move through the next few weeks. Please let us know if you find a suspect field with the disease so we can send samples to the lab for ID. The U of A has an ASR working group which includes researchers, Extension specialists and agents, and other crop advisors. The group monitor for rust and collect leaf samples weekly to be sent to the lab for screening.

We will notify you when rust moves this way and becomes a potential threat. We will also provide you a recommendation on the need to use a fungicide based upon your crops growth stage and field status. We encourage you to pay close attention to your late crop. You can always go to the Soybean Rust website for an ASR update:

http://sbr.ipmPIPE.org/cgi-bin/sbr/public.cgi
Frogeye Leaf Spot and Aerial Web Blight Considerations

Most of our latest planted soybeans are blooming while the earliest plantings are beginning to form seed. According to Dr. Travis Faske, Arkansas Extension Plant Pathologist, this is the timing window (R1 to R5) to closely watch your crop to determine if a foliar fungicide would be beneficial. A fungicide application timed between beginning pod formation and early seed development, may help protect yield and seed quality on some fields.

Which fields should you treat? It depends. First of all, is disease present? With the exception of soybean rust, Aerial web blight and Frogeye leaf spot are the two major diseases to monitor. You should be checking your fields weekly to see if they are present. It is also good to become familiar with the life cycle of each disease organism to better determine if they are more of a threat on your farm.

Frogeye is the disease most often sprayed for in Arkansas. It can be identified by its trademark angular lesions that are light colored in the center and surrounded by a reddish-purple margin. Faske notes that it is more likely to be seen on fields in a continuous soybean rotation. Initial infection of a crop generally occurs as soybeans close canopy, shift into reproductive growth, and weather conditions become favorable (damp, warm). The disease organism overwinters in infected soybean plant debris. When the new crop is growing and the weather is right, spores will be splashed up from ground level and from older infected leaves, to infect newly expanding leaves in the top of the canopy. If enough leaf area becomes infected, yield and seed quality can be reduced. The disease can also develop on soybean pods further damaging the crop.

One of the most effective ways to combat Frogeye is to plant varieties resistant to it. They are not likely to develop Frogeye to a level that will hurt the crop. On the other hand, if you have varieties planted that are rated susceptible to Frogeye, they are more at risk to develop the disease, especially with all the wet weather seen lately and if you planted soybeans following soybeans. For fields with good yield potential, fungicide treatment is recommended soon after Frogeye begins to develop.

There are more fungicide and fungicide mix products on the market now days adding to the confusion on what to spray. Faske suggests using a newer generation triazole mixed with a strobilurin (strobie) if Frogeye is found early (R3-R4 or pod formation). This mix will help in disease resistance management. If Frogeye shows up at R5 (beginning seed), Faske says a triazole product alone may be all that is needed to get the crop through seed fill. This approach minimizes pressure on the strobies, helping to delay Frogeye resistance to them.

Aerial web blight can also significantly damage a crop. It is more likely to be seen in a rice - soybean rotation. It is called sheath blight in rice and develops on soybeans in a similar fashion. Since it overwinters in the soil in BB sized bodies called sclerotia, infection will generally begin near ground level. In dense, closed soybean canopies, with damp, cloudy weather, moisture generally persists long enough for spores, released from the sclerotia, to germinate and grow. With continued damp, warm weather, the web-like mass of mycelia (vegetative part of the fungi) will continue to grow up the plant engulfing leaves, pods, and stems. In severe infections, the disease can blow out of the top of the canopy like sheath blight does in rice.

University studies show the strobie products to be more effective on control of aerial web blight than the triazoles. In addition, in some studies, even within the strobie chemistry, some products did better that others for suppressing the web blight organism. Fields should be treated with a fungicide as soon as aerial web blight starts to develop.

A couple of final thoughts. Faske reminds us that if your soybeans make it to R6 (full seed) and disease has not yet developed, the crop should reach maturity without being impacted by disease that comes along later. Also keep spray coverage in mind. It does not matter how effective a fungicide is if you don't do a good job getting it down into the plant canopy to protect the remaining healthy green plant tissue. Use a high spray volume and make sure to include the adjuvant listed on the fungicide label.

On a final note, remember if frogeye or web blight are not present in your soybeans, a yield response is unlikely from a fungicide application. In addition, we will alert you if rust moves this way and a protective fungicide becomes needed.
COTTON

Harvest Aid Considerations

Application Timing: According to Blake McClellend, Extension Cotton Verification Coordinator for Arkansas, application timing is the first decision that has to be made and several factors should be considered. First, picker capacity should be evaluated to determine how many acres should be defoliated to keep pickers running. There are several ways to time defoliation applications: 60% open bolls, 4 NACB (nodes above cracked boll) and 850 heat units (DD60’s) past cutout are the most common ways to determine whether or not the field is ready to defoliate. There has to be a balance between protecting fiber quality and maintaining yield when defoliating cotton. Cotton that stays open longer will most likely decrease in quality while defoliating too early may sacrifice lint yield. Previous research in Arkansas has shown that the most profitable time to defoliate cotton is when 850 heat units, or DD60’s, have been accumulated after cutout (NAWF5). Regardless of which timing method is used, before you pull the trigger, cut some bolls. Cut the uppermost harvestable boll, most of the time 4 to 5 nodes from the terminal. If the cotyledons are developed and black layer is forming, the boll can be opened without decreasing yield and quality.

Application Method: The majority of cotton in Arkansas is irrigated and will require two applications to achieve the best defoliation. The two main things that can make or break defoliation application are tip selection and amount of water applied (GPA – Gallons Per Acre). Make sure to utilize a tip such as a flat fan, twin jet or a cone nozzle that provides good coverage and smaller droplet size. Coverage is essential. If air-mix, or air induction nozzles are used, poor results may follow. The application should be made with no less than 15 GPA (Gallons Per Acre) by ground (20 GPA is better) and 5 GPA by air. If you have the proper combination of tips, pressure, and water, which ever products you go with will perform their best.

Upcoming meetings & field days.

August 27 - UA/MS State—Agritourism & Wildlife Enterprise Workshop, Lonoke, AR

Hoping for a good harvest,

Allen Davis  Dave Freeze
County Extension Agent-County Extension Agent-
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