Field Notes
June 8, 2007
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The topic of conversation remains disease control, more specifically control of Narrow Brown Leaf Spot. We still do not have confirmation on the "suspicious" lesions we mentioned last week. I hope the supplemental Field Notes with updated fungicide charts straightened out the confusion over the difference between the fungicide rates released first by Drs. Hollier and Groth and the subsequent erroneous one by me. If you need the updated version sent to you again just let me know.

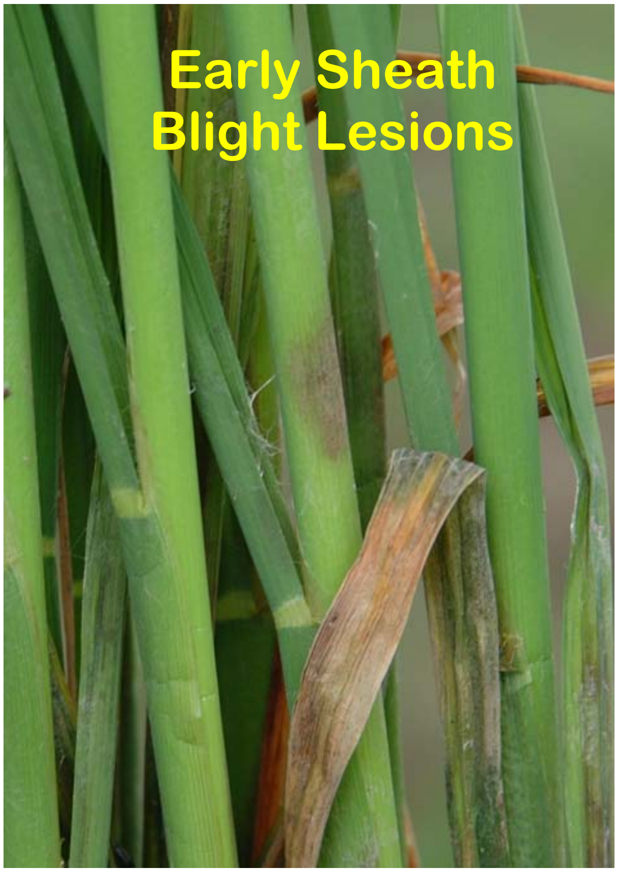
To apply fungicides or not to apply them is the question of the hour. In the past we had become fairly confident in our ability to scout and decide whether a fungicide was justified or not. This time around we are trying to out-guess Mother Nature. If we had some sort of disease predictability model based on weather, cultivar grown and other factors it would be helpful, but we do not. As I mentioned last week the use of a fungicide in the absence of disease is like buying car insurance. It only pays off if you have a wreck, but you really don't want that to happen either.

The two diseases exemplified below are the type we cannot scout for effectively. Sometimes blast will give us a warning if leaf blast shows up early. Last year we found the lesion on Jupiter and were relieved when we found out it was not blast, only *Cercospora*. Boy were we surprised at the damage Narrow Brown Leaf Spot could cause.

Finding either of the lesions above is bad news this year. We have known of the significant damage blast can cause for a long time. Until last year the presence of Narrow Brown Leaf Spot (NBLS) is not a major cause for concern. The devastation we experienced last year changed all of that. The tan to gray center of the blast lesion separates it from the NBLS lesions. The other noticeable difference is the location of the lesion. The blast lesion can be directly over a vein, as it is here or between the veins while NBLS tends to remain between the veins of the leaf. This is not an absolute rule, just the most common form.

On the next page are a series of photographs of other common diseases. As mentioned earlier, fungicides have been used successfully for the past several years to control sheath blight. Panicle blight **cannot** be controlled with fungicides because it is caused by a bacterium. In animals and humans antibiotics are used to treat bacterial diseases. They might be effective on panicle blight, but you could not afford them.

In northeast Louisiana and Arkansas fungicides containing propiconazole (Tilt and others) have been mixed with Quadris and Gem for several years to control False Smut and Kernel Smut which are not controlled effectively with the strobilurins found in either Gem or Quadris. It became so common the companies came out with the pre-mixes Quilt and Stratego. Neither False Smut nor Kernel Smut can be treated on the basis of symptoms. Like NBLS by the time the symptoms show up it is too late. If there is a history of these diseases on your farm or in the area then they are likely to be around nearly every year.


Early Sheath
Blight Lesions


Panicle Blight
symptoms


False Smut


Kernel Smut

The major question remains, should we treat for NBLS. It needs to be done soon if it is to be effective. I created some confusion when I said **3 inch** panicles instead of **4 inch** panicles in my Field Notes last week. The difference in time between a 3 inch and 4 inch panicle can be measured in hours, not days. The simplest way to determine the stage of development is to identify an area that is representative of the field then pull about 10 panicles and split them making sure to use the main stem not tillers. Then just use common sense. Random sampling of the entire field is more accurate; however most farmers don't have time to do that kind of sampling. Based on observations in our verification fields this year it takes about 3 to 4 weeks from green ring (internode elongation) to a 4 inch panicle. I still recommend scouting because environmental effects can alter the time.

Some growers who are able to scout thoroughly and are confident in their judgment might want to treat with propiconazole (Tilt, Propimax, et cetera) early then with Quadris or Gem later if sheath blight shows up. The idea is to reduce fungicide cost. At risk is a second application cost. This is just another way of looking at the problem of timing both fungicides for their most effective use.

If you think diseases are the only problem out there this year take a look at the following two photographs. These are of the worst hail damage I have ever seen in rice. It occurred in Calcasieu parish when hail from the size of quarters to golf balls hit earlier this week. As bad as it looks we think it will recover because for the most part the growing points were not destroyed. The other positive factor was that the flag leaves had not emerged. Most of the grain fill comes from the flag leaf and the one just below it. I'm not saying it did the crop any good, but I think it will recover to a large degree. It certainly has more yield potential than plowing and re-planting this late. I remember a friend in graduate school who decided to quit farming and go to graduate school when one spring he had **FIVE** consecutive plantings of cotton each destroyed by hail.

One other problem associated with the hail damage is the large amount of dead and decomposing leaves and stems in the field. It smelled like it had been recently shredded. It was, just not with a machine. This plant material can provide an ideal medium for the growth of some organisms like *Rhizoctonia* which causes Sheath Blight.

Today is the feast of St. Medard. In the northeast portion of the state they hope it will rain while down here I sure hope it does not. If tradition holds and it rains today it will rain for 40 more days and if it doesn't it will stay dry for 40. We make better rice in a dry June than a wet one. I sure hope it doesn't rain.