Field Notes
June 4, 2007
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The major topic of discussion this past week has been Narrow Brown Leaf Spot often called Cercospora because that is the genus of the causal organism. At left is a photograph of a leaf with suspicious lesions we found last week. Dr. Groth has looked at these and many others brought in by county agents and field representatives of several companies. He has put them in moist chambers to induce spore formation which would be diagnostic for the organism. So far no spores have been produced. Some of the lesions appear to be classic of Narrow Brown Leaf Spot while others appear to those associated with Brown Spot, a different disease. Regardless of symptoms they have not sporulated thus remain suspicious. In the last issue of field notes we talked about the use of fungicides to control this disease. I mentioned application at **3 inch** panicle, but I should have said **4 inch** panicle; not that it really makes that much difference. I look at the application of fungicide without confirmation of disease much like buying insurance.

If we were dealing with sheath blight as we have in the past, we could scout carefully then based on the appearance and severity of symptoms, age of the plant and susceptibility of the variety we could make a decision with some degree of certainty that the fungicide application would provide an economic benefit. Being forced to make a decision in this situation, based on stage of growth rather than knowledge that the disease is present is much more difficult.

We have been scouting all of our verification fields in south Louisiana for the presence of disease for the past couple of weeks and will continue to do so. At this point we have not found any sheath blight or blast. We have found the light flecking of brown spots on the leaves. Until Dr. Groth can confirm the disease we will continue to consider them “suspicious” lesions. We will have to make a decision concerning the use of fungicides soon so I hope we have an answer by then.

The rainy weather we have had for the past week or two is ideal for the development of disease. It seems like every time we have a wet June we have lower yields. Part of that is disease, but a great deal is simply the lack of sunshine. Dr. Dunand said he checked the weather station data and at this time of year we should have about 3 times as much sunlight per day as we do.

We continue to get calls about localized decline. The field pictured above had been drained and dried and was being re-flooded at the time of the photograph. As of this morning it was not getting any better. I also saw a similar field in Vermilion parish this morning. It had deteriorated rapidly over the weekend and was being drained. Dr. Gary Breitenbeck and his associate Joe Kraska are working on this difficult problem. Progress is slow because it is a complex problem often occurring without predictability.

On the next page are a series of photographs taken in our verification field in Concordia parish. A load of Regiment + Aim + a surfactant preceded our load of Duet + Permit + crop oil. Apparently the herbicide left in the hopper was enough to interact with the second load and kill the rice. We tried draining, but accomplished little. The photographs from top to bottom are in what we believe is the order of application. The top photograph was right down the center of the field, the second shows the pass along the top border, the third along one side of the field and the last along the lower border. In the last photograph you can see that as the herbicide from the previous load ran out the damage disappeared. Ironically, propanil and Regiment usually antagonize each other reducing weed control efficacy. What caused this severe injury puzzles both Dr. Webster and me. We would never have expected it. We have good spray records and the pattern tells the tale. We know what happened; we just don't know why it happened. We will measure the affected area and compare yields of good rice to the total of the field to assess the losses. I think it would have been cheaper to rinse out the plane.

We will set up our “Trouble Desk” at the Rice Research Station field day on June 28. As usual if you have any interesting problems please bring them in so we can show them to others who may not have seen the problem or to diagnose it if we can. Different weeds are of particular interest because each year we find new plants in rice fields as the herbicide programs change and cause shifts in weed populations.