

Field Notes
July 5, 2012
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The view above is a portion of Dr. Steve Linscombe's plots on the Rice Research Station in Crowley. Those who were able to make the Field Day tour last week got a chance to see these and more that showed what Dr. Linscombe has described as the worst epidemic of blast he has seen in his career. I have not worked exclusively with rice as long as Dr. Linscombe, but I agree that I have never seen this much or this severity in my career either. These plots were NOT treated with fungicide. What appear to be differences in ripening are actually differences in reaction to blast disease. The plots with straw colored panicles are susceptible and infected with the disease. Dr. Groth had similar appearing plots. One study designed to measure the effects of fungicides at different rates and timings on sheath blight ended up providing good data on blast because of the heavy and uniform infection. A year like this provides excellent research opportunities for scientists and misery and additional costs for growers.

I was pleased to see Cheniere holding up well in Dr. Linscombe's plots. One of our verification fields is a field of Cheniere fertilized with only 65 pounds of actual nitrogen based on the Arkansas developed N-ST*R soil nitrogen test. It is the cleanest field in terms of disease I have ever had in the verification program. We recommended propiconazole only as a preventative for *Cercospora* in spite of the blast in surrounding fields. So, seeing Cheniere looking good on the station provided some relief concerning the decision. CL111 and Catahoula also looked better than most of the other varieties. This was expected of Catahoula which is rated resistant to blast, but surprising for Cheniere and CL111 which are rated as susceptible and moderately susceptible respectively.

With the amount of rice flowering for the past couple of weeks I was expecting to get more calls about the disease shown at right. There are several things to look at in the photograph that help us identify the disease. The smaller yellow circle on the left shows the base of the pedicel where that part of the plant joins the spikelet. Note its discoloration compared to the next one above it in the red circle. Also take a look at the band of slightly darker area of the spikelet in the larger yellow circle at right. Third diagnostic aids are the green panicle branches. What cannot be seen in the photograph is the absence of grain in the affected spikelets.

The disease is bacterial panicle blight. It is associated with high night time temperatures during flowering. Just as a reminder, no matter how much fungicide is used it will not control this disease. Fungicides control fungi NOT bacteria. We have nothing to control bacterial panicle blight yet. The only thing we can recommend is to plant a variety that is resistant or moderately susceptible or plant early to avoid flowering when night time temperatures have risen.

