

Field Notes
June 27, 2012
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Today's edition of Field Notes will be brief because the week has been shortened by the annual Rice Research Station field day to be held tomorrow.

The past several days I have received several phone calls and have visited fields like the one below with county agents. This field is planted to CL151. The straw colored panicles are not ripe; they are the result of rotten neck blast. In this case as in several others, the grower and/or scout never observed leaf blast and decided to take a chance and not use a fungicide. This is the common result. In this area of the field one sample had 100% infection in the panicles, either complete panicle loss or some branches of the panicle.

There seems to have been some misunderstanding that rotten neck and leaf blast are two separate diseases. This is **NOT** the case. These are two symptoms of the same disease. We have tried to stress that leaf blast is a good indicator of rotten neck blast, but the absence of leaf blast did not and does not mean rotten neck will not occur. I guess I have not done a very good job of communicating this based on the number of calls and questions recently received. We have tried since the first discovery of blast in May (see the May 14th edition of Field Notes) to stress the serious nature of the disease and to point out the varieties showing the greatest risk. CL151 and CL261 are both very susceptible.

Fungicide applied at 90% heading might make a person feel better, but is very unlikely to provide an economic benefit. Interestingly, fields like this one might have a good chance to produce a good second crop because the carbohydrates that were supposed to fill the grains will accumulate in the plant. Good second crop production has been associated with carbohydrate accumulation in the straw of the first crop. Furthermore, blast is not normally as serious in second crop as it is in first crop. The same principle applies to fields where straighthead is a problem; poor first crop with an excellent second crop. So there is some chance of recovering some of the loss if a second crop is produced.

One more note about fungicides. All of the fungicide labels state **two** applications are necessary to control blast. Even then 80% control is considered very good control of this disease. In most instances farmers are reluctant to invest that much at a time of the year when the budget is tightening. We have done the same thing in our verification fields electing to use a single application as soon as the first stray heads begin to show. This is a compromise application. It will be too early for some blast infections and too late for some sheath blight and Cercospora infections. We believe we get the most bang for our buck on this application, but realize if the pressure is severe we probably should have applied fungicide twice. It is a chance we take and will likely never know what would have happened if we had made two applications.

Dr. Groth's plots on the station are really worth seeing. There are dramatic differences in his **sheath blight** study as a result of **blast**. In the study he does have single versus double applications of the same materials. The results of this study should confirm what we already suspect, two applications are better than one in controlling disease. An analysis of cost of fungicide application, yield response, quality response and rice price will be necessary to answer the fundamental question, "Was it worth it?" Adversity for the grower provides opportunity for the researcher.



A couple of weeks ago when we had a few days of fairly strong winds I told some of the agents to expect calls regarding tip burn. The next two photographs are of Jazzman 2 exhibiting very typical tip burn symptoms. I have taken leaves like these to several plant pathologists who have tried unsuccessfully to isolate pathogens from them. We still think it is environmental, but cannot explain why it might occur in one field and not the other. There was a nearby field of CL111 that was not affected to the same degree. While it might lead to the conclusion that one variety is more susceptible to the problem than another this is not a valid conclusion. It is just as likely that the problem might be associated with the coincidence of a particular stage of growth and the right weather conditions. Obviously CL111 and Jazzman 2 planted on the same day would not likely be at the same stage at the same time. Add to that a difference in planting date and the results are truly confounded.

This was our most common call last year. We did not figure it out then and I doubt we will figure it out this year.

