LOUISIANA RICE NOTES

Dr. Dustin Harrell & Don Groth

June 8, 2015 **No. 2015-07**

A few days of dry weather

The past few days have given us a few days of dry weather which has allowed us to play catch-up on critical rice management practices. In north Louisiana, a lot of rice was sprayed, fertilized and the permanent flood was established. In southwest Louisiana, a lot of mid-season N was applied. The warm, dry conditions also provided some needed good growing weather for rice which was hurting due to some kind of stress or another. In addition, the first fungicide applications of the season have started to go out. With that in mind, Dr. Groth and I thought it would be good to address fungicide timings and sources in relation to real world scenarios. Dr. Groth has put together an excellent discussion this below with many different disease control scenarios.

Rice fungicide timing for sheath blight, blast, smuts and Cercospora

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Sheath blight has been reported in several fields moving upward very rapidly but is hard to detect in other fields. The current weather patterns (warm and moist) favor sheath blight development. As rice approaches reproductive stages sheath blight development will increase. A few fields have already started to head. **Remember fungicides need to be applied by 50-70% heading!** As a rule of thumb, you lose 100 lb/A/day the fungicide application is delayed for both sheath blight and blast. Severe blast has been found in several Jupiter and CL151 fields. I would plan on spraying a blast fungicide on these and other susceptible varieties at heading. This later application will still have good sheath blight activity. Only light Cercospora has been detect or reported, a good sign. Temperatures remain hot but not excessively high (95^{o} F and above) so damage from bacterial panicle blight should remain light. Below are specific recommendations for various rice diseases and combinations.

Blast fungicide timing: Fungicide timing is critical for blast control. If a single application is being used, the best timing is when 50-70% of the heads are emerging (Heading) but not 100% completely emerged (Headed). Application before or after this stage will not provide good control. If disease pressure is high, when the plants have a large number of active leaf blast lesions on them, two fungicide applications may be necessary to obtain effective control. The first application should be applied between mid-boot to very early heading to protect early emerging heads and reduce spore numbers, and the second between 50-90% heading to protect the majority of the heads. If rotten neck or

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panicle symptoms have already appeared, fungicides will have little if any activity against this disease. Strobilurin fungicides (Quadris, Quilt, Quilt Excel, Stratego, and Equation) are the only fungicides active against blast. Use full labeled rates. Blast is most severe on very susceptible varieties, where the flood has been lost, or excessive nitrogen has been used.

Sheath blight fungicide timing: Fungicides have been used for the last 35 years for sheath blight control. In the past, two fungicide treatments were necessary to reduce sheath blight, but with the advent of more effective fungicides and economic constraints that limit the number of applications, a single application approach is usually used. The best timing for a single sheath blight fungicide application is at the boot growth stage (2-4 inch panicle). Prior to deciding on a fungicide application, a field should be scouted from first joint elongation until heading. The field should be sampled at several locations to determine the percentage of tillers infected or percent positive stops. Specific fungicide treatment recommendations are based on either percent infected tillers or percent positive stops. This threshold is adjusted for the susceptibility of the cultivar. With a susceptible cultivar, 5 to 10% of the tillers infected or 35% positive stops indicate that a fungicide is necessary. A moderately susceptible cultivar requires 10 to 15% infected tillers or 50% positive stops to justify a fungicide treatment for sheath blight. Strobilurin fungicides (Quadris, Quilt, Quilt Excel, Stratego, and Equation) have the best activity against sheath blight but in areas where resistance to the strobilurins is present or suspected the alternate mode of action fungicides fluxapyroxad (Sercadis) or flutolanil (Convoy) must be used. It is a good idea to rotate the mode of action in fields that do not have strobilurin resistant *Rhizoctonia* to prevent or delay development of resistance.

Cercospora fungicide timing: In general, you want to apply propiconazole (6 oz/A of Tilt or equivalent) for Cercospora at boot but before heading. However, the later rice is planted the earlier fungicides should be applied. March planted rice should be applied at boot to heading, April planted rice should be applied at early boot (< 2 inch panicle) and May planted rice should be applied at panicle differentiation. Apply to Cercospora susceptible varieties.

Kernel and False smut fungicide timing: The best timing for the grain smuts is the booting growth stage. Propiconazole (6 oz/A of Tilt or equivalent) has the best activity but only suppresses false smut. Apply to fields planted with susceptible varieties and fields that have a history of smuts.

Blast and sheath blight timing: If both sheath blight and blast are present in a field apply fungicides at the blast timing 50-70% heading.

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Sheath blight may move up the plant some but you will still will get good suppression.

Blast and Cercospora timing: Apply the strobilurin fungicide at the blast timing 50-70% heading. The propiconazole should be used earlier.

Sheath blight and Cercospora timing: Apply a fungicide at boot that has both a strobilurin and propiconazole for common *Rhizoctonia* (Stratego, Quilt, Quilt Xcel, or a tank mix) or if you have the resistant *Rhizoctonia* a tank mix with fluxapyroxad (Sercadis) or flutolanil (Convoy) and propiconazole should be used.

Blast and kernel/false smut timing: Apply the strobilurin fungicide at the blast timing 50-70% heading. The propiconazole should be used earlier.

Sheath blight and kernel/false smut timing: Apply a fungicide at boot that has both a strobilurin and propiconazole for wild type *Rhizoctonia* (Stratego, Quilt, Quilt Xcel, or a tank mix) or if you have the resistant *Rhizoctonia* a tank mix with fluxapyroxad (Sercadis) or flutolanil (Convoy) and propiconazole should be used.

Cercospora and kernel/false smut timing: Propiconazole containing fungicides should be applied at the boot growth stage.

Multiple fungicide applications may be necessary to manage multiple diseases in a field because of selective activity, disease severity, and label restrictions. There are limitations on fungicide application timings i.e. heading restrictions on propiconazole fungicides or preharvest intervals. **You must read and follow the label.** Also, check fungicide prices to determine the most cost-effective program and if you do not need a fungicide (no disease) do not use a fungicide. For additional information and current disease control options, contact your local LSU AgCenter extension agent for information and advice.

Stretched rice update

Last week I shared with you this picture (above) of stretched rice in north Louisiana. For this our recommendation was that the water level should be drained until a skim of water was left on the field. Once the rice begins to recover and stand up on its own the flood should be re-established. The picture

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below shows the same field 3 days later.

Upcoming

June 9	Evangeline Parish Field Day, Mamou.
June 16	Acadia Parish (Rice Research Station South Farm) Field Day, Crowley.
June 30	HorizonAg field day, Rayne (GF&Z Farms, 9:00)
July 1	Rice Research Station Field Day, Crowley.
July 21	Northeast Louisiana Field Day.

Additional Information

Louisiana Rice Notes is published biweekly to provide timely information and recommendations for rice production in Louisiana. If you would like to be added to this email list, please send your request to dharrell@agcenter.lsu.edu.

This Information will also be posted to the LSU AgCenter website where additional rice information can be found. Please visit www.LSUAgCenter.com.

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