Hail, Disease, and Early Heading: A lot Can Happen in One Week

Rice in parts of southwest Louisiana was hit with heavy rain and hail on Tuesday evening (May 26) this week. Hail-damaged rice was reported from Fenton to Mowata. The swaths of the hail-damaged rice can be seen on the map below. The damage covered approximately 200 square miles. This is right in the heart of Louisiana rice country. You can probably guess that most calls this week were related to hail damage.

The damage is highly dependent on growth stage and how the plant was damaged. Rice in the early tillering stages, like the drill-seeded rice in Figure 2 below, can take a lot of damage and still recover. The hail in this case knocked off all the leaves and left only the crown node at, or just below the soil surface. The separated leaves will move with water and wind to the edge of the field. While this scenario looks bleak, it still has a great chance
of surviving. The growing point of tillering rice is the crown of the plant which can be found at or just below the soil surface for drill-seeded rice. The soil gives the crown some protection from the hail. If the grower can keep the soil from drying out completely or submerging the crown for an extended period of time with dark water, this rice will grow a new leaf at the crown. This field should look much different in 10 days to 2 weeks. All rice placed under stress will lose some yield potential, however, early-tillering rice should lose the least if you are able to keep the crown alive long enough to grow that new leaf.

Rice that is in reproductive growth is more susceptible to big yield losses from hail damage. The growing point of rice is the uppermost node and the panicle. Damage to the growing point or the panicle in the boot stage can cause extensive yield loss. In Figure 3, you can see that the rice was broken below the growing point. In this case, the rice will begin to regrow at the uppermost intact node just like ratoon rice. Yield potential will also be similar to ratoon rice. The rice in Figure 4 is at or slightly beyond green ring. The hail in this case caused only minor damage to the leaves and not the growing point. This rice should be ok and should be managed normally.
Headed Rice and Sheath Blight

I have gotten the first reports of headed rice this week. This is only a small portion of the rice in southwest Louisiana. Most rice in the area is at or slightly beyond panicle differentiation. We have also gotten our first reports of sheath blight pressure in rice as well. This is not surprising considering that we have moved into reproductive growth and have currently been in a wet and rainy period over the last week or so. The current forecast has low rain potential for the next 10-days, so that should help reduce some of the disease pressure. As we move into booting rice, we should begin thinking of our fungicide program. Dr. Don Groth has provided a review of the common rice fungicides, timings, rates, and preharvest intervals in the chart below.

Furrow Irrigated Rice

Rice in northeast Louisiana is growing at a quick pace due to the warm weather. Rice that emerged only 2 weeks ago is already at the 4- to 5-leaf stage and ready to fertilize and flood. Most soils in the area are dry now but there are pockets of wet areas. Furrow-irrigated rice (row rice) acres in the area are much higher this year and most questions are related to nitrogen (N) management. Currently, we only have a couple of years of research related to N management in row rice. However, early research suggests that the best management scenario is to spoon feed N fertilizer in this system with 100 pounds of urea spaced 7 to 10 days apart. Visual observation should be used for the need of an additional mid-season N application. Be sure to apply N on dry ground and use NBPT-treated urea when possible followed by irrigation.

Fungicide Use

It is fungicide season again and the rice crop and rice diseases are developing rapidly. The common current labeled fungicides are listed but several of them have generic equivalents available. The rate is the most common recommendation, usually the maximum rate. Many producers like to spike their fungicides with propiconazole (Tilt) to increase Cercospora and grain smut activity. Since the propiconazole label limits the single application rate to 10 oz/A, the maximum additional Tilt that can be added is in column three. The typical growth stages for each fungicide application is listed in column four between boot and heading. However, specific diseases require specific fungicide growth stage applications. Fungicide application for sheath blight and Cercospora can be applied...
**LOUISIANA RICE NOTES**  
Drs. Dustin Harrell & Don Groth  
May 29, 2020

<table>
<thead>
<tr>
<th>Fungicide¹</th>
<th>Recommended Rate²</th>
<th>Max Tilt Addition³</th>
<th>Timing⁴</th>
<th>Diseases recommended⁵</th>
<th>Preharvest interval (Days)</th>
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<tbody>
<tr>
<td>Stratego</td>
<td>19 oz/A</td>
<td>4</td>
<td>B to H</td>
<td>Blst, SB, Cerc. smut</td>
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<td>Quilt</td>
<td>28 oz/A</td>
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<td>B to H</td>
<td>Blst, SB, Cerc., smut</td>
<td>35</td>
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<td>Quilt Excel</td>
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<td>Amistar</td>
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<td>Elegia</td>
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<td>B to H</td>
<td>SB, RSB</td>
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<td>Sercadis</td>
<td>6.8 oz/A</td>
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<tr>
<td>Tilt</td>
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<td>B</td>
<td>Cerc. smut</td>
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<td>Blst, SB</td>
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</table>

¹ Fungicide common name given, but there may be generic versions available  
² Most common rate recommended  
³ Maximum amount of tilt that can be added to tank mix based on 10 oz/A max  
⁴ Boot (B) 2-4 inch panicle in the boot, Heading (H) 50 to 70% of heads emerging  
⁵ Rotten Neck Blast (Blst), Sheath Blight (SB), Cercospora (Cerc.), Strobilurin resistant sheath blight (RSB), kernel and false smut suppression (smut)

**Figure 5. Table of common rice fungicide rates, timing, diseases managed and preharvest interval.**

between boot and heading with good effect. False and kernel smut fungicides must be applied at boot growth stage. Blast applications must be applied at heading growth stage. Each fungicide has a specific preharvest application time to avoid residues. Remember you have to scout for disease and rice growth stages to know what is going on in each of your individual fields. Please refer to the Louisiana Plant Disease Control Guide for more information or contact your local cooperative extension agent for additional information.
Join the Louisiana Rice Text Group List

If you would like to join the Louisiana Rice Text Group, simply text @larice to 81010. To unsubscribe to the group, simply text back “unsubscribe@larice” to the group.

If you would like to get the text messages by email, send an email to larice@mail.remind.com. If you would like to unsubscribe to the email messages, simply email larice@mail.remind.com with “unsubscribe” in the subject line.

Additional Information

Louisiana Rice Notes is published periodically 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.