Rain, Rinse, Repeat

“Long as I remember the rain been coming down, clouds of mystery pouring confusion on the ground, good men through the ages trying to find the sun, and I wonder, still I wonder, who’ll stop the rain.” Could there be a better description of the current situation? I think not.

Looking at the precipitation totals from September 2018 through February 2019, a number of stations are approaching the annual average rainfall in just that 5-month period. Little Rock shows over 40 inches in that period versus an annual average of 49 inches.

For only about the second time I can remember in the last few months, a little field work was observed on high ground in scattered locations the past few days. That all came to a halt with foggy, rainy conditions this morning. Now the 7-day forecast is calling for 4+ inches of additional rainfall (Figure 1). One positive is the easterly shift of the heaviest rainfall amounts, but we’ll see what actually happens.

Figure 1. 7-day precipitation forecast, NOAA.

Looking at Figure 2, we’ve had a great deal of variation in planting progress over the past 12 years. In 2013 and 2014, we had some of our latest planting progress during that time and still managed to set record yields those years, while we didn’t fare so well in 2008 and 2009. We can play this game with each recent year, and the average yields don’t consistently match up with planting progress because so many other in-season factors muddy the waters. There’s still hope for a very good season, but having a little luck start going our way would help a lot.

Figure 2. 2006-2018 Rice Planting Progress by Week of Year, USDA-NASS.

Dealing with Rutted Fields

It’s not a surprise to most, but too many fields look like Figure 3. These ruts will not be easy to fix – they need time – which we’re rapidly running out of. Be wary of working ground too wet and causing compaction that will lead to stand issues and increased herbicide injury.

Seed supplies may be tight for popular hybrids and varieties, so we want to do this right the first time and avoid replant situations. Also note that planting immediately behind tillage may result in more erratic stands than our preferred stale seedbed approach, so be mindful not to cut seeding rates too low.
Custom Rates for Field Operations

Growers are approaching the conditions caused by the current weather situation in a couple of ways. Some are buying, leasing, or renting additional equipment. Some are custom hiring help to do operations like running stubble rollers. That is about the only thing the weather has permitted anyone to do this winter.

Table 1 below summarizes some typical custom rates charged for specific field operations. Custom rates normally include the cost of repairs, fuel, labor, and fixed costs for the tractor and implement.

Table 1. Custom rates ($/acre) for specified field operations.

<table>
<thead>
<tr>
<th>Field Operation</th>
<th>Custom Rate ($/acre)</th>
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<tbody>
<tr>
<td>Land Plane</td>
<td>$16 - $18</td>
</tr>
<tr>
<td>Grain Drill: Rice</td>
<td>$16 - $20</td>
</tr>
<tr>
<td>Chisel Plow</td>
<td>$15</td>
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<tr>
<td>Disk</td>
<td>$12</td>
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<tr>
<td>Field Cultivator</td>
<td>$10</td>
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<tr>
<td>Bedder Roller</td>
<td>$10</td>
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<tr>
<td>Do-All</td>
<td>$6 - $7</td>
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<tr>
<td>Stubble Roller</td>
<td>$6 - $7</td>
</tr>
<tr>
<td>Harrow</td>
<td>$5 - $6</td>
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Custom rates in a local area may vary depending on a number of factors such as equipment size, fuel, and labor costs. The number of acres to cover, field size, and field conditions may be additional considerations in negotiating a custom rate.

Herbicide Choices Prior to Planting

Continuing the theme of weather impacts on field work, it’s time to make plans for managing herbicide applications. It is increasingly likely that planting will follow very closely behind tillage activities. In some cases, the drill may chase the tillage equipment out of the field.

With that in mind, we need to be proactive in our herbicide management. Command may be applied up to 14 days prior to planting. So in a situation where we may not be planting immediately, but within 14 days, it may be wise to make a Command application immediately following completion of tillage activities to prevent grasses from emerging. In instances where the window leans toward 14 days, a higher labeled rate of Command may be successful at providing longer residual activity.

In an ideal situation, tillage would be completed, a Command application made followed by an activating rainfall, followed by planting. Once rice has germinated, a follow-up application of a pre-emergence herbicide such as Prowl or Bolero (and other combinations) could be made to overlap the residual and keep the field clean.

While Command can be used in both Clearfield and non-Clearfield systems, we can also make early applications of Newpath in Clearfield systems. It may be advisable to use Newpath preplant incorporated where we feel we can incorporate and then plant within 7 days. A surface application of Newpath following completion of tillage may also be successful.
If using Command or Newpath early, it will be very important to follow those up with Prowl, Bolero, and/or more Command, especially in fields with a bad barnyardgrass history. If for some reason is planting is delayed past 21 days due to weather, we will essentially have to start over. Even if fields are planted within 14 days, fields should be checked for emerging grass for a potential glyphosate + residual spray prior to rice emergence.

It may also be advisable, depending on the situation and planting date, to include Sharpen at a 2 oz rate for some broadleaf residual activity. Note that these are suggestions and individual situations will dictate the most appropriate program.

Combining Insecticide Seed Treatments for Rice

We’re getting a lot of calls on “overlaying” another insecticide seed treatment on top of seed already treated with an insecticide seed treatment. Obviously this comes at an additional cost to the grower and the cost must provide an additional benefit to the grower.

In our studies, when we compare the neonicotinoid seed treatments CruiserMaxx Rice and NipsIt INSIDE, we have observed very little difference in efficacy between the two products. In other words, they both perform equally well, particularly on grape colaspis. They provide control for rice water weevil too, but both do not provide control equal to that of Dermacor or Fortenza. However, Dermacor does not provide adequate control of grape colaspis. Another thing to remember is that CruiserMaxx Rice and NipsIt INSIDE provide protection of the rice for about 28-35 days. Dermacor on the other hand, provides protection 60-70 days after planting or more with similar results observed for Fortenza. Another difference is that CruiserMaxx and NipsIt provide protection for chinch bugs and aphids (not common pests) while Dermacor and Fortenza provide protection against caterpillar pests such as fall armyworm and rice stem borer.

With growers planting earlier, and as a result, growth being slow from cool temperatures, we see the permanent flood going on late, often as many as 30-50 days after planting. By the time rice water weevils hit the field, the residual control of CruiserMaxx and NipsIt INSIDE is gone and little or no control for rice water weevil is observed, as should be expected.

We have spent the last few years looking at combining insecticide seed treatments to enhance control of grape colaspis and rice water weevil. In rare cases, we have seen some benefit to putting CruiserMaxx and NipsIt INSIDE on the seed to improve control. But in most cases we do not. If you think about it, it just makes sense. Both provide control of the same pests at about the same level and the residual control is essentially the same.

Adding Dermacor or Fortenza to CruiserMaxx or NipsIt appears to give use early control of grape colaspis and the longer residual control for rice water weevil, particularly when we go to permanent flood at 4 to 5 weeks after planting. This approach looks very promising for growers that have both grape colaspis and rice water weevil and based on 2018 data, may have some advantages for row rice if billbugs are a problem. Again, we are working hard to determine the combinations that will give the best control and return on investment for our growers.

So the question is: What will it cost to overtreat seed that already has either NipsIt or CruiserMaxx on it? Currently Fortenza will cost around $7-8 for hybrid and $20-22 for varieties per acre. Dermacor is around $12.50 for hybrid and $25 for varieties. NipsIt and CruiserMaxx both cost around $10-12 for either
hybrids or varieties. For hybrid seed it would make more sense to over-treat with Fortenza which is a few dollars less than CruiserMaxx or NipsIt and provide better control of rice water weevil. Bottom line, we consistently see better control and higher yields when combining NipsIt or CruiserMaxx with Dermacor or Fortenza, compared to CruiserMaxx with NipsIt, and we can do this at a similar price point.

Additional Information
Arkansas Rice Updates are published periodically to provide timely information and recommendations for rice production in Arkansas. If you would like to be added to this email list, please send your request to rice@uaex.edu.

This information will also be posted to the Arkansas Row Crops blog (http://www.arkansas-crops.com/) where additional information from Extension specialists can be found.

More information on rice production, including access to all publications and reports, can be found at http://www.uaex.edu/rice.

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