



# Arkansas Rice Update

Dr. Jarrod Hardke, Dr. Gus Lorenz, Dr. Trent Roberts, and Dr. Bob Scott

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## Crop Progress

“We’re having a heat wave, a tropical heat wave.” Hot, but not quite that hot yet. Warm, sunny, breezy days were just what much of the state needed this week. The rice is starting to get back on track and lose some of the sick appearance it’s had for most of the year.

The news isn’t good for everyone – the breezy conditions we’ve been experiencing have definitely been causing some issues with herbicide applications. Drift and tank contamination are both problems from trying to accomplish a lot in a short amount of time.

The forecast for next week is a little cooler. It looks like we’ll sink back into the upper 80s with rain chances of 30-40% every day next week. Many will get to spend the weekend in the field trying to get as much done as possible before the rain sets in. On the upside, next week’s rain should help take care of what is already in the ground.

For those of you at the end of your window to apply pre-flood N – **get it out now while the ground is dry**. You can push outside that application window a little and be ok, but let’s not risk a week of rain chances that pushes us 10 days passed it. There is still plenty of young rice out there not ready for a flood, and for those fields these rains can help us avoid having to flush to keep it moving.

**Tables 1 – 3** provide some perspective on crop progress and will be updated during the season. Constantly changing weather will certainly shift them around – hopefully in our favor.

**Table 1. Percent of rice acres to reach ½” IE during listed weeks of 2013 according to current DD50 enrollment.**

½” IE Date	Percent
June 15-21	20%
June 22-28	36%
June 29 – July 5	27%
July 6-12	11%
July 13-19	4%
July 20-26	1%

**Table 2. Percent of rice acres to reach 50% heading during listed weeks of 2013 according to current DD50 enrollment.**

50% Heading Date	Percent
July 5-11	1%
July 12-18	29%
July 19-25	35%
July 26 – Aug 1	21%
Aug 2-8	10%
Aug 9-15	3%
Aug 16-22	1%

**Table 3. Percent of rice acres to reach harvest timing during listed weeks of 2013 according to current DD50 enrollment.**

Harvest Date	Percent
Aug 10-16	1%
Aug 17-23	23%
Aug 24-30	29%
Aug 31 – Sept 6	29%
Sept 7-13	13%
Sept 14-20	5%
Sept 21-27	1%

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## Pre-Flood Nitrogen Management Following Levee Washouts

Rain, rain, GO AWAY! That appears to be the common theme for this year's cropping season. Try not to scare the rain away for too long – just long enough to get things back on track. Imagine how short our memories are – last year at this time I think we were all asking for a rain that never came. This year, some producers have experienced the unfortunate effect of heavy rain on fields that were fertilized and ready to flood resulting in levee washouts.

The most common scenario heard the past few weeks is “I put out my pre-flood N and had levees wash out – I had to let the field dry to re-pull levees. How much of my pre-flood N have I lost and how do I proceed?” The important thing to realize is that you will not lose any of your N until you re-establish the flood. We apply N as urea, which is hydrolyzed to ammonium and we typically protect it when we establish the permanent flood. When the flood is lost and the soil is able to dry soil microbes begin to convert ammonium to nitrate. Rice has the ability to use both ammonium and nitrate, but when we re-establish the flood nitrate is reduced to a gas ( $N_2$ ,  $N_2O$ , etc.), which is lost and no longer available for the rice plant to utilize.

Unfortunately, it is difficult to ascertain exactly how much of the pre-flood N was converted to nitrate and is prone to loss after the establishment of the flood. The only way to know for sure is to take a soil sample and have it analyzed for ammonium and nitrate (residual N / inorganic N). This will give you an estimate of how much ammonium has been converted to

nitrate and can provide a good indication of how to manage N for the remainder of the season. For many producers this is not an option due to the amount of time it would require to pull soil samples, have them analyzed, and determine the N fertilization strategy. Therefore, in most cases we will have to “spoon feed” and manage the N fertilization on a week-to-week basis as needed.

Prior to re-establishing the flood you might consider applying 100 lbs of urea and monitoring the growth and appearance of the rice. When spoon feeding rice and applying N into the floodwater, never apply more than 45 units of N at a time. Following application wait 7-10 days in order to give the rice time to take up the N before making a decision on whether or not to apply more. It is easy to jump the gun and apply more N than needed and end up with increased disease pressure and lodging. So **BE PATIENT** because you don't really know how much N “survived” your flood loss and re-flooding. Spoon feeding rice is a painful and expensive process, but when done correctly can result in comparable yields – but at a much higher cost and with much more risk. Please feel free to contact us with specific scenarios/events for more guidance.

## Picture 1. Time to flood up.



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## In the Field

### Herbicide Issues

A lot of the calls in the past week have been about carryover or mis-applications of Newpath. Sometimes it's strictly a carryover situation where we have a reduced stand or possibly the survival of some Clearfield off-types in fields planted to non-Clearfield cultivars. In other situations it has been non-Clearfield cultivars accidentally sprayed with a tank contaminated with Newpath. In some cases it has been Newpath drift to non-Clearfield cultivars. For all three situations, the result is pretty much the same – a weak, reduced stand (see **Picture 2**).

**Picture 2. Reduced stand due to herbicide injury.**



### Insects

Rice stink bugs seem to be building in a lot of field edges on heading grasses. While we realize you have enough to do already, now is the time to try and get those field edges clean. We talk a lot about how you can expect to see rice stink bug problems if you are the first or last field planted in your area. Unfortunately, this year there isn't a true "middle" crop. We have planted this crop in spurts, and that has the potential to create stink bug problems for all fields as they begin to head. Stink bugs will have the opportunity to hit the earliest planted fields, and then move to newly headed fields throughout the late season. So within a given area, you may have the problem in your earliest fields, but then they'll be ready to move to nearby rice that heads out a couple of weeks later. This will likely repeat itself across our rice acres from beginning to end. Let's try to get ahead of them and suppress the populations on the front end and prevent a large buildup.

**Picture 3. Rice stink bug populations build in field edges like this one.**



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## Scout for Sheath Blight

Dr. Yeshe Wamishe provides information on scouting for sheath blight in rice. For more information, please see the article on the Arkansas Row Crops blog here:

<http://www.arkansas-crops.com/2013/06/10/scout-for-sheath-blight-disease-of-rice-from-green-ring-until-pre-heading/>

## 24c Approved for Dermacor X-100 Seed Treatment in Water-Seeded Rice

Arkansas just received a Section 24(c) Special Local Need label for use of Dermacor X-100 insecticide seed treatment for use in water-seeded rice. This should help growers prevent injury from rice water weevil in water-seeded situations. Dermacor X-100 may be applied to dry rice seed, including conventional, “Clearfield”, and hybrid seed varieties, which will be broadcast into flooded rice fields. Dry rice treated with Dermacor X-100 CANNOT be soaked or pre-germinated before planting. This label is valid until June 5, 2018 or until otherwise revised, amended, cancelled, or suspended.

[http://170.94.200.136/prodreg/PDFform.aspx?file=\443\20130614-17334-M-DEMACOR\\_X100\\_r1373.pdf](http://170.94.200.136/prodreg/PDFform.aspx?file=\443\20130614-17334-M-DEMACOR_X100_r1373.pdf)

**Always read and follow label directions.**

**Need Help with DD50 Enrollment? Call or E-mail Me or Your Local County Extension Agent**

If you prefer to enter them yourself, please visit <http://dd50.uaex.edu/dd50Logon.asp>.

## 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 [jhardke@uaex.edu](mailto:jhardke@uaex.edu).

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

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