



Arkansas Rice Update

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Harvest Progress

“Bring a song and a smile for the banjo, better get while the getting’s good.”

The getting could be better right now. Initial yield reports have been mixed. The general idea is that yields are down some from last year, which was expected considering that exceptional crop.

Some lower yields have been encountered already, but those appear to be mostly due to difficulty managing some of this earliest rice. The cool, continued wet conditions early made it very difficult for rice growth and subsequent fertilization timing for rice planted really early.

By this time last year we had harvested our first two planting date studies. This year, they won’t be mature enough until next week. We’ll provide an update on those results as soon as we have it and maybe they can provide some additional insight into the year and our expectations.

The upcoming forecast also leaves something to be desired for the getting. Rain yesterday and now through the weekend will put a stop to things. That will be followed by what look like good harvest conditions, but not good finishing conditions for the rest of the crop trying to finish up as we move into the mid 80s for highs and 60s for lows. This could start to drag out.



Don’t Drain Too Early

Given the lateness of this crop and the current weather pattern, many are considering trying to get fields drained soon. While we want to get the ground dried out and move toward harvest, draining too early can have negative consequences.

We can agree that when temperatures are mild and additional rainfall is expected, we can stop pumping early (~14 days after 50% heading). However, actually pulling the water off the field early is not our goal at that timing. At this stage we want to make sure we do not stress the plants as we complete grain fill.

It’s been a little while since we’ve revisited drain timing in research, but the general take home message remains the same. As we’ve moved to higher yielding cultivars with longer panicles that take longer to complete grain maturation, the negative impact of draining too early could be even further exaggerated.

Table 1 illustrates the optimum drain timing to be approximately 25 days after 50% heading (our current recommendation for long grains). This research is based on silt loam sites, so clay soils could be drained a little earlier as they retain moisture better. But limited data from 2006-2007 indicates that the optimum drain timing for clay

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soils is in line with the data presented below for loamy soils.

Remember that we want to target approximately 25 days after 50% heading and have about 2/3 straw colored kernels on loamy soils, or 1/3 straw colored kernels on clayey soils. Remain conservative in your decision to drain as we can lose yield by going too early – and this is not a year to leave yield in the field.

Table 1. Relative rice grain yield based on drain timing after 50% heading.

Drain Timing	RREC		PTRS	
	2004	2005	2004	2006
dah	bu/A			
14	89%	89%	92%	61%
21	92%	95%	94%	--
28	100%	98%	96%	100%
35	92%	100%	100%	86%

Application Timing for Rice Stink Bug in Late Rice

Over the past week we have gotten multiple calls about some growers not wanting to spray for rice stink bug in their late rice. This is understandable, we have spent a lot of money this year already to get the crop to where it is. We should keep in mind that our late rice is going to have high rice stink bug populations, and that the higher these populations are the greater the chance of having ‘pecky’ rice. Most mills do not dock for 2% peck or less, but starting at 2.5% we can see a loss of \$30 an acres on 200 bushel rice.

With this in mind, the question becomes: If I can only make one application for rice stink bug, what timing gets me the most bang for my buck? Based on our work the past few years, an application around 50% milk and 50% soft dough gives us the best chance of reducing peck. This is not a suggestion for an automatic application, but rather if I can only make one application this is

the timing I would choose. This application timing has also shown increases in total rice, which can help maintain profitability.

We have a lot of confidence in our current thresholds for rice stink bug, and would like to see rice stink bugs managed by those guidelines. Rice stink bug management is not an area where money should be saved on our late rice. At a minimum we are looking at one application, but most likely more. If we are only willing to make one application, we should time that application when rice panicles are around 50% milk and 50% soft dough.

Residuals for Weed Control on PP Ground

On the ~1 million acres of prevented plant (PP) ground this year in Arkansas, managing weeds has become a priority to reduce seeds from returning to the seedbank. End-of-summer/fall-applied residual herbicides are a great option to stop more flushes of weeds from emerging and save us from extra postemergence applications. However, later applied residual herbicides have the potential for carryover into our next cropping season, which may severely impact our crop potential. Here’s a few things to keep in mind if applying residual herbicides on PP ground and rotating to rice next season:

1. Many residual herbicides have plant-back intervals to rice at or greater than 8 months. Therefore, there are limited options to apply at this time to remain on-label.
2. Beware of drifting these late-applied herbicides onto neighboring crops that may be finishing up. A lot of crops are at a delicate stage with grain-fill and even a slight drift amount can significantly impact yield.
3. Herbicide carryover is a guessing game in most situations (dependent on environment, soil, precipitation, etc.). Although certain

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residual products may be successful 4 out of 5 years and not result in crop injury, those same herbicides may significantly damage the crop the other year.

Residual herbicides that can be used, used with caution, or should not be used for PP ground rotating to rice are as follows:

Can use: Sharpen, Prowl, Verdict (10 fl oz/ac max), Valor;

Use with caution: Dual Magnum, Outlook, Callisto, Treflan;

Do not use: atrazine (if applied after June 10, only corn or sorghum can be planted FY), metribuzin especially in a high pH soil, Zidua.

These residual herbicides should also be selected depending on the target weed species and timing. If applications are planning to go out now to manage late flushes of Palmer amaranth, PPO-inhibitors (Valor, Sharpen), Group 15's (Dual Magnum, Outlook), Verdict, and Callisto would work well. If the primary concern is grasses, especially ryegrass later this fall, applications of Prowl, Treflan, and Group 15's (Dual Magnum, Outlook) will help.

However, the later applications get delayed into the fall, the greater potential for crop injury to occur. A study from Mississippi State (Lawrence et al., 2018) showed crop injury, stand loss, delay to 50% heading, and yield loss from fall applications of Dual Magnum, Zidua, and Treflan. Their study had approximately a 6 month gap between applications and rice seeding (sprayed in November, planted in May), and was conducted on a heavy Sharkey clay soil with high pH (8.0 – 8.2). Therefore, the potential for injury in Arkansas on lighter soils, especially those which also have a high pH, is greater than what was documented in the Mississippi study.

Although residual herbicides are a great option for weed control on PP ground,

implementing tillage where possible is also still beneficial without a risk of crop injury the following year. In the war against weeds, keep fighting the good fight out there.

Reference: Lawrence, B.H., Bond, J.A., Edwards, H.M., Golden, B.R., Montgomery, G.B., Eubank, T.W., Walker, T.W., 2018. Effect of fall-applied residual herbicides on rice growth and yield. *Weed Technol.* 32, 526–531. <https://doi.org/10.1017/wet.2018.41>

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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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