



Arkansas Rice Update

Dr. Jarrod Hardke, Dr. Trent Roberts,
& Scott Stiles

May 22, 2020 No. 2020-10

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Mostly Nearly Planted Up

“There’s no normal life, Wyatt. There’s just life.” - Doc Holliday, Tombstone. Strange days are the norm these days.

All parts of the state are rapidly approaching the end of rice planting. However, south Arkansas is likely 90-95% planted while north Arkansas is 80-85% planted. The main difference here is that there are areas and individuals in the north with drastically lower planting progress while the south is somewhat uniform in progress.

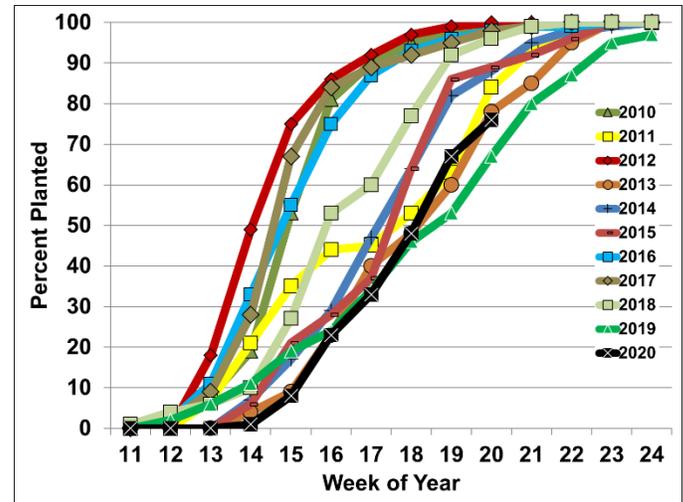
Rain in unexpected amounts hit most of the state last night and again today (5/22). Between the two different events locations received 1 to 4 inches. An earlier than expected hit based on forecasts.

Now we have rainfall expected beginning sometime Monday and extending through most of next week. That quite possibly puts us into June before much of any of the remaining rice acreage would have a shot at being planted. Say hello to prevented planting and for the most part, the completion of rice planting in the state.

While I will have a better idea once the smoke clears from these rains and next week’s rain chances, maybe we can take an early guess at where acres will fall. It’s probably safe to say that we will be near 1.4 million total acres, but we could also see 200,000 acres go to prevented planting. Intentions were up greatly this year, but there are still plenty of reports of folks just not getting the opportunity or window to plant all of the acres they intended.

Depending on specific situations, and the soybean price, some will continue planting into the early part of June where we do still have some yield potential. After the first week of June it’s time to completely shut it down as the risk begins to outweigh the reward.

Fig. 1. AR Rice Planting Progress 2010-2020.



Time to Send Some Rice to Flood

The oldest or earliest planted rice in the state is now ready to go to flood. Remember that fertilizing ‘on time’ depends on the age of the rice, not the height. Some of this 4-5 leaf rice is only 4-5 inches tall, but is within the optimal flood timing window. For this earliest planted rice now is the time to fertilize and flood if we can manage a 2-4 inch initial flood depth and not let the water remain too deep. After fertilization and flooding, the rice will begin rapid vegetative growth and allow us to increase flood depths as the plants increase in height.

Some of this early-planted rice may be getting to the end of the pre-flood nitrogen (N) window by the time we dry out again. If we can’t get it out on time on dry ground during this optimal window then we can start to lose yield potential.

The earlier the maturity of the cultivar, the shorter the window the get rice fertilized on time and prevent yield loss. **Fig. 2** shows a general overview of yield decline as pre-flood N is delayed. When we talk about the date to get a field fertilized, remember

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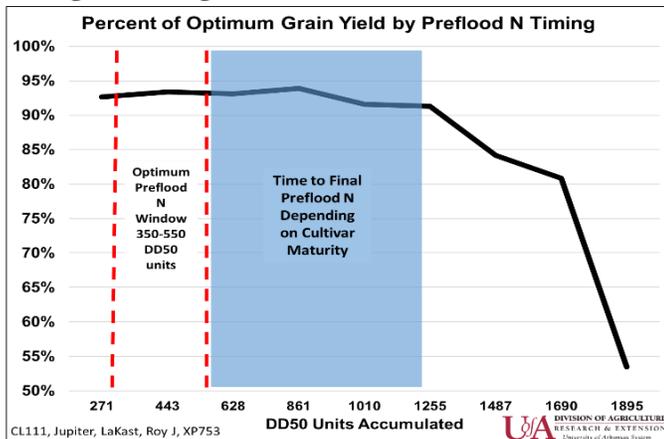


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that is the date it needs to be incorporated with the flood to be available to the rice plant for uptake.

Fig. 2. Rice grain yield as affected by pre-flood nitrogen timing.



See **Tables 1 & 2** for estimated Final Recommended Time to Apply Preflood Nitrogen for selected cultivars. Keep in mind that these DD50 report projections were run today (5/22) and with the milder temperatures rice may progress slightly slower than the 30-year average weather data used to project these dates. However, given how close we are now to these dates, they likely will not change by more than a couple of days even with milder temps.

Table 1. Final recommended date to incorporate pre-flood nitrogen for selected cultivars based on emergence date in Arkansas County.

Cultivar	Emergence Date			
	4/9	4/24	5/4	5/15
Final Date to Incorporate Preflood N*				
Diamond	5/29	6/2	6/10	6/16
Jupiter	6/2	6/6	6/13	6/19
CLL15	5/27	5/31	6/8	6/14
XP753	5/22	5/27	6/4	6/10

* Based on DD50 reports run 5/22/20.

Table 2. Final recommended date to incorporate pre-flood nitrogen for selected cultivars based on emergence date in Poinsett County.

Cultivar	Emergence Date			
	4/9	4/24	5/4	5/15
Final Date to Incorporate Preflood N*				
Diamond	6/3	6/5	6/12	6/18
Jupiter	6/6	6/8	6/15	6/21
CLL15	6/1	6/3	6/10	6/16
XP753	5/27	5/30	6/6	6/12

* Based on DD50 reports run 5/22/20.

Use a Urease Inhibitor on Your Preflood Nitrogen

There has been a fair amount of chatter of late about folks looking to ‘skip’ using a urease inhibitor (NBPT product such as Agrotain). Some of the incorrect reasoning heard was that it slows nitrogen availability (FALSE) and that they don’t see that it saves them anything (FALSE). For about \$5 per acre the value of these products far exceeds the investment.

See **Fig. 3 & 4**. On loamy soils if you cannot flood in 3 days or less, you stand to lose 15% or more of the N applied to volatilization. On clayey soils if you cannot flood in 7 days or less you stand to lose a similar amount. This N loss is equivalent to the cost of the urease inhibitor and if it takes you even longer to flood the losses just keep adding up. There are plenty of fields out there that take 10-21 days to establish a flood.

Use a urease inhibitor as cheap insurance to win the fight against lengthy flood times or emergencies where wells or power units go down. Unless you can flood in just a few days, there really shouldn’t be much argument about the utility and return on investment of these products.

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Fig. 3. Ammonia volatilization losses when several N sources were applied 10 days prior to flooding.

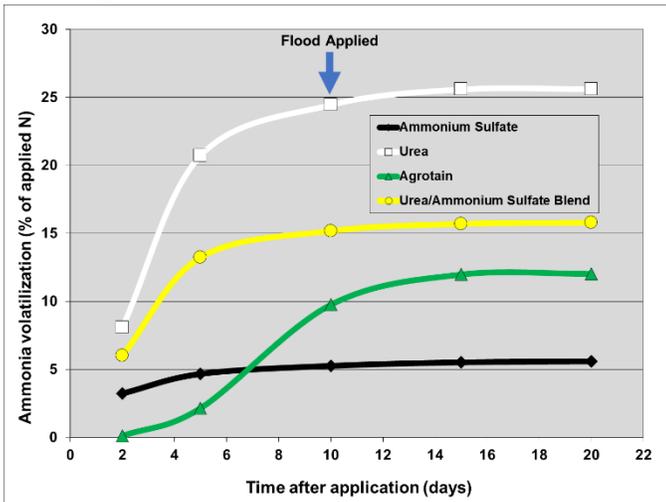
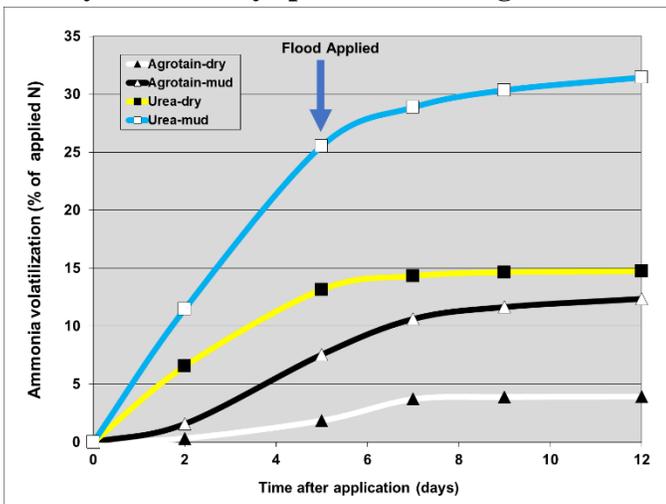


Fig. 4. Ammonia volatilization losses when urea and NBPT-treated urea were applied to a dry or muddy soil five days prior to flooding.



Preplant and Preflood Zinc

There are several simple and cost-effective preventative measures that can help ensure that zinc deficiencies never occur. Potentially areas where zinc deficiency often arise are on sandy and silt loam soils or areas that have recently been precision graded.

The availability of zinc to the rice crop is controlled by zinc concentration in the soil and the soil pH. Fields with high pH either in the soil or due to the addition of calcareous irrigation water are often prone to zinc deficiencies.

An extensive amount of research has been conducted on zinc availability and fertilization with the following guidelines to help prevent these deficiencies from occurring. If you have sandy or silt loam soil, Mehlich 3 soil test zinc < 4 ppm and a pH >5.9 or a pH <6.0 a soil test zinc concentration <1.6 ppm a zinc application is recommended to ensure that yield is not limited.

Preplant or delayed application granular zinc fertilizers can be blended with other products such as ammonium sulfate or DAP. Although it is not necessary, incorporation of granular zinc fertilizers will often help with distribution and place zinc in the rice root zone where it is needed most.

When applying granular zinc as zinc sulfate it is important that you apply at least 10 lbs of actual zinc per acre to ensure uniform distribution and adequate zinc concentration for rice growth. The solubility and zinc concentration of granular and liquid sources vary greatly so make sure that you check the label to be sure that the correct amount of actual zinc is being applied.

Preflood zinc applications are often made in a liquid form and are tank mixed with herbicides. Always test the compatibility of herbicides with

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liquid zinc sources prior to loading. Several liquid zinc products are available, but the rate of zinc application is very important.

Another important consideration is whether or not the liquid zinc source is chelated. With most pre-flood zinc applications in rice the amount of leaf area or canopy coverage is relatively small therefore the majority of the spray application hits the soil rather than the foliage.

Zinc is immobile in the soil therefore nonchelated zinc sources remain at the soil surface and do not move into the root zone limiting plant uptake. Chelation increases the mobility of zinc in the soil profile and allows faster and more effective uptake and use by the small rice plants.

For pre-flood zinc applications, a zinc EDTA chelated source is the best option as it allows foliar uptake but also enhances root uptake. Once the rice is larger (often post-flood) and has near complete canopy coverage a zinc sulfate or a non-chelated zinc source can be effective as the majority of the uptake will be foliar.

Always know your product and check your label when using liquid zinc sources. Applications of zinc made using liquid sources can often be adequate at rates of 1-2.5 lbs of actual zinc per acre depending on the source used. In all cases please contact your local county agent or refer to the MP192 for more information regarding the identification, prevention and correction of zinc deficiencies in rice.

Rice Market Update

Calendar: May 25th - Memorial Day - Grain Markets Closed.

Reminder: The crop insurance Final Planting Date for rice in Arkansas is May 25th. Acres planted on or before this date receive the full yield or revenue guarantee that was selected. Acres planted after this date receive a reduced guarantee. Acres not yet planted as of this date should be reported to your insurance agent within three days.

A late planting period begins after the Final Planting Date and typically lasts for 15 days (check with your insurance agent). For acres planted after the beginning of this period, the value of the yield or revenue guarantee is reduced daily (generally 1% per day).

Crop Progress:

The table below includes rice planting progress for individual states as of May 17th. The Arkansas crop was reported 76 percent planted; ahead of last year's 63 percent but still behind the 5-year average of 88 percent.

U.S. Rice Planting Progress, 2020.				
State	May 17 2020	Last Week	Last Year	5-Yr Avg.
<i>Percent Planted</i>				
AR	76	67	63	88
LA	91	87	91	97
MS	76	57	60	85
MO	60	51	65	83
TX	97	95	83	87
U.S.	81	70	68	84
Source: USDA, NASS.				

The U.S. rice crop is 81 percent planted as of Monday's USDA report, which is well ahead of last year's pace (68 percent by the same day). Next week

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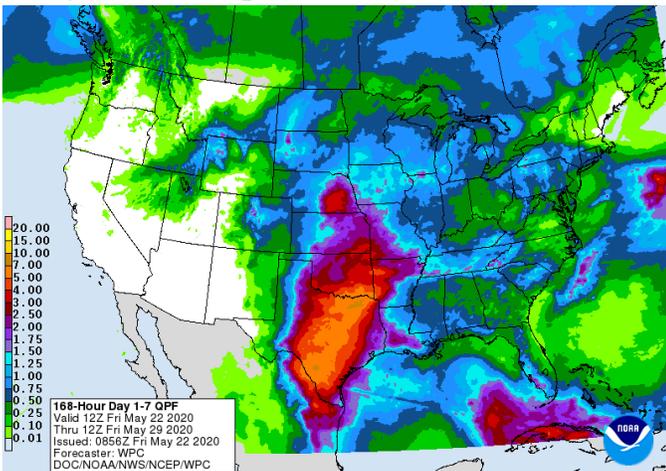


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will feature rains across the state which will stall planting progress on remaining acres. Like last year, the calendar will force decisions on planting late or taking prevented planting. Unfortunately, losing an opportunity to get in the field next week will keep planters parked until at least early June.

7-Day Total Precipitation (5/22 – 5/29).



Source: NOAA/ National Weather Service.

Coronavirus Food Assistance Program (CFAP)

Beginning May 26, Farm Service Agency offices will be accepting applications for CFAP. Applications will be accepted through Aug. 28, 2020. Once the application process opens, there will be forms and payment calculators on USDA’s website at www.farmers.gov/cfap.

Row crops:

Some of the “non-specialty crops” eligible for CFAP payments include corn, upland cotton, oats, soybeans, and sorghum. Producers will be paid based on inventory subject to price risk held as of Jan. 15, 2020. A payment will be made based 50% of a producer’s 2019 total production or the 2019 inventory as of Jan. 15, 2020, whichever is smaller,

multiplied by the commodity’s applicable payment rates.

Producers must provide the following information for CFAP:

- Total 2019 production for the commodity that suffered a 5% or greater price decline, and
- Total 2019 production that was not sold as of Jan. 15, 2020.

Producers will self-certify their inventory on Jan. 15 and will receive payments on up to 50% of the 2019 production levels for that crop. For example, if a grower produced 100,000 bu. of soybeans in 2019 and had 75,000 bu. left as of Jan. 15, he would be eligible for payments on 50,000 bu. However, if only 25,000 bu. were in inventory, he would be eligible for the payment on only 25,000 bushels.

Additional details including a complete list of eligible commodities and CFAP payment rates can be found at www.farmers.gov/cfap/non-specialty.

Rice Market:

September rice futures look to end the week near unchanged, trading at \$11.91 (Friday a.m.). Trading volume is lite ahead of the Memorial Day holiday on Monday. The September contract stayed in a tight range this week between \$11.86 and \$11.97. A wet forecast for the upcoming week and the approaching insurance Final Planting Date is offering mild price support.

Thursday weekly *Export Sales* report from USDA was supportive to the market in early trading with 69,256 MT of long-grain rough rice sales recorded and 30,848 MT of long-grain milled rice sales. Mexico was the largest buyer of both. Year-to-date, long-grain export sales stand at 16 percent ahead of last year while shipments are 6 percent ahead.

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DD50 Program is Live

While planting progress has only just begun, we do have rice emerged. With that in mind, the DD50 Rice Management Program is live and ready for fields to be enrolled for the 2020 season. All log-in and producer information has been retained from the 2019 season, so if you used the program last year you can log-in just as you did last year. Only field data from 2019 has been removed. Log-in and enroll fields here: <https://dd50.uaex.edu/>.

Here's a recent article on the DD50 program:

[Use the DD50 Rice Management Program to Say Ahead in 2020.](#)

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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