Arkansas Rice Update

Dr. Jarrod Hardke, Dr. Yeshi Wamishe,
Dr. Tommy Butts, & Scott Stiles

July 2, 2020 No. 2020-16 www.uaex.edu/rice

DIVISION OF AGRICULTURE
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Crop Progress

"Have you ever seen the rain, coming down on a sunny day." Sun, rain, rinse, repeat.

The 2020 season continues to be anything other than dull. Scattered storms this week turned right into downpours in some places. While that means a free maintenance flood for some, it means issues for others.

A persistently wet year is forecast to stay that way for another week too. Next week is full of mid-80s temperatures and scattered to isolated thunderstorms. Cloudy weather and rain are a bad combination as we pass midseason and enter disease season. Time to kick scouting efforts into gear and be on the on the lookout for sheath blight and blast development. See more on these later in the update.

The June *Acreage* report come out on Tuesday, and that's also addressed later here. See a nice breakdown of Arkansas and other states acreage forecast. These numbers are survey based and we won't get more concrete numbers until FSA acreage in August.

As you track your crop progress, keep an eye on your DD50 program (and hopefully sign up for text or email alerts to help). The mild temperatures have us accumulating slightly fewer DD50 units than the 30-year average so we're very gradually shifting a little later than early projections (**Tables 1 & 2**).

Table 1. Percent of acres reaching ½" internode elongation (IE) by week (based on fields in DD50).

Week	Percent of Acres
Beyond ½" IE	35.6%
June 29 to July 5	37.4%
July 6 to July 12	18.8%
July 13 to July 19	5.2%
July 20 to July 26	2.5%

Table 2. Percent of acres reaching 50% heading by week (based on fields in DD50).

Week	Percent of Acres
July 5 to July 11	0.6%
July 12 to July 18	5.5%
July 19 to July 25	24.2%
July 26 to August 1	38.3%
Aug 2 to Aug 8	23.1%
Aug 9 and later	8.1%

Rice Herbicide Cut-Off Timings

With much of the rice in the state now reaching or past the start of reproductive growth stages, it's important to remember cut-off timings for herbicide applications. Applications of herbicides after cut-off dates can result in rice yield loss.

Table 3. Cut-off timing by rice growth stage for selected herbicides.

Herbicide	Rice Growth Stage Cut-Off
Aim	½" IE
Beyond/Postscript	BIE/green ring for hybrid BIE + 14 d for varieties
Clincher	60-day PHI
Facet	BIE; green ring
Gambit	48-day PHI
Grandstand	½" IE
Grasp	½" IE
Londax	½" IE
Loyant	60-day PHI
Permit	48-day PHI
Permit Plus	48-day PHI
Phenoxy (2,4-D)	½" IE
Propanil	BIE; green ring
Provisa	BIE; green ring
Regiment	BIE; green ring
Ricestar	BIE; green ring
Sharpen	BIE; green ring
Ultra Blazer	50-day PHI

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Rice Disease Update

Blast: The no stranger is back again. We received our first report of leaf blast on June 30 in 2020 from Randolph County on a medium-grain rice, Titan (**Fig. 1**). If you have not started scouting fields planted with susceptible rice for leaf blast, please do so. As observed for several years, blast in Arkansas often starts in the second or third week of June. Right at the end of June, we received our first report.

Fig. 1. Rice blast on Titan in Randolph Co.

Field spots to scout for blast: Scouting for blast across your fields planted with susceptible or moderately susceptible rice is not practical. Blast infection often shows up along tree lines, drier field edges, on the levees, and spots in the field where nitrogen fertilization overlaid.

Early symptoms may be greyish-black spots without the typical symptoms. You may find the typical symptoms of blast if you open the canopy and look at lower leaves. If you cannot find leaves with typical leaf blast symptoms but only the dark-grey spots, you may flag it for re-visit within a week. When more infection occurs across a field, you may see color differences.

In the cases of leaf burndown due to infection from the blast fungus chemical spraying becomes inevitable. However, early detection helps to take immediate action particularly in raising the flood depth and low the disease development and also to plant ahead for protective fungicides for later season blast damage.

Sheath blight: Sheath blight is progressing very fast in our research plots inoculated artificially (**Fig. 2**). This means the weather is just perfect for sheath blight fungus to establish itself within the rice tissues and to develop and spread to new tissues. The wet and warm conditions with high humidity help the pathogen to take off. Please continue scouting and determine the threshold for management action. To read on how to establish the threshold, please visit last week's post here.

Fig. 2. Sheath blight is active when the colors of lesions are dark grey.

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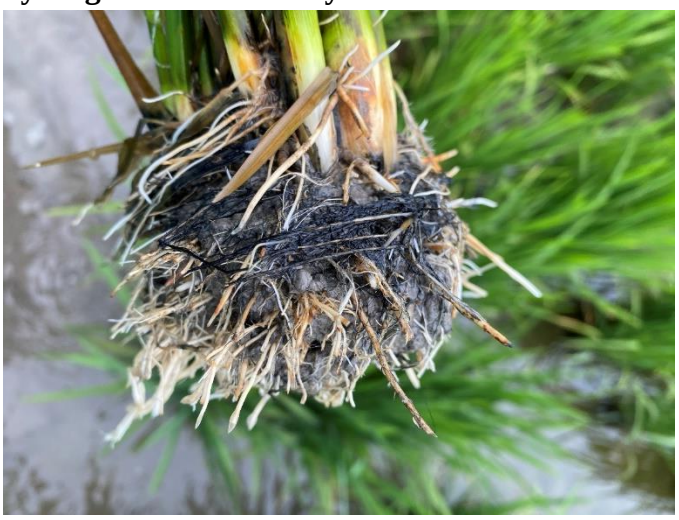
Hydrogen Sulfide Toxicity: Under anaerobic conditions, symptoms of hydrogen sulfide toxicity may not be evident until after the darkened roots from the coating of reduced iron start to deteriorate by hydrogen sulfide (**Fig. 3**). Early symptoms include stunted rice with yellow lower leaves. However, continued deterioration of root systems leads to invasion of root crowns by opportunistic fungi resulting in collapse of the rice plants as the season advances under continuous flooded/anaerobic condition. These situations can be avoided and the crop can be rescued by allowing oxygen to get in the soil profile. This is done either by completely draining and drying the field just for a few days as in for straighthead or lower the water until mud and pump back the water. This is more realistic to small-sized fields. Please read the post from two weeks ago for more information here.

Fig. 3. Poor root system of rice affected from iron sulfide dark coating followed by deterioration by hydrogen sulfide toxicity.



Approved Tank-Mixtures with Loyant

Loyant herbicide is a valuable tool for broadleaf and sedge weed control in rice and can assist with managing barnyardgrass and broadleaf signalgrass. However, the label does not allow for several herbicides to be tank-mixed with Loyant. This list of approved tank-mix partners was updated this year resulting in some recent confusion on what mixes are allowed. **Table 4** provide a quick guide to those rice herbicides that are approved and not approved to be tank-mixed with Loyant.

All pre-mixture herbicides are approved to be tank-mixed with Loyant excluding Rebel EX. Please visit www.loyanttankmix.com for more information and the most up-to-date list of approved tank-mix options for Loyant. Be aware of the 60-day PHI cutoff for Loyant (roughly green ring or ½" IE).

Table 4. Approved and not approved tank-mix partners with Loyant herbicide.

Approved	
Common name	**Trade name**
2,4-D	2,4-D
acifluorfen	Ultra Blazer
bensulfuron	Londax
bentazon	Basagran/Broadloom
carfentrazone	Aim
clomazone	Command
cyhalofop	Clincher
halosulfuron	Permit
imazamox	Beyond/Postscript
imazethapyr	Newpath/Preface
imazosulfuron	League
pendimethalin	Prowl
penoxsulam	Grasp
propanil	SuperWham, Stam
quizalofop	Provisia
saflufenacil	Sharpen
thiobencarb	Bolero

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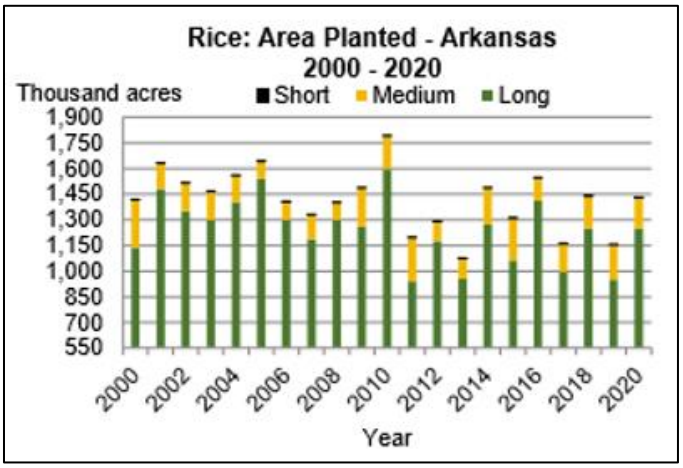
Not Approved	
Common name	**Trade name**
bispyribac-sodium	Regiment
cyhalofop + bentazon	Clincher + Basagran/Broadloom
cyhalofop + imazamox	Clincher + Beyond/Postscript
cyhalofop + penoxsulam	RebelEx
fenoxaprop	Ricestar
orthosulfamuron	Strada
pexosulam + fenoxaprop	Grasp + Ricestar
quinclorac	Facet
triclopyr	Grandstand

Rice Market Update

USDA released its' much-anticipated June *Acreage* report this week. The results weren't too surprising with U.S. long-grain acres increasing 414,000 or 23 percent from last year. All the major rice producing states increased acreage in 2020.

U.S. Long-Grain Planted Acres.			
million acres	**2019**	**2020**	**Difference**
Arkansas	.950	1.250	+.300
California	.010	.012	+.002
Louisiana	.370	.390	+.020
Mississippi	.115	.150	+.035
Missouri	.180	.210	+.030
Texas	.153	.180	+.027
U.S.	**1.778**	**2.192**	**+.414**
Source: USDA-NASS.			

Arkansas increased long-grain acreage by 300,000 or 32 percent compared with last year. The complete breakout **(figure below)** by class for Arkansas is 1.25 million acres for long-grain, 180,000 acres for medium-grain and 1,000 acres for short-grain.



As we've talked about in previous *Rice Updates*, the results of the June *Acreage* survey will be used in the production estimates of the upcoming July 10th WASDE (ie. supply/demand report). How will the June *Acreage* impact the 2020 balance sheet for long-grain? Answering this question requires a look at the differences between the 2020 March *Prospective Plantings* and the June *Acreage* report. Likely due to the price disparities this spring between rice and competing crops, NASS indicated that long-grain acres increased a bit (92,000 acres) from the March intentions. Arkansas added 60,000 acres. California, Missouri, and Texas collectively added another 32,000 acres, bringing total long-grain planted acres to 2.192 million. Of this total, USDA anticipates that 2.156 million will actually be harvested.

U.S. Long-Grain Planted Acres, 2020.			
	March*	**June****	**Difference**
Arkansas	1.190	1.250	+.060
California	.010	.012	+.002
Louisiana	.390	.390	-
Mississippi	.150	.150	-
Missouri	.190	.210	+.020
Texas	.170	.180	+.010
U.S.	**2.100**	**2.192**	**+.092**
NASS March 2020 *Prospective Plantings ****NASS June 2020 *Acreage***			

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Incorporating these acreage adjustments into the July WASDE will increase 2020 long-grain harvested acreage by 86,000. Applying the same U.S. average yield used in the prior two monthly S/D reports, one could anticipate USDA's July production estimate to increase by 6.3 million to 161.8 million cwt. Without any adjustments to demand, this increase in production would push projected ending stocks up to 27.5 million cwt. Given that, expectations for 2020 average farm prices will likely begin to soften in the July WASDE from USDA's June estimate of $11.80/cwt.

U.S. Long-Grain Supply and Demand
(in millions)

	2018/19	2019/20	2020/21	2020/21	Change
		June	June	July	June to July
Planted Acres	2.20	1.778	2.1	2.192	0.092
Harvested Acres	2.18	1.73	2.07	2.156	0.086
% Harvested	99.2%	97.3%	98.6%	98.4%	-0.2%
Yield (cwt./ac.)	75.17	72.61	75.03	75.03	0
Beginning Stocks	20.3	32.6	14.7	14.7	0
Production	163.6	125.6	155.5	161.8	6.3
Imports	23.4	25.5	26.0	26.0	0.0
Total Supply	**207.3**	**183.7**	**196.2**	**202.5**	**6.3**
Domestic Use	109.0	99.0	103.0	103.0	0
Exports	65.7	70.0	72.0	72.0	0
Total Usage	**174.7**	**169.0**	**175.0**	**175.0**	**0**
Ending Stocks	**32.6**	**14.7**	**21.2**	**27.5**	**6.3**
Stocks-Use %	18.7%	8.7%	12.1%	15.7%	
Avg.Farm Price ($/cwt.)	$ 10.80	$ 12.00	$ 11.80	$ 11.25	(0.55)
Avg.Farm Price ($/bu.)	$ 4.86	$ 5.40	$ 5.31	$ 5.06	(0.25)

Text & Email Alerts Now Available for Fields Enrolled in DD50 Rice Management Program

See more information in the article here: http://www.arkansas-crops.com/2020/06/17/available-enrolled-management/.

DD50 Program is Live

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 an article on the DD50 program: Use the DD50 Rice Management Program to Say Ahead in 2020.

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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.

Acknowledgements

We sincerely appreciate the support for this publication provided by the rice farmers of Arkansas and administered by the Arkansas Rice Research and Promotion Board.

The authors greatly appreciate the feedback and contributions of all growers, county agents, consultants, and rice industry stakeholders.

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