



Arkansas Rice Update

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

April 17, 2020 No. 2020-05

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Slowly Gaining Traction

“Blow up your TV, throw away your paper, go to the country, build you a home.”

Is this how you test the brakes on your tractor? We start and stop, we start and we stop. Progressing is being made, but it’s a circus of fits and starts it would seem.

There’s a wide range of planting progress out there from top to bottom in the state. Some areas and individual growers have achieved anywhere from 20-40% planted, a few as high as 75%, but a large subset is still sitting at 0%. Field work opportunity has been the biggest limiting factor, with a number focusing on getting ground opened up and ready with planting to begin soon.

Over the next 7 days we’re expected to receive 1-2” of rain depending on location in the state (Fig. 1). The larger concern at this point aside from the amount of rain is the scattering of it over the week, with chances on several days next week.

We’re currently tracking with 2013 for planting progress (Fig. 2) but behind other recent years including 2019. Now is traditionally about the time we take off in planting progress, so we just need to miss a rain chance and we’ll be back in business. It’s still April so we’re still on track to get this crop planted with good yield potential.

Fig. 1. 7-day precipitation forecast, NOAA.

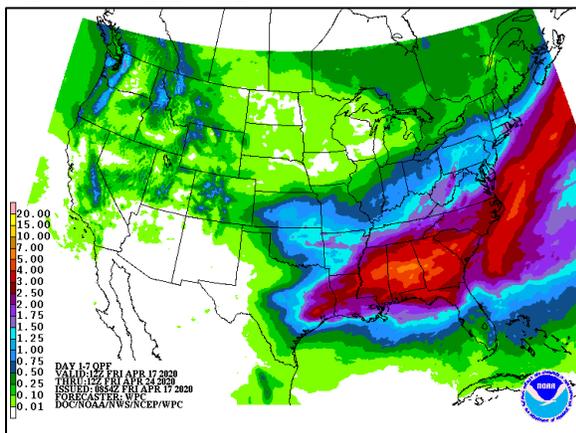
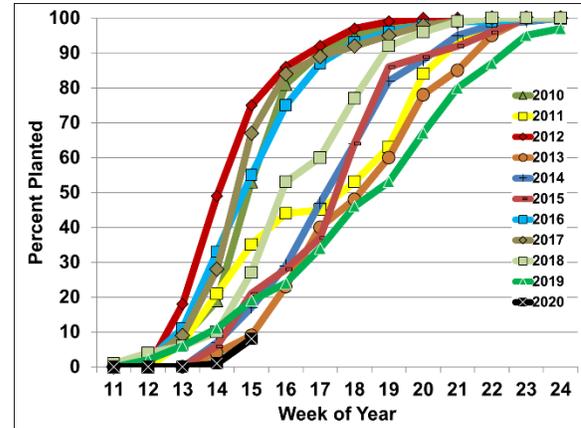


Fig. 2. AR Rice Planting Progress 2010-2020.



Start Clean, Use Residuals, and Don’t Let Weeds See the Light of Day

Everything has officially greened up across the state (looks like I’m mowing our lawn soon), and rice is going in the ground. And although it’s a beautiful sight to see green lawns and trees, and Kelly tools, floats, and planters rolling, it also means weeds are in full swing.

Ryegrass has been more troublesome this spring to get controlled, especially with all of the wet weather delaying timely applications. It has popped up in several areas that have not had to deal with it to a large extent in previous years. Barnyardgrass is already well on its way to challenging our rice crop for the entire upcoming 2020 growing season (Fig. 3). Barnyardgrass seed can germinate anytime when temperatures ranges from 55 to 104°F, and maximum germination occurs at temperatures of 68 to 86°F.

Multiple herbicide-resistant populations of barnyardgrass are now common across the state (Fig. 4 & 5), with resistance to 5 modes-of-action being identified in Arkansas: ALS-inhibitors (Newpath/Preface), DOXP-inhibitor (i.e. clomazone) (Command), ACCase-inhibitors (Fops and Props) (Clincher, Ricestar), Photosystem II inhibitors (propanil), and synthetic auxins (Facet, Loyant). This greatly

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limits herbicide options available to control barnyardgrass in rice. So, what's our best option for getting a handle on weeds and start our rice crop off in the right direction? It's in the title of this article, "Start clean, use residuals, and don't let weeds see the light of day."

Fig. 3. Barnyardgrass seedlings emerging near Hoxie, AR on April 10th.



First and foremost, planting into a clean field is a must, so scout diligently. If we allow weeds to be up when we plant into the field, we're automatically eliminating options that could help such as paraquat, glyphosate, or clethodim (Select Max). Fellow Extension Weed Scientist, Tom Barber, previously this year wrote a blog post about burndown options, especially to manage ryegrass and can be found [here](#). It's also necessary to observe plant-back restrictions on any potential burndown herbicides (e.g. 30 day plant-back to rice if clethodim is sprayed) to reduce the likelihood of crop injury occurring; check out [MP-519, Row Crop Plant-Back Intervals for Common Herbicides](#).

The next item of business, especially for managing herbicide-resistant barnyardgrass, is to use preemergence (PRE) residual herbicides and overlap multiple applications. The best method of control for barnyardgrass in rice is to never let a seedling see the light of day. We recommend starting out with a PRE application of Command at a rate based on your specific soil type, 12.8 to

18 fl oz/acre for silt loam soils and 21 to 26 fl oz/acre for clay soils. These rates allow for a second application of Command to be applied EPOST to remain below the 34.1 fl oz/acre limit per year. A little bleaching on rice is normal and good because it indicates the herbicide is activated and working properly.

A mixture of Prowl (2.1 pt/acre) + Bolero (4 pt/acre) should then be applied delayed PRE to overlap residual herbicides and use modes-of-action that barnyardgrass has not yet been confirmed resistant to in the state. These two herbicide applications should be the foundation of a barnyardgrass management plan.

Building onto that foundation, other residual herbicide options can be added into the program. Facet may be added in PRE with Command or applied EPOST (2-3 leaf rice) at a rate based on your soil type (22-28 fl oz/acre on sands, 32 fl oz/acre on silt loams, and 43 fl oz/acre on clays).

If using a Clearfield or FullPage rice system, 4-6 fl oz/acre of Newpath (Clearfield) or Preface (FullPage) may be mixed with Command PRE, EPOST (2-3 leaf rice), or at both timings to overlap the residual.

Additionally, if broadleaves or rice flatsedge are concerns early-season, consider a Facet + Bolero mixture, or League (6.4 oz/acre), Grasp (2 oz/acre), or Gambit (2 oz/acre) (as long as the weeds are not ALS-inhibitor resistant) as residual herbicides that can help manage those weed species before they emerge.

Although these programs are expensive upfront, the goal is to save a POST application later by not allowing barnyardgrass and other weed species to see the light of day, resulting in better overall weed control with reduced back-end costs. Residual PRE herbicides have a great long-term return on investment.

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Please be sure to visit our website, <https://www.uaex.edu/weeds>, for the latest U of A weed science information. If you ever have any questions, please don't hesitate to get ahold of me at (501) 804-7314. Stay safe, good luck, and thanks for reading!

Figure 4. Total number of herbicide modes-of-action barnyardgrass has been confirmed resistant to in Arkansas by county determined from seed samples collected and screened from 2017-2019. Counties shaded in white represent those which no samples were screened.

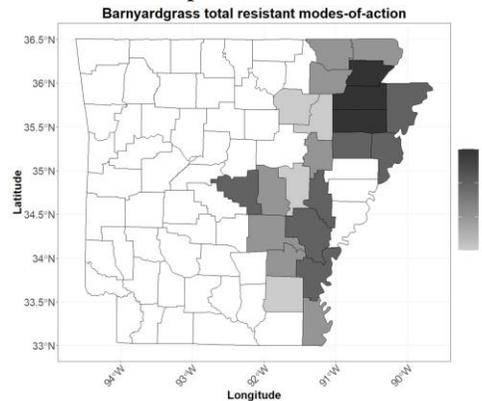
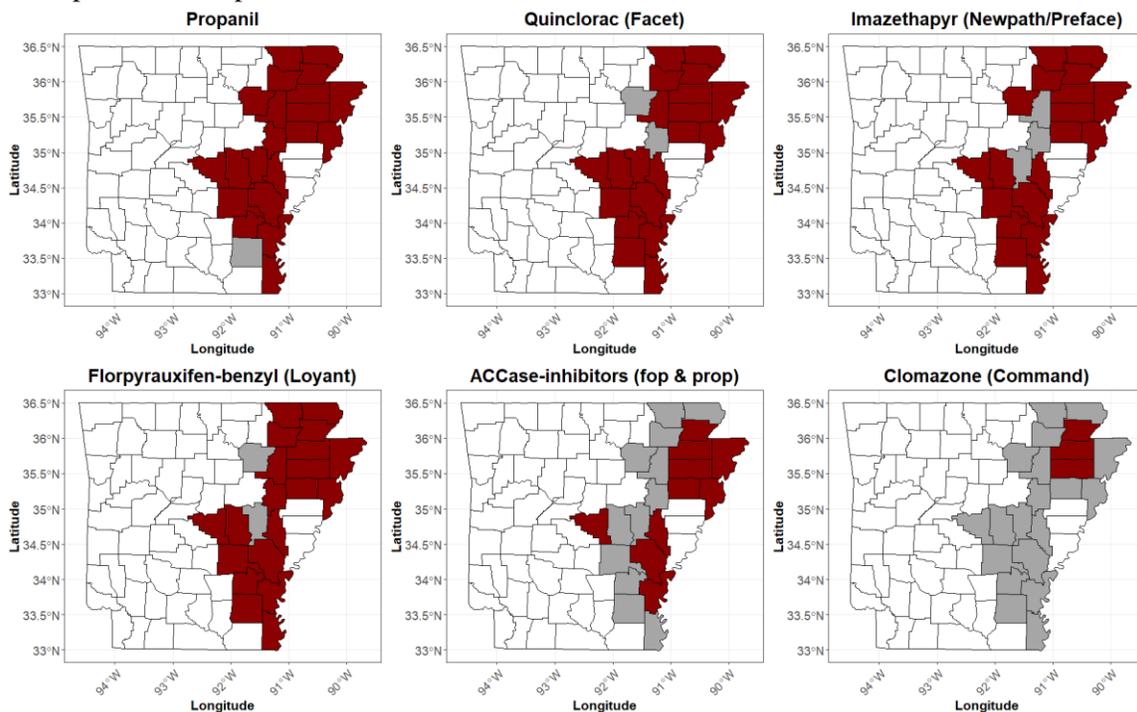


Fig. 5. Herbicide resistance in barnyardgrass samples collected and screened from 2017-2019. A county shaded in red indicates confirmed resistance for the respective herbicide; counties shaded in gray represent those which samples were tested but resulted in sensitive populations; counties shaded in white represent those which no samples were screened. Additionally, several populations were confirmed to be multiple resistant up to five modes-of-action.



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Rice Market Update

Trading this week in the new crop September contract has been confined to a fairly narrow 17 cent range between \$11.95 and \$12.12. At the time of this writing on Friday, the September contract trades at \$12.07. The old crop, May and July, continue to trade better than \$2/cwt. above new crop futures. The May contract currently trades at \$14.38.

CBOT September '20 Rice Futures.



Following this week's Crop Progress report, new crop futures added some risk premium for planting delays (more details below). Thursday's Export Sales report showed weekly long-grain sales at 23,588 metric tons. Long-grain shipments were 67,805 metric tons. Total long-grain sales year-to-date are roughly 13% ahead of last year. In the international market, Vietnam announced plans to export 400,000 mt of rice in April.

Crop Progress:

The table below includes rice planting progress for individual states as of April 12th. Planting in Louisiana and Texas has generally been ahead of the historical average this year. Intermittent rains and below normal temperatures have kept soils wet in Arkansas, Mississippi and Missouri, with planting well behind the five-year average pace in all three states. Historically, rice planting in Arkansas has been 28% complete by April 12th. By April 20th, planting in Arkansas averaged 50% complete in the years 2014-2018.

U.S. Rice Planting Progress, 2020.				
State	April 12 2020	Last Week	Last Year	5-Yr Avg.
<i>Percent Planted</i>				
AR	8	1	17	28
LA	75	70	75	76
MS	5	2	16	25
MO	3	-	12	13
TX	79	73	50	60

Source: USDA, NASS.

NYMEX May '20 Diesel Futures.



Diesel futures remain in a downtrend, but found chart support this week at 90 cents. The loss in demand for over-the-road diesel is starting to show up in weekly inventory reporting. Yesterday's Department of Energy numbers indicated a 6.3-million-barrel week-to-week build in diesel supply. The weekly build of 19.2 million barrels in crude oil was the largest on record.

The key focus of the energy market remains on the recent OPEC+ agreement to cut production. The President tweeted this week "...the number that OPEC+ is looking to cut is 20 million bbl/day, not the 10 million that is generally being reported." So far, crude oil futures are not impressed as the May contract trades Friday morning at \$18/bbl and the June contract at \$25/bbl. Bottom line, a cut of 19.5 to 20 million barrels of daily production may simply equal the drop in global oil demand. The current energy market environment is offering fuel hedging opportunities for 2020 and 2021.

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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>.

Acknowledgements

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