# **Row Crops**

# White County Newsletter

January 2023

# **2023 Production Meeting**

It's that time of year for all the winter meetings, and this year's White County production meeting will be on **February 10 starting at 8:30 a.m. at the extension office.** This will be a good way to get a jump start on the upcoming growing season. We will have several of our U of A specialists come and give presentations on the latest information and updates for crop production (listed below) and a lunch will be provided. If there is any particular subject you would like to hear about please contact me so I can let the speaker know it is a topic you would like discussed.

Rice- Jarrod Hardke, Rice Extension Agronomist

Soybeans- Chris Elkins, Soybean/Wheat Verification Coordinator

Corn- Jason Kelley, Corn Extension Agronomist

Plant Pathology- Terry Spurlock, Extension Plant Pathologist

Weed Science- Tom Barber, Extension Weed Scientist

Ag Economics- Hunter Biram, Extension Agriculture Economist

#### What is your vision for precision agriculture in Arkansas?

How can precision agriculture help you? We want to find out. Our team is gathering information regarding precision agriculture adoption and use in Arkansas. Responses to this survey will help us define the stakeholder vision for precision agriculture.

Why do we need this data? To identify research and educational priorities regarding precision agriculture and soil testing in Arkansas.

Who can participate? Field crop farmers, crop consultants, and county agents in Arkansas

Why should you participate?

This survey will take about 10 minutes of your time and our findings will help us better serve you!

Scan the QR Code below to access our survey.







### <u>Topics</u>

- 2023 White County Production Meeting
- Precision Ag Survey
- Private Pesticide
  Applicator Training
- Corn 2022 Review
- Rice 2022 Review
- 2022 Rice Research
- Looking ahead to 2023



U of A Cooperative Extension Service 2400 Old Searcy Landing Rd. Searcy, AR. 72143 (501) 268-5394 www.uaex.uada.edu/co unties/white

#### PRIVATE PESTICIDE APPLICATOR TRAINING

Anyone wishing to purchase or apply "restricted use" pesticides in the coming year must be licensed by the Arkansas State Plant Board. Before being eligible for a license, a certain amount of training is required. The Cooperative Extension Service in White County will be conducting a training class for the Private Pesticide applicator license. A fee of \$20 per person will be charged at the door for those participating in the private pesticide applicator training. Training will be located at the White County Extension Office at 2400 Old Searcy Landing Road in Searcy.

#### **Classes are scheduled as follows:**

### February 20, 2023 6:00 p.m. White County Extension Office Searcy

### March 16, 2023 6:00 p.m. White County Extension Office Searcy

The Arkansas Cooperative Extension Service is an equal opportunity/equal access/affirmative action institution. If you require a reasonable accommodation to participate or need materials in another format, please contact White County Extension office at 501-268-5394 (or other appropriate office) as soon as possible. Dial 711 for Arkansas Relay.

If you can't attend the February or March training you have the option of re-certifying or certifying online. To take the online training go to the following link: https://bit.ly/3j9s9aj . If you have any questions call the White County Extension Office.





# **Feral Hogs**

# Need help controlling nuisance hogs?

Just a reminder that feral hogs can be trapped and disposed of anytime of the year in Arkansas. White County landowners and producers have access to a Game Changer Jr. hog trap for \$25/week. If you are having an issue, please reach out for help. Call 268-5394 to schedule the trap now or for more info. on managing feral hogs.



# Arkansas pushes corn through drought

Jason Kelley, University of Arkansas System Division of Agriculture professor and wheat and feed grains extension agronomist, said the drought and high temperatures hit at a crucial point for corn growers.

"For corn, the pollination period is very critical for the plant to have water, and that lined up right when we were trying to get started on irrigation," Kelley said. "It was a tough year. Irrigation is effective, but it is never effective as a good, widespread rain."

Kelley noted that the weather from Memorial Day to July 4th significantly impacts corn yields, and that time was very hot and dry this year. Even though about 95 percent of the state's corn acres can be irrigated, the drought and heat still took a toll on yields, he said. Farmers struggled to get corn irrigated timely because, in many instances, they were also trying to flood rice and irrigate soybean. Arkansas farmers harvested 690,000 of the 710,000 acres of corn planted in 2022, according to estimates from the United States Department of Agriculture's National Agricultural Statistics Service. The number of acres planted was down 16.5 percent from last year. The state average yield was 176 bushels per acre, down 4.3 percent from the prior year's 183 bushels per acre.

For the past 10 years, Arkansas has averaged 181 bushels per acre. Kelley said that the state's average yields have increased by 100 bushels per acre in the past 40 years through a combination of better farming practices, more irrigation, improved hybrids and more nutrients.

"On average, we're gaining about 2.5 bushels per acre a year," Kelley said. "We're much better growers now than we were 20, 30, 40 years ago. At the same time, if you took those hybrids we had 40 years ago and planted them this year, the yields would be considerably less than the hybrids we are growing now."

Kelley said the drought and high temperatures were the two main culprits of the state's corn yield decrease.

Many farmers also rotate corn with soybeans, which helps improve yields and decrease plant diseases. Kelley said the Arkansas Agricultural Experiment Station's Lon Man Cotton Research Station in Marianna is wrapping up a 10-year study that shows soybean yields improved by seven to eight bushels per acre in a corn-soybean rotation compared to continuous soybean.

Although fuel costs were higher in 2022, fertilizer prices saw an even steeper increase, impacting profit margins. Kelley said fertilizer generally accounts for 30 percent or more of the costs to grow corn because of its high nutrient demand.

"Fertilizer prices hit the corn farmer more than anybody just because of the amount of fertilizer we typically apply," Kelley said. "The grain price is a pretty good number at around \$7 a bushel. Yields were a little down, but if you look at the price, they still should come out OK."

Kelley said that it was a good harvest for Arkansas corn even though the farmers had to work harder to get their yields because of the drought and higher fuel and fertilizer prices.

- John Lovett University of Arkansas System Division of Agriculture

# High input costs, weather extremes challenged rice growers in 2022

"The year began with dramatically higher input costs, especially for fertilizer and diesel fuel," said Hardke, extension rice agronomist. Rice prices began to rise around planting time, holding out hope that farmers might recoup their input costs in the end. But 2022 was the fourth or fifth wet spring in a row, and that delayed field preparation and planting, making those projected prices shaky.

"The rains stabilized a bit around May," he said. "And then in June, it was like someone threw a switch, the rain stopped, and temperatures got up in the 90s. It got hot and dry, and everything just dried up really fast."

The dry weather in June, when it was time to fertilize and flood rice, put a lot of strain on irrigation systems.

"Rice is very hardy in the face of extremes," Hardke said. "So, in June, the rice was growing so fast it was soaking up all the water. A lot of growers were late getting nitrogen incorporated into the soil, and it took much longer to put a flood on the rice. Fields that might take three to four days to flood were taking 10 or 14 days."

Irrigation pumps were running non-stop. "Growers experienced a lot of problems with wells going down because they were running so hard. And then, they had issues with replacing parts because of supply chain shortages."

Average yields are down from last year's record average, according to the U.S. Department of Agriculture's National Agricultural Statistics Service estimate, Hardke said. "Average yield is estimated at 165 bushels per acre, down from almost 170 bushels an acre in 2021."

While the average yield is lower this year, Hardke said — and he expects it to be a little lower when the final data is in — it's not far off the previous years of 2017-2020.

Dry weather kept disease pressure low. But late rains in some areas in August revived disease problems in those fields until hot, dry weather returned. On the other hand, the dry weather during harvest was a bonus.

"This year was the smoothest, driest harvest anyone could remember," Hardke said.

The extended dry weather also allowed many growers to prepare fields for next year, work that usually has to wait for a dry window between August and April. And those windows of opportunity have been few in recent years.

"The speed that farmers were able to move through their fields meant that a ton of fall field work got done, especially in northeast Arkansas," Hardke said. "A lot of fields are basically ready to plant next year."

- Fred Miller U of A System Division of Agriculture

# 2022 Rice Research Highlights

The Arkansas Agricultural Experiment Station, the Division of Agriculture's research arm, released four new rice varieties in 2022.

<u>CLL18</u> is a high-yielding Clearfield variety that will be available to growers in 2023 through Horizon Ag. It averaged 221 bushels per acre over two years in the 2020-21 Arkansas Rice Variety Advancement Trials conducted by the University of Arkansas System Division of Agriculture.

"This was the highest yielding nonhybrid Clearfield® rice in the ARVAT for those two years," said Karen Moldenhauer, professor emeritus and rice breeder for the experiment station. "It has looked very good in all of the tests it has been in.

"CLL18 is an excellent long-grain Clearfield® line derived from the cross of Roy J and CL142-AR, made at the Rice Research and Extension Center at Stuttgart in 2011," Moldenhauer said.

Two new conventional rice varieties, <u>Taurus and Ozark</u>, also debuted in 2022.

Taurus, a new medium-grain rice, could even be a gamechanger in the coming years for medium-grain rice growers in the South, according to Hardke.

Taurus offered an average yield potential of 232 bushels per acre in the 2021 Arkansas Rice Variety Advancement Trials.

"Based on ARVAT data, Taurus has a significant yield advantage over all current medium-grain varieties in all test locations," said Xueyan Sha, senior rice breeder for the experiment station.

Sha said Taurus was bred for Midsouth conditions and would be adaptable to wherever Jupiter or Titan are grown. Taurus is a cross between four other conventional varieties and has a more plump kernel than Jupiter. It outshined even the latest medium-grain varieties, Lynx and Titan, in the 2021 trials at six locations. Taurus brought in the highest average yield in a Clay County field with 249 bushels per acre.

Ozark, a new conventional long-grain variety, is a cross of Diamond and LaKast.

"Diamond has shown some issues the last two years," Sha said. "It seems it has not been as consistent on yield potential, so this one we hope can be used as a replacement for Diamond. It's definitely shown a yield advantage in the ARVAT."

Ozark offered an average of 218 bushels per acre in the 2021 ARVAT conducted at six locations in Arkansas. Sha said the overall yield advantage of Ozark over Diamond is about 5 percent.

Ozark is agronomically similar to Diamond, with a plant height of 43 inches. Maturity for Ozark is a day or two earlier than Diamond at 88 days to 50 percent heading, Sha said. Lodging tolerance is also similar to Diamond's, with a slight improvement in milling, especially head rice yield.

The experiment station released a new jasmine-type aromatic rice called <u>ARoma 22</u> amid rising U.S. demand for aromatic rice. Emeritus Professor Karen Moldenhauer and assistant breeder Debra Ahrent Wisdom developed it to fill that demand with an improved Arkansas-adapted variety.

ARoma 22 offers superior aromatics and color consistency over earlier releases, and equals several qualities looked for by consumers of imported Asian aromatic rice, sensory tests show.

ARoma 22 averaged 167 bushels per acre with high milling yields in five Arkansas Rice Variety Advancement Trials. ARoma 22 reaches 50 percent heading at 88 days with "excellent" straw strength, according to data collected from the Arkansas Uniform Rice Regional Nursery and reported in 2020 research trials.

- Fred Miller U of A System Division of Agriculture

# Look at forecast price rises from 2022 to 2023

Here is a quick look at forecast price increases in farm-related expenses as they appear in the <u>enterprise budgets</u> developed for the 2023 growing season by the University of Arkansas System Division of Agriculture for farmers.

- **Diesel** and **interest** will be driving costs across all crops with about a 73 percent increase over 2022 in per-acre costs for both in Arkansas.
- Nitrogen is actually projected to be about six percent lower in 2023 relative to 2022 across all major row crops. Biram said "this is most likely driven by the alleviation of supply chain pressures across the globe as more product is moved. However, the continued war in Ukraine will continue to place upward pressure on urea and diammonium phosphate relative to 2021."
- Corn Seed costs for corn are projected to be about 12 percent higher over 2022; Phosphate appears to be up about two percent while zinc sulfate is projected to be up about 15 percent over 2022.
- Cotton DAP is projected to be up about seven percent over 2022; Defoliant is projected to be up nearly 10 percent over last year.
- **Rice** Insecticides and fungicides for rice are projected to be up 98 percent and 18 percent, respectively.
- **Soybeans** Phosphate and potash are projected to be up 1.6 percent and 0.5 percent, respectively. Herbicides are actually projected to be down seven percent relative to 2022 but still up 26 percent over 2021.
  - Mary Hightower U of A System Division of Agriculture

# AR Row Crops Blog

# Want to Know What is Up in AR Row Crops?

Arkansas Row Crops now has a blog that you can check for weekly market updates and research-based crop recommendations and updates from our specialists.

AR Row Crop Blog

# **Farmland Wanted**

Need Someone to Partner with on the Farm? We have a request from a local man looking to start row crop farming. If you are interested or have questions, please contact Bobby Morrison at (870) 552-5109.

# **Flow Meters**

#### Meters Available

If you need to get your wells checked before the season gets too busy, just let me know. We have an 8" an 10" flow meter you can check out from our office.

### 2023 White County Demonstrations

It is that time of year again!! Time to get some research demonstrations planned on your farm. Do you have any issues or challenges you would like to have some help with? Have any burning questions or ideas that you would like to see answered on your own farm? If so, let me know!

Current: Wheat Verification- Shannon and Luke Feather

Upcoming:

Soybean Verification- Patrick Hambrick

Rice Verification – John Hamilton

Enlist Soybean Variety- Patrick Hambrick

Extend Flex Soybean Variety- Brandon Cain

Deer Repellent- Brad and RJ Peacock

Corn Verification- Brad and RJ Peacock

Corn Hybrid Demo- Keith and Jacob Feather

Green Seeker Demonstration- Jacob Feather

Cover Crop Moisture- Brad Peacock

Corn Ear Worm Traps- County Wide

Southwestern Corn Borer Traps- County Wide

Please, feel free to contact me for further information about the items in this newsletter or anything else I may be able to assist you with.

Sincerely,

Jerrael W Haynes

Jerrod Haynes County Extension Agent - Agriculture (501) 230-9974

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U of A Helpful Publications: <u>UPDATED Row Crop Plant-Back</u> <u>Intervals for Common Herbicides</u> <u>Max Use Rates per Application and</u> <u>Per Season for Common Herbicides</u> <u>Application Cut-Off Timings for</u> <u>Common Herbicides</u>

