

Arkansas Rice Research & Outlook Report USA Rice Outlook Dec. 8, 2025

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DIVISION OF AGRICULTURE
RESEARCH & EXTENSION
University of Arkansas System



Agronomy

- **Cultivar Testing**
- **DD50 Rice Management Program**
- **Planting Dates**
- **Variety/Hybrid Nitrogen Response**
- **Seeding Rates**
- **Rice Research Verification Program**
- **Various agronomic trials**
Seed treatments, herbicide tolerance, new products, etc.

Agronomy



Dr. Justin Chlapecka

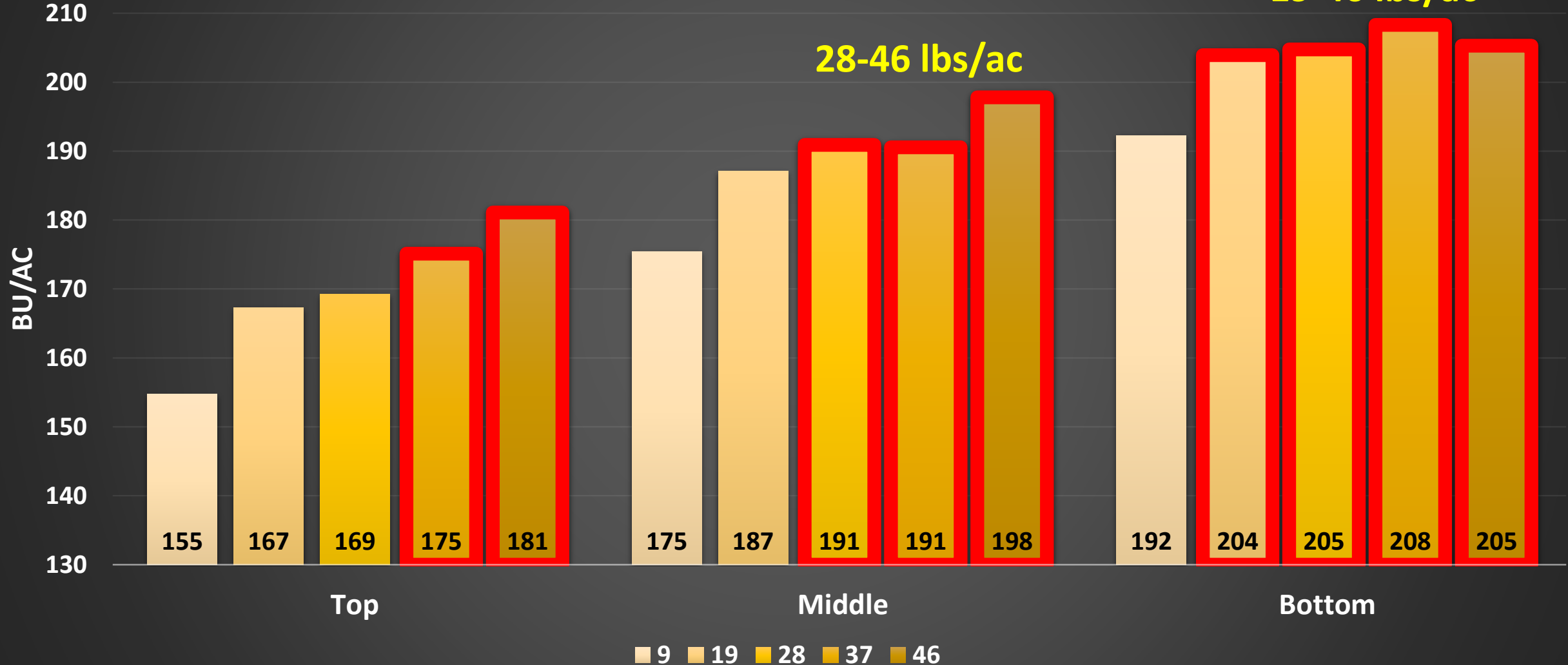
- Furrow-irrigated rice seeding rate research
- It is NOT worth increasing overall seeding rate
 - Especially when rough rice prices are low
- Consistent benefit from higher seeding rate at top end of field
 - Benefit decreases significantly going down the field
- When rice prices are low, can decrease across the board

FIR Seed Rate x Area of Field

RT7421 FP/XP753

19-46 lbs/ac

28-46 lbs/ac



Breeding



Dr. Xueyan Sha



Dr. Christian de Guzman

- **Recent Releases:**
 - Ozark – 2022 conv. long-grain
 - CLL18 – 2022 Clearfield long-grain
 - PVL04 – 2022 Provisia long-grain
 - **PVL06 – 2026 Provisia long-grain**
 - Taurus – 2022 conv. medium-grain
 - **CLM05 – 2024 Clearfield medium-grain**
 - ARoma22 – 2022 long-grain aromatic
- **Programs**
 - Long-grain (conv., Clearfield, Provisia)
 - Medium-grain (conv., Clearfield, Provisia)
 - Aromatic (conventional, Clearfield)

Breeding



- 198 bu/ac in 55 trials across AR, LA, MS, MO, & TX, highest pureline variety across all herbicide technologies
- 54% head rice, 68% total rice
- 42-inch height, 2 inch taller than PVL04 and moderately susceptible to lodging
- 87 days to heading, 1-3 days earlier than PVL03 & PVL04
- Typical Southern long-grain with a slender kernel > 6.6 mm in length

Breeding



24AR1134 – CL long-grain

- 193 bu/ac in trials across AR, LA, MS, MO, TX; 98% of CLL18
- 53% Head Rice, 69% Total Rice
- Traditional stature, 42 inch height
- 85 days to 50% hdg, 2 days earlier than CLL18
- Pi-ta for blast resistance



RU2101208 – CL Jasmine

- 190 bu/ac in 35 trials across AR, LA, MS, MO, TX; 128% of CLJ01
- 59% Head Rice, 68% Total Rice
- 39 inch height, similar to CLJ01 but 5 inch shorter than ARoma22
- 92 days to 50% hdg, similar to ARoma22 but 4 days later than CLJ01
- Slender kernel, 6.76 mm in length vs 6.64 of ARoma22

Weed Science



Dr. Tom Barber



Dr. Jason Norsworthy



Dr. Bob Scott

Weed Science

- **Resistance screening program**
 - Alarming increase in resistant sedges, weedy rice, & barnyardgrass
 - New population of ALS-resistant smartweed identified in 2025
- **Annual sedge number one call**
 - Failures with ALS chemistry POST (Permit/Newpath)
 - Relying on older chemistry, more expensive
- **Viludo seed treatment safening effect on Command injury and other potential products including acetochlor**
- **New HPPD herbicide for rice submitted to EPA for registration**
 - Very promising grass & broadleaf control (registration 2-3 years away)
- **Keenali Complete season-long barnyardgrass control**
 - New mode of action, first in over 30 years

Dr. Bob Scott

FMC - TVE29 (registration 2026/27)

Arkansas has applied for a section 18 for 2026

Dodhylex™

Kennali® (Tetflupyrolimet)

**Kennali Complete (Co-pack with
Command)**

Group 28 – New!

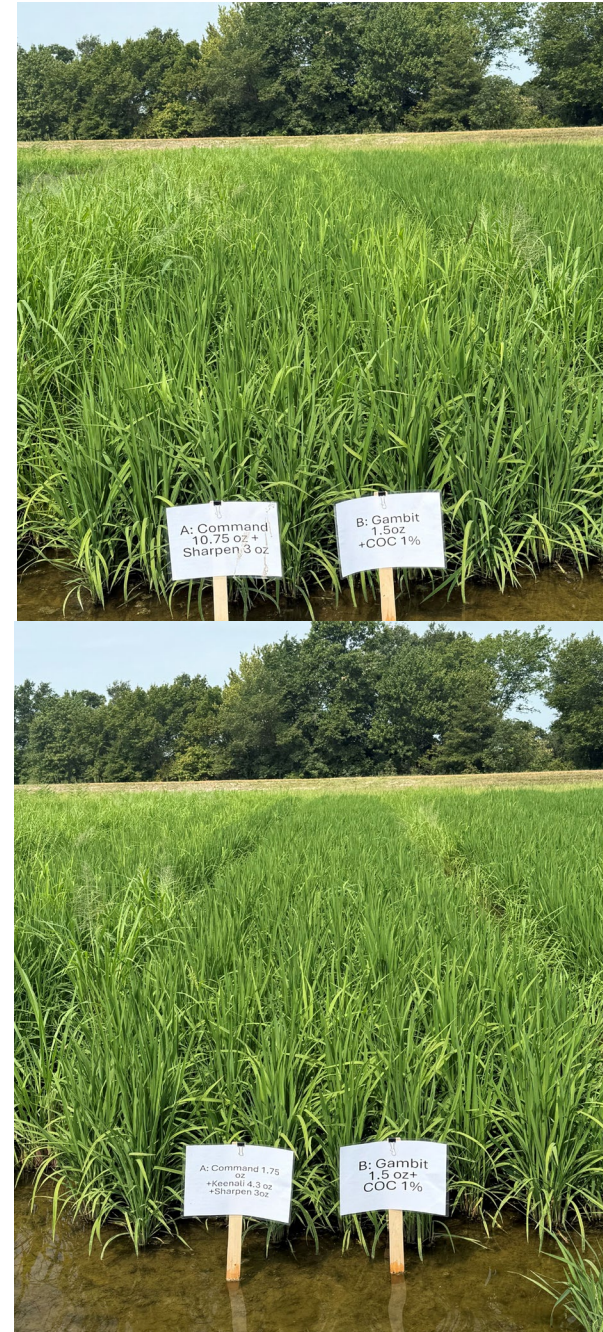
Residual only, narrow spectrum

Barnyardgrass

Sprangletop

Crabgrass

suppression of signalgrass



Soil Fertility



Dr. Trent Roberts



Dr. Gerson Drescher

- Nutrient uptake differences between pureline and hybrid
- In-season tissue sampling for potassium
- N-STaR recommendations
- Novel sensing platforms for N mgmt.
- Post-season N tissue analysis
- Late-season N applications

Soil Fertility – P and K

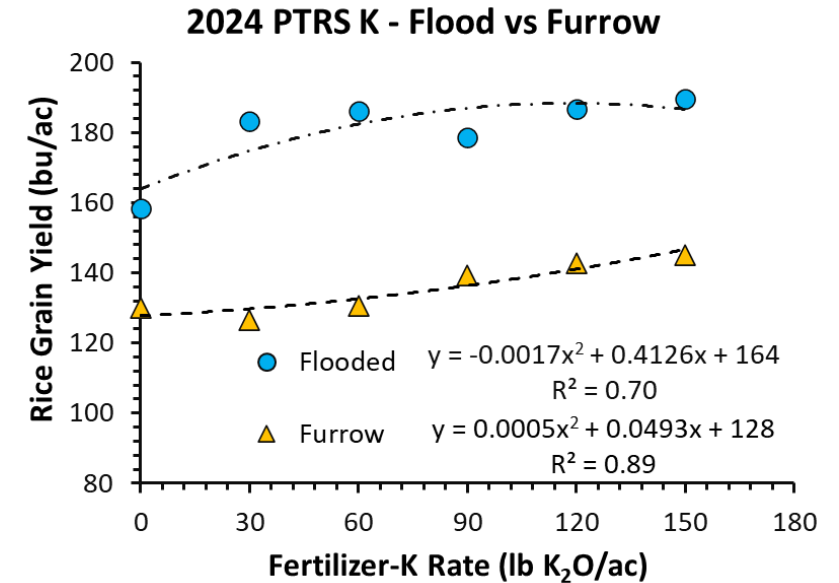
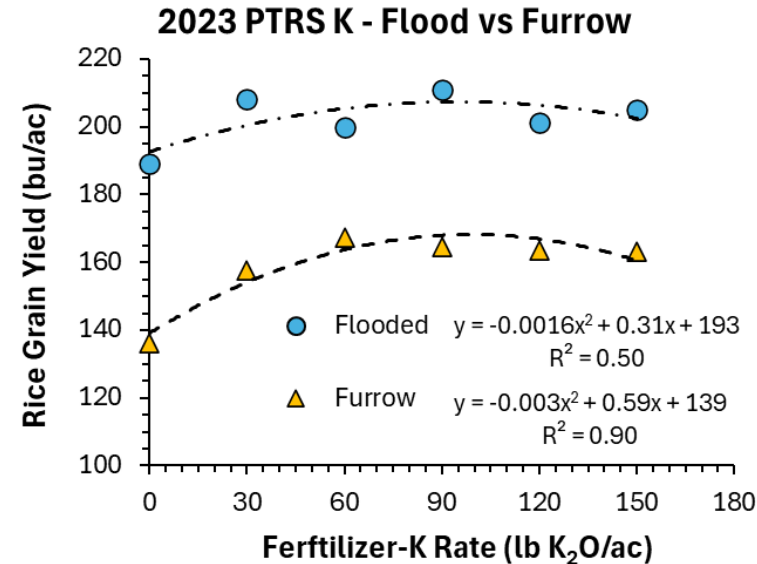
Flood-irrigated (~82% AR acreage)



Furrow-irrigated (~18% AR acreage)



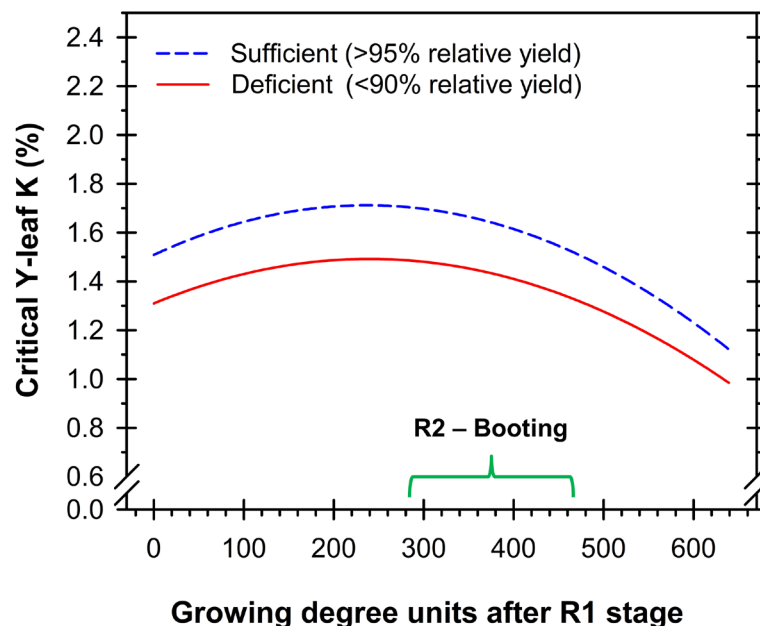
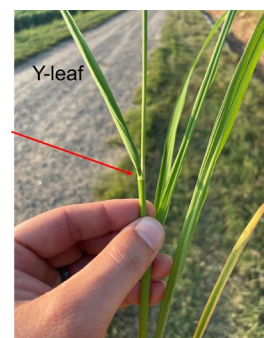
Flood- and furrow-irrigated rice yield response to K fertilization on Very Low and Low soil-test K soils in Colt, AR:



- Different irrigation/production systems have different yield potentials, yet similar nutrient requirements to maximize yield due to changes in soil nutrient dynamics.
- Similar trends observed for both K and P (data not shown).

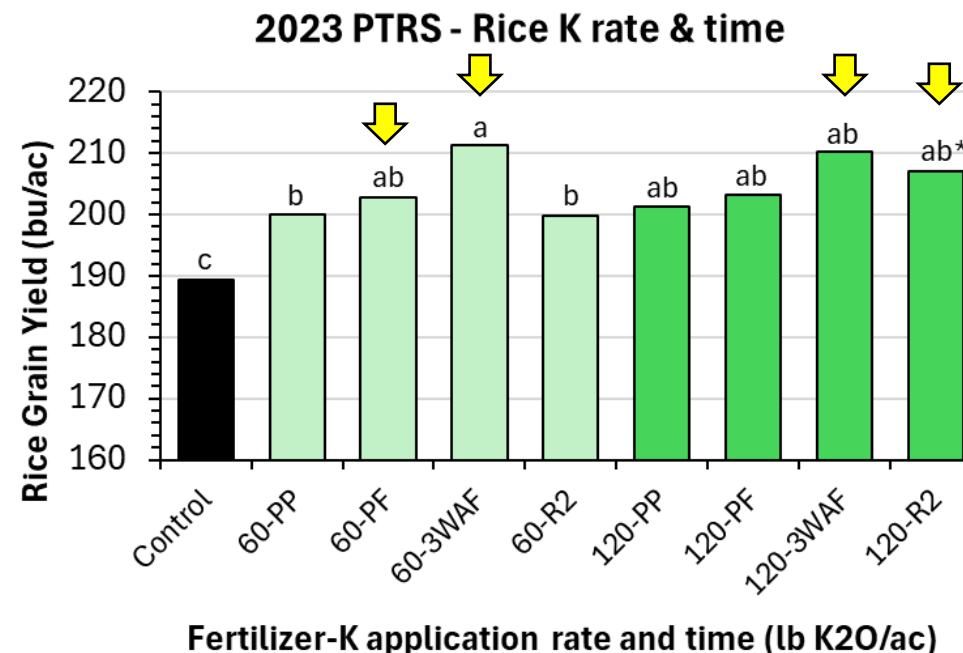
Soil Fertility – K

- Established dynamic critical Y-leaf K concentrations to monitor rice nutrition and yield potential (Greuner et al., 2022).



- What is the window of opportunity to correct K-deficient rice and rescue yield potential?

Rice response to fertilizer-K application RATE and TIME on soil with Low K availability



PP = preplant PF = pre-flood 3WAF = 3 weeks after flood R2 = Booting

- In-season K fertilization is effective in correcting K deficiency and rescuing yield potential if timely diagnosed either with soil or tissue testing.

Entomology



Dr. Nick Bateman



Dr. Ben Thrash

- Defoliation thresholds
- Rice stink bug resistance to pyrethroids
- Rice billbug in row rice
- Rice water weevil sampling/thresholds
- Rice delphacid management

Termination Test

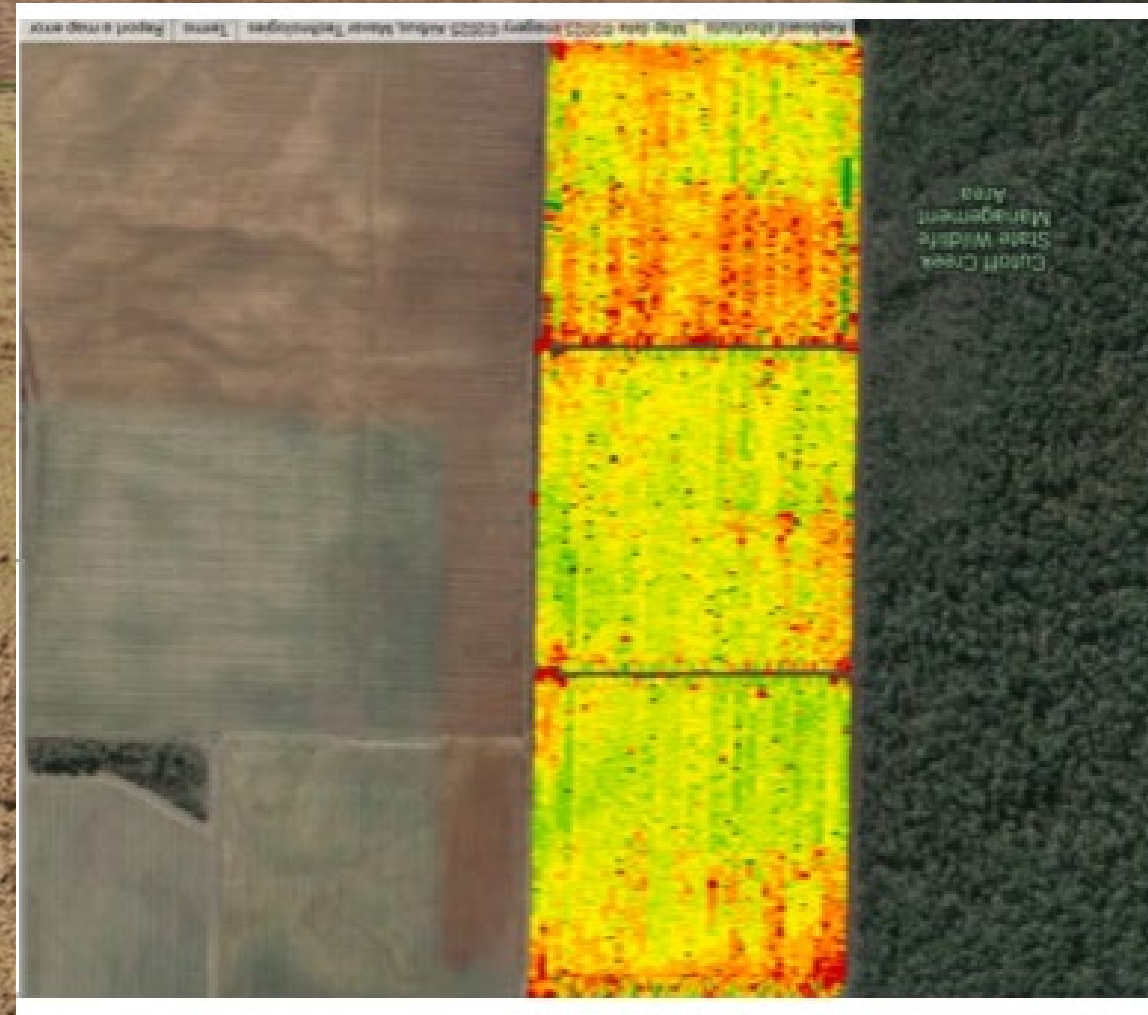


87/10 Sweeps

281/10 Sweeps

107/10 Sweeps

359/10 Sweeps



Dr. Griffiths Atungulu et al.

- **Impact of Specific Agronomic & Post-Harvest Practices on Rice Quality and Milling Yields:**
 - Optimal harvest moisture content
 - Quantify fissure resistance
 - Husk and bran layer characteristics
- **Determine the role of fissure resistance & chalkiness in HR**
 - Identify genes for improving HR
 - Methods for breeders to improve HR

Economics



Dr. Hunter Biram



Dr. Ryan Loy



Scott Stiles



Breana Watkins

- Morning Coffee & Ag Markets
- AR Crop Profit/Loss Calculator
- Crop Insurance Decision-Maker

- Crop Enterprise Budgets
- Fryar Risk Center

Economics

Arkansas Crop Profit/Loss Calculator (Crop Year 2025)

County

Lonoke

Crop

Rice

Practice

Irrigated

Would you like to input your own cost?
☒ No
☐ Yes

Rental Agreement

Cash Rent

Cash Rent (\$/acre):

150

Expected Yield: 182.64 bushels/acre
Expected Price: \$6.13/bushel
Cost: \$992.8/acre
Breakeven Yield: 186.43 bushels/acre
Breakeven Price: \$6.26/bushel
Cotton Rebate: \$0/bushel

Net Returns for Irrigated Rice in Lonoke County, Arkansas in 2025 (Cash Rent - \$ 150 /acre)

Note: The prices and yields are in green with prices provided in the leftmost column and yields provided in the topmost row. The per acre cost listed in the sidebar only contains operating expenses and do not include fixed costs (e.g., equipment loan, custom harvesting, and any other overhead). Costs come from the [U of A Division of Agriculture](#)

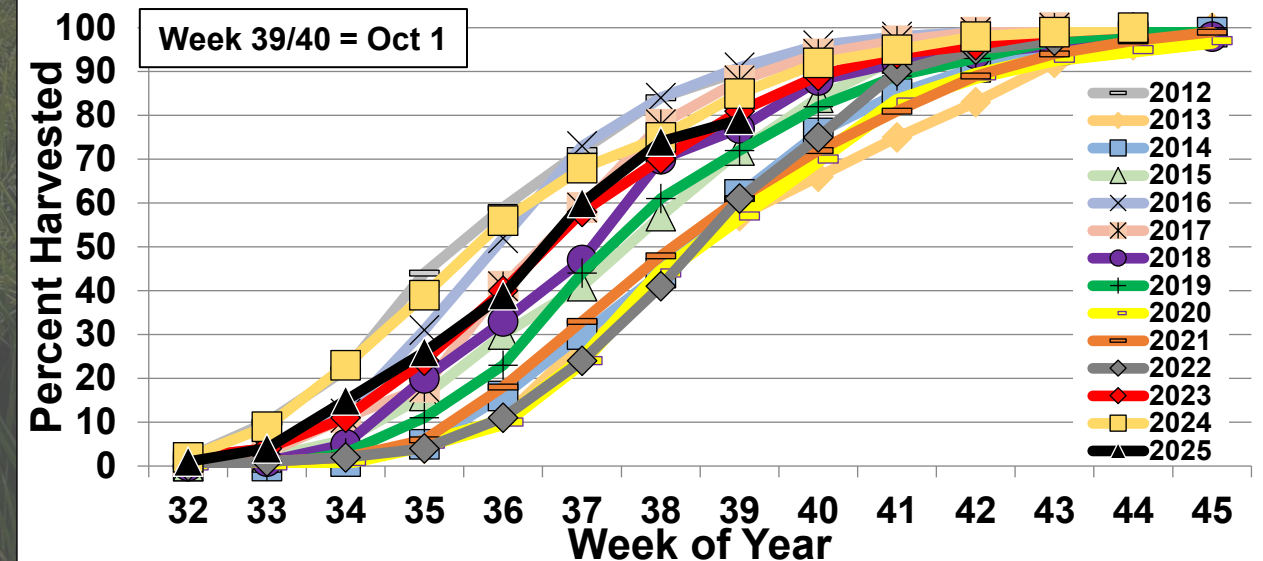
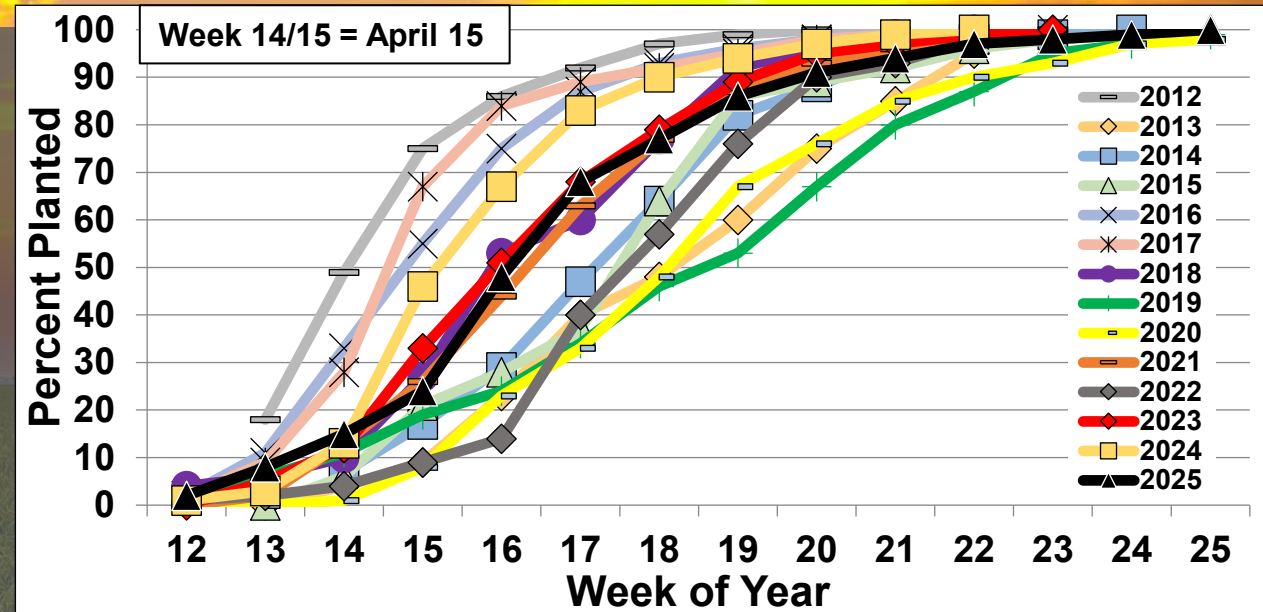
	110	128	146	164	183	201	219	237	256	274
\$ 3.68	-\$738.00	-\$671.76	-\$605.52	-\$539.28	-\$469.36	-\$403.12	-\$336.88	-\$270.64	-\$200.72	-\$134.48
\$ 4.29	-\$670.90	-\$593.68	-\$516.46	-\$439.24	-\$357.73	-\$280.51	-\$203.29	-\$126.07	-\$44.56	\$32.66
\$ 4.9	-\$603.80	-\$515.60	-\$427.40	-\$339.20	-\$246.10	-\$157.90	-\$69.70	\$18.50	\$111.60	\$199.80
\$ 5.52	-\$535.60	-\$436.24	-\$336.88	-\$237.52	-\$132.64	-\$33.28	\$66.08	\$165.44	\$270.32	\$369.68
\$ 6.13	-\$468.50	-\$358.16	-\$247.82	-\$137.48	-\$21.01	\$89.33	\$199.67	\$310.01	\$426.48	\$536.82
\$ 6.74	-\$401.40	-\$280.08	-\$158.76	-\$37.44	\$90.62	\$211.94	\$333.26	\$454.58	\$582.64	\$703.96
\$ 7.36	-\$333.20	-\$200.72	-\$68.24	\$64.24	\$204.08	\$336.56	\$469.04	\$601.52	\$741.36	\$873.84
\$ 7.97	-\$266.10	-\$122.64	\$20.82	\$164.28	\$315.71	\$459.17	\$602.63	\$746.09	\$897.52	\$1,040.98
\$ 8.58	-\$199.00	-\$44.56	\$109.88	\$264.32	\$427.34	\$581.78	\$736.22	\$890.66	\$1,053.68	\$1,208.12
\$ 9.2	-\$130.80	\$34.80	\$200.40	\$366.00	\$540.80	\$706.40	\$872.00	\$1,037.60	\$1,212.40	\$1,378.00

DISCLAIMER: This decision tool is intended for illustrative and educational purposes only. We do not guarantee any level of loss or profit.

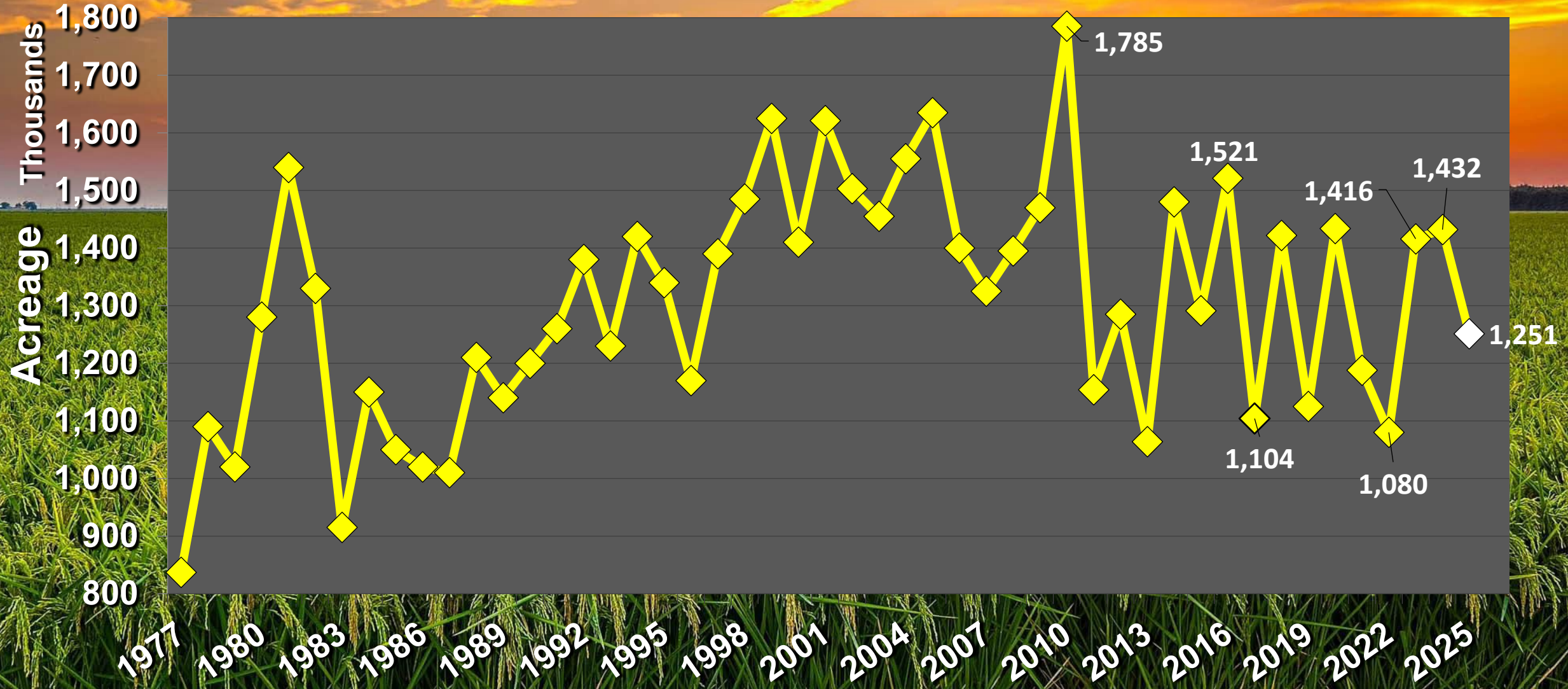
Download PDF Table

2025 Overview

- Flood early, then wet for a month of Sundays
- 12"+ rain April 2-5
- May mostly rained out
- Acreage achieved in a few windows + late planting
- Summer turned to drought
- Harvest
 - Rapid drydown but planting more spread out than '24
 - Milling was variable
 - Better milling than '24



AR Rice Acreage, 1977-2025



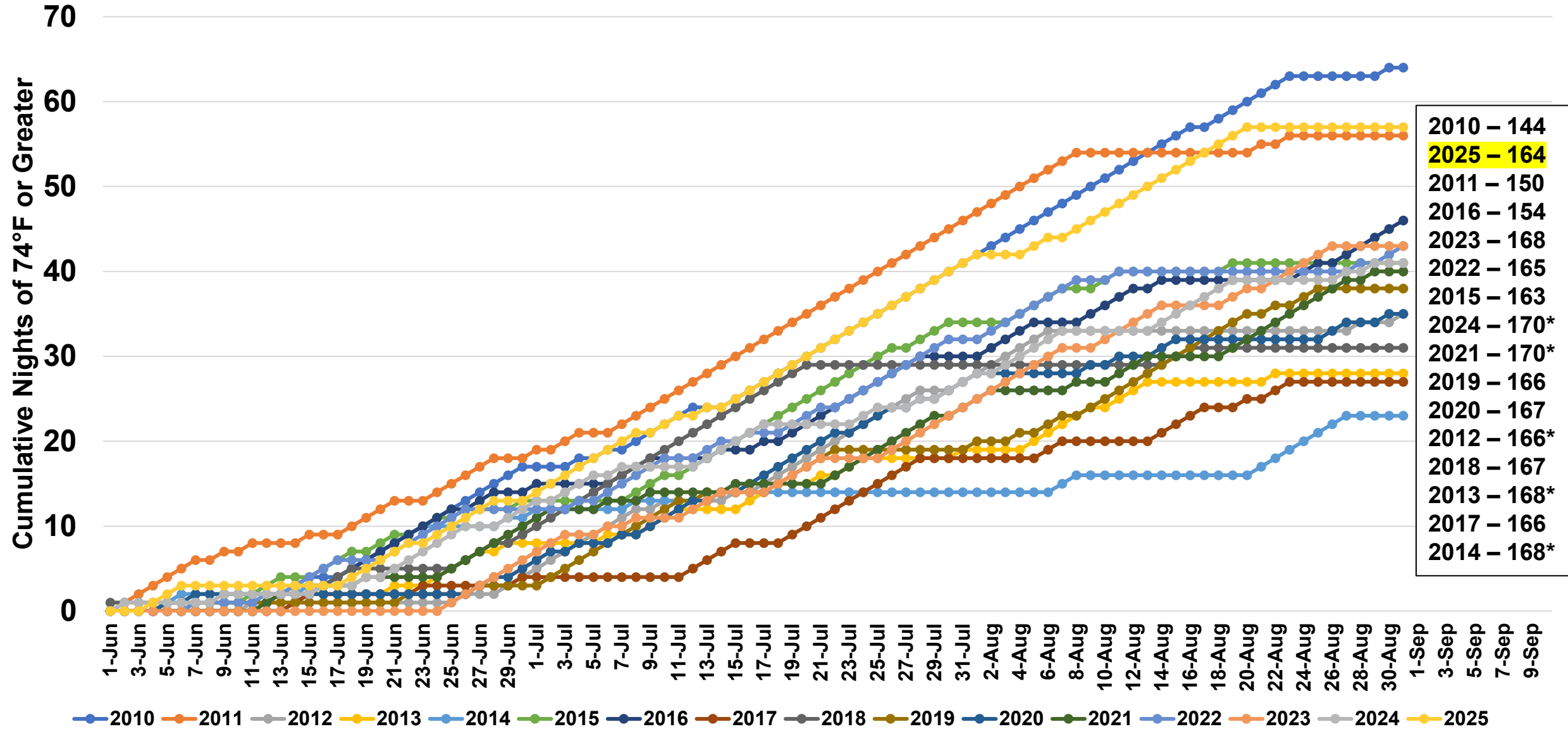
2025 Overview

Erratic Grain Yields

- **Everyone had a problem with something**
- **Some experienced yields rivaling record '24 yields**
- **Most closer to average**
 - **High fields and low fields**
- **Excessive heat – long stretch of high nighttime temps**
- **Well managed fields actually suffered worse**
 - **Microclimate / water temps...**

2025 Overview

Cumulative Nights 74+ at Stuttgart

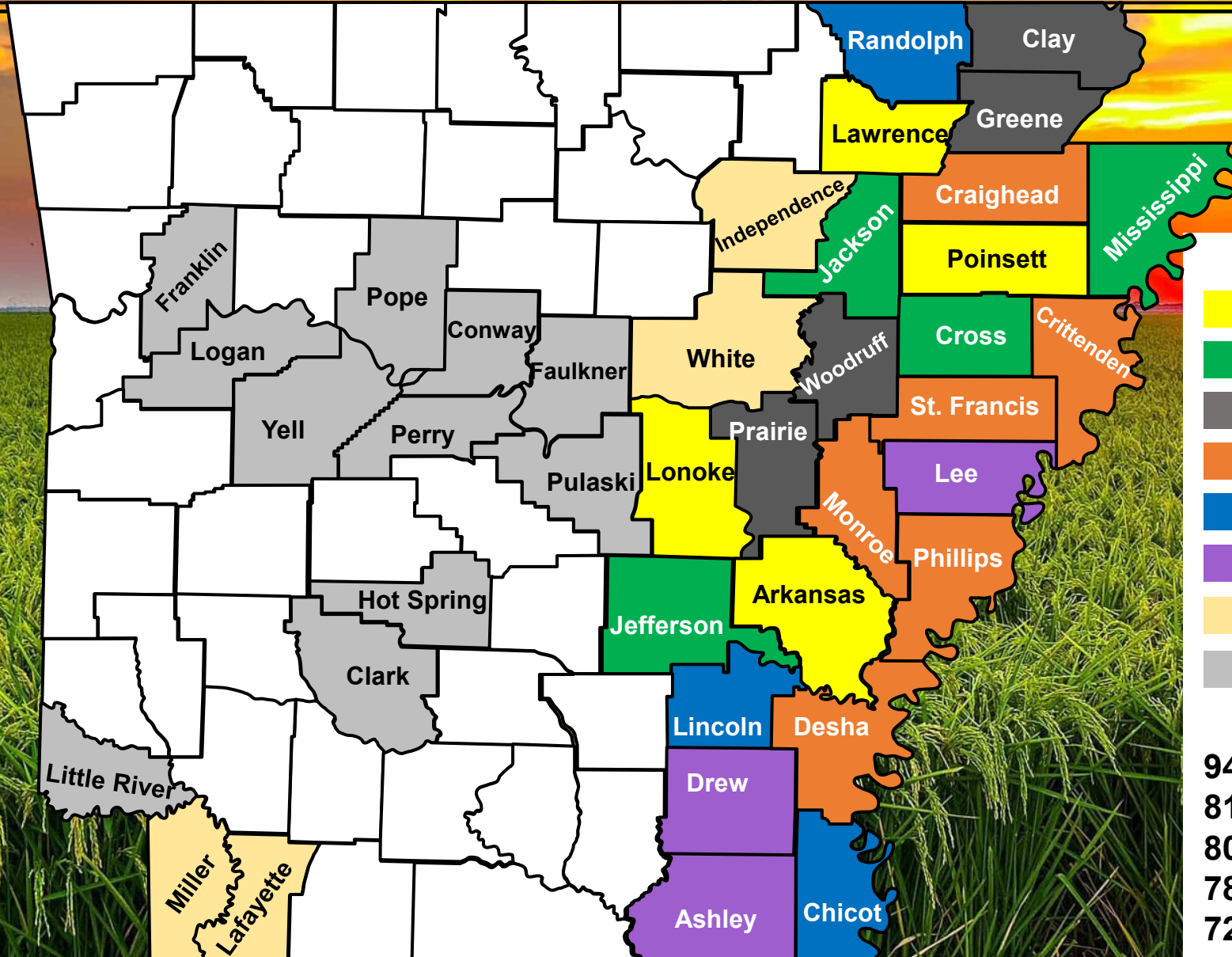


2025 Overview

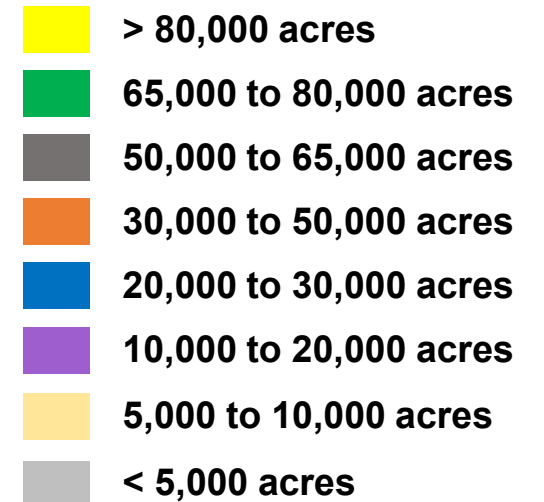
Milling Yields again a topic of concern

- **Improvement in 2025 over 2024**
 - ~48% HR avg in 2024, ~51% HR avg in 2025
 - Still lacking
- **Another hot and dry August with crop maturing early**
 - HOT and DRY
 - Overdrying
 - BUT – no storms or hurricanes to cause major re-wetting/drying
 - Low harvest moisture still an issue (biggest driver?)

AR Rice Acreage, 2025

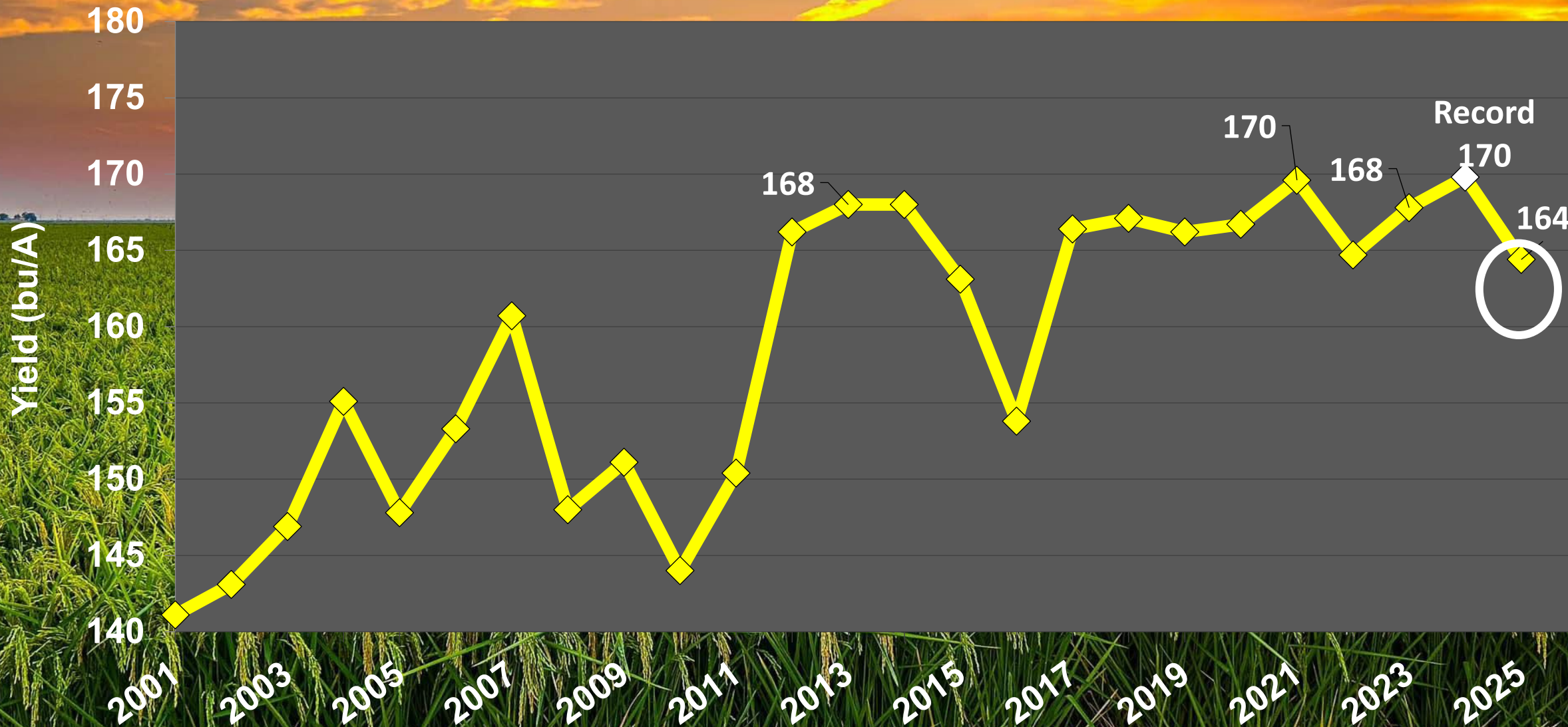


Planted Acreage



94,309 ac – Poinsett
81,534 ac – Lawrence
80,445 ac – Arkansas
78,509 ac – Lonoke
72,183 ac – Jefferson

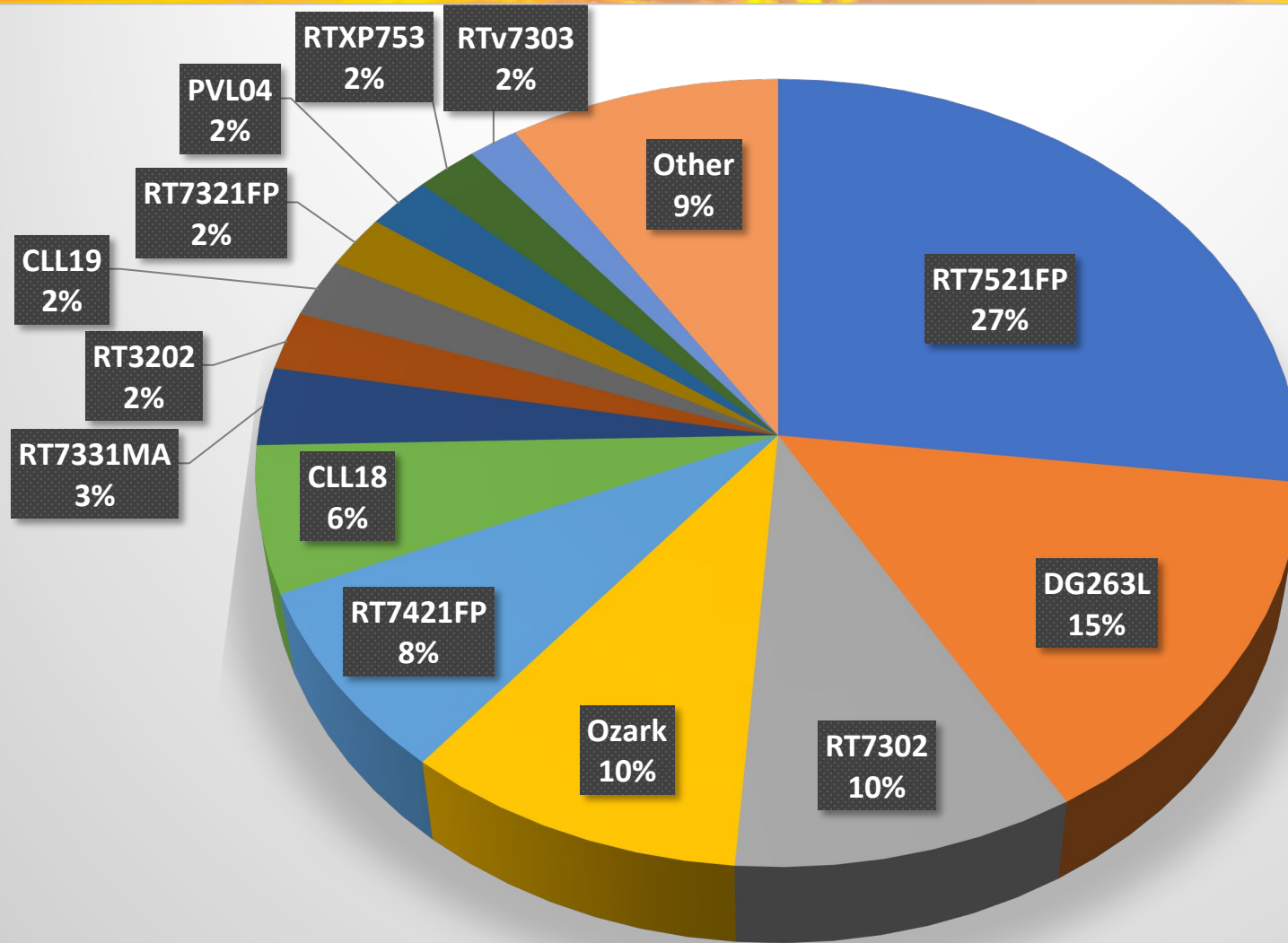
AR Avg. Rice Yield, 2001-2025



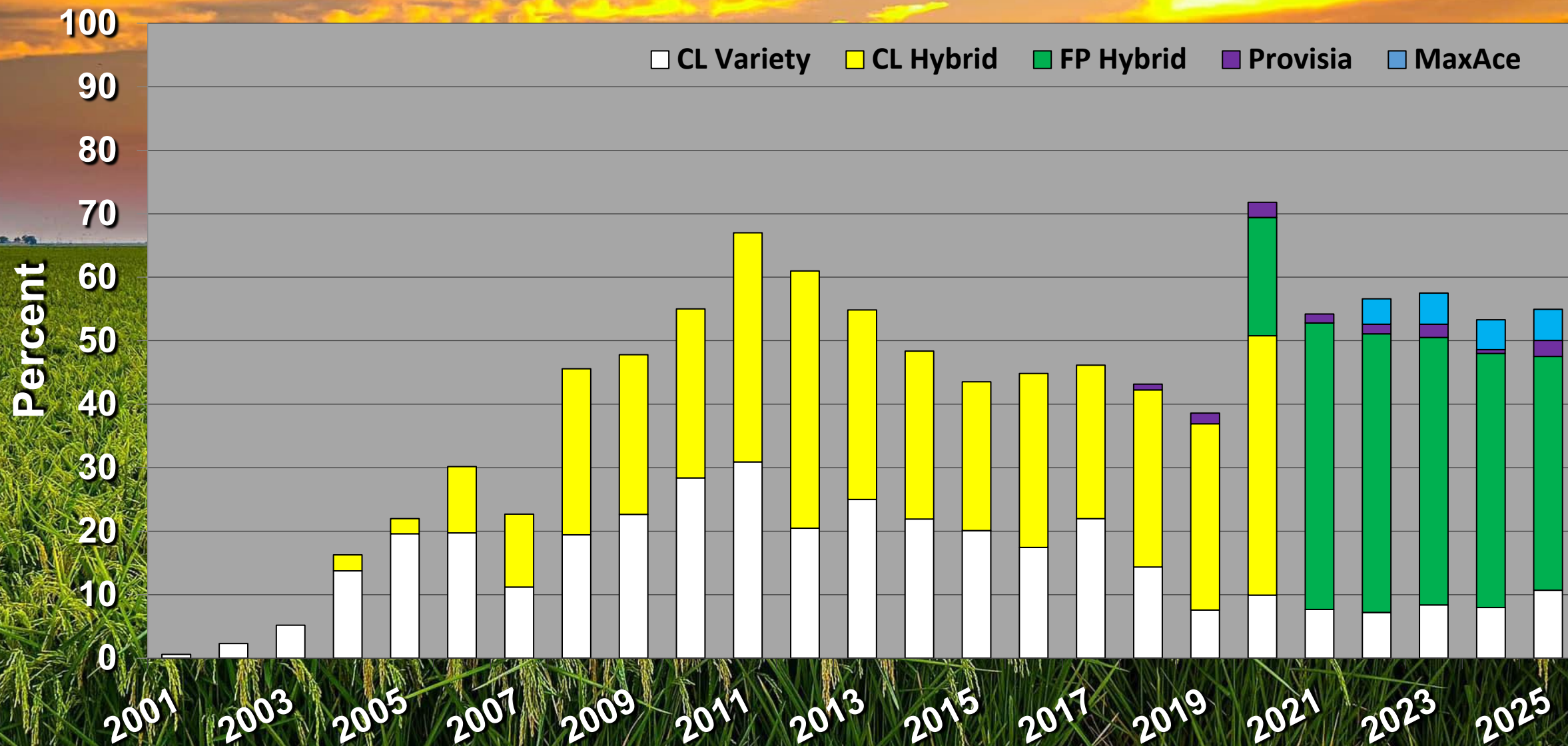
2018-2025 Rice Cultivar Distribution

Cultivar	2025*	2024	2023	2022	2021	2020	2019	2018
	% of Acres							
RT 7521 FP	26.9	24.9	21.3	29.8	21.2	13.3	--	--
DG263L	14.6	11.8	8.1	10.9	3.3	--	--	--
RT 7302	9.7	6.6	0.8	--	--	--	--	--
Ozark	9.7	6.4	0.8	--	--	--	--	--
RT 7421 FP	7.7	9.0	6.0	--	--	--	--	--
CLL18	6.0	4.5	0.5	--	--	--	--	--
RT 7331 MA	3.2	1.2	--	--	--	--	--	--
RT 3202	2.4	1.3	--	--	--	--	--	--
CLL19	2.4	1.2	--	--	--	--	--	--
RT 7321 FP	2.2	3.2	14.6	14.6	25.2	5.4	--	--
PVL04	2.2	--	--	--	--	--	--	--
RT XP753	2.1	9.8	12.3	17.8	21.2	19.2	25.6	22.2
RTv7303	1.7	--	--	--	--	--	--	--

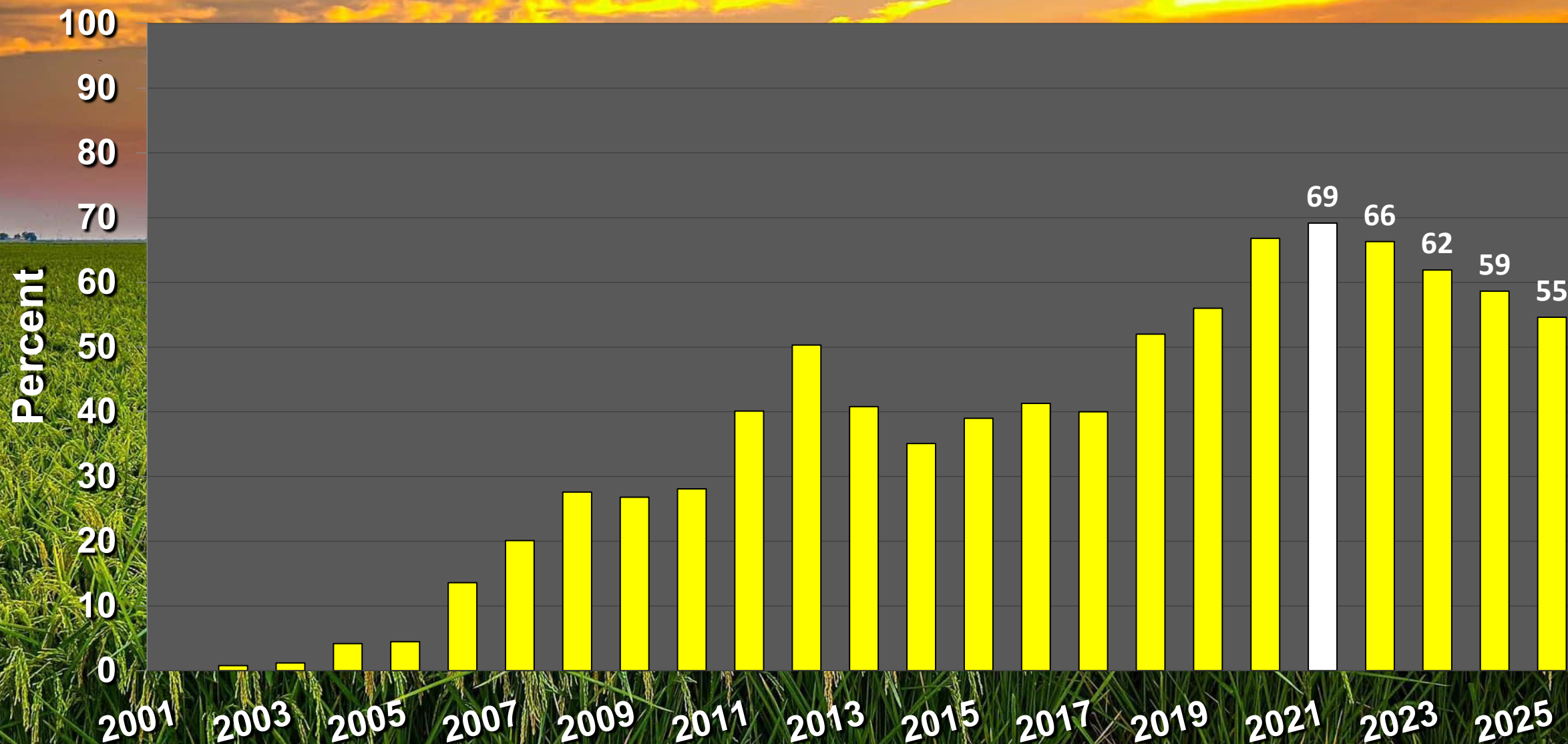
2025 Rice Cultivar Distribution



Clearfield / FullPage / Provisia / MaxAce Rice Technologies in AR



% Hybrid Rice Acres by Year



Arkansas: 2026 Outlook

- **Input costs holding while price outlook falling**
- **Profitability – wasn't in 2025 vocabulary**
 - 2026 can't even spell it...
- **Current fall 2026 rice bids are near \$4.68/bu compared to \$6.16/bu at '24 Outlook and \$6.80/bu at '23 Outlook**
- **Fall 2026 soybean bids near \$10.92 and corn bids near \$4.66, both far more profitable than rice**
 - **Corn and soybean have profit potential in full ownership and 80/20 common share least structures**
 - **No current scenario where rice production is profitable**

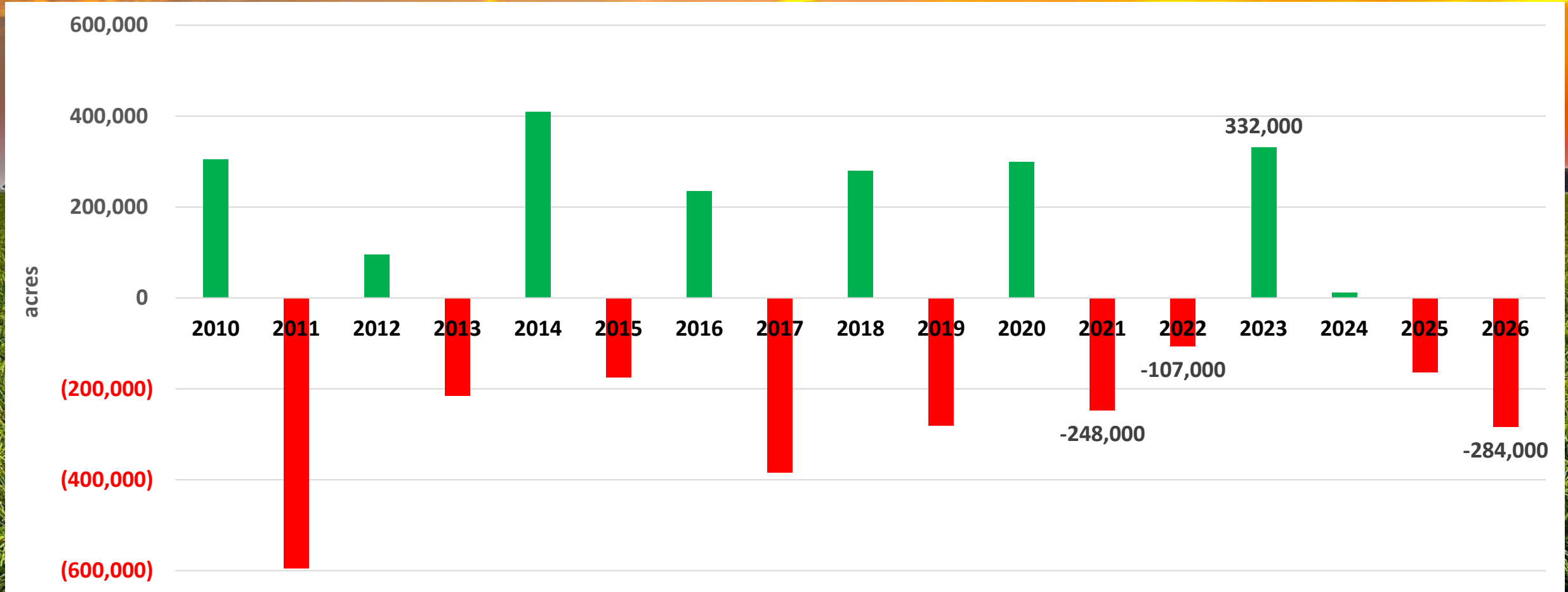
Arkansas: 2026 Outlook

- **Soybean and corn acres to rise**
 - **Rice and cotton acres to decrease**
- **Arkansas rice industry faces great uncertainty**
 - **At current prices, how many rice acres can afford to be planted?**
 - **Can current situation be resolved in one year of reduced acres?**
 - **A second low acreage year may permanently reduce acres**

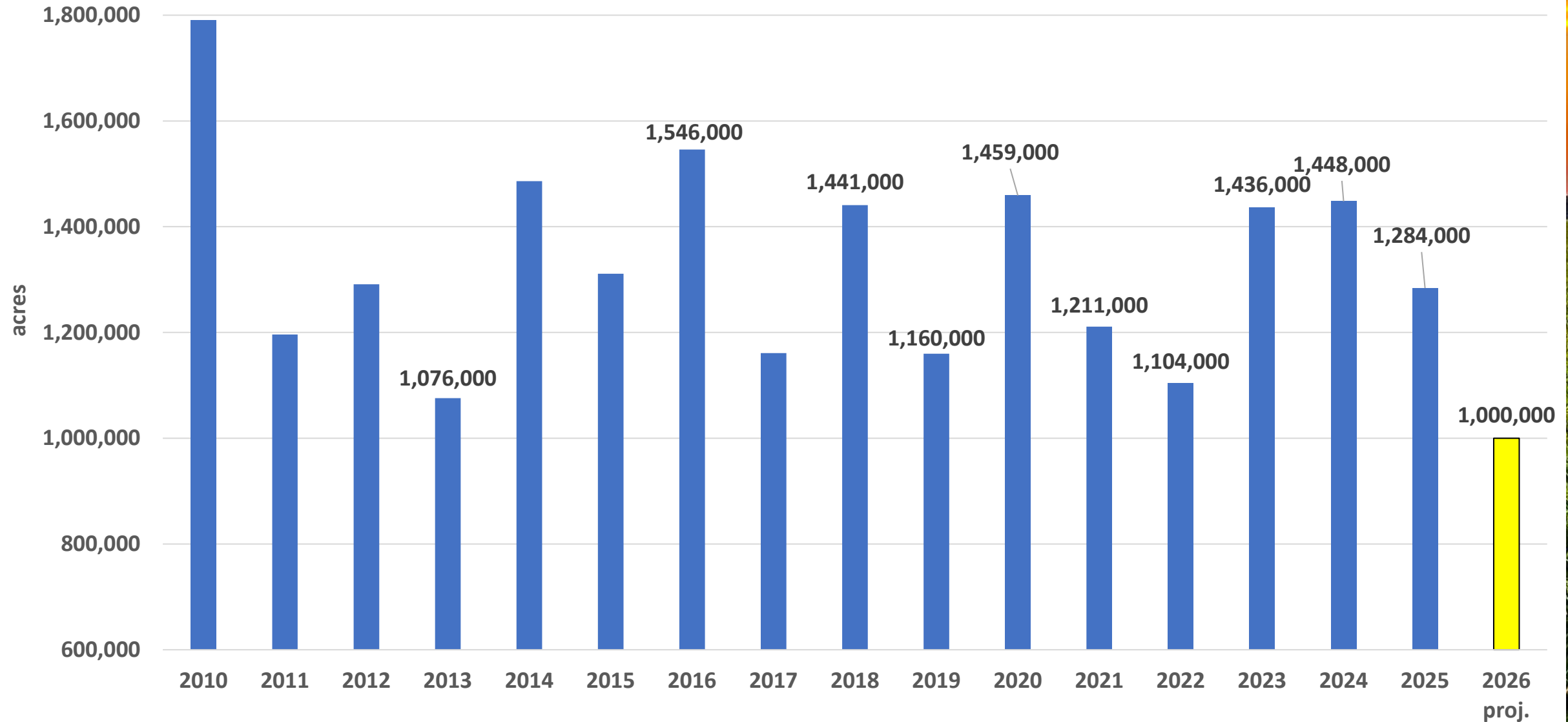
Arkansas: 2026 Crop Comparison

2026 Crop Costs & Returns	Corn	Cotton	Rice FP Hybrid	Rice Hybrid	Rice Variety	Rice CL Variety	Soybean
Cash Price	4.66	0.68	4.68	4.68	4.68	4.68	10.92
Yield	210	1300	190	190	170	170	60
75/25 Return (\$)	-33	-120	-303	-322	-258	-355	17
80/20 Return (\$)	15	-75	-259	-278	-218	-316	50
Owner Return (\$)	211	101	-81	-100	-59	-157	181
Operating Costs	767.14	962.61	970.31	989.24	854.59	952.14	474.64
B/E 75/25 (bu/a)	219	1535	276	282	243	271	58
B/E 80/20 (bu/a)	206	1439	259	264	228	254	54
B/E Owner (bu/a)	165	1152	207	211	183	203	43
State AVG Yields '25:	179	1491	164	164	164	164	54

YoY Change in Rice Acres Planted Arkansas



YoY Change in Rice Acres Planted Arkansas



Arkansas Rice Acreage Outlook for 2026

	2025	2026	Change	% Change
Long-grain	1,180,000	880,000	300,000	-25%
Medium-grain	104,000	120,000	16,000	15%
Total	1,284,000	1,000,000	284,000	-22%



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ARKANSAS
R✓CE
CHECK-OFF