



# Arkansas Rice Research & Outlook Report

## USA Rice Outlook

### Dec. 9, 2024

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# Northeast Rice Research & Extension Center (NERREC)



- Grand opening Aug. 30
- ~600 acres
- Surface & well irrigation
- Silt loam soils typical of NE Arkansas rice production
- Research & Extension focus
- Also – kitchen, classroom, & greenhouse for teaching all ages
- Rice! also soybean, corn, sorghum, wheat research

# Breeding



- **Recent Releases:**

- Ozark – conventional long-grain
- CLL18 – Clearfield long-grain
- PVL04 – Provisia long-grain
- Taurus – conventional medium-grain
- CLM05 – Clearfield medium-grain
- ARoma22 – long-grain aromatic

- **Programs**

- Long-grain (conventional, Clearfield, Provisia)
- Medium-grain (conventional, Clearfield, Provisia)
- Aromatic (conventional, Clearfield)
- Hybrid (conventional, Clearfield, Provisia)

- 215 bu/A in 51 trials in AR, LA, MS, MO, and TX
- 61% head rice and 67% total rice
- 39 in height, 3 inch shorter than CLM04 and better lodging tolerance
- 90 days to heading, same as CLM04
- Plump medium grain similar to Bengal, L/W > 2.4



Xueyan Sha & Christian de Guzman, Rice Breeders  
[xsha@uark.edu](mailto:xsha@uark.edu) & [deguzma@uark.edu](mailto:deguzma@uark.edu)



- 198 bu/A in 55 trials in AR, LA, MS, MO, and TX
- 53% head rice and 68% total rice
- Traditional stature, 42 in in height
- 87 days to 50% heading and 3 days earlier than PVL04
- Slender long grain, 6.6 mm in length



- 194 bu/A in 49 trials in AR, LA, MS, MO, and TX
- 50% head rice and 68% total rice yield
- Traditional stature, 44 in in height
- 86 days to 50% heading and 4 days earlier than PVL04
- Pi-ta for blast resistance
- Slender long grain, 6.7 mm in length

# Weed Science



**Dr. Tom Barber**

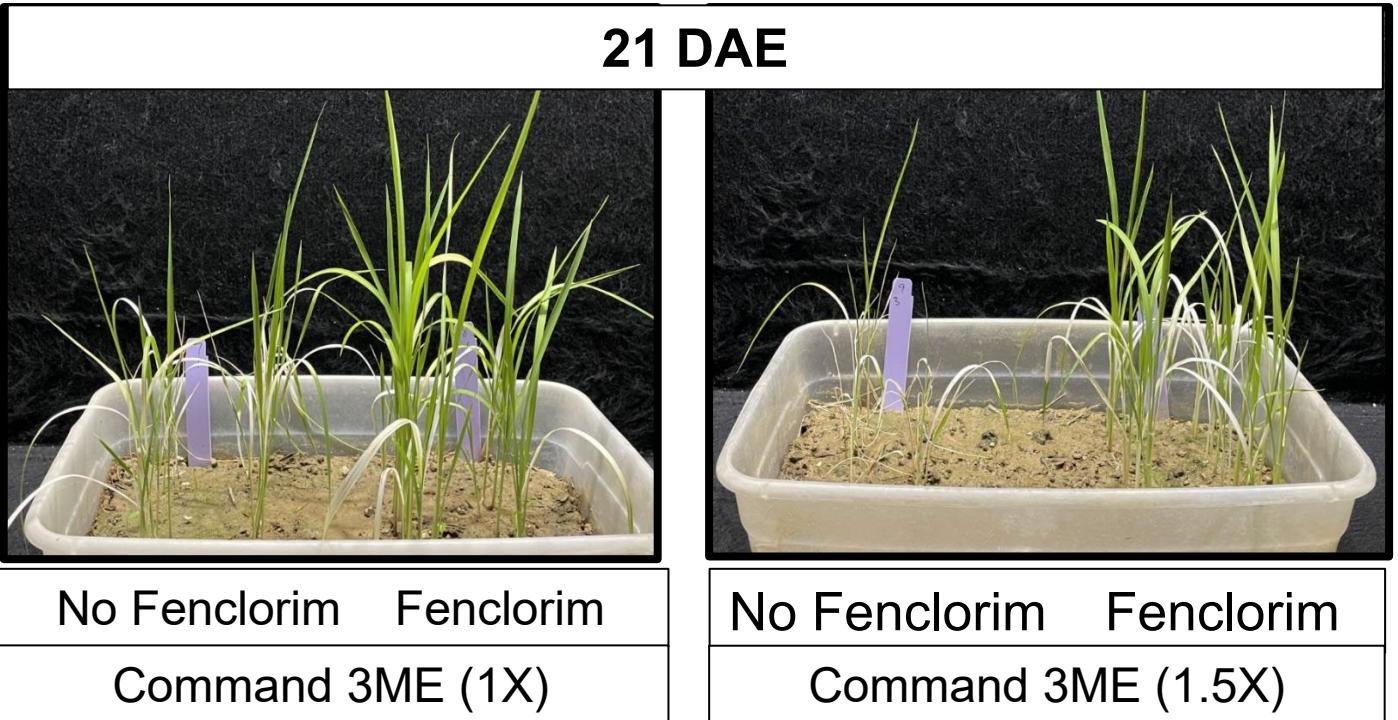


**Dr. Jason Norsworthy**



**Dr. Bob Scott**

- Safener technology
  - HPPD's
  - Warrant
  - Higher rates of Command?
- New herbicides
  - Tetflupyroliment Dodylex™
  - Others
  - Brake
- Roxy rice



# Pathology



- Pathology
  - Sheath blight threshold
  - Monitoring for fungicide resistance in sheath blight
  - Cercospora in the Mid-South

# Revising the Prevalence and Stability of host resistance of Rice Blast Races in Arkansas

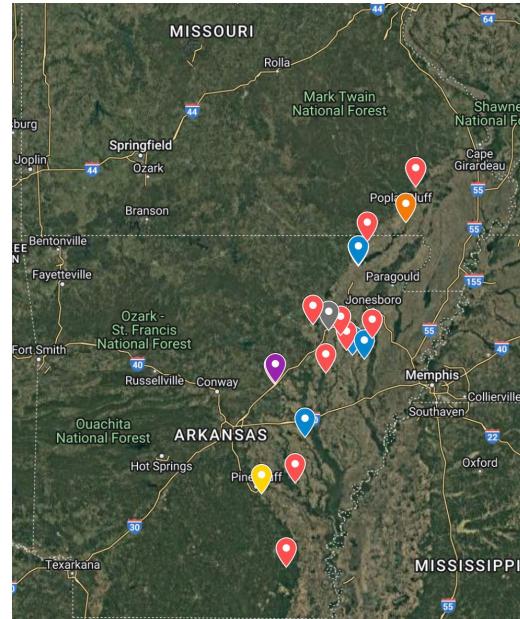
## Season 2024:

22 fields

5 cultivars

150 isolates (*Pyricularia oryzae*)

- RT7521FP (Resistant)
- Taurus (Moderately susceptible)
- Titan (Moderately susceptible)
- DG353M ( -- )
- CLM04 (Susceptible)



# Integrating Host Resistance and Fungicides to Control Cercospora (Narrow brown leaf spot) in Rice

## Season 2024:

3 trial locations

3 timing applications

3 cultivars (CLL19, PVL03, RT7521FP)



Camila Nicolli, Extension Plant Pathologist  
[cnicolli@uada.edu](mailto:cnicolli@uada.edu)



# Entomology



Dr. Nick Bateman

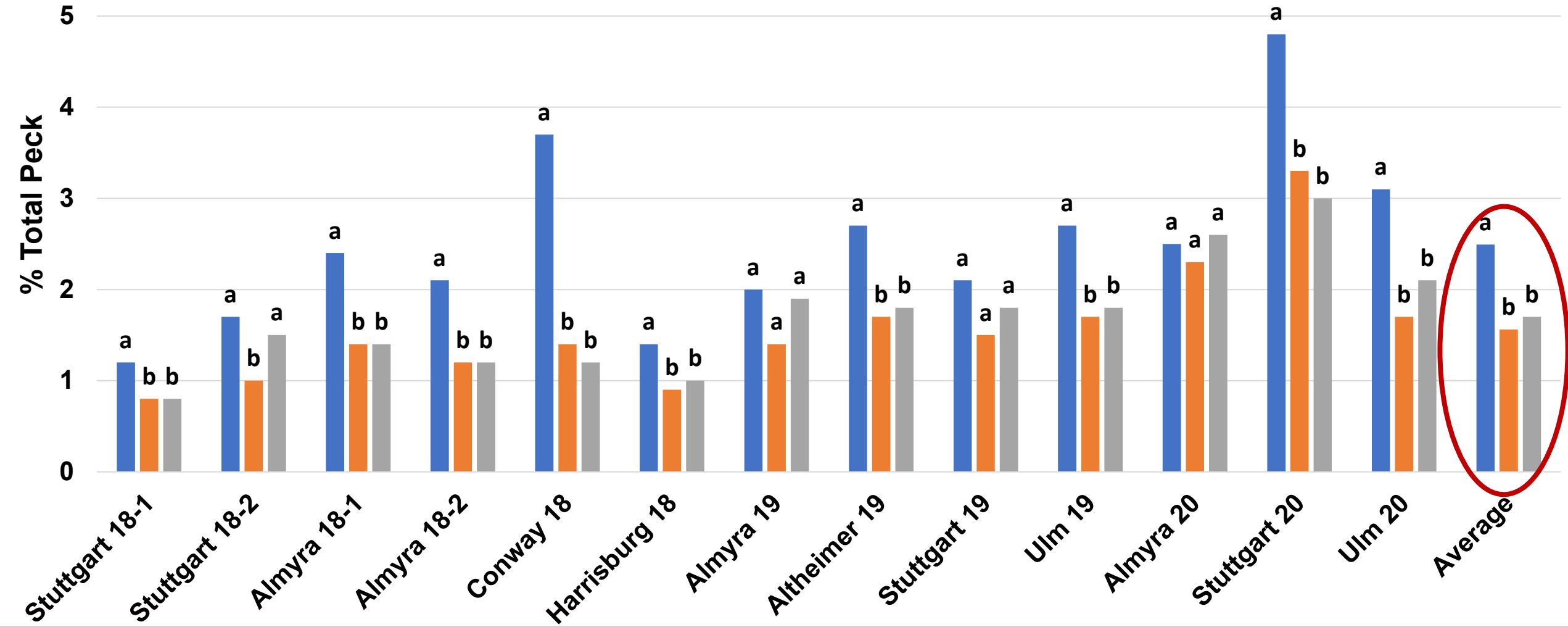
- **Entomology:**
  - Defoliation thresholds
  - Rice stink bug resistance to pyrethroids
  - Rice billbug in row rice

# RSB Threshold-Peck

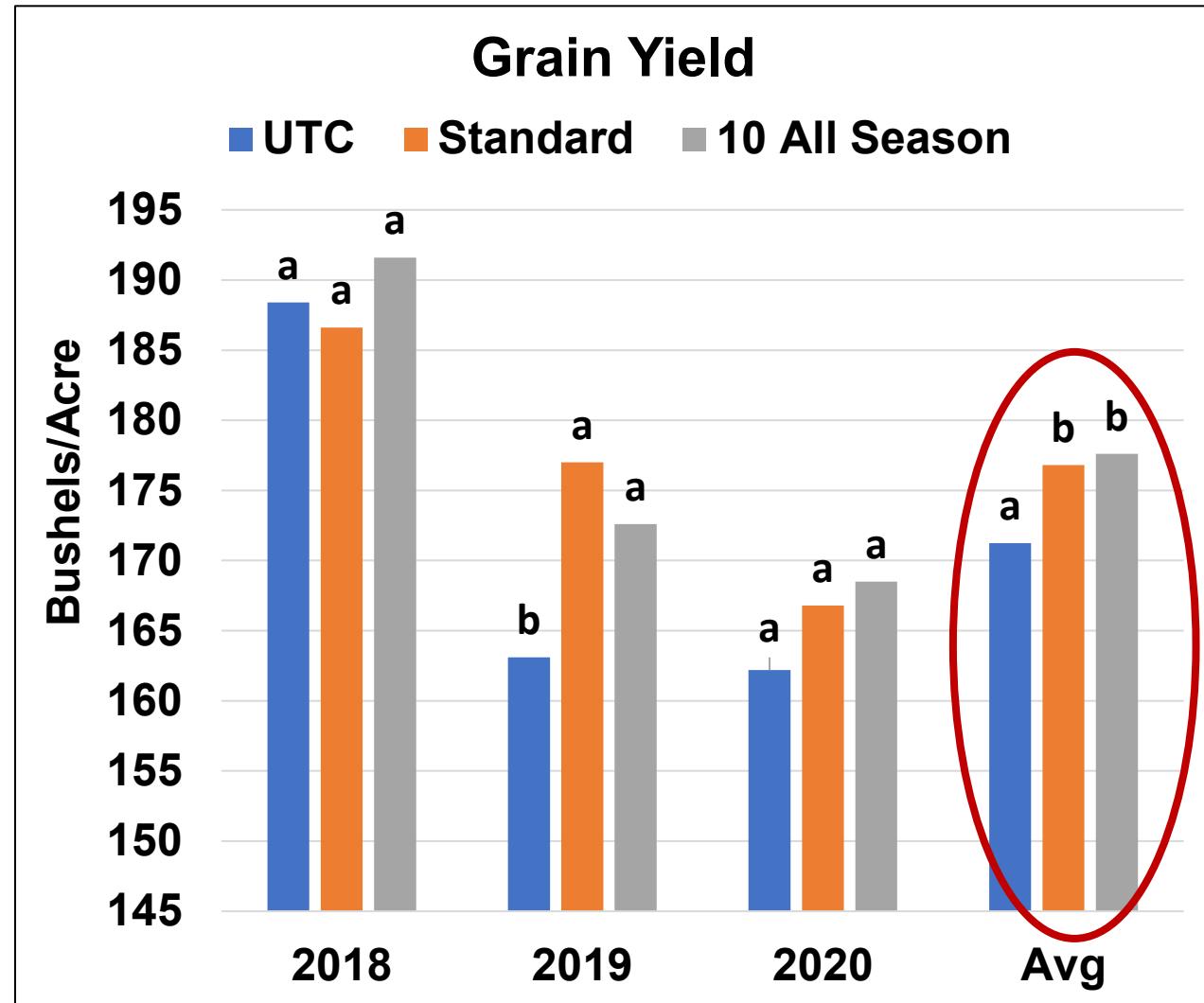
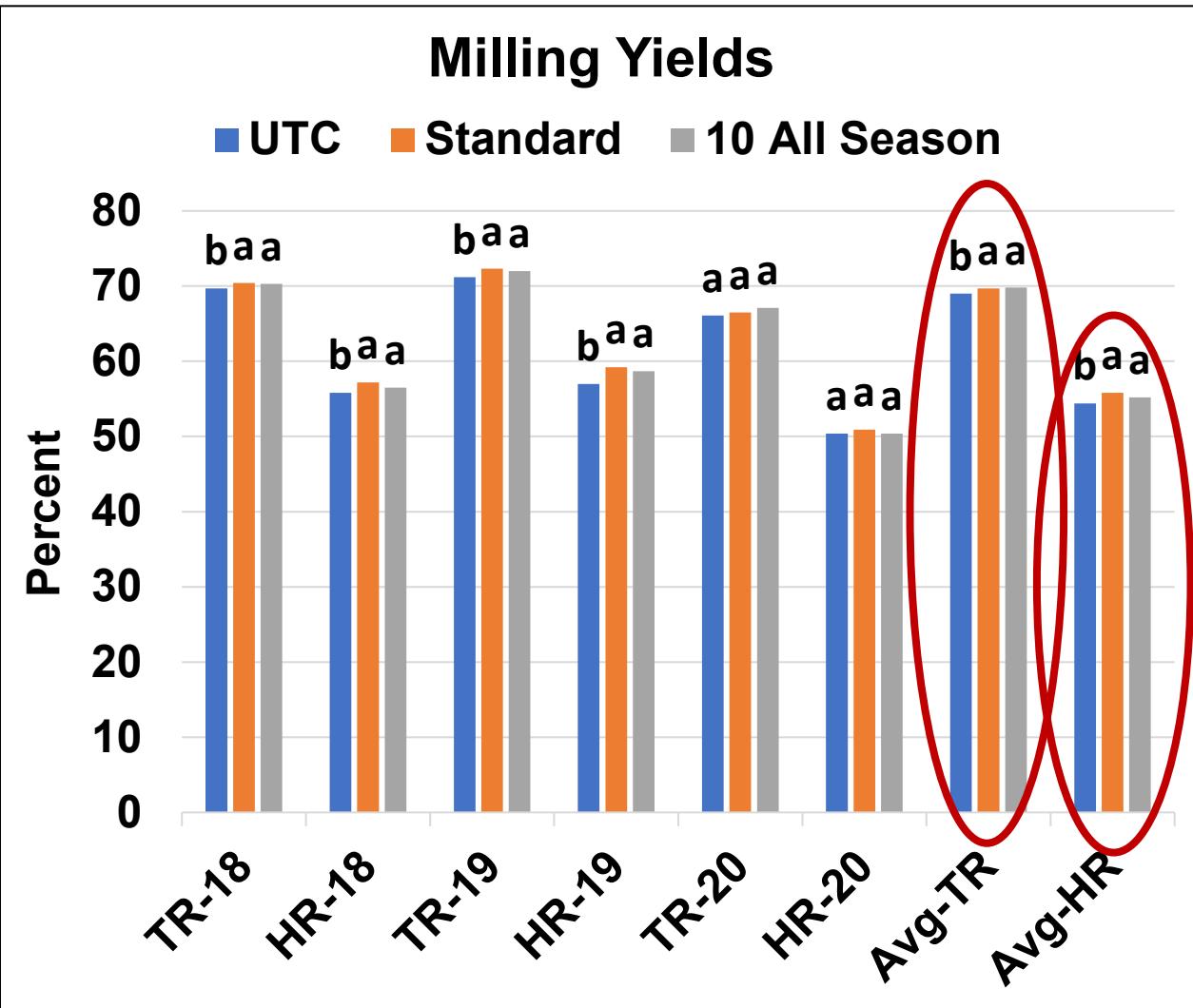
UTC

Standard

10 All Season

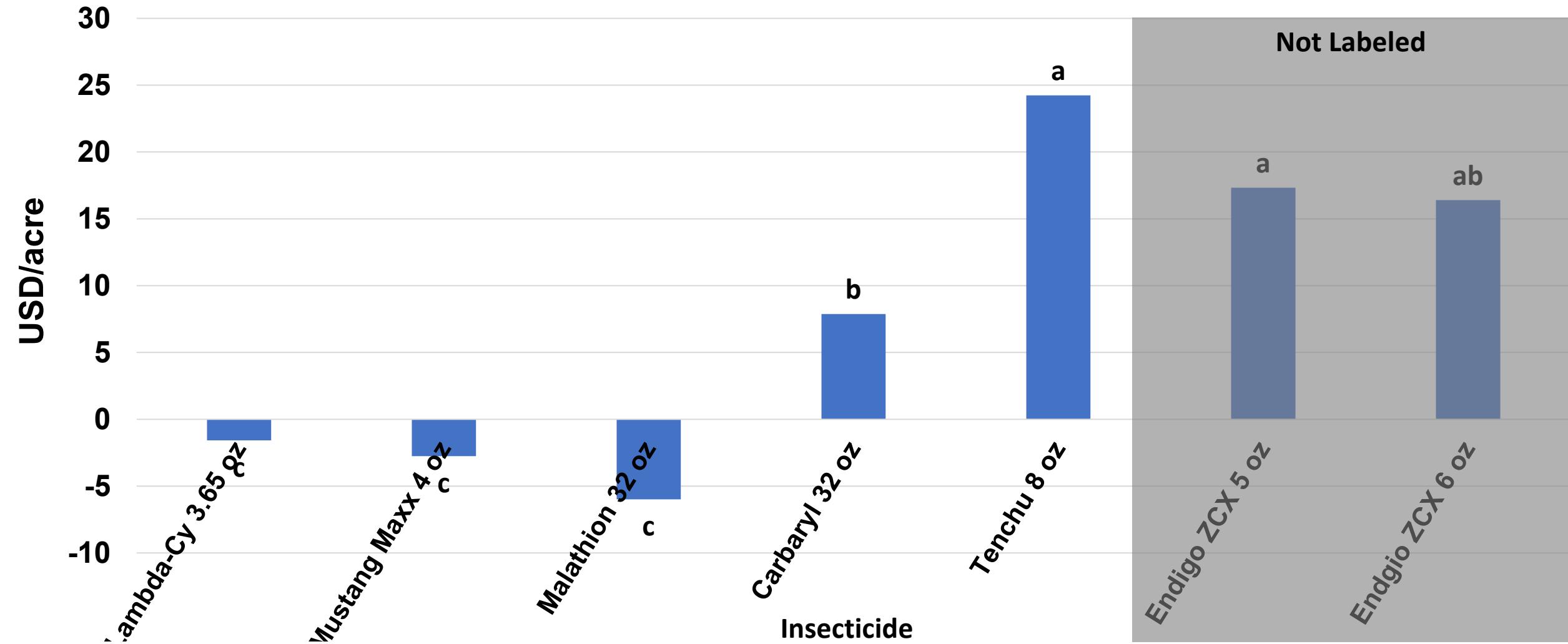


# RSB Threshold-Yield & Milling



# Rice Stink Bug Insecticide Options

## Return on Investment (ROI) Compared to Untreated

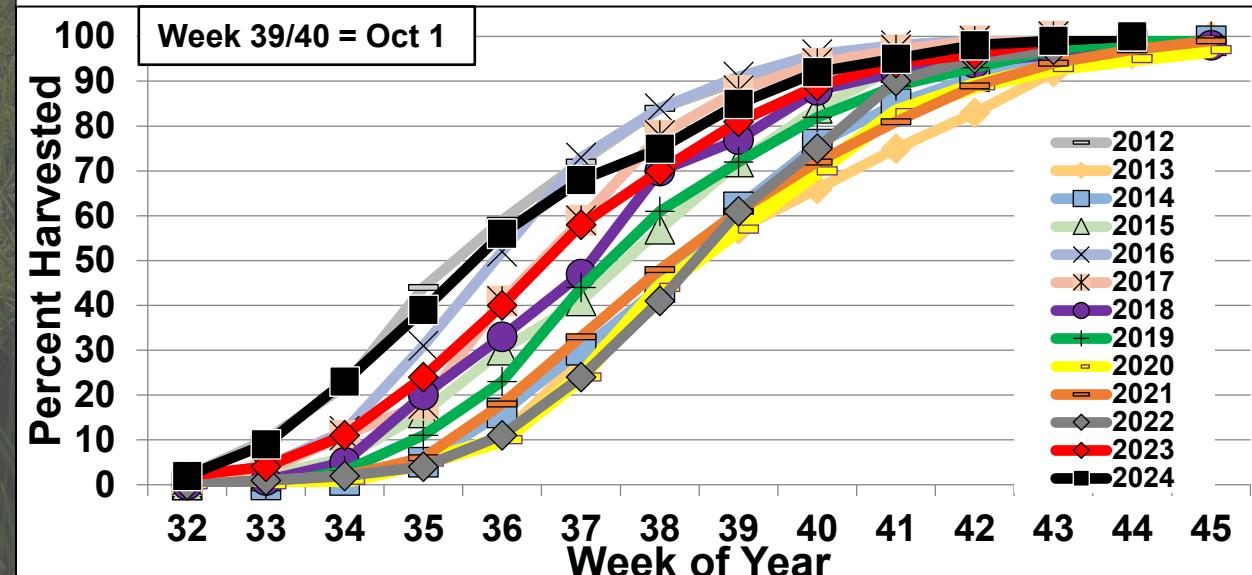
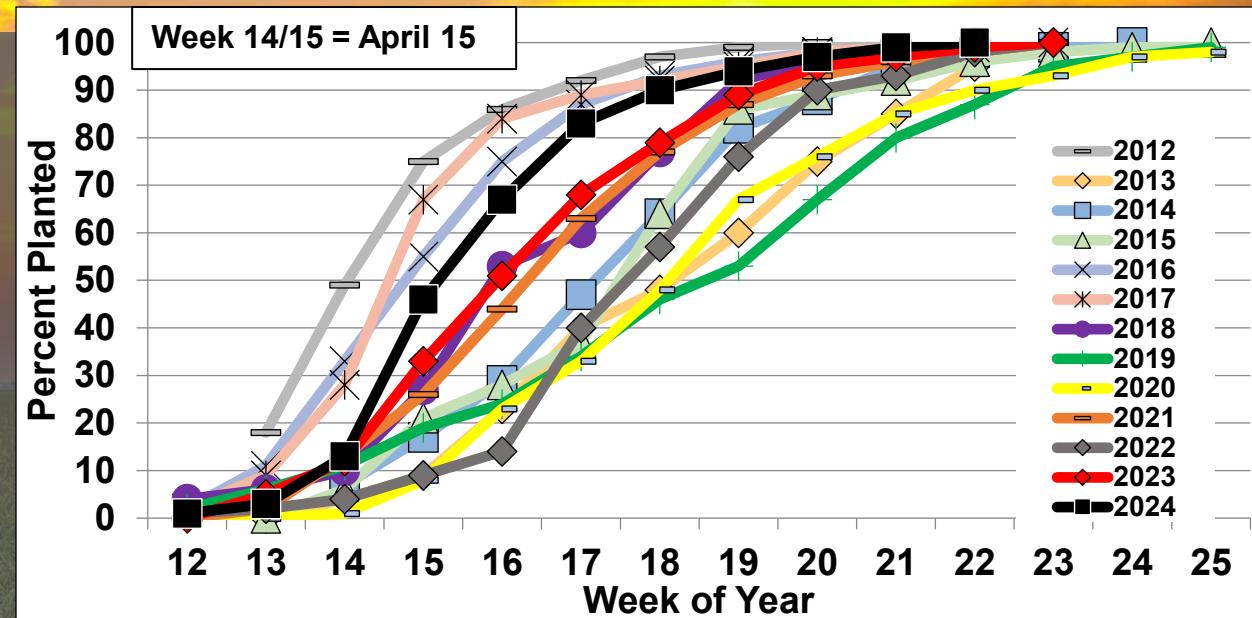


# Thresholds for Rice Stink Bugs

- For weeks 1 and 2 after 75% heading, treat if sampling gives an average of 5 bugs (adults and nymphs) per 10 sweeps to protect yield
- For all weeks after 75% heading, treat if sampling gives an average of 10 bugs (adults and nymphs) per 10 sweeps to prevent quality loss (pecky rice)



- One of the fastest planting paces on record
    - Warm from late March through May
  - Mid-April rains arrived and persisted to June
    - Fertilizer & herbicide issues
  - Summer very good conditions overcoming early mgmt struggles
  - Harvest
    - Rapid drydown under dry conditions
    - Too dry too fast – lower milling
    - Lowest milling yields in AR since ??
    - Labor Day rains and Hurricane Francine in mid-September no help

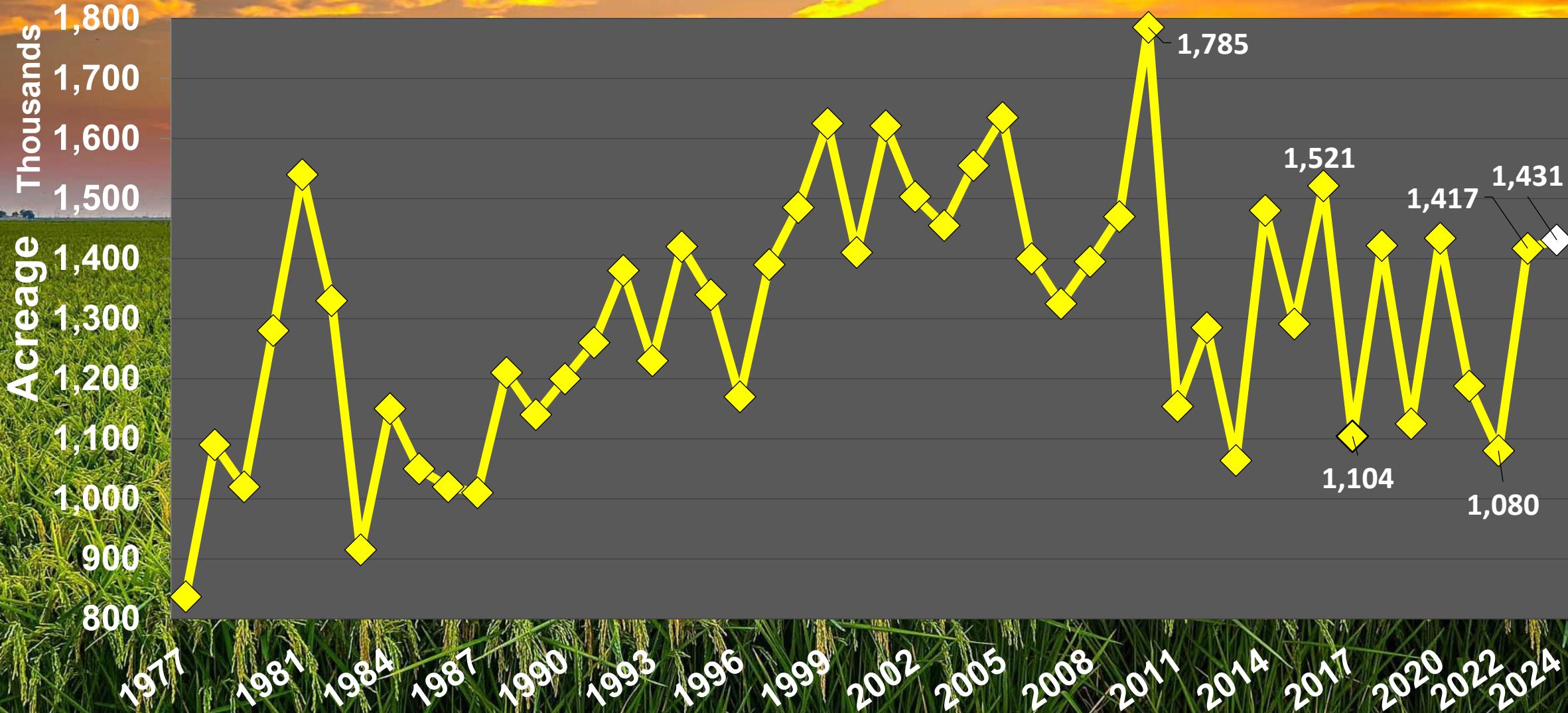


# 2024 Overview

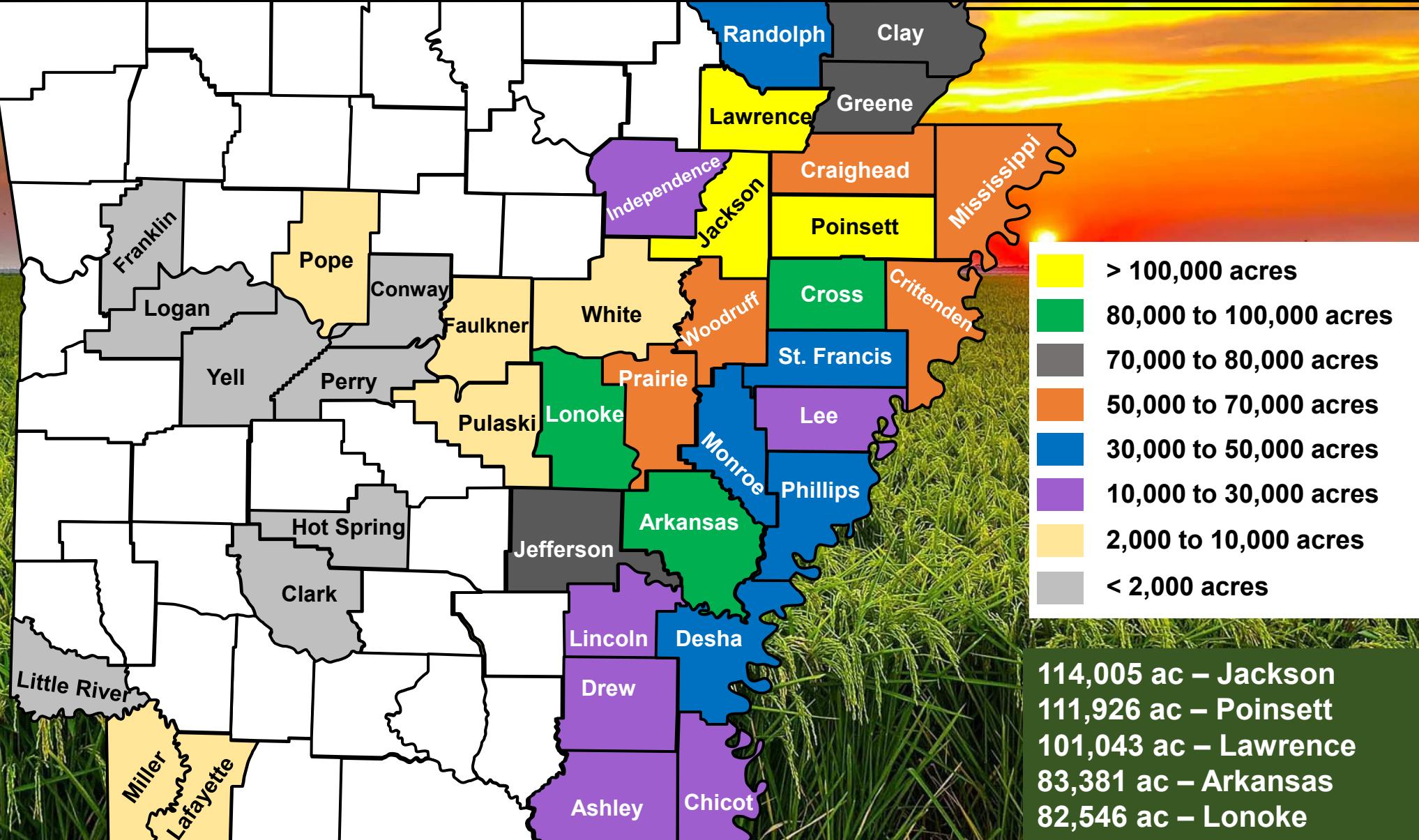
## Milling Yields AGAIN the topic of greatest concern

- Planted faster than we can harvest
- AUGUST
  - HOT and DRY
  - Overdrying
  - Excessive rewetting and drying cycles
  - Large amount of green rice harvested below 16% moisture
    - Earlier effects of HNT, wet/dry cycles lower MY
    - Addition of low harvest moisture = critically low MY

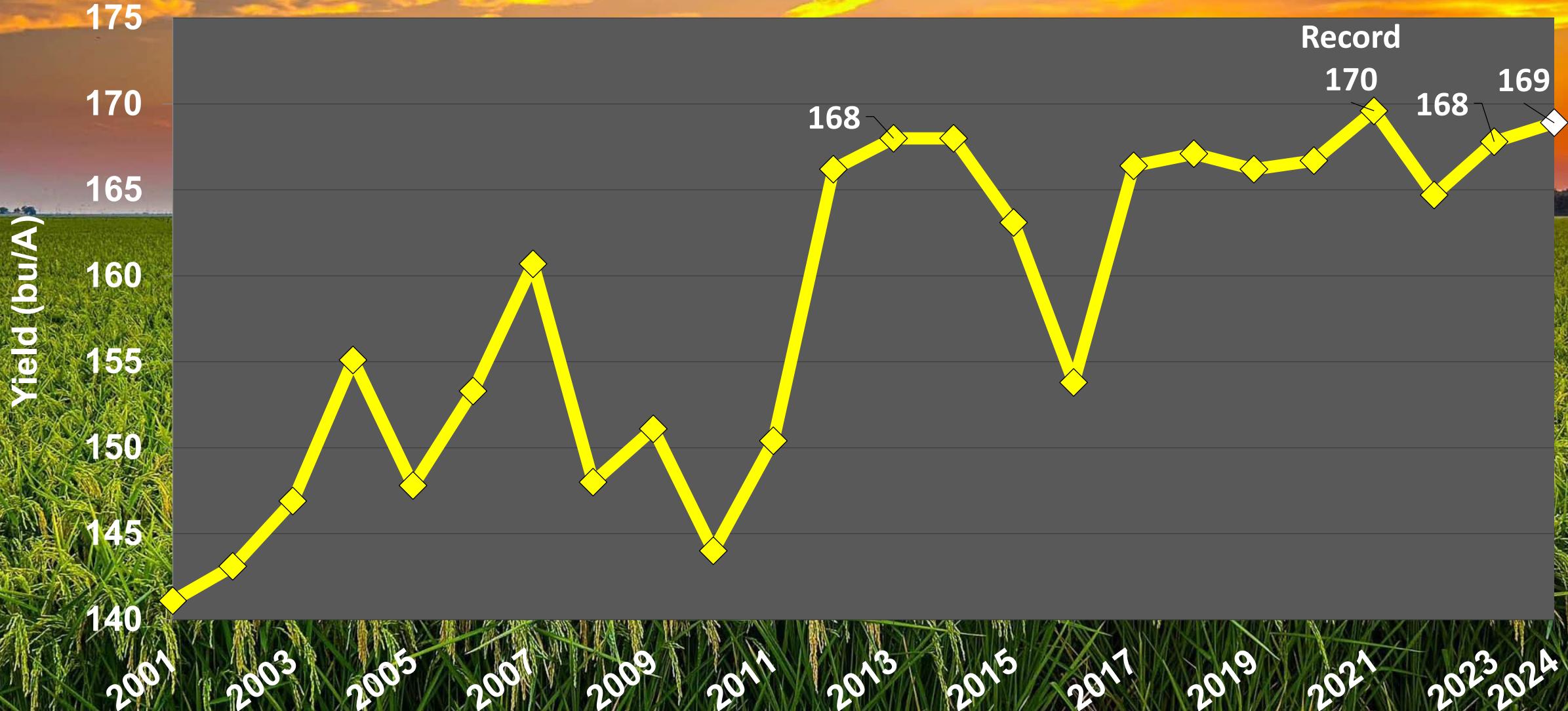
# AR Rice Acreage, 1977-2024



# AR Rice Acreage, 2024



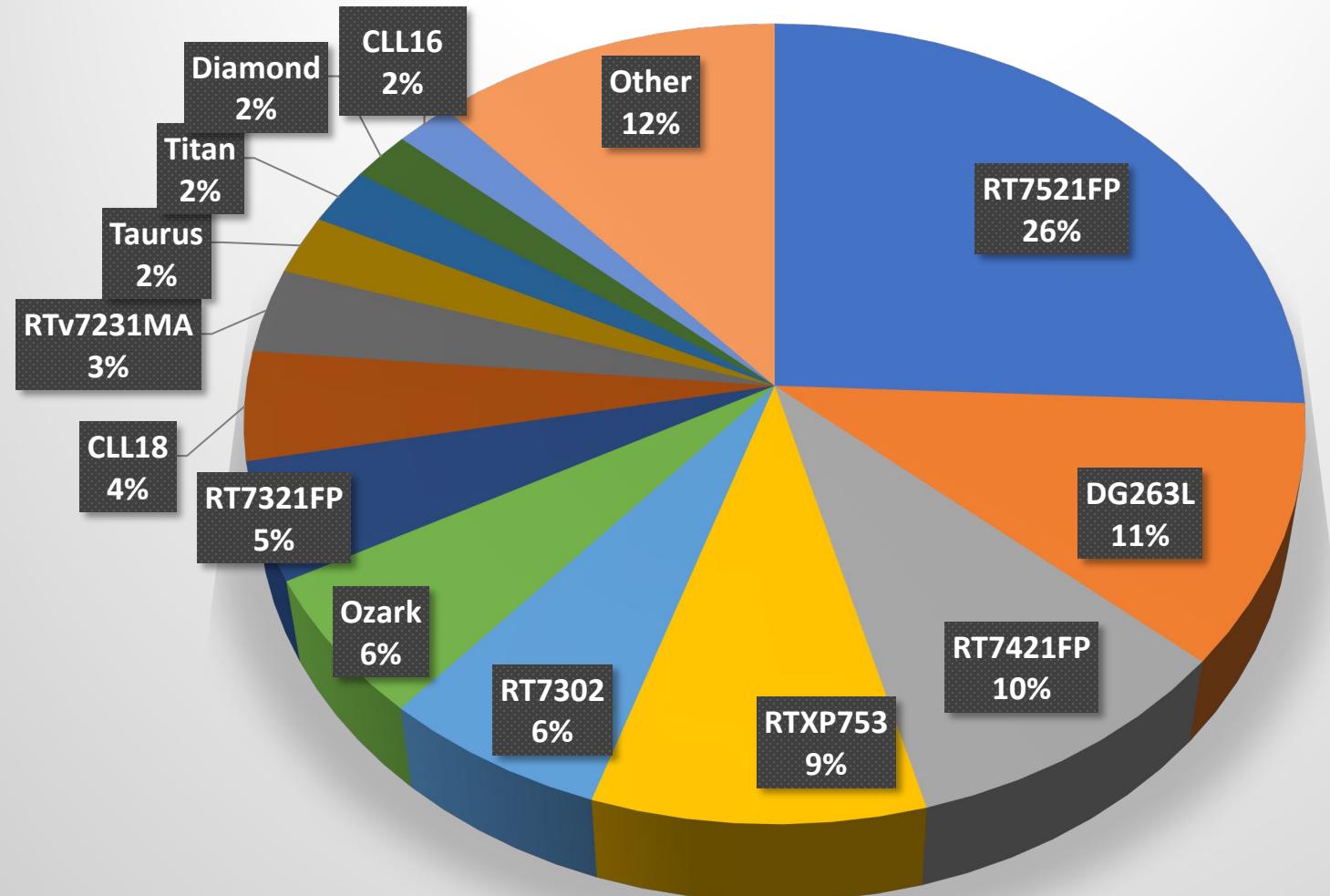
# AR Avg. Rice Yield, 2001-2024



# 2017-2024 Rice Cultivar Distribution

Cultivar	2024*	2023	2022	2021	2020	2019	2018	2017
% of Acres								
RT 7521 FP	25.7	21.3	29.8	21.2	13.3	--	--	--
DG263L	10.6	8.1	10.9	3.3	--	--	--	--
RT 7421 FP	9.5	6.0	--	--	--	--	--	--
RT XP753	9.3	12.3	17.8	21.2	19.2	25.6	22.2	16.5
RT 7302	6.3	0.8	--	--	--	--	--	--
Ozark	5.8	0.8	--	--	--	--	--	--
RT 7321 FP	4.8	14.6	14.6	25.2	5.4	--	--	--
CLL18	4.4	0.5	--	--	--	--	--	--
RTv7231 MA	3.4	3.4	**	--	--	--	--	--
Taurus	2.4	0.1	--	--	--	--	--	--
Titan	2.3	5.8	2.7	2.7	2.5	6.5	4.7	3.0
Diamond	2.0	3.8	5.5	6.0	10.1	10.9	20.0	8.6
CLL16	1.9	4.3	4.9	2.5	0.1	--	--	--

# 2024 Rice Cultivar Distribution



- Input costs holding while price outlook falling
- Profitability – not in 2025 vocabulary
- Current fall 2025 rice bids are near \$6.16 per bu compared to \$6.80 (for fall 2024)
- Fall 2025 soybean bids near \$9.73, rice is more profitable at 100% share (full ownership)
  - However, profitability shifts in favor of soybeans in common share lease arrangements (75/25 and 80/20)
  - But rice and soybean both at break-even or a loss.

# Arkansas: 2025 Outlook

- Current uncertainty points to static crop selections
  - Rice increase acres (replace corn/cotton) ??
- Corn acres likely to drop further
  - Primary move to soybean?
  - How much to rice?
- Prices for remainder of 24/25 marketing year uncertain
  - Can U.S. LG rice markets sustain current prices long-term????
  - What happens to medium-grain market – planted more acres than expected in '24 in part due to LG seed shortage
  - International impact...

# Arkansas: 2025 Crop Comparison

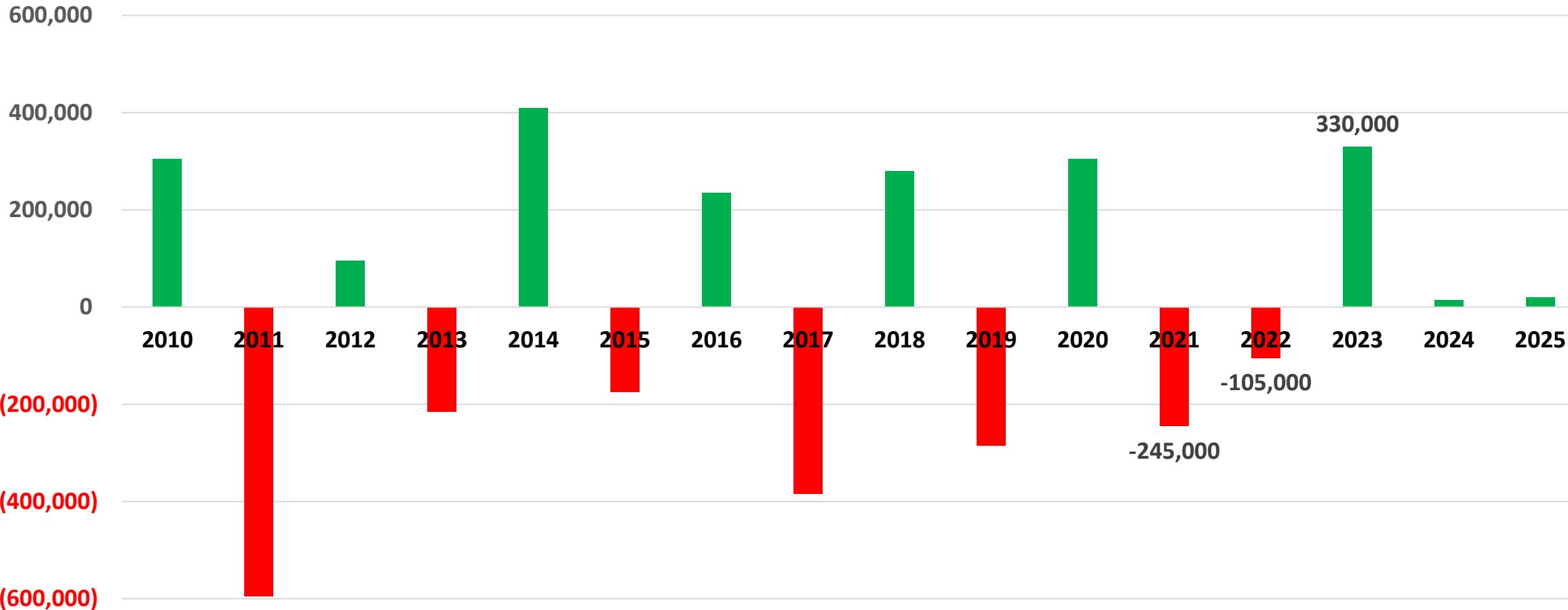
2025 Crop Costs & Returns	Corn	Cotton	Rice FP Hybrid	Rice Hybrid	Rice Variety	Rice CL Variety	Soybean
Cash Price	4.33	0.71	6.16	6.16	6.16	6.16	9.73
Yield	210	1300	190	190	170	170	60
75/25 Return (\$)	-108	-110	-93	-93	-61	-145	-25
80/20 Return (\$)	-63	-64	-34	-34	-8	-93	4
Owner Return (\$)	119	121	200	200	201	116	121
<b>Operating Costs</b>	<b>790.42</b>	<b>981.90</b>	<b>970.32</b>	<b>970.39</b>	<b>846.00</b>	<b>930.83</b>	<b>463.17</b>
B/E 75/25 (bu/a)	243	1507	210	210	183	201	63
B/E 80/20 (bu/a)	228	1413	197	197	172	189	60
B/E Owner (bu/a)	183	1130	158	158	137	151	48
<b>State AVG Yields '24:</b>	<b>186</b>	<b>1200</b>	<b>169</b>	<b>169</b>	<b>169</b>	<b>169</b>	<b>55</b>



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# Year-to-Year Change in Rice Acres Arkansas

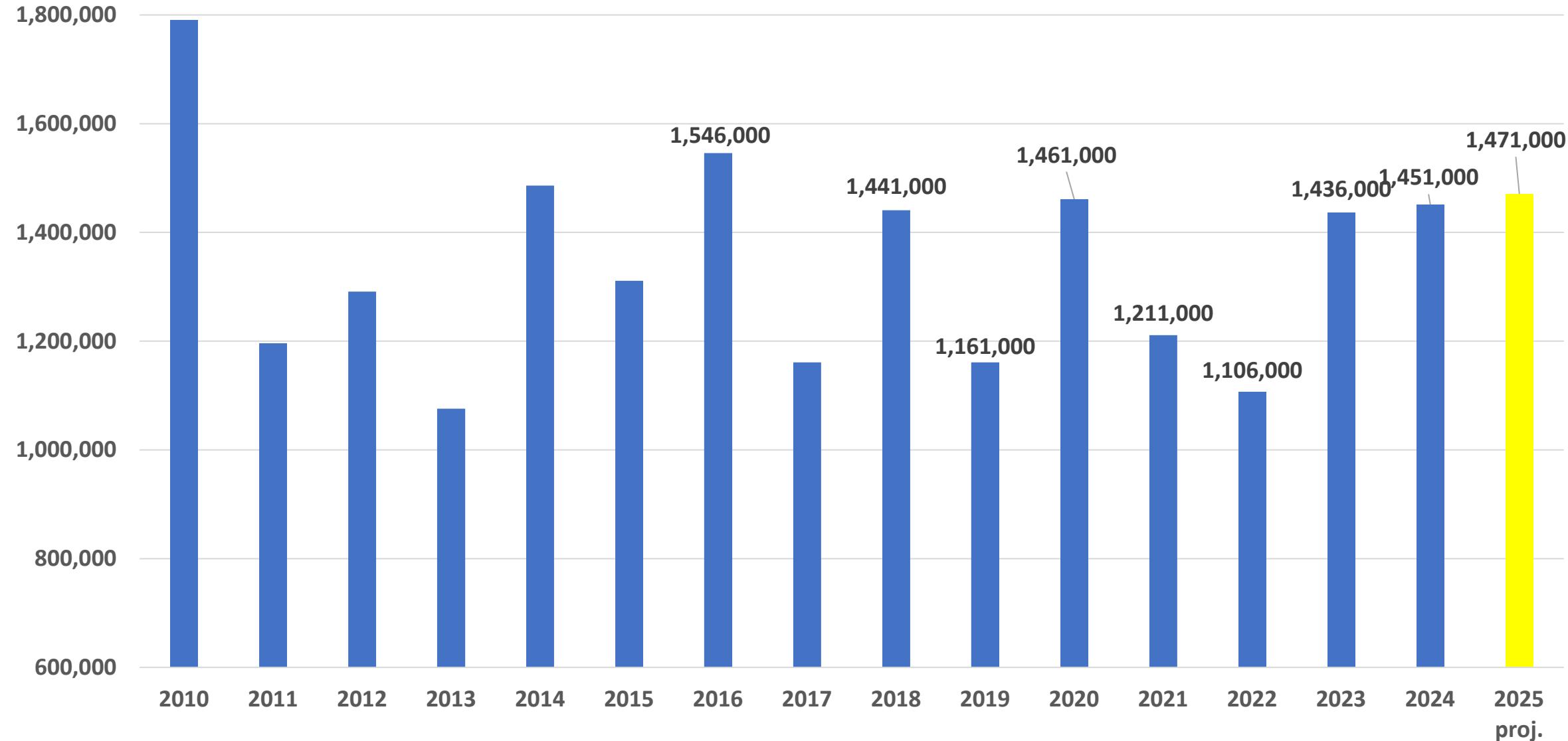




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# Year-to-Year Change in Rice Acres Arkansas





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# Arkansas Rice Acreage Outlook for 2025



	2024	2025	Change	% Change
Long-grain	1,330,000	1,350,000	20,000	1%
Medium-grain	121,000	121,000	--	
Total	1,451,000	1,471,000	20,000	1%



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