



Arkansas Rice Performance Trials 2023

Introduction

Rice cultivar performance data included in this publication are from the Arkansas Rice Performance Trials (ARPT) conducted at research stations and on-farm locations throughout Arkansas. These studies are supported through grower check-off funds administered by the Arkansas Rice Research and Promotion Board and support from the University of Arkansas System Division of Agriculture.

Methods

The 2023 Arkansas Rice Performance Trials (ARPT) contained 27 rice cultivars and were conducted at the Rice Research and Extension Center (RREC) near Stuttgart, the Pine Tree Research Station (PTRS) near Colt, the Northeast Research and Extension Center (NEREC) near Keiser, the Northeast Rice Research and Extension Center (NERREC) near Harrisburg, a grower field in Clay Co. (CLAY) near McDougal, a grower field in Desha Co. (DESHA) near McGehee, a grower field in Lawrence Co. (LAW) near Walnut Ridge, a grower field in Jackson Co. (JAC) near Newport, a grower field in Greene Co. (GRE) near Paragould, and a grower field in Arkansas Co. (ARK) near Gillette. A test location map can be found on the next page.

Plots in all tests were 8 rows wide on 7.5-inch drill spacing and approximately 20 feet in length depending on location. Seeds were packaged based on 33 seed/ft² for varieties and 11 seed/ft² for hybrids. These rates are slightly higher than standard recommended rates to account for changes in soil

type and seedbed condition at planting. For each test, entries were arranged in a randomized complete block design with four replications. Percent moisture was recorded, and plot weights were adjusted to 12% moisture. Plot weights were then converted to yield in bushels per acre (bu/ac).

Plots were visually rated for lodging at harvest and converted to a 1 to 5 scale to represent stalk strength. Canopy heights were measured prior to harvest. Disease susceptibility was evaluated prior to harvest for known rice diseases.

Samples from each plot were collected at harvest. The samples were then dried to approximately 12% moisture before being milled to obtain percent head rice (%HR; whole kernels) and percent total milled rice (%TR) represented as HR-TR.

Planting date study results from RREC and NERREC are also included. Trials were planted approximately every two weeks beginning in late March. Methods were similar to those described for ARPT.

General rice cultivar characteristics are provided to describe the majority of rice cultivars currently available to growers. Also included is the 2023 Arkansas rice cultivar disease reaction table.

Additional Information

Extension rice website:

<http://www.uaex.uada.edu/rice>

B.R. Wells Arkansas Rice Research Studies:

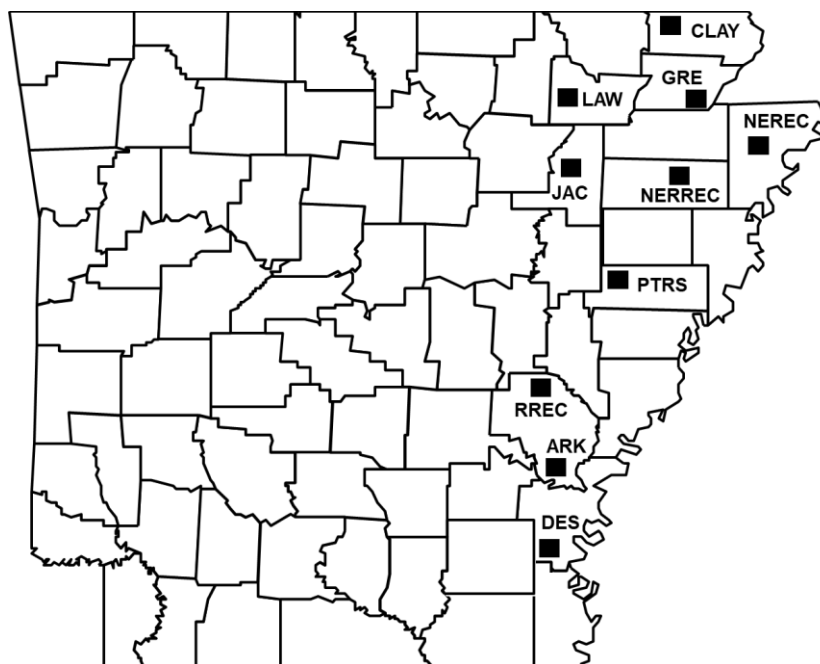
<https://aaes.uada.edu/communications/publications/>

Arkansas Rice Performance Trials (ARPT)

Summary of Arkansas Rice Performance Trial Locations, 2023

University of Arkansas System Division of Agriculture

Site	Planting Date	Emergence Date	Harvest Date	Soil Type	Location Type
RREC, Arkansas Co., Stuttgart, Ark.	April 10	April 23	September 11	Dewitt silt loam	Research Station
PTRS, St. Francis Co., Colt, Ark.	May 3	May 10	September 15	Calhoun-Henry silt loam	Research Station
NEREC, Mississippi Co., Keiser, Ark.	May 4	May 12	September 27	Sharkey silty clay	Research Station
NERREC, Poinsett Co., Harrisburg, Ark.	April 11	April 30	September 19	Henry-Calloway silt loam	Research Station
CLAY, Clay Co., McDougal, Ark.	April 4	April 20	September 6	Jackport silty clay	On-Farm
DESHA, Desha Co., McGehee, Ark.	April 19	May 1	August 31	Perry clay	On-Farm
LAW, Lawrence Co., Walnut Ridge, Ark.	April 12	May 5	September 5	Foley-Calhoun silt loam	On-Farm
JAC, Jackson, Co., Newport, Ark.	April 18	May 14	September 26	Sharkey silty clay loam	On-Farm
GRE, Greene Co., Paragould, Ark.	April 13	May 5	September 5	Jackport silty clay loam	On-Farm
ARK, Arkansas Co., Gillette, Ark.	March 30	April 12	August 24	LaGrue silty clay loam	On-Farm



Arkansas Rice Performance Trials (ARPT)

2023 Grain Yield Summary – All Locations

University of Arkansas System Division of Agriculture

Cultivar	Grain Length ¹	RREC bu/ac	PTRS bu/ac	NEREC bu/ac	NERREC bu/ac	CLAY bu/ac	DESHA bu/ac	GRE bu/ac	JAC bu/ac	LAW bu/ac	ARK bu/ac	Mean bu/ac
Diamond	L	156	178	162	174	170	176	182	166	193	175	173
Ozark	L	168	188	174	178	177	172	202	187	208	189	184
DG263L	L	170	198	165	203 ²³	215	187	202	181	210	178	191
CLL16	L	163	174	156	165	177	184	198	172	186	188	176
CLL18	L	170	185	169	184	188	190	197	186	196	201	187
CLL19	L	164	184	161	162	186	187	196	163	207	207	182
PVL03	L	146	163	126	161	155	176	167	151	158	200	160
PVL04	L	135	174	153	162	157	151	192	144	180 ²⁰	176	162
RTv7231 MA	L	170	185	171	170 ¹⁵	196	191	178	180	197	175	181
RT 7331 MA	L	210	212	197	200 ¹⁰	215	204	213	191	235	226	210
RT 7431 MA	L	207	216	190	207 ⁸	201	202	200 ²⁰	209	201	207	204
RT 7321 FP	L	211	209	194	219	223	213	211 ²³	210	237	223	215
RT 7421 FP	L	219	229	210	217	205	203	219	215	223	204	214
RT 7521 FP	L	215	226	171	209	241	230	229 ²⁹	187 ³⁶	211 ⁵⁰	228	215
RT 7523 FP	L	208	212	190 ¹³	210	195	204	188 ²¹	219	231	201	206
RT 7302	L	232	222	221	230	231	229	219	225	236	228	227
RT 7401	L	206	218	203	214	194	201	201 ¹⁰	211	218	213	208
RT XP753	L	215	209	200	217	208	211	220	213	231	218	214
Jupiter	M	118	146	149	150	147	159	166	175	167	146	152
Titan	M	130	167	132 ¹⁰	155 ¹⁹	171 ⁷	155	173	169	195	159	161
Taurus	M	169	180	153 ¹⁵	178	187	197	200	185	206	207	186
DG353M	M	118	160	128	151	132	163	173	184	172	149	153
ProGold M3	M	158	173	193	172	172	190	204	186	181	196	183
RT 3202	M	211	220	207	229	218	201	224	204	230	225	217
CLM04	M	128	169	135	163 ²⁵	167	177	169	181	165	165	162
CLM05	M	151	173	146	179	204	175	183	168	199	201	178
ARoma22	LA	121	151	131	145	--	--	--	--	--	--	137
MEAN	--	172	189	168	184	189	189	196	186	202	195	186

¹ Grain Length: L=long grain, M=medium grain, LA = long grain aromatic.

* Numbers in superscript beside yields represent percent lodging.

Arkansas Rice Performance Trials (ARPT)

2023 Milling Yield Summary – All Locations

University of Arkansas System Division of Agriculture

Cultivar	Grain	RREC	PTRS	NEREC	NERREC	CLAY	DESHA	GRE	JAC	LAW	ARK	Mean
	Length ¹	HR-TR ²	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR
Diamond	L	59-71	54-72	60-72	57-71	51-69	50-69	58-72	51-71	59-71	60-72	56-71
Ozark	L	63-72	54-71	57-71	61-72	55-70	51-68	61-73	57-72	61-71	58-72	58-71
DG263L	L	61-70	55-69	56-69	59-70	49-67	54-68	61-70	49-70	53-68	64-71	56-69
CLL16	L	62-71	52-70	61-71	57-70	47-68	47-68	59-71	49-71	55-70	61-71	55-70
CLL18	L	61-70	55-70	58-70	61-72	54-69	44-68	59-72	52-71	56-69	55-71	55-70
CLL19	L	64-71	56-71	53-69	60-71	58-70	53-69	62-72	46-70	59-70	66-73	58-71
PVL03	L	65-72	60-72	58-71	63-72	57-72	48-71	63-73	51-72	59-71	62-73	59-72
PVL04	L	61-71	58-71	60-71	59-69	55-70	51-69	62-72	58-71	58-70	63-72	59-71
RTv7231 MA	L	60-72	42-71	54-71	59-72	48-70	52-70	55-71	29-71	52-72	61-72	51-71
RT 7331 MA	L	63-72	44-71	54-71	60-72	44-71	54-71	60-73	38-72	56-71	64-73	54-72
RT 7431 MA	L	62-72	48-71	52-71	61-72	52-71	55-70	57-73	43-72	57-71	63-73	55-72
RT 7321 FP	L	56-71	40-70	55-71	55-71	38-70	50-70	53-72	34-72	52-71	57-72	49-71
RT 7421 FP	L	59-72	48-70	55-71	61-72	50-70	51-69	59-72	45-72	52-71	63-72	54-71
RT 7521 FP	L	63-71	56-69	52-69	60-71	52-69	49-69	59-72	49-71	55-69	64-72	56-70
RT 7523 FP	L	62-71	49-70	55-70	59-72	40-70	51-70	55-71	43-71	47-71	63-73	52-71
RT 7302	L	63-72	49-70	54-71	58-72	41-69	51-70	55-72	39-72	50-70	66-73	53-71
RT 7401	L	59-71	49-70	56-71	57-72	49-70	50-69	53-72	44-72	59-71	57-73	53-71
RT XP753	L	61-72	52-71	51-70	54-72	42-71	53-71	54-73	34-72	51-72	62-74	51-72
Jupiter	M	67-70	64-69	60-67	65-70	58-66	58-66	68-71	63-70	61-69	68-71	63-69
Titan	M	63-70	47-70	60-70	62-71	59-69	57-69	65-72	43-71	58-71	67-72	58-70
Taurus	M	62-72	55-72	61-70	63-71	62-69	59-70	66-73	48-72	62-71	66-73	60-71
DG353M	M	67-71	59-72	58-70	65-71	61-69	54-68	68-72	59-72	60-70	68-73	62-71
ProGold M3	M	67-71	65-71	62-69	67-71	61-67	62-70	69-72	61-71	61-69	69-72	65-70
RT 3202	M	67-71	52-70	46-70	61-71	49-70	59-70	63-72	40-71	58-71	67-72	56-71
CLM04	M	68-71	65-71	58-69	64-69	63-68	61-69	68-72	61-72	64-70	69-72	64-70
CLM05	M	64-69	60-69	54-67	65-70	57-66	51-68	66-70	55-70	56-68	68-71	60-69
ARoma22	LA	63-70	52-69	56-69	61-70	--	--	--	--	--	--	58-70
MEAN	--	63-71	54-71	56-70	61-71	52-69	53-69	61-72	48-71	57-70	64-72	57-71

¹ Grain Length: L=long grain, M=medium grain, LA = long grain aromatic; ² HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

Arkansas Rice Performance Trials (ARPT)

2021-2023 Summary – Permanent Locations¹

University of Arkansas System Division of Agriculture

Cultivar	Grain	Straw Strength	50% Heading	Plant Height	Kernel Wt	Chalky Kernels	2021	2022	2023	Mean	2021	2022	2023	Mean
	Length ²	Rating ³	Days ⁴	in.	mg ⁵	% ⁵	HR-TR ⁶	HR-TR	HR-TR	HR-TR	bu/ac	bu/ac	bu/ac	bu/ac
Diamond	L	1.1	91	37	19.6	2.9	57-69	59-71	55-71	57-70	178	174	169	174
Ozark	L	1.2	91	37	18.4	4.0	56-70	61-71	57-71	58-70	192	192	176	187
DG263L	L	1.5	87	34	19.0	3.5	56-67	51-69	56-69	54-68	197	185	190	191
CLL16	L	1.1	93	38	20.6	3.1	55-68	56-70	54-69	55-69	179	173	170	174
CLL18	L	1.0	91	37	18.3	4.4	--	58-70	55-70	57-70	--	181	181	181
CLL19	L	1.0	88	33	18.3	4.4	--	60-70	57-70	59-70	--	184	174	179
PVL03	L	1.0	91	36	19.2	2.6	59-70	59-71	58-72	59-71	170	164	155	163
RTv7231 MA	L	1.3	85	35	16.4	1.6	--	49-70	53-71	51-71	--	181	180	181
RT 7331 MA	L	1.2	87	36	18.8	5.4	--	54-70	53-72	53-71	--	194	206	200
RT 7321 FP	L	1.2	86	40	20.7	5.0	54-70	48-71	49-71	50-70	213	181	212	202
RT 7421 FP	L	1.0	89	39	18.3	3.5	--	53-71	54-71	54-71	--	187	214	200
RT 7521 FP	L	1.7	90	40	19.9	5.2	56-69	59-70	55-70	57-70	201	201	215	206
RT 7302	L	1.0	87	37	18.6	4.6	--	53-72	53-71	53-71	--	199	227	213
RT 7401	L	1.6	88	37	19.1	2.7	55-70	54-71	54-71	54-70	213	198	206	206
RT XP753	L	1.1	87	38	20.2	5.3	52-70	52-72	52-71	52-71	214	201	210	208
Jupiter	M	1.2	91	35	20.3	3.9	65-69	62-69	62-68	63-69	175	152	145	157
Titan	M	1.4	86	35	21.3	2.9	59-70	53-70	58-70	57-70	181	161	152	164
Taurus	M	1.4	88	33	18.7	2.9	61-71	56-70	60-71	59-70	197	180	178	185
DG353M	M	1.0	90	36	21.8	3.5	64-70	57-70	60-70	61-70	174	156	142	157
CLM04	M	1.5	90	39	20.2	3.7	63-69	61-70	63-69	62-70	165	160	156	161
MEAN	--	1.3	89	37	19.4	3.7	58-69	56-70	56-70	56-70	189	180	183	184

¹ RREC, PTRS, NEREC, NERREC, CLAY, and DESHA are permanent ARPT locations; ² Grain Length: L=long grain, M=medium grain; ³ Relative straw strength based on field tests using scale: 1=very strong straw, 5=very weak straw; based on percent lodging; ⁴ Number of days from plant emergence until 50% of the panicles are visibly emerging from the boot; ⁵ Data from Riceland Grain Quality Lab, 2020-2022 including milled kernel weight and % chalky kernels; ⁶ HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

Arkansas Rice Performance Trials (ARPT)

RREC, Arkansas County 2021-2023 Summary – Silt Loam Soil

University of Arkansas System Division of Agriculture

Cultivar	Grain	50% Heading	Plant Height	2021	2022	2023	Mean	2021	2022	2023	Mean
	Length ¹	Days ³	in.	HR-TR ⁴	HR-TR	HR-TR	HR-TR	bu/ac	bu/ac	bu/ac	bu/ac
Diamond	L	100	37	58-68	62-70	59-71	60-70	182	180	156	173
Ozark	L	101	36	57-69	62-70	63-72	60-70	211	207	168	195
DG263L	L	98	33	58-67	58-68	61-70	59-68	203	191	170	188
CLL16	L	103	37	59-68	61-69	62-71	61-69	185	181	163	177
CLL18	L	97	38	--	59-68	61-70	60-69	--	189	170	180
CLL19	L	94	33	--	61-69	64-71	63-70	--	193	164	179
PVL03	L	102	36	62-69	64-71	65-72	64-71	189	177	146	171
RTv7231 MA	L	92	34	--	56-68	60-72	58-70	--	202	170	186
RT 7331 MA	L	93	36	--	63-71	63-72	63-72	--	220	210	215
RT 7321 FP	L	95	37	58-70	58-70	56-71	58-70	204	210	211	208
RT 7421 FP	L	96	39	--	61-71	59-72	60-71	--	211	219	215
RT 7521 FP	L	98	38	59-70	61-70	63-71	61-70	209	211	215	212
RT 7302	L	95	36	--	63-71	63-72	63-72	--	222	232	227
RT 7401	L	98	36	59-69	62-71	59-71	60-70	214	211	206	210
RT XP753	L	97	36	59-70	61-71	61-72	60-71	226	219	215	220
Jupiter	M	100	34	65-69	65-69	67-70	66-69	184	168	118	157
Titan	M	95	33	65-70	62-69	63-70	63-70	200	166	130	165
Taurus	M	97	31	64-71	61-69	62-72	63-71	217	193	169	193
DG353M	M	100	33	67-71	63-69	67-71	66-71	176	155	118	150
CLM04	M	99	37	67-70	65-70	68-71	67-70	191	172	128	163
Mean	--	97	36	61-69	61-70	62-71	62-70	199	194	174	189

¹ Grain Length: L=long grain, M=medium grain; ² Relative straw strength based on field tests using the scale: 1=very strong straw, 5=very weak straw; based on percent lodging; ³ Number of days from plant emergence until 50% of the panicles are visibly emerging from the boot; ⁴ HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

Arkansas Rice Performance Trials (ARPT)

PTRS, St. Francis County 2021-2023 Summary – Silt Loam Soil

University of Arkansas System Division of Agriculture

Cultivar	Grain	50% Heading	Plant Height	2021	2022	2023	Mean	2021	2022	2023	Mean
	Length ¹	Days ³	in.	HR-TR ⁴	HR-TR	HR-TR	HR-TR	bu/ac	bu/ac	bu/ac	bu/ac
Diamond	L	87	38	58-68	45-69	54-72	52-70	146	150	178	158
Ozark	L	86	37	56-68	48-69	54-71	53-69	166	177	188	177
DG263L	L	83	33	56-66	32-67	55-69	48-67	175	194	198	189
CLL16	L	89	37	55-66	40-68	52-70	49-68	155	160	174	163
CLL18	L	85	38	--	43-67	55-70	49-69	--	157	185	171
CLL19	L	81	34	--	45-68	56-71	50-69	--	154	184	169
PVL03	L	88	35	58-69	42-69	60-72	53-70	133	135	163	144
RTv7231 MA	L	75	36	--	14-69	42-71	28-70	--	137	185	161
RT 7331 MA	L	77	41	--	21-59	44-71	33-65	--	138	212	175
RT 7321 FP	L	81	42	49-67	19-69	40-70	36-69	183	125	209	173
RT 7421 FP	L	82	42	--	25-69	48-70	36-69	--	147	229	188
RT 7521 FP	L	87	40	55-66	43-67	56-69	51-67	174	187	226	196
RT 7302	L	79	41	--	22-69	49-70	36-70	--	149	222	185
RT 7401	L	84	38	52-68	29-69	49-70	43-69	200	158	218	192
RT XP753	L	83	40	49-68	23-69	52-71	41-69	191	168	209	189
Jupiter	M	87	35	62-67	46-66	64-69	57-67	139	131	146	139
Titan	M	82	35	51-68	18-68	47-70	39-69	151	132	167	150
Taurus	M	83	32	59-69	27-69	55-72	47-70	172	154	180	169
DG353M	M	86	35	62-69	29-68	59-72	50-70	137	151	160	149
CLM04	M	87	38	59-67	39-68	65-71	54-69	122	146	169	146
Mean	--	84	37	56-68	32-68	53-71	45-69	160	153	190	169

¹ Grain Length: L=long grain, M=medium grain; ² Relative straw strength based on field tests using the scale: 1=very strong straw, 5=very weak straw; based on percent lodging; ³ Number of days from plant emergence until 50% of the panicles are visibly emerging from the boot; ⁴ HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

Arkansas Rice Performance Trials (ARPT)

NERREC, Poinsett County 2021-2023 Summary – Silt Loam Soil

University of Arkansas System Division of Agriculture

Cultivar	Grain	50% Heading	Plant Height	2021	2022	2023	Mean	2021	2022	2023	Mean
	Length ¹	Days ³	in.	HR-TR ⁴	HR-TR	HR-TR	HR-TR	bu/ac	bu/ac	bu/ac	bu/ac
Diamond	L	93	39	63-71	65-72	57-71	62-71	201	179	174	185
Ozark	L	94	39	63-71	66-72	61-72	64-72	206	196	178	194
DG263L	L	88	35	61-69	60-70	59-70	60-70	196	184	203	194
CLL16	L	96	41	65-71	63-71	57-70	62-71	188	178	165	177
CLL18	L	95	40	--	64-70	61-72	62-71	--	186	184	185
CLL19	L	92	36	--	65-71	60-71	63-71	--	183	162	172
PVL03	L	93	38	65-71	66-72	63-72	65-72	185	163	161	170
RTv7231 MA	L	88	35	--	63-71	59-72	61-71	--	187	170	178
RT 7331 MA	L	92	38	--	67-73	60-72	63-73	--	225	200	213
RT 7321 FP	L	90	40	61-72	63-73	55-71	59-72	239	196	219	218
RT 7421 FP	L	92	40	--	67-73	61-72	64-72	--	218	217	217
RT 7521 FP	L	92	41	62-71	66-72	60-71	63-72	218	228	209	218
RT 7302	L	91	39	--	68-73	58-72	63-72	--	216	230	223
RT 7401	L	91	37	62-71	66-72	57-72	62-72	238	234	214	229
RT XP753	L	90	39	64-72	68-73	54-72	62-72	229	220	217	222
Jupiter	M	94	36	67-70	67-70	65-70	66-70	194	165	150	170
Titan	M	90	37	66-70	65-71	62-71	65-71	185	173	155	171
Taurus	M	91	35	66-71	67-72	63-71	66-71	212	203	178	198
DG353M	M	93	37	66-71	67-72	65-71	66-71	188	158	151	166
CLM04	M	94	40	66-70	68-71	64-69	66-70	179	166	163	169
Mean	--	92	38	64-71	66-72	60-71	63-71	204	193	185	193

¹ Grain Length: L=long grain, M=medium grain; ² Relative straw strength based on field tests using the scale: 1=very strong straw, 5=very weak straw; based on percent lodging; ³ Number of days from plant emergence until 50% of the panicles are visibly emerging from the boot; ⁴ HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

Arkansas Rice Performance Trials (ARPT)

NEREC, Mississippi County 2021-2023 Summary – Silty Clay Soil

University of Arkansas System Division of Agriculture

Cultivar	Grain	50% Heading	Plant Height	2021	2022	2023	Mean	2021	2022	2023	Mean
	Length ¹	Days ³	in.	HR-TR ⁴	HR-TR	HR-TR	HR-TR	bu/ac	bu/ac	bu/ac	bu/ac
Diamond	L	93	37	63-72	63-72	60-72	62-72	197	186	162	181
Ozark	L	93	38	62-71	67-72	57-71	62-71	202	196	174	191
DG263L	L	87	35	59-69	38-69	56-69	51-69	218	162	165	182
CLL16	L	96	39	64-71	56-72	61-71	60-71	197	181	156	178
CLL18	L	91	40	--	63-72	58-70	60-71	--	188	169	178
CLL19	L	88	38	--	63-73	53-69	58-70	--	181	161	171
PVL03	L	90	37	66-73	58-72	58-71	61-72	185	165	126	159
RTv7231 MA	L	83	39	--	47-71	54-71	51-71	--	168	171	169
RT 7331 MA	L	86	40	--	49-73	54-71	52-72	--	190	197	193
RT 7321 FP	L	86	42	59-72	35-72	55-71	50-72	221	193	194	203
RT 7421 FP	L	86	42	--	46-72	55-71	50-71	--	137	210	173
RT 7521 FP	L	89	41	63-72	58-71	52-69	58-71	213	132	171	172
RT 7302	L	85	42	--	40-72	54-71	47-71	--	181	221	201
RT 7401	L	88	39	63-72	41-71	56-71	53-71	249	174	203	209
RT XP753	L	86	40	60-72	41-72	51-70	51-72	222	210	200	211
Jupiter	M	90	38	68-70	64-70	60-67	64-69	178	152	149	160
Titan	M	87	36	66-72	54-70	60-70	60-70	185	160	132	159
Taurus	M	88	35	69-72	55-70	61-70	61-71	208	164	153	175
DG353M	M	90	38	70-72	62-71	58-70	63-71	172	172	128	157
CLM04	M	87	39	68-71	65-71	58-69	64-71	185	136	135	152
Mean	--	88	39	64-71	53-71	57-70	57-71	202	171	169	179

¹ Grain Length: L=long grain, M=medium grain; ² Relative straw strength based on field tests using the scale: 1=very strong straw, 5=very weak straw; based on percent lodging; ³ Number of days from plant emergence until 50% of the panicles are visibly emerging from the boot; ⁴ HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

Arkansas Rice Performance Trials (ARPT)

Clay County 2021-2023 Summary – Silt Loam Soil

University of Arkansas System Division of Agriculture

Cultivar	Grain	50% Heading	Plant Height	2021	2022	2023	Mean	2021	2022	2023	Mean
	Length ¹	Days ³	in.	HR-TR ⁴	HR-TR	HR-TR	HR-TR	bu/ac	bu/ac	bu/ac	bu/ac
Diamond	L	90	36	46-69	61-70	51-69	53-69	174	170	170	171
Ozark	L	91	35	46-69	65-71	55-70	55-70	177	190	177	181
DG263L	L	85	32	49-67	59-69	49-67	52-67	208	211	215	211
CLL16	L	92	36	38-68	57-68	47-68	48-68	184	168	177	176
CLL18	L	91	37	--	60-68	54-69	57-69	--	180	188	184
CLL19	L	86	33	--	63-70	58-70	60-70	--	197	186	191
PVL03	L	91	33	46-71	64-71	57-72	55-72	175	171	155	167
RTv7231 MA	L	83	34	--	62-70	48-70	55-70	--	211	196	203
RT 7331 MA	L	85	36	--	64-71	44-71	54-71	--	205	215	210
RT 7321 FP	L	85	38	43-69	62-71	38-70	48-70	216	203	223	214
RT 7421 FP	L	87	38	--	61-70	50-70	55-70	--	194	205	199
RT 7521 FP	L	88	37	40-69	62-70	52-69	52-69	213	226	241	227
RT 7302	L	88	38	--	65-71	41-69	53-69	--	225	231	228
RT 7401	L	86	35	40-69	64-71	49-70	51-70	195	214	194	201
RT XP753	L	86	36	32-70	63-71	42-71	46-71	203	194	208	202
Jupiter	M	92	35	60-68	63-68	58-66	60-66	187	163	147	165
Titan	M	86	36	48-70	67-70	59-69	58-69	197	182	171	184
Taurus	M	89	33	50-71	65-70	62-69	59-69	188	182	187	186
DG353M	M	91	35	57-69	65-70	61-69	61-69	192	161	132	161
CLM04	M	92	38	57-69	66-70	63-68	62-68	193	172	167	177
Mean	--	88	36	47-69	63-70	52-69	55-70	193	191	189	192

¹ Grain Length: L=long grain, M=medium grain; ² Relative straw strength based on field tests using the scale: 1=very strong straw, 5=very weak straw; based on percent lodging; ³ Number of days from plant emergence until 50% of the panicles are visibly emerging from the boot; ⁴ HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

Arkansas Rice Performance Trials (ARPT)

Desha County 2021-2023 Summary – Clay Soil

University of Arkansas System Division of Agriculture

Cultivar	Grain	50% Heading	Plant Height	2021	2022	2023	Mean	2021	2022	2023	Mean
	Length ¹	Days ³	in.	HR-TR ⁴	HR-TR	HR-TR	HR-TR	bu/ac	bu/ac	bu/ac	bu/ac
Diamond	L	80	38	62-69	60-72	50-69	57-70	169	179	176	175
Ozark	L	76	37	61-70	59-72	51-68	57-70	188	186	172	182
DG263L	L	72	36	60-68	60-70	54-68	58-69	184	166	187	179
CLL16	L	79	39	58-67	60-72	47-68	55-69	163	169	184	172
CLL18	L	82	39	--	61-71	44-68	52-70	--	185	190	188
CLL19	L	76	35	--	63-72	53-69	58-70	--	199	187	193
PVL03	L	78	36	62-69	64-73	48-71	58-71	153	173	176	167
RTv7231 MA	L	72	36	--	53-71	52-70	53-71	--	180	191	186
RT 7331 MA	L	78	40	--	58-73	54-71	56-72	--	184	204	194
RT 7321 FP	L	73	43	60-70	50-72	50-70	53-71	214	160	213	196
RT 7421 FP	L	79	42	--	61-72	51-69	56-71	--	211	203	207
RT 7521 FP	L	80	43	63-70	62-72	49-69	58-70	181	221	230	211
RT 7302	L	76	39	--	60-74	51-70	56-72	--	197	229	213
RT 7401	L	76	38	62-70	61-73	50-69	58-71	181	200	201	194
RT XP753	L	72	38	62-71	57-73	53-71	57-72	211	197	211	207
Jupiter	M	79	36	68-71	68-71	58-66	65-69	167	135	159	153
Titan	M	73	33	65-70	54-71	57-69	58-70	169	150	155	158
Taurus	M	74	33	65-70	58-72	59-70	60-71	186	184	197	189
DG353M	M	76	35	66-71	56-71	54-68	59-70	177	142	163	161
CLM04	M	77	40	65-69	63-72	61-69	63-70	122	169	177	156
Mean	--	76	38	63-70	59-72	52-69	57-70	176	179	190	184

¹ Grain Length: L=long grain, M=medium grain; ² Relative straw strength based on field tests using the scale: 1=very strong straw, 5=very weak straw; based on percent lodging; ³ Number of days from plant emergence until 50% of the panicles are visibly emerging from the boot; ⁴ HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

DD50 Planting Date Trials

RREC, Arkansas County – 2023 Grain & Milling Yield Summary

University of Arkansas System Division of Agriculture

Cultivar	Grain	Mar 22	Apr 10	Apr 24	May 8	May 23	Jun 6	Mean	Mar 22	Apr 10	Apr 24	May 8	May 23	Jun 6	Mean
	Length ¹	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	HR-TR ²	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR
CLL16	L	178	184	180	178	164	153	173	53-68	53-68	58-68	52-67	42-70	66-73	54-70
CLL18	L	187	198	183	192	162	174	183	51-68	52-69	57-68	52-68	42-70	67-73	55-70
CLL19	L	193	193	179	160	134	158	170	60-70	61-70	65-70	56-69	44-70	63-71	53-69
DG263L	L	197	200	208	225	183	181	199	60-69	59-68	60-69	53-68	47-69	66-73	59-70
Diamond	L	183	185	174	188	157	162	175	51-70	55-70	60-70	52-69	47-71	66-74	57-72
Ozark	L	191	200	182	194	150	186	184	52-70	54-69	60-70	54-70	42-72	65-73	55-71
PVL03	L	168	167	143	125	119	145	144	55-71	59-72	64-72	55-69	34-71	65-73	53-70
RTv7231 MA	L	186	208	214	214	158	158	190	52-70	56-70	57-70	49-70	41-70	65-74	56-71
RT 7331 MA	L	210	230	231	236	202	183	215	57-72	61-72	60-71	48-71	37-71	65-73	54-71
RT 7431 MA	L	219	219	209	214	205	192	209	53-71	60-71	60-71	51-70	46-70	69-73	60-71
RT 7321 FP	L	216	217	203	222	180	174	202	50-71	56-71	54-70	44-70	42-70	64-72	57-71
RT 7421 FP	L	212	209	209	233	193	185	207	54-70	56-70	56-70	52-70	47-69	65-71	59-70
RT 7521 FP	L	223	217	200	226	180	184	205	55-70	55-69	59-69	55-69	41-68	64-71	56-69
RT 7302	L	215	214	211	236	196	198	212	55-71	58-71	60-71	55-70	47-70	64-72	55-69
RT 7401	L	210	221	210	228	212	190	212	55-70	57-70	58-71	54-70	42-70	67-74	57-71
RT XP753	L	212	219	222	235	185	186	210	55-72	58-72	58-71	49-71	36-69	60-71	51-70
CLM04	M	178	168	151	167	134	155	159	62-70	63-68	65-69	64-69	35-70	61-73	50-71
RT 3202	M	216	211	220	224	179	190	207	58-70	61-71	65-71	55-69	45-70	66-72	56-70
Titan	M	173	164	144	150	121	158	152	59-70	64-70	66-70	58-69	36-71	64-74	53-72
Taurus	M	196	199	190	177	148	184	182	63-72	63-71	65-71	57-70	38-70	65-72	58-70
ARoma22	LA	148	143	147	150	127	135	142	59-70	60-70	63-70	57-68	46-70	68-72	61-70
Mean	--	196	198	191	199	166	173	187	56-70	58-70	61-70	53-69	42-70	65-72	56-70

¹ Grain Length: L=long grain; M=medium grain; LA=long grain aromatic; ² HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

DD50 Planting Date Trials

NERREC, Poinsett County – 2023 Grain & Milling Yield Summary

University of Arkansas System Division of Agriculture

Cultivar	Grain	Mar 29	Apr 11	Apr 24	May 8	May 23	Jun 6	Mean	Mar 29	Apr 11	Apr 24	May 8	May 23	Jun 6	Mean
	Length ¹	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	bu/ac	HR-TR ²	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR	HR-TR
CLL16	L	184	178	176	147	141	134	160	54-68	58-69	52-66	53-67	61-71	57-68	56-68
CLL18	L	178	190	195	157	125	128	162	57-69	57-69	55-67	53-66	61-70	58-67	57-68
CLL19	L	184	177	176	171	128	153	165	58-69	58-69	58-69	56-67	57-69	60-68	58-68
DG263L	L	194	193	213	207	147	143	183	57-68	58-69	58-69	57-68	58-68	59-67	58-68
Diamond	L	178	183	171	153	135	106	154	57-70	58-70	56-70	55-68	59-70	62-69	58-70
Ozark	L	176	182	184	162	134	118	159	59-70	58-69	58-70	56-69	59-71	61-68	59-70
PVL03	L	175	165	162	155	107	105	145	59-70	60-70	59-70	56-68	59-69	62-70	59-69
RTv7231 MA	L	173	173	205	176	140	132	167	58-70	60-71	58-71	59-70	55-68	60-69	58-70
RT 7331 MA	L	209	215	229	210	149	167	196	61-72	60-70	61-72	59-71	53-70	63-72	59-71
RT 7431 MA	L	206	222	233	213	162	151	198	61-72	58-70	62-72	60-71	54-71	61-71	59-71
RT 7321 FP	L	207	212	229	206	141	160	193	55-71	57-70	56-71	54-70	51-69	57-70	55-70
RT 7421 FP	L	205	222	230	208	170	165	200	58-70	57-70	59-71	57-69	60-72	59-69	58-70
RT 7521 FP	L	187	212	212	185	166	135	183	57-69	57-69	57-69	54-67	63-71	61-70	58-69
RT 7302	L	210	227	232	214	169	161	202	62-72	59-70	60-71	59-70	56-70	62-70	59-71
RT 7401	L	210	222	229	212	187	143	201	58-71	59-70	59-71	57-69	54-71	60-70	58-70
RT XP753	L	201	216	234	209	153	164	196	60-72	60-71	58-72	56-71	52-72	59-71	58-71
CLM04	M	167	160	184	148	126	126	152	65-71	62-70	64-69	61-67	63-70	65-70	63-69
RT 3202	M	238	228	223	203	156	154	200	64-71	63-70	64-71	59-69	60-70	61-69	62-70
Titan	M	175	176	194	185	135	120	164	63-69	61-69	64-70	60-68	56-69	58-68	60-69
Taurus	M	194	199	215	187	141	129	178	64-70	63-70	64-71	61-68	56-69	59-68	61-69
ARoma22	LA	152	159	158	136	112	117	139	60-69	59-69	60-69	57-67	56-69	59-68	59-69
Mean	--	191	196	204	183	144	139	176	59-70	59-70	59-70	57-69	57-70	60-69	59-70

¹ Grain Length: L=long grain; M=medium grain; LA=long grain aromatic; ² HR-TR = % Head Rice (whole kernel) and % Total Rice (total milled rice).

General Rice Cultivar Characteristics

University of Arkansas System Division of Agriculture

Cultivar	Grain Type	Year Released & Source	Highlights
ARoma 22	LA	2022 – Arkansas	Mid-season, Jasmine-type aromatic variety with good yield potential; improved yield compared to Jazzman-2; stands well; different aroma compared to ARoma 17; broad disease package.
CLL16	L	2020 – BASF, Horizon Ag	Mid-season, standard stature long-grain Clearfield variety (Newpath/Beyond herbicide); very good yield potential and average milling yield; stands well; S to sheath blight and bacterial panicle blight.
CLL18	L	2022 – BASF, Horizon Ag	Mid-season, standard stature long-grain Clearfield variety (Newpath/Beyond herbicides); very good yield potential and average milling yield; yield potential slightly higher than CLL16; stands well; S to false smut.
CLL19	L	2023 – BASF, Horizon Ag	Mid-season, semi-dwarf long-grain Clearfield variety (Newpath/Beyond herbicides); very good yield potential and very good milling yield; similar yield potential to CLL18; stands well; VS to sheath blight.
CLM04	M	2019 – BASF, Horizon Ag	Mid-season, short-stature medium-grain Clearfield variety (Newpath/Beyond herbicides); good yield potential and milling yield; risk of lodging; S to blast and bacterial panicle blight.
CLM05	M	2023 – BASF, Horizon Ag	Mid-season, short-stature medium-grain Clearfield variety (Newpath/Beyond herbicides); very good yield potential and milling yield; improved yield compared to CLM04.
DG263L	L	2021 – Nutrien / DynaGro	Mid-season, long-grain variety with excellent yield potential and good milling yield; stands well; S to sheath blight, MS to blast; highest-yielding pureline variety.
DG353M	M	2023 – Nutrien / DynaGro	Mid-season, medium-grain variety with good yield potential and milling yield; yield similar to Jupiter and Titan.
Diamond	L	2016 – Arkansas	Mid-season, long-grain variety with very good yield potential and good milling yield; stands well; VS to false smut; S to sheath blight, blast, and kernel smut.
Jupiter	M	2006 – Louisiana	Mid-season, semi-dwarf, medium-grain variety with very good yield potential and milling quality; small grain size; risk of lodging; S to sheath blight and blast; MR to bacterial panicle blight.
Ozark	L	2022 – Arkansas	Mid-season, long-grain variety with excellent yield potential and good milling yield; stands well; VS to false smut; S to sheath blight, blast, and Cercospora; yield and milling improvement over Diamond.
ProGold1	L	2021 – Progeny	Mid-season, standard stature, long-grain variety with very good yield potential and good milling yield; stands well; S to sheath blight, bacterial panicle blight, and false smut; similar in performance to Diamond.
ProGold2	L	2021 - Progeny	Mid-season, standard stature, long-grain variety with good yield potential and milling yield; stands well; S to bacterial panicle blight; otherwise, broad disease package; similar in performance to Jewel.
ProGold M3	M	2023 – Progeny	Mid-season medium-grain variety with very good yield potential and milling yield; similar in performance to Taurus.

General Rice Cultivar Characteristics (cont.)

University of Arkansas System Division of Agriculture

Cultivar	Grain Type	Year Released & Source	Highlights
PVL03	L	2021 – BASF, Horizon Ag	Mid-season, long-grain Provisia variety (Provisia herbicide); good yield potential and good milling yield; stands well; S to sheath blight and straighthead; S to Cercospora.
PVL04	L	2023 – BASF, Horizon Ag	Mid-season, long-grain Provisia variety (Provisia herbicide); good yield potential and good milling yield; performance similar to or slightly better than PVL03.
RT 3202	M	2023 – RiceTec, Inc.	Short season, medium-grain hybrid with excellent yield potential and good milling yield; higher yield in research trials than pureline varieties.
RTv7231 MA	L	2022 – RiceTec, Inc.	Short season, long-grain MaxAce variety (Highcard herbicide); good yield potential and fair milling yield; stands well; limited disease data; early maturity can lead to harvest at low moisture and lower milling yield.
RT 7302	L	2022 – RiceTec, Inc.	Short-season, long-grain hybrid with excellent yield potential and good milling yield; stands well; broad disease package; yield similar to or greater than XP753.
RT 7321 FP	L	2018 – RiceTec, Inc.	Short season, long-grain FullPage hybrid (Preface/PostScript herbicides); excellent yield potential; fair milling yield; tolerant to Preface herbicide; stands well; S to kernel smut, otherwise broad disease package.
RT 7331 MA	L	2022 – RiceTec, Inc.	Short season, long-grain MaxAce hybrid (Highcard herbicide); excellent yield potential; good milling yield; tolerant to Highcard herbicide; S to sheath blight, kernel smut, and false smut.
RT 7401	L	2020 – RiceTec, Inc.	Mid-season, long-grain hybrid with excellent yield potential and good milling yield; stands well; broad disease package.
RT 7421 FP	L	2022 – RiceTec, Inc.	Mid-season, long-grain FullPage hybrid (Preface/PostScript herbicides); excellent yield potential; good milling yield; tolerant to Preface herbicide; stands well; limited disease data.
RT 7521 FP	L	2018 – RiceTec, Inc.	Mid-season, long-grain FullPage hybrid (Preface/PostScript herbicides); excellent yield potential and good milling yield; risk of lodging; VS to false smut; S to sheath blight; highest yielding FP hybrid.
RT 7523 FP	L	2022 – RiceTec, Inc.	Mid-season, long-grain FullPage hybrid (Preface/PostScript herbicides); excellent yield potential and good milling yield; tolerant to Preface herbicide.
RT XP753	L	2011 – RiceTec, Inc.	Short season, long-grain hybrid with excellent yield potential and good milling yield; stands well; S to false smut, otherwise broad disease package.
Taurus	M	2022 – Arkansas	Mid-season, medium-grain variety with excellent yield potential and good milling yield; similar maturity to Jupiter; S to bacterial panicle blight; MS to other major diseases; highest-yielding pureline medium-grain.
Titan	M	2016 – Arkansas	Short season, medium-grain variety with very good yield potential and good milling yield; preferred large grain size; 5-7 days earlier maturing than Jupiter; stands well; S to sheath blight; otherwise, broad disease package; similar or better yield compared to Jupiter.

Arkansas Rice Cultivar Reactions to 2023 Diseases and Lodging

University of Arkansas System Division of Agriculture

Cultivar	Sheath Blight	Blast	Straight head	Bacterial Panicle Blight	Narrow Brown Leaf Spot	Kernel Smut	False Smut	Lodging
ARoma 22	MS	MS	--	MS	MS	--	MS	MS
CLL16	S	MS	S	S	MR	MS	MS	MS
CLL18	MS	MS	--	--	S	MS	S	MS
CLL19	VS	S	--	MS	S	MS	S	MR
CLM04	MS	S	MS	S	MS	S	S	S
CLM05	S	MS	--	--	MS	MS	MS	MS
DG263L	S	MS	MS	--	S	MS	S	MS
DG353M	S	--	--	--	S	MS	MS	MS
Diamond	S	S	MS	MS	MS	S	VS	MS
Jupiter	S	S	MS	MR	S	MS	MS	S
Ozark	S	S	S	--	S	MS	VS	MS
ProGold1	S	MS	MS	S	MS	--	S	MS
ProGold2	MS	MS	VS	S	MS	--	MS	MS
ProGold M3	S	--	--	--	MR	MS	S	MS
PVL03	VS	--	S	--	S	MS	MS	MR
PVL04	VS	--	--	--	--	MS	S	MS
RT 3202	S	--	--	--	--	MS	S	MS
RT 7302	MS	--	--	--	MS	MS	S	MS
RT 7321 FP	MS	R	S	--	S	S	MS	MS
RT 7331 MA	S	--	--	--	MS	S	S	MS
RT 7401	MS	MR	--	--	--	S	MS	MS
RT 7421 FP	MS	--	--	--	S	MS	MS	S
RT 7521 FP	S	R	MR	--	MR	MS	VS	S
RT 7523 FP	S	--	--	--	--	--	--	MS
RT XP753	MS	R	MS	MR	MS	MS	S	MR
RTv7231 MA	S	--	--	--	S	S	MS	MS
Taurus	MS	MS	MS	S	MS	MS	MS	MS
Titan	S	MS	MS	MS	MS	MS	MS	MS

* Ratings based on limited data.

Reaction: R = Resistant; MR = Moderately Resistant; MS = Moderately Susceptible; S = Susceptible; VS = Very Susceptible
Cells with no values indicate no definitive Arkansas disease rating information is available at this time. Reactions were determined based on historical and recent observations from test plots and grower fields across Arkansas and other rice states in southern USA. In general, these ratings represent expected cultivar reactions to disease under conditions that most favor severe disease development.