

ARICE

INFORMATION

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Arkansas Rice Performance Trials, 2010-2012¹

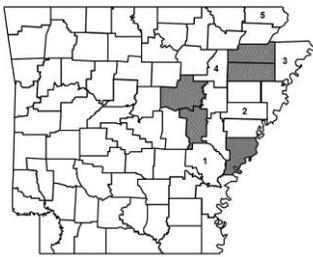
Cultivar selection is likely the most important management decision made each year by rice producers. This choice is generally based upon past experience, seed availability, agronomic traits, and cultivar yield potential. When choosing a rice cultivar, grain yield, milling yield, lodging, maturity, disease susceptibility, seeding date, field characteristics, potential for quality reductions due to pecky rice, and market strategy should all be considered. Cultivar performance data included in this publication are from the Arkansas Rice Performance Trials (ARPT), disease monitoring plots in grower fields, and from seeding date studies conducted during 2010-2012. Additional information can be found on the Arkansas Cooperative Extension website (www.uaex.edu) and the annual B.R. Wells Rice Research Series publication (<http://www.uark.edu/depts/agripub/Publications/researchseries/>).

Varieties grown in the Arkansas Rice Performance Trials (ARPT) in 2012 averaged **199** bu/A of rough rice compared to the state average yield of **163** bu/A as reported by the USDA Crop Reporting Service (<http://usda01.library.cornell.edu/usda/current/RCS/RCS-11-13-2012.pdf>). Data averaged over years and locations are more reliable than a single year of data for evaluating rice performance for such important factors as grain yield, milling yield, kernel size, maturity, lodging resistance, plant height and disease susceptibility. It is critical to evaluate as many years of information as possible, particularly when extreme weather conditions occur which may unfairly impact results for certain cultivars in a given year.

The ARPT and disease observation tests are supported through grower check-off funds administered by the Arkansas Rice Research and Promotion Board. These studies are conducted every year to compare promising new experimental lines and newly-released varieties from the

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breeding programs in Arkansas, Louisiana, Texas, and Mississippi with established varieties currently grown in Arkansas. Descriptions of varieties included in the ARPT and disease observation tests are provided in Table 7 at the end of this report. The 2012 ARPT were conducted at five locations in Arkansas (Figure 1). Multiple locations each year allow for continued reassessment of the performance and adaptability of advanced breeding lines and commercial varieties to environmental conditions, soil properties, and management factors. Twenty-five entries, which were either promising breeding lines or established varieties, were grown in each of the four maturity groups (early, very-short, short, and mid-season) for a total of 100 entries.



1. Rice Research & Extension Center, Stuttgart, AR
2. Pine Tree Branch Station, Colt, AR
3. Northeast Research & Extension Center, Keiser, AR
4. Newport Branch Station, Newport, AR
5. Goodman Farm, Clay County

Figure 1. Locations (1 - 5) of the Arkansas Rice Performance Trials and Rice Disease Monitoring Sites (shaded) conducted in 2012.

The 2012 ARPT tests were located at the Rice Research & Extension Center (RREC) near Stuttgart, AR; Pine Tree Branch Station (PTBS) near Colt, AR; Northeast Research & Extension Center (NEREC) near Keiser, AR; Newport Branch Experiment Station (NBES) near Newport, AR; and the Jerry and Blake Goodman farm in Clay County. The studies were seeded on April 6, April 23, April 2, April 24, and April 4, respectively. Cultural practices varied somewhat among the ARPT locations, but overall the trials were grown under conditions for high yield. Nitrogen was applied to ARPT tests located on Experiment Stations in a single application of 120 lbs N/A at pre-flood on the silt loam soils and 150 lbs N/A on the clay soils. Phosphorus and potassium fertilizers were applied before seeding at each location.

The average yields for the 2010, 2011, and 2012 ARPTs are listed in Table 1. Agronomic traits and grain yields from the 2012 ARPTs are shown in Table 2. Averaged across all locations, Rice Tec XL753, RiceTec CLXP4534, and Roy J were the top yielding varieties in the 2012 ARPT (Table 2). RiceTec XL753, RiceTec XL723, and RoyJ have been the highest yielding cultivars averaged across the past three years (Table 1). Roy J, AREXP1, Francis, and Taggart were the top four yielding conventional varieties from 2010 to 2012 (Table 1).

The most recent disease ratings for each variety are listed in Table 3. Ratings for disease susceptibility should be evaluated critically to optimize variety selection. Varieties should be selected for specific fields, relative to the potential yield limitations observed in historical yields. For example, Francis and Wells are both susceptible to rice blast disease and should be planted in fields with low risk of this disease. Other varieties should be considered for fields that have limited water availability, poor water-holding ability, historical blast infestations, high risk of straighthead, and tree lines or other natural barriers that encourage long dew periods. Potential for bacterial panicle blight should also be considered. High risk fields should be planted to relatively resistant varieties (hybrids and Jupiter). Conventional rice should be planted early and

prior to planting hybrids. Conventional rice should be managed as timely as possible to avoid unnecessary stress. Ratings are a general guide based on our expectations of the cultivar reaction under conditions that strongly favor disease; however, environment will modify the actual reaction in different fields. Also, resistance to particular diseases, like blast, can be overcome by the fungus over time. Do not expect these ratings to be an absolute predictor of variety performance with respect to a particular disease in all situations.

Each year replicated variety trials are established in numerous grower fields to monitor rice variety reaction to diseases. The counties where the 2012 Arkansas Rice Disease Monitoring Plots (ARDMP) were located are shaded in Figure 1. Yield information from these trials provides additional valuable information on how varieties and advanced experimental lines perform across the state when subjected to different environments and management practices (Table 4). Variety disease reaction data from these trials are used to help establish disease susceptibility ratings. Averaged across all locations, RiceTec XL753, RiceTec XP4523, RiceTec CL XP4534, and RoyJ were the highest yielding cultivars in the ARDMP. RoyJ, Mermentau, and AREXP1 were the highest yielding conventional varieties. Yield variability among the various locations represents different environments, but also susceptibility to various diseases present at specific locations.

Planting date studies are conducted annually to establish rice DD50 thresholds and to evaluate performance of new varieties over a range of seeding dates at the RREC (Table 5). Results from previous years can be found in past Rice Information Sheets.

In 2012, planting date studies were drill-seeded and then fertilized and flooded at the 5-leaf stage. Urea was applied as a single pre-flood application of 120 lbs N/A to all cultivars. The highest grain yields were observed in plots seeded on March 30 (Table 5). Lodging caused by Tropical Storm Isaac resulted in a significant decrease in yield for cultivars seeded in April. RoyJ was the most consistent cultivar across all planting dates, with its excellent stalk strength preserving high yields in the severely lodged April planting. Exposure to higher average daily temperatures resulted in more rapid plant growth and development (Table 6) which likely contributed to yield decreases in the later plantings compared to the early planting. In contrast, the highest milling yields were observed in plots seeded on May 11 (Table 5). This later planting likely avoided excessive high nighttime air temperatures during critical grain development stages which can negatively affect grain quality.

Descriptions of the varieties tested in the 2012 ARPTs are provided in Table 7. New varieties included in the 2012 ARPTs include Antonio, Colorado, RiceTec CL XP4534, RiceTec XP4523, Della-2, and Mermentau.

Growers are encouraged to seed newly released varieties on a small acreage to evaluate performance under their specific management practices, soils and environment. Growers are also encouraged to seed rice acreage in several varieties to reduce the risk of disease epidemics and environmental effects. Varieties that have been tested under Arkansas growing conditions will reduce potential risks associated with crop failure. Additional information on specific varieties not listed in this publication is available upon request. Contact your local county Extension agent for more information.

ADDITIONAL INFORMATION SOURCES

Univ. of Arkansas Cooperative Extension Service Web www.uaex.edu

- Rice Information Sheet No. 166
- Rice Information Sheet No. 167
- Rice Information Sheet No. 168
- Rice Information Sheet No. 169
- Rice Information Sheet No. 170

University of Arkansas Agricultural Publications

<http://www.uark.edu/depts/agripub/Publications/>

- B.R. Wells Rice Research Studies 2001 - 2006

Table 1. Results of the Arkansas Rice Performance Trials averaged across the three-year period of 2010-2012.

Maturity Group and Variety	Grain Length ¹	Straw Strength ²	50% Heading ³	Plant Height	Test Weight	Milled Kernel Wt ⁴	Chalky Kernels ⁴	Milling Yield				Grain Yield by Year			
		Rating	Days	in.	lbs/bu	mg	%	2010	2011 ⁵	2012	Mean	2010	2011	2012	Mean
		% Head Rice - % Total Rice								Bushels / Acre					
Very Early Season															
CL111	L	3.7	82	41	42.0	21.14	0.843	58-65	67-73	62-71	63-70	167	158	179	168
CL151	L	4.0	83	40	41.3	19.71	1.187	55-64	67-72	63-71	62-69	182	142	204	176
CL162	L	3.5	81	42	40.0	21.34	1.129	.	61-69	59-70	56-69	.	166	187	176
CL261	M	2.7	82	40	41.8	20.01	1.126	56-67	68-73	59-69	61-70	170	163	180	171
Rex	L	1.3	84	42	42.1	21.80	0.968	55-64	67-72	63-69	62-68	167	175	196	179
RiceTec CL XL729	L	4.0	83	45	41.9	20.54	2.195	55-65	62-72	59-70	59-69	223	180	203	202
RiceTec CL XL745	L	4.7	79	45	41.5	21.27	1.132	55-67	64-73	57-72	59-70	212	184	205	201
RiceTec XL723	L	3.3	82	46	42.0	21.27	3.019	55-66	67-72	61-71	61-70	231	191	222	215
RiceTec XL753	L	2.5	81	44	42.0	22.27	2.033	.	66-74	57-71	61-73	.	254	246	250
AREXP1	L	4.0	82	44	42.2	21.97	0.913	56-66	62-70	61-72	60-69	194	190	210	198
Early Season															
Bengal	M	3.0	85	38	40.6	22.58	0.781	52-67	67-73	61-70	60-70	176	153	216	182
Caffey	M	2.0	85	38	42.7	.	.	.	69-74	63-71	63-71	.	189	203	196
Cheniére	L	1.7	86	38	42.0	18.60	0.907	51-65	68-74	65-73	61-71	160	177	192	176
CL142-AR	L	3.7	85	45	42.3	22.01	1.103	54-66	59-73	63-71	55-70	166	174	193	178
CL152	L	2.0	85	39	41.8	18.40	0.873	.	65-70	57-72	59-68	.	178	192	185
CL181-AR	L	1.0	86	36	42.3	19.99	0.750	55-65	66-72	61-70	61-69	151	181	195	176
Francis	L	2.7	85	42	42.0	19.08	1.025	56-66	63-70	63-72	61-69	184	195	213	197
Jazzman	L	2.3	86	41	41.5	21.02	0.373	53-64	62-71	60-70	58-69	146	170	153	156
Jazzman-2	L	1.5	84	38	41.9	18.59	0.295	.	67-72	63-70	65-71	.	159	170	164
Jupiter	M	2.0	85	37	42.0	20.23	1.062	58-66	67-73	61-68	62-69	158	196	204	186
Wells	L	2.3	86	43	42.2	21.68	0.801	53-66	63-75	54-71	57-71	170	182	205	186
Mid-Season															
ArizeQM1003	L	5.0	92	45	40.0	.	.	.	.	56-67	56-69	.	83	148	115
RoyJ	L	1.0	90	43	41.5	20.61	0.733	54-65	62-72	64-72	60-70	179	196	234	203
Taggart	L	1.3	88	46	41.9	23.10	0.733	52-66	62-73	56-71	57-70	180	215	199	198
Templeton	L	2.7	88	44	41.7	18.87	0.526	51-64	62-72	61-71	58-69	166	166	186	173
Mean		2.7	85	42	41.7	20.63	1.022	54-65	64-72	60-71	60-70	178	173	195	182

¹ Grain Length: L=long grain; M=medium grain

² Relative straw strength based on field tests using the scale: 0=very strong straw, 5=very weak straw; based on percent lodging.

³ Number of days from emergence until 50% of the panicles are visibly emerging from the boot

⁴ Data from 2010 & 2011 only.

⁵ Data from Riceland Grain Quality Lab.

Table 2. Results of the Arkansas Rice Performance Trials at five locations during 2012.

Maturity Group and Variety	Grain Length ¹	Straw Strength ²	50% Heading ³	Plant Height	Test Weight	Milling Yield	Grain Yield					
		Rating	Days	in.	lbs/bu	%HR-%TR	CLAY	NEREC	NBES	PTBS	RREC	MEAN
							Bushels / Acre					
Very Early Season												
Antonio	L	4.0	83	38	42.5	64-71	211	214	173	202	192	198
CL111	L	4.0	82	39	42.3	62-71	221	180	161	165	170	179
CL151	L	2.0	84	39	42.1	63-71	224	234	207	188	169	204
CL162	L	4.0	82	42	41.4	59-70	177	201	.	178	190	187
CL261	M	3.0	83	39	43.0	59-69	170	209	192	156	172	180
Colorado	L	4.0	81	39	42.2	61-70	183	195	169	152	172	174
RiceTec CL XL729	L	5.0	84	43	40.8	59-70	253	191	196	183	193	203
RiceTec CL XL745	L	5.0	79	43	40.6	57-72	252	164	.	198	206	205
RiceTec CL XP4534	L	2.0	75	37	42.3	50-70	261	226	205	262	274	246
RiceTec XL723	L	4.0	82	45	41.2	61-71	273	179	193	209	256	222
RiceTec XL753	L	4.0	82	42	42.0	57-71	248	239	219	263	260	246
RiceTec XP4523	L	2.0	76	39	41.9	54-70	236	209	207	242	232	225
AREXPI	L	4.0	83	43	42.0	61-72	227	215	210	207	193	210
Early Season												
Bengal	M	3.0	86	36	42.4	61-70	226	209	240	.	189	216
Caffey	M	3.0	87	38	43.6	60-69	217	252	148	216	184	203
Cheniere	L	3.0	86	37	42.1	65-73	198	218	167	179	199	192
CL142-AR	L	5.0	85	44	43.1	51-70	244	216	117	211	179	193
CL152	L	3.0	85	38	42.0	63-71	227	194	159	207	171	192
CL181-AR	L	1.0	86	35	43.1	61-70	213	212	139	211	200	195
Della-2	L	2.0	87	42	42.1	61-70	176	175	142	199	218	182
Francis	L	5.0	86	41	43.1	63-72	219	227	192	215	.	213
Jazzman	L	3.0	86	42	41.9	60-70	174	194	141	106	150	153
Jazzman-2	L	2.0	85	37	41.5	63-70	183	187	155	175	151	170
Jupiter	M	3.0	88	37	43.5	61-68	209	236	200	187	186	204
Mermentau	L	2.0	84	38	41.5	65-71	212	220	.	218	213	216
Rex	L	2.0	83	42	42.1	63-69	180	228	184	180	206	196
Wells	L	5.0	85	40	42.8	54-71	221	204	155	228	215	205
Mid-Season												
ArizeQM1003	L	5.0	92	43	38.9	56-69	112	203	129	179	117	148
RoyJ	L	1.0	89	41	42.3	64-72	222	212	217	260	257	234
Taggart	L	2.0	88	45	42.2	56-71	202	202	185	232	176	199
Templeton	L	4.0	89	43	42.0	61-71	177	224	.	197	147	186
Mean		3.4	85	41	42	60-71	211	209	178	200	195	199

¹ Grain Length: L=long grain; M=medium grain;

² Relative straw strength based on field tests using the scale: 0=very strong straw, 5=very weak straw; based on percent lodging.

³ Number of days from emergence until 50% of the panicles are visibly emerging from the boot;

Table 3. Rice variety reactions¹ to diseases (2012).

Cultivar	Sheath Blight	Blast	Straighthead	Bacterial Panicle Blight	Narrow Brown Leaf Spot	Stem Rot	Kernel Smut	False Smut	Lodging	Black Sheath Rot	Sheath Spot
ANTONIO	S	MS		MS				MS	MS		
AREXP1	MS	S	MS	S	S	S	S	S	MS	MS	S
ARIZEQM1003	MS			MR/MS				S	VS		
BENGAL	MS	S	VS	VS	S	VS	MS	MS	MR	MR	
CAFFEY	MS			S	R			MS			
CATAHOULA	VS	R	MS	S	MR	S	S	S	MR	S	
CHENIERE	S	VS	VS	VS	S	S	S	S	MR	MS	
CL111	VS	MS	S	VS	VS	VS	S	S	MS	S	
CL 131	VS	MS	VS	VS	VS	VS	S	S	MR	S	
CL142-AR	MS	S	MS	S	S	S	S	S	S	S	
CL181-AR	VS	MS	MS	VS	S	VS	S	S	MR	VS	
CL 151	S	VS	VS	VS	S	VS	S	S	MR	S	
CL 152	S	S	S	S	R		VS	S			
CL 162	VS	S		VS	R		S	S	S		
CL 261	MS	VS	S	VS	S	VS	MS	S	MS	MS	
COCODRIE	S	S	VS	S	S	VS	S	S	MR	S	
COLORADO	S	VS		S				S			
DELLA-2				S							
FRANCIS	MS	VS	MR	VS	S	S	VS	S	MS	S	
JAZZMAN	MS	S	S	MS	S	S	MS	S	MS	MS	
JAZZMAN-2	VS	MS		VS	MR			S			
JES	S	R	VS	S	R	VS	MS	MS	S	MR	
JUPITER	S	S	S	MR	MS	VS	MS	MS	MS	MR	
MERMENTAU	MS	MS	VS	MS				MS	MS		
NEPTUNE	MS	MS	VS	VS	MS	VS	MS	MS	MR	MR	
REX	S	S	S	S	MS	S	S	S	MR	S	
ROY J	MS	S	S	S	MR	S	VS	S	MR	MS	
RT CL XL729	MS	R	MS	MR	MS	S	MS	S	S	S	
RT CL XL745	MS	R	R	MR	MS	S	MS	S	S	S	S
RT CL XP756	MS							S		S	
RT XL723	MS	R	S	MR	MS	S	MS	S	MS	S	
RT XL 753	MS			MR				S		S	
RT XP 754	MS							S		S	S
TAGGART	MS	MS	R	MS	MS	S	S	S	MS	MS	
TEMPLETON	MS	R	S	MS	S	MS	S	S	MS	MS	
WELLS	S	S	S	S	S	VS	S	S	MS	MS	

¹ Reaction: R = Resistant; MR = Moderately Resistant; MS = Moderately Susceptible; S = Susceptible; VS = Very Susceptible. Reactions were determined based on historical and recent observations from test plots and in grower fields across Arkansas. In general, these reactions would be expected under conditions that favor severe disease development including excessive nitrogen rates (most diseases) or low flood depth (blast).

Table prepared by Y. Wamishe, Assistant Professor/Extension Plant Pathologist and R.D. Cartwright, Associate Director – Ag and Natural Resources

Table 4. Performance of selected cultivars in the Arkansas Rice Disease Monitoring Plots located in grower fields in Arkansas during 2012.

	Grain Yield					Lodging					Milling Yield				
	Craighead	Poinsett	Prairie	White	Mean	Craighead	Poinsett	Prairie	White	Mean	Craighead	Poinsett	Prairie	White	Mean
	Bushels / Acre					%					%Head Rice - % Total Milled Rice				
Antonio	171	240	199	176	196	0	0	0	0	0	61-67	66-71	59-67	64-70	63-69
AREXP1	218	223	219	161	205	0	20	0	0	5	59-68	61-70	52-67	56-70	57-68
ArizeQM1003	178	119	72	41	102	0	57	97	100	63	57-64	50-66	54-63	57-68	54-65
Caffey	201	184	197	213	199	0	50	0	0	13	59-65	48-67	60-66	59-68	56-66
Cheniere	174	214	193	165	187	0	7	0	0	2	63-68	67-72	63-70	64-72	64-70
CL111	190	238	213	170	203	0	0	10	0	3	61-67	64-70	57-67	58-69	60-68
CL142-AR	171	230	230	156	197	0	7	0	0	2	60-66	50-69	50-66	44-70	51-68
CL151	194	215	201	187	199	0	0	27	0	7	61-66	62-70	59-67	61-70	61-68
CL152	178	232	213	153	194	0	0	0	0	0	60-65	65-70	59-67	61-69	61-68
CL162	176	204	181	151	178	0	7	23	13	11	60-66	61-69	54-66	58-69	58-68
CL261	187	184	196	165	183	0	0	0	7	2	61-67	59-68	61-67	59-69	60-68
RT CL XL729	.	140	192	161	164	.	100	13	33	49	.	59-69	54-65	55-68	56-67
RT CL XL745	.	197	235	197	210	.	100	20	33	51	.	57-71	58-68	53-70	56-70
RT CL XP4534	.	267	274	205	249	.	47	0	27	24	.	52-67	49-65	46-67	49-66
Colorado	144	193	171	142	163	0	7	0	0	2	59-66	63-70	57-67	58-68	59-68
Della-2	159	194	177	139	167	0	0	0	0	0	62-67	63-69	59-66	63-69	62-68
Francis	197	210	232	158	199	0	35	0	0	9	63-68	64-71	58-68	52-70	59-69
Jazzman	161	224	171	158	178	0	0	0	0	0	62-67	67-70	61-67	60-70	62-68
Jazzman-2	175	213	164	118	168	0	0	0	0	0	64-66	67-70	61-66	66-70	64-68
Jupiter	211	169	187	168	184	0	0	0	17	4	55-61	59-68	57-63	61-68	58-65
Mermentau	185	257	214	185	210	0	20	0	17	9	62-66	65-70	60-68	67-68	64-68
Rex	196	188	206	152	186	0	13	0	0	3	60-66	61-68	57-66	60-67	60-67
RoyJ	191	234	229	191	211	0	0	0	0	0	62-68	66-72	58-69	61-72	62-70
RT XL723	.	129	229	165	174	.	97	30	33	53	.	60-69	56-66	60-70	59-68
RT XL753	.	270	278	268	272	.	53	0	23	26	.	52-69	58-68	54-70	55-69
RT XP4523	.	267	290	194	250	.	60	0	7	22	.	55-68	52-66	51-68	53-67
Taggart	189	253	207	165	203	0	10	0	0	3	60-67	62-70	55-67	48-69	56-68
Wells	204	230	222	165	205	0	0	0	0	0	61-68	58-70	52-67	46-70	55-69
Mean	184	211	207	167	194	0	25	8	11	13	61-66	60-69	57-67	57-69	58-68

Table 5. Influence of seeding date on grain yield of selected rice cultivars in studies conducted at the RREC during 2012.

Variety	Grain Yields (bu/A)				Milling Yield (%HR-%TR)			
	March 30	April 13	May 11	Mean	March 30	April 13	May 11	Mean
AREXP1	260	120	125	168	50-67	52-66	63-69	55-67
ARCLEXP	252	208	192	217	59-68	63-70	65-70	62-69
Antonio	219	145	202	189	55-68	58-68	67-71	60-69
Caffey	248	113	145	169	55-66	50-67	62-69	56-67
CL152	225	108	183	172	56-67	60-69	67-70	61-69
CL162	212	135	88	145	53-67	54-67	64-69	57-67
CL261	207	120	77	135	57-68	56-67	63-69	59-68
RiceTec CL XP4534	294	177	197	222	43-64	42-66	57-68	47-66
Colorado	189	125	122	145	51-66	51-64	61-68	55-66
Della-2	195	149	162	169	54-66	59-67	63-67	59-66
Jazzman-2	186	102	146	145	61-68	60-68	66-68	62-68
Jupiter	254	128	198	193	56-64	60-67	66-69	61-67
Mermentau	223	136	209	189	60-68	58-67	67-70	62-68
Rex	218	151	171	180	55-66	58-68	64-68	59-67
RoyJ	255	251	208	238	53-68	56-70	65-70	58-69
RiceTec XL753	274	149	251	225	50-67	46-68	65-70	53-68
Wells	236	149	214	200	46-67	50-68	64-70	53-68
RiceTec XP4523	262	216	196	225	48-66	47-66	58-67	51-66
Mean	222	142	165	176	53-67	54-67	63-69	57-67

Table 6. Influence of seeding date on days from emergence to ½” internode elongation and 50% heading for selected rice cultivars in studies conducted at the RREC during 2012.

Variety	Days to ½” Internode Elongation				Days to 50% Heading			
	March 30	April 13	May 11	Mean	March 30	April 13	May 11	Mean
	days after emergence				days after emergence			
AREXP1	63	51	49	54	90	79	78	82
ARCLEXP	65	56	55	58	91	83	86	87
Antonio	59	49	48	52	90	78	81	83
Caffey	68	59	54	61	92	86	84	88
CL152	63	51	49	54	89	84	84	86
CL162	58	49	48	52	88	78	79	82
CL261	64	55	52	57	90	82	78	83
RiceTec CL XP4534	56	47	45	49	82	71	71	75
Colorado	58	49	48	52	86	78	80	81
Della-2	62	52	52	55	91	83	87	87
Jazzman-2	60	50	47	52	90	81	79	83
Jupiter	.	.	.	.	96	86	81	88
Mermentau	57	48	47	51	89	79	84	84
Rex	66	55	51	57	89	78	80	82
RoyJ	.	.	.	.	96	86	92	91
RiceTec XL753	57	49	47	51	87	78	74	80
Wells	64	53	51	56	91	82	85	86
RiceTec XP4523	55	48	46	50	81	71	70	74
Mean	61	51	49	54	90	81	81	84

Table 7. General characteristics of cultivars tested in the Arkansas Rice Performance Trials and Arkansas Rice Disease Monitoring Program.

Cultivar	Year Released & Source	Pedigree	Highlights
Antonio	2012 – Texas	Cypress/Cocodrie	A short season, semi-dwarf long-grain with very good yield potential and milling quality. Similar to Cocodrie for agronomic characteristics.
ArizeQM1003	Bayer CropScience	Proprietary hybrid	A mid-season, long-grain hybrid with good yield potential, but weak straw strength. Low amylose so soft cooking.
Bengal	1992 – Louisiana	Mars/M-201//Mars	A short season, semi dwarf, medium-grain with good yield potential and milling quality. It has a preferred large grain size.
Bowman	2007 - Mississippi	RU8603006/3/Mars/Newrex//Tebonnet	A short-season, high-amylose long grain designed for canning rice market. Has good grain and milling yield potential and is susceptible to blast and moderately susceptible to sheath blight and straighthead.
Caffey	2011 - Louisiana	Bengal//Mercury/Rico/3/Mercury/Rico//Bengal	A short season, semi-dwarf medium grain with excellent yield potential and milling quality. Susceptible to blast, sheath blight, and panicle blight.
Cheniere	2003 - Louisiana	Newbonnet/Katy/3/82CAY21/Lemont//L-202	A short season semi-dwarf long-grain with good yield potential and milling quality comparable to Cypress. Susceptible to sheath blight and blast.
CL111	2008 – BASF, Horizon Ag	Proprietary variety	An early season, semi-dwarf long grain similar to CL 131. Susceptible to blast, straighthead, and bacterial panicle blight.
CL 142-AR	2009 – BASF, Horizon Ag	Proprietary variety: Francis//Wells/CL161	A midseason, semi-dwarf long-grain Clearfield similar to Francis with good yield potential, and high tolerance to Newpath herbicide. It is susceptible to blast and bacterial panicle blight, and moderately susceptible to sheath blight and straighthead.
CL151	2007 – BASF, Horizon Ag	Proprietary variety: CFX-26/4/Lemont/2001-5/3/Lemont//L-202/Taducan	A midseason, semi-dwarf long-grain similar to Cocodrie with good yield potential and high tolerance to Newpath herbicide. It is very susceptible to blast, straighthead, and susceptible to lodging and sheath blight.
CL152	2011 – BASF, Horizon Ag	Proprietary variety: Tacauri/3/Cypress//L-202/Tebonnet/4/CL161	A mid-season, semi-dwarf long-grain similar to CL151 with good yield potential and high tolerance to Newpath herbicide. Improved lodging and chalk compared to CL151.
CL162	2011 – BASF, Horizon Ag	Proprietary variety: CL161/Priscilla	A short season, long-grain Clearfield variety with average yield potential and good milling quality. Susceptible to sheath blight, blast, and straighthead.
CL181-AR	2009 – BASF, Horizon Ag	Proprietary variety: Francis/CL161	A midseason, semi-dwarf, long-grain Clearfield with good yield potential and milling quality. Very susceptible to sheath blight and bacterial panicle blight.
CL261	2008 – BASF, Horizon Ag	Proprietary variety: Bengal/CL161	A short-season, medium-grain Clearfield variety similar to Bengal.
CL XL729	2007 – RiceTec, Inc.	Proprietary hybrid	A short-season, long grain with excellent yield potential and moderately susceptible to sheath blight, and moderately resistant to blast.
CL XL745	2008 – RiceTec, Inc.	Proprietary hybrid	A short-season, long grain Clearfield hybrid with excellent yield potential, moderately susceptible to sheath blight, and moderately resistant to blast, and susceptible to lodging. Reported to have improved tolerance to shattering.
CL XP756	2011 – RiceTec, Inc.	Proprietary hybrid	A mid-season, long-grain Clearfield hybrid with excellent good yield potential and average milling quality. Similar to CL XL729.

Table 7 (cont.). General characteristics of varieties tested in the Arkansas Rice Performance Trials and Arkansas Rice Disease Monitoring Program.

Variety/Hybrid	Year Released & State	Pedigree	Highlights
Colorado	2012 – Texas	Cocodrie/L-202	A short season, long-grain semi-dwarf with good yield potential and good milling quality.
Della-2	2012 – Louisiana	Cypress//L-205/Della	A long-grain aromatic with very good grain quality. Improved lodging compared to Della.
Drew	1996 – Arkansas	Newbonnet/Katy	A mid-season, long-grain with average yield potential and milling quality. It is blast resistant, straighthead tolerant, and has a larger kernel size than Kaybonnet.
Francis	2002 – Arkansas	Lebonnet/9902/3/Dawn/9695/Starbonnet/4/LaGrue	A very short season, long-grain with excellent yield potential, susceptible to rice blast and very susceptible to kernel smut. It is the best long grain for high pH and salt soils of NE Arkansas west of Crowley's ridge but should not be stressed for water due to blast concerns.
Jazzman	2009 – Louisiana	Chinese aromatic/Ahrent	A Jasmine-type aromatic rice with good yield potential and milling quality.
Jazzman-2	2011 – Louisiana	RU0302195/RU0302125	A Jasmine-type aromatic rice with improved yield and milling compared to Jazzman. Susceptible to sheath blight, bacterial panicle blight, and straighthead.
Jupiter	2006 – Louisiana	Mercury//Mercury/Koshihikari/3/Bengal//Mercury/Rico	A short season, semi dwarf, medium-grain with excellent yield potential and milling quality. It has a small grain size but has resistance to bacterial panicle blight.
Mermentau	2012 – Louisiana	AR1188/Cocodrie//9502088/LaGrue	A short season, semi-dwarf, long-grain variety with good yield potential and physical characteristics similar to Cocodrie, Cheniere, and Catahoula.
Rex	2010 – Mississippi	Rosemont//Rexmont/IR36	A short season, semi-dwarf long-grain variety with excellent yield potential and good milling quality. Very good straw strength, but is susceptible to most diseases.
RoyJ	2010 – Arkansas	LaGrue//Katy/Starbonnet/5/Newbonnet/Katy//RA73/Lemont/4/Lebonnet/9902/3/Dawn/9695//Starbonnet	A mid-season, long-grain variety with excellent yield potential and good milling quality. Excellent straw strength. Susceptible to blast and moderately susceptible to sheath blight.
Taggart	2009 – Arkansas	LaGrue//Katy/Starbonnet/5/LaGrue//Lemont/RA73/3/LaGrue/4/LaGrue	A mid-season, long-grain variety with very good yield potential and average milling quality. Resistant to straighthead. Moderately susceptible to sheath blight and rice blast.
Templeton	2009 – Arkansas	Drew/5/Newbonnet/3/Dawn/9695//Starbonnet/4/Katy/Starbonnet	A mid-season, long-grain variety with good yield potential and good milling quality. Similar to Wells, but with resistance to all strains of blast.
Wells	1999 Arkansas	Newbonnet/3/Lebonnet/CI9902//Labelle	A short season, long grain with excellent yield potential, average to good milling quality, large kernel size similar to Lemont, but is susceptible to rice blast. Only moderately susceptible to kernel smut and most other diseases.
XL723	2005 – RiceTec, Inc.	Proprietary hybrid	A short-season long-grain hybrid with excellent yield potential, average milling quality; resistant to blast and moderately susceptible to sheath blight.
XP753	2011 – RiceTec, Inc.	Proprietary hybrid	A short-season long-grain hybrid with excellent yield potential.
XP754	2011 – RiceTec, Inc.	Proprietary hybrid	A mid-season long-grain hybrid with excellent yield potential and good milling quality.