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ARICE

INFORMATION

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Arkansas Rice Performance Trials, 2005-2007¹

Variety selection is one of the most important management decisions made each year by rice producers. This choice is generally based upon past experience, seed availability, agronomic traits and variety yield potential. When choosing a rice variety, grain and milling yields, lodging, maturity, disease susceptibility, seeding date, field characteristics, the potential for quality reductions due to pecky rice, and market strategy should all be considered. Variety performance data included in this publication are from the Arkansas Rice Performance Trials (ARPT), disease observation plots in grower fields, and from seeding date studies conducted during 2005-2007. 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 2007 averaged **168** bu/A of rough rice compared to the state average yield of **160** bu/A as reported by the USDA Crop Reporting Service (http://www.nass.usda.gov/Statistics_by_State/Arkansas/Publications/Crops_Releases/Crop_Production_Monthly/2007/crpdnov06.pdf). This is consistent with the differences usually observed between small plot research and commercial field yields. 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 and milling yields, kernel size, maturity, lodging resistance, plant height and disease susceptibility.

The ARPT, seeding date studies, disease observation tests, and evaluations for pecky rice are supported through grower check-off funds administered by the Arkansas Rice Research and

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Promotion Board. These studies are conducted every year to compare promising new experimental lines and newly-released varieties from the breeding programs in Arkansas, Louisiana, Texas, Mississippi and California with established varieties currently grown in Arkansas. Descriptions of varieties included in the ARPT and disease observation tests are provided in Table 8 at the end of this report. The 2007 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. Four maturity groups, early-season, very-short-season, short-season, and mid-season, were grown at each ARPT location. Twenty-six entries, which were either promising breeding lines or established varieties, were grown in each of the four maturity groups.

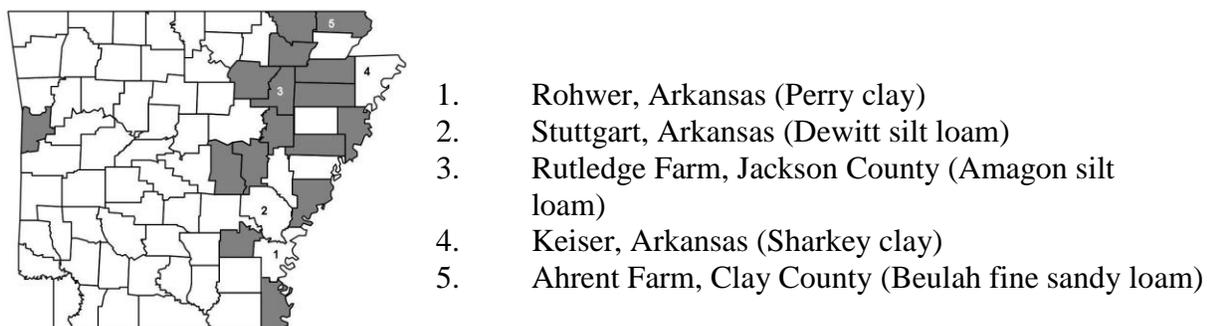


Figure 1. Locations (1 - 5) of the Arkansas Rice Performance Trials and Rice Disease Monitoring Sites (shaded) conducted in 2007.

The 2007 ARPT tests were located at Rohwer (SEREC), Stuttgart (RREC), on the Rutledge farm in Jackson County, at Keiser (NEREC), and on the Ahrent farm in Clay County (CC) and seeded on April 24, May 1, April 15, April 30, and April 19, respectively. Cultural practices varied somewhat among the ARPT locations, but overall the trials were grown under conditions for high yield. Nitrogen was typically applied to ARPT tests located on Experiment Stations in a two-way split application of 100 lb N/A at pre-flood followed by a single mid-season application of 30 to 60 lb N/A. Phosphorus and potassium fertilizers were applied before seeding at the Stuttgart, Jackson County, and Clay County locations.

The average yields for the 2005, 2006, and 2007 ARPT are listed in Table 1. Agronomic traits measured in 2007 are presented in Table 2 and the yield results from the 2007 ARPT are shown in Table 3. Averaged across all locations, Francis, Banks, and Wells were the top yielding conventional varieties in the 2007 ARPT (Table 3). Rice Tec XL 723 was the highest yielding cultivar in the three year study (Tables 1). The ARPT yield data from 2005, 2006, and 2007 show that these same varieties tend to be the top yielding rice varieties in Arkansas each year. Jupiter, Francis, and Wells were the top three yielding conventional varieties from 2005 to 2007 (Table 1).

The most recent disease ratings for each variety are listed in Table 4. 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. 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. This has happened to the variety Banks since 2004. Released originally as resistant (R) to blast disease, it is now considered to be susceptible due to a buildup of the new blast race IE-1k, which attacks Banks. Banks should no longer be considered a blast resistant variety in Arkansas. Do not expect these ratings to be an absolute predictor of variety performance with respect to a particular disease in all situations.

Descriptions of the varieties tested in the 2007 ARPT are provided in Table 8. CL 171 AR, a new Clearfield variety released by Horizon AG, BASF, LSU, and the University of Arkansas, was tested on a widespread basis for the first time in 2006. CL 171 AR is a long-grain rice with Wells plant type but has CL 161 leaf color (paler green). CL 171 AR has comparable yield potential and slightly better sheath blight tolerance than CL 161, and better blast resistance in 2007 field observations than either Wells or CL 161. One new hybrid, RiceTec XP 744, was evaluated in 2007.

Each year replicated variety trials are established in numerous grower fields to monitor rice variety reaction to diseases (Tables 4 and 5). The counties where the 2007 Rice Disease Monitoring Plots (ARDMP) were located are shaded in Fig. 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. Variety disease reaction data from these trials are used to help establish disease susceptibility ratings presented in Table 4. In general, information from these trials on variety yield potential supports data from the ARPT. Similar to the ARPT, the top yielding conventional varieties in the ARDMP were Francis, Jupiter, Banks, and Wells. Rice Tec XL 723 continues to be the highest yielding entry across all locations but CL XP 729 and CL XL 730 also appear to have outstanding yield potential (Table 5). Yield variability among the various locations represent different environments, but also susceptibility to various diseases present at specific locations. For example, severe straighthead was present at the Clay county site, severe stem rot was present at the Lonoke county site, and blast and narrow-brown leaf spot were present at the Jackson county site. Narrow brown leaf spot, affecting the panicle, was present at all the later planted locations and was severe at the Faulkner and Jackson County sites.

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 (Tables 6 and 7). Results from 2004, 2005, and 2006 planting date studies can be found in Rice Information Sheet No. 156, 162, and 164, respectively. These publications are available either on the Cooperative Extension Service website (<http://www.aragriculture.org>) or at your local county Extension office.

Seeding 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 lb N/A to all varieties. Most varieties produced their highest yield when seeded on either March 16 or April 9 (Table 6). Later planted rice is more likely to head during the high temperatures commonly encountered during August and September. Temperatures above 95°F are detrimental to pollination and may result in excessive blanking. Also, shorter vegetative growth with later planting results in less stored carbohydrates needed for grain filling (Table 6). Consequently, late-planted rice tends to result in a 17 to 68% reduction in yield potential. Banks, Cybonnet, Francis, Jupiter, Rice Tec CL XP729, Rice Tec XP723, Rice Tec CL XL 730, and Wells were among the most consistent varieties across all planting dates.

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. 151
- Rice Information Sheet No. 153
- Rice Information Sheet No. 154
- Rice Information Sheet No. 156
- Rice Information Sheet No. 162
- Rice Information Sheet No. 164

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 2005-2007.

Maturity Group and Variety	Grain Length ¹	Straw Strength ²	50% Heading ₃	Plant Height	Milled Grain Weight	Pecky Rice ⁴	Milling Yield				Grain Yield by Year			
							2005	2006	2007	Mean	2005	2006	2007	Mean
		Rating	Days	in.	mg	%	% Head Rice - % Total Rice				Bushels / Acre			
Very Short Season														
Jefferson	L	3.3	83	40	22.5	1.75	51 - 70	54-69	47-68	51-69	165	149	133	149
Rice Tec XL 723	L	3.3	85	43	23.2	1.47	60 - 71	62-70	55-70	59-70	219	224	212	218
Spring	L	4.7	80	42	20.6	0.89	51 - 69	53-69	45-69	50-69	157	150	144	151
Trenasse	L	3.3	84	40	22.3	1.38	57 - 70	58-69	55-69	57-69	177	166	166	170
Short Season														
Ahrent	L	3.3	86	41	19.8	1.67	57 - 68	56-68	51-67	55-68	159	146	135	146
Bengal	M	3.0	88	37	23.0	2.54	67 - 73	66-71	57-65	63-70	204	184	178	189
CL 161	L	2.0	89	39	20.0	1.31	62 - 70	62-71	61-70	62-70	187	176	155	173
CL 171 AR	L	2.7	90	39	21.6	1.42	60 - 72	61-71	57-71	60-72	194	173	167	178
Cocodrie	L	2.0	88	37	20.8	2.01	61 - 71	63-71	61-70	62-71	195	162	163	174
Cybonnet	L	2.0	89	37	20.8	1.23	61 - 71	63-71	58-71	61-71	202	186	171	186
Francis	L	3.0	87	40	20.5	1.04	62 - 71	59-70	53-70	58-70	210	208	185	201
Jupiter	M	3.7	88	37	21.8	2.20	67 - 72	66-71	60-70	64-71	209	193	178	193
Medark	M	2.3	87	36	22.5	3.21	66 - 72	65-71	60-70	64-71	195	179	154	176
Presidio	L	3.3	86	38	20.5	1.09	58 - 70	61-70	52-68	57-69	161	165	165	164
Wells	L	2.7	88	41	22.6	1.18	55 - 72	57-71	48-70	53-71	211	198	185	198
Mid-Season														
Banks	L	3.7	92	44	21.7	0.87	56 - 70	62-70	56-68	58-69	193	206	180	193
Drew	L	4.0	91	43	21.0	0.95	59 - 72	59-70	52-69	57-70	193	168	175	179
LaGrue	L	3.3	90	44	22.5	0.80	57 - 70	59-70	53-69	56-70	205	197	186	196

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.

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

4 Average percent, by weight, in brown rice for stink bug damage.

Table 2. Agronomic traits of selected varieties in the 2007 Arkansas Rice Performance Trials.

Maturity Group and Variety	Grain Type¹	Straw Strength²	50% Heading³	Plant Height⁴	Milled Grain Weight	Pecky Rice⁵
		Rating	Days	in.	mg	%
Very Short Season						
Jefferson	L	3	83	40	18.48	2.62
Rice Tec XL 723	L	4	85	43	19.59	1.70
Rice Tec XP 744	L	5	82	44	20.33	1.47
Spring	L	5	80	43	16.20	1.37
Trenasse	L	4	84	39	19.69	1.68
Short Season						
Ahrent	L	3	86	40	15.83	1.97
Bengal	M	3	88	37	19.71	2.35
CL 161	L	2	89	38	16.73	1.65
CL 171 AR	L	2	90	39	16.79	
Cocodrie	L	2	88	36	17.85	2.16
Cybonnet	L	2	89	35	17.81	1.30
Francis	L	3	87	38	17.18	1.37
Jupiter	M	4	88	36	19.33	2.10
Medark	M	3	87	35	20.35	3.75
Presidio	L	3	86	37	17.07	1.46
Wells	L	2	88	41	18.79	1.50
Mid-Season						
Banks	L	3	92	43	16.90	0.97
Drew	L	3	91	44	17.52	0.82
LaGrue	L	2	90	45	16.07	0.96

¹ Grain type: L=long grain; M=medium grain; S=Short grain

² Numerical rating for straw strength, lodging susceptibility increases as rating number increases.

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

⁴ Plant height is the average distance from soil surface to the tip of erect panicle.

⁵ Average percent, by weight, in brown rice for stink bug damage.

Table 3. Results of the 2007 Arkansas Rice Performance Trials.

Maturity Group and Variety	Milling Yield						Grain Yield					
	Clay Co.	Jackson Co.	NEREC	RREC	SEREC	Mean	Clay Co.	Jackson Co.	NEREC	RREC	SEREC	Mean
	%HR-%TR						Bushels/acre					
Very Short Season												
Jefferson	51-72	54-70	37-66	43-65	--	47-68	133	183	98	145	106	133
Rice Tec XL 723	57-70	61-72	47-67	53-71	--	55-70	268	300	104	215	172	212
Rice Tec XP 744	58-72	55-70	42-67	49-70	--	51-70	208	284	43	183	123	168
Spring	48-70	54-70	31-65	48-70	--	45-69	147	208	83	164	118	144
Trenasse	59-69	59-70	44-66	59-70	--	55-69	217	221	87	184	121	166
Short Season												
Ahrent	57-70	53-68	37-64	59-67	--	51-67	115	165	71	178	145	135
Bengal	67-73	65-71	35-46	63-71	--	57-65	193	240	105	170	184	178
CL 161	64-71	64-71	52-67	66-72	--	61-70	189	212	122	140	113	155
CL 171 AR	56-72	56-72	56-69	63-72	--	57-71	197	210	180	142	105	167
Cocodrie	62-70	63-71	58-69	62-72	--	61-70	162	238	144	176	95	163
Cybonnet	61-71	60-72	51-68	63-72	--	58-71	190	207	190	163	103	171
Francis	57-71	55-71	43-68	62-72	--	53-70	218	249	93	199	163	185
Jupiter	65-72	64-70	48-68	64-70	--	60-70	209	256	59	199	166	178
Medark	64-72	63-71	49-68	65-71	--	60-70	169	193	86	187	137	154
Presidio	60-71	52-67	47-67	50-65	--	52-68	160	199	172	165	129	165
Wells	53-72	52-72	33-66	54-72	--	48-70	203	230	168	172	150	185
Mid-Season												
Banks	56-69	57-68	56-67	56-70	--	56-68	201	227	116	169	186	180
Drew	52-69	55-70	47-66	56-70	--	52-69	191	216	153	167	148	175
LaGrue	59-70	50-71	49-67	51-69	--	53-69	203	242	140	162	181	186
Average	58-71	57-70	45-66	57-70	--	54-69	188	225	117	173	139	168

¹ HR-TR = %Head Rice - %White Rice;

Table 4. Rice variety reactions¹ to diseases (2007).

Variety/Hybrid	Sheath Blight	Blast	Stem Rot	Kernel Smut	False Smut	Brown Spot	Straight head	Lodging	Black Sheath Rot	Bacterial Panicle Blight	Narrow Brown Leaf Spot
Bengal	MS	S	VS	MS	MS	VS	VS	MR	MR	VS	S
Jupiter	MS	MS	S	MS	MS	R	MS	MR	MR	MR	MS
Clearfield 161	VS	S	S	S	S	R	MS	MS	S	S	MS
CL 171AR	VS	MS	S	S	S	R	MS	MS	MS	S	MS
Cocodrie	S	MS	S	VS	S	R	VS	MR	MS	VS	MS
Cybonnet	VS	R	S	S	S	R	MS	MR	S	MS	S
Francis	MS	VS	S	VS	S	R	MS	MS	MS	VS	S
Pirogue	MR	MR	S	MS	S	R		MS	MR	MS	MS
Sabine	S		S	S	S	R		MR	MS	S	MS
Sierra	MS	VS	S	S	S	R	MS	MR	MS	MS	MS
Spring	S	MS	VS	MS	MS	R	VS	S	MS	S	MS
Trenasse	VS	S	S	S	S	R	VS	MS	MS	S	MS
Wells	S	S	VS	MS	S	R	MS	MS	MS	S	S
RiceTec XL723	MS	R	S	MS	S	R	MR	MS	MS	R	MR
RiceTec CL XL729	MS	MR	S	MS	S	MR	MR	MS	MS	MR	MR
RiceTec CL XL730	S	MR	S	MS	S	R	MR	S	MS	MR	MR
RiceTec XP 744	S	R	S	MS	S	R		S	MS	R	MR
RiceTec CLXP 745	S	R	S	MS	S	R		S	MS	R	MR

¹ Reaction: R = Resistant; MR = Moderately Resistant; MS = Moderately Susceptible; S = Susceptible; VS = Very Susceptible. Reactions were established from both 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).

² Based on reaction to common races of the rice blast fungus in Arkansas for the most part; however, Banks and other Pi-ta resistant gene based varieties are susceptible to Race IE-1k, a previously rare race that has increased in importance in the state since 2004. All rice varieties should be monitored periodically for blast since the blast fungus is capable of developing new races that can overcome known resistance genes.

Table prepared by R.D. Cartwright, Professor/Extension Plant Pathologist and F.N. Lee, Professor of Plant Pathology.

Table 5. Performance of selected varieties in replicated rice disease monitoring tests located in grower fields in Arkansas during 2007.

	Grain Yield								
	Chicot	Jackson	Lawrence	Lonoke	Poinsett	Randolph	Woodruff	Mean	C.V.
	Bushels/acre								
4484	172	138	159	176	159	155	188	164	10.0
Bengal	140	149	227	165	130	143	156	158	20.3
CL161	124	141	145	149	125	156	153	142	9.0
CL171AR	123	160	175	146	126	140	152	146	12.6
Cocodrie	110	179	189	159	144	152	161	156	16.2
Cybonnet	113	130	179	158	140	154	154	147	14.6
Francis	140	173	216	198	172	169	178	178	13.5
Jupiter	162	192	192	206	166	146	203	181	12.7
Pirogue	149	174	235	196	156	153	178	177	17.2
Presidio	115	172	179	162	151	139	149	152	14.1
RTCLXL729	179	191	236	219	189	214	231	208	10.6
RTCLXL730	172	183	239	213	183	193	216	200	11.9
RTCLXP745	154	195	173	224	181	149	207	183	14.9
RTXL723	178	206	214	210	206	212	231	208	7.6
RTXP744	138	190	193	232	175	161	203	185	16.4
Sabine	119	184	188	146	164	147	146	156	15.5
Sierra	105	158	192	146	115	179	121	145	22.7
Spring	119	151	153	162	26	154	162	132	37.0
Tranasse	127	173	191	154	160	164	181	164	12.6
Wells	134	173	212	184	173	175	178	175	13.0
Mean	139	171	194	180	152	163	177		
LSD _(0.05)	20.1	43.9	52.6	14.5	24.6	18.9	15.6		
C.V. (%)	8.7	15.6	16	4.9	9.5	6.8	5.3		

¹Mean = average across 7 locations

²C.V.= coefficient of variation, provides an indication of yield variability across environments. Lower numbers are better.

Table 6. Influence of seeding date on grain yield of selected rice varieties studies conducted at the RREC during 2007.

Variety	Grain Yield					Milling Yield				
	April 5	April 23	May 21	June 13	Mean	April 5	April 23	May 21	June 13	Mean
	Bushels/acre					%HR-%TR				
4484	177	184	185	156	182	43 - 69	48 - 70	62 - 70	44 - 69	49 - 69
Bowman	154	161	128	85	148	64 - 72	63 - 71	60 - 70	42 - 66	57 - 70
CL161	142	170	136	75	149	67 - 72	62 - 71	65 - 72	62 - 72	64 - 72
CL171AR	157	150	131	91	146	68 - 74	66 - 72	64 - 74	60 - 71	64 - 73
Cybonnet	171	164	180	69	172	68 - 73	66 - 71	64 - 72	62 - 71	65 - 72
Francis	174	196	161	110	177	65 - 72	61 - 71	60 - 71	54 - 70	60 - 71
Jupiter	172	189	192	116	185	67 - 72	69 - 72	69 - 73	68 - 73	68 - 73
Pirogue	130	133	167	127	143	56 - 73	58 - 73	60 - 72	61 - 73	59 - 73
Presidio	158	126	149	79	144	67 - 72	59 - 71	62 - 70	56 - 70	61 - 71
RTCLXL729	217	275	200	133	231	63 - 73	60 - 71	59 - 71	55 - 70	59 - 71
RTCLXL730	210	205	199	124	205	63 - 72	61 - 72	62 - 72	52 - 70	60 - 72
RTCLXP745	193	233	194	137	206	61 - 72	60 - 72	59 - 73	48 - 71	57 - 72
RTXL723	231	229	205	117	222	63 - 72	63 - 72	59 - 71	56 - 70	60 - 71
RTXP744	177	211	204	142	197	63 - 72	62 - 73	59 - 72	56 - 72	60 - 72
RU0401182	177	189	153	121	173	64 - 72	60 - 70	64 - 72	54 - 70	61 - 71
Spring	134	155	86	50	125	62 - 72	56 - 70	48 - 70	56 - 69	55 - 70
Trenasse	169	185	144	102	166	60 - 70	58 - 69	56 - 69	44 - 67	54 - 69
Wells	174	184	188	117	182	61 - 73	58 - 74	62 - 73	52 - 71	58 - 73
Mean	173	187	166	105	182	64 - 72	61 - 72	61 - 72	55 - 70	60 - 71

Table 7. Influence of seeding date on days from emergence to ½” Internode elongation and 50% heading for selected rice varieties in seeding date studies conducted at the RREC during 2007.

Variety	Days to ½” Internode Elongation					Days to 50% Heading				
	April 5	April 23	May 21	June 13	Mean	April 5	April 23	May 21	June 13	Mean
	days after emergence					days after emergence				
4484	54	52	46	41	48	91	91	81	76	85
Bowman	56	58	51	45	52	82	88	80	78	82
CL161	51	52	43	40	46	84	88	81	74	82
CL171AR	53	54	46	42	48	84	88	82	75	82
Cybonnet	--	--	--	--	--	83	88	77	74	81
Francis	--	--	--	--	--	82	88	77	74	80
Jupiter	56	58	52	47	53	82	84	77	73	79
Pirogue	62	62	54	52	58	83	86	75	74	80
Presidio	54	56	49	42	50	78	85	75	69	77
RTCLXL729	51	53	44	40	47	80	84	78	70	78
RTCLXL730	48	49	42	37	44	80	85	78	70	78
RTCLXP745	51	54	43	39	47	77	80	73	68	75
RTXL723	52	52	43	39	46	79	83	76	69	77
RTXP744	52	52	43	40	47	77	79	73	68	74
RU0401182	54	56	47	43	50	84	88	82	76	83
Spring	--	--	--	--	--	70	75	67	60	68
Trenasse	51	50	44	41	47	74	79	72	65	73
Wells	55	56	48	42	50	83	88	78	74	81
Mean	53	54	46	42	49	81	85	77	72	78

Table 8. General characteristics of varieties tested in the Arkansas Rice Performance Trials and Arkansas Rice Disease Monitoring Program.

Variety/Hybrid	Year Released & State	Pedigree	Highlights
Ahrent	2001 – Arkansas	Line from recurrent selection – many crosses and parents	A short season, long-grain with good grain and milling yield potential, and blast resistance from the recurrent selection program
Banks	2004 – Arkansas	LaGrue//Lemont/RA73/3/LaGrue/4/LaGrue	A short-season, long-grain LaGrue type rice originally listed with blast resistance, however a new race of the blast fungus IE-1k has overcome the resistance in Banks. Therefore, Banks is now considered susceptible to blast in Arkansas.
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. Represented about 7.5% of the 2007 rice acreage in Arkansas.
Bowman	2007 - Mississippi		
CL 161	2002 – BASF, Horizon Ag	Proprietary variety; Developed from Cypress	A midseason, semi-dwarf, long-grain similar to Cypress with high tolerance to Newpath herbicide. It is very susceptible to sheath blight, susceptible to blast and moderately susceptible to straighthead. Represented about 10.2% of the 2007 rice acreage in Arkansas.
CL 171 AR	2006 - BASF, Horizon Ag	Proprietary variety; Developed from Wells	A midseason, semi-dwarf, long-grain similar to Wells with high tolerance to Newpath herbicide. It is susceptible to sheath blight, moderately susceptible to blast and straighthead. Yield is similar to CL 161.
CL XL 729	2006 – Rice Tec, Inc.	Proprietary Hybrid	A short-season, long grain with excellent yield potential and high tolerance to Newpath herbicide, moderately susceptible to sheath blight, and moderately resistant to blast. Represented about 5.2% of the 2007 rice acreage in Arkansas.
CL XL 730	2005– Rice Tec, Inc.	Proprietary Hybrid	A short-season, long grain with excellent yield potential and high tolerance to Newpath herbicide, moderately susceptible to sheath blight, and moderately resistant to blast. Somewhat susceptible to lodging under extreme conditions. Represented about 4.0% of the 2007 rice acreage in Arkansas.
CL XL 745	2007– Rice Tec, Inc.	Proprietary Hybrid	A short-season, long grain with excellent yield potential and high tolerance to Newpath herbicide, moderately susceptible to sheath blight, and moderately resistant to blast. Reported to have improved tolerance to shattering.
Cocodrie	1997 – Louisiana	Cypress//82CAY21/Tebonnet	A short season semi-dwarf long-grain with good yield potential and milling quality. Susceptible to sheath blight and other diseases. High bran oil content makes it somewhat of a milling concern to certain buyers. Represented about 6.5% of the 2007 rice acreage in Arkansas.
Cybonnet	2004 – Arkansas	Cypress//Newbonnet/Katy	A short season, semidwarf long grain with good yield potential and excellent milling quality similar to Cypress. It has blast resistance similar to Katy and moderately susceptible to straighthead. Very susceptible to sheath blight. Represented about 3.7% of the 2007 rice acreage in Arkansas.
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.

Table 8 (con.). General characteristics of varieties tested in the Arkansas Rice Performance Trials and Arkansas Rice Disease Monitoring Program.

Variety/Hybrid	Year Released & State	Pedigree	Highlights
Francis	2002 – Arkansas	Lebonnet/9902/3/Dawn/9695/Starbonnet/4/La Grue	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. Represented about 11.0% of the 2007 rice acreage in Arkansas.
Jefferson	1999 – Texas	Vista/Lebonnet//Rosemont	A very short season, semidwarf, long-grain rvariety with good yield potential and average milling quality. It is moderately susceptible to sheath blight and susceptible to certain races of the blast fungus.
Koshihikari	Japanese variety	Norin 22/Norin 1	A premium quality short-grain with low yield potential but good milling quality. It is the standard for Japanese eating quality rices. Very susceptible to lodging under almost all growing conditions.
LaGrue	1993 – Arkansas	Bonnet73/Nova76/Bonnet73/3/Newrex	A short season, long-grain with excellent yield potential and variable milling quality. It is susceptible to rice blast and and very susceptible to kernel smut.
Medark	2004 – Arkansas	Bengal/Short Rico	A short season, semidwarf, medium-grain with good yield potential and milling quality. It has a preferred large grain size but undesirable color.
Pirogue	2002 – Louisiana	PY 678	A short-season, short grain with good yield potential and good milling quality. Few, if any, disease problems at this time.
Presidio	2005 – Texas	Vista/Lebonnet//Rosemont/Maybelle	A mid-season, semidwarf long grain with resistance to some rice blast races. It has yield and quality characteristics similar to Cypress.
Spring	Experimental – Arkansas	RU9101001//Tebonnet/Katy/3/LaGrue	A very short season, long grain with good yield potential under ideal conditions. It is susceptible to sheath blight, very susceptible to stem rot, prone to lodging and has variable rice blast resistance. It is one of the earliest maturing long-grain rice lines.
Trenasse	2005 - Louisiana	Cypress//82CAY21/Tebonnet	A very short season, long grain with excellent yield potential. It is very susceptible to sheath blight, straighthead, and susceptible to 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 and is the most widely adapted long grain rice in Arkansas. Represented about 35.5% of the 2007 rice acreage in Arkansas.
XL 723	2003- Rice Tec Hybrid	Proprietary Hybrid	A short-season long-grain hybrid with excellent yield potential, average milling quality, but resistant to blast and moderately susceptible to sheath blight. Represented about 8.5% of the 2007 rice acreage in Arkansas.
XP 744	2007 – Rice Tec Hybrid	Proprietary Hybrid	A short-season long-grain hybrid with excellent yield potential, average milling quality, but resistant to blast and susceptible to sheath blight. Reported to have improved resistance to shattering. Represented about 8.5% of the 2007 rice acreage in Arkansas.