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RICE INFORMATION

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Arkansas Rice Performance Trials, 2006-2008[1]

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 2006-2008. 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 2008 averaged **150** bu/A of rough rice compared to the state average yield of **153** 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/2008/crpdnov07.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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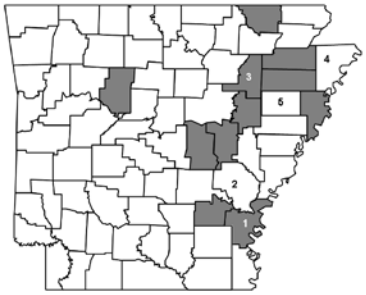
Promotion Board. These studies are conducted every year to compare promising new experimental lines and newly-released varieties from the breeding programs in Arkansas, Louisiana, Texas, Mississippi and California with established varieties currently grown in Arkansas. Descriptions of varieties included in the ARPT and disease observation tests are provided in Table 7 at the end of this report. The 2008 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.



1. Rohwer, Arkansas (Perry clay)
2. Stuttgart, Arkansas (Dewitt silt loam)
3. Rutledge Farm, Jackson County (Amagon silt loam)
4. Keiser, Arkansas (Sharkey clay)
5. Pine Tree Branch Experiment Station (Calloway silt loam)

Figure 1. Locations (1 - 5) of the Arkansas Rice Performance Trials and Rice Disease Monitoring Sites (shaded) conducted in 2008.

The 2008 ARPT tests were located at Rohwer (SEREC), Stuttgart (RREC), on the Rutledge farm in Jackson County, at Pine Tree (PTBS), and at Keiser (NEREC), and were seeded on April 22, May 13, May 13, May 28, and May 22, 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 preflood 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, PTBS, and Jackson County locations.

The average yields for the 2006, 2007, and 2008 ARPT are listed in Table 1. Agronomic traits and grain yields from the 2008 ARPT are shown in Table 2. Averaged across all locations, Jupiter, and Neptune (both medium grains) were among the top yielding varieties in the 2008 ARPT (Table 2). Rondo, Francis, and Wells were the highest yielding long grain varieties in 2008. Rice Tec XL 723 was the highest yielding cultivar averaged across the past three years (Table 1). Franics and Wells were the top three yielding conventional varieties from 2006 to 2008 (Table 1).

Three experimental lines are included in the Arkansas Rice Performance Trials report for 2008 (Table 1). RU0701124 is a very early season cultivar that has maturity similar to Spring,

has good cold tolerance, and good yield potential. RU0401182 is an experimental line that has good yield potential and blast resistance to all of the known races of blast. RU0601188 is an experimental line that has good yield potential and has a kernel size that is much larger than currently available long grains. These experimental lines will be considered for release this winter. Should they be released, certified seed will be available for these lines in 2011.

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. 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 2008 ARPT are provided in Table 7. CL 151 was tested in the Disease Monitoring Program. This new Clearfield variety has better yield potential than CL 161 or CL 171 AR but has higher susceptibility for straighthead, blast, and lodging. Other new varieties tested during 2008 include Catahoula and Neptune. Neptune is a medium grain that has shown excellent yield potential but the bacterial panicle blight reaction of this variety has not been confirmed.

Each year replicated variety trials are established in numerous grower fields to monitor rice variety reaction to diseases (Table 4). The counties where the 2008 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 3. 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, Neptune, and Wells. Rice Tec XL 723 continues to be the highest yielding entry across all locations (Table 3). RU0401182 also performed well. Yield variability among the various locations represents different environments, but also susceptibility to various diseases present at specific locations. The hurricanes during 2008 also took their toll on these studies. Severe lodging was observed in Craighead, Lonoke, Pope, and Prairie counties.

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 5 and 6). Results from 2005, 2006, and 2007 planting date studies can be found in Rice Information

Sheet No. 162, 164, and 166, 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 preflood application of 120 lb N/A to all varieties. Most varieties produced their highest yield when seeded on either March 26 or April 16 (Table 5). Later planted rice is more likely to head during the high temperatures commonly encountered during August. 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 resulted in a 17 to 45% reduction in yield potential during 2008. The hybrids Rice Tec CL XL 730, Rice Tec CL 745, and Rice Tec CL 729 were among the most consistent cultivars in the study between early and late planting dates.

During 2008, the weather was abnormally cool at times during the season. The extremely long time measured to reach ½-inch internode and 50% heading, particularly for the early seeding dates, suggest that the weather delayed the crop substantially. This data illustrates the importance of DD50 in predicting growth stages in the field.

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 2006-2008.

Maturity Group and Variety	Grain Length[1]	Straw Strength[2]	50% Heading[3]	Plant Height	Milled Grain Weight	Milling Yield				Grain Yield by Year			
						2006	2007	2008	Mean	2006	2007	2008	Mean
		Rating	Days	in.	mg	% Head Rice - % Total Rice				Bushels / Acre			
Very Short Season													
CL 131	L	1.8	88	33	17.54	59-70		63-73	61-72	172		138	143
RU0701124[4]	L	3.6	77	37	15.78		51-67	55-68	53-68		156	130	146
Rice Tec XL 723	L	3.6	86	43	15.96	61-70	58-66	60-70	53-69	224	212	161	189
Spring	L	6.4	81	42	18.71	53-69	45-69	59-71	57-70	150	144	99	124
Trenasse	L	4.2	85	39	19.64	57-69	55-69	62-72	61-70	166	166	141	154
Short Season													
Bengal	M	2.1	89	37	20.08	66-71	57-65	66-73	63-70	184	178	151	166
Cheniere	L	1.7	91	36	16.52	60-70		61-72	60-71	185		140	147
CL 161	L	2.4	91	38	16.29	61-70	61-70	60-71	61-71	176	155	142	151
CL 171-AR	L	1.0	91	39	17.36	60-71	57-71	57-72	58-71	173	167	135	153
Cocodrie	L	2.0	89	36	17.76	62-71	61-70	63-72	62-71	162	163	148	156
Cybonnet	L	0.7	90	37	17.61	62-71	58-71	63-72	61-71	186	171	144	160
Francis	L	2.6	90	39	17.14	59-70	53-70	62-72	58-70	208	185	170	180
Jupiter	M	3.4	89	37	19.07	66-71	60-70	64-73	63-71	193	175	174	177
Medark	M	1.4	88	35	20.31	65-71	60-71	69-73	65-71	179	154	161	159
Wells	L	2.2	91	41	18.77	56-71	48-72	56-72	53-71	198	185	165	177
Mid-Season													
Drew	L	1.8	93	42	16.39	62-70	53-69	60-71	58-70	168	175	139	158
LaGrue	L	2.1	92	44	17.75	58-70	52-69	56-70	55-69	197	186	161	175
Rondo	L	4.0	95	40	18.55	56-67		53-67	55-67	190		174	176
RU0401182[4]	L	3.0	93	41	16.13	60-71	51-70	57-71	56-70	197	179	156	169
RU0601188[4]	L	1.5	95	44	20.07	60-70	50-70	60-72	57-71	204	190	165	180

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

2 Relative straw strength based on field tests using the scale: 0=very strong straw, 10=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 Advanced Experimental line; not available in 2009

Table 2. Results of the Arkansas Rice Performance Trials at five locations during 2008.

Maturity Group and Variety	Grain Length[1]	Straw Strength[2]	50% Heading[3]	Plant Height	Milled Grain Weight	Milling Yield	Grain Yield by Location					
							Jackson County	NEREC	RREC	PTBS	SEREC	Mean
		Rating	Days	in.	mg	%HR–%TR	Bushels / Acre					
CL 131	L	3	87	32	17.54	67-72	121	172	130	138	131	138
RU0701124[4]	L	5	76	37	15.78	63-71	101	138	125	161	159	130
Rice Tec XL 723	L	6	87	42	15.96	64-71	160	126	149	204	167	161
Spring	L	10	80	41	18.71	67-71	105	24	146	102	116	99
Trenasse	L	5	85	39	19.64	64-71	110	167	138	148	140	141
Short Season												
Bengal	M	4	89	36	20.98	66-71	141	122	177	168	145	151
Bowman	L	0	94	35	17.21	62-72	136	147	144	173	143	149
Catahoula	L	1	91	34	17.54	66-71	100	135	117	185	115	130
Cheniere	L	2	90	34	16.63	64-71	122	168	118	165	130	140
CL 161	L	4	93	37	16.10	66-71	153	146	117	176	119	142
CL 171-AR	L	1	93	39	17.43	64-72	130	162	121	160	105	135
Cocodrie	L	3	89	36	17.71	66-71	144	173	150	158	117	148
Cybonnet	L	0	92	37	17.58	68-73	120	177	136	173	116	144
Francis	L	3	92	39	17.39	63-70	163	187	167	196	138	170
Jupiter	M	2	89	36	19.25	73-74	149	180	177	204	160	174
Medark	M	1	88	35	20.89	68-72	134	155	165	190	159	161
Neptune	M	1	93	35	21.10	68-72	137	208	167	189	160	172
Wells	L	4	94	40	18.95	66-74	133	172	177	194	151	165
Mid-Season												
Arize 1003	L	10	98	42	18.93	51-65	41	144	179	165	185	143
Drew	L	3	96	43	15.84	67-73	129	146	161	162	97	139
LaGrue	L	5	95	44	17.99	65-71	147	158	162	171	167	161
Rondo	L	6	95	39	18.85	59-69	171	199	134	192	174	174
RU0401182[4]	L	4	95	41	16.33	64-71	127	181	156	184	130	156
RU0601188[4]	L	3	98	44	20.81	61-69	181	145	181	194	125	165

1 Grain Length: L=long grain; M=medium grain; **2** Relative straw strength based on field tests using the scale: 0=very strong straw, 10=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** Advanced Experimental line; not available in 2009

Table 3. Rice variety reactions[1] to diseases (2009).

Variety/Hybrid	Sheath Blight	Blast[2]	Straighthead	Bacterial Panicle Blight	Narrow Brown Leaf Spot	Stem Rot[3]	Kernel Smut	False Smut	Brown Spot	Lodging	Black Sheath Rot
Arize 1003	MR				MS	MS		MS	R	S	MR
Bengal	MS	S	VS	VS	S	VS	MS	MS	VS	MR	MR
Bowman	MS	S	MS	S	MR	S	S	S	R	MR	MS
Catahoula	S	R	S	MS*	MR	S	S	S	R	MR	MS
Cheniere	S	S	MS	MS*	VS*	S	S	S	R	MR	MS
CL 131	VS	MS	VS	VS	VS	S	S	S	R	R	S
CL 151	S	VS	VS	S	S	S	S	S	R	MS	S
CL 171AR	VS	S	MS	S	MS	S	S	S	R	MS	S
Clearfield 161	VS	S	MS	S	MS	S	S	S	R	MS	S
Cocodrie	S	MS	VS	VS	MS	S	S	S	R	MR	MS
Cybonnet	VS	R	MS	S	MS	S	S	S	R	MR	S
Francis	MS	VS	MS	VS	S	S	VS	S	R	MS	MS
Jupiter	MS	MS	MS	R	MS	S	MS	MS	R	MR	MR
KDM 08	MS			MS	S	S	MS		R	MS	MS
Neptune	MS	R	MS	R*	MS	S	MS	MS		MR	MR
Presidio	S			MS	MS	S	S	S	R	MR	S
Rondo	MR	R		S	MR	MS	MS	VS	R	S	MR
RT CL XL 745	MS	R		MR	MS	MS	MS	S	R	S	MS
RT CL XL729	MS	MR	MR	MR	MS	MS	MS	S	R	S	MS
RT CL XL730	MS	MR	MR	MR	MS	MS	MS	S	R	S	MS
RT XL 744	MS	R		MR	MS	MS	MS	S	R	S	MS
RT XL723	MS	R	MR	MR	MS	MS	MS	S	R	MS	MS
RU0401182	MS	R		MS	MS	S	S	S	R	MS	MS
RU0601188	MS	S		MS	MS	S	S	S	R	MS	MS
RU0701124	MS	R		S	MS	S	S	S		MR	MS
RU0801076	MS	S		S	MS	S	S	S	R	MR	MS
Sabine	S			S	MS	S	S	S	R	MR	S
Sierra	MS	VS	MS	MS	MS	S	S	S	R	MR	S
Spring	S	MS	VS	S	MS	VS	MS	MS	R	S	MS
Trenasse	VS	S	VS	S	S	S	S	S	R	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).

[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.

[3] Other Notes: Most cultivars will be susceptible to stem rot under low K and high N conditions. Bengal and certain other cultivars become very susceptible to brown spot under low K conditions. Most cultivars are susceptible to false smut under high N, late planted conditions. Kernel smut is increased by excessive nitrogen fertilization.

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

Table 4. Performance of selected cultivars in replicated rice disease monitoring tests located in grower fields in Arkansas during 2008.

	Craighead	Desha	Lonoke	Poinsett	Prairie-DA	Prairie-HA	Randolph	Woodruff	Mean	C.V.
	Bu/acre									
Arize 1003	158		162	188	211	142	152	163	168	13.9
Bengal	157	162	136	181	194	142	209	175	169	14.9
Bowman	130	131	138	167	200	120	190	149	153	19.3
Catahoula	142	101	123	165	211	132	177	153	151	22.6
Cheniere	153	116	136	169	195	139	225	154	161	21.9
CL 131	145	133	120	150	203	151	202	156	157	19.0
CL 151	125	138	143	184	196	133	184	186	161	17.9
CL 161	139	129	127	158	186	148	186	152	153	15.0
CL 171 AR	136	120	120	150	188	152	189	156	151	17.6
Cocodrie	152	112	112	171	218	156	220	180	165	25.1
Cybonnet	141	140	129	158	208	133	197	143	156	19.2
Francis	145	182	137	191	205	155	226	206	181	17.8
Jupiter	151	161	147	173	147	152	193	182	163	10.8
KDM 08	90	107	149	161	209	128	173	149	146	25.9
Neptune	170	152	134	182	220	166	223	177	178	17.3
Presidio	134	153	142	151	173	129	200	137	153	15.5
Rondo	118	135	152	147	154	143	200	168	152	16.0
RT XL 723	190	148	175	195	272	170	294	225	209	24.5
RU0401182	156	154	145	163	229	149	204	187	173	17.4
RU0601188	123	125	144	175	208	141	212	146	159	22.0
RU0701124	104	141	130	123	164	117	169	158	138	17.2
RU0801076	166			178		112	214	170	168	22.0
Trenasse	115	116	114	155	166	146	190	164	146	19.5
Wells	143	154	144	164	209	175	217	160	171	16.4
Mean	141	137	137	167	202	143	202	166	166	
LSD	30.0	20.9	21.1	16.4	49.3	23.5	31.3	19.4		
C.V.	13.0	9.4	9.4	6.0	14.7	10.0	9.4	7.1		

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

Table 5. Influence of seeding date on grain yield of selected rice varieties studies conducted at the RREC during 2008.

Variety	Grain Yield					Milling Yield				
	March 26	April 17	May 19	June 12	Mean	March 26	April 17	May 19	June 12	Mean
	Bushels/acre					%HR-%TR				
Arize1003	232	175	154	138	175	9-69	15-68	59-69	59-71	35-69
Bowman	211	175	147	124	164	61-69	59-68	58-68	59-70	59-69
Catahoula	181	186	107	127	151	62-69	65-70	58-72	63-73	62-71
Cheniere	189	175	151	138	163	61-69	62-69	61-70	57-72	60-70
CL131	187	168	124	143	155	64-68	64-68	59-68	60-70	62-69
CL151	215	178	119	144	164	59-67	61-68	55-67	58-71	58-68
CL161	164	156	148	92	140	63-68	65-70	58-70	65-73	63-70
CL171AR	191	153	115	109	142	63-70	61-68	52-70	62-72	60-70
CLXL729	226	186	182	180	194	60-68	61-68	58-69	61-72	60-69
CLXL730	200	192	174	167	183	60-68	60-68	58-68	58-70	59-69
CLXL745	208	213	170	173	191	58-68	58-69	57-70	59-71	58-69
CLXP746	247	212	184	176	205	59-68	59-67	57-69	61-72	59-69
Jupiter	224	199	162	154	185	67-71	67-71	66-72	66-74	67-72
KDM08	194	163	127	113	149	62-67	59-65	55-67	60-68	59-67
Neptune	192	206	162	161	180	69-72	69-72	63-74	69-75	68-73
RU0401182	207	163	139	127	159	61-67	61-68	50-70	61-67	57-66
RU0601188	190	159	150	136	159	57-68	54-66	57-70	59-71	58-69
RU0801076	214	183	155	131	171	18-71	31-69	59-68	59-71	35-69
Trenasse	179	171	139	118	152	57-66	57-65	54-66	59-70	59-69
Wells	185	190	172	128	169	61-69	60-68	52-70	63-73	62-71
Mean	200	180	149	139	167	57-69	58-68	57-69	61-71	58-69

Table 6. 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 2008.

Variety	Days to ½" Internode Elongation					Days to 50% Heading				
	March 26	April 17	May 19	June 12	Mean	March 26	April 17	May 19	June 12	Mean
	days after emergence					days after emergence				
Arize1003	81	74	53	43	63	123	116	100	86	107
Bowman	87	80	60	53	70	115	107	95	80	99
Catahoula	78	69	47	43	59	113	102	86	79	95
Cheniere	80	71	52	48	63	113	102	87	80	96
CL131	78	72	52	46	62	107	99	86	77	92
CL151	78	69	51	44	61	108	99	85	74	92
CL161						114	106	92	84	99
CL171AR	83	74	55	48	65	115	105	90	84	99
CLXL729	81		53	45	60	109	102	86	78	94
CLXL730	78		53	43	58	109	101	87	80	94
CLXL745	78	73	52	44	62	107	99	83	73	91
CLXP746	81	72	50	43	61	109	104	86	77	94
Jupiter	83	77	59	50	67	106	101	87	74	92
KDM08	85	76	57	46	66	116	111	94	81	101
Neptune	86	76	62	53	69	109	103	91	77	95
RU0401182	87	80	56	49	68	118	113	93	82	101
RU0601188	87	78	60	50	69	121	117	96	85	105
RU0801076	90	79	59	50	70	120	115	94	86	104
Trenasse	83	73	52	44	63	106	99	81	71	89
Wells	84	77	55	50	67	115	108	91	82	99
Mean	83	75	55	47	64	113	105	90	80	97

Table 7. 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
Arize 1003	2008 – Bayer Cropscience	Proprietary Hybrid	A mid-season, long-grain hybrid with good yield potential and is moderately resistant to sheath blight.
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	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.
Catahoula	2008 - Louisiana	LA9502008-A/Drew	A semi-dwarf, long-grain with good yield and milling potential and resistance to blast.
CL 131	2005– BASF, Horizon Ag	Proprietary variety; Developed from Cocodrie	A midseason, semi-dwarf long-grain similar to CL 161 with shorter plant height, moderately susceptible to blast, very susceptible to straighthead and sheath blight, but improved grain yield potential. Represented about 13.1% of the 2006 rice acreage in Arkansas.
CL 151	2008 – BASF, Horizon Ag	Proprietary variety	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.
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.
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. Represented about 13.8% of the 2008 rice acreage in Arkansas.
CL XL 729	2006 – Rice Tec, Inc.	Proprietary Hybrid	A short-season, long grain with excellent yield potential and moderately susceptible to sheath blight, and moderately resistant to blast. Represented about 14.7% of the 2008 rice acreage in Arkansas.
CL XL 730	2005– Rice Tec, Inc.	Proprietary Hybrid	A short-season, long grain with excellent yield potential and moderately susceptible to sheath blight, and moderately resistant to blast. Somewhat susceptible to lodging under extreme conditions. Represented about 9.4% of the 2008 rice acreage in Arkansas.
CL XL 745	2007– Rice Tec, Inc.	Proprietary Hybrid	A short-season, long grain 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 XP 746	2008 – 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.

Table 7 (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
Cocodrie	1997 – Louisiana	Cypress//82CAY21/Tebonnet	A short season semi-dwarf long-grain with good yield potential and milling quality. Suseptible to sheath blight and other diseases. High bran oil content makes it somewhat of a milling concern to certain buyers.
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.
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.
Rondo	2008 – Texas	4484-1693	A mid-season, standard statured long grain with resistance to rice blast and moderately resistant to blast.
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; resistant to blast and moderately susceptible to sheath blight.