



# AGRONOMY PROGRESS REPORT

Agricultural Experiment Station

Cooperative Extension

April 2001 • No. 283

## CALIFORNIA RICE VARIETIES

### DESCRIPTION AND PERFORMANCE SUMMARY OF THE 2000 AND MULTIYEAR STATEWIDE RICE VARIETY TESTS IN CALIFORNIA

R.L. Wennig, R. G. Mutters, J.F. Williams, W.M. Canevari, M.W. Hair and J.E. Hill\*

University of California Cooperative Extension conducted rice variety evaluation tests in the Sacramento and San Joaquin Valleys in 2000. This program, a cooperative effort involving the California Cooperative Rice Research Foundation, Inc. (CCRFI) and the United States Department of Agriculture (USDA), compares advanced breeding lines with commercially available rice varieties and evaluates preliminary breeding lines to determine their adaptation to the principal rice growing regions of California. Entries in the tests include lines and varieties developed by CCRRFI rice breeders. The Rice Research Board partially funds the program. Cooperating growers provide land, water and on-site management for the tests. Names and brief descriptions of the current publicly developed varieties are listed in Table 1.

Planted area decreased by 2% in 2000 as compared to 1999, 565,000 and 576,180 acres, respectively (Table 2). Similar to 1999, medium grains were the most widely planted varieties accounting for 90% of the total acreage. M-202 was planted on 353,879 acres or 63% of the total area in production. Short grain plantings were down by almost 50% (43,196 versus 76,940 acres) attributable in large part to decreases in specialty Japanese and sweet rice plantings as compared to 1999. Long grain plantings increased to 8416 acres in 2000 as compared to 6186 acres in 1999. The increase was due primarily to additional land planted to the two newly released long grain varieties, L-205 and Calmati-201.

A relatively dry spring allowed for good seedbed preparation and strong stand establishment in most areas. In contrast to 1999, aside from a brief cool period in early May temperatures were favorable for rice production throughout the 2000 growing season (Table 3).

### EXPERIMENTAL PROCEDURE

#### Cultivars and Locations

Field experiments were conducted at eight farm locations in the rice growing counties of California. Two classes of tests were conducted at each site: 1) Tests of advanced breeding lines

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\*Interim Extension Agronomist, Department of Agronomy and Range Science, UC Davis and UC Cooperative Extension Farm Advisor Butte/Glenn/Tehama counties, UC Cooperative Extension Farm Advisors for Placer/Sutter/Yuba, San Joaquin, and Colusa/Yolo counties, respectively, and Staff Research Associate, Department of Agronomy and Range Science, UC Davis.

and commercial varieties (Advanced Tests); and 2) Tests consisting of lines to be newly evaluated on a statewide basis (Preliminary Tests). Advanced and preliminary tests were conducted in three maturity groups, Very Early, Early, and Intermediate to Late. Entries in each test were generally restricted to a single maturity group to avoid too early or too late maturation relative to the field variety surrounding the test location. Commercial varieties in the very early and early maturity classes, however, were evaluated in Very Early and Early tests in both years. Advanced and preliminary lines from three maturity groups were also evaluated at the Rice Experiment Station (RES), Biggs, California, for a total of 22 statewide tests each year. Advanced tests were arranged in randomized complete block designs with four replications. Preliminary lines were planted in two replications. The RES provided the seed for the variety trials. Maturity groups, test locations and commercial standards are described below.

**Very Early Maturity Group.** Eight advanced lines and ten commercial varieties were evaluated in 2000. Very Early variety tests were conducted at four locations.

	Date Planted
• Butte County (RES)	5/13, 5/24 (Reps 1&2, 3&4 respectively)
• San Joaquin County (Brumley)	5/9
• Sutter County (Lauppe)	5/18
• Yolo County (Geer)	5/11

Commercial varieties in 2000 included S-102, Calhikari-201, Calmochi-101, M-103, M-104, M-202, M-204, M-205, L-204, and L-205. Twenty-four experimental lines were evaluated in the Preliminary Test at each location. Advanced and preliminary experimental lines at each location were entries from the RES breeding program.

**Early Maturity Group.** In 2000, eight advanced lines and eleven commercial varieties were evaluated in the Advanced Tests at each location. Early tests were conducted at four locations.

	Date Planted
• Butte County (RES)	5/13, 5/24 (Reps 1&2, 3&4 respectively)
• Butte County (Skinner)	5/17
• Colusa County (Dennis)	5/8
• Yuba County (Quad-4)	5/4

Commercial varieties in 2000 included S-102, Calmochi-101, Calhikari-201, CT-201, M-103, M-104, M-202, M-204, M-205, L-204, and L-205. Twenty-two preliminary lines were tested in 2000. All advance and preliminary entries were from the RES breeding program.

**Late Maturity Group.** Eight advanced lines and six commercial varieties were assessed in 2000 at the following three locations.

	Date Planted
• Butte County (RES)	5/13, 5/24 (Reps 1&2, 3&4 respectively)
• Glenn County (Wiley)	5/8
• Sutter County (Akin)	5/10

Commercial varieties included in 2000 were M-202, M-205, M-402, A-201, Calmati-201, and Calhikari-201. Twenty preliminary lines were included with no commercial standard. All advance and preliminary entries were from the RES breeding program.

### **Planting and Harvesting**

Individual plots were water-seeded by hand at a planting rate of 144 lb/acre. Agronomic characteristics measured for each entry were seedling vigor, days to 50% heading, plant height, lodging at harvest, grain moisture at harvest and grain yield at 14% moisture. Seedling vigor was rated subjectively by visual observation on a scale of 1 (poor) to 5 (excellent) at three to four weeks after planting. Scores were based on plant health and stand at crop emergence (through the water). Days to 50% heading was measured as the number of days from planting to when 50% of the heads were free from the boot. Plant height was measured at harvest as the distance from the soil surface to the tip of the panicle. Plant lodging was rated visually on a scale of 1 (no lodging) to 99 (all plants completely lodged).

County tests were harvested with a SWECO 324 small plot combine. Plots at the RES were harvested with a modified Allis-Chalmers combine. The harvest area for all plots was 150 ft<sup>2</sup> (0.0034acre). Grain moisture was assessed at harvest and yields adjusted to 14% moisture.

### **SUMMARY OF THE VERY EARLY RICE VARIETY TESTS**

*(<90 days to 50% heading at Biggs, CA)*

Agronomic performance data for individual entries at each Very Early location are presented in Tables 4 through 7. A four location combined yield summary is given in Table 8. Entries are ranked by grain yield with the highest yielding entry appearing first. A yield summary of Very Early commercial public rice varieties by locations and years (1996-2000) is found in Table 9.

Grain yields in the advanced tests averaged 9700 lbs/acre at the RES, 9360 at Yolo, 9300 at Sutter, and 6840 at San Joaquin. The highest yielding entry over all locations was the commercial variety S-102 at 9300 lbs/acre (Table 8). Entry 96Y457, an advanced long grain, ranked first in yield at Yolo and second overall.

The only test site with entries that produced yields significantly higher than S-102 was at the RES. M-104, S-102, and M-103 yielded first, second and fifth, (respectively), in the cooler San Joaquin trial location. Of the preliminary lines, medium-grains 99Y208, 99Y233, and 99Y234 were ranked first, second, and third, respectively.

Table 9 shows over-year and over-location yields for the very early commercial varieties compared with leading early varieties in the same tests. Common year-location entries are compared to give relative yield as a percentage of M-202, the very early standard. M-103 yielded 95%, M-104 99%, Calmochi-101 97%, and S-102 102% of M-202 in the Very Early tests over the last five-year period.

## **SUMMARY OF THE EARLY RICE VARIETY TESTS**

*(90-97 days to 50% heading at Biggs, CA)*

Agronomic performance data for individual entries at each Early location are presented in Tables 10 through 13. A four location combined yield summary is given in Table 14. Entries are ranked by grain yield with the highest yielding entry appearing first.

Yields in the advanced tests averaged 10040 lb/acre at the RES, 8280 lb/acre at Colusa, 8610 lb/acre at Yuba, and 8050 lb/acre at Butte. The highest yielding public variety, M-205, averaged 10870 lb/acre at the RES, 10570 lb/acre at Colusa, 9520 lb/acre at Yuba and was the highest yielding entry, 10060 lb/acre, over the four locations (Table 14). Commercial varieties M-204, M-202, and L-204 ranked third, fifth, and seventh in average over-location yield. Other leading advanced cultivars were 96Y480 and 98Y242 (second and fourth, respectively). Of the preliminary lines, medium-grains 99Y397, 99Y243, and 99Y376 were ranked first, second, and third, respectively.

Table 15 shows the over-year and over-location yields for the commercial public varieties. Common year-location entries are compared to give relative yield as a percentage of M-202, the early standard. Cahikari-201 yielded 87%, M-204 102%, M-205 105%, and Calmati-201 77% of M-202 in the Early tests over the past five years.

## **SUMMARY OF THE INTERMEDIATE-LATE RICE VARIETY TESTS**

*(intermediate = 98-105 days and late = > 105 days to 50% heading at Biggs, CA)*

Agronomic performance data for individual entries at each Intermediate-Late location are presented in Tables 16 through 18. A three location combined yield summary is given in Table 19. Entries are ranked by grain yield, with the highest yielding entry appearing first.

Average yields in the advanced Intermediate-Late tests were 9980 lb/acre at the RES, 7970 lb/acre at Glenn, and 9730 lb/acre at Yuba. The medium-grain cultivar M-205 was the third highest yielding entry over all locations, ranking third at the RES, first at Glenn, and seventh at Sutter (Table 19). Premium quality M-402 ranked eighth in yield at RES and ninth at Glenn, Sutter, and overall. In the preliminary tests, medium-grain 98Y425 yielded highest overall (10450 lb/acre), with yields of 11160, 9310, and 10880 lb/acre at the RES, Glenn, and Sutter test sites respectively.

Table 20 compares Intermediate-Late maturing commercial cultivars in over-location and over-years tests. M-402 yielded 110%, of M-401, the standard for comparison, over the last five years. M-401 was dropped from the Late tests following the 1999 season.

## **ACKNOWLEDGEMENTS**

The authors and the RES plant breeders are indebted to the Rice Research Board for partial funding of this program and to the rice growers who cooperated in this on-farm research.

Table 1. Characteristics Of Public California Rice Varieties - 2001

Grain Type	Maturity	Year Seed Widely Available	Stem Rot Score <sup>1</sup> (0-10)	Seedling Vigor <sup>2</sup> (1-5)	Comments
<b>Short Grain</b>					
S-102	Very Early <sup>3</sup>	1998	5.9	4.3	Very high yield potential, two weeks earlier than S-201. Good resistance to blanking. Grain is 8% larger than S-201 and less chalky. Rough leaves and hulls, grain dries down rapidly during ripening. Susceptible to stem rot.
<b>Medium Grain</b>					
M-103	Very Early <sup>3</sup>	1990	5.5	3.9	Earliest medium grain, vigor less than M-202. Excellent resistance to blanking. Very good head and total milled rice yields. Moderate lodging and good yield potential. Alternative variety for M-202 in coldest rice areas and for late planting in warmer areas.
M-104	Very Early <sup>3</sup>	2002	5.6	4.4	Has potential as replacement for M-103 in San Joaquin Valley and as an alternative to M-202 in other cool rice areas. Improved seedling vigor, lodging resistance, and yield compared to M-103. Milling yields similar to M-103. Heads 8 to 10 days earlier than M-202. Early planting in warm areas could limit yield and quality.
M-202	Early	1987	5.8	4.4	Very high yield potential. Moderate lodging potential. Long time favorite variety that threshes easily.
M-204	Early	1993	5.7	4.2	Very high yield potential. Seedling vigor slightly less than M-202. Height 3 inches shorter and heading 3 days later than M-202. Better lodging resistance and improved total and head rice yields than M-202. Resistance to blanking similar to M-202. Threshes easily. <b>Not recommended</b> for Escalon, Natomas or other cool areas.
M-205	Early	2002	5.5	4.1	Very high Yield potential. Seedling vigor slightly lower than M-202. Height and heading like M-204. Improved milling yields relative to M-202. Blanking resistance similar to M-204. Area of primary adaptation west of Highway 70 and north of Highway 20. <b>Not recommended</b> for Escalon, Natomas or other cool areas.
<b>Long Grain</b>					
L-204	Early	1998	5.6	4.1	High yield potential. Two days earlier than L-203. Resistant to lodging. Seedling vigor fair, may be affected by deep water. Improved head rice and cooking characteristics, better than L-202 and L-203. Avoid early draining (requires 40-45 days after 50% heading to mature) and harvest at 18-19% moisture to maximize milling yield.
L-205	Early	2001	5.7	3.9	Newrex type, dry cooking long grain. High yield potential. Two days later than L-204. Resistant to lodging. More resistant to blanking than L-204. Seedling vigor fair. Seed size slightly smaller than L-204. Similar milling yield to L-204. Avoid early draining (requires 40-45 days after 50% heading to mature) and harvest at 16-18% grain moisture to maximize milling yield.
<b>Premium Quality</b>					
M-401	Late	1983	5.4	4.3	<i>Premium quality</i> medium grain rice with large kernels. Good yield potential but susceptible to blanking, lodging and damage from premature drainage. Use 20-25% less nitrogen than on other medium grain varieties. Best adapted to warmer areas. Milling yields lower than other medium grain varieties.
M-402	Late	2001	5.4	4.2	<i>Premium quality</i> medium grain. Kernel size is smaller than M-401, much higher head rice potential. About 5-7 days earlier than M-401 with better straw strength. Adapted to warmer areas.
Calhikari-201	Early	2001	6.0	4.4	<i>Premium quality</i> short grain developed for the Japanese premium short-grain market. Has very good seedling vigor. A semidwarf with much greater yield potential and resistance to lodging than Japanese varieties. Rough leaves and hulls. Cold delays maturity and increases blanking. Use low nitrogen to maximize market quality.
<b>Specialty Rice</b>					
Calmochi-101	Very Early <sup>3,4</sup>	1987	5.6	4.2	A sweet glutinous rice. Two weeks earlier than S-201. Excellent resistance blanking. Has rough leaves and hulls, no awns. Grain dries down rapidly during ripening.
A-201	Early <sup>4</sup>	1998	6.2	4.2	Aromatic (popcorn aroma) long grain, eight days earlier than A-301. Moderate yield potential similar to L-202 and A-301. Becomes leafy under excessive nitrogen. Poor milling yield, use slower cylinder speed and harvest at 18-20% grain moisture. Air dry without heat to retain aroma.
Calmati-201	Early <sup>4</sup>	2001	5.4	3.9	A basmati type aromatic long grain. Moderate yield potential. Five days later than L-204. Pubescent leaves and hull. Milling yield is considerably higher than A-201. Very susceptible to blanking and should not be grown in cool areas. Excessive nitrogen and late planting will delay maturity and increase blanking. Harvest at 17-18% grain moisture.
<p><sup>1</sup> Average stem rot score over last four years: 0 = no disease and 10 = severe disease.</p> <p><sup>2</sup> Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling vigor.</p> <p><sup>3</sup> Milling quality and yield may be reduced by early planting in warmer areas.</p> <p><sup>4</sup> Specialty varieties should not be grown unless arrangements have first been made with a marketing agency.</p>					

Table 2. 1999 and 2000 California rice acreage by variety. \*

Rice Variety by Grain Type	1999				2000			
	Seed acres	%	Total acres	%	Seed acres	%	Total acres	%
<b>Short Grains</b>								
S-102	340	1.5	9800	1.7	439	1.95	10,464	1.85
Akitakomachi	740	3.27	25,350	4.4	280	1.24	10,175	1.8
Koshihikari	410	1.81	12,100	2.1	200	0.89	6205	1.1
Calhikari-201	160	0.71	160	0.03	884	3.93	3822	0.68
Calmochi-101	1740	7.69	28,230	4.9	813	3.61	11,077	1.96
Surpass	NA	NA	1300	0.23	NA	NA	1453	0.26
<b>Subtotal</b>	<b>3390</b>	<b>14.98</b>	<b>76,940</b>	<b>13.35</b>	<b>2616</b>	<b>11.63</b>	<b>43,196</b>	<b>7.65</b>
<b>Medium Grains</b>								
M-103	290	1.28	12,100	2.1	233	1.04	11,720	2.07
M-201	360	1.59	14,980	2.6	136	0.6	6917	1.22
M-202	12,470	56.1	335,330	58.2	12,289	54.64	353,320	62.63
M-204	2940	12.99	55,890	9.7	2935	13.05	76,320	13.51
M-401	2170	9.59	54,740	9.5	1668	7.42	33,662	5.96
M-402	500	2.21	500	0.09	674	3	9194	1.63
Kokuhorose	NA	NA	11,520	2	NA	NA	12,527	2.22
NFD 181	NA	NA	5190	0.9	NA	NA	4620	2.22
<b>Subtotal</b>	<b>18,730</b>	<b>82.76</b>	<b>490,250</b>	<b>85.09</b>	<b>17,935</b>	<b>79.75</b>	<b>508,839</b>	<b>90.06</b>
<b>Long Grains</b>								
L-204	90	0.4	3460	0.6	133	0.59	2093	0.37
L-205	259	1.14	259	0.04	198	0.88	2647	0.47
A-201	32	0.14	1076	0.19	88	0.39	1025	0.18
A-301	NA	NA	1260	0.22	NA	NA	1449	0.26
Calmati-201	131	0.58	131	0.02	196	0.87	1202	0.21
<b>Subtotal</b>	<b>512</b>	<b>2.26</b>	<b>6186</b>	<b>1.07</b>	<b>615</b>	<b>2.73</b>	<b>8416</b>	<b>1.49</b>
Other	0	0	2804	0.49	1324	5.89	4550	0.81
<b>Total</b>	<b>22,632</b>	<b>100</b>	<b>576,180</b>	<b>100</b>	<b>22,490</b>	<b>100</b>	<b>565,000</b>	<b>100</b>

\* Source: 2000 RES Progress Report.

Table 3. 2000 County Weather Data - Daily Maximums and Minimums (°F). Collected by UC IPM - IMPACT and CIMIS

	Glenn (Orland)		San Joaquin (Escalon)		Butte (Durham)		Sutter (yuba City)		Yolo (zamora)		Colusa (colusa)			Glenn (Orland)		San Joaquin (Escalon)		Butte (Durham)		Sutter (yuba City)		Yolo (zamora)		Colusa (colusa)	
	max	min	max	min	max	min	max	min	max	min	max	min		max	min	max	min	max	min	max	min	max	min	max	min
Apr 01	85	59	84	39	85	47	81	52	86	52	85	53	Jun 01	84	54	89	48	88	49	88	50	86	49	89	48
Apr 02	86	58	86	45	90	43	90	48	90	55	90	48	Jun 02	85	53	88	50	87	55	89	53	85	50	89	56
Apr 03	89	49	88	49	89	47	84	48	88	45	90	47	Jun 03	87	52	88	53	89	52	90	48	87	43	91	48
Apr 04	76	42	78	50	75	50	74	46	78	44	78	51	Jun 04	86	52	88	51	89	54	89	51	86	46	89	53
Apr 05	79	43	76	47	80	43	78	42	75	42	78	42	Jun 05	77	50	81	50	80	53	81	47	81	46	82	52
Apr 06	77	43	76	44	78	43	76	41	79	38	79	47	Jun 06	82	54	85	51	85	56	85	50	83	48	85	55
Apr 07	82	48	80	40	84	42	80	43	81	41	84	43	Jun 07	76	51	77	55	80	58	80	50	77	49	79	57
Apr 08	75	49	73	47	74	49	71	44	73	39	77	49	Jun 08	70	57	71	53	71	56	73	53	72	54	73	55
Apr 09	71	44	73	46	73	42	73	41	72	41	73	46	Jun 09	73	55	76	52	74	57	75	48	77	48	76	54
Apr 10	82	47	79	45	81	47	85	43	82	44	84	43	Jun 10	77	54	77	52	77	56	79	52	76	47	79	55
Apr 11	79	49	83	47	81	51	81	48	78	42	81	54	Jun 11	82	52	83	48	82	54	83	52	81	49	83	53
Apr 12	70	58	80	53	80	57	80	54	78	55	80	54	Jun 12	87	63	88	57	88	64	90	58	87	56	90	60
Apr 13	68	50	73	51	68	53	70	50	67	48	69	53	Jun 13	99	69	95	66	98	64	98	62	97	70	97	65
Apr 14	66	46	73	48	67	49	70	48	67	50	69	52	Jun 14	105	81	104	61	106	72	106	68	104	79	106	72
Apr 15	63	47	69	48	62	51	63	46	64	48	64	51	Jun 15	102	72	103	63	102	64	101	67	101	66	102	65
Apr 16	61	51	66	52	65	51	67	47	64	51	64	52	Jun 16	96	79	97	62	97	73	98	75	96	79	95	76
Apr 17	54	48	57	46	55	47	55	49	55	43	55	46	Jun 17	98	68	89	62	98	66	96	64	93	63	98	66
Apr 18	62	47	67	40	63	46	64	42	66	39	64	42	Jun 18	80	59	83	59	81	60	82	55	83	57	83	60
Apr 19	69	49	70	42	68	49	68	40	68	41	70	43	Jun 19	93	58	91	56	95	58	93	54	85	53	95	54
Apr 20	75	50	75	46	75	50	76	46	75	49	76	49	Jun 20	101	69	95	59	100	62	98	60	94	60	100	61
Apr 21	80	46	76	49	81	46	80	47	80	44	82	45	Jun 21	92	61	97	59	94	59	100	60	96	57	100	61
Apr 22	69	49	69	47	69	50	70	49	70	44	72	50	Jun 22	91	70	95	57	91	67	93	61	90	56	93	61
Apr 23	69	44	69	40	69	42	70	43	71	40	70	47	Jun 23	87	57	90	57	89	56	88	52	87	53	89	54
Apr 24	75	43	76	44	76	40	78	42	76	43	78	42	Jun 24	90	59	89	57	92	60	94	55	89	53	94	56
Apr 25	77	50	77	44	78	50	78	44	79	46	78	51	Jun 25	90	59	94	59	93	61	96	57	91	52	95	60
Apr 26	84	50	84	46	85	49	84	47	84	46	85	47	Jun 26	94	66	97	58	95	65	97	59	93	59	98	64
Apr 27	69	53	76	47	77	54	77	51	71	46	77	51	Jun 27	94	66	96	59	97	67	99	63	95	61	98	64
Apr 28	67	42	67	46	68	37	69	37	61	36	68	39	Jun 28	95	67	98	61	97	68	99	63	95	58	100	67
Apr 29	78	46	76	42	78	45	78	45	79	44	78	40	Jun 29	91	67	93	62	94	67	92	61	91	57	93	62
Apr 30	81	42	84	42	83	42	82	44	80	41	83	43	Jun 30	84	58	88	56	87	59	85	52	86	53	87	58
May 01	78	50	83	47	82	47	81	45	79	42	82	44	Jul 01	80	55	85	53	83	55	84	58	82	52	84	56
May 02	79	50	80	52	81	47	81	48	79	48	82	49	Jul 02	80	56	82	51	82	56	82	58	79	51	83	56
May 03	81	53	82	49	83	51	82	47	82	46	84	52	Jul 03	76	53	81	50	78	54	79	55	78	52	80	54
May 04	75	57	80	50	77	57	80	51	79	54	78	57	Jul 04	82	56	85	54	84	56	85	51	83	50	85	54
May 05	74	50	74	52	76	51	75	48	76	47	77	52	Jul 05	77	57	77	55	80	58	81	50	80	49	82	58
May 06	62	48	69	47	64	48	64	47	69	48	65	49	Jul 06	78	54	82	53	80	55	82	49	79	47	81	56
May 07	57	48	65	50	58	49	59	43	58	48	58	49	Jul 07	79	54	79	55	80	55	83	51	80	50	83	56
May 08	71	54	73	54	73	57	72	50	73	53	75	55	Jul 08	90	55	84	54	88	52	88	50	74	50	88	50
May 09	71	49	74	50	74	52	73	50	74	49	75	47	Jul 09	87	57	90	53	88	56	91	54	87	51	92	54
May 10	71	48	65	48	66	49	65	44	64	39	65	44	Jul 10	87	57	90	59	89	59	90	58	88	52	90	57
May 11	71	37	70	42	70	34	70	38	72	37	71	36	Jul 11	89	58	91	57	90	58	93	55	90	49	92	58
May 12	69	40	75	42	72	35	70	39	73	41	73	39	Jul 12	88	57	85	57	90	59	89	55	89	53	91	58
May 13	71	51	76	46	72	50	72	52	74	47	71	51	Jul 13	84	56	83	56	87	57	88	53	89	51	87	58
May 14	59	46	73	42	66	51	66	48	62	44	63	49	Jul 14	88	54	91	57	90	56	90	51	91	48	92	54
May 15	61	49	67	53	60	49	60	50	64	47	62	48	Jul 15	87	57	90	56	90	59	80	58	92	49	91	56
May 16	80	45	62	51	63	44	61	45	68	49	61	45	Jul 16	81	60	80	58	83	60	93	55	84	55	83	59
May 17	79	52	75	52	79	51	76	49	76	53	78	53	Jul 17	80	54	81	55	81	56	82	51	82	50	83	56
May 18	85	57	85	48	86	52	86	54	85	58	87	51	Jul 18	86	53	90	54	89	55	91	50	90	50	91	51
May 19	90	55	89	55	91	54	91	55	90	53	91	54	Jul 19	91	60	94	54	92	58	95	54	93	53	96	57
May 20	93	63	94	55	94	57	96	59	94	60	95	57	Jul 20	92	60	96	55	94	58	96	55	95	55	97	57
May 21	95	59	99	59	97	58	96	59	98	59	98	58	Jul 21	87	60	91	57	89	60	90	53	86	52	90	59
May 22	96	63	98	59	97	60	99	63	97	66	98	62	Jul 22	85	54	90	58	87	58	91	54	89	51	91	59
May 23	89	72	93	63	102	66	99	70	97	68	99	70	Jul 23	92	61	95	56	92	58	97	55	93	53	97	57
May 24	89	65	89	62	92	68	89	62	88	62	92	66	Jul 24	93	62	97	55	95	61	99	60	96	55	99	59
May 25	80	61	80	52	82	61	82	55	83	57	84	60	Jul 25	91	64	93	58	94	63	96	65	95	60	97	64
May 26	84	56	85	56	87	56	88	57	88	55	88	57	Jul 26	87	60	85	59	87	61	90	60	91	55	90	62
May 27	86	60	87	55	89	61	88	54	89	52	90	59	Jul 27	88	54	88	55	89	55	91	51	89	53	93	52
May 28	83	55	89	56	85	61	89	55	87	54	88	57	Jul 28	92	58	94	56	94	58	97	56	94	53	97	56
May 29	81	55	84	51	82	56	85	52	80	48	84	55	Jul 29	94	62	98	59	97	60	98	58	95	58	100	60
May 30	87	56	80	50	82	53	79	50	78	46	79	53	Jul 30	96	62	98	64	98	64	101	63	98	60	101	63
May 31	89	55	81	51	83	56	83	53	82	59	83	53	Jul 31	100	64	99	62	100	63	105	69	102	61	107	63



Table 4. 2000 Very Early Rice Variety Test - Butte County (Biggs-RES)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
99Y205	W	11180 (1)	22.0 (4)	4.7 (17)	79 (10)	3 (12)	98 (12)
M-204	M	10670 (2)	22.3 (2)	4.8 (14)	83 (17)	1 (1)	94 (6)
L-205	REX	10500 (3)	16.6 (17)	4.8 (14)	81 (15)	1 (1)	95 (7)
99Y042	REX	10460 (4)	16.6 (16)	4.7 (17)	76 (6)	1 (1)	85 (1)
97Y476	L	10090 (5)	18.8 (13)	4.8 (13)	80 (11)	1 (1)	92 (4)
96Y457	L	10040 (6)	18.8 (12)	4.8 (9)	81 (13)	8 (15)	96 (9)
98Y174	MPQ	9950 (7)	21.9 (5)	4.8 (9)	77 (7)	6 (13)	100 (15)
99-330	SPQ	9940 (8)	18.8 (11)	4.9 (5)	75 (2)	1 (1)	91 (3)
M-205	M	9850 (9)	24.5 (1)	4.8 (8)	83 (17)	1 (1)	93 (5)
M-104	M	9720 (10)	19.2 (9)	4.9 (6)	72 (1)	11 (17)	97 (11)
S-102	S	9390 (11)	16.1 (18)	4.8 (9)	75 (2)	1 (1)	101 (16)
M-202	M	9380 (12)	21.2 (7)	5.0 (2)	78 (8)	6 (13)	103 (17)
L-204	L	9330 (13)	18.0 (15)	4.9 (7)	79 (9)	1 (1)	90 (2)
M-103	M	9160 (14)	19.3 (8)	4.7 (16)	76 (4)	28 (18)	99 (14)
99Y183	MPQ	9090 (15)	22.0 (3)	4.8 (9)	81 (13)	1 (1)	103 (18)
97Y255	M	8760 (16)	21.4 (6)	4.9 (3)	81 (12)	1 (1)	98 (13)
CM-101	WX	8590 (17)	18.1 (14)	4.9 (3)	76 (4)	8 (16)	96 (10)
CH-201	SPQ	8460 (18)	19.2 (10)	5.0 (1)	81 (15)	1 (1)	95 (8)
MEAN		9700	19.7	4.8	78	4	96
CV		5.2	6.7	2	1.4	207.6	3.8
LSD (.05)		720	1.9	0.1	2	13	5

**Preliminary Lines**

99Y469	L	10930 (1)	17.1 (22)	4.7 (19)	77 (15)	1 (1)	88 (1)
99Y234	M	10620 (2)	18.4 (17)	4.8 (15)	74 (5)	1 (1)	96 (10)
97Y517	REX	10510 (3)	17.9 (20)	4.4 (24)	78 (20)	1 (1)	94 (6)
98Y452	REX	10510 (4)	16.1 (24)	4.8 (12)	74 (5)	1 (1)	90 (3)
98Y189	S	10500 (5)	18.1 (18)	4.9 (7)	78 (21)	1 (1)	95 (7)
99Y241	M	10370 (6)	18.6 (14)	4.9 (4)	76 (14)	1 (1)	97 (12)
99Y259	M	10220 (7)	18.6 (13)	4.8 (12)	75 (8)	8 (19)	97 (13)
99Y459	REX	10190 (8)	16.9 (23)	4.7 (18)	73 (3)	1 (1)	101 (22)
99Y233	M	10190 (9)	18.1 (19)	4.8 (15)	75 (9)	1 (1)	101 (21)
99Y235	M	10130 (10)	18.7 (12)	4.9 (7)	76 (10)	8 (19)	102 (23)
99Y457	REX	10120 (11)	17.9 (21)	4.8 (10)	74 (4)	1 (1)	98 (16)
98Y214	M	10010 (12)	19.7 (5)	4.7 (20)	78 (18)	1 (1)	97 (15)
99Y208	M	9880 (13)	19.4 (8)	4.6 (21)	75 (7)	1 (1)	95 (8)
99Y212	M	9750 (14)	19.6 (6)	4.9 (4)	76 (13)	8 (21)	97 (14)
97Y187	MPQ	9580 (15)	21.2 (1)	4.9 (4)	78 (19)	1 (1)	100 (19)
99Y213	M	9500 (16)	18.6 (15)	4.8 (12)	76 (10)	8 (18)	95 (9)
97Y469	TQ	9490 (17)	19.0 (10)	4.8 (11)	81 (24)	1 (1)	104 (24)
99-403	MPQ	9430 (18)	19.3 (9)	5.0 (3)	72 (1)	1 (1)	99 (17)
99Y476	L	9250 (19)	18.5 (16)	4.8 (15)	81 (22)	1 (1)	90 (2)
99Y473	L	8880 (20)	19.9 (3)	4.5 (23)	81 (23)	1 (1)	92 (4)
99Y410	M	8860 (21)	20.6 (2)	4.6 (21)	77 (17)	16 (22)	93 (5)
99-287	SPQ	8530 (22)	19.8 (4)	4.8 (9)	77 (15)	1 (1)	96 (10)
99Y225	M	8460 (23)	19.4 (7)	5.0 (1)	76 (12)	18 (23)	100 (19)
99-363	MPQ	7890 (24)	19.0 (10)	5.0 (1)	73 (2)	18 (23)	99 (18)
MEAN		9740	18.7	4.8	76	4	96
CV		3.8	3.7	3.1	1.6	192	2.2
LSD (.05)		760	1.5		2		4

Planting dates: May 13, May 24 (reps 1&amp;2, 3&amp;4 respectively).

S,SPQ = short; M,MPQ = medium; L,TQ,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 5. 2000 Very Early Rice Variety Test - Yolo County (Geer Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
96Y457	L	9970 (1)	13.4 (13)	3.5 (13)	88 (9)	17 (6)	99 (17)
97Y255	M	9970 (2)	13.2 (15)	4.3 (2)	93 (12)	94 (18)	100 (18)
S-102	S	9870 (3)	16.0 (4)	4.0 (5)	84 (4)	69 (13)	97 (14)
M-202	M	9820 (4)	14.8 (6)	5.0 (1)	95 (14)	61 (12)	98 (16)
CM-101	WX	9800 (5)	15.0 (5)	4.0 (5)	86 (6)	59 (10)	93 (10)
99Y205	W	9750 (6)	17.9 (2)	3.5 (13)	88 (8)	60 (11)	96 (13)
M-204	M	9570 (7)	13.1 (17)	3.3 (17)	98 (17)	40 (8)	91 (5)
98Y174	MPQ	9500 (8)	14.0 (9)	3.8 (10)	87 (7)	35 (7)	92 (8)
M-205	M	9360 (9)	14.3 (8)	4.0 (5)	100 (18)	8 (5)	86 (3)
M-104	M	9340 (10)	13.8 (11)	4.3 (2)	81 (1)	69 (14)	95 (11)
M-103	M	9290 (11)	13.8 (12)	3.8 (10)	84 (3)	50 (9)	95 (11)
99Y183	MPQ	9270 (12)	12.9 (18)	4.3 (2)	97 (16)	90 (16)	98 (15)
99Y042	REX	9270 (13)	13.3 (14)	3.0 (18)	84 (4)	1 (1)	79 (1)
L-204	L	9170 (14)	13.9 (10)	3.5 (13)	89 (10)	1 (1)	85 (2)
L-205	REX	8970 (15)	13.2 (15)	3.8 (12)	91 (11)	1 (1)	92 (7)
CH-201	SPQ	8620 (16)	17.2 (3)	4.0 (5)	93 (12)	80 (15)	92 (8)
99-330	SPQ	8520 (17)	18.6 (1)	4.0 (5)	83 (2)	92 (17)	90 (4)
97Y476	L	8490 (18)	14.6 (7)	3.3 (16)	96 (15)	1 (1)	91 (6)
MEAN		9360	14.6	3.8	90	46	93
CV		6.2	6.3	12.1	0.8	55.8	3.8
LSD (.05)		820	1.3	0.7	1	36	5

**Preliminary Lines**

99Y233	M	10250 (1)	13.8 (12)	4.0 (2)	83 (5)	10 (17)	92 (9)
99Y410	M	10250 (2)	14.3 (5)	3.0 (17)	88 (18)	10 (17)	86 (3)
99Y208	M	10190 (3)	14.0 (7)	3.0 (17)	84 (7)	1 (1)	95 (15)
99Y234	M	10020 (4)	13.7 (14)	4.0 (2)	83 (5)	3 (11)	99 (24)
97Y187	MPQ	9980 (5)	16.8 (3)	4.0 (2)	93 (24)	90 (24)	92 (9)
99Y241	M	9970 (6)	13.9 (9)	3.0 (17)	87 (13)	18 (21)	95 (16)
99Y213	M	9840 (7)	13.5 (18)	4.0 (2)	86 (12)	3 (11)	93 (13)
99Y212	M	9830 (8)	13.9 (9)	4.0 (2)	85 (8)	3 (11)	96 (17)
98Y214	M	9780 (9)	13.8 (12)	4.0 (2)	87 (13)	3 (11)	93 (11)
99Y259	M	9450 (10)	13.4 (19)	4.0 (2)	87 (16)	1 (1)	89 (5)
99Y235	M	9360 (11)	15.1 (4)	4.0 (2)	85 (8)	11 (19)	97 (18)
99Y225	M	9330 (12)	12.9 (24)	5.0 (1)	89 (21)	13 (20)	97 (20)
99Y473	L	9320 (13)	13.2 (22)	4.0 (2)	88 (19)	1 (1)	90 (6)
98Y189	S	9320 (14)	17.2 (1)	3.0 (17)	88 (19)	3 (11)	93 (11)
99Y476	L	8980 (15)	13.9 (8)	3.0 (17)	93 (23)	1 (1)	80 (2)
99Y457	REX	8940 (16)	13.8 (11)	3.5 (15)	82 (2)	1 (1)	97 (18)
97Y469	TQ	8840 (17)	13.6 (16)	4.0 (2)	87 (13)	1 (1)	98 (22)
97Y517	REX	8690 (18)	13.7 (15)	3.0 (17)	87 (16)	1 (1)	90 (7)
99Y469	L	8670 (19)	13.3 (21)	3.0 (17)	90 (22)	1 (1)	79 (1)
99-403	MPQ	8580 (20)	13.6 (17)	4.0 (2)	83 (3)	3 (11)	94 (14)
99-363	MPQ	8400 (21)	13.0 (23)	4.0 (2)	83 (3)	50 (22)	98 (22)
99-287	SPQ	8150 (22)	17.1 (2)	3.5 (16)	85 (8)	90 (23)	91 (8)
99Y459	REX	8120 (23)	14.1 (6)	4.0 (2)	80 (1)	1 (1)	98 (21)
98Y452	REX	7580 (24)	13.3 (20)	3.0 (17)	85 (8)	1 (1)	86 (4)
MEAN		9240	14.1	3.7	86	13	92
CV		3.8	3.1	5.4	0.8	41.3	5.3
LSD (.05)		730	0.9	0.4	1	11	10

Planting date: May 11 Harvest date: October 17.

S,SPQ = short; M,MPQ = medium; L,TQ,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 6. 2000 Very Early Rice Variety Test - Sutter County (Laupe Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
M-202	M	9940 (1)	11.8 (17)	3.8 (10)	97 (16)	2 (8)	87 (10)
S-102	S	9750 (2)	13.5 (5)	3.0 (15)	87 (1)	1 (1)	91 (17)
99Y183	MPQ	9730 (3)	11.9 (16)	3.8 (10)	95 (12)	5 (11)	87 (9)
98Y174	MPQ	9650 (4)	11.4 (18)	3.0 (15)	90 (8)	11 (13)	87 (11)
96Y457	L	9600 (5)	12.5 (10)	4.5 (1)	93 (10)	1 (1)	88 (12)
99Y205	W	9390 (6)	15.7 (2)	3.5 (12)	94 (11)	7 (12)	89 (14)
97Y255	M	9380 (7)	12.0 (14)	4.5 (1)	97 (14)	29 (17)	90 (16)
L-205	REX	9370 (8)	12.5 (11)	4.0 (4)	92 (9)	1 (1)	83 (4)
CM-101	WX	9300 (9)	13.8 (4)	3.0 (15)	90 (6)	2 (8)	88 (13)
CH-201	SPQ	9270 (10)	14.4 (3)	3.0 (15)	97 (15)	17 (15)	91 (17)
M-103	M	9230 (11)	12.6 (8)	4.0 (4)	89 (4)	33 (18)	90 (15)
M-104	M	9220 (12)	12.6 (9)	4.5 (1)	88 (3)	14 (14)	86 (8)
99Y042	REX	9190 (13)	12.1 (13)	3.3 (14)	87 (2)	1 (1)	79 (1)
99-330	SPQ	9120 (14)	15.9 (1)	4.0 (4)	89 (4)	22 (16)	84 (6)
M-205	M	9090 (15)	13.2 (6)	4.0 (4)	106 (18)	1 (1)	82 (3)
L-204	L	8980 (16)	12.8 (7)	4.0 (4)	90 (6)	2 (8)	83 (5)
M-204	M	8730 (17)	12.1 (12)	4.0 (4)	103 (17)	1 (1)	81 (2)
97Y476	L	8510 (18)	11.9 (15)	3.3 (13)	95 (13)	1 (1)	86 (7)
MEAN		9300	12.9	3.7	93	8	86
CV		3.7	5.9	9.5	1.1	196.6	4.5
LSD (.05)		490	1.1	0.5	2		6

**Preliminary Lines**

99Y225	M	10460 (1)	11.0 (24)	3.5 (11)	91 (17)	10 (18)	97 (24)
99Y212	M	9940 (2)	12.4 (10)	4.0 (2)	89 (9)	1 (1)	89 (15)
97Y187	MPQ	9830 (3)	14.7 (1)	4.0 (2)	96 (24)	13 (19)	91 (19)
98Y189	S	9640 (4)	12.2 (15)	3.0 (15)	93 (21)	16 (20)	86 (8)
99Y213	M	9600 (5)	12.3 (13)	3.5 (11)	89 (10)	6 (17)	89 (14)
99Y469	L	9540 (6)	11.8 (19)	3.0 (15)	90 (12)	1 (1)	85 (6)
99Y259	M	9510 (7)	11.5 (22)	3.5 (11)	92 (19)	1 (1)	85 (6)
99Y234	M	9500 (8)	12.9 (7)	4.0 (2)	88 (8)	1 (1)	92 (20)
99Y241	M	9420 (9)	12.6 (9)	4.0 (2)	90 (12)	1 (1)	90 (17)
98Y214	M	9400 (10)	13.1 (5)	3.5 (11)	93 (21)	1 (1)	88 (11)
99Y410	M	9360 (11)	12.3 (12)	3.0 (15)	90 (12)	1 (1)	83 (4)
97Y469	TQ	9350 (12)	12.4 (10)	3.0 (15)	92 (19)	1 (1)	95 (23)
99Y208	M	9320 (13)	13.0 (6)	4.0 (2)	88 (6)	48 (23)	88 (12)
99Y233	M	9250 (14)	12.2 (14)	4.0 (2)	88 (6)	1 (1)	87 (9)
99-287	SPQ	9110 (15)	14.7 (1)	3.0 (15)	90 (12)	1 (1)	90 (18)
99Y235	M	9080 (16)	13.6 (3)	4.0 (2)	89 (10)	41 (22)	93 (21)
98Y452	REX	9020 (17)	11.8 (18)	3.0 (15)	85 (5)	1 (1)	82 (3)
97Y517	REX	8920 (18)	11.7 (21)	3.0 (15)	90 (16)	1 (1)	82 (2)
99Y457	REX	8870 (19)	11.9 (17)	4.0 (2)	85 (3)	1 (1)	88 (12)
99Y459	REX	8840 (20)	12.1 (16)	3.0 (15)	85 (4)	1 (1)	89 (15)
99Y473	L	8770 (21)	11.7 (20)	3.0 (15)	91 (17)	1 (1)	84 (5)
99-363	MPQ	8760 (22)	13.5 (4)	4.5 (1)	83 (1)	97 (24)	93 (22)
99Y476	L	8640 (23)	11.5 (22)	3.0 (15)	93 (21)	1 (1)	79 (1)
99-403	MPQ	8510 (24)	12.8 (8)	4.0 (2)	83 (2)	26 (21)	87 (10)
MEAN		9280	12.5	3.5	89	11	88
CV		3.9	3.3	11.8	0.6	169.5	4.3
LSD (.05)		740	0.9	0.9	1	40	8

Planting date: May 18 Harvest date: October23.

S,SPQ = short; M,MPQ = medium; L,TQ,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 7. 2000 Very Early Rice Variety Test - San Joaquin County (Brumley Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
M-104	M	8260 (1)	15.0 (13)	4.5 (3)	92 (5)	6 (13)	78 (9)
S-102	S	8180 (2)	16.0 (9)	3.8 (11)	88 (2)	34 (16)	84 (18)
97Y255	M	7870 (3)	14.2 (15)	5.0 (1)	99 (12)	17 (15)	81 (15)
98Y174	MPQ	7810 (4)	14.0 (17)	3.5 (13)	92 (5)	46 (17)	78 (9)
M-103	M	7710 (5)	14.4 (14)	4.3 (5)	88 (1)	8 (14)	79 (13)
96Y457	L	7400 (6)	13.8 (18)	4.3 (5)	92 (7)	1 (1)	79 (12)
L-204	L	7370 (7)	15.4 (10)	3.8 (12)	93 (9)	1 (1)	74 (5)
99Y183	MPQ	6860 (8)	15.1 (11)	4.3 (5)	102 (13)	1 (1)	83 (17)
CM-101	WX	6750 (9)	17.5 (3)	4.3 (5)	89 (4)	50 (18)	79 (13)
L-205	REX	6720 (10)	15.0 (12)	4.0 (9)	96 (11)	1 (1)	77 (8)
M-202	M	6670 (11)	16.1 (8)	4.5 (3)	104 (15)	1 (1)	78 (9)
99Y042	REX	6420 (12)	14.2 (15)	3.0 (18)	89 (3)	1 (1)	69 (1)
99Y205	W	6390 (13)	19.9 (1)	3.5 (13)	92 (7)	3 (11)	81 (15)
M-204	M	6280 (14)	16.2 (7)	3.5 (13)	106 (16)	1 (1)	76 (7)
99-330	SPQ	6200 (15)	17.3 (5)	3.5 (13)	93 (10)	3 (11)	74 (6)
97Y476	L	6060 (16)	16.7 (6)	3.3 (17)	110 (17)	1 (1)	70 (2)
CH-201	SPQ	5250 (17)	17.3 (4)	4.8 (2)	104 (14)	1 (1)	73 (4)
M-205	M	4970 (18)	19.5 (2)	4.0 (9)	114 (18)	1 (1)	71 (3)
MEAN		6840	16	4	97	10	77
CV		11.1	7	11.5	1.6	197.5	3.9
LSD (.05)		1070	1.6	0.6	2	28	4

**Preliminary Lines**

99Y208	M	8680 (1)	15.2 (5)	3.0 (12)	88 (7)	2 (12)	84 (20)
99Y233	M	8270 (2)	15.0 (6)	4.0 (2)	87 (2)	2 (12)	76 (7)
99Y212	M	8270 (3)	14.7 (10)	4.0 (2)	88 (5)	1 (1)	77 (8)
99Y473	L	8220 (4)	14.0 (18)	3.0 (12)	90 (13)	1 (1)	84 (20)
99Y213	M	8180 (5)	14.2 (15)	3.5 (10)	89 (11)	18 (23)	81 (17)
99Y241	M	8100 (6)	15.3 (4)	4.0 (2)	91 (14)	1 (1)	80 (16)
98Y214	M	8080 (7)	14.9 (9)	3.5 (10)	94 (18)	10 (16)	79 (12)
99Y235	M	7960 (8)	14.6 (11)	3.0 (12)	88 (7)	1 (1)	79 (12)
99Y259	M	7880 (9)	14.0 (20)	3.0 (12)	95 (19)	1 (1)	74 (4)
99-403	MPQ	7650 (10)	13.9 (21)	4.0 (2)	87 (3)	3 (14)	81 (17)
99Y234	M	7640 (11)	15.0 (6)	4.0 (2)	86 (1)	17 (22)	77 (8)
97Y469	TQ	7530 (12)	13.9 (23)	4.0 (2)	93 (16)	1 (1)	79 (14)
99-363	MPQ	7480 (13)	14.5 (12)	4.5 (1)	88 (7)	1 (1)	79 (14)
99Y469	L	7350 (14)	15.0 (8)	3.0 (12)	99 (22)	1 (1)	66 (1)
97Y187	MPQ	7350 (15)	17.6 (2)	3.0 (12)	101 (24)	15 (19)	83 (19)
99Y225	M	7330 (16)	13.9 (21)	4.0 (2)	99 (23)	15 (19)	86 (23)
98Y189	S	7320 (17)	18.8 (1)	3.0 (12)	96 (20)	1 (1)	71 (2)
99Y457	REX	7060 (18)	14.0 (18)	3.0 (12)	88 (5)	11 (18)	85 (22)
97Y517	REX	7040 (19)	14.2 (15)	2.5 (24)	89 (10)	1 (1)	72 (3)
99Y410	M	7000 (20)	14.4 (13)	3.0 (12)	91 (14)	10 (16)	77 (8)
99Y476	L	6860 (21)	13.6 (24)	3.0 (12)	98 (21)	16 (21)	74 (5)
98Y452	REX	6500 (22)	14.1 (17)	3.0 (12)	89 (11)	1 (1)	75 (6)
99-287	SPQ	6470 (23)	17.1 (3)	3.0 (12)	93 (16)	80 (24)	77 (8)
99Y459	REX	6200 (24)	14.2 (14)	3.5 (9)	87 (3)	6 (15)	86 (24)
MEAN		7520	14.8	3.4	91	9	78
CV		7.9	2.2	9.3	1.2	91.2	3.9
LSD (.05)		1230	0.7	0.7	2	17	6

Planting date: May 9 Harvest date: October 15.

S,SPQ = short; M,MPQ = medium; L,TQ,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 8. 2000 Very Early Rice Lines and Varieties Grain Yield (lb/acre @14% moisture) at Four Locations

**ADVANCED LINES AND VARIETIES**

Variety	Grain		Biggs	Yolo	Sutter	San Joaquin
	Type	Average	Biggs RES	Geer Ranch	Lauppe Ranch	Brumley Ranch
S-102	S	9300 ( 1)	9390 (11)	9870 ( 3)	9750 ( 2)	8180 ( 2)
96Y457	L	9250 ( 2)	10040 ( 6)	9970 ( 1)	9600 ( 5)	7400 ( 6)
98Y174	MPQ	9230 ( 3)	9950 ( 7)	9500 ( 8)	9650 ( 4)	7810 ( 4)
99Y205	W	9180 ( 4)	11180 ( 1)	9750 ( 6)	9390 ( 6)	6390 (13)
M-104	M	9140 ( 5)	9720 (10)	9340 (10)	9220 (12)	8260 ( 1)
97Y255	M	8990 ( 6)	8760 (16)	9970 ( 2)	9380 ( 7)	7870 ( 3)
M-202	M	8950 ( 7)	9380 (12)	9820 ( 4)	9940 ( 1)	6670 (11)
L-205	REX	8890 ( 8)	10500 ( 3)	8970 (15)	9370 ( 8)	6720 (10)
M-103	M	8850 ( 9)	9160 (14)	9290 (11)	9230 (11)	7710 ( 5)
99Y042	REX	8840 (10)	10460 ( 4)	9270 (13)	9190 (13)	6420 (12)
M-204	M	8810 (11)	10670 ( 2)	9570 ( 7)	8730 (17)	6280 (14)
99Y183	MPQ	8740 (12)	9090 (15)	9270 (12)	9730 ( 3)	6860 ( 8)
L-204	L	8710 (13)	9330 (13)	9170 (14)	8980 (16)	7370 ( 7)
CM-101	WX	8610 (14)	8590 (17)	9800 ( 5)	9300 ( 9)	6750 ( 9)
99-330	SPQ	8450 (15)	9940 ( 8)	8520 (17)	9120 (14)	6200 (15)
M-205	M	8320 (16)	9850 ( 9)	9360 ( 9)	9090 (15)	4970 (18)
97Y476	L	8290 (17)	10090 ( 5)	8490 (18)	8510 (18)	6060 (16)
CH-201	SPQ	7900 (18)	8460 (18)	8620 (16)	9270 (10)	5250 (17)
MEAN		8800	9700	9360	9300	6840
CV		6.4	5.2	6.2	3.7	11.1
LSD (.05)		390	720	820	490	1070

**PRELIMINARY LINES**

99Y208	M	9520 ( 1)	9880 (13)	10190 ( 3)	9320 (13)	8680 ( 1)
99Y233	M	9490 ( 2)	10190 ( 9)	10250 ( 1)	9250 (14)	8270 ( 2)
99Y241	M	9470 ( 3)	10370 ( 6)	9970 ( 6)	9420 ( 9)	8100 ( 6)
99Y234	M	9450 ( 4)	10620 ( 2)	10020 ( 4)	9500 ( 8)	7640 (11)
99Y212	M	9450 ( 5)	9750 (14)	9830 ( 8)	9940 ( 2)	8270 ( 3)
98Y214	M	9320 ( 6)	10010 (12)	9780 ( 9)	9400 (10)	8080 ( 7)
99Y213	M	9280 ( 7)	9500 (16)	9840 ( 7)	9600 ( 5)	8180 ( 5)
99Y259	M	9260 ( 8)	10220 ( 7)	9450 (10)	9510 ( 7)	7880 ( 9)
98Y189	S	9200 ( 9)	10500 ( 5)	9320 (14)	9640 ( 4)	7320 (17)
97Y187	MPQ	9180 (10)	9580 (15)	9980 ( 5)	9830 ( 3)	7350 (15)
99Y235	M	9130 (11)	10130 (10)	9360 (11)	9080 (16)	7960 ( 8)
99Y469	L	9120 (12)	10930 ( 1)	8670 (19)	9540 ( 6)	7350 (14)
99Y225	M	8890 (13)	8460 (23)	9330 (12)	10460 ( 1)	7330 (16)
99Y410	M	8870 (14)	8860 (21)	10250 ( 2)	9360 (11)	7000 (20)
97Y469	TQ	8800 (15)	9490 (17)	8840 (17)	9350 (12)	7530 (12)
99Y473	L	8800 (16)	8880 (20)	9320 (13)	8770 (21)	8220 ( 4)
97Y517	REX	8790 (17)	10510 ( 3)	8690 (18)	8920 (18)	7040 (19)
99Y457	REX	8750 (18)	10120 (11)	8940 (16)	8870 (19)	7060 (18)
99-403	MPQ	8540 (19)	9430 (18)	8580 (20)	8510 (24)	7650 (10)
99Y476	L	8430 (20)	9250 (19)	8980 (15)	8640 (23)	6860 (21)
98Y452	REX	8400 (21)	10510 ( 4)	7580 (24)	9020 (17)	6500 (22)
99Y459	REX	8340 (22)	10190 ( 8)	8120 (23)	8840 (20)	6200 (24)
99-363	MPQ	8130 (23)	7890 (24)	8400 (21)	8760 (22)	7480 (13)
99-287	SPQ	8060 (24)	8530 (22)	8150 (22)	9110 (15)	6470 (23)
MEAN		8940	9740	9240	9280	7520
CV		4.8	3.8	3.8	3.9	7.9
LSD (.05)		430	760	730	740	1230

S,SPQ = short; M,MPQ = medium; L,REX,TQ = long; WX = waxy.

Numbers in parentheses indicate relative rank in column.

Table 9. Grain Yield (lb/acre @14% moisture) Summary of Very Early Rice Varieties by Location and Year (1996-2000)

Location	Year	Calmochi				
		101	S-102	<b>M-202</b>	M-103	M-104
Butte (RES)	1996	8150	9410	<b>8570</b>	8570	9340
	1997	9800	11490	<b>10620</b>	9130	10540
	1998	8320	9030	<b>8810</b>	8480	9610
	1999	10200	11140	<b>10480</b>	10330	10550
	2000	8590	9390	<b>9380</b>	9160	9720
Location Mean		9012	10092	<b>9572</b>	9134	9952
San Joaquin	1996	9690	9590	<b>9170</b>	8650	9390
	1997	9870	10130	<b>9370</b>	9630	9590
	1998	8270	9070	<b>7110</b>	8120	8340
	1999	8860	8260	-	7980	5620
	2000	6750	8180	<b>6670</b>	7710	8260
Location Mean		8688	9046	<b>8080</b>	8418	8240
Sutter	1996	7370	7800	<b>9680</b>	8360	8420
	1997	9060	9270	<b>9720</b>	8510	8760
	1998	6520	7240	<b>7090</b>	6430	7240
	1999	9670	10150	<b>9990</b>	9670	9260
	2000	9300	9750	<b>9940</b>	9230	9220
Location Mean		8384	8842	<b>9284</b>	8440	8580
Yolo	1996	9800	8540	<b>9850</b>	9200	10230
	1997	11430	11090	<b>12450</b>	9700	11530
	1998	8540	9350	<b>9510</b>	7780	8820
	1999	9960	10290	<b>7420</b>	9960	9020
	2000	9800	9870	<b>9820</b>	9290	9340
Location Mean		9906	9828	<b>9810</b>	9186	9788
Loc/Years Mean		8998	9452	<b>9245</b>	8795	9140
<b>Yield % M-202</b>		<b>97.3</b>	<b>102.2</b>	<b>100.0</b>	<b>95.1</b>	<b>98.9</b>
Number of Tests		20	20	<b>19</b>	20	20

Table 10. 2000 Early Rice Variety Test - Butte County (Biggs-RES)

<b>Advanced Lines and Varieties</b>							
Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
96Y480	L	11410 (1)	17.7 (9)	4.9 (6)	76 (8)	1 (1)	90 (5)
M-204	M	11200 (2)	20.8 (4)	4.7 (15)	82 (17)	1 (1)	97 (13)
M-205	M	10870 (3)	22.6 (1)	4.9 (8)	83 (19)	1 (1)	95 (8)
99Y041	L	10740 (4)	17.7 (10)	4.9 (6)	79 (13)	1 (1)	99 (16)
98Y242	M	10740 (5)	21.0 (3)	4.8 (12)	75 (5)	3 (15)	99 (17)
99Y278	MPQ	10420 (6)	22.1 (2)	4.8 (14)	81 (16)	3 (15)	96 (12)
L-205	L	10380 (7)	16.2 (17)	4.8 (10)	79 (13)	1 (1)	94 (7)
M-104	M	10370 (8)	16.5 (16)	4.9 (3)	71 (1)	1 (1)	96 (11)
L-204	L	10270 (9)	16.0 (18)	4.9 (3)	76 (8)	1 (1)	88 (1)
M-202	M	10140 (10)	18.8 (6)	4.9 (3)	78 (10)	1 (1)	99 (17)
M-103	M	10080 (11)	17.8 (8)	4.7 (15)	75 (4)	1 (1)	95 (9)
99Y087	REX	9950 (12)	16.8 (15)	4.6 (19)	79 (12)	1 (1)	89 (4)
99-270	SPQ	9880 (13)	18.1 (7)	4.6 (17)	75 (7)	1 (1)	89 (2)
S-102	S	9710 (14)	15.4 (19)	4.8 (10)	74 (2)	3 (15)	98 (15)
CM-101	WX	9200 (15)	16.9 (13)	4.9 (8)	74 (3)	11 (19)	97 (13)
99-291	SPQ	9200 (16)	16.9 (12)	4.8 (12)	75 (5)	1 (1)	89 (3)
CH-201	SPQ	9020 (17)	17.7 (11)	5.0 (1)	81 (15)	6 (18)	93 (6)
99-435	MPQ	8600 (18)	19.8 (5)	4.9 (2)	78 (10)	1 (1)	104 (19)
CT-201	BAS	8490 (19)	16.8 (14)	4.6 (17)	82 (17)	1 (1)	96 (10)
MEAN		10040	18.2	4.8	77	2	95
CV		4.4	8.1	2	1.4	231.9	3
LSD (.05)		620	2.1	0.1	2		4
<b>Preliminary Lines</b>							
99Y464	L	11120 (1)	17.2 (22)	4.7 (17)	79 (8)	1 (1)	93 (10)
99Y397	M	10990 (2)	20.1 (7)	4.8 (7)	79 (13)	1 (1)	99 (20)
99Y343	BS	10760 (3)	18.0 (17)	4.7 (19)	77 (5)	6 (18)	98 (18)
99Y204	WX	10760 (4)	19.5 (9)	4.7 (10)	74 (3)	6 (18)	98 (18)
99Y263	M	10700 (5)	20.6 (2)	4.8 (4)	80 (18)	1 (1)	97 (14)
99Y530	L	10690 (6)	18.0 (18)	4.4 (22)	79 (16)	1 (1)	93 (9)
99Y376	M	10620 (7)	20.5 (3)	4.7 (10)	80 (18)	1 (1)	98 (17)
99Y377	M	10590 (8)	20.4 (4)	4.7 (10)	79 (11)	1 (1)	95 (13)
99Y374	M	10560 (9)	20.7 (1)	4.8 (7)	81 (21)	1 (1)	97 (14)
97Y346	BS	10510 (10)	19.6 (8)	4.8 (4)	80 (18)	1 (1)	89 (4)
99Y267	M	10450 (11)	19.3 (11)	4.8 (4)	78 (6)	1 (1)	92 (8)
99Y238	M	10290 (12)	19.5 (10)	4.7 (10)	74 (4)	8 (20)	99 (20)
98Y558	WX	10280 (13)	18.3 (14)	4.9 (1)	79 (16)	1 (1)	91 (6)
99Y243	M	10220 (14)	20.1 (6)	4.7 (17)	79 (11)	1 (1)	94 (11)
99Y217	M	10120 (15)	17.7 (19)	4.7 (16)	74 (2)	1 (1)	95 (12)
99Y219	M	10080 (16)	18.3 (15)	4.8 (7)	73 (1)	1 (1)	85 (1)
99Y528	L	10010 (17)	17.5 (20)	4.6 (20)	82 (22)	1 (1)	88 (2)
99Y454	REX	9990 (18)	18.1 (16)	4.5 (21)	79 (13)	1 (1)	98 (16)
99Y541	L	9970 (19)	17.4 (21)	4.7 (10)	79 (8)	1 (1)	89 (3)
99Y413	M	9880 (20)	20.2 (5)	4.7 (10)	79 (13)	1 (1)	99 (22)
99Y323	SPQ	9140 (21)	18.8 (13)	4.8 (3)	79 (8)	23 (21)	89 (4)
99-265	SPQ	9000 (22)	18.9 (12)	4.9 (2)	78 (7)	31 (22)	91 (7)
MEAN		10310	19.0	4.7	78	4	94
CV		3.5	5.8	3.6	1.5	264.9	1.6
LSD (.05)		750	2.3		2		3

Planting dates: May 13, May 24 (reps 1&amp;2, 3&amp;4 respectively).

S,SPQ,BS = short; M,MPQ = medium; L,BAS,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 11. 2000 Early Rice Variety Test - Butte County (Skinner Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield	Grain	Seedling	Days to	Lodging (1-99)	Plant Height (cm)
		at 14% Moisture lbs/acre	Moisture at Harvest (%)	Vigor (1-5)	50% Heading		
96Y480	L	9530 (1)	17.0 (16)	4.8 (1)	80 (8)	24 (4)	94 (12)
M-205	M	9270 (2)	17.0 (17)	3.3 (15)	85 (18)	63 (9)	89 (4)
98Y242	M	8570 (3)	18.3 (11)	4.0 (7)	79 (7)	87 (10)	95 (15)
M-104	M	8450 (4)	17.8 (12)	4.3 (2)	73 (1)	99 (13)	95 (16)
99Y041	L	8430 (5)	19.0 (7)	4.3 (2)	81 (11)	56 (7)	94 (11)
L-205	L	8290 (6)	16.8 (18)	3.8 (11)	83 (14)	8 (2)	88 (2)
M-204	M	8250 (7)	17.0 (15)	3.5 (14)	83 (14)	60 (8)	93 (10)
99-291	SPQ	8230 (8)	18.6 (10)	3.0 (18)	78 (6)	99 (13)	91 (9)
99-270	SPQ	8190 (9)	21.4 (1)	3.0 (18)	76 (3)	34 (5)	90 (6)
L-204	L	8080 (10)	17.3 (14)	4.0 (7)	82 (12)	23 (3)	89 (3)
S-102	S	8000 (11)	18.7 (9)	3.8 (11)	75 (2)	98 (12)	94 (13)
CM-101	WX	7950 (12)	19.1 (6)	3.8 (11)	78 (5)	99 (13)	97 (19)
99Y278	MPQ	7760 (13)	20.0 (2)	4.0 (7)	83 (14)	91 (11)	89 (4)
M-202	M	7710 (14)	19.2 (5)	4.3 (2)	80 (8)	99 (13)	94 (14)
M-103	M	7570 (15)	19.0 (7)	3.3 (15)	77 (4)	99 (13)	96 (17)
CH-201	SPQ	7540 (16)	19.8 (3)	4.3 (2)	82 (12)	99 (13)	90 (7)
99Y087	REX	7370 (17)	15.0 (19)	4.0 (7)	83 (14)	45 (6)	86 (1)
99-435	MPQ	7020 (18)	17.4 (13)	4.3 (2)	81 (10)	99 (13)	97 (18)
CT-201	BAS	6650 (19)	19.8 (4)	3.3 (15)	87 (19)	7 (1)	90 (7)
MEAN		8050	18.3	3.8	80	68	92
CV		9.8	5.8	10.4	1	26.3	4.1
LSD (.05)		1110	1.5	0.6	1	25	5

**Preliminary Lines**

99Y243	M	9690 (1)	17.1 (9)	3.0 (16)	80 (5)	18 (3)	85 (3)
99Y267	M	9360 (2)	15.4 (17)	4.0 (1)	82 (13)	65 (12)	88 (7)
99Y530	L	9280 (3)	17.5 (8)	3.5 (9)	82 (13)	1 (1)	91 (14)
99Y219	M	9160 (4)	15.8 (13)	4.0 (1)	77 (2)	40 (7)	84 (2)
97Y346	BS	8880 (5)	18.7 (5)	3.5 (9)	83 (15)	50 (10)	90 (12)
99Y397	M	8860 (6)	15.7 (14)	3.5 (9)	86 (21)	80 (16)	99 (22)
99Y374	M	8850 (7)	15.1 (18)	4.0 (1)	83 (18)	90 (17)	90 (10)
99Y376	M	8850 (8)	16.3 (10)	3.0 (16)	83 (15)	63 (11)	90 (10)
99Y217	M	8830 (9)	15.7 (14)	3.0 (16)	80 (3)	28 (4)	83 (1)
99Y204	WX	8780 (10)	21.0 (1)	4.0 (1)	76 (1)	99 (20)	94 (20)
99Y541	L	8660 (11)	15.9 (12)	3.5 (9)	83 (15)	46 (9)	86 (4)
98Y558	WX	8610 (12)	15.0 (20)	3.5 (9)	84 (19)	45 (8)	91 (13)
99Y263	M	8430 (13)	14.8 (21)	4.0 (1)	82 (10)	93 (18)	88 (7)
99Y413	M	8370 (14)	18.7 (6)	4.0 (1)	82 (10)	95 (19)	96 (21)
99Y377	M	8310 (15)	16.2 (11)	4.0 (1)	84 (19)	28 (4)	92 (15)
99Y528	L	8280 (16)	13.9 (22)	3.0 (16)	87 (22)	78 (15)	92 (15)
99Y454	REX	8260 (17)	15.0 (19)	3.0 (16)	82 (10)	28 (4)	93 (18)
99Y238	M	7960 (18)	19.5 (3)	3.5 (9)	80 (5)	73 (14)	93 (19)
99Y343	BS	7880 (19)	18.5 (7)	3.0 (16)	81 (9)	68 (13)	92 (15)
99Y464	L	7860 (20)	15.5 (16)	3.0 (16)	80 (5)	3 (2)	89 (9)
99-265	SPQ	5990 (21)	19.1 (4)	4.0 (1)	80 (5)	99 (20)	86 (5)
99Y323	SPQ	5070 (22)	20.2 (2)	3.5 (9)	80 (3)	99 (20)	88 (6)
MEAN		8370	16.8	3.5	81	58	90
CV		9.8	7.7	13	0.8	47.7	4.7
LSD (.05)		1710	2.7		1	58	

Planting date: May 17 Harvest date: September 28.

S,SPQ,BS = short; M,MPQ = medium; L,BAS,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 12. 2000 Early Rice Variety Test - Colusa County (Canal Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
M-205	M	10570 ( 1)	18.6 (12)	3.9 (9)	97 (18)	65 ( 8)	99 (15)
96Y480	L	10210 ( 2)	16.4 (17)	3.9 (9)	87 ( 7)	6 ( 2)	95 ( 6)
M-204	M	10170 ( 3)	22.6 ( 2)	3.5 (16)	94 (15)	71 ( 9)	97 (10)
L-204	L	9520 ( 4)	16.4 (19)	4.0 (3)	88 ( 8)	18 ( 3)	92 ( 3)
99Y087	REX	9480 ( 5)	16.7 (15)	3.5 (16)	92 (13)	57 ( 6)	91 ( 2)
M-202	M	9350 ( 6)	19.9 (10)	4.1 (2)	93 (14)	65 ( 7)	98 (12)
99-270	SPQ	9150 ( 7)	20.8 ( 8)	3.5 (16)	89 (10)	18 ( 4)	90 ( 1)
L-205	L	9110 ( 8)	16.6 (16)	3.6 (15)	89 (11)	37 ( 5)	93 ( 4)
99Y278	MPQ	9100 ( 9)	20.9 ( 6)	4.0 (3)	97 (17)	89 (10)	98 (12)
98Y242	M	8400 (10)	20.9 ( 7)	4.4 (1)	87 ( 6)	99 (16)	102 (19)
M-103	M	7780 (11)	18.3 (13)	3.8 (14)	83 ( 3)	98 (14)	98 (14)
CH-201	SPQ	7540 (12)	21.5 ( 4)	3.9 (9)	91 (12)	96 (12)	96 ( 7)
99Y041	L	7020 (13)	19.4 (11)	3.9 (9)	89 ( 9)	99 (15)	101 (17)
CM-101	WX	6950 (14)	20.1 ( 9)	4.0 (3)	83 ( 4)	95 (11)	97 (10)
99-435	MPQ	6870 (15)	23.5 ( 1)	4.0 (3)	94 (15)	99 (16)	102 (18)
CT-201	BAS	6840 (16)	16.4 (18)	3.9 (9)	99 (19)	3 ( 1)	96 ( 9)
M-104	M	6680 (17)	17.6 (14)	4.0 (3)	81 ( 1)	97 (13)	96 ( 7)
S-102	S	6340 (18)	21.6 ( 3)	4.0 (3)	82 ( 2)	99 (16)	99 (15)
99-291	SPQ	6210 (19)	21.3 ( 5)	3.5 (19)	87 ( 5)	99 (16)	95 ( 5)
MEAN		8280	19.4	3.9	90	69	96
CV		10.6	10.4	5.2	0.9	29.7	3.3
LSD (.05)		1240	2.9	0.3	1	29	4

**Preliminary Lines**

99Y397	M	11940 ( 1)	22.3 ( 5)	4.0 (2)	96 (19)	60 (12)	99 (18)
99Y243	M	11360 ( 2)	19.5 (11)	4.0 (2)	96 (19)	1 ( 1)	95 ( 8)
99Y530	L	10850 ( 3)	17.7 (19)	3.8 (14)	89 ( 8)	1 ( 1)	91 ( 2)
99Y219	M	10730 ( 4)	19.8 (10)	4.3 (1)	87 ( 3)	90 (16)	92 ( 3)
99Y263	M	10660 ( 5)	18.9 (13)	3.8 (14)	94 (17)	45 (10)	96 (10)
99Y374	M	10600 ( 6)	22.2 ( 6)	4.0 (2)	96 (19)	38 ( 9)	97 (14)
98Y558	WX	10460 ( 7)	17.6 (20)	4.0 (2)	93 (14)	63 (14)	92 ( 3)
99Y377	M	10410 ( 8)	19.1 (12)	3.5 (20)	96 (19)	26 ( 5)	94 ( 7)
99Y376	M	10410 ( 9)	18.4 (14)	4.0 (2)	95 (18)	60 (12)	101 (20)
99Y464	L	10410 (10)	17.8 (18)	4.0 (2)	89 ( 8)	30 ( 6)	93 ( 5)
99Y541	L	10320 (11)	16.7 (21)	4.0 (2)	91 (11)	1 ( 1)	93 ( 5)
99Y217	M	10150 (12)	18.2 (15)	3.8 (14)	88 ( 6)	33 ( 8)	96 (10)
99Y454	REX	9730 (13)	17.9 (16)	3.8 (13)	89 ( 8)	70 (15)	97 (13)
99Y267	M	9680 (14)	17.9 (17)	4.0 (2)	92 (13)	31 ( 7)	99 (17)
99Y238	M	9230 (15)	20.1 ( 9)	3.8 (14)	87 ( 4)	98 (18)	101 (21)
97Y346	BS	9040 (16)	21.8 ( 7)	4.0 (2)	91 (12)	45 (10)	96 ( 9)
99Y528	L	8960 (17)	15.8 (22)	3.5 (20)	93 (16)	1 ( 1)	88 ( 1)
99Y413	M	8900 (18)	21.1 ( 8)	4.0 (2)	93 (14)	93 (17)	98 (15)
99Y204	WX	8750 (19)	24.1 ( 1)	4.0 (2)	84 ( 1)	99 (19)	100 (19)
99Y343	BS	8210 (20)	23.6 ( 2)	3.5 (20)	88 ( 5)	99 (19)	104 (22)
99Y323	SPQ	6490 (21)	22.7 ( 3)	3.8 (14)	88 ( 6)	99 (19)	96 (10)
99-265	SPQ	6490 (22)	22.6 ( 4)	3.8 (14)	86 ( 2)	99 (19)	98 (15)
MEAN		9720	19.8	3.9	91	54	96
CV		8	7.3	5.4	0.6	39.2	3.4
LSD (.05)		1620	3		1	44	7

Planting date: May 8 Harvest date: October 13.

S,SPQ,BS = short; M,MPQ = medium; L,BAS,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 13. 2000 Early Rice Variety Test - Yuba County (Quad 4 Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
M-205	M	9520 (1)	11.9 (12)	3.8 (16)	95 (19)	1 (1)	86 (9)
M-204	M	9400 (2)	11.8 (15)	4.0 (4)	92 (14)	17 (9)	90 (16)
98Y242	M	9330 (3)	11.6 (17)	4.8 (1)	87 (6)	55 (13)	91 (17)
M-202	M	9210 (4)	11.9 (14)	4.3 (3)	93 (15)	29 (11)	94 (18)
99Y278	MPQ	9060 (5)	12.4 (9)	4.0 (4)	94 (17)	58 (14)	90 (15)
96Y480	L	9030 (6)	12.3 (11)	4.8 (1)	88 (8)	1 (1)	87 (10)
99-291	SPQ	8870 (7)	14.2 (3)	3.0 (18)	86 (5)	95 (19)	84 (5)
99Y041	L	8850 (8)	12.8 (7)	4.0 (4)	89 (10)	25 (10)	89 (14)
99-270	SPQ	8610 (9)	14.9 (1)	3.0 (18)	88 (9)	1 (1)	82 (2)
S-102	S	8590 (10)	14.4 (2)	4.0 (4)	81 (1)	16 (8)	88 (11)
99-435	MPQ	8570 (11)	11.9 (12)	4.0 (4)	93 (16)	51 (12)	96 (19)
M-104	M	8450 (12)	11.5 (18)	4.0 (4)	83 (4)	71 (17)	86 (7)
CH-201	SPQ	8390 (13)	13.6 (4)	4.0 (4)	90 (13)	70 (16)	85 (6)
L-205	L	8290 (14)	12.8 (6)	4.0 (4)	89 (10)	2 (6)	89 (12)
L-204	L	8240 (15)	12.4 (9)	4.0 (4)	88 (7)	1 (1)	84 (3)
M-103	M	8210 (16)	12.4 (8)	3.8 (16)	83 (3)	74 (18)	89 (12)
CM-101	WX	8170 (17)	13.1 (5)	4.0 (4)	82 (2)	68 (15)	86 (8)
99Y087	REX	7980 (18)	11.0 (19)	4.0 (4)	89 (12)	2 (6)	81 (1)
CT-201	BAS	6840 (19)	11.7 (16)	4.0 (4)	94 (17)	1 (1)	84 (4)
MEAN		8610	12.5	4	88	34	87
CV		3.9	5	8.1	1	43	2.8
LSD (.05)		470	0.9	0.5	1	20	3

**Preliminary Lines**

99Y376	M	10110 (1)	11.2 (14)	4.5 (2)	91 (18)	15 (12)	89 (17)
99Y263	M	9560 (2)	10.7 (21)	4.0 (5)	90 (13)	11 (11)	88 (14)
99Y413	M	9530 (3)	11.0 (17)	3.5 (13)	92 (19)	70 (18)	89 (18)
99Y528	L	9490 (4)	11.6 (10)	3.5 (13)	92 (19)	1 (1)	83 (4)
99Y243	M	9470 (5)	11.0 (17)	4.0 (5)	93 (22)	1 (1)	87 (11)
98Y558	WX	9280 (6)	11.1 (16)	4.5 (2)	90 (13)	50 (15)	85 (7)
99Y374	M	9160 (7)	11.1 (15)	3.5 (13)	90 (13)	18 (13)	86 (8)
99Y397	M	9150 (8)	11.5 (11)	4.0 (5)	90 (16)	10 (10)	90 (19)
99Y377	M	9140 (9)	12.2 (8)	4.0 (5)	92 (21)	1 (1)	88 (16)
99Y267	M	9100 (10)	11.4 (12)	5.0 (1)	90 (16)	1 (1)	86 (8)
99Y454	REX	8980 (11)	12.2 (7)	3.5 (12)	89 (9)	70 (18)	91 (22)
99Y541	L	8880 (12)	10.6 (22)	3.5 (13)	89 (9)	1 (1)	79 (2)
99Y204	WX	8830 (13)	14.8 (1)	4.5 (2)	84 (1)	63 (17)	90 (19)
99Y343	SBS	8820 (14)	13.5 (5)	4.0 (5)	87 (3)	92 (20)	90 (19)
99-265	SPQ	8720 (15)	14.8 (2)	3.0 (20)	87 (6)	97 (21)	86 (10)
99Y464	L	8660 (16)	12.5 (6)	3.0 (20)	86 (2)	43 (14)	87 (11)
99Y217	M	8640 (17)	10.9 (20)	3.5 (13)	87 (3)	1 (1)	83 (3)
99Y323	SPQ	8570 (18)	14.0 (4)	3.0 (20)	88 (8)	97 (21)	84 (5)
99Y219	M	8560 (19)	11.0 (17)	4.0 (5)	87 (6)	1 (1)	77 (1)
99Y238	M	8470 (20)	11.4 (13)	4.0 (5)	87 (3)	55 (16)	88 (14)
99Y530	L	8460 (21)	11.8 (9)	3.5 (13)	89 (9)	1 (1)	85 (6)
97Y346	BS	8360 (22)	14.4 (3)	3.5 (13)	89 (9)	5 (9)	87 (13)
MEAN		9000	12	3.8	89	32	86
CV		2.8	3.9	13.5	0.7	38.6	3.6
LSD (.05)		520	1	1.1	1	26	6

Planting date: May 4 Harvest date: October 24.

S,SPQ,BS = short; M,MPQ = medium; L,BAS,REX = long; WX = waxy.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 14. 2000 Early Rice Lines and Varieties Grain Yield (lb/acre @14% moisture) at Four Locations

**ADVANCED LINES AND VARIETIES**

Variety	Grain		Biggs	Butte	Colusa	Yuba
	Type	Average	Biggs RES	Skinner Ranch	Canal Ranch	Quad4 Ranch
M-205	M	10060 (1)	10870 (3)	9270 (2)	10570 (1)	9520 (1)
96Y480	L	10050 (2)	11410 (1)	9530 (1)	10210 (2)	9030 (6)
M-204	M	9760 (3)	11200 (2)	8250 (7)	10170 (3)	9400 (2)
98Y242	M	9260 (4)	10740 (5)	8570 (3)	8400 (10)	9330 (3)
M-202	M	9100 (5)	10140 (10)	7710 (14)	9350 (6)	9210 (4)
99Y278	MPQ	9090 (6)	10420 (6)	7760 (13)	9100 (9)	9060 (5)
L-204	L	9030 (7)	10270 (9)	8080 (10)	9520 (4)	8240 (15)
L-205	L	9020 (8)	10380 (7)	8290 (6)	9110 (8)	8290 (14)
99-270	SPQ	8960 (9)	9880 (13)	8190 (9)	9150 (7)	8610 (9)
99Y041	L	8760 (10)	10740 (4)	8430 (5)	7020 (13)	8850 (8)
99Y087	REX	8690 (11)	9950 (12)	7370 (17)	9480 (5)	7980 (18)
M-104	M	8490 (12)	10370 (8)	8450 (4)	6680 (17)	8450 (12)
M-103	M	8410 (13)	10080 (11)	7570 (15)	7780 (11)	8210 (16)
S-102	S	8160 (14)	9710 (14)	8000 (11)	6340 (18)	8590 (10)
99-291	SPQ	8130 (15)	9200 (16)	8230 (8)	6210 (19)	8870 (7)
CH-201	SPQ	8120 (16)	9020 (17)	7540 (16)	7540 (12)	8390 (13)
CM-101	WX	8070 (17)	9200 (15)	7950 (12)	6950 (14)	8170 (17)
99-435	MPQ	7770 (18)	8600 (18)	7020 (18)	6870 (15)	8570 (11)
CT-201	BAS	7210 (19)	8490 (19)	6650 (19)	6840 (16)	6840 (19)
MEAN		8740	10040	8050	8280	8610
CV		7.4	4.4	9.8	10.6	3.9
LSD (.05)		450	620	1110	1240	470

**PRELIMINARY LINES**

99Y397	M	10230 (1)	10990 (2)	8860 (6)	11940 (1)	9150 (8)
99Y243	M	10180 (2)	10220 (14)	9690 (1)	11360 (2)	9470 (5)
99Y376	M	10000 (3)	10620 (7)	8850 (8)	10410 (9)	10110 (1)
99Y263	M	9840 (4)	10700 (5)	8430 (13)	10660 (5)	9560 (2)
99Y530	L	9820 (5)	10690 (6)	9280 (3)	10850 (3)	8460 (21)
99Y374	M	9790 (6)	10560 (9)	8850 (7)	10600 (6)	9160 (7)
98Y558	WX	9660 (7)	10280 (13)	8610 (12)	10460 (7)	9280 (6)
99Y267	M	9640 (8)	10450 (11)	9360 (2)	9680 (14)	9100 (10)
99Y219	M	9630 (9)	10080 (16)	9160 (4)	10730 (4)	8560 (19)
99Y377	M	9610 (10)	10590 (8)	8310 (15)	10410 (8)	9140 (9)
99Y464	L	9510 (11)	11120 (1)	7860 (20)	10410 (10)	8660 (16)
99Y541	L	9460 (12)	9970 (19)	8660 (11)	10320 (11)	8880 (12)
99Y217	M	9430 (13)	10120 (15)	8830 (9)	10150 (12)	8640 (17)
99Y204	WX	9280 (14)	10760 (4)	8780 (10)	8750 (19)	8830 (13)
99Y454	REX	9240 (15)	9990 (18)	8260 (17)	9730 (13)	8980 (11)
97Y346	BS	9200 (16)	10510 (10)	8880 (5)	9040 (16)	8360 (22)
99Y528	L	9190 (17)	10010 (17)	8280 (16)	8960 (17)	9490 (4)
99Y413	M	9170 (18)	9880 (20)	8370 (14)	8900 (18)	9530 (3)
99Y238	M	8990 (19)	10290 (12)	7960 (18)	9230 (15)	8470 (20)
99Y343	BS	8920 (20)	10760 (3)	7880 (19)	8210 (20)	8820 (14)
99-265	SPQ	7550 (21)	9000 (22)	5990 (21)	6490 (22)	8720 (15)
99Y323	SPQ	7320 (22)	9140 (21)	5070 (22)	6490 (21)	8570 (18)
MEAN		9350	10310	8370	9720	9000
CV		6.5	3.5	9.8	8	2.8
LSD (.05)		600	750	1710	1620	520

S = short; M = medium; L = long; BS=Arborio; BAS=basmati; REX=rexmont; PQ=premium quality; WX = waxy.  
 Numbers in parentheses indicate relative rank in column.

Table 15. Grain Yield (lb/acre @14% moisture) Summary of Early Rice Varieties by Location and Year (1996-2000)

Location	Year	Calhikari			Calmati	
		201	<b>M-202</b>	M-204	M-205	201
Biggs (RES)	1996	8430	<b>8790</b>	9650	10320	8190
	1997	9690	<b>10510</b>	10580	11940	8660
	1998	7670	<b>8260</b>	8910	9940	8360
	1999	9460	<b>10540</b>	11130	11200	6620
	2000	9020	<b>10140</b>	11200	10870	8490
Location Mean		8854	<b>9648</b>	10294	10854	8064
Butte	1996	7780	<b>7280</b>	8520	9380	7360
	1997	6460	<b>8240</b>	8480	8760	7350
	1998	5930	<b>7320</b>	7950	7720	5870
	1999	3930	<b>6780</b>	6070	4740	-
	2000	7540	<b>7710</b>	8250	9270	6650
Location Mean		6328	<b>7466</b>	7854	7974	6808
Colusa	1996	8520	<b>10340</b>	9630	10120	8870
	1997	7270	<b>9130</b>	8840	9440	6700
	1998	7150	<b>7590</b>	7060	7350	5670
	1999	8220	<b>10550</b>	9780	8260	2680
	2000	7540	<b>9350</b>	10170	10570	6840
Location Mean		7740	<b>9392</b>	9096	9148	6152
Yuba	1996	6610	<b>8110</b>	7230	8390	5820
	1997	8110	<b>7730</b>	8230	9200	5520
	1998	5320	<b>6070</b>	6190	6550	5980
	1999	6310	<b>7920</b>	7100	7130	2420
	2000	8390	<b>9210</b>	9400	9520	6840
Location Mean		6948	<b>7808</b>	7630	8158	5316
Loc/Years Mean		7468	<b>8579</b>	8719	9034	6573
<b>Yield % M-202</b>		<b>87.0</b>	<b>100</b>	<b>101.6</b>	<b>105.3</b>	<b>76.6</b>
Number of Tests		20	<b>20</b>	20	20	19

Table 16. 2000 Late Rice Variety Test - Butte County (Biggs-RES)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
98Y511	L	11320 (1)	18.2 (6)	4.6 (12)	82 (3)	1 (1)	92 (9)
97Y413	M	11280 (2)	21.8 (3)	4.8 (5)	84 (9)	1 (1)	96 (13)
M-205	M	11110 (3)	23.7 (1)	4.8 (7)	84 (10)	1 (1)	92 (9)
94Y663	L	10850 (4)	18.1 (7)	4.6 (13)	82 (3)	1 (1)	89 (4)
99Y058	SPQ	10510 (5)	17.6 (10)	4.7 (9)	86 (12)	21 (14)	90 (7)
M-202	M	10480 (6)	19.8 (5)	5.0 (2)	82 (3)	13 (13)	97 (14)
96Y671	SR	9830 (7)	17.9 (9)	4.4 (14)	82 (6)	1 (1)	86 (2)
M-402	MPQ	9810 (8)	22.2 (2)	4.8 (3)	91 (14)	1 (1)	96 (12)
A-201	A	9810 (9)	18.0 (8)	4.8 (3)	83 (8)	1 (1)	90 (6)
99Y055	MPQ	9770 (10)	21.8 (4)	4.8 (6)	86 (13)	1 (1)	93 (11)
99-190	SPQ	9470 (11)	16.8 (12)	4.7 (10)	84 (10)	6 (12)	88 (3)
CH-201	SPQ	9010 (12)	16.8 (14)	5.0 (1)	81 (2)	1 (1)	91 (8)
99-292	SPQ	8610 (13)	16.8 (13)	4.7 (11)	76 (1)	1 (1)	73 (1)
CT-201	BAS	7870 (14)	17.4 (11)	4.8 (7)	82 (6)	1 (1)	89 (4)
MEAN		9980	19.1	4.7	83	4	90
CV		6	7.4	2.8	1.6	313.3	3.2
LSD (.05)		860	2	0.2	2		4

**Preliminary Lines**

99Y414	M	11530 (1)	21.6 (6)	4.9 (4)	83 (13)	1 (1)	97 (14)
99Y596	M	11180 (2)	21.2 (9)	4.9 (4)	82 (12)	1 (1)	97 (14)
99Y425	M	11160 (3)	21.4 (7)	4.8 (13)	84 (17)	1 (1)	89 (5)
99Y423	M	11110 (4)	21.0 (10)	4.7 (18)	85 (18)	1 (1)	90 (6)
99Y393	M	10850 (5)	22.6 (2)	4.9 (4)	84 (16)	1 (1)	99 (19)
99Y494	WX	10790 (6)	18.8 (14)	4.9 (2)	81 (7)	1 (1)	89 (4)
99Y529	L	10770 (7)	17.0 (18)	4.6 (20)	78 (1)	1 (1)	92 (9)
98Y526	IRGA	10740 (8)	17.6 (17)	4.7 (16)	81 (8)	1 (1)	91 (7)
99Y403	M	10700 (9)	21.4 (8)	4.6 (19)	82 (11)	1 (1)	87 (3)
99P2726	L	10630 (10)	16.1 (20)	4.8 (7)	80 (6)	1 (1)	85 (2)
99Y356	M	10590 (11)	20.4 (11)	4.7 (17)	81 (8)	1 (1)	91 (8)
99-425	MPQ	10570 (12)	19.5 (13)	4.8 (10)	80 (4)	13 (20)	95 (12)
99Y358	M	10350 (13)	23.3 (1)	4.8 (13)	85 (20)	1 (1)	98 (17)
99Y384	M	10330 (14)	22.2 (3)	5.0 (1)	83 (14)	1 (1)	95 (11)
99Y426	M	10320 (15)	21.9 (4)	4.8 (8)	85 (18)	1 (1)	97 (16)
99Y522	REX	10200 (16)	16.9 (19)	4.7 (15)	80 (5)	1 (1)	100 (20)
99Y291	MPQ	9970 (17)	21.7 (5)	4.8 (8)	83 (15)	1 (1)	94 (10)
99-394	MPQ	9950 (18)	19.6 (12)	4.9 (3)	78 (3)	3 (19)	98 (18)
99Y575	MPQ	9430 (19)	18.4 (15)	4.8 (10)	81 (10)	1 (1)	96 (13)
99Y324	SPQ	9410 (20)	18.0 (16)	4.8 (10)	78 (1)	1 (1)	79 (1)
MEAN		10530	20	4.8	82	2	93
CV		3.2	5.2	1.7	1.7	226.2	3.3
LSD (.05)		700	2.2	0.2	3		6

Planting dates: May 13, May 24 (reps 1&amp;2, 3&amp;4 respectively).

S = short; M = medium; L,A,BAS,IRGA,SR,REX = long; WX = waxy; PQ = Premium Quality.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 17. 2000 Late Rice Variety Test - Glenn County (Wylie Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
M-205	M	9630 (1)	14.1 (6)	3.9 (8)	92 (12)	1 (1)	92 (10)
97Y413	M	9480 (2)	13.6 (9)	4.0 (7)	91 (9)	1 (1)	92 (11)
98Y511	L	8720 (3)	12.9 (14)	3.6 (12)	87 (3)	1 (1)	87 (4)
M-202	M	8490 (4)	13.5 (11)	4.4 (1)	89 (7)	2 (10)	98 (14)
99-190	SPQ	8340 (5)	15.1 (3)	3.8 (9)	91 (9)	87 (14)	89 (6)
99Y055	MPQ	8290 (6)	13.8 (8)	4.1 (6)	93 (13)	1 (1)	96 (12)
99Y058	SPQ	8180 (7)	16.9 (1)	3.5 (13)	91 (11)	34 (13)	88 (5)
99-292	SPQ	7880 (8)	14.7 (4)	3.8 (9)	84 (1)	2 (10)	72 (1)
M-402	MPQ	7800 (9)	13.9 (7)	4.3 (2)	101 (14)	1 (1)	97 (13)
94Y663	L	7720 (10)	13.0 (13)	3.5 (13)	88 (4)	1 (1)	83 (3)
CH-201	SPQ	7270 (11)	15.2 (2)	4.3 (2)	88 (5)	9 (12)	91 (8)
A-201	A	6820 (12)	14.2 (5)	4.3 (2)	88 (6)	1 (1)	92 (9)
96Y671	SR	6740 (13)	13.6 (10)	3.8 (9)	89 (7)	1 (1)	77 (2)
CT-201	BAS	6270 (14)	13.0 (12)	4.3 (2)	87 (2)	1 (1)	89 (6)
MEAN		7970	14.1	3.9	90	10	89
CV		5.2	3.5	6	1.5	102.8	4.5
LSD (.05)		590	0.7	0.3	2	15	6

**Preliminary Lines**

99Y393	M	9330 (1)	13.7 (9)	4.0 (1)	90 (10)	8 (16)	100 (17)
99Y425	M	9310 (2)	14.1 (3)	4.0 (1)	90 (12)	1 (1)	93 (7)
99Y426	M	9180 (3)	14.0 (6)	4.0 (1)	96 (20)	1 (1)	103 (19)
99Y414	M	8960 (4)	13.3 (14)	4.0 (1)	93 (19)	1 (1)	97 (12)
99Y423	M	8870 (5)	13.4 (13)	3.3 (20)	92 (14)	3 (11)	95 (10)
99Y384	M	8790 (6)	14.1 (5)	4.0 (1)	89 (9)	6 (14)	96 (11)
99Y356	M	8690 (7)	13.9 (8)	4.0 (1)	90 (10)	3 (11)	90 (5)
99Y358	M	8650 (8)	14.6 (1)	4.0 (1)	92 (15)	1 (1)	93 (7)
99Y596	M	8540 (9)	14.0 (6)	4.0 (1)	91 (13)	1 (1)	98 (13)
99Y494	WX	8520 (10)	11.8 (20)	4.0 (1)	89 (7)	6 (14)	91 (6)
98Y526	IRGA	8430 (11)	13.3 (15)	4.0 (1)	92 (15)	55 (20)	98 (15)
99Y403	M	8360 (12)	13.7 (9)	3.5 (18)	89 (7)	3 (11)	86 (4)
99Y522	REX	8210 (13)	12.9 (18)	4.0 (1)	88 (6)	43 (19)	102 (18)
99-425	MPQ	8110 (14)	12.7 (19)	3.8 (17)	86 (3)	1 (1)	98 (13)
99Y324	SPQ	8100 (15)	14.1 (4)	3.5 (18)	86 (3)	1 (1)	76 (1)
99-394	MPQ	7960 (16)	13.0 (17)	4.0 (1)	86 (2)	23 (17)	103 (20)
99Y575	MPQ	7720 (17)	13.1 (16)	4.0 (1)	92 (15)	1 (1)	93 (9)
99Y291	MPQ	7710 (18)	14.5 (2)	4.0 (1)	92 (15)	25 (18)	98 (15)
99Y529	L	7700 (19)	13.6 (12)	4.0 (1)	85 (1)	1 (1)	85 (3)
99P2726	L	6970 (20)	13.7 (11)	4.0 (1)	86 (3)	1 (1)	80 (2)
MEAN		8410	13.6	3.9	89	9	93
CV		4.8	3.2	5	1.2	209	4.7
LSD (.05)		850	0.9	0.4	2		9

Planting date: May 8 Harvest date: October 18.

S = short; M = medium; L,A,BAS,IRGA,SR,REX = long; WX = waxy; PQ = Premium Quality.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 18. 2000 Late Rice Variety Test - Sutter County (Akin Ranch)

**Advanced Lines and Varieties**

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (cm)
98Y511	L	10950 (1)	13.9 (9)	4.0 (6)	88 (3)	94 (10)	89 (9)
94Y663	L	10100 (2)	13.8 (10)	3.5 (10)	88 (3)	23 (5)	85 (3)
CH-201	SPQ	10080 (3)	15.7 (2)	4.8 (1)	86 (2)	75 (6)	86 (5)
A-201	A	9970 (4)	14.6 (5)	4.3 (4)	89 (9)	1 (1)	95 (11)
97Y413	M	9910 (5)	12.9 (14)	3.8 (7)	94 (11)	99 (13)	92 (10)
M-202	M	9840 (6)	13.8 (11)	4.3 (4)	89 (8)	99 (13)	102 (14)
M-205	M	9840 (7)	13.5 (12)	3.3 (12)	95 (12)	91 (9)	85 (3)
96Y671	SR	9840 (8)	14.4 (6)	3.5 (10)	88 (3)	1 (1)	83 (2)
M-402	MPQ	9620 (9)	14.2 (8)	4.5 (2)	97 (13)	80 (7)	95 (12)
99-292	SPQ	9490 (10)	15.1 (3)	3.3 (12)	84 (1)	1 (1)	77 (1)
99-190	SPQ	9480 (11)	14.9 (4)	3.8 (7)	88 (3)	96 (11)	86 (5)
99Y055	MPQ	9460 (12)	14.2 (7)	3.8 (7)	97 (13)	90 (8)	96 (13)
99Y058	SPQ	9390 (13)	17.1 (1)	3.0 (14)	88 (7)	98 (12)	88 (7)
CT-201	BAS	8230 (14)	13.4 (13)	4.5 (2)	90 (10)	1 (1)	88 (7)
MEAN		9730	14.4	3.9	90	61	89
CV		5.3	3.9	14	0.6	21.9	3.5
LSD (.05)		740	0.8	0.8	1	19	4

**Preliminary Lines**

99Y425	M	10880 (1)	13.6 (5)	4.0 (4)	90 (12)	68 (9)	93 (10)
99Y403	M	10530 (2)	13.6 (5)	3.5 (12)	91 (14)	13 (4)	83 (3)
99Y529	L	10460 (3)	13.3 (10)	4.0 (4)	85 (1)	1 (1)	88 (5)
99Y575	MPQ	10450 (4)	13.1 (13)	4.0 (4)	94 (19)	26 (5)	98 (18)
99Y423	M	10410 (5)	12.7 (16)	3.0 (18)	92 (17)	90 (16)	85 (4)
99Y596	M	10400 (6)	14.2 (2)	3.0 (18)	91 (13)	28 (6)	88 (5)
98Y526	IRGA	10350 (7)	13.5 (9)	4.0 (4)	87 (7)	73 (12)	88 (7)
99Y356	M	10220 (8)	14.0 (4)	3.5 (12)	87 (7)	38 (7)	90 (8)
99Y522	REX	10210 (9)	13.1 (12)	3.5 (12)	86 (4)	73 (11)	93 (10)
99Y414	M	10160 (10)	12.3 (17)	4.0 (4)	93 (18)	85 (13)	94 (13)
99Y324	SPQ	10000 (11)	14.2 (2)	3.5 (12)	85 (1)	1 (1)	71 (1)
99P2726	L	9990 (12)	13.0 (14)	4.5 (1)	86 (3)	1 (1)	80 (2)
99Y426	M	9960 (13)	13.0 (14)	4.0 (4)	91 (14)	88 (14)	93 (10)
99Y384	M	9930 (14)	13.3 (10)	4.0 (4)	89 (10)	88 (14)	94 (13)
99Y494	WX	9790 (15)	14.7 (1)	4.5 (1)	88 (9)	70 (10)	90 (8)
99-394	MPQ	9700 (16)	13.5 (8)	4.0 (4)	86 (4)	55 (8)	97 (17)
99-425	MPQ	9660 (17)	13.6 (5)	3.0 (18)	86 (4)	90 (16)	95 (16)
99Y393	M	9590 (18)	11.8 (19)	4.5 (1)	91 (14)	99 (19)	100 (20)
99Y358	M	9550 (19)	11.9 (18)	3.5 (12)	95 (20)	97 (18)	94 (13)
99Y291	MPQ	9130 (20)	11.6 (20)	3.5 (12)	89 (10)	99 (19)	98 (18)
MEAN		10070	13.2	3.8	89	59	90
CV		4.7	4.1	12.6	0.8	23.9	5.9
LSD (.05)			1.1		2	29	11

Planting date: May 10 Harvest date: October 16.

S = short; M = medium; L,A,BAS,IRGA,SR,REX = long; WX = waxy; PQ = Premium Quality.

Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.

Subjective rating of 1-99 where 1 = none and 99 = completely lodged.

Numbers in parentheses indicate relative rank in column.

Table 19. 2000 Late Rice Lines and Varieties Grain Yield (lb/acre @ 14% moisture) at Three Locations

**ADVANCED LINES AND VARIETIES**

Variety	Grain Type	Average	Biggs	Glenn	Sutter
			Biggs RES	Wylie Ranch	Akin Ranch
98Y511	L	10330 ( 1)	11320 ( 1)	8720 ( 3)	10950 ( 1)
97Y413	M	10220 ( 2)	11280 ( 2)	9480 ( 2)	9910 ( 5)
M-205	M	10190 ( 3)	11110 ( 3)	9630 ( 1)	9840 ( 7)
M-202	M	9600 ( 4)	10480 ( 6)	8490 ( 4)	9840 ( 6)
94Y663	L	9550 ( 5)	10850 ( 4)	7720 (10)	10100 ( 2)
99Y058	SPQ	9360 ( 6)	10510 ( 5)	8180 ( 7)	9390 (13)
99Y055	MPQ	9170 ( 7)	9770 (10)	8290 ( 6)	9460 (12)
99-190	SPQ	9100 ( 8)	9470 (11)	8340 ( 5)	9480 (11)
M-402	MPQ	9080 ( 9)	9810 ( 8)	7800 ( 9)	9620 ( 9)
A-201	A	8870 (10)	9810 ( 9)	6820 (12)	9970 ( 4)
96Y671	SR	8800 (11)	9830 ( 7)	6740 (13)	9840 ( 8)
CH-201	SPQ	8790 (12)	9010 (12)	7270 (11)	10080 ( 3)
99-292	SPQ	8660 (13)	8610 (13)	7880 ( 8)	9490 (10)
CT-201	BAS	7460 (14)	7870 (14)	6270 (14)	8230 (14)
MEAN		9230	9980	7970	9730
CV		5.6	6	5.2	5.3
LSD (.05)		420	860	590	740

**PRELIMINARY LINES**

99Y425	M	10450 ( 1)	11160 ( 3)	9310 ( 2)	10880 ( 1)
99Y414	M	10210 ( 2)	11530 ( 1)	8960 ( 4)	10160 (10)
99Y423	M	10130 ( 3)	11110 ( 4)	8870 ( 5)	10410 ( 5)
99Y596	M	10040 ( 4)	11180 ( 2)	8540 ( 9)	10400 ( 6)
99Y393	M	9920 ( 5)	10850 ( 5)	9330 ( 1)	9590 (18)
99Y403	M	9860 ( 6)	10700 ( 9)	8360 (12)	10530 ( 2)
98Y526	IRGA	9840 ( 7)	10740 ( 8)	8430 (11)	10350 ( 7)
99Y356	M	9840 ( 8)	10590 (11)	8690 ( 7)	10220 ( 8)
99Y426	M	9820 ( 9)	10320 (15)	9180 ( 3)	9960 (13)
99Y494	WX	9700 (10)	10790 ( 6)	8520 (10)	9790 (15)
99Y384	M	9680 (11)	10330 (14)	8790 ( 6)	9930 (14)
99Y529	L	9640 (12)	10770 ( 7)	7700 (19)	10460 ( 3)
99Y522	REX	9540 (13)	10200 (16)	8210 (13)	10210 ( 9)
99Y358	M	9510 (14)	10350 (13)	8650 ( 8)	9550 (19)
99-425	MPQ	9450 (15)	10570 (12)	8110 (14)	9660 (17)
99-394	MPQ	9200 (16)	9950 (18)	7960 (16)	9700 (16)
99Y575	MPQ	9200 (17)	9430 (19)	7720 (17)	10450 ( 4)
99P2726	L	9200 (18)	10630 (10)	6970 (20)	9990 (12)
99Y324	SPQ	9170 (19)	9410 (20)	8100 (15)	10000 (11)
99Y291	MPQ	8930 (20)	9970 (17)	7710 (18)	9130 (20)
MEAN		9670	10530	8410	10070
CV		4.2	3.2	4.8	4.7
LSD (.05)		470	700	850	

S = short; M = medium; L,A,BAS,IRGA,SR,REX = long; WX = waxy;  
PQ = Premium Quality.

Numbers in parentheses indicate relative rank in column.

Table 20. Grain Yield (lb/acre @14% moisture) Summary of Late Rice Varieties by Location and Year (1996-2000)

Location	Year	<b>M-401</b>	M-402
Butte (RES)	1996	<b>8090</b>	9840
	1997	<b>11120</b>	10560
	1998	<b>6990</b>	9620
	1999	<b>5880</b>	9270
	2000	-	9810
<b>Location Mean</b>		<b>8020</b>	9820
Glenn	1996	<b>8600</b>	8980
	1997	<b>8580</b>	8150
	1998	<b>7820</b>	7920
	1999	<b>8510</b>	8230
	2000	-	7800
<b>Location Mean</b>		<b>8378</b>	8216
Sutter	1996	<b>7470</b>	7980
	1997	<b>8860</b>	8790
	1998	<b>6270</b>	7280
	1999	<b>7650</b>	7820
	2000	-	9620
<b>Location Mean</b>		<b>7563</b>	8298
Loc/Years Mean		<b>7987</b>	8778
<b>Yield % M-401</b>		<b>100.0</b>	<b>109.9</b>
Number of Tests		<b>12</b>	15