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CALIFORNIA RICE VARIETIES

DESCRIPTION AND PERFORMANCE SUMMARY OF THE 2001 AND MULTIYEAR STATEWIDE RICE VARIETY TESTS IN CALIFORNIA

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University of California Cooperative Extension rice variety evaluation tests were conducted in the Sacramento and San Joaquin Valleys in 2001. This program, a cooperative effort involving the California Cooperative Rice Research Foundation, Inc. (CCRRFI) 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 areas of California. Entries in the tests include lines and varieties developed by CCRRFI rice breeders. The program is partially funded by the Rice Research Board and 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.

Low prices and high carryover caused growers to reduce plantings to 470,917 acres in 2001, down 94,083 acres (17%) compared to 2000 (Table 2). Medium-grain varieties M-103, M-104, M-201, M-202, M-204, M-205, M-401, and M-402 were produced on 87% of the acreage. As in recent years, M-202 was planted on the most acreage (49%), a 34% decrease compared to the 2000 season. M-204 acreage decreased 17% to 63,000 acres in 2001. A new potential replacement for M-103 in the cooler rice areas, medium-grain M-104, increased from 500 acres in 2000 to 29,200 acres in 2001. Premium quality medium-grains M-103 and M-104 were produced on 35,200 acres, 7,600 acres less than in 2000. Acreage of short-grain types decreased 7,000 acres from 2000 levels with S-102 produced on 7,550 acres. 2001 long-grain acreage increased 3,300 acres to 11,700 acres. Leading short- and long-grain varieties were Calmochi-101 and L-205, 2.4% and 1.4% of the total acreage respectively.

Unusually high temperatures in early May, (Table 3), accelerated seedling growth and advanced growth stages ahead a few days at several sites. Unfortunately, weed growth was also quickened. This resulted in poor control of some weeds, such as early watergrass and sprangle top, particularly in fields where water management was less than optimal.

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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) Advanced tests consisting of advanced breeding lines and commercial varieties; and 2) Preliminary tests consisting of lines to be newly evaluated on a statewide basis. 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 of the test location. Commercial varieties in the very early and early maturity classes, however, were evaluated in both Very Early and Early tests. Advanced and preliminary lines from the three maturity groups were also evaluated at the Rice Experiment Station (RES), Biggs, California, for a total of 22 statewide tests. Advanced tests were arranged in randomized complete block designs with four replications, while preliminary lines were planted in two replications. Seed for the tests was provided by the RES. Maturity groups, test locations and commercial standards in each test were as follows:

Very Early Maturity Group. Nine advanced breeding lines and nine commercial varieties were evaluated in Advanced Tests at each of the following locations.

	Date Planted
• Butte County (RES)	5/14, 5/24 (Reps 1&2, 3&4 respectively)
• San Joaquin County (Brumley)	5/08
• Sutter County (Lauppe)	5/14
• Yolo County (Geer)	5/10

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

Early Maturity Group. Nine advanced lines and ten commercial varieties were evaluated in Advanced Tests at each of the following locations.

	Date Planted
• Butte County (RES)	5/14, 5/24 (Reps 1&2, 3&4 respectively)
• Butte County (Thompson)	5/15
• Colusa County (Dennis)	5/09
• Yuba County (Quad-4)	5/07

Commercial varieties included Calmochi-101, Calhkari-201, Calmati-201, M-104, M-202, M-204, M-205, L-204, L-205, and S-102. Thirty-four preliminary lines were also included in Preliminary Tests at each site. All advanced and preliminary experimental lines were entries from the RES breeding program.

Late Maturity Group. Eight advanced lines and six commercial varieties were evaluated in Advanced Tests at the following locations.

	Date Planted
• Butte County (RES)	5/14, 5/24 (Reps 1&2, 3&4 respectively)
• Glenn County (Wiley)	4/23
• Sutter County (Akin)	5/16

Commercial varieties included Calhkari-201, Calmati-201, M-202, M-205, M-402, and L-205. Twenty experimental lines were also included in separate tests at each site. Advanced and preliminary non-commercial lines were entries 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 and plots at the RES were harvested with a modified Allis-Chalmers combine. The harvest area for all plots was 150 ft² (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 rice varieties by location and year (1997-2001) is found in Table 9.

Grain yields in the advanced tests averaged 9900 lbs/acre at the RES, 8560 at Yolo, 8640 at Sutter, and 7880 at San Joaquin. Over the four locations, the highest yielding entry was the commercial variety S-102 at 9770 lbs/acre (Table 8). Entry 00Y175, an advanced waxy short grain, was the second highest yielding entry at Yolo and San Joaquin and ranked second in the four location summary.

No entry produced yields significantly higher than S-102 at any of the trials. S-102, an advanced waxy short-grain cultivar 00Y175, and Calmochi-101, yielded highest (first, second and third, respectively) in the cooler San Joaquin trial. M-104, a very early medium-grain potential replacement for M-103, produced higher yields than M-103 at all locations.

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-103, the very early standard. M-104 has yielded 104%, M-202, 104%, Calmochi-101, 103%, S-102, 110%, L-204, 99%, and L-205, 93% of M-103 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 9520 lb/acre at the RES, 7880 lb/acre at Butte, 9200 lb/acre at Colusa and 7630 lb/acre at Yuba. The medium-grain variety, M-205, averaged 10180 lb/acre at the RES, 9960 lb/acre at Colusa, and was the highest yielding entry, 9080 lb/acre, averaged over four locations (Table 14). Other leading advanced cultivars were 99Y041 and 99Y376 (third and sixth, respectively). Commercial varieties S-102, M-104, and M-204 ranked second, fourth, and fifth in over-location yield average. Of the preliminary lines, long-grain 00Y562 and medium-grains 00Y410, and 00Y375 were ranked first, second, and third, respectively.

Table 15 shows the over-year and over-location yields for five commercial varieties. Common year-location entries are compared to give relative yield as a percentage of M-202, the early standard. Cahikari-201 has yielded 88%, M-204, 102%, M-205, 104%, and Calmati-201, 75% 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 8910 lb/acre at the RES, 7930 lb/acre at Glenn, and 9050 lb/acre at Sutter. The medium-grain cultivar M-205 was the highest yielding entry at Glenn, second at Sutter, fifth at the RES and ranked first in the over-location results (Table 19). Premium quality M-402 ranked eighth in yield at the RES and Glenn, sixth at Sutter, and was ranked eighth overall. In the preliminary tests, medium-grain 99Y393 yielded highest overall (9340 lb/acre), with yields of 8460, 9160, and 10400 lb/acre at the RES, Glenn, and Sutter sites respectively.

Table 20 compares Intermediate-Late maturing commercial cultivars in over-location and over-years tests. Using M-202 as the standard for comparison, M-401 and M-402 yielded 86% and 103%, respectively, of M-202 over the last five years. M-401 was dropped from the Intermediate-Late tests following the 1999 season.

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Table 1. Characteristics Of Public California Rice Varieties - 2002

Grain Type	Maturity	Year Seed Widely Available	Stem Rot Score ¹	Seedling Vigor ²	Comments
			(0-10)	(1-5)	
Short Grain					
S-102	Very Early ³	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.
Medium Grain					
M-103	Very Early ³	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 ³	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. Not recommended 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. Not recommended for Escalon, Natomas or other cool areas.
Long Grain					
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.
Premium Quality					
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.
Specialty Rice					
Calmochi-101	Very Early ^{3,4}	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 ⁴	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 ⁴	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>¹ Average stem rot score over last four years: 0 = no disease and 10 = severe disease.</p> <p>² Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling vigor.</p> <p>³ Milling quality and yield may be reduced by early planting in warmer areas.</p> <p>⁴ Specialty varieties should not be grown unless arrangements have first been made with a marketing agency.</p>					

Table 2. California Rice Acreage by Variety (1998-2001)¹

Variety	1998		1999		2000		2001	
	(acres)	(%)	(acres)	(%)	(acres)	(%)	(acres)	(%)
Short Grains								
S-102	7,070	1.40	9,800	1.70	10,464	1.85	7,546	1.60
S-201	3,680	0.80	1,150	0.20	-	-	-	-
Akitakomachi	15,680	3.10	25,350	4.40	10,175	1.80	8,438	1.79
Calhikari-201	-	-	160	0.03	3,822	0.68	1,056	0.22
Calmochi-101	19,110	3.80	28,230	4.90	11,077	1.96	11,230	2.38
Koshihikari	9,480	1.80	12,100	2.10	6,205	1.10	6,136	1.30
Surpass	-	-	1300	0.23	1,453	0.26	-	-
Subtotal	55,020	11.00	76,630	13.35	41,743	7.65	34,406	7.29
Medium Grains								
M-103	28,425	5.70	12,100	2.10	11,720	2.07	8,055	1.71
M-104	-	-	-	-	493	0.09	29,199	6.20
M-201	14,860	3.00	14,980	2.60	6,917	1.22	2,440	0.52
M-202	284,170	57.00	335,330	58.20	353,879	62.63	232,765	49.43
M-204	55,490	11.10	55,890	9.70	76,320	13.51	62,999	13.38
M-205	-	-	-	-	849	0.15	37,594	7.98
M-401	30,780	6.20	54,740	9.50	33,662	5.96	29,898	6.35
M-402	-	-	500	0.09	9,194	1.63	5,319	1.13
Kokuhorose	-	-	11,520	2.00	12,527	2.22	12,176	2.59
NFD 181	-	-	5,190	0.90	4,620	0.82	3,061	0.65
Subtotal	413,725	83.00	490,250	85.09	510,181	90.30	423,506	89.94
Long Grains								
L-204	15,580	3.10	3,460	0.60	2,093	0.37	1,235	0.26
L-205	-	-	259	0.04	2,647	0.47	6,472	1.37
A-201	-	-	1,076	0.19	1,025	0.18	799	0.17
A-301	-	-	1,260	0.22	1,449	0.26	1,700	0.36
Calmati-201	-	-	131	0.02	1,202	0.21	1,507	0.32
Subtotal	15,580	3.10	6,186	1.07	8,416	1.49	11,713	2.48
Other ²	14,495	2.9	3,114.0	0.49	4,660.0	0.56	1,292.0	0.29
Total	498,820	100	576,180	100	565,000	100	470,917	100

¹ Acreage estimates based on surveys conducted by Rice Experiment Station of rice millers and seed production.² Other varieties reported include: Short grains Calhikari-201, Surpass, H-4, and 89-Y-235; Medium grain SP 411; and Long grains L-202 and L-203.

Table 3. 2001 County Weather Data - Daily Maximums and Minimums (°F). Collected by UC IPM - IMPACT and CIMIS

	Glenn (Willows)		Colusa (colusa)		Yolo (zamora)		Butte (Durham)		Yuba (Yuba City)		Sutter (Nicolas)		San Joaquin (Escalon)		Glenn (Willows)		Colusa (colusa)		Yolo (zamora)		Butte (Durham)		Yuba (Yuba City)		Sutter (Nicolas)		San Joaquin (Escalon)		
	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max	min	max
Apr 01	80	47	76	46	76	45	75	49	84	46	74	43	75	43	Jun 01	93	62	96	64	90	59	91	67	92	62	87	60	91	60
Apr 02	64	35	61	34	61	37	63	37	60	35	61	32	62	38	Jun 02	81	54	83	57	80	49	81	58	83	50	82	55	80	53
Apr 03	62	31	61	30	60	28	61	30	61	34	60	31	60	31	Jun 03	85	55	80	51	80	50	80	55	80	52	82	48	81	50
Apr 04	67	36	66	36	65	37	68	37	67	32	64	30	64	35	Jun 04	87	57	86	60	84	59	85	56	88	54	86	51	86	49
Apr 05	73	34	72	50	70	37	72	53	71	35	70	33	70	38	Jun 05	82	59	83	58	83	53	80	59	84	50	85	55	85	54
Apr 06	53	40	51	46	53	44	53	46	50	40	51	46	55	43	Jun 06	89	57	90	52	78	49	91	52	91	51	91	54	90	53
Apr 07	57	41	58	33	57	37	59	32	58	34	58	34	57	37	Jun 07	95	62	97	57	95	56	95	57	98	57	97	57	95	57
Apr 08	59	29	58	33	58	29	59	32	59	30	59	32	59	31	Jun 08	96	62	95	60	93	54	94	59	94	56	96	60	93	55
Apr 09	65	29	66	37	65	38	66	34	65	34	66	32	64	39	Jun 09	87	54	89	58	87	51	88	56	90	52	88	56	89	53
Apr 10	70	40	71	36	69	42	70	35	71	37	70	33	69	32	Jun 10	85	51	86	56	86	47	86	52	87	48	86	54	85	52
Apr 11	71	44	70	38	67	39	64	38	64	42	63	34	62	39	Jun 11	83	51	87	53	85	54	83	58	87	53	86	57	82	56
Apr 12	69	41	68	31	67	33	69	31	66	33	67	29	68	33	Jun 12	89	57	85	58	83	54	85	66	84	53	86	55	84	56
Apr 13	66	40	65	49	64	40	65	42	62	40	63	41	63	39	Jun 13	91	64	86	60	85	64	87	59	87	57	88	55	86	56
Apr 14	69	38	69	35	67	35	70	35	68	34	68	31	68	36	Jun 14	93	58	95	53	92	55	92	55	96	54	96	52	95	52
Apr 15	72	36	71	41	71	34	72	39	72	35	71	39	75	40	Jun 15	92	59	96	58	93	54	94	58	97	58	95	61	96	54
Apr 16	74	36	72	43	70	40	74	43	72	41	71	44	72	46	Jun 16	97	62	100	57	95	55	95	59	94	56	97	53	98	54
Apr 17	75	41	74	50	70	46	73	53	74	42	75	44	74	42	Jun 17	96	62	97	59	94	56	95	61	100	57	97	60	96	55
Apr 18	73	49	74	50	72	46	72	47	73	42	73	41	77	44	Jun 18	98	62	98	58	95	66	98	66	98	58	97	59	96	55
Apr 19	61	46	64	44	64	43	62	45	64	42	63	44	61	42	Jun 19	98	65	101	60	97	64	98	62	101	59	99	58	98	57
Apr 20	51	38	51	43	52	40	51	44	51	36	53	42	53	41	Jun 20	105	67	105	60	100	63	101	62	103	63	104	59	102	58
Apr 21	71	35	71	36	69	37	72	40	68	36	68	35	66	39	Jun 21	101	67	103	64	100	62	99	63	103	63	102	61	101	59
Apr 22	71	35	73	46	72	39	73	42	72	40	73	43	73	40	Jun 22	97	69	99	64	94	59	98	66	100	63	99	64	102	59
Apr 23	80	35	79	49	77	42	79	47	78	42	77	42	76	44	Jun 23	85	58	92	59	91	51	89	58	91	52	88	56	92	55
Apr 24	87	50	84	48	83	47	84	48	83	47	83	47	84	48	Jun 24	78	51	84	57	85	51	80	55	88	50	87	54	85	49
Apr 25	89	54	88	51	87	49	88	53	87	53	89	49	90	51	Jun 25	73	49	74	59	74	57	73	56	76	56	76	56	82	55
Apr 26	88	55	87	53	86	45	89	52	85	50	87	49	83	54	Jun 26	77	55	79	56	76	55	76	57	79	54	79	54	85	56
Apr 27	83	46	81	50	80	40	79	48	79	43	79	47	77	47	Jun 27	68	57	71	57	71	57	70	59	70	56	70	56	81	61
Apr 28	72	52	72	53	66	46	71	48	71	47	72	49	69	48	Jun 28	84	58	86	54	83	51	83	53	85	51	85	51	85	58
Apr 29	80	43	78	44	80	43	79	43	79	42	78	38	77	41	Jun 29	90	55	92	56	91	54	93	57	93	53	94	52	92	54
Apr 30	87	43	86	48	83	44	86	46	85	45	86	48	84	46	Jun 30	91	62	97	62	95	60	96	58	98	48	97	62	97	57
May 01	81	50	80	48	80	56	78	58	80	53	81	48	81	53	Jul 01	96	63	100	61	88	57	96	62	100	46	99	59	96	56
May 02	76	54	75	53	75	53	79	53	77	48	78	49	77	53	Jul 02	103	63	104	72	103	60	105	71	105	60	105	57	102	61
May 03	83	51	80	51	80	47	80	50	80	48	82	46	82	48	Jul 03	104	69	102	66	103	69	104	65	107	65	107	67	104	66
May 04	88	47	87	42	87	44	88	46	87	46	86	39	85	44	Jul 04	96	72	93	69	91	69	93	70	100	68	97	72	92	68
May 05	90	52	89	47	87	49	89	45	88	48	88	46	85	47	Jul 05	99	63	101	63	92	55	100	68	102	65	99	66	99	66
May 06	92	47	89	47	91	50	90	46	90	47	90	44	89	48	Jul 06	92	59	92	60	87	56	93	60	95	56	94	58	93	62
May 07	99	47	95	54	97	53	97	64	95	54	96	48	94	50	Jul 07	91	57	92	58	91	56	91	60	94	60	93	65	92	64
May 08	96	61	96	56	96	55	97	57	95	57	97	53	96	55	Jul 08	97	57	100	59	99	58	95	61	100	60	99	63	94	60
May 09	96	51	92	56	95	58	95	58	92	56	95	55	94	54	Jul 09	93	57	94	63	93	56	94	64	96	56	94	61	90	62
May 10	100	60	97	59	97	56	96	60	97	58	98	53	95	53	Jul 10	89	61	89	60	90	58	89	62	91	55	87	58	88	59
May 11	94	58	95	57	94	53	96	56	94	58	93	60	95	55	Jul 11	87	59	87	58	88	54	85	60	87	52	84	57	84	56
May 12	86	55	86	57	86	55	86	59	84	54	80	55	77	56	Jul 12	88	50	90	55	87	51	88	54	90	48	87	55	85	55
May 13	80	47	80	53	78	52	79	53	78	49	76	53	77	51	Jul 13	94	56	95	54	93	52	93	57	96	57	94	51	93	56
May 14	73	48	79	52	82	46	75	54	82	46	82	51	83	49	Jul 14	88	61	89	59	89	54	90	59	90	53	87	56	87	56
May 15	81	60	82	59	80	60	78	62	84	50	83	61	83	58	Jul 15	87	54	87	53	86	50	87	56	89	48	84	53	86	53
May 16	85	54	83	57	82	52	84	55	83	52	83	54	83	56	Jul 16	80	54	80	56	79	52	80	57	82	51	78	55	79	51
May 17	89	55	90	50	90	51	87	48	90	48	90	53	88	49	Jul 17	85	51	85	50	84	48	85	51	88	46	85	52	85	52
May 18	95	62	93	56	90	55	91	60	96	55	93	52	91	51	Jul 18	89	56	91	57	90	53	89	57	92	52	90	55	90	54
May 19	98	63	98	63	94	63	96	63	97	58	98	56	96	54	Jul 19	86	59	87	59	84	54	86	59	88	53	86	58	86	57
May 20	100	63	98	73	95	77	98	69	97	69	99	60	95	57	Jul 20	83	54	83	55	82	51	83	55	85	49	82	56	84	54
May 21	101	66	99	66	96	67	99	66	99	68	100	63	97	58	Jul 21	85	54	86	56	84	52	84	51	90	50	84	54	83	54
May 22	97	61	98	60	96	56	96	60	98	59	98	62	94	59	Jul 22	92	54	94	55	91	52	91	55	94	60	93	49	92	52
May 23	96	59	98	64	92	53	95	71	98	54	98	59	94	59	Jul 23	102	54	101	57	96	56	95	60	97	51	96	56	94	55
May 24	96	62	99	61	96	54	95	60	98	57	98	58	94	55	Jul 24	96	60	96	68	94	57	92	68	97	58	95</			

Table 3. (Continued)

	Glenn (Willows)		Colusa (colusa)		Yolo (zamora)		Butte (Durham)		Yuba (Yuba City)		Sutter (Nicolas)		San Joaquin (Escalon)	
	max	min	max	min	max	min	max	min	max	min	max	min	max	min
Aug 01	92	60	93	62	90	55	93	61	95	57	92	61	94	57
Aug 02	92	58	93	58	93	53	94	57	96	53	94	57	92	57
Aug 03	90	55	90	59	89	55	91	57	96	53	96	53	88	61
Aug 04	90	59	89	60	87	56	88	60	92	54	88	59	86	58
Aug 05	91	55	93	61	90	54	91	58	94	54	92	59	89	59
Aug 06	98	55	99	56	95	54	95	59	99	55	98	55	96	59
Aug 07	102	65	104	60	93	59	100	60	104	60	103	59	101	60
Aug 08	103	67	105	65	101	64	103	66	106	64	104	67	103	63
Aug 09	96	67	98	67	95	60	95	68	98	61	95	63	92	62
Aug 10	92	56	93	60	91	55	91	58	95	53	91	58	89	57
Aug 11	95	55	98	53	95	51	93	56	97	51	96	51	91	57
Aug 12	90	55	92	59	92	52	91	57	94	52	88	55	86	57
Aug 13	89	51	91	53	90	50	90	53	92	51	89	54	86	54
Aug 14	94	55	96	53	95	49	91	54	96	51	94	50	93	55
Aug 15	95	57	97	56	95	52	94	55	100	53	96	52	92	56
Aug 16	99	57	100	54	97	54	96	55	101	54	98	53	97	55
Aug 17	98	65	99	74	101	57	98	70	101	56	101	57	98	58
Aug 18	94	57	96	58	92	53	94	58	97	56	97	58	97	57
Aug 19	96	57	98	57	94	57	95	58	96	55	96	57	95	56
Aug 20	83	54	83	56	83	51	83	55	85	50	80	55	83	53
Aug 21	84	52	84	52	83	52	83	53	83	60	83	53	84	52
Aug 22	87	56	87	59	87	53	85	56	86	48	86	58	81	57
Aug 23	84	52	86	58	86	55	83	57	87	53	87	57	85	54
Aug 24	93	57	92	56	89	56	91	59	92	55	91	60	88	58
Aug 25	95	56	97	57	96	56	94	56	96	55	96	58	95	54
Aug 26	104	56	101	57	98	57	96	59	100	56	100	55	97	56
Aug 27	108	57	107	59	102	59	107	60	105	57	104	57	100	58
Aug 28	105	66	104	59	101	60	100	59	102	58	103	58	101	60
Aug 29	96	66	98	61	94	58	93	62	95	58	95	59	93	61
Aug 30	85	56	86	58	78	55	84	56	84	52	81	56	84	57
Aug 31	90	58	90	54	88	53	88	55	90	53	89	56	91	56
Sep 01	91	57	92	56	89	54	91	60	92	55	92	59	92	57
Sep 02	96	57	97	58	94	57	95	60	97	55	96	60	96	58
Sep 03	95	54	98	56	96	54	96	59	98	55	98	59	95	60
Sep 04	87	54	97	69	93	54	94	66	96	55	97	60	96	59
Sep 05	87	56	91	57	90	52	85	58	89	53	89	57	90	57
Sep 06	95	56	90	56	90	57	91	57	88	57	90	53	89	51
Sep 07	97	55	95	50	91	51	87	51	92	49	92	50	92	50
Sep 08	100	60	97	52	94	49	98	53	90	52	90	51	87	52
Sep 09	85	52	86	53	84	52	82	53	84	50	83	55	82	55
Sep 10	85	51	85	57	84	50	82	54	84	52	84	54	83	56
Sep 11	81	55	77	56	82	56	73	56	76	55	79	58	85	60
Sep 12	85	52	85	52	85	51	83	56	84	50	83	55	84	56
Sep 13	87	52	87	56	87	52	87	55	86	49	86	55	87	55
Sep 14	95	54	94	56	93	57	91	58	83	54	92	56	93	54
Sep 15	92	60	92	62	92	52	89	61	80	54	91	56	90	54
Sep 16	88	60	87	60	81	57	86	60	85	54	84	57	84	57
Sep 17	95	53	92	55	90	51	86	55	87	50	88	53	87	54
Sep 18	92	54	91	59	89	54	92	62	89	52	88	55	88	55
Sep 19	94	54	93	55	92	53	88	55	91	52	91	54	88	56
Sep 20	92	53	92	53	89	53	90	54	91	52	91	54	90	55
Sep 21	95	56	95	52	92	48	90	53	93	49	91	49	88	55
Sep 22	92	55	93	52	90	53	91	55	91	50	91	52	90	52
Sep 23	87	56	89	51	87	52	89	54	87	51	86	54	86	53
Sep 24	85	53	85	49	81	49	82	51	81	48	81	49	82	55
Sep 25	77	55	78	55	77	57	78	56	76	53	76	54	77	53
Sep 26	84	55	85	52	85	52	84	51	83	48	84	47	84	53
Sep 27	83	56	84	55	82	52	82	56	82	54	80	55	80	54
Sep 28	85	50	82	49	80	49	83	52	81	46	80	44	79	50
Sep 29	95	55	94	49	93	53	93	55	91	46	93	45	87	48
Sep 30	100	56	98	50	95	54	99	53	95	46	96	52	93	50
Oct 01	105	55	104	54	102	63	103	57	101	57	102	57	97	56
Oct 02	103	65	104	57	103	58	106	58	103	55	104	54	96	57
Oct 03	98	59	98	55	97	53	95	56	96	53	97	55	94	54
Oct 04	86	54	87	58	86	50	85	57	83	50	82	56	81	57
Oct 05	75	49	76	53	74	52	76	52	75	49	74	54	73	53
Oct 06	78	47	78	46	75	49	76	47	76	43	76	45	75	49
Oct 07	78	47	79	48	73	47	79	48	78	47	78	48	78	50
Oct 08	82	48	80	54	78	51	82	55	79	48	78	52	77	51
Oct 09	82	54	81	51	81	52	81	53	79	49	81	46	78	47
Oct 10	84	50	83	47	83	46	82	47	83	42	84	40	84	42
Oct 11	82	50	80	54	80	50	82	57	78	45	82	53	80	47
Oct 12	90	58	88	62	87	63	88	61	85	54	90	59	84	50
Oct 13	93	62	91	53	91	54	91	58	89	47	88	44	85	45
Oct 14	92	62	90	51	89	51	84	53	88	45	88	45	88	49
Oct 15	89	50	88	47	86	49	87	48	87	47	87	48	92	51
Oct 16	83	54	80	51	81	52	83	51	78	47	82	52	82	52
Oct 17	80	51	79	50	77	52	79	51	78	50	78	50	77	52
Oct 18	88	52	85	45	85	45	87	45	83	42	83	42	83	47
Oct 19	83	45	81	43	83	43	81	44	83	44	83	44	81	46
Oct 20	81	46	80	45	80	45	81	46	81	44	80	43	86	46
Oct 21	78	43	74	41	75	40	76	46	75	40	74	46	73	46
Oct 22	81	43	80	44	79	43	78	45	78	41	79	42	77	44
Oct 23	76	48	75	60	76	46	75	59	74	43	77	47	77	49
Oct 24	81	54	79	48	80	52	81	48	79	42	80	42	75	44
Oct 25	86	48	81	44	71	47	81	42	78	42	77	40	81	42
Oct 26	83	48	82	41	74	47	81	43	81	41	82	43	82	45
Oct 27	70	48	71	48	70	46	70	51	70	47	71	52	73	49
Oct 28	64	48	65	50	67	52	65	54	67	48	68	52	73	45
Oct 29	68	48	68	53	69	57	68	53	67	51	69	55	70	48
Oct 30	64	55	68	56	67	53	60	57	65	52	66	54	68	52
Oct 31	67	48	70	48	70	48	69	49	71	47	71	47	68	47

Table 4. 2001 Very Early Rice Variety Test - Butte County (Biggs RES)

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
99Y469	L	10740 (1)	4.7 (12)	78 (11)	1 (1)	33 (2)
00Y481	L	10720 (2)	4.7 (14)	80 (12)	2 (5)	36 (7)
M-205	M	10700 (3)	4.8 (6)	85 (18)	1 (1)	37 (11)
00Y175	W	10330 (4)	4.7 (14)	80 (13)	10 (9)	37 (11)
L-204	L	10300 (5)	4.8 (8)	81 (14)	1 (1)	34 (3)
S-102	S	10260 (6)	4.9 (2)	74 (2)	14 (11)	37 (11)
L-205	REX	10220 (7)	4.7 (12)	82 (15)	6 (8)	35 (4)
M-202	M	9950 (8)	4.9 (3)	82 (17)	12 (10)	40 (18)
99Y042	REX	9930 (9)	4.7 (14)	75 (5)	1 (4)	33 (1)
99Y212	M	9850 (10)	4.8 (6)	76 (8)	2 (6)	37 (9)
M-104	M	9760 (11)	4.9 (3)	72 (1)	22 (15)	37 (14)
98Y242	M	9720 (12)	4.8 (8)	77 (10)	4 (7)	38 (16)
CH-201	SPQ	9570 (13)	5.0 (1)	82 (15)	16 (14)	35 (6)
00Y184	W	9560 (14)	4.7 (18)	76 (6)	15 (12)	36 (7)
00Y004	SPQ	9450 (15)	4.8 (11)	75 (3)	29 (16)	35 (4)
98Y174	MPQ	9240 (16)	4.9 (3)	77 (9)	35 (18)	39 (17)
M-103	M	9040 (17)	4.7 (14)	75 (4)	29 (16)	37 (14)
CM-101	WX	8930 (18)	4.8 (8)	76 (6)	15 (13)	37 (9)
MEAN		9900	4.8	78	12	36
CV		6.8	2	2.1	120.1	4.4
LSD (.05)		950	0.1	2	20	2

Preliminary Lines and Varieties

00Y480	L	10440 (1)	4.8 (18)	81 (25)	1 (1)	36 (17)
97Y469	TQ	10200 (2)	4.8 (18)	81 (28)	2 (7)	38 (27)
00Y168	S	9990 (3)	4.8 (18)	77 (13)	2 (7)	35 (6)
00Y447	L	9970 (4)	4.8 (13)	77 (15)	4 (13)	37 (21)
00Y444	L	9960 (5)	4.8 (9)	77 (15)	13 (20)	38 (23)
00Y392	M	9940 (6)	4.7 (23)	81 (28)	6 (16)	38 (26)
00Y170	S	9940 (7)	4.8 (13)	74 (1)	3 (10)	35 (7)
00Y478	L	9830 (8)	4.7 (26)	80 (24)	1 (3)	35 (7)
00Y358	M	9800 (9)	4.8 (18)	81 (25)	4 (12)	36 (12)
00Y716	M	9730 (10)	4.9 (4)	77 (14)	4 (11)	38 (28)
00Y440	L	9620 (11)	4.8 (9)	81 (28)	1 (3)	34 (4)
00Y228	M	9600 (12)	4.9 (1)	76 (10)	15 (22)	35 (11)
00Y879	M	9530 (13)	4.8 (13)	75 (4)	4 (13)	36 (12)
00Y455	L	9490 (14)	4.7 (23)	79 (21)	2 (5)	36 (12)
00Y151	SPQ	9420 (15)	4.6 (30)	79 (21)	1 (1)	33 (1)
00Y805	M	9420 (16)	4.8 (6)	76 (7)	35 (29)	40 (30)
00Y186	WX	9410 (17)	4.7 (25)	79 (20)	25 (27)	38 (24)
99Y234	M	9370 (18)	4.9 (5)	76 (9)	8 (18)	36 (16)
00Y467	L	9360 (19)	4.7 (26)	79 (21)	4 (13)	35 (9)
00Y222	M	9240 (20)	4.8 (18)	77 (15)	18 (25)	35 (10)
00Y806	M	9200 (21)	4.9 (2)	76 (7)	11 (19)	37 (21)
00Y460	REX	9100 (22)	4.7 (26)	81 (27)	13 (21)	36 (18)
00Y487	BAS	9000 (23)	4.8 (6)	75 (3)	2 (5)	34 (5)
00Y215	M	8990 (24)	4.8 (9)	76 (10)	2 (7)	37 (19)
00Y737	M	8870 (25)	4.9 (2)	78 (19)	7 (17)	38 (24)
97Y187	MPQ	8770 (26)	4.7 (26)	78 (18)	29 (28)	37 (20)
00Y811	M	8540 (27)	4.8 (13)	75 (6)	17 (23)	40 (29)
00-167	MPQ	8110 (28)	4.8 (9)	76 (12)	18 (24)	36 (15)
00Y157	SPQ	7960 (29)	4.8 (13)	75 (4)	40 (30)	34 (3)
00Y158	SPQ	7620 (30)	4.8 (6)	75 (2)	24 (26)	33 (2)
MEAN		9350	4.8	78	11	36
CV		4.4	1.7	2.3	93.5	2.8
LSD (.05)		850		4	20	2

Planting dates: May 14, May 24 (reps 1&2, 3&4 respectively).

S = short; M = medium; L = long; BAS = basmati; PQ = premium quality; REX = Newrex; TQ = Te Qing; W or 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 parenthesis indicate relative rank in column.

Table 5. 2001 Very Early Rice Variety Test - Yolo County (Geer Ranch)

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield	Grain	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		at 14% Moisture lbs/acre	Moisture at Harvest (%)				
S-102	S	9880 (1)	16.0 (17)	4.2 (10)	84 (1)	53 (12)	40 (12)
00Y175	W	9820 (2)	20.0 (9)	3.9 (15)	88 (7)	56 (13)	38 (6)
CM-101	WX	9550 (3)	17.6 (16)	4.0 (14)	86 (5)	85 (17)	40 (15)
00Y184	W	9480 (4)	20.8 (6)	3.8 (18)	88 (6)	5 (7)	41 (18)
00Y481	L	9450 (5)	15.5 (18)	4.5 (4)	90 (12)	2 (6)	36 (4)
99Y212	M	9380 (6)	19.9 (11)	4.2 (10)	85 (3)	35 (10)	40 (13)
M-104	M	9300 (7)	19.7 (12)	4.4 (5)	85 (2)	85 (16)	40 (13)
98Y242	M	9130 (8)	20.2 (8)	4.2 (7)	91 (13)	18 (9)	39 (10)
M-202	M	8880 (9)	22.7 (2)	4.6 (2)	95 (17)	13 (8)	40 (16)
M-103	M	8710 (10)	20.6 (7)	4.2 (7)	86 (4)	56 (13)	39 (11)
00Y004	SPQ	8590 (11)	21.7 (3)	4.6 (3)	90 (10)	85 (17)	38 (6)
CH-201	SPQ	8250 (12)	20.9 (5)	4.9 (1)	93 (16)	70 (15)	39 (9)
L-204	L	8230 (13)	19.9 (10)	4.1 (12)	91 (14)	1 (1)	35 (3)
98Y174	MPQ	8180 (14)	21.0 (4)	4.3 (6)	90 (10)	48 (11)	40 (16)
L-205	REX	7680 (15)	17.9 (15)	3.8 (17)	92 (15)	1 (1)	38 (5)
99Y469	L	6930 (16)	18.4 (14)	3.9 (15)	89 (9)	1 (1)	35 (2)
M-205	M	6730 (17)	24.9 (1)	4.0 (13)	104 (18)	1 (1)	38 (6)
99Y042	REX	5850 (18)	19.0 (13)	4.2 (7)	88 (8)	1 (1)	32 (1)
MEAN		8560	19.8	4.2	90	34	38
CV		7.4	9.9	6.7	0.7	54.9	2.8
LSD (.05)		900	2.8	0.4	1	27	1

Preliminary Lines and Varieties

00Y186	WX	10170 (1)	19.1 (5)	3.5 (29)	87 (8)	45 (25)	39 (20)
97Y469	TQ	9940 (2)	16.2 (21)	4.0 (22)	89 (19)	3 (18)	41 (30)
00Y228	M	9930 (3)	16.9 (18)	4.5 (4)	87 (9)	60 (28)	38 (15)
00Y157	SPQ	9550 (4)	17.7 (12)	4.4 (9)	83 (3)	83 (30)	36 (3)
00Y170	S	9520 (5)	17.1 (15)	4.5 (4)	81 (1)	41 (23)	36 (3)
99Y234	M	9510 (6)	17.3 (13)	4.3 (15)	83 (2)	8 (20)	37 (9)
00Y478	L	9500 (7)	13.1 (29)	4.6 (2)	88 (12)	1 (1)	35 (1)
00Y215	M	9390 (8)	17.9 (10)	4.3 (12)	89 (19)	28 (22)	39 (23)
00Y805	M	9320 (9)	16.4 (19)	4.3 (12)	91 (25)	68 (29)	40 (26)
97Y187	MPQ	9290 (10)	17.1 (15)	3.9 (25)	91 (26)	50 (26)	40 (26)
00-167	MPQ	9250 (11)	17.0 (17)	4.3 (12)	91 (26)	8 (20)	36 (7)
00Y158	SPQ	9240 (12)	16.3 (20)	4.4 (6)	85 (5)	60 (27)	36 (7)
00Y444	L	9120 (13)	12.4 (30)	4.4 (6)	84 (4)	1 (1)	39 (23)
00Y480	L	8880 (14)	14.1 (28)	4.4 (9)	88 (13)	1 (1)	36 (3)
00Y168	S	8850 (15)	18.4 (8)	4.4 (9)	86 (7)	1 (1)	39 (20)
00Y392	M	8790 (16)	20.9 (4)	4.2 (19)	92 (29)	1 (1)	38 (15)
00Y440	L	8640 (17)	15.6 (23)	3.8 (27)	90 (21)	1 (1)	35 (1)
00Y358	M	8630 (18)	17.8 (11)	4.1 (20)	94 (30)	1 (1)	39 (20)
00Y455	L	8600 (19)	14.3 (27)	3.9 (25)	88 (13)	1 (1)	36 (3)
00Y460	REX	8590 (20)	14.9 (24)	3.5 (29)	88 (13)	6 (19)	37 (12)
00Y151	SPQ	8520 (21)	19.1 (6)	3.9 (24)	90 (21)	1 (1)	37 (9)
00Y806	M	8340 (22)	17.3 (13)	4.3 (15)	90 (21)	43 (24)	38 (15)
00Y467	L	8140 (23)	15.7 (22)	4.1 (20)	88 (13)	1 (1)	37 (9)
00Y487	BAS	7720 (24)	14.6 (26)	3.7 (28)	85 (5)	1 (1)	37 (12)
00Y222	M	7660 (25)	18.3 (9)	4.4 (6)	91 (26)	1 (1)	38 (14)
00Y447	L	7410 (26)	14.8 (25)	4.2 (18)	87 (9)	1 (1)	38 (15)
00Y811	M	7360 (27)	18.8 (7)	4.3 (15)	87 (9)	1 (1)	40 (26)
00Y737	M	6250 (28)	21.2 (3)	4.5 (3)	89 (18)	1 (1)	41 (29)
00Y716	M	4670 (29)	23.2 (2)	4.6 (1)	90 (21)	1 (1)	40 (25)
00Y879	M	3630 (30)	24.8 (1)	4.0 (22)	88 (13)	1 (1)	38 (15)
MEAN		8480	17.3	4.2	88	17	38
CV		7.2	5.6	6.8	0.4	117	3.2
LSD (.05)		1250	2	0.6	1	41	2

Planting date: May 10 Harvest date: October 8.

S = short; M = medium; L = long; BAS = basmati; PQ = premium quality; REX = Newrex; TQ = Te Qing; W or 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 parenthesis indicate relative rank in column.

Table 6. 2001 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 (in)
98Y242	M	9480 (1)	18.0 (6)	4.2 (13)	86 (11)	1 (1)	37 (13)
00Y184	SW	9370 (2)	18.6 (5)	3.9 (17)	83 (7)	2 (9)	37 (13)
S-102	S	9260 (3)	12.4 (17)	4.1 (15)	79 (1)	9 (12)	37 (17)
00Y175	SW	8950 (4)	17.1 (8)	4.4 (6)	84 (10)	23 (16)	36 (12)
00Y481	L	8790 (5)	12.8 (16)	4.3 (9)	88 (15)	1 (1)	34 (5)
M-104	M	8780 (6)	17.2 (7)	4.5 (4)	82 (2)	12 (13)	37 (13)
99Y469	L	8770 (7)	13.5 (15)	4.1 (16)	84 (8)	2 (9)	34 (4)
99Y212	M	8660 (8)	18.6 (4)	4.4 (8)	82 (2)	1 (1)	37 (13)
98Y174	MPQ	8590 (9)	16.0 (9)	4.2 (13)	84 (8)	4 (11)	36 (8)
M-202	M	8590 (10)	18.8 (3)	4.6 (1)	94 (17)	2 (8)	35 (7)
99Y042	REX	8570 (11)	11.7 (18)	4.2 (12)	82 (2)	1 (1)	30 (1)
CM-101	WX	8530 (12)	15.5 (10)	3.9 (18)	82 (5)	29 (17)	37 (18)
L-204	L	8530 (13)	14.3 (13)	4.3 (10)	87 (13)	1 (1)	33 (2)
M-205	M	8440 (14)	22.4 (1)	4.5 (2)	96 (18)	1 (1)	33 (3)
M-103	M	8310 (15)	15.4 (11)	4.4 (6)	82 (5)	13 (14)	36 (10)
L-205	REX	8250 (16)	13.6 (14)	4.5 (4)	87 (13)	1 (1)	34 (6)
00Y004	SPQ	7920 (17)	19.1 (2)	4.3 (11)	86 (11)	68 (18)	36 (10)
CH-201	SPQ	7810 (18)	14.6 (12)	4.5 (2)	93 (16)	19 (15)	36 (8)
MEAN		8640	16.1	4.3	86	10	35
CV		3.6	6.5	4.5	0.4	113	3.1
LSD (.05)		440	1.5	0.3	0	17	2

Preliminary 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 (in)
00-167	MPQ	9290 (1)	14.7 (17)	4.0 (29)	88 (21)	6 (26)	35 (11)
00Y215	M	9220 (2)	15.8 (14)	4.2 (22)	84 (10)	6 (26)	36 (16)
00Y392	M	9130 (3)	17.9 (2)	4.5 (6)	90 (27)	2 (21)	35 (11)
00Y170	S	9100 (4)	15.7 (15)	4.6 (2)	79 (1)	21 (28)	33 (1)
00Y186	WX	8990 (5)	16.4 (9)	3.9 (30)	82 (4)	1 (1)	37 (26)
97Y187	MPQ	8950 (6)	17.4 (3)	4.3 (16)	89 (24)	1 (1)	35 (11)
00Y805	M	8690 (7)	14.1 (19)	4.5 (6)	86 (17)	2 (21)	37 (25)
00Y811	M	8540 (8)	13.7 (21)	4.6 (2)	82 (6)	1 (1)	37 (26)
00Y228	M	8510 (9)	15.1 (16)	4.3 (16)	84 (11)	1 (1)	36 (22)
00Y444	L	8480 (10)	10.9 (30)	4.6 (2)	82 (6)	1 (1)	37 (26)
00Y358	M	8470 (11)	16.6 (8)	4.4 (12)	90 (27)	1 (1)	34 (8)
00Y480	L	8390 (12)	11.1 (29)	4.2 (24)	89 (24)	1 (1)	34 (5)
00Y467	L	8370 (13)	11.6 (26)	4.2 (24)	86 (18)	1 (1)	36 (16)
00Y222	M	8330 (14)	14.7 (18)	4.0 (27)	91 (30)	1 (1)	33 (1)
00Y478	L	8330 (15)	11.3 (27)	4.4 (12)	88 (22)	1 (1)	34 (5)
00Y157	SPQ	8290 (16)	16.1 (12)	4.0 (27)	79 (1)	68 (30)	35 (11)
99Y234	M	8230 (17)	17.0 (6)	4.2 (22)	82 (6)	2 (21)	36 (16)
00Y168	S	8220 (18)	17.2 (4)	4.3 (20)	81 (3)	1 (1)	36 (16)
00Y806	M	8140 (19)	17.2 (5)	4.3 (20)	84 (11)	2 (21)	36 (16)
00Y460	REX	8020 (20)	11.8 (25)	4.4 (12)	85 (13)	1 (1)	35 (11)
97Y469	TQ	7990 (21)	13.9 (20)	4.3 (16)	85 (13)	2 (21)	39 (30)
00Y440	L	7960 (22)	12.5 (23)	4.5 (9)	89 (24)	1 (1)	33 (1)
00Y158	SPQ	7940 (23)	16.0 (13)	4.4 (12)	82 (6)	40 (29)	36 (22)
00Y455	L	7780 (24)	13.4 (22)	4.4 (11)	87 (20)	1 (1)	33 (1)
00Y151	SPQ	7740 (25)	18.1 (1)	4.1 (26)	89 (23)	1 (1)	34 (8)
00Y737	M	7540 (26)	16.1 (11)	4.7 (1)	90 (27)	1 (1)	37 (26)
00Y487	BAS	7300 (27)	11.2 (28)	4.3 (16)	82 (4)	1 (1)	34 (5)
00Y447	L	7280 (28)	12.0 (24)	4.5 (9)	85 (13)	1 (1)	35 (10)
00Y716	M	6870 (29)	16.2 (10)	4.5 (6)	86 (18)	1 (1)	36 (16)
00Y879	M	6500 (30)	16.9 (7)	4.6 (2)	85 (13)	1 (1)	36 (22)
MEAN		8220	14.7	4.3	85	6	35
CV		4.5	4.5	4.9	0.4	173.5	2.4
LSD (.05)		760	1.4		1	20	2

Planting date: May 14 Harvest date: October 12.

S = short; M = medium; L = long; BAS = basmati; PQ = premium quality; REX = Newrex;

TQ = Te Qing; W or 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 parenthesis indicate relative rank in column.

Table 7. 2001 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	Plant Height (in)
S-102	S	9680 (1)	15.8 (17)	4.0 (17)	85 (1)	32 (12)
00Y175	SW	9130 (2)	22.1 (9)	4.1 (15)	91 (12)	33 (16)
CM-101	WX	9070 (3)	17.3 (14)	4.3 (8)	88 (5)	32 (12)
98Y174	MPQ	8560 (4)	20.7 (10)	4.0 (17)	85 (3)	31 (7)
M-104	M	8400 (5)	23.3 (6)	4.5 (2)	89 (9)	32 (10)
99Y212	M	8280 (6)	22.7 (8)	4.2 (14)	88 (6)	33 (18)
98Y242	M	8280 (7)	26.5 (3)	4.3 (8)	94 (15)	33 (16)
M-103	M	8080 (8)	20.4 (11)	4.5 (7)	86 (4)	31 (7)
00Y184	SW	7800 (9)	23.6 (5)	4.0 (16)	89 (8)	32 (12)
L-204	L	7750 (10)	17.2 (15)	4.5 (2)	89 (9)	30 (3)
99Y469	L	7740 (11)	18.1 (12)	4.2 (12)	88 (6)	26 (1)
00Y481	L	7630 (12)	16.2 (16)	4.5 (6)	90 (11)	30 (3)
L-205	REX	7300 (13)	17.7 (13)	4.5 (5)	91 (12)	31 (6)
99Y042	REX	7190 (14)	15.5 (18)	4.2 (13)	85 (2)	26 (2)
M-202	M	7010 (15)	26.7 (2)	4.7 (1)	99 (16)	32 (12)
00Y004	SPQ	6870 (16)	24.2 (4)	4.3 (11)	92 (14)	32 (11)
M-205	M	6780 (17)	26.9 (1)	4.3 (8)	101 (17)	30 (5)
CH-201	SPQ	6350 (18)	23.1 (7)	4.5 (2)	103 (18)	31 (7)
MEAN		7880	21	4.3	91	31
CV		4.9	5.1	5.0	0.7	3.3
LSD (.05)		550	1.5	0.3	1	1

Preliminary Lines and Varieties

00Y170	S	8150 (1)	17.3 (20)	4.2 (20)	86 (4)	29 (3)
00Y186	WX	8130 (2)	21.6 (13)	4.2 (20)	89 (15)	33 (27)
97Y187	MPQ	8100 (3)	23.9 (4)	4.2 (20)	92 (26)	32 (20)
97Y469	TQ	8000 (4)	15.1 (23)	4.4 (15)	88 (14)	32 (25)
99Y234	M	7920 (5)	20.6 (17)	4.5 (9)	87 (10)	30 (14)
00Y444	L	7910 (6)	12.9 (30)	4.6 (6)	86 (7)	30 (14)
00Y228	M	7890 (7)	20.9 (15)	4.4 (12)	90 (19)	30 (14)
00Y215	M	7810 (8)	22.2 (10)	4.4 (12)	91 (24)	33 (27)
00Y358	M	7770 (9)	22.8 (9)	4.5 (9)	95 (29)	29 (3)
00Y478	L	7630 (10)	13.3 (28)	4.3 (17)	87 (10)	28 (1)
00-167	MPQ	7600 (11)	24.0 (3)	4.4 (15)	92 (26)	30 (14)
00Y805	M	7570 (12)	23.8 (5)	4.5 (8)	94 (28)	33 (27)
00Y158	SPQ	7500 (13)	22.1 (11)	3.9 (29)	90 (19)	32 (20)
00Y480	L	7450 (14)	14.3 (27)	4.3 (18)	86 (4)	29 (3)
00Y392	M	7410 (15)	24.7 (1)	4.1 (25)	91 (25)	32 (20)
00Y811	M	7380 (16)	20.7 (16)	4.0 (28)	89 (15)	33 (26)
00Y806	M	7380 (17)	23.7 (8)	4.3 (18)	87 (10)	31 (19)
00Y151	SPQ	7270 (18)	21.3 (14)	3.7 (30)	90 (22)	30 (11)
00Y222	M	7240 (19)	23.8 (5)	4.7 (4)	95 (29)	29 (9)
00Y460	REX	7230 (20)	15.6 (22)	4.1 (24)	89 (18)	30 (11)
00Y168	S	7220 (21)	17.9 (19)	4.4 (12)	86 (7)	29 (3)
00Y487	BAS	7200 (22)	13.1 (29)	4.7 (2)	83 (1)	29 (3)
00Y157	SPQ	6980 (23)	20.3 (18)	4.0 (26)	86 (7)	30 (11)
00Y879	M	6900 (24)	21.7 (12)	4.0 (26)	90 (19)	30 (14)
00Y440	L	6770 (25)	15.0 (24)	4.6 (5)	86 (4)	28 (1)
00Y455	L	6740 (26)	16.3 (21)	4.5 (9)	89 (15)	29 (9)
00Y467	L	6650 (27)	14.4 (26)	4.2 (23)	85 (3)	29 (3)
00Y447	L	6510 (28)	14.7 (25)	4.6 (6)	85 (2)	32 (20)
00Y737	M	5550 (29)	23.8 (5)	4.9 (1)	90 (22)	33 (27)
00Y716	M	5260 (30)	24.4 (2)	4.7 (2)	87 (10)	32 (20)
MEAN		7300	19.5	4.3	88	30
CV		4.6	5.8	4.8	1.1	3.7
LSD (.05)		680	2.3	0.4	2	2

Planting date: May 8 Harvest date: September 26.

S = short; M = medium; L = long; BAS = basmati; PQ = premium quality;

REX = Newrex; TQ = Te Qing; W or WX = waxy.

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

Numbers in parenthesis indicate relative rank in column.

Table 8. 2001 Very Early Rice Variety Tests Four Location Yield (lb/acre @ 14% moisture) Summary

Advanced Lines and Varieties

Variety	Grain Type	Average	Biggs	Yolo	Sutter	San Joaquin
			Biggs (RES)	Geer Ranch	Lauppe Ranch	Brumley
S-102	S	9770 (1)	10260 (6)	9880 (1)	9260 (3)	9680 (1)
00Y175	W	9560 (2)	10330 (4)	9820 (2)	8950 (4)	9130 (2)
98Y242	M	9150 (3)	9720 (12)	9130 (8)	9480 (1)	8280 (7)
00Y481	L	9150 (4)	10720 (2)	9450 (5)	8790 (5)	7630 (12)
M-104	M	9060 (5)	9760 (11)	9300 (7)	8780 (6)	8400 (5)
00Y184	W	9050 (6)	9560 (14)	9480 (4)	9370 (2)	7800 (9)
99Y212	M	9040 (7)	9850 (10)	9380 (6)	8660 (8)	8280 (6)
CM-101	W	9020 (8)	8930 (18)	9550 (3)	8530 (12)	9070 (3)
L-204	L	8700 (9)	10300 (5)	8230 (13)	8530 (13)	7750 (10)
98Y174	MPQ	8640 (10)	9240 (16)	8180 (14)	8590 (9)	8560 (4)
M-202	M	8610 (11)	9950 (8)	8880 (9)	8590 (10)	7010 (15)
99Y469	L	8550 (12)	10740 (1)	6930 (16)	8770 (7)	7740 (11)
M-103	M	8530 (13)	9040 (17)	8710 (10)	8310 (15)	8080 (8)
L-205	REX	8360 (14)	10220 (7)	7680 (15)	8250 (16)	7300 (13)
00Y004	SPQ	8210 (15)	9450 (15)	8590 (11)	7920 (17)	6870 (16)
M-205	M	8160 (16)	10700 (3)	6730 (17)	8440 (14)	6780 (17)
CH-201	SPQ	7990 (17)	9570 (13)	8250 (12)	7810 (18)	6350 (18)
99Y042	REX	7890 (18)	9930 (9)	5850 (18)	8570 (11)	7190 (14)
MEAN		8750	9900	8560	8640	7880
CV		6.0	6.8	7.4	3.6	4.9
LSD (.05)		360	950	900	440	550

Preliminary Lines and Varieties

00Y170	S	9180 (1)	9940 (7)	9520 (5)	9100 (4)	8150 (1)
00Y186	SWX	9180 (2)	9410 (17)	10170 (1)	8990 (5)	8130 (2)
97Y469	TQ	9030 (3)	10200 (2)	9940 (2)	7990 (21)	8000 (4)
00Y228	M	8980 (4)	9600 (12)	9930 (3)	8510 (9)	7890 (7)
00Y444	L	8870 (5)	9960 (5)	9120 (13)	8480 (10)	7910 (6)
00Y215	M	8850 (6)	8990 (24)	9390 (8)	9220 (2)	7810 (8)
00Y478	L	8820 (7)	9830 (8)	9500 (7)	8330 (15)	7630 (10)
00Y392	M	8820 (8)	9940 (6)	8790 (16)	9130 (3)	7410 (15)
00Y480	L	8790 (9)	10440 (1)	8880 (14)	8390 (12)	7450 (14)
97Y187	MPQ	8780 (10)	8770 (26)	9290 (10)	8950 (6)	8100 (3)
99Y234	M	8760 (11)	9370 (18)	9510 (6)	8230 (17)	7920 (5)
00Y805	M	8750 (12)	9420 (16)	9320 (9)	8690 (7)	7570 (12)
00Y358	M	8660 (13)	9800 (9)	8630 (18)	8470 (11)	7770 (9)
00Y168	S	8570 (14)	9990 (3)	8850 (15)	8220 (18)	7220 (21)
00-167	MPQ	8560 (15)	8110 (28)	9250 (11)	9290 (1)	7600 (11)
00Y806	M	8270 (16)	9200 (21)	8340 (22)	8140 (19)	7380 (17)
00Y440	L	8250 (17)	9620 (11)	8640 (17)	7960 (22)	6770 (25)
00Y151	SPQ	8240 (18)	9420 (15)	8520 (21)	7740 (25)	7270 (18)
00Y460	REX	8230 (19)	9100 (22)	8590 (20)	8020 (20)	7230 (20)
00Y157	SPQ	8200 (20)	7960 (29)	9550 (4)	8290 (16)	6980 (23)
00Y455	L	8150 (21)	9490 (14)	8600 (19)	7780 (24)	6740 (26)
00Y467	L	8130 (22)	9360 (19)	8140 (23)	8370 (13)	6650 (27)
00Y222	M	8120 (23)	9240 (20)	7660 (25)	8330 (14)	7240 (19)
00Y158	SPQ	8080 (24)	7620 (30)	9240 (12)	7940 (23)	7500 (13)
00Y811	M	7960 (25)	8540 (27)	7360 (27)	8540 (8)	7380 (16)
00Y487	BAS	7810 (26)	9000 (23)	7720 (24)	7300 (27)	7200 (22)
00Y447	L	7790 (27)	9970 (4)	7410 (26)	7280 (28)	6510 (28)
00Y737	M	7050 (28)	8870 (25)	6250 (28)	7540 (26)	5550 (29)
00Y879	M	6640 (29)	9530 (13)	3630 (30)	6500 (30)	6900 (24)
00Y716	M	6630 (30)	9730 (10)	4670 (29)	6870 (29)	5260 (30)
MEAN		8340	9350	8480	8220	7300
CV		5.3	4.4	7.2	4.5	4.6
LSD (.05)		440	850	1250	760	680

S = short; M = medium; L = long; BAS = basmati; PQ = premium quality; REX = Newrex;

TQ = Te Qing; W or WX = waxy.

Numbers in parenthesis indicate relative rank in column.

Table 9. Grain Yield (lb/acre @14% moisture) Summary of Very Early Rice Varieties by Location and Year (1997-2001)

Location	Year	M-103	M-104	M-202	Calmochi			
					101	S-102	L-204	L-205
Biggs (RES)	1997	9130	10540	10620	9800	11490	11570	-
	1998	8480	9610	8810	8320	9030	10180	10160
	1999	10330	10550	10480	10200	11140	10310	10610
	2000	9160	9720	9380	8590	9390	9330	10500
	2001	9040	9760	9950	8930	10260	10300	10220
Location Mean		9228	10036	9848	9168	10262	10338	10373
San Joaquin	1997	9630	9590	9370	9870	10130	8680	-
	1998	8120	8340	7110	8270	9070	7350	7650
	1999	7980	5620	-	8860	8260	2460	2490
	2000	7710	8260	6670	6750	8180	7370	6720
	2001	8080	8400	7010	9070	9680	7750	7300
Location Mean		8304	8042	7540	8564	9064	6722	6040
Sutter	1997	8510	8760	9720	9060	9270	8780	-
	1998	6430	7240	7090	6520	7240	7520	7700
	1999	9670	9260	9990	9670	10150	9410	9170
	2000	9230	9220	9940	9300	9750	8980	9370
	2001	8310	8780	8590	8530	9260	8530	8250
Location Mean		8430	8652	9066	8616	9134	8644	8623
Yolo	1997	9700	11530	12450	11430	11090	11900	-
	1998	7780	8820	9510	8540	9350	8870	8180
	1999	9960	9020	7420	9960	10290	9250	7750
	2000	9290	9340	9820	9800	9870	9170	8970
	2001	8710	9300	8880	9550	9880	8230	7680
Location Mean		9088	9602	9616	9856	10096	9484	8145
Loc/Years Mean		8763	9083	9095	9051	9639	8797	8295
Yield % M-103		100.0	103.7	103.8	103.3	110.0	100.4	94.7
Number of Tests		20	20	19	20	20	20	16

Table 10. 2001 Early Rice Variety Test - Butte County (Biggs - RES)

Advanced Lines and Varieties						
Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
99Y041	L	10410 (1)	4.8 (7)	81 (8)	1 (4)	36 (9)
L-205	L	10320 (2)	4.7 (10)	82 (12)	1 (4)	36 (5)
M-205	M	10180 (3)	4.7 (10)	84 (18)	1 (1)	36 (11)
99Y376	M	10090 (4)	4.6 (16)	83 (14)	2 (8)	37 (16)
M-104	M	9950 (5)	4.9 (2)	72 (1)	18 (18)	36 (6)
M-204	M	9880 (6)	4.7 (13)	84 (17)	2 (8)	37 (15)
S-102	S	9850 (7)	4.9 (2)	74 (2)	4 (13)	37 (12)
L-204	L	9800 (8)	4.7 (10)	81 (8)	1 (1)	32 (1)
99Y530	L	9670 (9)	4.5 (19)	83 (14)	1 (1)	34 (4)
00Y570	MPQ	9400 (10)	4.9 (4)	83 (16)	14 (16)	38 (19)
99Y087	REX	9390 (11)	4.6 (17)	81 (7)	2 (6)	34 (3)
M-202	M	9300 (12)	4.9 (5)	81 (8)	4 (13)	38 (17)
98Y242	M	9290 (13)	4.8 (8)	77 (4)	3 (10)	37 (12)
CH-201	SPQ	9290 (14)	5.0 (1)	82 (11)	19 (19)	36 (10)
00Y118	MPQ	9220 (15)	4.8 (8)	78 (6)	3 (10)	36 (8)
99Y278	MPQ	8920 (16)	4.7 (15)	82 (13)	4 (12)	37 (12)
00Y055	SPQ	8830 (17)	4.6 (18)	78 (5)	15 (17)	33 (2)
CM-101	W	8740 (18)	4.8 (6)	76 (3)	6 (15)	36 (6)
CT-201	BAS	8280 (19)	4.7 (13)	85 (19)	2 (6)	38 (18)
MEAN		9520	4.7	80	5	36
CV		5.9	1.9	2.8	141	4.5
LSD (.05)		790	0.1	3	11	2
Preliminary Lines and Varieties						
00Y562	L	11030 (1)	4.6 (31)	83 (25)	2 (13)	38 (23)
00P3895+6	L	10690 (2)	4.8 (12)	80 (10)	1 (1)	37 (15)
00Y558	L	10580 (3)	4.6 (31)	82 (20)	1 (1)	37 (15)
00Y637	M	10470 (4)	4.8 (8)	85 (31)	1 (7)	38 (23)
00Y509	L	10330 (5)	4.8 (12)	81 (15)	3 (15)	38 (29)
00Y510	L	10320 (6)	4.7 (30)	83 (27)	3 (15)	36 (11)
00Y375	M	10270 (7)	4.7 (23)	82 (20)	3 (15)	38 (29)
00Y506	L	10260 (8)	4.8 (12)	83 (27)	1 (1)	34 (2)
00Y434	M	10220 (9)	4.8 (12)	83 (27)	2 (10)	37 (19)
00Y410	M	10190 (10)	4.8 (12)	81 (15)	18 (31)	37 (15)
00Y623	M	10180 (11)	4.7 (23)	81 (18)	4 (20)	37 (19)
00Y247	M	9990 (12)	4.7 (23)	81 (15)	9 (27)	35 (8)
00Y284	MPQ	9970 (13)	4.9 (4)	80 (10)	19 (32)	38 (29)
00Y818	M	9950 (14)	4.7 (23)	80 (7)	22 (33)	38 (29)
00Y517	L	9900 (15)	4.7 (23)	86 (32)	3 (19)	35 (5)
00Y169	SPQ	9880 (16)	4.9 (1)	78 (3)	9 (28)	38 (23)
00Y730	M	9820 (17)	4.9 (1)	78 (1)	2 (14)	38 (23)
00Y408	M	9810 (18)	4.9 (4)	80 (7)	13 (29)	37 (19)
97Y346	BG	9740 (19)	4.8 (12)	82 (23)	4 (21)	35 (5)
00Y344	BG	9720 (20)	4.8 (8)	83 (27)	7 (26)	36 (11)
00Y728	M	9690 (21)	4.9 (1)	79 (4)	2 (10)	37 (19)
00Y296	MPQ	9680 (22)	4.9 (4)	80 (10)	6 (24)	38 (23)
99Y464	L	9640 (23)	4.5 (34)	81 (18)	1 (7)	34 (2)
00Y342	BG	9630 (24)	4.8 (12)	83 (25)	5 (23)	39 (34)
00Y871	M	9620 (25)	4.8 (8)	79 (4)	7 (25)	36 (11)
00Y152	SPQ	9530 (26)	4.7 (23)	82 (23)	1 (7)	35 (5)
00Y942	L	9500 (27)	4.6 (33)	86 (34)	1 (1)	35 (8)
00Y054	SPQ	9340 (28)	4.8 (12)	80 (10)	1 (1)	34 (1)
00Y790	M	9280 (29)	4.8 (12)	80 (10)	2 (10)	34 (2)
00Y736	M	9240 (30)	4.8 (8)	78 (1)	13 (29)	38 (23)
00Y748	M	8590 (31)	4.9 (4)	80 (7)	5 (22)	36 (10)
00-169	MPQ	8470 (32)	4.8 (12)	79 (4)	33 (34)	36 (11)
9844473	BAS	8420 (33)	4.8 (12)	86 (32)	3 (15)	37 (15)
9843599	BAS	7920 (34)	4.7 (23)	82 (20)	1 (1)	38 (29)
MEAN		9760	4.7	81	6	36
CV		4.2	2.4	1.9	124.9	3.4
LSD (.05)		840		3	15	2

Planting dates: May 14, May 24 (reps 1&2, 3&4 respectively).

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality;

REX = Newrex; W = 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 parenthesis indicate relative rank in column.

Table 11. 2001 Early Rice Variety Test - Butte County (John Thompson)

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 (in)
S-102	S	8930 (1)	15.7 (18)	4.0 (17)	76 (2)	1 (1)	38 (15)
M-205	M	8410 (2)	21.8 (5)	4.3 (9)	89 (19)	1 (1)	35 (1)
00Y570	MPQ	8390 (3)	22.3 (2)	4.3 (9)	88 (14)	11 (16)	37 (14)
M-104	M	8330 (4)	19.5 (10)	4.4 (4)	74 (1)	21 (17)	36 (10)
98Y242	M	8210 (5)	20.8 (8)	4.1 (13)	80 (4)	1 (1)	38 (15)
M-202	M	8170 (6)	22.6 (1)	4.2 (11)	87 (12)	1 (1)	38 (17)
M-204	M	8150 (7)	20.7 (9)	3.9 (18)	88 (16)	1 (1)	35 (3)
99Y041	L	8080 (8)	17.2 (11)	4.4 (3)	82 (7)	1 (1)	37 (13)
00Y118	MPQ	7830 (9)	21.0 (7)	4.1 (16)	83 (9)	5 (15)	38 (19)
99Y376	M	7790 (10)	21.8 (4)	4.1 (13)	87 (13)	1 (1)	36 (9)
CM-101	W	7790 (11)	16.9 (13)	4.5 (2)	79 (3)	23 (18)	36 (12)
CH-201	SPQ	7760 (12)	15.8 (17)	4.5 (1)	88 (16)	2 (14)	36 (10)
99Y530	L	7720 (13)	16.9 (12)	4.2 (12)	85 (11)	1 (1)	35 (1)
99Y278	MPQ	7640 (14)	22.1 (3)	4.3 (6)	88 (16)	1 (1)	35 (4)
00Y055	SPQ	7630 (15)	21.3 (6)	4.1 (15)	80 (5)	55 (19)	35 (4)
L-204	L	7550 (16)	16.0 (16)	3.8 (19)	82 (7)	1 (1)	35 (8)
L-205	L	7440 (17)	16.6 (14)	4.3 (7)	80 (5)	1 (1)	35 (4)
99Y087	REX	7080 (18)	15.0 (19)	4.4 (4)	85 (10)	1 (1)	35 (4)
CT-201	BAS	6800 (19)	16.1 (15)	4.3 (8)	88 (14)	1 (1)	38 (17)
MEAN		7880	18.9	4.2	84	7	36
CV		4.3	8.7	5.8	0.7	173.3	4.3
LSD (.05)		480	2.3	0.3	1	17	2

Preliminary Lines and Varieties

00Y562	L	8810 (1)	13.7 (31)	3.6 (32)	82 (17)	1 (1)	37 (25)
00Y408	M	8760 (2)	16.8 (18)	4.2 (19)	81 (11)	1 (1)	37 (25)
00Y410	M	8630 (3)	18.2 (6)	4.5 (7)	86 (28)	1 (1)	36 (18)
00Y169	SPQ	8410 (4)	16.7 (19)	4.3 (11)	77 (1)	1 (1)	37 (25)
00Y375	M	8290 (5)	18.5 (5)	4.4 (10)	86 (28)	1 (1)	36 (16)
00-169	MPQ	8080 (6)	18.8 (4)	4.3 (11)	83 (23)	2 (34)	36 (18)
00Y730	M	7960 (7)	17.4 (14)	4.6 (3)	79 (3)	1 (1)	38 (31)
00Y284	MPQ	7960 (8)	18.0 (9)	4.6 (3)	81 (11)	1 (1)	35 (11)
00Y342	BG	7960 (9)	17.2 (15)	4.6 (3)	82 (19)	1 (1)	39 (33)
00Y728	M	7950 (10)	17.6 (12)	4.3 (11)	79 (2)	1 (1)	38 (29)
00Y434	M	7920 (11)	17.5 (13)	4.2 (21)	87 (31)	1 (1)	34 (2)
00Y506	L	7890 (12)	13.8 (30)	4.1 (23)	83 (22)	1 (1)	34 (2)
00Y247	M	7820 (13)	17.1 (16)	4.5 (7)	84 (25)	1 (1)	35 (9)
00Y623	M	7820 (14)	18.2 (6)	3.9 (29)	89 (34)	1 (1)	35 (9)
00Y296	MPQ	7810 (15)	18.9 (2)	4.2 (21)	80 (6)	1 (1)	37 (25)
00Y344	BG	7810 (16)	16.6 (20)	4.3 (11)	85 (26)	1 (1)	35 (11)
00Y509	L	7780 (17)	14.2 (28)	3.6 (32)	83 (23)	1 (1)	37 (23)
00P3895+6	L	7770 (18)	13.5 (32)	4.5 (6)	81 (11)	1 (1)	36 (16)
00Y871	M	7710 (19)	14.7 (27)	4.3 (11)	79 (3)	1 (1)	37 (23)
00Y736	M	7690 (20)	15.9 (23)	4.6 (2)	80 (6)	1 (1)	39 (33)
00Y637	M	7660 (21)	18.2 (6)	4.0 (26)	88 (32)	1 (1)	36 (18)
00Y054	SPQ	7620 (22)	19.0 (1)	3.9 (29)	80 (6)	1 (1)	34 (1)
00Y558	L	7590 (23)	12.7 (34)	4.3 (16)	81 (14)	1 (1)	36 (18)
97Y346	BG	7470 (24)	16.8 (17)	4.1 (23)	81 (14)	1 (1)	34 (2)
99Y464	L	7460 (25)	14.2 (29)	3.6 (32)	80 (6)	1 (1)	34 (2)
00Y942	L	7430 (26)	13.2 (33)	4.0 (26)	86 (28)	1 (1)	34 (2)
00Y818	M	7400 (27)	17.8 (11)	4.4 (9)	82 (19)	1 (1)	38 (31)
00Y510	L	7390 (28)	15.8 (24)	4.3 (16)	82 (19)	1 (1)	38 (29)
00Y790	M	7270 (29)	15.9 (22)	4.3 (16)	82 (17)	1 (1)	34 (2)
00Y152	SPQ	7210 (30)	18.9 (2)	3.8 (31)	80 (6)	1 (1)	34 (2)
00Y517	L	6970 (31)	15.3 (25)	4.0 (26)	85 (27)	1 (1)	35 (11)
00Y748	M	6940 (32)	17.8 (10)	4.7 (1)	80 (5)	1 (1)	36 (18)
9844473	BAS	5770 (33)	14.8 (26)	4.2 (19)	88 (32)	1 (1)	35 (11)
9843599	BAS	5750 (34)	16.3 (21)	4.1 (25)	81 (14)	1 (1)	35 (11)
MEAN		7670	16.4	4.2	82	1	36
CV		4.4	4.7	5.8	0.6	23.6	2.3
LSD (.05)		680	1.6	0.5	1		2

Planting date: May 15 Harvest date: October 6.

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality; REX = Newrex; W = 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 parenthesis indicate relative rank in column.

Table 12. 2001 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 (in)
99Y376	M	10080 (1)	18.4 (6)	4.3 (12)	90 (16)	17 (10)	39 (15)
99Y530	L	9990 (2)	13.7 (18)	4.4 (10)	89 (13)	1 (1)	35 (3)
M-205	M	9960 (3)	18.7 (4)	4.6 (3)	92 (18)	3 (5)	37 (9)
98Y242	M	9940 (4)	17.7 (8)	4.5 (8)	84 (5)	46 (11)	38 (14)
M-204	M	9810 (5)	17.5 (9)	4.5 (6)	90 (15)	14 (9)	36 (4)
L-204	L	9580 (6)	15.0 (14)	4.1 (17)	86 (8)	1 (1)	35 (2)
M-202	M	9370 (7)	18.9 (3)	4.7 (1)	87 (11)	8 (8)	39 (17)
99Y087	REX	9330 (8)	12.2 (19)	4.4 (11)	89 (14)	4 (7)	34 (1)
S-102	S	9320 (9)	16.0 (13)	4.3 (14)	80 (1)	54 (12)	39 (16)
00Y055	SPQ	9300 (10)	16.9 (11)	3.8 (18)	81 (2)	99 (19)	37 (5)
99Y041	L	9240 (11)	14.4 (16)	4.7 (1)	86 (8)	1 (1)	38 (12)
00Y118	MPQ	9150 (12)	17.1 (10)	4.1 (16)	85 (6)	79 (14)	39 (17)
M-104	M	9110 (13)	19.1 (2)	4.5 (6)	81 (2)	98 (17)	37 (5)
00Y570	MPQ	9060 (14)	18.5 (5)	4.4 (9)	85 (6)	98 (17)	39 (17)
L-205	L	8920 (15)	14.9 (15)	4.3 (12)	86 (10)	3 (5)	37 (8)
CH-201	SPQ	8670 (16)	17.9 (7)	4.6 (5)	89 (12)	97 (16)	37 (5)
CM-101	W	8600 (17)	16.6 (12)	3.7 (19)	81 (2)	93 (15)	38 (11)
99Y278	MPQ	8550 (18)	19.7 (1)	4.6 (3)	91 (17)	68 (13)	37 (9)
CT-201	BAS	6740 (19)	13.9 (17)	4.2 (15)	94 (19)	1 (1)	38 (12)
MEAN		9200	16.7	4.3	87	41	37
CV		3.8	7.2	6.3	0.9	41.4	3.1
LSD (.05)		500	1.7	0.4	1	24	2

Preliminary Lines and Varieties

00Y410	M	10750 (1)	17.2 (10)	4.5 (6)	88 (23)	65 (30)	39 (31)
00Y375	M	10480 (2)	15.7 (20)	4.7 (1)	85 (11)	15 (24)	38 (18)
00Y623	M	10430 (3)	16.4 (15)	4.5 (6)	90 (28)	18 (26)	37 (10)
00Y434	M	10410 (4)	15.2 (22)	4.1 (20)	90 (28)	3 (19)	37 (16)
00Y562	L	10340 (5)	12.8 (31)	3.9 (30)	89 (26)	1 (1)	38 (18)
00Y169	SPQ	10230 (6)	16.6 (13)	4.4 (10)	80 (1)	65 (31)	37 (16)
00Y818	M	10210 (7)	16.2 (19)	4.2 (18)	84 (7)	35 (27)	38 (18)
00Y637	M	10200 (8)	17.2 (9)	4.2 (17)	92 (33)	1 (1)	38 (24)
00-169	MPQ	9990 (9)	18.3 (4)	4.5 (3)	84 (7)	65 (31)	38 (24)
00Y247	M	9940 (10)	16.7 (12)	4.5 (3)	86 (16)	3 (19)	36 (9)
00P3895+6	L	9900 (11)	12.1 (32)	4.5 (6)	85 (11)	1 (1)	37 (10)
00Y408	M	9860 (12)	16.4 (16)	4.4 (10)	87 (19)	99 (34)	38 (24)
97Y346	BG	9820 (13)	16.2 (18)	4.1 (23)	86 (16)	3 (19)	38 (24)
00Y728	M	9780 (14)	17.3 (8)	4.2 (18)	82 (2)	15 (24)	40 (32)
00Y054	SPQ	9620 (15)	18.5 (3)	3.5 (34)	82 (2)	1 (1)	35 (5)
00Y558	L	9590 (16)	12.1 (33)	4.3 (15)	87 (21)	1 (1)	34 (1)
00Y284	MPQ	9580 (17)	17.8 (6)	4.3 (15)	88 (23)	45 (28)	38 (24)
00Y790	M	9470 (18)	15.6 (21)	4.1 (20)	84 (7)	1 (1)	35 (3)
00Y344	BG	9350 (19)	16.3 (17)	4.4 (10)	88 (23)	1 (1)	37 (10)
99Y464	L	9350 (20)	11.9 (34)	4.0 (25)	86 (16)	1 (1)	37 (10)
00Y730	M	9180 (21)	16.7 (11)	4.4 (14)	84 (6)	58 (29)	40 (32)
00Y342	BG	9120 (22)	14.3 (26)	4.7 (2)	82 (4)	1 (1)	38 (24)
00Y517	L	9060 (23)	14.1 (27)	3.8 (31)	91 (31)	1 (1)	35 (5)
00Y506	L	9030 (24)	13.3 (29)	3.9 (28)	89 (26)	1 (1)	35 (5)
00Y510	L	8970 (25)	14.7 (24)	4.1 (20)	87 (19)	1 (1)	37 (10)
00Y509	L	8680 (26)	13.6 (28)	4.0 (25)	90 (28)	1 (1)	37 (10)
00Y942	L	8440 (27)	13.1 (30)	4.0 (25)	91 (31)	1 (1)	35 (3)
00Y296	MPQ	8130 (28)	18.2 (5)	4.5 (6)	86 (15)	3 (19)	38 (18)
00Y152	SPQ	8030 (29)	19.2 (1)	3.7 (32)	83 (5)	1 (1)	36 (8)
00Y736	M	7990 (30)	16.6 (13)	4.1 (23)	84 (7)	1 (1)	40 (34)
00Y871	M	7870 (31)	14.5 (25)	4.4 (10)	85 (11)	95 (33)	38 (24)
00Y748	M	7680 (32)	18.7 (2)	4.5 (3)	85 (14)	3 (19)	38 (18)
9843599	BAS	6710 (33)	17.6 (7)	3.9 (28)	87 (21)	1 (1)	38 (18)
9844473	BAS	5690 (34)	15.2 (22)	3.7 (32)	94 (34)	1 (1)	34 (2)
MEAN		9230	15.7	4.2	86	18	37
CV		5.7	8.1	5.9	1	80.4	2.4
LSD (.05)		1070	2.6	0.5	2	29	2

Planting date: May 9 Harvest date: October 7.

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality; REX = Newrex; W = 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 parenthesis indicate relative rank in column.

Table 13. 2001 Early Rice Variety Test - Yuba County (Quad 4, District 10)

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 (in)
M-104	M	8420 (1)	13.8 (11)	4.3 (6)	75 (2)	9 (17)	36 (11)
98Y242	M	8230 (2)	14.1 (8)	4.3 (7)	79 (4)	1 (1)	36 (14)
S-102	S	8160 (3)	11.8 (17)	4.1 (14)	73 (1)	3 (14)	37 (17)
99Y041	L	8130 (4)	13.1 (13)	4.3 (5)	80 (6)	1 (1)	35 (8)
CM-101	W	7990 (5)	11.5 (18)	4.0 (17)	75 (3)	19 (18)	37 (15)
00Y570	MPQ	7990 (6)	14.9 (4)	4.0 (17)	89 (18)	1 (1)	38 (19)
M-204	M	7960 (7)	14.7 (5)	4.2 (10)	85 (14)	1 (1)	35 (8)
99Y278	MPQ	7950 (8)	16.3 (1)	4.2 (10)	87 (16)	1 (1)	37 (16)
99Y376	M	7820 (9)	14.3 (6)	4.2 (12)	84 (12)	1 (1)	36 (12)
M-202	M	7810 (10)	15.7 (3)	4.4 (4)	86 (15)	3 (16)	38 (18)
M-205	M	7770 (11)	15.9 (2)	4.5 (2)	89 (18)	1 (1)	36 (10)
00Y118	MPQ	7740 (12)	14.2 (7)	4.1 (14)	81 (8)	1 (1)	36 (12)
00Y055	SPQ	7730 (13)	13.9 (10)	3.8 (19)	80 (5)	50 (19)	34 (5)
L-205	L	7490 (14)	12.8 (14)	4.4 (3)	82 (10)	1 (1)	34 (6)
99Y530	L	7340 (15)	12.1 (15)	4.2 (12)	84 (13)	1 (1)	33 (2)
CH-201	SPQ	7330 (16)	12.1 (16)	4.8 (1)	81 (8)	3 (14)	34 (4)
L-204	L	6900 (17)	14.0 (9)	4.1 (16)	81 (7)	1 (1)	33 (3)
99Y087	REX	6660 (18)	10.7 (19)	4.3 (8)	83 (11)	1 (1)	32 (1)
CT-201	BAS	5630 (19)	13.2 (12)	4.2 (9)	87 (16)	1 (1)	35 (7)
MEAN		7630	13.6	4.2	82	5	35
CV		4.0	7.3	5.0	0.6	176.7	2.8
LSD (.05)		440	1.4	0.3	1	13	1

Preliminary Lines and Varieties

00Y818	M	8600 (1)	16.5 (12)	3.9 (23)	86 (26)	1	38 (34)
00Y871	M	8460 (2)	13.1 (32)	4.4 (1)	80 (2)	1	35 (14)
00Y558	L	8420 (3)	10.9 (34)	4.0 (14)	82 (8)	1	35 (23)
00Y730	M	8200 (4)	14.6 (29)	4.2 (6)	80 (2)	1	37 (31)
00Y247	M	8190 (5)	15.5 (24)	4.2 (6)	82 (6)	1	35 (14)
00-169	MPQ	8100 (6)	18.5 (2)	4.2 (4)	85 (21)	1	35 (14)
00Y623	M	8010 (7)	17.0 (10)	4.3 (2)	86 (28)	1	33 (4)
00Y637	M	7940 (8)	17.7 (6)	4.0 (17)	88 (31)	1	35 (23)
00Y408	M	7840 (9)	17.4 (7)	3.9 (28)	85 (21)	1	35 (14)
00Y375	M	7740 (10)	16.3 (16)	4.2 (6)	84 (16)	1	34 (12)
00Y296	MPQ	7720 (11)	15.6 (22)	4.1 (10)	82 (8)	1	36 (27)
00Y562	L	7690 (12)	12.7 (33)	3.9 (28)	84 (17)	1	36 (27)
00Y434	M	7590 (13)	16.8 (11)	3.9 (23)	88 (32)	1	35 (14)
00Y169	SPQ	7570 (14)	15.8 (20)	3.9 (23)	76 (1)	1	36 (27)
00Y728	M	7570 (15)	15.6 (21)	4.1 (10)	80 (2)	1	35 (23)
00Y342	BG	7500 (16)	16.2 (17)	4.1 (10)	80 (2)	1	38 (33)
00Y284	MPQ	7490 (17)	16.5 (12)	4.3 (3)	84 (17)	1	36 (27)
00Y510	L	7320 (18)	14.4 (30)	3.9 (23)	85 (25)	1	35 (14)
00Y410	M	7320 (19)	18.1 (3)	4.1 (10)	85 (21)	1	35 (14)
00Y509	L	7320 (20)	15.4 (25)	4.0 (17)	85 (21)	1	34 (12)
00Y344	BG	7270 (21)	17.1 (9)	3.9 (23)	82 (8)	1	35 (23)
00Y736	M	7240 (22)	16.2 (17)	4.2 (4)	82 (8)	1	37 (31)
99Y464	L	7200 (23)	15.6 (22)	3.8 (30)	82 (8)	1	34 (9)
00P3895+6	L	7050 (24)	16.5 (14)	4.0 (14)	86 (26)	1	34 (9)
97Y346	BG	6900 (25)	16.1 (19)	3.8 (32)	82 (8)	1	34 (9)
00Y506	L	6890 (26)	15.3 (26)	4.0 (17)	88 (32)	1	32 (2)
00Y517	L	6780 (27)	15.2 (27)	4.0 (14)	86 (28)	1	33 (8)
00Y790	M	6740 (28)	17.4 (7)	3.8 (30)	84 (17)	1	31 (1)
00Y942	L	6530 (29)	14.0 (31)	4.1 (9)	86 (28)	1	32 (3)
00Y054	SPQ	6480 (30)	18.8 (1)	3.7 (33)	82 (6)	1	33 (4)
00Y748	M	6420 (31)	17.9 (4)	4.0 (17)	83 (14)	1	35 (14)
00Y152	SPQ	6250 (32)	17.9 (4)	3.7 (33)	83 (14)	1	33 (4)
9843599	BAS	5620 (33)	15.0 (28)	4.0 (17)	84 (17)	1	35 (14)
9844473	BAS	5290 (34)	16.5 (14)	4.0 (17)	90 (34)	1	33 (4)
MEAN		7330	16	4.0	84	-	34
CV		6.0	9.6	3.8	0.9	-	2.9
LSD (.05)		900	3.1	0.3	2	-	2

Planting date: May 7 Harvest date: October 4.

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality;

REX = Newrex; W = 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 parenthesis indicate relative rank in column.

Table 14. 2001 Four Location Early Rice Variety Tests Yield (lb/acre @ 14% moisture) Summary

Advanced Lines and Varieties						
Variety	Grain Type	Average	Biggs Biggs (RES)	Butte Thompson	Colusa Canal Ranch	Yuba Quad 4 Ranch
M-205	M	9080 (1)	10180 (3)	8410 (2)	9960 (3)	7770 (11)
S-102	S	9070 (2)	9850 (7)	8930 (1)	9320 (9)	8160 (3)
99Y041	L	8960 (3)	10410 (1)	8080 (8)	9240 (11)	8130 (4)
M-104	M	8950 (4)	9950 (5)	8330 (4)	9110 (13)	8420 (1)
M-204	M	8950 (5)	9880 (6)	8150 (7)	9810 (5)	7960 (7)
99Y376	M	8950 (6)	10090 (4)	7790 (10)	10080 (1)	7820 (9)
98Y242	M	8920 (7)	9290 (13)	8210 (5)	9940 (4)	8230 (2)
00Y570	MPQ	8710 (8)	9400 (10)	8390 (3)	9060 (14)	7990 (6)
99Y530	L	8680 (9)	9670 (9)	7720 (13)	9990 (2)	7340 (15)
M-202	M	8660 (10)	9300 (12)	8170 (6)	9370 (7)	7810 (10)
L-205	L	8540 (11)	10320 (2)	7440 (17)	8920 (15)	7490 (14)
00Y118	MPQ	8490 (12)	9220 (15)	7830 (9)	9150 (12)	7740 (12)
L-204	L	8460 (13)	9800 (8)	7550 (16)	9580 (6)	6900 (17)
00Y055	SPQ	8370 (14)	8830 (17)	7630 (15)	9300 (10)	7730 (13)
CM-101	SW	8280 (15)	8740 (18)	7790 (11)	8600 (17)	7990 (5)
99Y278	MPQ	8270 (16)	8920 (16)	7640 (14)	8550 (18)	7950 (8)
CH-201	SPQ	8260 (17)	9290 (14)	7760 (12)	8670 (16)	7330 (16)
99Y087	REX	8120 (18)	9390 (11)	7080 (18)	9330 (8)	6660 (18)
CT-201	BAS	6860 (19)	8280 (19)	6800 (19)	6740 (19)	5630 (19)
MEAN		8560	9520	7880	9200	7630
CV		4.7	5.9	4.3	3.8	4.0
LSD (.05)		280	790	480	500	440
Preliminary Lines and Varieties						
00Y562	L	9470 (1)	11030 (1)	8810 (1)	10340 (5)	7690 (12)
00Y410	M	9220 (2)	10190 (10)	8630 (3)	10750 (1)	7320 (19)
00Y375	M	9190 (3)	10270 (7)	8290 (5)	10480 (2)	7740 (10)
00Y623	M	9110 (4)	10180 (11)	7820 (14)	10430 (3)	8010 (7)
00Y637	M	9070 (5)	10470 (4)	7660 (21)	10200 (8)	7940 (8)
00Y408	M	9070 (6)	9810 (18)	8760 (2)	9860 (12)	7840 (9)
00Y558	L	9040 (7)	10580 (3)	7590 (23)	9590 (16)	8420 (3)
00Y818	M	9040 (8)	9950 (14)	7400 (27)	10210 (7)	8600 (1)
00Y434	M	9030 (9)	10220 (9)	7920 (11)	10410 (4)	7590 (13)
00Y169	SPQ	9020 (10)	9880 (16)	8410 (4)	10230 (6)	7570 (14)
00Y247	M	8980 (11)	9990 (12)	7820 (13)	9940 (10)	8190 (5)
00P3895+6	L	8850 (12)	10690 (2)	7770 (18)	9900 (11)	7050 (24)
00Y730	M	8790 (13)	9820 (17)	7960 (7)	9180 (21)	8200 (4)
00Y284	MPQ	8750 (14)	9970 (13)	7960 (8)	9580 (17)	7490 (17)
00Y728	M	8750 (15)	9690 (21)	7950 (10)	9780 (14)	7570 (15)
00-169	MPQ	8660 (16)	8470 (32)	8080 (6)	9990 (9)	8100 (6)
00Y342	BG	8550 (17)	9630 (24)	7960 (9)	9120 (22)	7500 (16)
00Y344	BG	8540 (18)	9720 (20)	7810 (16)	9350 (19)	7270 (21)
00Y509	L	8530 (19)	10330 (5)	7780 (17)	8680 (26)	7320 (20)
00Y506	L	8520 (20)	10260 (8)	7890 (12)	9030 (24)	6890 (26)
00Y510	L	8500 (21)	10320 (6)	7390 (28)	8970 (25)	7320 (18)
97Y346	BG	8480 (22)	9740 (19)	7470 (24)	9820 (13)	6900 (25)
00Y871	M	8410 (23)	9620 (25)	7710 (19)	7870 (31)	8460 (2)
99Y464	L	8410 (24)	9640 (23)	7460 (25)	9350 (20)	7200 (23)
00Y296	MPQ	8340 (25)	9680 (22)	7810 (15)	8130 (28)	7720 (11)
00Y054	SPQ	8260 (26)	9340 (28)	7620 (22)	9620 (15)	6480 (30)
00Y790	M	8190 (27)	9280 (29)	7270 (29)	9470 (18)	6740 (28)
00Y517	L	8180 (28)	9900 (15)	6970 (31)	9060 (23)	6780 (27)
00Y736	M	8040 (29)	9240 (30)	7690 (20)	7990 (30)	7240 (22)
00Y942	L	7980 (30)	9500 (27)	7430 (26)	8440 (27)	6530 (29)
00Y152	SPQ	7750 (31)	9530 (26)	7210 (30)	8030 (29)	6250 (32)
00Y748	M	7410 (32)	8590 (31)	6940 (32)	7680 (32)	6420 (31)
9843599	BAS	6500 (33)	7920 (34)	5750 (34)	6710 (33)	5620 (33)
9844473	BAS	6290 (34)	8420 (33)	5770 (33)	5690 (34)	5290 (34)
MEAN		8500	9760	7670	9230	7330
CV		5.1	4.2	4.4	5.7	6.0
LSD (.05)		430	840	680	1070	900

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality;

REX = Newrex; W = waxy.

Numbers in parenthesis indicate relative rank in column.

Table 15. Grain Yield (lb/acre @14% moisture) Summary of Early Rice Varieties by Location and Year (1997-2001)

Location	Year	Calhikari			Calmati	
		201	M-202	M-204	M-205	201
Biggs (RES)	1997	9690	10510	10580	11940	8660
	1998	7670	8260	8910	9940	8360
	1999	9460	10540	11130	11200	6620
	2000	9020	10140	11200	10870	8490
	2001	9290	9300	9880	10180	8280
Location Mean		9026	9750	10340	10826	8082
Butte	1997	6460	8240	8480	8760	7350
	1998	5930	7320	7950	7720	5870
	1999	3930	6780	6070	4740	-
	2000	7540	7710	8250	9270	6650
	2001	7760	8170	8150	8410	6800
Location Mean		6324	7644	7780	7780	6668
Colusa	1997	7270	9130	8840	9440	6700
	1998	7150	7590	7060	7350	5670
	1999	8220	10550	9780	8260	2680
	2000	7540	9350	10170	10570	6840
	2001	8670	9370	9810	9960	6740
Location Mean		7770	9198	9132	9116	5726
Yuba	1997	8110	7730	8230	9200	5520
	1998	5320	6070	6190	6550	5980
	1999	6310	7920	7100	7130	2420
	2000	8390	9210	9400	9520	6840
	2001	7330	7810	7960	7770	5630
Location Mean		7092	7748	7776	8034	5278
Loc/Years Mean		7553	8585	8757	8939	6426
Yield % M-202		88.0	100	102.0	104.1	74.9
Number of Tests		20	20	20	20	19

Table 16. 2001 Intermediate/Late Rice Variety Test - Butte County (Biggs - RES)

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield		Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		at 14% Moisture lbs/acre					
98Y511	L	10000 (1)		4.8 (2)	84 (2)	16 (10)	37 (4)
94Y663	L	9790 (2)		4.6 (12)	85 (4)	2 (2)	36 (2)
96Y671	SR	9650 (3)		4.3 (14)	87 (7)	1 (1)	34 (1)
99Y425	M	9560 (4)		4.6 (11)	86 (6)	7 (8)	37 (6)
M-205	M	9430 (5)		4.8 (2)	89 (9)	5 (6)	38 (7)
99Y058	SPQ	9410 (6)		4.7 (10)	90 (12)	61 (13)	37 (4)
L-205	REX	8910 (7)		4.8 (4)	82 (1)	10 (9)	36 (3)
M-402	MPQ	8710 (8)		4.6 (13)	99 (14)	4 (5)	39 (11)
M-202	M	8580 (9)		4.7 (9)	84 (2)	25 (12)	39 (13)
00Y281	MPQ	8480 (10)		4.7 (6)	87 (8)	21 (11)	38 (7)
CT-201	BAS	8190 (11)		4.7 (6)	89 (11)	3 (3)	38 (10)
00Y105	MPQ	8170 (12)		4.8 (5)	89 (9)	5 (7)	39 (14)
00Y567	MPQ	8120 (13)		4.7 (6)	90 (12)	3 (4)	39 (12)
CH-201	SPQ	7750 (14)		5.0 (1)	85 (4)	70 (14)	38 (9)
MEAN		8910		4.7	87	17	37
CV		6.4		2.9	2.2	75.4	3.5
LSD (.05)		820		0.2	3	18	2

Preliminary Lines and Varieties

00Y578	SR	10120 (1)		4.4 (16)	86 (14)	1 (1)	35 (3)
99Y529	L	10020 (2)		4.6 (13)	80 (2)	1 (1)	37 (7)
99Y494	WX	9750 (3)		4.4 (16)	90 (20)	3 (7)	38 (10)
00Y831	M	9170 (4)		4.8 (2)	80 (2)	21 (15)	37 (8)
99Y621	SR	9150 (5)		4.3 (18)	89 (19)	1 (3)	34 (1)
00Y606	M	9140 (6)		4.8 (4)	85 (8)	16 (14)	40 (19)
99Y343	BG	8950 (7)		4.2 (19)	81 (6)	88 (20)	39 (16)
00Y845	M	8920 (8)		4.6 (14)	80 (1)	6 (9)	38 (13)
00Y794	M	8860 (9)		4.2 (19)	80 (2)	1 (3)	37 (6)
00Y711	M	8770 (10)		4.6 (15)	86 (13)	16 (13)	39 (14)
00Y404	M	8620 (11)		4.7 (11)	85 (8)	11 (12)	39 (14)
00Y401	M	8570 (12)		4.7 (7)	85 (11)	6 (9)	38 (9)
00Y858	M	8500 (13)		4.8 (2)	81 (5)	31 (18)	39 (17)
99Y393	M	8460 (14)		4.7 (11)	87 (17)	25 (17)	41 (20)
00Y633	M	8440 (15)		4.7 (10)	85 (12)	11 (11)	39 (18)
00Y939	L	8430 (16)		4.7 (7)	85 (10)	2 (5)	34 (2)
00Y280	MPQ	8110 (17)		4.8 (5)	86 (15)	40 (19)	38 (12)
00Y283	MPQ	7840 (18)		4.8 (5)	82 (7)	24 (16)	38 (11)
99H2641	BAS	7530 (19)		4.7 (7)	87 (17)	3 (6)	36 (5)
99H2642	BAS	7430 (20)		4.9 (1)	86 (15)	5 (8)	36 (4)
MEAN		8740		4.6	84	16	38
CV		6.4		3.7	2.2	64.4	2.8
LSD (.05)		1170		0.4	4	21	2

Planting dates: May 14, May 24 (reps 1&2, 3&4 respectively).

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality; SR = stem rot resistant; REX = Newrex; 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 parenthesis indicate relative rank in column.

Table 17. 2001 Intermediate/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 (in)
M-205	M	9020 (1)	16.8 (2)	4.1 (4)	96 (11)	1 (1)	34 (7)
98Y511	L	8480 (2)	11.8 (13)	4.0 (9)	88 (2)	1 (1)	32 (2)
00Y281	MPQ	8400 (3)	15.1 (7)	3.9 (13)	93 (9)	1 (1)	35 (10)
99Y425	M	8330 (4)	16.5 (3)	4.1 (4)	94 (10)	1 (1)	34 (7)
00Y567	MPQ	8300 (5)	14.0 (10)	3.8 (15)	96 (11)	1 (1)	35 (12)
94Y663	L	8270 (6)	11.5 (16)	3.8 (14)	90 (4)	1 (1)	33 (6)
99Y058	SPQ	8230 (7)	14.6 (9)	4.1 (6)	90 (4)	18 (16)	32 (4)
T309B	M	8180 (8)	15.6 (5)	4.1 (8)	101 (14)	4 (14)	44 (15)
M-402	MPQ	8100 (9)	18.9 (1)	4.2 (3)	102 (16)	1 (1)	36 (13)
T309A	M	8010 (10)	15.5 (6)	4.0 (9)	101 (14)	16 (15)	45 (16)
00Y105	MPQ	8000 (11)	15.7 (4)	4.0 (11)	96 (13)	1 (1)	35 (10)
96Y671	SR	7850 (12)	12.3 (11)	3.7 (16)	89 (3)	1 (1)	31 (1)
M-202	M	7690 (13)	15.1 (7)	4.1 (6)	90 (4)	1 (1)	37 (14)
CH-201	SPQ	6900 (14)	11.8 (13)	4.7 (1)	88 (1)	1 (1)	32 (3)
L-205	REX	6630 (15)	12.3 (12)	3.9 (12)	90 (7)	1 (1)	33 (5)
CT-201	BAS	6580 (16)	11.5 (15)	4.5 (2)	91 (8)	1 (1)	34 (9)
MEAN		7930	14.3	4	93	3	35
CV		3.9	4.6	6.7	1	143.1	3.2
LSD (.05)		440	0.9	0.4	1	6	2

Preliminary Lines and Varieties

99Y393	M	9160 (1)	14.8 (7)	4.4 (2)	89 (4)	1	40 (20)
00Y633	M	8690 (2)	16.1 (2)	3.6 (18)	95 (20)	1	37 (16)
00Y711	M	8370 (3)	13.3 (11)	4.0 (7)	89 (7)	1	32 (3)
00Y404	M	8290 (4)	15.8 (3)	3.9 (9)	91 (15)	1	35 (12)
00Y606	M	8250 (5)	16.4 (1)	4.4 (2)	93 (18)	1	38 (18)
00Y283	MPQ	8160 (6)	15.4 (5)	4.2 (6)	90 (10)	1	35 (12)
00Y280	MPQ	8150 (7)	15.0 (6)	3.9 (9)	94 (19)	1	38 (18)
99Y494	WX	8090 (8)	9.8 (20)	4.3 (4)	90 (13)	1	33 (7)
00Y401	M	7940 (9)	15.8 (4)	3.7 (16)	90 (13)	1	37 (16)
00Y831	M	7760 (10)	13.5 (10)	3.8 (14)	89 (7)	1	35 (12)
99Y529	L	7570 (11)	11.6 (18)	4.2 (5)	89 (4)	1	34 (8)
00Y578	SR	7230 (12)	14.6 (8)	3.7 (17)	90 (10)	1	33 (6)
00Y939	L	7200 (13)	12.4 (16)	3.9 (12)	90 (10)	1	32 (3)
99Y343	BG	7150 (14)	12.8 (13)	2.9 (20)	87 (1)	1	35 (10)
99Y621	SR	6870 (15)	12.5 (15)	3.9 (12)	91 (15)	1	31 (1)
99H2642	BAS	6820 (16)	10.7 (19)	4.7 (1)	89 (7)	1	34 (8)
00Y845	M	6780 (17)	14.2 (9)	3.8 (14)	89 (4)	1	36 (15)
00Y794	M	6740 (18)	13.2 (12)	3.9 (9)	87 (1)	1	32 (3)
00Y858	M	6510 (19)	12.7 (14)	3.6 (19)	88 (3)	1	35 (10)
99H2641	BAS	6370 (20)	12.0 (17)	4.0 (8)	92 (17)	1	32 (2)
MEAN		7600	13.6	3.9	90	-	35
CV		7.8	6.1	10.4	0.6	-	5.4
LSD (.05)		1240	1.7		1	-	4

Planting date: April 23 Harvest date: September 28.

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality; SR = stem rot resistant; REX = Newrex; 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 18. 2001 Intermediate/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 (in)
M-202	M	10240 (1)	23.1 (5)	4.5 (3)	82 (3)	14 (10)	39 (13)
M-205	M	9870 (2)	22.4 (6)	4.4 (6)	87 (8)	2 (7)	37 (9)
99Y058	SPQ	9790 (3)	18.6 (12)	4.4 (9)	85 (6)	31 (12)	35 (4)
98Y511	L	9770 (4)	18.4 (13)	4.4 (8)	84 (5)	1 (1)	36 (6)
00Y281	MPQ	9590 (5)	22.3 (7)	4.0 (16)	87 (7)	45 (14)	38 (12)
M-402	MPQ	9390 (6)	19.8 (9)	4.4 (10)	97 (14)	19 (11)	40 (14)
94Y663	L	9370 (7)	17.4 (14)	4.2 (13)	83 (4)	1 (1)	34 (2)
99Y425	M	9080 (8)	23.4 (3)	4.1 (14)	88 (12)	2 (7)	37 (8)
00Y567	MPQ	8770 (9)	21.5 (8)	4.2 (11)	87 (10)	1 (1)	36 (7)
L-205	REX	8750 (10)	16.1 (16)	4.4 (6)	80 (1)	3 (9)	35 (5)
CH-201	SPQ	8680 (11)	19.4 (11)	4.6 (1)	81 (2)	38 (13)	35 (3)
00Y105	MPQ	8660 (12)	23.2 (4)	4.5 (5)	90 (13)	1 (1)	38 (11)
96Y671	SR	8640 (13)	19.7 (10)	4.1 (14)	87 (8)	1 (1)	32 (1)
T309B	M	8420 (14)	25.8 (1)	4.6 (1)	99 (15)	86 (15)	49 (15)
T309A	M	7940 (15)	25.7 (2)	4.2 (11)	99 (16)	89 (16)	49 (15)
CT-201	BAS	7790 (16)	16.4 (15)	4.5 (3)	87 (10)	1 (1)	37 (9)
MEAN		9050	20.8	4.3	88	21	38
CV		5.3	4.2	4.9	0.6	60.9	2.6
LSD (.05)		680	1.2	0.3	1	18	1

Preliminary Lines and Varieties

00Y633	M	10430 (1)	21.2 (3)	4.5 (5)	86 (15)	1 (1)	38 (17)
99Y393	M	10400 (2)	22.3 (1)	4.7 (1)	85 (11)	20 (20)	40 (20)
99Y529	L	10200 (3)	15.1 (19)	4.5 (5)	81 (2)	1 (1)	36 (8)
99Y343	BG	9700 (4)	16.7 (14)	4.5 (11)	81 (2)	1 (1)	37 (12)
00Y606	M	9490 (5)	20.8 (6)	4.5 (5)	85 (11)	1 (1)	38 (17)
00Y711	M	9420 (6)	18.5 (10)	4.6 (4)	85 (11)	1 (1)	38 (15)
00Y283	MPQ	9210 (7)	21.4 (2)	4.7 (2)	82 (7)	1 (1)	37 (12)
99Y494	WX	9180 (8)	14.6 (20)	4.5 (5)	83 (8)	1 (1)	35 (5)
00Y831	M	9100 (9)	18.8 (9)	4.5 (5)	81 (2)	1 (1)	36 (8)
00Y578	SR	9100 (10)	21.2 (3)	4.5 (11)	83 (8)	1 (1)	33 (3)
00Y939	L	8580 (11)	17.7 (12)	4.4 (17)	85 (10)	1 (1)	33 (3)
00Y404	M	8430 (12)	21.0 (5)	4.4 (13)	86 (15)	1 (1)	37 (11)
00Y280	MPQ	8380 (13)	19.8 (7)	4.7 (2)	87 (18)	2 (19)	37 (12)
00Y858	M	8370 (14)	16.6 (16)	4.4 (13)	81 (2)	1 (1)	38 (17)
00Y794	M	8300 (15)	16.7 (14)	4.4 (13)	79 (1)	1 (1)	36 (6)
00Y845	M	8270 (16)	17.3 (13)	4.4 (13)	81 (2)	1 (1)	38 (15)
00Y401	M	8070 (17)	19.4 (8)	4.3 (19)	86 (15)	1 (1)	36 (6)
99Y621	SR	7810 (18)	18.1 (11)	4.4 (17)	88 (20)	1 (1)	32 (1)
99H2642	BAS	6760 (19)	15.4 (18)	4.5 (5)	85 (11)	1 (1)	36 (8)
99H2641	BAS	5560 (20)	15.9 (17)	4.2 (20)	87 (18)	1 (1)	32 (1)
MEAN		8740	18.4	4.5	84	2	36
CV		5.7	6.3	4.5	0.3	159.7	2.7
LSD (.05)		1040	2.4		1	7	2

Planting date: May 16 Harvest date: October 9.

S = short; M = medium; L = long; BG = big seed; BAS = basmati; PQ = premium quality; SR = stem rot resistant; REX = Newrex; 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 19. 2001 Three Location Intermediate/Late Rice Variety Tests
Yield (lb/acre @ 14% moisture) Summary

Advanced Lines and Varieties

Variety	Grain Type	Average	Biggs	Glenn	Sutter
			Biggs (RES)	Wylie	Akin Ranch
M-205	M	9440 (1)	9430 (5)	9020 (1)	9870 (2)
98Y511	L	9420 (2)	10000 (1)	8480 (2)	9770 (4)
99Y058	SPQ	9140 (3)	9410 (6)	8230 (7)	9790 (3)
94Y663	L	9140 (4)	9790 (2)	8270 (6)	9370 (7)
99Y425	M	8990 (5)	9560 (4)	8330 (4)	9080 (8)
M-202	M	8840 (6)	8580 (9)	7690 (11)	10240 (1)
00Y281	MPQ	8820 (7)	8480 (10)	8400 (3)	9590 (5)
M-402	MPQ	8730 (8)	8710 (8)	8100 (8)	9390 (6)
96Y671	SR	8710 (9)	9650 (3)	7850 (10)	8640 (13)
00Y567	MPQ	8400 (10)	8120 (13)	8300 (5)	8770 (9)
00Y105	MPQ	8280 (11)	8170 (12)	8000 (9)	8660 (12)
L-205	REX	8090 (12)	8910 (7)	6630 (13)	8750 (10)
CH-201	SPQ	7780 (13)	7750 (14)	6900 (12)	8680 (11)
CT-201	BAS	7520 (14)	8190 (11)	6580 (14)	7790 (14)
MEAN		8660	8910	7930	9050
CV		5.5	6.4	3.9	5.3
LSD (.05)		380	820	440	680

Preliminary Lines and Varieties

99Y393	M	9340 (1)	8460 (14)	9160 (1)	10400 (2)
99Y529	L	9260 (2)	10020 (2)	7570 (11)	10200 (3)
00Y633	M	9180 (3)	8440 (15)	8690 (2)	10430 (1)
99Y494	WX	9010 (4)	9750 (3)	8090 (8)	9180 (8)
00Y606	M	8960 (5)	9140 (6)	8250 (5)	9490 (5)
00Y711	M	8850 (6)	8770 (10)	8370 (3)	9420 (6)
00Y578	SR	8820 (7)	10120 (1)	7230 (12)	9100 (10)
00Y831	M	8680 (8)	9170 (4)	7760 (10)	9100 (9)
99Y343	BG	8600 (9)	8950 (7)	7150 (14)	9700 (4)
00Y404	M	8450 (10)	8620 (11)	8290 (4)	8430 (12)
00Y283	MPQ	8400 (11)	7840 (18)	8160 (6)	9210 (7)
00Y280	MPQ	8210 (12)	8110 (17)	8150 (7)	8380 (13)
00Y401	M	8190 (13)	8570 (12)	7940 (9)	8070 (17)
00Y939	L	8070 (14)	8430 (16)	7200 (13)	8580 (11)
00Y845	M	7990 (15)	8920 (8)	6780 (17)	8270 (16)
00Y794	M	7970 (16)	8860 (9)	6740 (18)	8300 (15)
99Y621	SR	7950 (17)	9150 (5)	6870 (15)	7810 (18)
00Y858	M	7790 (18)	8500 (13)	6510 (19)	8370 (14)
99H2642	BAS	7000 (19)	7430 (20)	6820 (16)	6760 (19)
99H2641	BAS	6490 (20)	7530 (19)	6370 (20)	5560 (20)
MEAN		8360	8740	7600	8740
CV		6.6	6.4	7.8	5.7
LSD (.05)		640	1170	1240	1040

S = short; M = medium; L = long; BG = big seed; BAS = basmati;
PQ = premium quality; SR = stem rot resistant; REX = Newrex; WX = waxy.
Numbers in parentheses indicate relative rank in column.

Table 20. Grain Yield (lb/acre @14% moisture) Summary of Intermediate/Late Rice Varieties by Location and Year (1997-2001)

Location	Year	M-401 *	M-402	M-202
Biggs (RES)	1997	11120	10560	9890
	1998	6990	9620	8270
	1999	5880	9270	9170
	2000	-	9810	10480
	2001	-	8710	8580
Location Mean		5997.5	9594	9278
Glenn	1997	8580	8150	7550
	1998	7820	7920	6230
	1999	8510	8230	7420
	2000	-	7800	8490
	2001	-	8100	7690
Location Mean		8303	8040	7476
Sutter	1997	8860	8790	8390
Yuba	1998	6270	7280	6260
Yuba	1999	7650	7820	8720
Sutter	2000	-	9620	9840
Sutter	2001	-	9390	10240
Location Mean		7593	8580	8690
Loc/Years Mean		7298	8738	8481
Yield % M-202		86.0	103.0	100
Number of Tests		9	15	15

* M-401 was dropped from the intermediate/late tests following the 1999 season.