



AGRONOMY PROGRESS REPORT

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CALIFORNIA RICE VARIETIES

DESCRIPTION AND PERFORMANCE SUMMARY OF THE 2016 AND MULTI-YEAR 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 2016. This program, a cooperative effort involving the California Cooperative Rice Research Foundation, Inc. (CCRRF) 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 CCRRF 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.

A full allocation of water resulted in an increase in California rice acres planted (541,000 acres) and harvested (536,000 acres) compared to 2015 (429,000 acres) planted and (426,000 acres) harvested. The estimated statewide yield was 8,840 lbs/ac, the second highest average yield on record and a slight decrease from 2015 (8,890 lbs/ac).

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 new lines to be evaluated on a statewide basis.

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Advanced and preliminary tests were conducted in three maturity groups, Very Early, Early, and Intermediate/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 commercial varieties and six advanced breeding lines were evaluated in the advanced test at each of the following locations.

	Date Planted	Date Harvested
• Butte County (RES)	05/9	09/26
• Sutter County (Lauppe)	05/03	09/23
• Yolo County (Meyer)	05/12	10/10
• San Joaquin (Del Rio Partners)	05/05 (drill-seeded)	10/11

Commercial varieties in the advanced test included CH201, CH202, S102, M105, M205, M206, M209, L206, and L207. Thirty-three experimental lines and four commercial varieties (CA201, CM101, CM203, and M208) were evaluated in the preliminary test at each location. All advanced and preliminary experimental lines at each location were entries from the RES breeding program.

Early Maturity Group

Eight commercial varieties and ten advanced lines and were evaluated in the advanced test at each of the following locations.

	Date Planted	Date Harvested
• Butte County (RES)	05/10	09/27
• Butte County (Larrabee)	05/06	10/09
• Colusa County (Dennis)	04/23	09/19
• Yuba County (Bosworth)	05/16	10/13

The advanced test included commercial varieties S102, M205, M206, M208, M209, M402, L206, and L207. Twenty-eight preliminary lines and eight commercial varieties (A202, CA201, CH201, CH202, CM101, CM203, CT202, and M105) were included in a separate preliminary test at each site. All advanced and preliminary experimental lines were entries from the RES breeding program.

Late Maturity Group

Seven commercial varieties and four advanced lines were evaluated in the advanced test at each of the locations listed below. The Butte County (Schohr) site is a new location in the late maturity group. The location is north of the Sutter-Butte Mountain Range in southern Butte County and replaces the Sutter County location.

	Date Planted	Date Harvested
• Butte County (RES)	05/11	10/04
• Glenn County (Wiley)	05/02	10/23
• Butte County (Schohr)	05/09	09/28

Advanced commercial varieties included M205, M206, M209, M401, and M402. Six commercial varieties (A202, Koshihikari, CH202, CM203, M105, and M208) and twenty experimental lines were included in a separate preliminary test at each site. All advanced and preliminary experimental lines were entries from the RES breeding program.

Planting and Harvesting

Individual plots, except at San Joaquin, were water-seeded by hand at a planting rate of 144 lbs/acre. The plots at the San Joaquin Delta site were drill-seeded with a HEGE plot planter at a rate of 140 lbs/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 at time of harvest on a scale of 1 (no lodging) to 99 (all plants completely lodged).

Variety trial harvest was completed in late October. The UCD ALMACO combine harvested the Sutter and Yolo County trials of the very early maturity group, the Butte, Colusa, and Yuba County trials of the early maturity group, and the Butte County trial of the late maturity group. The UCD SWECO combine harvested the Glenn County trial of the late maturity group, and a hand harvest was conducted at the San Joaquin County trial of the very early maturity group. All trials at the RES were harvested with the RES ALMACO combine. Harvested areas were 155ft² (UCD ALMACO), 145ft² (UCD SWECO), 25ft² (Hand Harvest), and 140ft² (RES ALMACO). Grain moisture was assessed at harvest and yields were adjusted to 14% moisture.

SUMMARY OF THE VERY EARLY RICE VARIETY TESTS

(≤ 80 days to 50% heading at Biggs, CA)

A three location combined yield and agronomic performance summary is given in Table 3. The San Joaquin data was not included in the over-location summary due to weed issues that resulted in the test being harvested by hand. Agronomic performance data for individual entries at each Very Early location are presented in Tables 4-7. Entries are ranked by grain yield with the highest yielding entry appearing first. A 5-year yield summary of selected Very Early commercial rice varieties by location and year (2012-2016) is presented in Table 8.

Grain yields in the advanced tests averaged 10,240 lbs/ac overall, 10,140 lbs/ac at Biggs-RES, 10,520 lbs/ac at Sutter, 10,100 lbs/ac at Yolo, and 8,020 lbs/ac at San Joaquin (Tables 3-7). Over all locations, the three highest yielding entries on average were advanced short grain lines 10Y2043 and 15Y2010, and advanced long grain 14Y1006 (11,650, 11,100, and 11,040 lbs/ac respectively). Top yielding commercial varieties L207, M206, M105, and M209 ranked fifth, sixth, seventh, and eighth respectively. Averaged across four locations, cultivar yields in the preliminary tests ranged from 11,020 to 7,470 lbs/ac (Table 3).

The three highest yielding advanced trial entries at the cooler San Joaquin site were M105, 13Y2031, and L207 (10,700, 10,670, and 10,380 lbs/ac). The short waxy-grain 15Y2031 was the highest yielding preliminary line cultivar (11,940 lbs/ac) in the San Joaquin trial.

Average grain moisture at harvest decreased and the number of days to 50% heading increased slightly. Lodging percentage increased 20% in 2016 as compared to 2015. Seedling vigor and plant height were essentially the same as in 2015.

Table 8 is a 5-year summary of very early commercial rice variety yields compared by locations and over years. Common year-location entries are compared to give relative yield as a percentage of M104, the very early standard. An average of the very early tests, over the last 5 years, shows that M105, M206, CM101, S102, and L206 yielded 102%, 104%, 86%, 96%, and 98% (respectively) of the standard variety M104. Over the 5-year period and across locations, M206 was the highest yielding variety at 9,570 lbs/ac followed by M105 and L206 at 9,430 lbs/ac, and 9,050 lbs/ac respectively (Table 8).

SUMMARY OF THE EARLY RICE VARIETY TESTS

(81-90 days to 50% heading at Biggs, CA)

A four location combined advanced and preliminary yield summary are presented in Table 9. Agronomic performance data for individual entries at each early location are presented in Tables 10-13. Entries are ranked by grain yield with the highest yielding entry appearing first. A 5-year yield summary of selected early commercial rice varieties by location and year (2012-2016) is found in Table 14.

Yields in the advanced line tests averaged 9,830 lbs/ac overall, 10,890 lbs/ac at the RES, 10,190 lbs/ac at Butte, 9,400 lbs/ac at Colusa, and 8,830 lbs/ac at Yuba (Tables 9-13). The three highest yielding advanced test entries were the short grain line 10Y2043, long grain line 14Y1006, and medium grain 12Y2175 (10,910, 10,630, and 10,540 lbs/ac respectively) when averaged over four locations in 2016 (Table 9). The yield of commercial varieties L207, M206, M209, and L206, ranked fourth, fifth, eighth, and twelfth over all locations (Table 9).

Average days to 50% heading ranged from 83 days at Biggs to 99 days at the Colusa County site. The commercial standard M206 headed at 80 days at Biggs and 94 days at Colusa. M105 averaged 9,990 lbs/ac in the preliminary test with six experimental varieties yielding higher.

Table 14 is a 5-year summary of early commercial rice variety yields compared by locations and over years. Common year-location entries are compared to give relative yield as a percentage of M202, the early standard. An average of the early tests, over the last 5 years, shows that M206, L206, M105, M205, and S102 yielded 111%, 111%, 109%, 108%, and 99% (respectively) of the standard variety M202. M206 was the highest yielding commercial variety (9,541 lbs/ac) followed by L206 (9,523 lbs/ac).

SUMMARY OF THE INTERMEDIATE-LATE RICE VARIETY TESTS

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

A three location combined yield summary is given in Table 15. Agronomic performance data for individual entries at each intermediate-late location are presented in Tables 16-18. Entries are ranked by grain yield with the highest yielding entry appearing first. A 5-year yield summary of selected intermediate-late commercial rice varieties by location and year (2012-2016) is found in Table 19.

Average yields in the advanced tests were 9,190 lbs/ac overall, 9,990 lbs/ac at the RES, 8,740 lbs/ac at Butte, and 8,860 lbs/ac at Glenn (Tables 15-17). The 2016 advanced over location average yield was 200 lbs/ac (2.1%) less than the 2015 average. The average yield at the RES increased 730 lbs/ac, and decreased 670 lbs/ac at Glenn compared to the 2015 season. The Butte test was a new location in 2016. L207 was the highest overall yielding variety (10,290 lbs/ac). 16Y127 was the highest yielding experimental line (9,880 lbs/ac) and second overall. L206 and M209 were the next highest yielding commercial varieties across locations, ranking fourth and fifth respectively (Table 15).

Average days to 50% heading increased nine days and lodging remained consistent at 8% compared to 2015. At 109 days, M401 required four more days than M402 to reach the 50% heading (Table 15). Seedling vigor and height were essentially the same as in 2015.

Averaged over the last 5 years and across locations, L206 (9,524 lbs/ac) is the highest yielding commercial variety. M205 and M402 yielded 106% and 99%, respectively, of the yield of the standard variety M202 on average over the last 5 years (Table 19).

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Table 1. Characteristics of Public California Rice Varieties-2017

CHARACTERISTICS OF PUBLIC CALIFORNIA RICE VARIETIES - 2017					
Grain Type	Maturity	Year Seed Widely Available	Stem Rot Score ¹	Seedling Vigor ²	Comments
Short Grain			(0-10)	(1-5)	
S102 ⁶	Very Early ³	1998	5.6	4.3	Very high yield potential. Good resistance to blanking with a very large grain. Rough leaves and hulls, grain dries down rapidly during ripening. Susceptible to stem rot.
Medium Grains					
M104 ^{6,7}	Very Early ³	2002	5.4	4.4	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.
M105 ^{6,7}	Very Early	2013	4.8	4.2	New release, earlier maturing than M-206 but not as early as M-104. The yield potential of M-105 is less than M-206 but greater than M-104. Very high stable milling yields. Not as cold tolerant as M-104 as a choice for cold areas or late plantings.
M205 ^{6,7}	Early	2002	4.9	4.1	Very high yield potential. Primary adaptation area west of Highway 70 and north of Highway 20. Susceptible to blanking. Matures 4-7 days later than M-202. Improved milling yields and lodging tolerance relative to M-202. Not recommended for Escalon, Delta region or other cool areas.
M206 ^{6,7}	Very Early to Early	2005	4.8	4.3	Very high yield potential. Adapted to entire rice area. Comparable to other medium grains. Improved resistance to blanking and improved milling yield. Four days later than M-104 and four days earlier than M-202. Avoid late planting in the Escalon/Delta areas.
M208 ^{6,7}	Early	2008	6.6	4.3	Calrose cultivar released with IG-1 blast resistance. Released for blast problems areas of Glenn and Colusa Counties. Primarily adapted to north of the Yolo-Colusa County line and west of Hwy 70. Production practices comparable to M-206.
M209 ^{6,7}	Early	2015	4.9	4.9	Very high yield potential. Heads 5-6 days later than M-206. Has improved stem rot and aggregate sheath spot compared to M-206 and M-208. Judged to be superior in grain quality. Production practices comparable to M-206. Avoid late planting and cool production areas to reduce blanking.
Long Grains					
L206 ^{6,7}	Very Early to Early	2008	5.5	4.4	Conventional long grain with improved cooking quality. Very high yield potential. Four days earlier than L-205 and M-202. Considerably shorter than L-205 and M-202. Average head rice yield 62%. Adapted to most areas except in coldest and warmest rice growing regions. Harvest at 17 - 18% grain moisture.
Premium Quality					
M401	Late	1983	5.1	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.
M402 ^{6,7}	Late	2001	4.7	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 ^{5,6,7}	Early	2001	6.0	5.0	<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.
Calhikari-202 ^{5,6,7}	Early	2012	4.8	4.8	<i>Premium quality</i> short grain developed for the Japanese premium short-grain market. Similar to CH-201 in most characteristics but has higher grain and head rice yields and improved milling quality. Not recommended for cold locations. Cold temperatures delay maturity and increases blanking. Use low nitrogen to maximize market quality.
Specialty Rices ⁵					
Calmochi-101 ⁵	Very Early ^{3,4}	1987	5.3	4.2	Glutinous (sweet, waxy) rice. Excellent blanking resistance. Has rough leaves and hulls, no awns. Grain dries down rapidly during ripening.
Calmochi-203 ^{5,6,7}	Early ⁴	2015	5.3	4.9	Glutinous (sweet, waxy) rice. Less blanking resistance than CA-101. Has glabrous (smooth) hulls, shape. Yields significantly higher, has larger seed and matures later than CA-101. Not adapted to cool temperature areas.
Calmati-202 ^{5,6,7}	Early ⁴	2008	6.0	4.4	A basmati type long grain with improved cooking quality and more slender grain. Excellent seedling vigor. Yield potential is 10% lower than CT-201. Pubescent leaves and hull. Average milling yield 58 - 60%. Susceptible to blanking and should not be grown in cool areas. Avoid excessive nitrogen. Harvest at 17-18% grain moisture.
A202 ^{6,7}	Early ⁴	2014	4.6	4.7	An aromatic smooth hulled long grain with very high yield potential and high head rice yield. Improved seedling vigor and similar lodging compared to A-301. Susceptible to blanking and should not be grown in cool areas. Is a replacement for A-301 and is well adapted for organic production systems.
¹ Average stem rot score over last five years: 0 = no disease and 10 = severe disease. ² Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling vigor. ³ Milling quality and yield may be reduced by early planting in warmer areas. ⁴ Specialty varieties should not be grown unless arrangements have first been made with a marketing agency.			⁵ These varieties are considered varieties of Commercial Impact (Tier 1) and are subject to production regulations. ⁶ Protected in the Plant Variety Protection Act and only to be sold as a class of certified seed. ⁷ Utility Patent		

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Table 2. 2016 Weather Data - Daily Maximums and Minimums (°F)

	Sutter (Very Early)	Yolo (Very Early)	San Joaquin (Very Early)	Butte (Early)	Colusa (Early)	Yuba (Early)	Glenn (Intermediate/Late)	Butte (Intermediate/Late)		Sutter (Very Early)	Yolo (Very Early)	San Joaquin (Very Early)	Butte (Early)	Colusa (Early)	Yuba (Early)	Glenn (Intermediate/Late)	Butte (Intermediate/Late)
	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 min	max min
Aug 01	57/89	58/88	57/83	58/87	59/87	60/87	61/85	59/86	Sep 01	57/86	54/86	53/82	53/84	54/84	54/84	56/83	55/85
Aug 02	57/92	57/87	56/86	58/88	59/89	58/92	61/86	58/90	Sep 02	53/88	55/85	51/84	54/87	55/87	53/87	57/87	55/87
Aug 03	60/95	60/91	57/89	62/92	63/93	62/94	64/91	62/93	Sep 03	57/83	55/82	53/78	55/82	54/83	55/81	57/83	56/82
Aug 04	56/83	56/83	55/76	59/83	58/84	58/83	59/82	58/84	Sep 04	54/76	52/77	48/78	52/77	52/80	53/79	54/79	54/81
Aug 05	54/83	54/82	55/78	54/81	54/82	55/82	54/80	55/81	Sep 05	50/84	50/83	49/83	50/88	48/92	51/84	51/86	51/85
Aug 06	56/85	56/84	53/81	58/85	58/85	58/84	59/84	59/84	Sep 06	49/90	49/87	50/86	49/88	48/87	49/88	52/86	51/91
Aug 07	55/88	55/85	53/84	56/85	56/85	56/90	57/84	56/84	Sep 07	52/91	54/90	52/91	54/91	53/93	51/90	57/90	54/90
Aug 08	56/88	56/87	54/84	58/87	58/86	58/88	60/85	59/86	Sep 08	57/92	55/88	56/80	55/90	55/91	55/92	57/87	57/89
Aug 09	57/89	56/88	55/86	57/90	58/92	58/92	59/92	59/89	Sep 09	53/93	52/88	52/88	53/88	54/92	54/89	57/92	55/89
Aug 10	59/89	57/88	56/84	58/89	59/88	58/90	59/86	59/87	Sep 10	53/91	53/87	53/85	55/89	54/92	56/90	56/88	55/87
Aug 11	57/90	57/90	56/85	60/89	59/89	59/91	60/88	60/88	Sep 11	55/81	52/80	54/76	54/81	53/84	53/81	56/80	55/81
Aug 12	58/94	57/91	57/89	60/92	59/90	60/97	62/89	60/90	Sep 12	52/78	49/77	49/72	51/74	51/75	53/75	52/76	54/73
Aug 13	57/95	57/93	58/90	61/95	60/92	61/97	62/92	61/91	Sep 13	48/76	46/74	47/74	48/73	47/76	52/73	49/73	51/72
Aug 14	59/96	58/94	59/89	60/91	60/91	60/97	62/90	60/91	Sep 14	48/80	46/79	47/79	47/80	47/81	47/81	49/80	47/78
Aug 15	56/90	55/89	55/85	59/91	58/89	60/93	60/88	60/90	Sep 15	47/86	48/84	49/84	48/83	47/87	46/85	51/85	47/84
Aug 16	57/92	57/92	56/87	60/91	59/89	60/91	61/88	61/89	Sep 16	48/89	48/89	49/86	49/86	49/91	50/91	52/91	49/86
Aug 17	59/91	59/91	58/89	61/89	61/89	61/92	62/89	61/89	Sep 17	49/93	49/90	49/91	50/90	50/92	51/93	52/88	49/90
Aug 18	59/91	59/91	59/86	61/92	61/91	61/92	63/90	62/90	Sep 18	52/97	54/93	51/92	53/92	54/95	52/96	55/92	53/92
Aug 19	59/88	60/88	59/81	62/89	62/87	62/87	64/87	62/88	Sep 19	55/99	55/94	53/93	55/91	56/89	57/92	58/90	54/91
Aug 20	58/90	59/88	57/82	61/90	60/90	60/91	61/89	61/89	Sep 20	62/92	53/90	51/85	57/87		64/87	54/86	57/87
Aug 21	58/86	58/86	56/82	60/86	59/86	60/85	60/85	60/85	Sep 21	57/83	50/82	56/75	52/78		59/78	52/78	53/78
Aug 22	56/87	57/86	57/81	59/87	57/86	59/88	60/86	59/87	Sep 22	49/75	43/74	52/73	49/76		51/75	47/76	45/75
Aug 23	56/85	56/84	56/82	57/84	56/84	57/84	58/83	58/83	Sep 23	43/86	47/80	44/79	43/80		43/79	47/79	42/80
Aug 24	53/87	54/87	55/83	56/86	54/85	55/86	57/85	57/85	Sep 24		52/87	47/86	51/88		47/87	51/86	49/87
Aug 25	53/88	55/88	54/82	56/87	56/87	55/87	59/86	58/86	Sep 25		49/94	48/90	54/96		45/92	57/93	53/97
Aug 26	54/83	53/85	56/77	54/85	52/84	53/84	55/84	54/84	Sep 26		51/94	49/92	49/94		49/96	52/96	49/95
Aug 27	55/83	53/84	57/77	54/82	54/82	55/82	56/82	55/82	Sep 27		54/94	49/91	54/93		51/94	52/91	53/93
Aug 28	54/87	51/84	54/85	52/85	52/85	54/88	54/86	54/84	Sep 28		52/91	50/90	52/90		52/89	53/86	52/67
Aug 29	53/86	51/83	55/81	53/82	52/81	53/84	55/83	54/82	Sep 29		49/88	46/81	48/84		53/85	51/82	
Aug 30	57/89	55/87	59/86	55/84	56/87	55/88	57/87	56/85	Sep 30		48/84	47/74	48/79		53/79	49/79	
Aug 31	58/87	54/86	56/82	55/85	54/86	57/86	56/86	56/84									
Oct 01		40/77	43/68	39/76		42/76	42/75										
Oct 02		39/72	51/69	42/69		42/69	41/69										
Oct 03		43/61	41/64	39/62		39/63	42/60										
Oct 04		48/73	46/72	43/73		40/73	45/73										
Oct 05		43/76	42/75	41/75		38/75	39/75										
Oct 06		43/79	41/78	46/79		38/80	45/78										
Oct 07		40/59	40/82	39/84		40/83	41/84										
Oct 08		45/87	42/87	44/87		46/87	45/90										
Oct 09		44/88	42/87	46/60		42/88	46/86										
Oct 10		43/60	48/82			45/84	47/82										
Oct 11			48/77			49/78	45/80										
Oct 12						45/78	43/77										
Oct 13						56/72	51/76										
Oct 14							54/70										
Oct 15							52/66										
Oct 16							54/71										
Oct 17							46/74										
Oct 18							42/71										
Oct 19							45/78										
Oct 20							43/80										
Oct 21							43/79										
Oct 22							45/73										
Oct 23							42/74										
Oct 24																	
Oct 25																	
Oct 26																	
Oct 27																	
Oct 28																	
Oct 29																	
Oct 30																	
Oct 31																	

Table 3. 2016 Three Location Very Early Rice Variety Trials

<i>Advanced Lines and Varieties</i>										
Variety	Grain Type	Over All Ave Grain Yield at 14% Moisture				Grain			Plant Height (in)	
		lbs/acre	Biggs	Sutter	Yolo	Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading		Lodging (1-99)
10Y2043	S	11650 (1)	11470 (3)	12050 (1)	11540 (1)	16.1	4.9	82	69	35
15Y2010	S	11100 (2)	12100 (1)	10810 (5)	10390 (7)	19.4	5.0	90	3	36
14Y1006	L	11040 (3)	11060 (4)	10710 (8)	11340 (2)	15.5	5.0	85	1	36
15Y2009	S	10860 (4)	11520 (2)	10620 (9)	10430 (5)	17.8	4.9	87	13	37
L207	L	10850 (5)	10890 (5)	11120 (3)	10540 (4)	15.3	5.0	86	7	39
M206	M	10750 (6)	10250 (7)	11110 (4)	10980 (3)	17.1	4.9	86	37	38
M105	M	10740 (7)	10380 (6)	11630 (2)	10420 (6)	16.5	5.0	83	31	38
M209	M	10120 (8)	10210 (8)	10710 (7)	9580 (11)	16.0	5.0	90	6	37
L206	L	9870 (9)	10100 (9)	9260 (15)	10090 (8)	15.2	4.9	86	1	34
M205	M	9780 (10)	9960 (10)	9780 (12)	9590 (10)	16.4	5.0	92	6	37
S102	S	9740 (11)	8960 (13)	10720 (6)	9530 (13)	13.6	5.0	81	28	38
13Y2031	SPQ	9700 (12)	9360 (12)	10610 (10)	9130 (14)	16.3	5.0	83	88	38
14Y3092	M	9660 (13)	9870 (11)	10350 (11)	8770 (15)	17.0	5.0	94	8	39
CH202	SPQ	9280 (14)	8840 (14)	9350 (14)	9630 (9)	17.1	5.0	86	84	35
CH201	SPQ	8700 (15)	7090 (15)	9460 (13)	9560 (12)	15.0	5.0	90	50	36
MEAN		10240	10140	10520	10100	16.3	5.0	87	29	37
CV		6.0	5.0	3.7	8.2	6.2	0.6	1.4	63	3.9
LSD (.05)		1100	730	600	1190	2.1	0.1	2.6	20	1.5
<i>Preliminary Lines and Varieties</i>										
CM203	SWX	11020 (1)	9720 (19)	11960 (1)	11380 (1)	16.4	5.0	84	37	39
15Y1027	L	10790 (2)	10600 (2)	11790 (2)	9990 (20)	15.3	4.9	84	4	39
13Y3152	M	10740 (3)	10060 (9)	11360 (7)	10790 (3)	16.6	4.9	87	1	38
15Y1021	L	10720 (4)	10480 (3)	11230 (14)	10440 (7)	15.2	5.0	89	13	38
14Y3143	MSR	10710 (5)	10380 (4)	11300 (12)	10450 (6)	16.3	4.9	86	11	39
14Y3055	MB	10610 (6)	9890 (16)	11320 (11)	10610 (5)	15.5	4.9	84	7	39
13Y3030	M	10580 (7)	10100 (8)	11400 (6)	10240 (12)	15.8	4.9	85	27	38
15Y1102	L	10550 (8)	9900 (15)	11520 (5)	10220 (14)	15.2	4.9	92	48	39
M206comp	M	10530 (9)	9600 (22)	11660 (3)	10330 (9)	17.1	5.0	85	22	39
15Y1077	LBL	10470 (10)	10110 (6)	11260 (13)	10050 (19)	15.7	4.9	89	2	38
14Y3099	M	10460 (11)	10100 (7)	11060 (15)	10220 (13)	16.4	4.9	88	5	37
15Y3151	M	10460 (12)	9780 (17)	11660 (4)	9940 (22)	15.9	4.9	89	29	38
14Y3022	M	10430 (13)	10030 (11)	10970 (17)	10300 (10)	16.1	5.0	83	1	38
15Y2112	SPQ	10410 (14)	10050 (10)	10790 (20)	10380 (8)	20.6	5.0	89	78	37
12Y3097	MB	10390 (15)	9740 (18)	11340 (9)	10080 (18)	16.2	4.9	86	15	38
15P3104	MB	10380 (16)	9560 (23)	10650 (21)	10920 (2)	16.9	4.9	89	8	38
15Y2031	SWX	10370 (17)	9480 (27)	11350 (8)	10290 (11)	16.1	4.9	85	1	39
15Y1197	LA	10120 (18)	10910 (1)	10070 (28)	9390 (29)	15.0	5.0	90	6	36
14Y3125	M	10110 (19)	9560 (24)	10880 (18)	9900 (24)	16.2	4.9	90	56	37
15Y2135	SWX	10080 (20)	9080 (31)	11030 (16)	10140 (17)	17.3	4.9	90	5	38
14Y3126	M	10030 (21)	9400 (28)	11320 (10)	9380 (30)	16.7	4.9	89	6	38
14Y3137	MB	9890 (22)	9650 (20)	10280 (25)	9740 (26)	15.6	5.0	89	3	38
15Y2013	S	9830 (23)	9540 (26)	10340 (23)	9600 (27)	15.3	4.9	85	4	37
15Y2100	SLA	9820 (24)	8420 (35)	10840 (19)	10200 (15)	13.6	4.9	90	42	38
14Y1104	L	9790 (25)	9220 (29)	10160 (26)	9980 (21)	15.2	5.0	88	1	38
M208	MB	9770 (26)	8760 (33)	9860 (29)	10690 (4)	15.5	5.0	90	2	39
15Y3139	MB	9760 (27)	9900 (14)	9600 (31)	9800 (25)	15.5	5.0	88	1	37
14G9	M	9720 (28)	9550 (25)	10120 (27)	9500 (28)	16.6	4.7	90	1	38
15Y2024	SPQ	9680 (29)	8570 (34)	10330 (24)	10150 (16)	15.2	5.0	88	35	36
14Y3060	MSR	9610 (30)	9960 (13)	8950 (36)	9910 (23)	18.1	5.0	91	1	39
14Y1078	L	9370 (31)	9980 (12)	9430 (33)	8690 (35)	16.2	4.9	89	1	37
14Y3110	M	9360 (32)	10330 (5)	8450 (37)	9320 (31)	17.2	5.0	91	1	38
15Y3175	M	9320 (33)	9610 (21)	9270 (35)	9070 (33)	17.5	5.0	94	4	37
89Y235	BG	9150 (34)	9120 (30)	9590 (32)	8720 (34)	14.3	5.0	85	47	37
14G6	M	9030 (35)	8360 (36)	10390 (22)	8330 (37)	15.5	4.9	89	23	37
15Y2002	BG	8980 (36)	8780 (32)	9740 (30)	8430 (36)	14.5	5.0	85	14	38
CM101	SWX	8730 (37)	7490 (37)	9420 (34)	9290 (32)	13.9	5.0	82	53	38
CA201	SLA	7470 (38)	6840 (38)	7770 (38)	7790 (38)	15.1	5.0	87	31	36
MEAN		9980	9540	10540	9860	16.0	4.9	88	17	38
CV		3.9	4.3	2.8	4.6	4.6	1.1	1.7	82	3.8
LSD (.05)		960	830	590	920	1.9	0.1	2.3	28	2.0

S = short; M = medium; L = long; BG = bold grain; PQ = premium quality; WX = waxy; LA = long grain aromatic; LBL = long grain blast resistant; MB = medium blast resistant; SR stem rot resistant; SLA = short grain low amaloose. 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.

Table 4. 2016 Biggs Very Early Rice Variety Trials

<i>Advanced Lines and Varieties</i>								
Variety	Grain Type	Grain Yield at 14%		Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Plant Lodging (1-99)	Plant Height (in)
		Grain	Moisture lbs/acre					
15Y2010	S	12100	(1)	17.0	4.9	84	3	36
15Y2009	S	11520	(2)	14.2	4.8	80	20	37
10Y2043	S	11470	(3)	14.7	4.8	78	58	35
14Y1006	L	11060	(4)	13.2	4.9	78	1	37
L207	L	10890	(5)	13.1	4.9	81	1	40
M105	M	10380	(6)	15.7	4.9	78	10	38
M206	M	10250	(7)	16.4	4.8	80	41	39
M209	M	10210	(8)	15.3	4.9	81	1	38
L206	L	10100	(9)	12.8	4.7	79	1	35
M205	M	9960	(10)	15.5	4.9	84	1	37
14Y3092	M	9870	(11)	16.2	4.9	86	1	41
13Y2031	SPQ	9360	(12)	12.9	4.9	78	80	38
S102	S	8960	(13)	8.8	5.0	76	20	36
CH202	SPQ	8840	(14)	14.8	4.9	80	90	33
CH201	SPQ	7090	(15)	10.8	5.0	82	20	36
MEAN		10140		14.1	4.9	80	23	37
CV		5.0		6.8	1.1	1.0	85	3.7
LSD (.05)		730		1.4	0.1	1.2	28	1.9

<i>Preliminary Lines and Varieties</i>								
Variety	Grain Type	Grain	Moisture	Seedling Vigor	Days to 50% Heading	Plant Lodging	Plant Height	
		Yield at 14%	at Harvest (%)	(1-5)		(1-99)	(in)	
15Y1197	LA	10910	(1)	13.8	4.9	83	1	38
15Y1027	L	10600	(2)	13.7	4.8	78	1	40
15Y1021	L	10480	(3)	13.3	4.9	83	1	39
14Y3143	MSR	10380	(4)	15.8	4.8	80	30	39
14Y3110	M	10330	(5)	16.0	4.9	82	1	40
15Y1077	LBL	10110	(6)	14.0	4.7	83	5	38
14Y3099	M	10100	(7)	15.7	4.8	81	1	38
13Y3030	M	10100	(8)	15.8	4.8	79	20	37
13Y3152	M	10060	(9)	15.8	4.8	80	1	38
15Y2112	SPQ	10050	(10)	19.0	4.9	84	75	37
14Y3022	M	10030	(11)	16.0	4.9	77	1	38
14Y1078	L	9980	(12)	14.6	4.7	84	1	39
14Y3060	MSR	9960	(13)	16.9	4.9	82	1	40
15Y3139	MB	9900	(14)	14.7	4.9	81	1	38
15Y1102	L	9900	(15)	14.1	4.8	85	1	41
14Y3055	MB	9890	(16)	14.6	4.8	78	1	39
15Y3151	M	9780	(17)	15.3	4.8	82	5	37
12Y3097	MB	9740	(18)	15.4	4.7	79	1	38
CM203	SWX	9720	(19)	12.9	5.0	79	5	38
14Y3137	MB	9650	(20)	14.8	4.9	82	1	38
15Y3175	M	9610	(21)	15.2	4.9	84	1	37
M206comp	M	9600	(22)	16.2	5.0	79	25	40
15P3104	MB	9560	(23)	16.0	4.7	82	1	38
14Y3125	M	9560	(24)	15.6	4.8	82	10	36
14G9	M	9550	(25)	15.6	4.5	81	1	35
15Y2013	S	9540	(26)	12.5	4.8	79	1	39
15Y2031	SWX	9480	(27)	12.9	4.8	80	1	40
14Y3126	M	9400	(28)	15.0	4.7	81	1	37
14Y1104	L	9220	(29)	13.3	4.9	83	1	39
89Y235	BG	9120	(30)	11.6	5.0	79	25	36
15Y2135	SWX	9080	(31)	14.2	4.8	83	1	38
15Y2002	BG	8780	(32)	10.6	4.9	79	5	39
M208	MB	8760	(33)	14.8	5.0	82	3	41
15Y2024	SPQ	8570	(34)	11.4	4.9	81	15	36
15Y2100	SLA	8420	(35)	9.8	4.7	83	1	38
14G6	M	8360	(36)	15.4	4.7	81	3	38
CM101	SWX	7490	(37)	9.0	4.9	78	5	40
CA201	SLA	6840	(38)	11.5	4.9	80	15	38
MEAN		9540		14.3	4.8	81	6	38
CV		4.3		7.1	1.5	1.1	145	4.6
LSD (.05)		830		2.1	0.1	1.8	19	3.6

S = short; M = medium; L = long; BG = bold grain; PQ = premium quality; WX = waxy; LA = long grain aromatic; LBL = long grain blast resistant; MB = medium blast resistant; SR = stem rot resistant; SLA = short grain low amalose. 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.

Table 5. 2016 Sutter Very Early Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield at 14%		Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		Moisture lbs/acre						
10Y2043	S	12050	(1)	16.7	5.0	85	83	34
M105	M	11630	(2)	17.0	5.0	86	39	36
L207	L	11120	(3)	16.3	5.0	89	19	36
M206	M	11110	(4)	16.9	5.0	88	30	35
15Y2010	S	10810	(5)	20.6	5.0	93	4	35
S102	S	10720	(6)	16.1	5.0	83	40	36
M209	M	10710	(7)	17.4	5.0	95	3	35
14Y1006	L	10710	(8)	16.6	5.0	87	1	33
15Y2009	S	10620	(9)	19.4	5.0	91	13	36
13Y2031	SPQ	10610	(10)	18.6	5.0	86	99	37
14Y3092	M	10350	(11)	18.4	5.0	99	4	36
M205	M	9780	(12)	16.7	5.0	97	4	34
CH201	SPQ	9460	(13)	17.6	5.0	95	88	35
CH202	SPQ	9350	(14)	18.6	5.0	90	97	34
L206	L	9260	(15)	16.8	5.0	89	1	32
MEAN		10520		17.6	5.0	90	35	35
CV		3.7		4.7	0.0	1.1	43	4.3
LSD (.05)		600		1.2	0.0	1.4	21	2.2

Preliminary Lines and Varieties

CM203	SWX	11960	(1)	18.8	5.0	89	83	39
15Y1027	L	11790	(2)	16.2	5.0	86	10	38
M206comp	M	11660	(3)	17.7	5.0	89	38	37
15Y3151	M	11660	(4)	16.1	5.0	94	30	37
15Y1102	L	11520	(5)	16.3	5.0	99	75	36
13Y3030	M	11400	(6)	15.8	5.0	89	28	39
13Y3152	M	11360	(7)	16.8	5.0	92	1	36
15Y2031	SWX	11350	(8)	17.8	5.0	89	3	36
12Y3097	MB	11340	(9)	16.8	5.0	90	40	36
14Y3126	M	11320	(10)	17.5	4.9	93	11	37
14Y3055	MB	11320	(11)	16.5	5.0	87	20	37
14Y3143	MSR	11300	(12)	17.0	5.0	90	3	37
15Y1077	LBL	11260	(13)	17.1	5.0	94	1	36
15Y1021	L	11230	(14)	16.5	5.0	94	28	36
14Y3099	M	11060	(15)	17.0	5.0	91	13	35
15Y2135	SWX	11030	(16)	19.4	5.0	95	11	36
14Y3022	M	10970	(17)	17.1	5.0	87	3	36
14Y3125	M	10880	(18)	18.1	5.0	94	75	35
15Y2100	SLA	10840	(19)	15.6	5.0	94	68	37
15Y2112	SPQ	10790	(20)	21.4	5.0	94	92	37
15P3104	MB	10650	(21)	17.7	5.0	93	13	36
14G6	M	10390	(22)	16.0	5.0	94	38	37
15Y2013	S	10340	(23)	17.0	5.0	88	10	37
15Y2024	SPQ	10330	(24)	17.6	5.0	92	85	36
14Y3137	MB	10280	(25)	16.5	5.0	92	1	37
14Y1104	L	10160	(26)	16.5	5.0	93	1	36
14G9	M	10120	(27)	17.3	4.9	97	3	38
15Y1197	LA	10070	(28)	16.1	5.0	95	1	33
M208	MB	9860	(29)	16.0	5.0	95	1	35
15Y2002	BG	9740	(30)	16.9	5.0	89	35	36
15Y3139	MB	9600	(31)	16.0	5.0	92	1	36
89Y235	BG	9590	(32)	16.0	5.0	88	90	37
14Y1078	L	9430	(33)	17.6	5.0	92	1	36
CM101	SWX	9420	(34)	16.8	5.0	85	83	36
15Y3175	M	9270	(35)	20.4	5.0	100	1	35
14Y3060	MSR	8950	(36)	20.2	5.0	96	1	37
14Y3110	M	8450	(37)	17.7	5.0	97	1	36
CA201	SLA	7770	(38)	17.5	5.0	94	43	35
MEAN		10540		17.2	5.0	92	27	36
CV		2.8		2.7	1.0	2.4	48	3.0
LSD (.05)		590		0.9	0.1	4.5	27	2.2

S = short; M = medium; L = long; BG = bold grain; PQ = premium quality; WX = waxy; LA = long grain aromatic;

LBL = long grain blast resistant; MB = medium blast resistant; SR = stem rot resistant; SLA = short grain low amylase.

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

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

Table 6. 2016 Yolo Very Early Rice Variety Trials

<i>Advanced Lines and Varieties</i>								
Variety	Grain Type	Grain Yield at 14%		Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Plant Lodging (1-99)	Plant Height (in)
		Moisture lbs/acre						
10Y2043	S	11540	(1)	16.8	5.0	83	66	36
14Y1006	L	11340	(2)	16.9	5.0	90	1	38
M206	M	10980	(3)	18.1	5.0	90	39	40
L207	L	10540	(4)	16.5	5.0	90	1	40
15Y2009	S	10430	(5)	19.7	5.0	91	6	38
M105	M	10420	(6)	16.8	5.0	85	44	40
15Y2010	S	10390	(7)	20.8	5.0	93	1	38
L206	L	10090	(8)	16.1	5.0	89	1	34
CH202	SPQ	9630	(9)	18.0	5.0	88	64	37
M205	M	9590	(10)	17.2	5.0	97	13	39
M209	M	9580	(11)	15.3	5.0	94	14	39
CH201	SPQ	9560	(12)	16.6	5.0	93	43	38
S102	S	9530	(13)	15.9	5.0	83	24	40
13Y2031	SPQ	9130	(14)	17.3	5.0	84	84	40
14Y3092	M	8770	(15)	16.5	5.0	97	21	41
MEAN		10100		17.2	5.0	90	28	39
CV		8.2		7.1	0.0	1.8	69	3.7
LSD (.05)		1190		1.8	0.0	2.3	27	2.1

<i>Preliminary Lines and Varieties</i>								
Variety	Grain Type	Grain Yield at 14%	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Plant Lodging (1-99)	Plant Height (in)	
CM203	SWX	11380	(1)	17.5	5.0	85	23	40
15P3104	MB	10920	(2)	17.0	5.0	93	11	39
13Y3152	M	10790	(3)	17.3	5.0	90	1	39
M208	MB	10690	(4)	15.7	5.0	93	1	40
14Y3055	MB	10610	(5)	15.5	5.0	88	1	40
14Y3143	MSR	10450	(6)	16.2	5.0	87	1	40
15Y1021	L	10440	(7)	15.8	5.0	92	10	41
15Y2112	SPQ	10380	(8)	21.6	5.0	91	68	37
M206comp	M	10330	(9)	17.5	5.0	88	3	41
14Y3022	M	10300	(10)	15.2	5.0	87	1	39
15Y2031	SWX	10290	(11)	17.7	5.0	87	1	40
13Y3030	M	10240	(12)	15.8	5.0	87	33	39
14Y3099	M	10220	(13)	16.5	5.0	91	1	39
15Y1102	L	10220	(14)	15.3	5.0	94	70	40
15Y2100	SLA	10200	(15)	15.5	5.0	94	58	40
15Y2024	SPQ	10150	(16)	16.7	5.0	92	6	37
15Y2135	SWX	10140	(17)	18.4	5.0	94	3	39
12Y3097	MB	10080	(18)	16.6	5.0	90	6	39
15Y1077	LBL	10050	(19)	16.1	5.0	91	1	38
15Y1027	L	9990	(20)	15.9	5.0	89	1	38
14Y1104	L	9980	(21)	16.0	5.0	89	1	38
15Y3151	M	9940	(22)	16.3	5.0	92	53	41
14Y3060	MSR	9910	(23)	17.2	5.0	95	1	39
14Y3125	M	9900	(24)	15.0	5.0	93	83	40
15Y3139	MB	9800	(25)	16.0	5.0	91	1	38
14Y3137	MB	9740	(26)	15.6	5.0	92	8	40
15Y2013	S	9600	(27)	16.4	5.0	88	1	37
14G9	M	9500	(28)	17.0	4.6	92	1	40
15Y1197	LA	9390	(29)	15.2	5.0	92	18	37
14Y3126	M	9380	(30)	17.6	5.0	93	8	40
14Y3110	M	9320	(31)	17.8	5.0	95	1	38
CM101	SWX	9290	(32)	15.9	5.0	84	73	40
15Y3175	M	9070	(33)	17.0	5.0	99	11	40
89Y235	BG	8720	(34)	15.2	5.0	87	28	37
14Y1078	L	8690	(35)	16.3	5.0	92	1	36
15Y2002	BG	8430	(36)	16.0	5.0	88	1	39
14G6	M	8330	(37)	15.2	5.0	93	28	36
CA201	SLA	7790	(38)	16.4	5.0	89	35	37
MEAN		9860		16.4	5.0	90	17	39
CV		4.6		3.7	0.5	1.3	104	3.5
LSD (.05)		920		1.2	0.0	2.4	36	2.8

S = short; M = medium; L = long; BG = bold grain; PQ = premium quality; WX = waxy; LA = long grain aromatic; LBL = long grain blast resistant; MB = medium blast resistant; SR = stem rot resistant; SLA = short grain low amylase. Subjective rating of 1-5 w here 1 = poor and 5 = excellent seedling emergence. Subjective rating of 1-99 w here 1 = none and 99 = completely lodged.

Table 7. 2016 San Joaquin Very Early Rice Variety Trials

Variety	Grain Type	Grain Yield at 14%		Grain Moisture		Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		Moisture lbs/acre	Moisture (%)	Moisture at Harvest (%)	Moisture at Harvest (%)				
M105	M	10700 (1)	19.1	5.0	103	6	36		
13Y2031	SPQ	10670 (2)	19.1	5.0	104	35	35		
L207	L	10380 (3)	22.4	5.0	105	1	37		
L206	L	10170 (4)	17.4	5.0	104	1	31		
M206	M	10130 (5)	25.3	5.0	106	1	34		
S102	S	10010 (6)	17.9	4.8	103	1	36		
10Y2043	S	9830 (7)	23.5	4.9	105	22	33		
14Y1006	L	9420 (8)	19.3	5.0	103	1	33		
15Y2010	S	8140 (9)	38.0	5.0	107	1	34		
CH202	SPQ	6870 (10)	29.9	3.9	109	1	31		
15Y2009	S	6640 (11)	34.5	4.6	106	1	33		
M209	M	5290 (12)	44.2	5.0	116	1	32		
CH201	SPQ	4600 (13)	43.2	5.0	111	1	32		
14Y3092	M	4340 (14)	49.2	5.0	123	1	34		
M205	M	3110 (15)	61.7	5.0	119	1	32		
MEAN		8020	31.0	4.9	108	5	34		
CV		15.7	24.8	4.0	0.9	160	4.4		
LSD (.05)		1790	10.9	0.3	1.4	11	2.1		

Preliminary Lines and Varieties

15Y2031	SWX	11940 (1)	26.9	5.0	103	1	36
14Y3143	MSR	11510 (2)	21.4	5.0	104	1	35
15Y1102	L	11490 (3)	22.5	5.0	106	18	35
15Y1027	L	10860 (4)	20.1	5.0	103	21	37
CM203	SWX	10690 (5)	25.2	5.0	104	11	37
15Y1077	LBL	10610 (6)	19.3	5.0	104	1	37
14Y1104	L	10540 (7)	20.5	5.0	104	1	36
15Y2002	BG	10530 (8)	21.7	5.0	103	1	34
13Y3030	M	10470 (9)	20.0	5.0	102	1	37
12Y3097	MB	10470 (10)	23.9	5.0	105	1	35
15Y1197	LA	10440 (11)	21.2	5.0	106	1	34
14Y3055	MB	10410 (12)	22.9	5.0	103	1	36
15Y1021	L	10110 (13)	20.0	5.0	103	1	35
89Y235	BG	9900 (14)	18.2	5.0	104	38	34
15Y2013	S	9880 (15)	25.0	5.0	105	1	37
15Y2135	SWX	9550 (16)	33.6	5.0	107	1	36
M206comp	M	9470 (17)	26.4	5.0	104	1	36
CM101	SWX	9450 (18)	20.4	5.0	104	1	35
15Y3151	M	9290 (19)	24.5	5.0	107	1	36
14Y3022	M	9110 (20)	19.0	5.0	103	1	34
15Y2100	SLA	8960 (21)	23.9	5.0	107	1	36
15Y2112	SPQ	8960 (22)	31.4	5.0	104	1	36
14G6	M	8560 (23)	23.8	5.0	106	1	32
14Y1078	L	8490 (24)	28.3	5.0	104	1	36
14Y3126	M	8400 (25)	33.3	5.0	108	1	34
15Y2024	SPQ	8270 (26)	24.1	5.0	105	1	33
15P3104	MB	7880 (27)	32.9	5.0	108	1	35
13Y3152	M	7380 (28)	31.8	5.0	109	1	34
CA201	SLA	7190 (29)	23.8	5.0	105	1	32
14Y3060	MSR	6940 (30)	33.3	5.0	109	1	34
14Y3137	MB	6930 (31)	29.8	5.0	109	1	33
15Y3139	MB	6620 (32)	35.0	5.0	107	1	35
14Y3099	M	6520 (33)	34.3	5.0	109	1	34
14Y3125	M	6030 (34)	42.9	5.0	109	1	33
14G9	M	5940 (35)	32.0	5.0	108	1	34
M208	MB	5220 (36)	38.2	5.0	110	1	33
14Y3110	M	5000 (37)	38.1	5.0	111	1	32
15Y3175	M	2390 (38)	50.0	5.0	125	1	31
MEAN		8750	27.3	5.0	106	3	35
CV		12.1	14.6	0.0	1.2	335	4.2
LSD (.05)		2150	8.1	0.0	2.5	22	2.9

S = short; M = medium; L = long; BG = bold grain; PQ = premium quality; WX = waxy; LA = long grain aromatic; LBL = long grain blast resistant; MB = medium blast resistant; SR = stem rot resistant; SLA = short grain low amaloese. Subjective rating of 1-5 w here 1 = poor and 5 = excellent seedling emergence. Subjective rating of 1-99 w here 1 = none and 99 = completely lodged.

Table 8. Grain Yield (lb/acre @14% moisture) Summary of Very Early Rice Varieties by Location and Year (2012-2016)

Location	Year	M104	M105	M206	Calmochi		
					101	S102	L206
Biggs (RES)	2012	10260	9950	10420	8500	9370	10020
	2013	9710	9150	8610	8580	9120	9970
	2014	8150	7680	9200	6540	7640	8580
	2015	8580	8150	9350	7940	9520	8910
	2016	.	10380	10250	7490	8960	10100
Location Mean		9175	9062	9566	7810	8922	9516
Sutter	2012	8990	9590	9320	7500	8470	9570
	2013	9510	9940	9710	8340	9300	9700
	2014	9510	10380	9710	7780	8770	9440
	2015	9520	10350	9900	7990	9190	9820
	2016	.	11630	11110	9420	10720	9260
Location Mean		9383	10378	9950	8206	9290	9558
Yolo	2012	9610	9560	9900	7450	8400	9060
	2013	9420	9670	9790	7830	8380	9000
	2014	9610	10150	9770	7580	8980	8760
	2015	8150	7210	7490	5560	6940	7740
	2016	.	10420	10980	9290	9530	10090
Location Mean		9198	9402	9586	7542	8446	8930
San Joaquin	2012	8460	8340	8990	7880	8180	7570
	2013	8140	8220	8410	7680	7960	8180
	2014	9680	9660	9390	8440	8480	8660
	2015	9650	9260	9970	8750	9240	8400
	2016	.	.	.	.	.	.
Location Mean		8983	8870	9190	8188	8465	8203
Loc/Years Mean		9184	9428	9573	7936	8781	9052
Yield % M104		100.0	102.7	104.2	86.4	95.6	98.6
Number of Tests		16	19	19	19	19	19

Table 9. 2016 Four Location Early Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Ave Grain Yield at 14% Moisture		Single Location Yields				Ave Grain Moisture at Harvest		Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		lbs/acre		Biggs	Butte	Colusa	Yuba	(%)					
10Y2043	S	10910 (1)		12540 (1)	11350 (1)	9490 (10)	10270 (1)	16.8	4.9	87	76	36	
14Y1006	L	10630 (2)		11930 (2)	11090 (3)	9780 (5)	9730 (2)	15.4	4.9	85	10	37	
12Y2175	MPQ	10540 (3)		11480 (4)	11250 (2)	10190 (2)	9230 (4)	17.3	4.9	92	23	39	
L207	L	10310 (4)		11220 (5)	10960 (4)	10600 (1)	8470 (13)	14.9	5.0	88	10	39	
M206	M	10060 (5)		10780 (11)	10400 (5)	9960 (3)	9090 (6)	17.0	4.9	87	47	39	
15Y1018	L	9990 (6)		11520 (3)	10190 (10)	9110 (13)	9120 (5)	16.1	5.0	94	10	39	
15P3104	MB	9960 (7)		11010 (9)	10310 (6)	9450 (11)	9080 (7)	17.7	4.9	90	21	38	
M209	M	9880 (8)		10950 (10)	10220 (9)	9600 (7)	8760 (8)	17.7	4.9	92	12	38	
14Y2159	MPQ	9830 (9)		10650 (13)	10160 (11)	9860 (4)	8640 (10)	18.4	4.9	93	13	38	
12Y3097	MB	9820 (10)		11080 (7)	10270 (7)	8270 (17)	9680 (3)	17.0	4.9	86	43	38	
14Y2147	MPQ	9720 (11)		11080 (6)	9870 (14)	9500 (9)	8440 (14)	17.3	4.9	93	6	37	
L206	L	9660 (12)		11060 (8)	10050 (12)	8870 (15)	8670 (9)	15.2	4.9	86	14	34	
M205	M	9630 (13)		10690 (12)	9640 (16)	9730 (6)	8430 (15)	17.5	4.9	93	6	37	
M208	MB	9530 (14)		10250 (16)	9680 (15)	9560 (8)	8630 (11)	16.5	5.0	89	32	39	
14Y3092	M	9530 (15)		10280 (15)	10220 (8)	9250 (12)	8350 (16)	17.6	4.9	95	18	39	
15Y2151	MPQ	9500 (16)		10620 (14)	10040 (13)	8730 (16)	8620 (12)	17.7	4.9	91	24	40	
S102	S	8960 (17)		9020 (18)	9480 (17)	9050 (14)	8300 (17)	14.4	5.0	83	60	37	
M402	MPQ	8420 (18)		9880 (17)	8210 (18)	8140 (18)	7470 (18)	18.9	5.0	104	2	38	
MEAN		9830		10890	10190	9400	8830	16.9	4.9	90	24	38	
CV		6.7		4.4	3.6	10.8	6.4	7.6	1.8	1.7	72	3.6	
LSD (.05)		630		680	510	1440	800	2.0	0.1	2.6	25	1.6	

Preliminary Lines and Varieties

13Y3176	M	10400 (1)		10790 (6)	11040 (1)	10210 (8)	9540 (1)	16.4	4.9	91	12	38
16Y101	L	10140 (2)		10440 (11)	10400 (3)	11280 (1)	8420 (12)	14.3	4.5	89	10	39
14Y3121	M	10100 (3)		11300 (1)	10310 (7)	9760 (17)	9050 (7)	17.8	4.9	94	10	37
M206comp	M	10090 (4)		10540 (8)	10890 (2)	10040 (10)	8890 (8)	16.8	4.9	87	33	37
15Y3177	M	10060 (5)		11160 (3)	10040 (15)	9960 (14)	9070 (6)	16.8	4.9	93	10	36
CM203	SWX	10040 (6)		9840 (22)	10370 (5)	11100 (2)	8870 (9)	17.7	4.9	89	38	39
13Y3191	M	9990 (7)		10910 (5)	10270 (9)	9670 (19)	9120 (4)	17.1	5.0	91	10	37
M105	M	9990 (8)		10380 (14)	10060 (14)	10390 (6)	9110 (5)	16.1	5.0	85	29	38
13Y3177	M	9810 (9)		10380 (13)	10400 (4)	9210 (23)	9260 (3)	16.7	4.8	89	9	38
14Y3124	M	9720 (10)		11160 (2)	10160 (10)	9970 (13)	7580 (24)	17.7	4.9	91	20	40
14G9	M	9700 (11)		10500 (9)	10090 (12)	8970 (27)	9260 (2)	16.5	4.5	91	6	38
15Y3171	M	9660 (12)		11010 (4)	9750 (19)	10190 (9)	7690 (21)	17.1	4.9	94	2	36
A202	LA	9660 (13)		10290 (16)	10070 (13)	10670 (4)	7590 (23)	16.0	5.0	91	11	38
14Y3087	MB	9650 (14)		10020 (20)	9750 (20)	9990 (12)	8860 (10)	16.0	5.0	91	39	40
15Y84	LJ	9650 (15)		10570 (7)	9990 (17)	9990 (11)	8030 (16)	13.6	4.8	94	5	34
12Y1022	LA	9630 (16)		10440 (12)	9440 (23)	10450 (5)	8180 (14)	15.5	4.9	91	7	39
15Y2145	MPQ	9530 (17)		10070 (18)	10100 (11)	10230 (7)	7720 (20)	16.3	4.9	93	34	36
15Y3172	M	9510 (18)		10240 (17)	10340 (6)	9730 (18)	7720 (19)	16.6	4.9	94	4	36
13Y3129	M	9450 (19)		9840 (23)	10010 (16)	9620 (20)	8350 (13)	16.5	4.8	91	3	35
15Y2153	MPQ	9350 (20)		10470 (10)	9810 (18)	9780 (16)	7340 (26)	17.4	4.9	94	12	37
15Y2106	SLA	9260 (21)		9980 (21)	10290 (8)	9110 (24)	7650 (22)	15.1	4.9	95	54	38
15Y1120	L	9250 (22)		9020 (26)	8820 (25)	10670 (3)	8490 (11)	14.9	5.0	95	1	34
13Y2031	SPQ	9180 (23)		9390 (24)	9500 (22)	9830 (15)	8000 (18)	16.0	4.9	87	74	38
CH202	SPQ	9130 (24)		10030 (19)	9120 (24)	9330 (22)	8020 (17)	16.8	4.9	88	67	35
14G6	M	8870 (25)		9260 (25)	9590 (21)	8560 (29)	8070 (15)	15.8	5.0	89	23	36
15Y89	LJ	7880 (26)		7910 (28)	7620 (28)	9330 (21)	6670 (28)	14.1	4.9	92	3	40
11Y106	LJ	7840 (27)		10310 (15)	6780 (31)	9020 (25)	5250 (33)	14.6	4.7	92	15	36
CH201	SPQ	7820 (28)		7310 (30)	8080 (27)	8590 (28)	7310 (27)	15.1	4.9	92	55	36
CM101	SWX	7550 (29)		7680 (29)	8280 (26)	6790 (35)	7470 (25)	14.8	5.0	86	58	37
15Y1169	LJ	7240 (30)		6950 (32)	6800 (30)	8970 (26)	6240 (30)	15.4	5.0	98	1	37
15Y85	LB	6850 (31)		8010 (27)	6640 (33)	7600 (33)	5150 (35)	15.2	5.0	98	1	33
CA201	SLA	6790 (32)		6300 (36)	6810 (29)	7800 (32)	6260 (29)	15.4	4.8	90	48	36
15Y1195	B	6630 (33)		6780 (34)	6660 (32)	8080 (30)	5020 (36)	15.5	5.0	98	1	33
CT202	LB	6630 (34)		7150 (31)	6200 (34)	7850 (31)	5310 (32)	14.4	5.0	95	1	34
14Y1142	LB	6360 (35)		6850 (33)	6070 (36)	6790 (36)	5740 (31)	15.5	4.9	96	3	35
14Y1172	LB	6280 (36)		6450 (35)	6140 (35)	7360 (34)	5180 (34)	14.2	4.8	97	43	40
MEAN		8880		9440	9080	9360	7650	15.9	4.9	92	21	37
CV		5.4		4.3	5.3	6.7	4.9	4.4	4.8	2.5	90	4.1
LSD (.05)		920		830	980	1270	760	1.9	0.2	3.2	27	2.1

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=long Basmati; J=Jasmine;

MB = medium blast resistant; LA = low amylose; SR = Stem Rot resistant; 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 10. 2016 Biggs Early Rice Variety Trials

<i>Advanced Lines and Varieties</i>							
Variety	Grain Type	Grain Yield	Grain	Seedling	Days to	Lodging (1-99)	Plant Height (in)
		at 14% Moisture lbs/acre	Moisture at Harvest (%)	Vigor (1-5)	50% Heading		
10Y2043	S	12540 (1)	14.9	4.9	76	61	35
14Y1006	L	11930 (2)	13.9	4.6	77	6	37
15Y1018	L	11520 (3)	15.5	4.9	88	1	39
12Y2175	MPQ	11480 (4)	17.1	4.7	83	53	39
L207	L	11220 (5)	13.7	4.9	81	3	39
14Y2147	MPQ	11080 (6)	16.5	4.5	84	18	38
12Y3097	MB	11080 (7)	17.3	4.6	80	88	39
L206	L	11060 (8)	13.9	4.6	80	3	33
15P3104	MB	11010 (9)	17.8	4.7	82	45	40
M-209	M	10950 (10)	16.6	4.7	83	18	38
M-206	M	10780 (11)	17.8	4.7	80	74	39
M-205	M	10690 (12)	17.0	4.7	85	19	37
14Y2159	MPQ	10650 (13)	18.2	4.7	85	19	38
15Y2151	MPQ	10620 (14)	16.7	4.7	83	45	40
14Y3092	M	10280 (15)	17.4	4.8	88	34	41
M-208	MB	10250 (16)	16.5	4.9	82	85	41
M-402	MPQ	9880 (17)	20.4	5.0	101	1	40
S-102	S	9020 (18)	9.2	4.9	77	61	35
MEAN		10890	16.1	4.7	83	35	38
CV		4.4	6.8	2.1	1.1	57	3.8
LSD (.05)		680	1.6	0.1	1.3	28	2.1
<i>Preliminary Lines and Varieties</i>							
14Y3121	M	11300 (1)	17.0	4.7	85	35	38
14Y3124	M	11160 (2)	19.2	4.8	82	45	42
15Y3177	M	11160 (3)	16.7	4.5	84	18	35
15Y3171	M	11010 (4)	17.1	4.7	85	1	34
13Y3191	M	10910 (5)	18.0	4.9	84	23	38
13Y3176	M	10790 (6)	16.4	4.8	82	38	39
15Y84	LJ	10570 (7)	13.1	4.8	84	18	33
M206comp	M	10540 (8)	16.8	4.8	81	40	38
14G9	M	10500 (9)	16.4	4.6	85	15	40
15Y2153	MPQ	10470 (10)	17.2	4.7	86	20	37
16Y101	L	10440 (11)	13.5	3.9	80	10	39
12Y1022	LA	10440 (12)	14.2	4.7	81	25	38
13Y3177	M	10380 (13)	16.8	4.7	83	18	40
M-105	M	10380 (14)	16.1	4.9	79	48	39
11Y106	LJ	10310 (15)	15.3	4.8	86	1	35
A202	LA	10290 (16)	14.7	5.0	85	35	37
15Y3172	M	10240 (17)	16.8	4.7	88	8	34
15Y2145	MPQ	10070 (18)	16.0	4.9	84	88	37
CH-202	SPQ	10030 (19)	18.1	4.9	80	28	34
14Y3087	MB	10020 (20)	16.9	4.9	87	38	42
15Y2106	SLA	9980 (21)	12.7	4.9	87	50	37
CM-203	SWX	9840 (22)	13.0	4.7	86	18	38
13Y3129	M	9840 (23)	15.9	4.8	83	3	34
13Y2031	SPQ	9390 (24)	12.9	4.8	83	25	37
14G6	M	9260 (25)	16.3	4.8	79	50	35
15Y1120	L	9020 (26)	14.1	4.8	88	1	33
15Y85	LB	8010 (27)	12.7	4.9	89	1	31
15Y89	LJ	7910 (28)	13.2	4.7	86	10	39
CM-101	SWX	7680 (29)	10.4	4.9	83	1	34
CH-201	SPQ	7310 (30)	12.7	4.8	81	57	37
CT202	LB	7150 (31)	13.8	4.9	85	1	32
15Y1169	LJ	6950 (32)	14.3	4.9	87	1	35
14Y1142	LB	6850 (33)	14.0	4.7	84	10	35
15Y1195	B	6780 (34)	13.2	4.9	85	1	31
14Y1172	LB	6450 (35)	12.9	4.9	84	40	42
CA-201	SLA	6300 (36)	13.3	4.9	83	50	36
MEAN		9440	15.0	4.7	84	24	37
CV		4.3	5.2	5.2	4.7	133	3.2
LSD (.05)		830	1.6	0.5	7.9	64	2.4

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=long Basmati; J=Jasmine;

MB = medium blast resistant; LA = low amylose; SR = Stem Rot resistant; WX = waxy.

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

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

Numbers in parentheses indicate relative rank in column.

Table 11. 2016 Butte Early Rice Variety Trial

<i>Advanced Lines and Varieties</i>							
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)
10Y2043	S	11350 (1)	18.8	5.0	87	97	36
12Y2175	MPQ	11250 (2)	17.4	5.0	93	35	38
14Y1006	L	11090 (3)	15.9	5.0	83	24	38
L207	L	10960 (4)	15.9	5.0	87	18	37
M206	M	10400 (5)	17.2	5.0	87	53	38
15P3104	MB	10310 (6)	16.5	5.0	90	21	36
12Y3097	MB	10270 (7)	17.5	5.0	88	58	38
14Y3092	M	10220 (8)	17.1	5.0	95	19	39
M209	M	10220 (9)	17.1	5.0	93	18	38
15Y1018	L	10190 (10)	16.4	5.0	94	8	38
14Y2159	MPQ	10160 (11)	17.1	5.0	94	25	37
L206	L	10050 (12)	16.2	5.0	86	34	35
15Y2151	MPQ	10040 (13)	16.8	5.0	92	39	39
14Y2147	MPQ	9870 (14)	16.2	5.0	93	4	38
M208	MB	9680 (15)	17.1	5.0	90	39	38
M205	M	9640 (16)	17.2	5.0	94	4	37
S102	S	9480 (17)	16.9	5.0	84	73	38
M402	MPQ	8210 (18)	20.5	5.0	100	8	38
MEAN		10190	17.1	5.0	90	32	37
CV		3.6	6.0	0.0	1.7	39	2.3
LSD (.05)		510	1.5	0.0	2.2	18	1.2
<i>Preliminary Lines and Varieties</i>							
13Y3176	M	11040 (1)	15.6	5.0	94	5	37
M206comp	M	10890 (2)	16.8	5.0	89	68	38
16Y101	L	10400 (3)	14.7	5.0	89	18	40
13Y3177	M	10400 (4)	15.7	5.0	90	15	38
CM203	SWX	10370 (5)	18.4	5.0	91	60	39
15Y3172	M	10340 (6)	15.7	5.0	94	1	36
14Y3121	M	10310 (7)	16.0	5.0	94	3	37
15Y2106	SLA	10290 (8)	16.2	5.0	96	55	38
13Y3191	M	10270 (9)	15.4	5.0	91	10	36
14Y3124	M	10160 (10)	15.6	5.0	93	30	38
15Y2145	MPQ	10100 (11)	15.8	5.0	95	38	35
14G9	M	10090 (12)	15.5	5.0	91	5	38
A202	LA	10070 (13)	15.8	5.0	92	6	35
M105	M	10060 (14)	15.6	5.0	85	30	35
15Y3177	M	10040 (15)	15.7	5.0	94	5	35
13Y3129	M	10010 (16)	15.5	5.0	92	6	36
15Y84	LJ	9990 (17)	14.1	5.0	93	1	33
15Y2153	MPQ	9810 (18)	15.7	5.0	96	13	37
15Y3171	M	9750 (19)	15.5	5.0	95	3	36
14Y3087	MB	9750 (20)	16.0	5.0	90	97	39
14G6	M	9590 (21)	14.9	5.0	91	3	38
13Y2031	SPQ	9500 (22)	16.6	5.0	89	99	37
12Y1022	LA	9440 (23)	15.3	5.0	92	1	38
CH202	SPQ	9120 (24)	16.6	5.0	92	99	35
15Y1120	L	8820 (25)	14.9	5.0	95	1	33
CM101	SWX	8280 (26)	16.2	5.0	86	92	33
CH201	SPQ	8080 (27)	16.3	5.0	95	33	34
15Y89	LJ	7620 (28)	14.1	5.0	90	1	39
CA201	SLA	6810 (29)	15.4	5.0	92	50	34
15Y1169	LJ	6800 (30)	15.6	5.0	100	3	37
11Y106	LJ	6780 (31)	14.6	5.0	94	8	35
15Y1195	B	6660 (32)	14.7	5.0	99	1	33
15Y85	LB	6640 (33)	14.7	5.0	96	1	34
CT202	LB	6200 (34)	14.8	5.0	98	1	33
14Y1172	LB	6140 (35)	14.7	5.0	99	30	38
14Y1142	LB	6070 (36)	14.8	5.0	95	1	35
MEAN		9080	15.5	5.0	93	25	36
CV		5.3	2.5	0.0	1.7	47	3.9
LSD (.05)		980	0.8	0.0	3.2	24	2.8

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=long Basmati; J=Jasmine;

MB = medium blast resistant; LA = low amylose; SR = Stem Rot resistant; WX = w axy.

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

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

Numbers in parentheses indicate relative rank in column.

Table 12. 2016 Colusa Early Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield	Grain	Seedling	Days to	Lodging (1-99)	Plant Height (in)
		at 14% Moisture lbs/acre	Moisture at Harvest (%)	Vigor (1-5)	50% Heading		
L207	L	10600 (1)	13.8	5.0	99	18	41
12Y2175	MPQ	10190 (2)	16.4	4.8	100	1	40
M206	M	9960 (3)	15.5	5.0	94	39	41
14Y2159	MPQ	9860 (4)	18.1	4.9	100	1	39
14Y1006	L	9780 (5)	14.8	4.9	96	11	38
M205	M	9730 (6)	16.8	5.0	101	1	38
M209	M	9600 (7)	17.1	4.9	100	13	40
M208	MB	9560 (8)	16.7	5.0	95	2	40
14Y2147	MPQ	9500 (9)	17.2	4.9	101	3	37
10Y2043	S	9490 (10)	13.9	4.8	99	52	38
15P3104	MB	9450 (11)	19.4	4.8	99	12	40
14Y3092	M	9250 (12)	16.1	5.0	102	18	40
15Y1018	L	9110 (13)	14.1	5.0	105	31	43
S102	S	9050 (14)	15.9	5.0	91	16	40
L206	L	8870 (15)	14.2	5.0	95	6	36
15Y2151	MPQ	8730 (16)	17.4	4.8	99	1	41
12Y3097	MB	8270 (17)	16.2	4.9	91	21	40
M402	MPQ	8140 (18)	16.3	5.0	112	1	38
MEAN		9400	16.1	4.9	99	14	39
CV		10.8	10.5	2.9	2.3	165	4.4
LSD (.05)		1440	2.4	0.2	3.3	32	2.5

Preliminary Lines and Varieties

16Y101	L	11280 (1)	13.6	4.0	101	10	42
CM203	SWX	11100 (2)	22.6	4.9	97	33	41
15Y1120	L	10670 (3)	14.4	5.0	106	3	37
A202	LA	10670 (4)	16.6	4.9	101	1	43
12Y1022	LA	10450 (5)	16.3	5.0	102	1	42
M105	M	10390 (6)	17.1	5.0	93	3	39
15Y2145	MPQ	10230 (7)	17.9	4.7	99	8	39
13Y3176	M	10210 (8)	17.8	5.0	100	1	39
15Y3171	M	10190 (9)	18.3	4.8	103	6	39
M206comp	M	10040 (10)	18.3	5.0	94	13	37
15Y84	LJ	9990 (11)	12.4	4.4	108	1	37
14Y3087	MB	9990 (12)	16.8	5.0	97	3	43
14Y3124	M	9970 (13)	17.8	4.8	99	3	42
15Y3177	M	9960 (14)	17.3	5.0	101	13	41
13Y2031	SPQ	9830 (15)	19.1	5.0	94	75	41
15Y2153	MPQ	9780 (16)	18.6	5.0	103	16	40
14Y3121	M	9760 (17)	20.6	4.8	102	1	39
15Y3172	M	9730 (18)	17.5	5.0	101	6	40
13Y3191	M	9670 (19)	18.3	5.0	98	1	39
13Y3129	M	9620 (20)	17.6	4.6	97	1	38
15Y89	LJ	9330 (21)	14.2	4.8	105	1	43
CH202	SPQ	9330 (22)	16.5	4.9	96	45	40
13Y3177	M	9210 (23)	17.3	4.6	96	1	37
15Y2106	SLA	9110 (24)	15.9	4.9	103	60	40
11Y106	LJ	9020 (25)	12.5	4.0	99	50	41
15Y1169	LJ	8970 (26)	15.7	5.0	107	1	42
14G9	M	8970 (27)	17.8	4.7	99	1	39
CH201	SPQ	8590 (28)	15.9	5.0	101	53	38
14G6	M	8560 (29)	16.4	5.0	99	23	37
15Y1195	B	8080 (30)	18.8	5.0	111	1	38
CT202	LB	7850 (31)	13.4	5.0	105	3	37
CA201	SLA	7800 (32)	17.9	4.4	99	13	38
15Y85	LB	7600 (33)	17.7	5.0	111	1	32
14Y1172	LB	7360 (34)	13.9	4.5	108	18	44
CM101	SWX	6790 (35)	17.5	5.0	94	45	42
14Y1142	LB	6790 (36)	16.9	4.8	110	1	36
MEAN		9360	16.9	4.8	101	14	39
CV		6.7	5.9	8.3	1.3	81	4.2
LSD (.05)		1270	2.0	0.8	2.7	23	3.3

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=long Basmati; J=Jasmine;

MB = medium blast resistant; LA = low amylose; SR = Stem Rot resistant; WX = waxy.

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

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

Numbers in parentheses indicate relative rank in column.

Table 13. 2016 Yuba Early Rice Variety Trials

<i>Advanced Lines and Varieties</i>							
Variety	Grain Type	Grain Yield	Grain	Seedling	Days to	Lodging (1-99)	Plant Height (in)
		at 14% Moisture lbs/acre	Moisture at Harvest (%)	Vigor (1-5)	50% Heading		
10Y2043	S	10270 (1)	19.7	5.0	84	94	35
14Y1006	L	9730 (2)	17.1	5.0	85	1	35
12Y3097	MB	9680 (3)	16.9	5.0	86	7	36
12Y2175	MPQ	9230 (4)	18.3	5.0	91	2	38
15Y1018	L	9120 (5)	18.3	5.0	91	1	37
M206	M	9090 (6)	17.6	5.0	86	24	37
15P3104	MB	9080 (7)	17.1	5.0	89	6	36
M209	M	8760 (8)	20.0	5.0	92	1	37
L206	L	8670 (9)	16.7	5.0	83	15	32
14Y2159	MPQ	8640 (10)	20.2	5.0	94	7	36
M208	MB	8630 (11)	15.7	5.0	88	2	36
15Y2151	MPQ	8620 (12)	19.9	5.0	92	12	41
L207	L	8470 (13)	16.1	5.0	87	1	38
14Y2147	MPQ	8440 (14)	19.3	5.0	93	1	35
M205	M	8430 (15)	19.1	5.0	94	1	37
14Y3092	M	8350 (16)	19.8	5.0	96	1	36
S102	S	8300 (17)	15.7	5.0	80	91	36
M402	MPQ	7470 (18)	18.6	5.0	102	1	35
MEAN		8830	18.1	5.0	90	15	36
CV		6.4	6.6	0.0	1.1	78	3.2
LSD (.05)		800	1.7	0.0	1.4	16	1.6
<i>Preliminary Lines and Varieties</i>							
13Y3176	M	9540 (1)	15.9	5.0	91	3	35
14G9	M	9260 (2)	16.6	3.9	90	1	36
13Y3177	M	9260 (3)	17.0	5.0	90	1	37
13Y3191	M	9120 (4)	16.6	5.0	90	8	36
M105	M	9110 (5)	15.5	5.0	84	36	38
15Y3177	M	9070 (6)	17.4	5.0	93	3	34
14Y3121	M	9050 (7)	17.6	5.0	94	1	35
M206comp	M	8890 (8)	15.5	5.0	85	10	34
CM203	SWX	8870 (9)	16.8	5.0	84	43	38
14Y3087	MB	8860 (10)	14.5	5.0	89	20	36
15Y1120	L	8490 (11)	16.5	5.0	92	1	33
16Y101	L	8420 (12)	15.4	5.0	86	1	37
13Y3129	M	8350 (13)	17.3	5.0	92	1	34
12Y1022	LA	8180 (14)	16.3	5.0	91	1	39
14G6	M	8070 (15)	15.6	5.0	89	16	35
15Y84	LJ	8030 (16)	15.1	5.0	92	1	34
CH202	SPQ	8020 (17)	16.0	5.0	85	95	33
13Y2031	SPQ	8000 (18)	15.3	5.0	83	95	37
15Y3172	M	7720 (19)	16.5	5.0	95	1	33
15Y2145	MPQ	7720 (20)	15.6	5.0	93	3	35
15Y3171	M	7690 (21)	17.7	5.0	94	1	34
15Y2106	SLA	7650 (22)	15.6	5.0	92	50	39
A202	LA	7590 (23)	16.8	5.0	88	1	35
14Y3124	M	7580 (24)	18.3	5.0	92	1	39
CM101	SWX	7470 (25)	15.3	5.0	83	95	38
15Y2153	MPQ	7340 (26)	18.2	5.0	94	1	36
CH201	SPQ	7310 (27)	15.5	5.0	92	78	33
15Y89	LJ	6670 (28)	15.2	5.0	90	1	41
CA201	SLA	6260 (29)	15.1	5.0	87	80	37
15Y1169	LJ	6240 (30)	16.1	5.0	98	1	36
14Y1142	LB	5740 (31)	16.5	5.0	95	1	34
CT202	LB	5310 (32)	15.4	5.0	93	1	33
11Y106	LJ	5250 (33)	15.9	5.0	92	1	35
14Y1172	LB	5180 (34)	15.5	5.0	98	85	36
15Y85	LB	5150 (35)	15.6	5.0	98	1	36
15Y1195	B	5020 (36)	15.4	5.0	97	1	32
MEAN		7650	16.1	5.0	91	21	35
CV		4.9	2.7	0.7	1.1	58	5.1
LSD (.05)		760	0.9	0.1	2.0	24	3.7

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=long Basmati; J=Jasmine;

MB = medium blast resistant; LA = low amylose; SR = Stem Rot resistant; WX = waxy.

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

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

Numbers in parentheses indicate relative rank in column.

Table 14. Grain Yield (lb/acre @14% moisture) Summary of Early Rice Varieties by Location and Year (2012-2016)

Location	Year	Calhikari					Calmati		
		201	S102	M202	M105	M205	M206	202	L206
Biggs (RES)	2012	8680	9500	9770	10250	10530	9980	7990	10510
	2013	8490	8640	7640	7820	9230	8160	5700	8420
	2014	6220	7320	7010	8570	9140	9240	6310	8640
	2015	8580	10050	8570	8610	8720	9620	6790	9360
	2016	7310	9020		10380	10690	10780	7150	11060
Location Mean		7856	8906	8248	9126	9662	9556	6788	9598
Butte	2012	8080	8220	8650	9490	9600	9240	7910	9380
	2013	7840	8650	7870	9640	8960	9020	6450	9390
	2014	8310	8570	8360	9070	9140	9610	7210	9730
	2015	7180	8810	7550	9350	7780	9370	6370	9810
	2016	8080	9480		10060	9640	10400	7850	10050
Location Mean		7898	8746	8108	9522	9024	9528	7158	9672
Colusa	2012	7430	7460	8630	8620	9130	9680	5340	9400
	2013	7840	7220	9140	9750	8930	9660	5970	10250
	2014	7740	8080	8720	9100	9370	9280	6150	9380
	2015	8940	9200	9820	10500	10050	9850	6660	9940
	2016	8590	9050		10390	9730	9960	7850	8670
Location Mean		8108	8202	9078	9672	9442	9686	6394	9528
Yuba	2012	6080	7970	9220	8510	8840	9240	5570	9100
	2013	8040	9280	8950	9330	9650	9750	5750	9590
	2014	7290	7420	8010	8590	9120	8950	5460	9260
	2015	8490	8740	9860	9970	9650	9940	6950	9840
	2016	7310	8300		9110	8430	9090	5310	8670
Location Mean		7442	8342	9010	9102	9138	9394	5808	9292
Loc/Years Mean		7826	8549	8611	9356	9317	9541	6537	9523
Yield % M202		90.9	99.3	100	108.7	108.2	110.8	75.9	110.6
Number of Tests		20	20	16	20	20	20	20	20

Table 15. 2016 Three Location Intermediate/Late Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Ave Grain Yield at 14% Moisture				Single Location Yields			Ave Grain		
		lbs/acre	Biggs	Butte	Glenn	Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Plant Lodging (1-99)	Plant Height (in)	
L207	L	10290 (1)	10440 (4)	9440 (4)	10990 (1)	17.5	4.9	86	3	41	
16Y127	L	9880 (2)	11150 (1)	9340 (5)	9140 (4)	19.1	4.9	90	7	39	
12Y2175	MPQ	9800 (3)	10730 (2)	9650 (1)	9030 (5)	20.3	5.0	89	5	40	
L206	L	9770 (4)	10490 (3)	9530 (3)	9290 (3)	17.6	4.9	83	14	35	
M209	M	9140 (5)	9900 (5)	9010 (7)	8520 (7)	21.0	4.8	88	1	39	
M206	M	9110 (6)	9860 (6)	9600 (2)	7860 (9)	21.1	5.0	84	17	39	
M205	M	9020 (7)	9460 (9)	9110 (6)	8490 (8)	20.6	4.9	90	2	38	
14Y3092	M	8900 (8)	9530 (8)	8450 (8)	8740 (6)	20.7	4.9	91	1	40	
M402	MPQ	8710 (9)	9370 (10)	6900 (11)	9850 (2)	23.6	4.9	105	3	40	
15Y2138	MPQ	8570 (10)	9760 (7)	8230 (9)	7730 (11)	20.0	4.8	89	2	40	
M401	MPQ	7950 (11)	9160 (11)	6920 (10)	7780 (10)	28.9	4.9	109	28	43	
MEAN		9190	9990	8740	8860	20.9	4.9	91	8	39	
CV		6.6	4.3	4.5	10.0	5.4	2.9	0.9	146	3.6	
LSD (.05)		1190	620	570	1280	3.3	0.1	2.2	25	1.6	

Preliminary Lines and Varieties

14Y1006	L	10320 (1)	11320 (1)	9500 (6)	10140 (1)	17.5	4.9	87	1	38
CM203	SWX	9820 (2)	9660 (8)	10590 (1)	9190 (3)	19.7	4.6	85	19	40
14Y2147	MPQ	9610 (3)	10240 (2)	9330 (9)	9270 (2)	19.5	4.9	91	1	37
15Y84	LJ	9420 (4)	10130 (3)	9850 (4)	8300 (9)	17.1	5.0	91	25	37
12Y3097	MB	9250 (5)	9800 (6)	9890 (3)	8060 (12)	20.5	4.9	85	12	38
15P3104	MB	9170 (6)	9760 (7)	9410 (7)	8330 (8)	19.9	4.8	90	2	39
15Y3179	M	9130 (7)	9840 (5)	8600 (16)	8970 (4)	21.1	5.0	92	1	39
15Y2004	MPQ	9110 (8)	9290 (14)	9390 (8)	8640 (5)	20.8	4.9	93	13	39
M206comp	M	9010 (9)	9460 (13)	9580 (5)	7990 (14)	20.1	4.9	84	18	39
14Y3145	MSR	9000 (10)	9520 (10)	9090 (10)	8400 (7)	22.6	4.9	93	5	39
M105	M	8970 (11)	9490 (11)	10090 (2)	7340 (18)	19.2	4.9	82	14	39
A202	LA	8820 (12)	9850 (4)	8570 (17)	8050 (13)	19.7	5.0	89	24	38
15Y2153	MPQ	8760 (13)	9530 (9)	8670 (15)	8080 (10)	21.0	4.7	92	2	39
15Y136	LJ	8740 (14)	9480 (12)	8960 (13)	7770 (16)	18.0	4.9	88	25	41
14G9	M	8520 (15)	8880 (17)	8830 (14)	7850 (15)	19.8	4.3	87	4	39
15Y1178	LJ	8410 (16)	8630 (19)	8540 (18)	8070 (11)	18.5	4.9	95	1	39
CH202	SPQ	8310 (17)	9110 (16)	8980 (12)	6850 (21)	19.3	4.6	85	76	35
M208	MB	8290 (18)	8710 (18)	9080 (11)	7080 (20)	19.9	5.0	85	29	40
14G6	M	8020 (19)	8530 (20)	7820 (19)	7690 (17)	19.2	4.8	86	7	40
15Y1051	LJ	7860 (20)	7420 (23)	7610 (20)	8550 (6)	17.5	4.9	88	2	43
15Y89	LJ	7390 (21)	7860 (21)	7050 (21)	7270 (19)	18.6	4.9	88	25	41
14Y156	LB	6740 (22)	9200 (15)	5950 (22)	5080 (24)	19.9	4.9	89	32	43
14Y149	LB	5380 (23)	7010 (24)	4030 (24)	5090 (23)	21.1	4.9	91	24	44
15Y1186	LB	4920 (24)	7650 (22)	3060 (26)	4040 (26)	22.1	4.9	96	3	44
KOSH	SPQ	4900 (25)	4870 (25)	3740 (25)	6100 (22)	22.4	4.8	100	97	46
15Y1189	LB	4620 (26)	4240 (26)	5210 (23)	4410 (25)	19.4	4.9	96	27	40
MEAN		8170	8830	8130	7560	19.8	4.9	90	19	40
CV		5.8	5.5	4.3	7.4	6.6	2.7	2.0	72	4.4
LSD (.05)		1400	1010	720	1160	4.2	0.4	3.8	30	2.5

S=short; M=medium; L=long; PQ=premium quality; WX=waxy; A= aromatic; LB=long Basmati;

J=Jasmine; MB=medium blast resistant; SR stem rot resistant.

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 16. 2016 Biggs Intermediate-Late Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield	Grain		Seedling Days to		Plant Height (in)
		at 14% Moisture lbs/acre	Moisture at Harvest (%)	Vigor (1-5)	50% Heading	Lodging (1-99)	
16Y127	L	11150 (1)	15.4	4.9	84	1	40
12Y2175	MPQ	10730 (2)	16.5	4.9	82	1	40
L206	L	10490 (3)	14.6	4.7	78	1	35
L207	L	10440 (4)	13.9	4.8	81	1	39
M-209	M	9900 (5)	17.0	4.9	81	1	38
M-206	M	9860 (6)	16.5	4.9	78	11	38
15Y2138	MPQ	9760 (7)	16.4	4.8	84	1	39
14Y3092	M	9530 (8)	16.8	4.9	86	1	38
M-205	M	9460 (9)	17.6	4.9	84	1	37
M-402	MPQ	9370 (10)	18.9	4.8	100	1	40
M-401	MPQ	9160 (11)	22.2	4.8	104	1	43
MEAN		9990	16.9	4.8	85	2	39
CV		4.3	3.9	1.2	0.9	221	3.7
LSD (.05)		620	1.0	0.1	1.1	6	2.1

Preliminary Lines and Varieties

14Y1006	L	11320 (1)	14.6	4.8	79	1	38
14Y2147	MPQ	10240 (2)	16.5	4.7	86	1	38
15Y84	LJ	10130 (3)	14.0	4.9	86	1	37
A202	LA	9850 (4)	16.3	4.9	84	1	38
15Y3179	M	9840 (5)	17.2	5.0	87	1	38
12Y3097	MB	9800 (6)	17.2	4.8	79	11	37
15P3104	MB	9760 (7)	16.0	4.8	81	1	38
CM-203	SWX	9660 (8)	13.9	4.8	76	6	38
15Y2153	MPQ	9530 (9)	17.2	4.8	87	1	39
14Y3145	MSR	9520 (10)	18.0	4.9	89	1	38
M-105	M	9490 (11)	16.0	4.8	77	1	40
15Y136	LJ	9480 (12)	15.7	4.8	82	1	39
M206comp	M	9460 (13)	16.3	4.9	78	36	38
15Y2004	MPQ	9290 (14)	16.7	5.0	88	1	39
14Y156	LB	9200 (15)	14.3	4.8	85	1	39
CH-202	SPQ	9110 (16)	12.8	4.8	78	58	34
14G9	M	8880 (17)	15.9	4.8	80	1	37
M-208	MB	8710 (18)	15.3	5.0	80	8	41
15Y1178	LJ	8630 (19)	16.0	4.8	93	1	36
14G6	M	8530 (20)	15.7	4.9	79	1	40
15Y89	LJ	7860 (21)	13.6	4.8	83	1	41
15Y1186	LB	7650 (22)	16.6	4.7	91	1	41
15Y1051	LJ	7420 (23)	15.9	4.8	84	1	43
14Y149	LB	7010 (24)	15.2	4.7	85	1	40
KOSH	SPQ	4870 (25)	17.0	4.8	98	95	46
15Y1189	LB	4240 (26)	13.9	4.8	94	1	39
MEAN		8830	15.7	4.8	84	9	39
CV		5.5	4.1	1.3	1.5	155	4.8
LSD (.05)		1010	1.3	0.1	2.6	29	3.8

S=short; M=medium; L=long; PQ=premium quality; WX=waxy; A=aromatic; LB=long Basmati;

J=Jasmine; MB=medium blast resistant; SR stem rot resistant.

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

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

Numbers in parentheses indicate relative rank in column.

Table 17. 2016 Glenn Intermediate-Late Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield	Grain		Seedling Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		at 14% Moisture lbs/acre	Moisture at Harvest (%)	Vigor (1-5)			
L207	L	10990 (1)	20.3	5.0	90	7	44
M402	MPQ	9850 (2)	24.3	4.9	107	7	42
L206	L	9290 (3)	20.3	5.0	85	40	36
16Y127	L	9140 (4)	21.5	4.9	94	20	40
12Y2175	MPQ	9030 (5)	21.4	5.0	94	15	40
14Y3092	M	8740 (6)	22.6	4.8	96	1	43
M209	M	8520 (7)	23.0	4.7	94	2	41
M205	M	8490 (8)	22.1	4.8	95	6	41
M206	M	7860 (9)	22.6	5.0	90	40	40
M401	MPQ	7780 (10)	27.1	4.8	112	84	45
15Y2138	MPQ	7730 (11)	22.3	4.7	93	6	43
MEAN		8860	22.5	4.9	95	21	41
CV		10.0	5.4	4.9	1.0	90	3.5
LSD (.05)		1280	1.8	0.3	1.3	27	2.1

Preliminary Lines and Varieties

14Y1006	L	10140 (1)	18.9	5.0	88	1	40
14Y2147	MPQ	9270 (2)	19.7	4.9	95	3	38
CM203	SWX	9190 (3)	21.9	4.0	91	47	44
15Y3179	M	8970 (4)	21.1	5.0	96	1	41
15Y2004	MPQ	8640 (5)	22.4	4.7	96	38	41
15Y1051	LJ	8550 (6)	20.1	5.0	90	5	44
14Y3145	MSR	8400 (7)	21.7	4.9	95	13	39
15P3104	MB	8330 (8)	20.4	4.7	102	5	41
15Y84	LJ	8300 (9)	21.0	5.0	94	60	40
15Y2153	MPQ	8080 (10)	21.2	4.4	95	3	40
15Y1178	LJ	8070 (11)	21.2	5.0	99	3	41
12Y3097	MB	8060 (12)	20.6	4.8	90	8	38
A202	LA	8050 (13)	24.5	5.0	91	70	40
M206comp	M	7990 (14)	21.2	4.7	90	13	39
14G9	M	7850 (15)	20.9	3.2	92	10	43
15Y136	LJ	7770 (16)	21.3	5.0	92	72	43
14G6	M	7690 (17)	23.1	4.6	92	20	44
M105	M	7340 (18)	21.3	4.9	87	38	40
15Y89	LJ	7270 (19)	25.9	5.0	92	75	42
M208	MB	7080 (20)	24.1	5.0	90	58	41
CH202	SPQ	6850 (21)	25.0	4.0	91	95	38
KOSH	SPQ	6100 (22)	26.0	4.7	102	97	46
14Y149	LB	5090 (23)	25.4	5.0	94	70	47
14Y156	LB	5080 (24)	28.9	5.0	92	95	44
15Y1189	LB	4410 (25)	26.6	5.0	96	78	42
15Y1186	LB	4040 (26)	22.9	5.0	101	8	48
MEAN		7560	22.6	4.7	93	38	42
CV		7.4	8.8	4.6	1.8	46	4.5
LSD (.05)		1160	4.1	0.5	3.5	36	3.9

S=short; M=medium; L=long; PQ=premium quality; WX=waxy; A=aromatic; LB=long Basmati;

J=Jasmine; MB=medium blast resistant; SR stem rot resistant.

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

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

Numbers in parentheses indicate relative rank in column.

Table 18. 2016 Butte Intermediate-Late Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield	Grain	Seedling	Days to	Lodging	Plant Height
		at 14% Moisture lbs/acre	Moisture at Harvest (%)	Vigor (1-5)	50% Heading		
12Y2175	MPQ	9650 (1)	22.9	5.0	91	1	39
M206	M	9600 (2)	24.3	5.0	85	2	38
L206	L	9530 (3)	18.0	5.0	87	1	35
L207	L	9440 (4)	18.3	5.0	88	1	39
16Y127	L	9340 (5)	20.5	5.0	91	1	37
M205	M	9110 (6)	22.0	5.0	91	1	36
M209	M	9010 (7)	23.1	5.0	89	1	39
14Y3092	M	8450 (8)	22.9	5.0	92	1	39
15Y2138	MPQ	8230 (9)	21.4	5.0	90	1	38
M401	MPQ	6920 (10)	37.3	5.0	110	1	42
M402	MPQ	6900 (11)	27.5	5.0	107	1	38
MEAN		8740	23.5	5.0	93	1	38
CV		4.5	5.9	0.0	0.8	55	3.6
LSD (.05)		570	2.0	0.0	1.1	1	2.0

Preliminary Lines and Varieties

CM203	SWX	10590 (1)	23.4	5.0	88	6	37
M105	M	10090 (2)	20.2	5.0	84	3	38
12Y3097	MB	9890 (3)	23.6	5.0	86	18	38
15Y84	LJ	9850 (4)	16.3	5.0	94	16	35
M206comp	M	9580 (5)	23.0	5.0	86	5	39
14Y1006	L	9500 (6)	19.2	5.0	94	1	38
15P3104	MB	9410 (7)	23.4	5.0	89	1	38
15Y2004	MPQ	9390 (8)	23.5	5.0	94	1	37
14Y2147	MPQ	9330 (9)	22.4	5.0	92	1	35
14Y3145	MSR	9090 (10)	28.0	5.0	97	1	39
M208	MB	9080 (11)	20.5	5.0	87	23	40
CH202	SPQ	8980 (12)	20.3	5.0	86	75	35
15Y136	LJ	8960 (13)	17.0	5.0	91	3	41
14G9	M	8830 (14)	22.7	5.0	88	1	38
15Y2153	MPQ	8670 (15)	24.6	5.0	94	3	39
15Y3179	M	8600 (16)	25.0	5.0	95	1	37
A202	LA	8570 (17)	18.5	5.0	92	1	37
15Y1178	LJ	8540 (18)	18.4	5.0	94	1	40
14G6	M	7820 (19)	18.9	5.0	87	1	36
15Y1051	LJ	7610 (20)	16.7	5.0	92	1	42
15Y89	LJ	7050 (21)	16.2	5.0	91	1	39
14Y156	LB	5950 (22)	16.5	5.0	90	1	44
15Y1189	LB	5210 (23)	17.8	5.0	98	3	38
14Y149	LB	4030 (24)	22.8	5.0	94	1	45
KOSH	SPQ	3740 (25)	24.3	5.0	101	99	45
15Y1186	LB	3060 (26)	26.8	5.0	97	1	43
MEAN		8130	21.1	5.0	91	10	39
CV		4.3	4.1	0.0	2.5	62	3.8
LSD (.05)		720	1.8	0.0	4.7	13	3.1

S=short; M=medium; L=long; PQ=premium quality; WX=waxy; A= aromatic; LB=long Basmati;

J=Jasmine; MB=medium blast resistant; SR stem rot resistant.

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

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

Numbers in parentheses indicate relative rank in column.

Table 19. Grain Yield (lb/acre @14% moisture) Summary of Intermediate/
Late Rice Varieties by Location and Year (2012-2016)

Location	Year	M205	M402	M202	L206
Biggs (RES)	2012	11210	10260	11090	11180
	2013	9730	9830	8700	9460
	2014	10550	10040	8870	10340
	2015	9880	8450	8150	9520
	2016	9460	9370	.	10490
Location Mean		10166	9590	9203	10198
Glenn	2012	8220	8260	7660	7680
	2013	8400	8970	8270	8870
	2014	8910	8910	8510	8870
	2015	9420	8710	8560	9910
	2016	8490	9850	.	9290
Location Mean		8688	8940	8250	8924
Sutter	2012	9630	9040	9690	9890
	2013	8540	6900	7890	8720
	2014	8680	7020	9030	9660
	2015	.	.	.	.
Butte	2016	9110	6900	.	9530
Location Mean		8990	7465	8870	9450
Loc/Years Mean		9281	8665	8774	9524
Yield % M202		105.8	98.8	100	109.9
Number of Tests		14	14	11	14