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COMPREHENSIVE RESEARCH ON RICE**
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PROJECT TITLE: Cooperative Extension Rice Variety Adaptation and Cultural Practice Research

PROJECT LEADER:

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OBJECTIVES AND EXPERIMENTS CONDUCTED BY LOCATION TO ACCOMPLISH OBJECTIVES:

Objective I

To evaluate and compare newly developed cultivars to existing varieties in on-farm in cooperation with the Rice Experiment Station for the purpose of new variety development and release. In 2012, trials were conducted by maturity group at different locations in the Sacramento Valley and the Sacramento-San Joaquin Delta. Several experimental cultivars were evaluated at each location within these groups to compare their performance in different environments of the rice-growing region.

Very Early Maturity Group: Three uniform trials for each of the advanced and experimental lines were conducted at each of the following on-farm sites: the Lauppe Ranch (south Sutter County), the Erdman Ranch (District 108, Yolo County), and at the Del Rio Partners Ranch (San Joaquin Delta, San Joaquin County). In addition to the three on-farm sites, two additional tests were conducted at the Rice Experiment Station (RES) in Butte County. The Advanced test at each site included 17 entries (nine commercial varieties and eight advanced breeding lines) in four replications. The Preliminary tests included 34 entries consisting of 32 preliminary breeding lines and two commercial varieties as checks, in two replications.

Early Maturity Group: Three uniform tests were conducted at each of the following on-farm sites: the Larrabee Ranch (Glenn County), the Dennis Ranch (Colusa County), and the Marler Farms Ranch (District 10, Yuba County). Two additional trials, Advanced and Preliminary, were conducted at the RES. The Advanced test at each site included 17 entries (eight commercial varieties and nine advanced breeding lines) in four replications. The Preliminary tests included 38 entries consisting of six commercial varieties and 32 preliminary breeding lines in two replications.

Intermediate and Late Maturity Group: Two uniform tests were conducted at each of the following on-farm sites: the Wiley Ranch (Glenn County) and the Tucker Ranch (Sutter Basin, Sutter County). Two additional tests were conducted at the RES. The Advanced test at each site included 8 entries (six commercial varieties and two advanced breeding lines) in four replications. The Preliminary tests consisted of four commercial varieties and 28 preliminary breeding lines in two replications.

Objective II

Cultural Practices: Rice variety tests were conducted on Twitchell Island in the western Delta as part of a larger project to evaluate rice under flooded culture as a method of preventing organic soil subsidence. Four commercial varieties with the best potential to tolerate cold temperatures (Calmochi-101, S-102, M-104, and M-206) were compared in one acre plots replicated three times. A small plot test similar to the statewide variety trials was conducted with the eight commercial varieties and eight advanced cold tolerant lines. The purpose of the small plot test was to provide the RES breeders with additional information under very cold conditions.

Objective III

Extension-Based Equipment and Service: A centrally-based equipment pool is maintained by Project RM-2 to provide services for planting, fertilizing, treatment application, and harvesting of rice and to provide professional technical assistance to UC research project leaders engaged in rice research.

To provide professional technical assistance to other UC research project leaders, we assisted in approximately 29 trials including the 18 variety tests. Equipment from the UCCE-based pool for planting and harvesting field experiments was used at 13 sites at different times during the season. The most heavily used equipment were the combines followed by a Kincaid seed drill planter. The rice combines were maintained according to the established maintenance schedules.

The ALMACO combine was used to harvest all of the statewide trials except Colusa. Wet field conditions caused the ALMACO to bottom out. The SWECO, with tracks, was used to complete the Colusa harvest.

Objective IV

Extension Education: We disseminated research-based information to California rice producers, dryer operators, millers and the general public through four winter grower meetings, field demonstrations, personal communication and through the distribution of two fact sheets (2012 Characteristics of Publicly Developed Varieties and M-105 Rice: Description and Management Guidelines), a reprint of the Rice Production Workshop Manual and other printed material. We hosted the Rice Breeders Tour. Progress was made updating the UCCE rice website.

SUMMARY OF 2012 RESEARCH BY OBJECTIVE

Objective I - Rice Variety Evaluation

Eight uniform advanced breeding line trials and eight preliminary breeding line trials were conducted throughout the major rice producing areas of California. The rice breeders at the RES conducted six additional tests, two from each of the three maturity groups. Many of the experimental lines have been tested and screened in previous years and many lines were in advanced stages of testing (2 or more years). The RES provided the seed for public varieties and experimental cultivars. No proprietary lines were tested.

The following analyses provide single-location yield summaries for the advanced line tests and over-location agronomic performance summaries for each entry in each maturity category. For quick reference, grain yields of selected commercially available varieties tested in very early, early and intermediate-late tests across years and locations are summarized in Tables 6, 12 and 17. An Agronomy Progress Report, to be published later this year, will provide agronomic performance results for all entries in each experiment.

Very Early Maturity Tests (< 90 days to 50% heading at Biggs): Nine commercial varieties and eight advanced breeding lines were compared in four very early advanced tests. The preliminary tests included two commercial varieties and 32 preliminary lines evaluated in separate tests at each location. Commercial varieties at each location included S-102, CH-201, CH-202, CM-101, M-104, M-202, M-205, M-206 and L-206.

Grain yields in the advanced tests averaged 9,960 lbs/ac at Biggs-RES, 9,120 lbs/ac at Sutter, 9,370 lbs/ac at Yolo and 8,000 lbs/ac at San Joaquin (Tables 1,2&3). The three highest yielding entries, on average, were advanced short grain line 09Y2141, M-206, and advanced short grain line 09Y2036 (10,020, 9,660, and 9,610 lbs/ac respectively). Other top yielding commercial varieties M-104, CH-202, L-206, and M-202 ranked seventh, tenth, eleventh, and thirteenth, respectively. Averaged across four locations, cultivar yields in the preliminary tests ranged from 6,050 to 10,930 lbs/ac (Table 1). Averages for grain moisture at harvest, seedling vigor, number of days to 50% heading, lodging, and plant height for varieties in 2012 were essentially the same as in 2011. Spring rains delayed field preparation and delayed early plantings resulting in the majority of the crop being planted in the mid to late planting window. The delayed planting combined with mild summer temperatures led to slow grain dry down and an extended harvest season.

Comparing the commercial standard entries over a 5-year period and across locations, M-206, M-104 and L-206 were the three highest yielding varieties (Table 6).

Early Maturity Tests (90-97 days to 50% heading at Biggs): Eight commercial varieties and nine advanced lines were compared in four early advanced tests. The preliminary tests included six commercial varieties and 32 preliminary lines evaluated in separate tests at each location. Commercial varieties at each location were CA-201, CH-201, CH-202, CM-101, S-102, M-105, M-202, M-205, M-206, M-208, A-201, A-301, CT-202 and L-206.

Yields in the advanced line tests averaged 10,100 lbs/ac at the RES; 9,220 lbs/ac at Butte, 8,810 lbs/ac at Colusa and 8,550 lbs/ac at Yuba (Table 7). Advanced long grain 11Y1008 was the highest yielding entry (10,180 lbs/ac) when averaged over four locations in 2012 (Table 7). Advanced experimental long grain 09Y1122, long grain 06Y575, and medium grain 08Y3269 yielded second, third, and fourth respectively. The yield of commercial varieties L-206, M-206, M-205, M-202, and S-102 ranked seventh, eighth, ninth, eleventh, and fifteenth over all locations (Table 7). Average days to 50% heading ranged from 85 days at Biggs to 90 days at the Yuba County site. The commercial standard M-206 headed at 84 days at Biggs and 87 days at Yuba. The average yield of M-105 increased more than 3% compared to 2011 however, fourteen experimental lines averaged higher yields than M-105 in the Preliminary tests.

L-206 was the highest yielding commercial variety (9,751 lbs/ac) followed by M-205 (9,698 lbs/ac) and M-206 (9,582 lbs/ac) when averaged over the last 5 years and across locations (Table 12).

Intermediate-Late Maturity Tests (> 97 days to 50% heading at Biggs) - Six commercial varieties and two advanced lines were compared in three intermediate-late tests. The preliminary tests included four commercial varieties and 28 preliminary lines that were evaluated in separate tests at each location. Commercial varieties at each location included CH-201, CH-202, Koshihikari, M-202, M-205, M-401, M-402, L-206, A-201, and CT-202.

Average yields in the advanced tests were 10,390 lbs/ac at the RES, 8,090 lbs/ac at Glenn and 9,350 lbs/ac at Sutter (Table 13). The 2012 advanced over location average yield was 190 lbs/ac less than the 2011 average. The average yields at the Glenn and Sutter decreased 1,160 and 50 lbs/ac respectively, while increasing 630 lbs/ac at Biggs compared to the 2011 season. M-205 was the highest yielding commercial variety (9,690 lbs/ac), ranking second overall. L-206 and M-202 were the next highest yielding commercial varieties across locations, ranking third and fourth respectively (Table 13). The long grain Newrex entry 06Y575 was the highest yielding advanced entry across all locations at 9,950 lbs/ac.

Average days to 50% heading decreased ten days compared to 2011. M-401 was the latest variety (103 days) to reach 50% heading among the commercial varieties at all locations.

Averaged over the last 5 years and across locations, M-205 is the highest yielding (9,535 lbs/ac) commercial variety closely followed by L-206 at 9,460 lbs/ac. M-205 and L-206 produced 105% and 104% of the yield of M-202 on average over the last 5 years and across all locations (Table 17).

Objective II - Cultural Practices

Table 18 shows the results of the large plot variety test at Twitchell Island. The average yield for the test (7550 lbs/ac) decreased 15% compared to 2011. The leading variety was S-102 followed by M-104, Calmochi-101, and M-206. Calmochi-101 is well-known as the most cold tolerant of commercial California varieties and has become the standard by which to measure this trait against other varieties and advanced lines. Calmochi-101 yielded the third lowest this year but was not significantly lower in yield than the highest yielding entry S-102. Days to 50% heading ranged from 100 days for S-102 to 110 days for M-206.

The Twitchell Island commercial variety yields in the small plot cold tolerance test were similar in ranking to the large plot test with Calmochi-101 ranking below M-104, M-206 and S-102. CH-201 and M-205 were the lowest yielding commercial varieties in the test (Table 19). A nine day planting date delay combined with moderate temperatures resulted in a 23% decrease in average test yield compared to 2011. There were no significant yield differences between the top four commercial varieties. The highest yielding entry was the medium grain M-105. S-102, advanced short grain 09Y2141, and M-104 ranked second, third, and fourth in yield thus indicating the continued potential for short grain types and medium grain Calrose types in cold environments. At Twitchell Island, the average time to 50% heading for these very early varieties was 113 days after planting, 21 days later than the average days to heading for very early maturing varieties in the Sacramento Valley tests. The large delay in maturity demonstrates one of the main challenges of growing rice in this cool environment.

Improved field uniformity could greatly improve the chances of obtaining reliable and statistically significant results for all of the tests. Each year field uniformity and cultural practices are improving as we learn to maximize growing conditions for rice in the coldest growing area of the Sacramento - San Joaquin Valley region.

Objective III - Assistance to Other Projects

Both the UC SWECO and ALMACO plot combines were serviced and maintained during the harvest season. The ALMACO was used to harvest all but the Colusa test. Wet soil conditions would not support the ALMACO (rubber tires) and the SWECO (with tracks) was used to complete harvesting of the test.

The rice equipment pool, including a precision Clampco fertilizer applicator, SWECO 324 plot combine, ALMACO SP40 plot combine, moisture meters, remote temperature stations, and other equipment were used along with personnel who provided technical assistance for numerous field experiments in 2012.

The SWECO 324 plot combine was used to harvest 2 statewide variety tests. The ALMACO was used to harvest 14 variety tests, four county fungicide trials, and two cold temperature variety tests at Twitchell Island. Over 1,200 experimental plots were harvested in 2012. In addition to equipment assistance to other projects, labor from this project was used to plant, collect samples, and monitor growth in several field experiments. Assistance was also provided to four winter rice growers meetings, the RES Rice Field Day and the annual rice breeders' field tour.

Objective IV - Publication and Distribution of Rice Research Information

The following extension education materials were designed, formatted and printed with support from this project:

1. The Annual Agronomy Progress Report No. 312 “California Rice Varieties: Description and Performance Summary of the 2011 Multiyear Statewide Rice Variety Tests In California”.
2. Two Agronomy Fact Sheets were distributed: 2012-1 Characteristics of Public Rice Varieties and 2012-2 M-105 Description and Management Guidelines.
3. The UCCE website is being updated.

Publications and Reports:

1. Lindquist, BA, K. Koffler, JE Hill and C. van Kessel. Rice field drainage affects nitrogen dynamics and management. 2011. Cal. Agric. 63:80-84.
2. Linquist, B.A., M.D. Ruark and J.E. Hill. 2011. Soil order and management practices control soil phosphorus fractions in managed wetland ecosystems. Nutrient Cycling in Agroecosystems 90:51-62.
3. Pittelkow, C.M., A.J. Fischer, M.J. Moechnig, J.E. Hill, K.B. Koffler, R.G. Mutters, C.A. Greer, Y.S. Cho, C. van Kessel, C. and B.A. Linquist. 2012. Agronomic productivity and nitrogen requirements of alternative tillage and crop establishment systems for improved weed control in direct-seeded rice. Field Crops Research 130:128-137.
4. Lundy, M.E., D.F. Spencer, C. van Kessel, J.E. Hill and B.A. Linquist. 2012. Managing phosphorus fertilizer to reduce algal growth, maintain water quality and sustain yields in water-seeded rice. Field Crops Research 131:81-87.
5. Hill, JE, Canevari, WM, Espino, LA, Greer, C.A., Mutters, RG, and Wennig, RL 2011. University of California Cooperative Extension (UCCE) rice variety adaptation and cultural practices research. *In* Annual Report Comprehensive Rice Research 2011. University of California and USDA. (available in e-version only).
6. Linquist, B.A., van Kessel, C., Hill, J.E. and Ruark, M.D. 2010. Soil phosphorus fractions in natural wetlands and conventional and organic rice fields. Proceedings of the 33rd Rice Technical Working Group. p 120. Feb 22-25, 2010. Biloxi, Mississippi
7. Hill, J.E., Espino, L., Greer, C.A. and R.G. Mutters. 2010. California rice production: A case study in environmental stewardship and environmental services. *in* Proceedings of the 3rd International Rice Congress. P 116. Nov. 8-12, 2010. Hanoi, Vietnam.
8. Mutters, RG. 2012. Rice Agronomy. Centennial Field Day Celebration. p 29-30. Rice Experiment Station. PO Box 306, Biggs CA.
9. Hill JE and JF Williams. 2012. Rice variety testing—a partnership UCCE and RES. Centennial Field Day Celebration. p 26-27. Rice Experiment Station. PO Box 306, Biggs CA.
10. Hill JE and AJ Fischer. 2012. Rice weeds—a never ending saga 36-37. Centennial Field Day Celebration. p 26-27. Rice Experiment Station. PO Box 306, Biggs CA.
11. Hill JE and BA Linquist and R Firoved. 2012. Rice production systems—a benefit to society. Centennial Field Day Celebration. p 38-39. Rice Experiment Station. PO Box 306, Biggs CA.

CONCISE GENERAL SUMMARY OF CURRENT YEAR'S RESULTS:

Seventeen on-farm rice variety evaluation trials were conducted throughout the rice growing region of California, with standard varieties compared to preliminary and advanced lines across a range of environments, cultural practices and disease levels. Six similar tests were conducted at the RES in Biggs, CA. Average yields across varieties and locations in the advanced line tests ranged from 9,110 lbs/acre in the very early trials to 9,170 lbs/acre in the early tests. In the intermediate to late tests the advanced lines average yield was 9,280 lbs/acre. Spring rains delayed field preparation and planting by 7 to 10 days.

Several advanced lines in 2012 produced high yields as well as representing important breeding goals aside from yield (disease resistance, grain quality, specialty types, etc.). Testing advanced and preliminary lines under a variety of conditions remains a critical aspect of releasing varieties adapted to changing cultural practices, markets, and pests.

The overall purpose of evaluating rice production in the western San Joaquin Delta is to find a flood tolerant crop to prevent subsidence of the organic soils from oxidation due to cultivation of upland crops. The special variety tests on Twitchell Island were conducted to determine the feasibility of commercial rice production in an extremely cold environment for rice. The results showed that varieties with good cold tolerance such as M-105, S-102, and M-104 will produce reasonable yields. Clearly blanking and delayed plant development due to cold temperatures was a negative factor in achieving high yields.

Project RM-2 was involved in the planting, sampling and harvesting of more than 14 trial sites throughout the rice growing areas. This project also was also involved in several educational activities including the winter rice grower meetings, update of UCCE rice website, rice field days, and promoting work through fact sheets and publications.

Table 1. 2012 Four Location Very Early Advanced Rice Variety Tests

Advanced Lines and Varieties

Variety	Over All Ave			Single Location Yields			Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)					
	Grain Type	Grain Yield at 14% Moisture lbs/acre		Biggs	Sutter	Yolo										
		Grain	Type													
09Y2141	SWX	10020 (1)	11130 (1)	9460 (5)	10590 (1)	8890 (3)	20.9 (4)	4.9 (10)	90 (8)	35 (14)	38 (17)					
M206	M	9660 (2)	10420 (4)	9320 (9)	9900 (4)	8990 (2)	20.6 (6)	5.0 (7)	92 (9)	21 (8)	37 (13)					
09Y2036	S	9610 (3)	10180 (9)	9640 (2)	9970 (3)	8640 (5)	19.1 (9)	4.9 (12)	89 (6)	59 (17)	38 (16)					
10Y3286	M	9600 (4)	10400 (5)	9370 (7)	10030 (2)	8600 (6)	19.0 (10)	4.9 (9)	88 (4)	2 (4)	36 (9)					
11Y1005	L	9480 (5)	10620 (3)	9630 (3)	9430 (10)	8240 (8)	18.0 (12)	4.8 (14)	93 (11)	2 (3)	37 (12)					
08Y3310	M	9390 (6)	10690 (2)	9360 (8)	9880 (5)	7630 (13)	20.8 (5)	5.0 (7)	94 (13)	1 (1)	35 (4)					
M104	M	9330 (7)	10260 (7)	8990 (12)	9610 (9)	8460 (7)	19.6 (7)	5.0 (5)	86 (3)	10 (7)	36 (7)					
08Y2049	SSR	9240 (8)	9430 (14)	9400 (6)	9350 (11)	8800 (4)	19.5 (8)	4.1 (16)	89 (5)	9 (5)	34 (3)					
06Y575	L	9210 (9)	9520 (12)	10030 (1)	8190 (16)	9080 (1)	19.0 (11)	4.0 (17)	99 (16)	10 (6)	38 (15)					
CH202	SWX	9070 (10)	9460 (13)	9050 (11)	9750 (6)	8000 (11)	17.9 (13)	4.9 (13)	89 (7)	57 (16)	34 (2)					
L206	L	9050 (11)	10020 (11)	9570 (4)	9060 (13)	7570 (14)	16.8 (15)	4.6 (15)	92 (10)	1 (1)	32 (1)					
08Y3269	M	9050 (12)	10360 (6)	9190 (10)	9720 (7)	6910 (16)	21.7 (2)	4.9 (11)	96 (15)	23 (10)	37 (11)					
M202	M	8820 (13)	10050 (10)	8810 (14)	8930 (14)	7490 (15)	21.4 (3)	5.0 (2)	95 (14)	24 (11)	38 (14)					
CH201	SPQ	8720 (14)	8790 (16)	8350 (16)	9660 (8)	8070 (10)	17.6 (14)	5.0 (1)	94 (12)	49 (15)	35 (5)					
S102	S	8610 (15)	9370 (15)	8470 (15)	8400 (15)	8180 (9)	15.6 (17)	5.0 (3)	84 (1)	31 (12)	36 (10)					
M205	M	8260 (16)	10220 (8)	8940 (13)	9310 (12)	4570 (17)	22.8 (1)	5.0 (3)	99 (17)	23 (9)	35 (6)					
CM101	SPQ	7830 (17)	8500 (17)	7500 (17)	7450 (17)	7880 (12)	16.5 (16)	5.0 (6)	85 (2)	35 (13)	36 (8)					
MEAN		9110	9960	9120	9370	8000	19.2	4.8	91	23	36					
CV		4.7	6.1	3.2	4.5	4.1	5.5	2.5	1.2	66.4	3.8					
LSD (.05)		300	860	410	600	470	0.7	0.1	1	11	1					

Preliminary Lines and Varieties

10Y2043	S	10270 (1)	10930 (3)	10300 (1)	10960 (1)	8900 (3)	17.8 (30)	4.9 (29)	87 (4)	38 (28)	36 (5)
12Y20	L	9820 (2)	10290 (8)	10040 (3)	10710 (2)	8220 (19)	17.1 (31)	5.0 (1)	92 (25)	3 (3)	38 (27)
10Y3274	M	9780 (3)	10420 (5)	9480 (12)	9760 (11)	9470 (1)	19.0 (15)	4.9 (29)	90 (16)	35 (27)	39 (31)
10Y3452	M	9760 (4)	10420 (4)	9610 (5)	10160 (6)	8870 (4)	20.3 (4)	4.9 (26)	91 (23)	46 (32)	39 (32)
11Y1044	L	9730 (5)	11560 (1)	9750 (4)	9530 (16)	8060 (22)	16.5 (32)	5.0 (16)	94 (31)	10 (5)	36 (12)
10Y3469	M	9660 (6)	10970 (2)	9600 (6)	9880 (9)	8180 (20)	19.9 (7)	5.0 (16)	92 (26)	24 (18)	37 (15)
11Y2040	S	9530 (7)	9750 (20)	10070 (2)	9920 (8)	8390 (10)	18.6 (20)	4.9 (26)	84 (1)	12 (7)	36 (7)
10Y3394	M	9460 (8)	9770 (19)	9460 (13)	10180 (5)	8460 (9)	20.6 (2)	5.0 (16)	91 (22)	26 (19)	37 (16)
10Y3236	M	9460 (9)	10370 (7)	9500 (10)	10250 (4)	7740 (26)	19.2 (13)	5.0 (16)	87 (2)	21 (12)	38 (22)
10Y3558	M	9430 (10)	10080 (10)	9520 (9)	9010 (23)	9100 (2)	18.4 (24)	5.0 (6)	90 (18)	45 (31)	40 (33)
10Y3318	M	9380 (11)	9720 (21)	9450 (14)	10070 (7)	8290 (17)	20.2 (6)	5.0 (6)	91 (21)	29 (24)	39 (29)
M105	M	9360 (12)	9950 (14)	9590 (7)	9560 (15)	8340 (12)	18.6 (21)	5.0 (10)	87 (8)	29 (25)	37 (18)
10Y1008	LSR	9350 (13)	10370 (6)	9290 (18)	10500 (3)	7230 (31)	18.8 (17)	5.0 (1)	94 (32)	3 (2)	39 (28)
10Y3395	M	9330 (14)	10080 (9)	9220 (19)	9680 (13)	8330 (13)	20.5 (3)	5.0 (16)	90 (15)	26 (21)	38 (26)
11Y2022	MPQ	9240 (15)	9410 (27)	9480 (11)	9530 (17)	8540 (7)	19.8 (8)	5.0 (16)	92 (26)	23 (17)	38 (22)
10Y3292	M	9150 (16)	9980 (13)	9410 (15)	8900 (27)	8310 (15)	18.2 (25)	5.0 (10)	88 (9)	22 (16)	37 (19)
10Y3237	M	9140 (17)	9800 (17)	8760 (29)	9320 (18)	8680 (6)	17.8 (29)	4.9 (31)	87 (4)	8 (4)	36 (4)
10Y3332	M	9130 (18)	9920 (15)	9400 (16)	8890 (28)	8310 (14)	20.2 (5)	5.0 (10)	93 (29)	17 (10)	37 (17)
10Y3362	M	9110 (19)	9270 (30)	8710 (30)	9760 (10)	8710 (5)	18.5 (22)	5.0 (16)	87 (2)	11 (6)	37 (14)
10Y3566	M	9110 (20)	9540 (23)	8790 (28)	9750 (12)	8380 (11)	19.6 (9)	4.9 (34)	91 (23)	12 (8)	37 (20)
10Y3326	M	9050 (21)	9340 (29)	9340 (17)	9590 (14)	7940 (23)	17.9 (28)	5.0 (16)	88 (10)	18 (11)	36 (6)
10Y3387	M	9050 (22)	9770 (18)	8970 (24)	9180 (21)	8270 (18)	19.3 (12)	4.9 (26)	90 (18)	26 (21)	37 (21)
10Y3276	M	9040 (23)	10020 (11)	8990 (22)	9290 (19)	7860 (24)	19.1 (14)	5.0 (16)	89 (13)	21 (13)	36 (11)
10Y3437	M	8990 (24)	10000 (12)	9520 (8)	8840 (30)	7600 (27)	18.7 (19)	5.0 (10)	90 (14)	39 (29)	38 (24)
11Y2023	MPQ	8980 (25)	9410 (28)	9170 (20)	8870 (29)	8460 (8)	18.1 (26)	5.0 (1)	93 (28)	69 (34)	40 (34)
10Y3428	M	8870 (26)	9430 (26)	8960 (25)	9000 (25)	8110 (21)	18.5 (23)	5.0 (10)	88 (11)	27 (23)	37 (13)
10Y3241	M	8830 (27)	9120 (31)	8980 (23)	8910 (26)	8300 (16)	18.7 (18)	4.9 (25)	87 (4)	46 (33)	36 (9)
10Y3706	M	8770 (28)	9540 (24)	8990 (21)	9280 (20)	7280 (29)	18.8 (16)	4.9 (33)	94 (30)	21 (14)	36 (8)
10Y3287	M	8750 (29)	9620 (22)	8880 (26)	8660 (32)	7840 (25)	19.6 (10)	5.0 (6)	89 (12)	13 (9)	38 (25)
11Y2032	MPQ	8490 (30)	9810 (16)	8670 (32)	9000 (24)	6490 (33)	21.6 (1)	5.0 (1)	98 (34)	26 (19)	39 (30)
11Y2021	MPQ	8420 (31)	9480 (25)	8800 (27)	8800 (31)	6590 (32)	19.3 (11)	5.0 (6)	97 (33)	21 (14)	35 (3)
11Y2059	SPQ	8400 (32)	8440 (32)	8700 (31)	9150 (22)	7300 (28)	16.5 (33)	5.0 (10)	87 (7)	40 (30)	34 (1)
10Y2179	MBG	7750 (33)	8290 (33)	7460 (33)	8020 (33)	7240 (30)	17.9 (27)	4.9 (31)	90 (16)	2 (1)	36 (10)
CA201	SLA	6760 (34)	6050 (34)	7040 (34)	7840 (34)	6110 (34)	16.4 (34)	5.0 (1)	91 (20)	32 (26)	34 (2)
MEAN		9100	9730	9170	9430	8060	18.8	4.9	90	25	37
CV		5.1	6.7	2.1	5.4	4.5	4.8	1.3	0.8	49.5	3.6
LSD (.05)		460	1330	400	1040	750	0.9	0.1	1	12	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, LA = Low Amalose; BG = bold grain.

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 2. 2012 Biggs-RES Very Early Advanced Rice Variety Trial

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)
09Y2141	SWX	11130 (1)	20.4 (6)	4.8 (16)	82 (8)	11 (11)	37 (10)
08Y3310	M	10690 (2)	21.8 (5)	4.8 (12)	87 (14)	1 (1)	35 (7)
11Y1005	L	10620 (3)	16.9 (16)	4.8 (9)	83 (10)	3 (8)	37 (12)
M206	M	10420 (4)	22.2 (4)	4.8 (12)	84 (11)	1 (1)	38 (14)
10Y3286	M	10400 (5)	19.3 (8)	4.9 (7)	81 (4)	1 (1)	36 (9)
08Y3269	M	10360 (6)	22.5 (3)	4.8 (9)	86 (12)	1 (1)	38 (15)
M104	M	10260 (7)	18.5 (11)	4.9 (6)	78 (2)	16 (12)	35 (5)
M205	M	10220 (8)	23.7 (1)	4.9 (3)	88 (16)	1 (1)	37 (13)
09Y2036	S	10180 (9)	17.3 (15)	4.7 (17)	82 (7)	68 (17)	37 (11)
M202	M	10050 (10)	22.7 (2)	4.9 (2)	89 (17)	8 (10)	41 (17)
L206	L	10020 (11)	17.5 (13)	4.8 (9)	81 (5)	1 (1)	33 (2)
06Y575	L	9520 (12)	18.9 (9)	4.8 (12)	87 (15)	1 (1)	40 (16)
CH202	SPQ	9460 (13)	18.2 (12)	4.8 (12)	83 (9)	60 (16)	33 (1)
08Y2049	SSR	9430 (14)	20.3 (7)	4.9 (7)	81 (5)	3 (8)	34 (3)
S102	S	9370 (15)	15.2 (17)	4.9 (3)	78 (1)	53 (15)	35 (4)
CH201	SPQ	8790 (16)	18.7 (10)	5.0 (1)	86 (12)	50 (14)	35 (5)
CM101	SWX	8500 (17)	17.5 (14)	4.9 (3)	79 (3)	45 (13)	35 (7)
MEAN		9960	19.5	4.8	83	19	36
CV		6.1	9.2	1.2	2	81.1	4.3
LSD (.05)		860	2.6	0.1	2	22	2

Preliminary Lines and Varieties

11Y1044	L	11560 (1)	16.8 (32)	4.8 (29)	85 (28)	1 (1)	38 (25)
10Y3469	M	10970 (2)	20.2 (8)	4.8 (19)	85 (27)	1 (1)	36 (6)
10Y2043	S	10930 (3)	17.1 (29)	4.8 (19)	78 (1)	16 (30)	35 (3)
10Y3452	M	10420 (4)	21.6 (1)	4.9 (10)	83 (22)	30 (32)	40 (32)
10Y3274	M	10420 (5)	19.6 (11)	4.8 (19)	82 (14)	11 (29)	39 (30)
10Y1008	LSR	10370 (6)	18.4 (18)	4.9 (5)	84 (26)	1 (1)	39 (29)
10Y3236	M	10370 (7)	16.5 (33)	4.8 (19)	78 (1)	1 (1)	36 (16)
12Y20	L	10290 (8)	18.1 (22)	4.9 (4)	83 (22)	1 (1)	38 (26)
10Y3395	M	10080 (9)	20.1 (9)	4.8 (19)	82 (16)	1 (1)	38 (27)
10Y3558	M	10080 (10)	20.6 (7)	4.9 (5)	82 (16)	6 (25)	39 (31)
10Y3276	M	10020 (11)	19.6 (11)	4.8 (19)	81 (11)	1 (1)	36 (13)
10Y3437	M	10000 (12)	19.7 (10)	4.9 (10)	83 (18)	6 (25)	37 (18)
10Y3292	M	9980 (13)	17.5 (26)	4.9 (10)	81 (9)	1 (1)	36 (10)
M105	M	9950 (14)	18.0 (23)	4.9 (10)	80 (7)	1 (1)	35 (5)
10Y3332	M	9920 (15)	20.8 (5)	4.9 (10)	86 (32)	1 (1)	37 (21)
11Y2032	MPQ	9810 (16)	21.4 (2)	5.0 (1)	87 (33)	1 (1)	41 (33)
10Y3237	M	9800 (17)	17.1 (30)	4.7 (33)	79 (6)	1 (1)	35 (4)
10Y3387	M	9770 (18)	18.1 (21)	4.9 (10)	81 (11)	1 (1)	36 (16)
10Y3394	M	9770 (19)	20.8 (6)	4.8 (19)	83 (18)	1 (1)	36 (10)
11Y2040	S	9750 (20)	18.3 (20)	4.9 (10)	78 (1)	1 (1)	36 (13)
10Y3318	M	9720 (21)	21.0 (4)	4.9 (5)	83 (18)	6 (25)	39 (28)
10Y3287	M	9620 (22)	18.7 (17)	4.9 (5)	81 (11)	1 (1)	37 (18)
10Y3566	M	9540 (23)	19.4 (13)	4.8 (30)	83 (18)	1 (1)	37 (22)
10Y3706	M	9540 (24)	18.4 (18)	4.8 (30)	85 (29)	1 (1)	37 (22)
11Y2021	MPQ	9480 (25)	21.3 (3)	4.9 (5)	88 (34)	1 (1)	38 (24)
10Y3428	M	9430 (26)	17.8 (24)	4.9 (10)	80 (8)	6 (25)	37 (18)
11Y2022	MPQ	9410 (27)	19.2 (14)	4.8 (19)	84 (25)	1 (1)	36 (8)
11Y2023	MPQ	9410 (28)	19.1 (15)	5.0 (1)	86 (31)	85 (34)	42 (34)
10Y3326	M	9340 (29)	17.1 (28)	4.8 (19)	81 (9)	1 (1)	36 (10)
10Y3362	M	9270 (30)	16.5 (34)	4.8 (19)	78 (1)	1 (1)	36 (13)
10Y3241	M	9120 (31)	18.9 (16)	4.8 (30)	78 (5)	45 (33)	36 (6)
11Y2059	SPQ	8440 (32)	16.9 (31)	4.9 (10)	82 (14)	1 (1)	32 (1)
10Y2179	MBG	8290 (33)	17.7 (25)	4.7 (33)	85 (29)	1 (1)	36 (8)
CA201	SLA	6050 (34)	17.3 (27)	5.0 (1)	83 (22)	25 (31)	34 (2)
MEAN		9730	18.8	4.8	82	8	37
CV		6.7	7.9	1.2	0.9	119.5	4.6
LSD (.05)		1330	3	0.1	2	18	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, LA = Low Amalose; BG = bold grain.

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 3. 2012 Sutter Very Early Advanced Rice Variety Trial

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)
06Y575	L	10030 (1)	16.4 (14)	5.0 (1)	89 (16)	38 (14)	36 (16)
09Y2036	S	9640 (2)	20.0 (5)	4.9 (13)	82 (5)	69 (16)	35 (13)
11Y1005	L	9630 (3)	17.4 (12)	4.9 (13)	84 (8)	1 (1)	36 (17)
L206	L	9570 (4)	15.1 (17)	4.9 (13)	83 (6)	1 (1)	32 (1)
09Y2141	S	9460 (5)	21.2 (1)	5.0 (1)	85 (10)	34 (13)	36 (15)
08Y2049	S	9400 (6)	18.7 (10)	5.0 (1)	79 (3)	30 (12)	35 (10)
10Y3286	M	9370 (7)	19.4 (8)	4.9 (13)	84 (8)	1 (1)	34 (9)
08Y3310	M	9360 (8)	19.1 (9)	5.0 (1)	86 (12)	1 (1)	33 (3)
M206	M	9320 (9)	19.8 (7)	5.0 (1)	86 (11)	14 (9)	35 (13)
08Y3269	M	9190 (10)	20.1 (4)	4.9 (17)	88 (14)	3 (8)	34 (8)
CH202	S	9050 (11)	17.9 (11)	5.0 (1)	84 (7)	70 (17)	34 (5)
M104	M	8990 (12)	20.4 (3)	5.0 (1)	82 (4)	2 (7)	35 (10)
M205	M	8940 (13)	19.9 (6)	5.0 (1)	90 (17)	1 (1)	34 (4)
M202	M	8810 (14)	21.1 (2)	5.0 (1)	87 (13)	1 (1)	34 (7)
S102	S	8470 (15)	15.1 (16)	5.0 (1)	78 (1)	15 (10)	35 (12)
CH201	S	8350 (16)	17.2 (13)	5.0 (1)	89 (15)	46 (15)	32 (2)
CM101	S	7500 (17)	15.7 (15)	5.0 (1)	78 (2)	19 (11)	34 (6)
MEAN		9120	18.5	5.0	84	20	34
CV		3.2	4.3	1.5	0.8	102.7	4.6
LSD (.05)		410	1.1		1	30	2

Preliminary Lines and Varieties

10Y2043	S	10300 (1)	18.2 (23)	4.9 (29)	80 (3)	35 (28)	34 (6)
11Y2040	S	10070 (2)	17.9 (24)	5.0 (1)	75 (1)	6 (21)	34 (11)
12Y20	L	10040 (3)	15.4 (33)	5.0 (1)	86 (22)	1 (1)	36 (27)
11Y1044	L	9750 (4)	15.4 (32)	5.0 (1)	86 (23)	1 (1)	35 (21)
10Y3452	M	9610 (5)	18.4 (21)	5.0 (1)	86 (23)	53 (31)	35 (23)
10Y3469	M	9600 (6)	18.5 (19)	5.0 (1)	86 (23)	10 (23)	35 (18)
M105	M	9590 (7)	18.8 (14)	5.0 (1)	82 (5)	21 (26)	36 (31)
10Y3437	M	9520 (8)	17.6 (28)	5.0 (1)	84 (16)	50 (29)	35 (19)
10Y3558	M	9520 (9)	17.7 (27)	5.0 (1)	85 (19)	75 (33)	37 (33)
10Y3236	M	9500 (10)	20.9 (3)	5.0 (1)	81 (4)	1 (1)	36 (32)
11Y2022	MPQ	9480 (11)	19.9 (6)	5.0 (1)	86 (23)	1 (1)	35 (21)
10Y3274	M	9480 (12)	19.9 (6)	4.9 (29)	84 (14)	30 (27)	38 (34)
10Y3394	M	9460 (13)	20.5 (4)	5.0 (1)	84 (16)	16 (25)	35 (15)
10Y3318	M	9450 (14)	18.9 (13)	5.0 (1)	83 (12)	11 (24)	36 (27)
10Y3292	M	9410 (15)	18.6 (17)	5.0 (1)	83 (7)	1 (1)	35 (23)
10Y3332	M	9400 (16)	19.6 (9)	5.0 (1)	86 (23)	1 (1)	34 (8)
10Y3326	M	9340 (17)	18.4 (20)	5.0 (1)	83 (7)	6 (21)	34 (6)
10Y1008	LSR	9290 (18)	18.7 (16)	5.0 (1)	86 (23)	1 (1)	36 (27)
10Y3395	M	9220 (19)	21.3 (1)	5.0 (1)	84 (16)	3 (18)	35 (19)
11Y2023	MPQ	9170 (20)	17.2 (29)	5.0 (1)	86 (23)	93 (34)	36 (27)
10Y3706	M	8990 (21)	17.8 (26)	4.8 (34)	86 (23)	1 (1)	33 (4)
10Y3276	M	8990 (22)	19.2 (11)	5.0 (1)	83 (7)	1 (1)	33 (5)
10Y3241	M	8980 (23)	18.6 (17)	5.0 (1)	79 (2)	50 (29)	34 (8)
10Y3387	M	8970 (24)	19.2 (11)	4.9 (29)	85 (19)	3 (18)	35 (15)
10Y3428	M	8960 (25)	18.8 (14)	5.0 (1)	83 (12)	1 (1)	34 (11)
10Y3287	M	8880 (26)	21.1 (2)	5.0 (1)	84 (14)	1 (1)	35 (23)
11Y2021	MPQ	8800 (27)	17.0 (30)	5.0 (1)	87 (33)	1 (1)	32 (2)
10Y3566	M	8790 (28)	20.0 (5)	4.9 (29)	86 (23)	1 (1)	34 (14)
10Y3237	M	8760 (29)	17.9 (25)	4.9 (29)	83 (7)	1 (1)	34 (8)
10Y3362	M	8710 (30)	19.6 (9)	5.0 (1)	83 (7)	1 (1)	34 (13)
11Y2059	SPQ	8700 (31)	15.8 (31)	5.0 (1)	82 (5)	60 (32)	32 (2)
11Y2032	MPQ	8670 (32)	19.9 (6)	5.0 (1)	87 (33)	1 (1)	36 (26)
10Y2179	MBG	7460 (33)	18.3 (22)	5.0 (1)	85 (19)	1 (1)	35 (15)
CA201	SLA	7040 (34)	15.4 (34)	5.0 (1)	86 (23)	3 (18)	32 (1)
MEAN		9170	18.6	5.0	84	16	35
CV		2.1	3.2	1.9	0.6	97.7	2.3
LSD (.05)		400	1.2		1	31	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, LA = Low Amalose; BG = bold grain.

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 4. 2012 Yolo Very Early Advanced Rice Variety Trial

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)
09Y2141	SWX	10590 (1)	19.9 (1)	5.0 (1)	91 (8)	96 (14)	44 (16)
10Y3286	M	10030 (2)	17.3 (12)	5.0 (1)	88 (6)	4 (6)	41 (11)
09Y2036	S	9970 (3)	18.2 (6)	5.0 (1)	88 (5)	97 (15)	44 (17)
M206	M	9900 (4)	18.4 (4)	5.0 (1)	91 (8)	69 (9)	42 (14)
08Y3310	M	9880 (5)	17.6 (8)	5.0 (1)	91 (10)	1 (1)	39 (5)
CH202	SPQ	9750 (6)	16.9 (13)	4.8 (13)	85 (4)	98 (16)	38 (3)
08Y3269	M	9720 (7)	17.8 (7)	5.0 (1)	92 (11)	89 (12)	42 (13)
CH201	SPQ	9660 (8)	16.6 (14)	5.0 (1)	93 (13)	99 (17)	41 (11)
M104	M	9610 (9)	17.6 (8)	5.0 (1)	84 (3)	23 (7)	39 (4)
11Y1005	L	9430 (10)	17.3 (11)	4.3 (14)	97 (15)	1 (1)	40 (7)
08Y2049	SSR	9350 (11)	18.7 (3)	1.6 (16)	94 (14)	1 (1)	37 (2)
M205	M	9310 (12)	18.3 (5)	5.0 (1)	93 (12)	89 (12)	41 (9)
L206	L	9060 (13)	15.9 (15)	3.5 (15)	97 (15)	1 (1)	34 (1)
M202	M	8930 (14)	17.4 (10)	5.0 (1)	90 (7)	87 (11)	43 (15)
S102	S	8400 (15)	15.5 (16)	5.0 (1)	83 (1)	56 (8)	41 (10)
06Y575	L	8190 (16)	19.8 (2)	1.4 (17)	110 (17)	1 (1)	40 (6)
CM101	SWX	7450 (17)	15.0 (17)	4.9 (12)	84 (2)	76 (10)	40 (8)
MEAN		9370	17.5	4.4	91	52	40
CV		4.5	2.4	4.9	0.8	31.5	2.9
LSD (.05)		600	0.6	0.3	1	23	2

Preliminary Lines and Varieties

10Y2043	S	10960 (1)	17.0 (29)	5.0 (1)	90 (21)	99 (22)	41 (8)
12Y20	L	10710 (2)	15.9 (32)	5.0 (1)	93 (30)	11 (3)	44 (28)
10Y1008	LSR	10500 (3)	17.2 (26)	5.0 (1)	94 (32)	10 (2)	45 (30)
10Y3236	M	10250 (4)	18.3 (12)	5.0 (1)	88 (9)	80 (12)	43 (20)
10Y3394	M	10180 (5)	19.3 (1)	5.0 (1)	92 (28)	85 (16)	42 (14)
10Y3452	M	10160 (6)	18.8 (5)	4.9 (31)	89 (13)	99 (22)	46 (32)
10Y3318	M	10070 (7)	18.8 (5)	5.0 (1)	89 (13)	99 (22)	45 (31)
11Y2040	S	9920 (8)	17.9 (17)	4.9 (31)	84 (1)	40 (6)	41 (9)
10Y3469	M	9880 (9)	18.8 (5)	5.0 (1)	91 (25)	85 (18)	43 (19)
10Y3362	M	9760 (10)	17.2 (24)	5.0 (1)	85 (3)	40 (6)	41 (9)
10Y3274	M	9760 (11)	17.3 (21)	5.0 (1)	90 (21)	99 (22)	43 (23)
10Y3566	M	9750 (12)	19.0 (4)	4.9 (31)	92 (27)	45 (8)	42 (14)
10Y3395	M	9680 (13)	19.2 (2)	5.0 (1)	89 (13)	99 (22)	44 (26)
10Y3326	M	9590 (14)	17.2 (24)	5.0 (1)	88 (9)	65 (10)	41 (9)
M105	M	9560 (15)	17.3 (22)	5.0 (1)	85 (5)	95 (21)	42 (14)
11Y1044	L	9530 (16)	15.5 (34)	5.0 (1)	97 (34)	35 (5)	39 (4)
11Y2022	MPQ	9530 (17)	19.2 (3)	5.0 (1)	90 (21)	90 (19)	44 (25)
10Y3237	M	9320 (18)	17.1 (27)	5.0 (1)	85 (3)	31 (4)	41 (5)
10Y3276	M	9290 (19)	17.9 (15)	5.0 (1)	89 (13)	80 (13)	43 (18)
10Y3706	M	9280 (20)	17.3 (22)	5.0 (1)	91 (24)	83 (14)	41 (7)
10Y3387	M	9180 (21)	18.7 (8)	5.0 (1)	89 (13)	99 (22)	41 (9)
11Y2059	SPQ	9150 (22)	16.2 (31)	5.0 (1)	84 (2)	99 (22)	39 (2)
10Y3558	M	9010 (23)	17.5 (18)	5.0 (1)	89 (13)	99 (22)	46 (33)
11Y2032	MPQ	9000 (24)	18.6 (9)	5.0 (1)	96 (33)	99 (22)	44 (28)
10Y3428	M	9000 (25)	18.4 (11)	5.0 (1)	88 (11)	99 (22)	41 (6)
10Y3241	M	8910 (26)	17.5 (19)	5.0 (1)	85 (5)	90 (19)	42 (14)
10Y3292	M	8900 (27)	18.2 (13)	5.0 (1)	86 (7)	85 (16)	43 (23)
10Y3332	M	8890 (28)	18.2 (13)	5.0 (1)	90 (20)	65 (10)	43 (20)
11Y2023	MPQ	8870 (29)	16.9 (30)	5.0 (1)	93 (30)	99 (22)	47 (34)
10Y3437	M	8840 (30)	17.9 (15)	5.0 (1)	87 (8)	99 (22)	43 (20)
11Y2021	MPQ	8800 (31)	18.6 (9)	5.0 (1)	92 (28)	83 (14)	39 (1)
10Y3287	M	8660 (32)	17.5 (19)	5.0 (1)	88 (11)	50 (9)	44 (26)
10Y2179	MBG	8020 (33)	17.1 (27)	4.9 (31)	91 (25)	3 (1)	42 (13)
CA201	SLA	7840 (34)	15.6 (33)	5.0 (1)	89 (13)	99 (22)	39 (2)
MEAN		9430	17.7	5.0	89	75	43
CV		5.4	4.1	1.4	0.7	22.4	3.8
LSD (.05)		1040	1.5		1	34	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, LA = Low Amalose; BG = bold grain.

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

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

Numbers in parentheses indicate relative rank in column.

Table 5. 2012 San Joaquin Very Early Advanced Rice Variety Trial

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)
06Y575	L	9080 (1)	20.8 (8)	5.0 (1)	109 (13)	1 (1)	35 (16)
M206	M	8990 (2)	22.1 (6)	5.0 (1)	106 (9)	1 (1)	34 (13)
09Y2141	SWX	8890 (3)	22.2 (5)	5.0 (1)	102 (6)	1 (1)	37 (17)
08Y2049	SSR	8800 (4)	20.4 (10)	5.0 (1)	100 (2)	1 (1)	31 (5)
09Y2036	S	8640 (5)	20.8 (9)	5.0 (1)	104 (7)	1 (1)	35 (15)
10Y3286	M	8600 (6)	20.2 (11)	5.0 (1)	100 (2)	1 (1)	32 (7)
M104	M	8460 (7)	21.9 (7)	5.0 (1)	100 (4)	1 (1)	33 (11)
11Y1005	L	8240 (8)	20.2 (12)	5.0 (1)	106 (9)	1 (1)	34 (14)
S102	S	8180 (9)	16.7 (17)	5.0 (1)	99 (1)	1 (1)	34 (12)
CH201	SPQ	8070 (10)	18.0 (15)	5.0 (1)	107 (12)	1 (1)	31 (3)
CH202	SPQ	8000 (11)	18.8 (13)	5.0 (1)	105 (8)	1 (1)	32 (6)
CM101	SWX	7880 (12)	17.7 (16)	5.0 (1)	101 (5)	1 (1)	33 (9)
08Y3310	M	7630 (13)	24.6 (3)	5.0 (1)	114 (14)	1 (1)	31 (4)
L206	L	7570 (14)	18.7 (14)	5.0 (1)	106 (9)	1 (1)	30 (1)
M202	M	7490 (15)	24.2 (4)	5.0 (1)	115 (15)	1 (1)	33 (9)
08Y3269	M	6910 (16)	26.2 (2)	5.0 (1)	118 (16)	1 (1)	32 (8)
M205	M	4570 (17)	29.3 (1)	5.0 (1)	126 (17)	1 (1)	30 (2)
MEAN		8000	21.3	5.0	107	1	33
CV		4.1	3.3		0.9		3.4
LSD (.05)		470	1		1		2

Preliminary Lines and Varieties

10Y3274	M	9470 (1)	19.4 (22)	5.0 (1)	106 (17)	1 (1)	36 (32)
10Y3558	M	9100 (2)	17.9 (32)	5.0 (1)	106 (17)	1 (1)	36 (30)
10Y2043	S	8900 (3)	18.9 (26)	5.0 (1)	99 (1)	1 (1)	34 (14)
10Y3452	M	8870 (4)	22.4 (2)	5.0 (1)	108 (26)	1 (1)	36 (29)
10Y3362	M	8710 (5)	20.9 (13)	5.0 (1)	102 (6)	1 (1)	34 (16)
10Y3237	M	8680 (6)	19.3 (24)	5.0 (1)	101 (5)	1 (1)	33 (6)
11Y2022	MPQ	8540 (7)	21.1 (11)	5.0 (1)	109 (29)	1 (1)	35 (28)
11Y2023	MPQ	8460 (8)	19.4 (22)	5.0 (1)	107 (24)	1 (1)	37 (33)
10Y3394	M	8460 (9)	21.9 (5)	5.0 (1)	107 (22)	1 (1)	35 (23)
11Y2040	S	8390 (10)	20.3 (16)	5.0 (1)	102 (6)	1 (1)	33 (5)
10Y3566	M	8380 (11)	20.2 (18)	5.0 (1)	106 (17)	1 (1)	35 (27)
M105	M	8340 (12)	20.4 (15)	5.0 (1)	102 (6)	1 (1)	35 (22)
10Y3395	M	8330 (13)	21.2 (9)	5.0 (1)	105 (16)	1 (1)	34 (16)
10Y3332	M	8310 (14)	22.3 (3)	5.0 (1)	112 (30)	1 (1)	34 (10)
10Y3292	M	8310 (15)	18.3 (31)	5.0 (1)	103 (10)	1 (1)	34 (13)
10Y3241	M	8300 (16)	19.7 (19)	5.0 (1)	105 (14)	1 (1)	34 (10)
10Y3318	M	8290 (17)	22.2 (4)	5.0 (1)	109 (28)	1 (1)	35 (23)
10Y3387	M	8270 (18)	21.1 (11)	5.0 (1)	107 (22)	1 (1)	37 (34)
12Y20	L	8220 (19)	18.8 (27)	5.0 (1)	106 (17)	1 (1)	34 (16)
10Y3469	M	8180 (20)	21.9 (5)	5.0 (1)	107 (24)	1 (1)	34 (14)
10Y3428	M	8110 (21)	19.1 (25)	5.0 (1)	103 (10)	1 (1)	34 (16)
11Y1044	L	8060 (22)	18.4 (30)	5.0 (1)	108 (26)	1 (1)	33 (6)
10Y3326	M	7940 (23)	18.7 (28)	5.0 (1)	102 (9)	1 (1)	33 (6)
10Y3276	M	7860 (24)	19.6 (20)	5.0 (1)	105 (14)	1 (1)	33 (6)
10Y3287	M	7840 (25)	21.2 (9)	5.0 (1)	104 (12)	1 (1)	35 (26)
10Y3236	M	7740 (26)	21.3 (8)	5.0 (1)	100 (3)	1 (1)	34 (16)
10Y3437	M	7600 (27)	19.5 (21)	5.0 (1)	106 (21)	1 (1)	36 (30)
11Y2059	SPQ	7300 (28)	17.1 (34)	5.0 (1)	100 (3)	1 (1)	31 (1)
10Y3706	M	7280 (29)	21.6 (7)	5.0 (1)	113 (32)	1 (1)	34 (10)
10Y2179	MBG	7240 (30)	18.6 (29)	5.0 (1)	100 (2)	1 (1)	33 (4)
10Y1008	LSR	7230 (31)	20.7 (14)	5.0 (1)	112 (30)	1 (1)	34 (16)
11Y2021	MPQ	6590 (32)	20.3 (17)	5.0 (1)	120 (33)	1 (1)	31 (1)
11Y2032	MPQ	6490 (33)	26.3 (1)	5.0 (1)	122 (34)	1 (1)	35 (23)
CA201	SLA	6110 (34)	17.2 (33)	5.0 (1)	104 (13)	1 (1)	32 (3)
MEAN		8060	20.2	5.0	106	1	34
CV		4.5	2.2		0.9		2.6
LSD (.05)		750	0.9		2		2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, LA = Low Amalose; BG = bold grain.

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

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

Numbers in parentheses indicate relative rank in column.

Table 6. Grain Yield (lb/acre @14% moisture) Summary of Very Early Rice Varieties by Location and Year (2008-2012)

Location	Year	M-104	M-202	M-206	Calmochi			
					101	S-102	L-205	L-206
Biggs (RES)	2008	10000	10170	10900	9960	10240	10010	11180
	2009	7180	8080	8940	7640	8230	9430	9710
	2010	-	10470	11290	9470	9380	10140	10200
	2011*	-	-	-	-	-	-	-
	2012	10260	10050	10420	8500	9370	-	10020
Location Mean		9147	9693	10388	8893	9305	9860	10278
Sutter	2008	10100	9540	9800	10010	10190	9490	9840
	2009	10040	9070	9390	7870	8480	9070	10160
	2010	8270	6520	7890	9500	9360	7450	8050
	2011*	-	-	-	-	-	-	-
	2012	8990	8810	9320	7500	8470	-	9570
Location Mean		9350	8485	9100	8720	9125	8670	9405
Yolo	2008	9930	10140	10480	9830	10340	9590	10210
	2009	11770	11400	12570	10760	11930	11220	10880
	2010	8050	7890	8210	7190	7520	7390	8230
	2011	10020	9590	10230	9320	9050	-	9490
	2012	9610	8930	9900	7450	8400	-	9060
Location Mean		9876	9590	10278	8910	9448	9400	9574
San Joaquin	2008	9780	7770	9360	9470	10000	7580	8160
	2009	8530	8720	8440	7650	7480	6970	8120
	2010	8360	7760	7560	8070	7950	5970	8170
	2011	8800	9090	9330	7850	7760	-	8340
	2012	8460	7490	8990	7880	8180	-	7570
Location Mean		8786	8166	8736	8184	8274	6840	8072
Loc/Years Mean		9303	8972	9612	8662	9018	8693	9276
Yield % M-104		100.0	96.4	103.3	93.1	96.9	93.4	99.7
Number of Tests		17	18	18	18	18	12	18

* Test locations not included in 2011 due to very high yield cvs.

Table 7. 2012 Four Location Early Advanced Rice Variety Tests

Advanced Lines and Varieties

Variety	Grain Type	Ave Grain Yield at 14%		Single Location Yields			Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		Grain	Moisture lbs/acre	Biggs	Butte	Colusa					
11Y1008	L	10180 (1)	11650 (1)	10100 (3)	9500 (5)	9460 (2)	17.3 (16)	4.9 (5)	83 (5)	24 (7)	39 (10)
09Y1122	L	9940 (2)	11350 (2)	9810 (5)	9340 (8)	9240 (5)	18.4 (12)	4.9 (6)	86 (9)	7 (4)	36 (1)
06Y575	L	9900 (3)	10400 (8)	9650 (6)	9990 (2)	9560 (1)	18.9 (11)	5.0 (2)	88 (12)	2 (3)	41 (16)
08Y3269	M	9800 (4)	9870 (11)	10210 (1)	10100 (1)	9010 (9)	21.2 (4)	4.9 (13)	90 (15)	17 (6)	38 (6)
09Y2141	SWX	9790 (5)	11060 (3)	10050 (4)	8680 (11)	9350 (4)	22.0 (2)	4.7 (16)	82 (4)	73 (13)	42 (17)
08Y3126	M	9770 (6)	10690 (4)	9470 (8)	9480 (6)	9460 (3)	20.8 (7)	4.9 (8)	84 (7)	65 (12)	41 (14)
L206	L	9600 (7)	10510 (6)	9380 (9)	9400 (7)	9100 (8)	17.8 (14)	4.9 (11)	83 (6)	52 (10)	36 (2)
M206	M	9530 (8)	9980 (10)	9240 (11)	9680 (3)	9240 (6)	20.7 (8)	4.9 (11)	84 (7)	52 (9)	41 (13)
M205	M	9520 (9)	10530 (5)	9600 (7)	9130 (9)	8840 (10)	22.0 (3)	4.9 (3)	91 (16)	14 (5)	38 (7)
09Y2179	S	9270 (10)	10280 (9)	10190 (2)	9650 (4)	6960 (16)	20.9 (5)	4.9 (9)	89 (14)	1 (1)	40 (12)
M202	M	9070 (11)	9770 (12)	8650 (13)	8630 (12)	9220 (7)	20.8 (6)	4.9 (4)	87 (11)	60 (11)	41 (15)
09Y3887	M	8860 (12)	10470 (7)	9320 (10)	7460 (15)	8170 (12)	23.3 (1)	4.9 (9)	91 (17)	1 (2)	38 (4)
09Y2159	SLA	8720 (13)	9430 (14)	8880 (12)	8760 (10)	7810 (14)	17.9 (13)	4.3 (17)	89 (13)	33 (8)	39 (9)
CH202	SPQ	8390 (14)	9000 (15)	8630 (14)	7370 (17)	8540 (11)	19.5 (10)	4.8 (15)	82 (3)	91 (15)	37 (3)
S102	S	8290 (15)	9500 (13)	8220 (15)	7460 (14)	7970 (13)	15.9 (17)	4.9 (7)	78 (1)	88 (14)	39 (11)
CM101	SWX	7690 (16)	8520 (17)	7190 (17)	7700 (13)	7360 (15)	17.4 (15)	4.9 (14)	80 (2)	92 (17)	39 (8)
CH201	SPQ	7570 (17)	8680 (16)	8080 (16)	7430 (16)	6080 (17)	19.8 (9)	5.0 (1)	86 (10)	92 (16)	38 (5)
MEAN		9170	10100	9220	8810	8550	19.7	4.9	85	45	39
CV		5.6	7.5	3.8	5.3	4.5	6.2	3.3	1.3	38.1	3.3
LSD (.05)		360	1070	500	660	550	0.9	0.1	1	12	1

Preliminary Lines and Varieties

11Y1076	L	9710 (1)	10660 (1)	9920 (1)	8920 (19)	9320 (3)	17.7 (35)	4.9 (20)	83 (5)	14 (11)	41 (32)
11P509	M-blst	9620 (2)	10150 (14)	9580 (5)	9550 (4)	9180 (4)	20.7 (14)	4.9 (18)	85 (9)	43 (25)	40 (18)
09Y3805	M	9600 (3)	10590 (2)	9470 (9)	9210 (15)	9110 (6)	21.2 (11)	4.9 (16)	89 (29)	3 (9)	40 (20)
12Y84	L	9590 (4)	9650 (26)	9720 (3)	9140 (17)	9840 (1)	17.6 (36)	4.8 (31)	85 (9)	18 (14)	41 (28)
11P503	M-blst	9550 (5)	10420 (9)	9120 (17)	10020 (1)	8630 (11)	21.5 (8)	4.9 (14)	86 (19)	51 (30)	41 (24)
09Y3517	M	9470 (6)	10100 (15)	9150 (16)	9540 (6)	9110 (5)	20.6 (16)	4.8 (26)	84 (8)	43 (25)	41 (22)
11P507	M-blst	9450 (7)	10360 (11)	8880 (21)	9670 (3)	8900 (7)	20.5 (17)	4.9 (18)	85 (17)	40 (23)	41 (31)
12y82	L	9420 (8)	10390 (10)	9320 (10)	9440 (9)	8530 (14)	18.9 (28)	4.8 (26)	90 (32)	1 (1)	36 (4)
10Y3754	M	9410 (9)	9860 (22)	9220 (14)	9750 (2)	8810 (9)	20.2 (19)	4.7 (32)	85 (16)	42 (24)	41 (29)
11Y2182	MPQ	9390 (10)	10430 (8)	9690 (4)	8010 (25)	9420 (2)	21.0 (12)	3.8 (38)	94 (34)	14 (11)	38 (8)
10Y3622	M	9360 (11)	9870 (21)	9230 (13)	9460 (8)	8890 (8)	20.0 (21)	4.8 (26)	85 (9)	51 (29)	40 (19)
10Y3729	M	9300 (12)	10330 (12)	8770 (24)	9550 (5)	8550 (13)	22.2 (3)	4.9 (23)	89 (28)	39 (21)	39 (11)
12Y81	L	9270 (13)	9940 (19)	8920 (20)	9490 (7)	8730 (10)	18.7 (31)	4.9 (7)	84 (6)	2 (7)	42 (37)
11P498	M-blst	9220 (14)	10450 (6)	9170 (15)	9010 (18)	8250 (17)	21.8 (5)	4.9 (7)	85 (14)	50 (27)	42 (33)
M105	M	9220 (15)	10250 (13)	9490 (8)	8620 (21)	8510 (15)	19.6 (22)	4.9 (20)	80 (2)	81 (36)	41 (24)
11Y1096	LA	9180 (16)	10480 (3)	9730 (2)	9200 (16)	7320 (27)	17.7 (34)	5.0 (4)	85 (9)	2 (7)	42 (36)
11Y2112	MPQ	9160 (17)	9740 (23)	9320 (11)	9430 (10)	8140 (19)	21.9 (4)	4.9 (7)	90 (31)	27 (18)	39 (12)
10Y3722	M	9150 (18)	9720 (24)	9570 (6)	9280 (13)	8030 (21)	20.2 (20)	4.8 (29)	86 (19)	40 (22)	40 (17)
10Y3536	M	9140 (19)	10470 (4)	9290 (12)	8670 (20)	8120 (20)	20.7 (15)	4.9 (23)	84 (7)	70 (34)	42 (34)
11Y1049	LA	9130 (20)	9990 (16)	9040 (19)	9260 (14)	8210 (18)	19.2 (25)	5.0 (3)	85 (17)	14 (11)	41 (30)
10Y2094	MPQ	9090 (21)	10470 (5)	8570 (26)	9340 (12)	8000 (22)	22.2 (2)	4.8 (30)	87 (21)	50 (27)	40 (14)
10Y1059	LJ	9040 (22)	9900 (20)	9520 (7)	8380 (23)	8370 (16)	18.7 (30)	4.9 (7)	85 (9)	19 (15)	40 (16)
M208	M	8870 (23)	9560 (27)	8760 (25)	9350 (11)	7810 (24)	21.0 (13)	4.9 (7)	88 (26)	56 (31)	41 (27)
10Y3670	M	8870 (24)	9960 (17)	9100 (18)	8590 (22)	7820 (23)	21.6 (7)	4.6 (34)	88 (24)	38 (19)	39 (10)
09Y2184	SPQ	8590 (25)	10440 (7)	8340 (27)	7920 (26)	7680 (26)	21.8 (6)	4.6 (33)	94 (35)	1 (1)	37 (6)
11Y2071	SWX	8430 (26)	9250 (30)	8850 (22)	7030 (31)	8590 (12)	19.0 (27)	4.6 (34)	77 (1)	73 (35)	40 (15)
11Y2192	MPQ	8290 (27)	9420 (29)	8850 (23)	7160 (29)	7720 (25)	21.3 (10)	4.9 (7)	85 (14)	94 (38)	44 (38)
A201	LA	8020 (28)	8480 (32)	8220 (28)	8140 (24)	7240 (28)	19.4 (24)	5.0 (1)	92 (33)	1 (1)	38 (9)
11Y2045	SLA	7990 (29)	9950 (18)	7500 (33)	7380 (28)	7140 (29)	22.8 (1)	5.0 (4)	89 (29)	66 (33)	41 (22)
12Y87	LJ	7600 (30)	9700 (25)	7580 (31)	7400 (27)	5730 (32)	18.2 (33)	4.9 (14)	95 (37)	1 (1)	36 (3)
11Y2049	SPQ	7410 (31)	9450 (28)	7270 (35)	7140 (30)	5800 (31)	20.2 (18)	4.9 (16)	87 (22)	57 (32)	40 (21)
A301	LA	7280 (32)	8640 (31)	8190 (29)	6580 (32)	5700 (33)	21.4 (9)	4.6 (36)	99 (38)	1 (1)	34 (1)
11Y1079	LB	7150 (33)	7970 (35)	7480 (34)	6130 (34)	7020 (30)	19.5 (23)	4.9 (7)	83 (3)	25 (17)	37 (7)
CT202	LB	6700 (34)	7990 (34)	7910 (30)	5340 (37)	5570 (35)	17.2 (38)	5.0 (4)	88 (26)	5 (10)	35 (2)
CA201	SLA	6670 (35)	7230 (38)	7560 (32)	6320 (33)	5570 (34)	18.7 (32)	5.0 (2)	83 (3)	90 (37)	39 (13)
10Y1199	LB	6230 (36)	7760 (36)	6560 (36)	5900 (36)	4720 (36)	18.8 (29)	4.9 (20)	95 (36)	38 (20)	41 (26)
11Y106	LJ	6100 (37)	8350 (33)	6090 (37)	6070 (35)	3890 (38)	19.1 (26)	4.6 (37)	87 (22)	24 (16)	42 (35)
11Y158	LB	5580 (38)	7540 (37)	5720 (38)	4680 (38)	4400 (37)	17.4 (37)	4.9 (23)	88 (25)	2 (6)	36 (5)
MEAN		8560	9630	8650	8260	7690	20	4.8	87	34	40
CV		5.9	6.6	3.9	5.4	6.9	6.3	3.6	1.3	57	3.6
LSD (.05)		490	1300	680	910	1070	1.2	0.2	1	19	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; A = aromatic; B=Basmati; BLST = blast resistance;

SR=stem rot resistant, LA = 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.

Numbers in parentheses indicate relative rank in column.

Table 8. 2012 Biggs Early Advanced Rice Variety Trial

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)
11Y1008	L	11650 (1)	16.6 (15)	4.7 (6)	82 (3)	1 (1)	36 (7)
09Y1122	L	11350 (2)	17.8 (12)	4.7 (7)	87 (10)	1 (1)	34 (3)
09Y2141	SWX	11060 (3)	20.2 (8)	4.5 (16)	84 (5)	30 (12)	39 (13)
08Y3126	M	10690 (4)	21.3 (5)	4.6 (12)	84 (6)	1 (1)	39 (14)
M205	M	10530 (5)	22.0 (2)	4.8 (4)	88 (15)	3 (7)	37 (9)
L206	L	10510 (6)	17.1 (14)	4.6 (12)	84 (8)	6 (10)	33 (1)
09Y3887	M	10470 (7)	25.1 (1)	4.6 (9)	88 (15)	1 (1)	38 (10)
06Y575	L	10400 (8)	19.0 (11)	4.8 (2)	87 (14)	3 (7)	41 (16)
09Y2179	S	10280 (9)	20.2 (7)	4.8 (2)	89 (17)	1 (1)	39 (15)
M206	M	9980 (10)	21.3 (4)	4.5 (15)	84 (6)	3 (7)	38 (11)
08Y3269	M	9870 (11)	21.5 (3)	4.6 (9)	87 (10)	1 (1)	36 (8)
M202	M	9770 (12)	21.1 (6)	4.8 (5)	87 (13)	11 (11)	41 (17)
S102	S	9500 (13)	12.5 (17)	4.6 (9)	80 (2)	60 (14)	36 (6)
09Y2159	SLA	9430 (14)	19.7 (10)	4.2 (17)	87 (12)	44 (13)	38 (12)
CH202	SPQ	9000 (15)	19.9 (9)	4.6 (14)	82 (4)	93 (17)	33 (1)
CH201	SPQ	8680 (16)	17.6 (13)	5.0 (1)	85 (9)	85 (15)	35 (5)
CM101	SWX	8520 (17)	16.1 (16)	4.7 (8)	80 (1)	86 (16)	35 (4)
MEAN		10100	19.4	4.7	85	25	37
CV		7.5	5.4	2.5	1.1	48.4	3.8
LSD (.05)		1070	1.5	0.2	1	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)
11Y1076	L	10660 (1)	15.7 (36)	4.5 (30)	83 (5)	1 (1)	39 (27)
09Y3805	M	10590 (2)	22.0 (6)	4.7 (19)	87 (32)	1 (1)	41 (36)
11Y1096	LA	10480 (3)	16.8 (30)	4.8 (7)	84 (13)	1 (1)	39 (28)
10Y3536	M	10470 (4)	20.7 (14)	4.7 (15)	83 (5)	1 (1)	40 (33)
10Y2094	MPQ	10470 (5)	20.8 (12)	4.6 (24)	85 (21)	11 (31)	38 (25)
11P498	M-blst	10450 (6)	22.4 (4)	4.8 (10)	84 (9)	1 (1)	40 (30)
09Y2184	SPQ	10440 (7)	20.8 (11)	4.1 (36)	86 (25)	1 (1)	36 (8)
11Y2182	MPQ	10430 (8)	22.9 (2)	4.2 (35)	90 (35)	1 (1)	38 (25)
11P503	M-blst	10420 (9)	21.8 (7)	4.7 (15)	84 (13)	6 (29)	38 (19)
12y82	L	10390 (10)	19.1 (21)	4.6 (21)	88 (33)	1 (1)	33 (2)
11P507	M-blst	10360 (11)	21.5 (8)	4.6 (24)	84 (9)	1 (1)	38 (21)
10Y3729	M	10330 (12)	22.0 (5)	4.5 (32)	87 (30)	1 (1)	38 (22)
M105	M	10250 (13)	18.0 (24)	4.7 (19)	79 (2)	31 (34)	36 (11)
11P509	M-blst	10150 (14)	20.3 (19)	4.6 (24)	84 (13)	6 (29)	37 (13)
09Y3517	M	10100 (15)	20.7 (15)	4.6 (22)	84 (9)	1 (1)	38 (19)
11Y1049	LA	9990 (16)	17.2 (28)	4.8 (6)	85 (24)	1 (1)	38 (18)
10Y3670	M	9960 (17)	20.9 (10)	4.5 (32)	85 (18)	1 (1)	36 (12)
11Y2045	SLA	9950 (18)	20.3 (18)	4.8 (7)	86 (25)	13 (32)	37 (15)
12Y81	L	9940 (19)	17.6 (26)	5.0 (2)	82 (3)	1 (1)	40 (35)
10Y1059	LJ	9900 (20)	16.5 (32)	4.7 (14)	84 (17)	1 (1)	38 (24)
10Y3622	M	9870 (21)	19.7 (20)	4.5 (28)	84 (9)	1 (1)	37 (14)
10Y3754	M	9860 (22)	20.4 (16)	4.6 (24)	85 (18)	1 (1)	37 (15)
11Y2112	MPQ	9740 (23)	21.3 (9)	4.8 (10)	85 (21)	1 (1)	39 (29)
10Y3722	M	9720 (24)	20.3 (17)	4.5 (32)	84 (13)	1 (1)	37 (15)
12Y87	LJ	9700 (25)	17.6 (27)	4.7 (15)	86 (29)	1 (1)	34 (6)
12Y84	L	9650 (26)	15.5 (37)	4.6 (23)	83 (5)	1 (1)	36 (10)
M208	M	9560 (27)	18.3 (22)	4.8 (10)	85 (21)	31 (34)	40 (32)
11Y2049	SPQ	9450 (28)	17.0 (29)	4.9 (3)	87 (30)	20 (33)	40 (30)
11Y2192	MPQ	9420 (29)	20.7 (13)	4.8 (10)	85 (18)	85 (37)	42 (38)
11Y2071	SWX	9250 (30)	16.6 (31)	4.5 (28)	77 (1)	40 (36)	38 (22)
A301	LA	8640 (31)	23.0 (1)	3.6 (38)	93 (38)	1 (1)	33 (1)
A201	LA	8480 (32)	18.3 (23)	5.0 (1)	89 (34)	1 (1)	34 (5)
11Y106	LJ	8350 (33)	22.7 (3)	3.7 (37)	91 (36)	1 (1)	42 (37)
CT202	LB	7990 (34)	16.2 (33)	4.8 (9)	86 (27)	1 (1)	35 (7)
11Y1079	LB	7970 (35)	15.8 (34)	4.9 (5)	82 (3)	1 (1)	34 (3)
10Y1199	LB	7760 (36)	17.9 (25)	4.5 (30)	92 (37)	1 (1)	40 (34)
11Y158	LB	7540 (37)	15.7 (35)	4.7 (15)	86 (27)	1 (1)	34 (4)
CA201	SLA	7230 (38)	15.3 (38)	4.9 (3)	83 (5)	85 (37)	36 (9)
MEAN		9630	19.2	4.6	85	9	38
CV		6.6	5.5	2.6	1.3	111.6	4.3
LSD (.05)		1300	2.2	0.2	2	21	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; A = aromatic; B=Basmati;

BLST = blast resistance; SR=stem rot resistant, LA = 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.

Numbers in parentheses indicate relative rank in column.

Table 9. 2012 Butte Early Advanced Rice Variety Trial

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield at 14% lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
08Y3269	M	10210 (1)	20.6 (7)	4.9 (11)	85 (13)	16 (7)	39 (10)
09Y2179	S	10190 (2)	20.4 (9)	4.9 (11)	81 (5)	1 (1)	41 (15)
11Y1008	L	10100 (3)	17.4 (15)	5.0 (1)	82 (8)	1 (1)	39 (10)
09Y2141	SWX	10050 (4)	23.6 (1)	4.3 (16)	82 (9)	65 (10)	42 (17)
09Y1122	L	9810 (5)	20.5 (8)	5.0 (1)	85 (13)	1 (1)	36 (1)
06Y575	L	9650 (6)	19.8 (10)	5.0 (1)	86 (15)	1 (1)	41 (16)
M205	M	9600 (7)	22.0 (3)	5.0 (1)	87 (16)	11 (6)	38 (7)
08Y3126	M	9470 (8)	21.1 (6)	5.0 (1)	81 (6)	82 (12)	39 (12)
L206	L	9380 (9)	17.3 (16)	5.0 (1)	81 (7)	60 (9)	38 (3)
09Y3887	M	9320 (10)	22.0 (2)	4.9 (11)	87 (17)	1 (1)	38 (4)
M206	M	9240 (11)	21.5 (4)	5.0 (1)	80 (4)	81 (11)	40 (14)
09Y2159	SLA	8880 (12)	18.5 (13)	3.7 (17)	83 (11)	45 (8)	38 (4)
M202	M	8650 (13)	21.2 (5)	5.0 (1)	84 (12)	96 (16)	39 (13)
CH202	SPQ	8630 (14)	19.2 (11)	4.5 (15)	79 (2)	85 (13)	37 (2)
S102	S	8220 (15)	16.7 (17)	5.0 (1)	76 (1)	94 (15)	38 (6)
CH201	SPQ	8080 (16)	18.8 (12)	5.0 (1)	83 (10)	96 (17)	38 (9)
CM101	SWX	7190 (17)	17.8 (14)	4.8 (14)	79 (2)	85 (13)	38 (8)
MEAN		9220	19.9	4.8	82	48	39
CV		3.8	5.3	5.5	1	40.8	3.5
LSD (.05)		500	1.5	0.4	1	28	2

Preliminary Lines and Varieties

11Y1076	L	9920 (1)	18.8 (32)	5.0 (1)	83 (16)	1 (1)	42 (35)
11Y1096	LA	9730 (2)	18.0 (35)	5.0 (1)	85 (25)	1 (1)	41 (29)
12Y84	L	9720 (3)	19.2 (30)	4.9 (29)	86 (29)	1 (1)	43 (37)
11Y2182	MPQ	9690 (4)	20.1 (23)	3.7 (38)	88 (32)	40 (18)	37 (5)
11P509	M-blst	9580 (5)	21.7 (10)	5.0 (1)	83 (13)	43 (20)	40 (24)
10Y3722	M	9570 (6)	20.8 (18)	4.9 (29)	82 (10)	31 (15)	39 (12)
10Y1059	LJ	9520 (7)	19.5 (28)	5.0 (1)	83 (16)	30 (14)	41 (31)
M105	M	9490 (8)	21.1 (15)	5.0 (1)	78 (2)	99 (35)	39 (14)
09Y3805	M	9470 (9)	20.9 (17)	5.0 (1)	87 (31)	1 (1)	39 (14)
12y82	L	9320 (10)	20.0 (24)	4.7 (33)	89 (34)	1 (1)	37 (5)
11Y2112	MPQ	9320 (11)	22.4 (8)	5.0 (1)	84 (22)	55 (23)	39 (14)
10Y3536	M	9290 (12)	21.1 (15)	4.8 (31)	80 (4)	85 (28)	41 (31)
10Y3622	M	9230 (13)	21.3 (13)	5.0 (1)	80 (4)	55 (21)	40 (18)
10Y3754	M	9220 (14)	21.7 (10)	4.2 (36)	81 (7)	35 (16)	41 (26)
11P498	M-blst	9170 (15)	22.5 (6)	5.0 (1)	83 (13)	90 (29)	40 (24)
09Y3517	M	9150 (16)	22.7 (4)	4.8 (31)	81 (7)	63 (24)	39 (14)
11P503	M-blst	9120 (17)	22.7 (4)	5.0 (1)	83 (13)	80 (27)	40 (21)
10Y3670	M	9100 (18)	21.5 (12)	4.6 (35)	83 (16)	99 (35)	38 (8)
11Y1049	LA	9040 (19)	20.3 (22)	5.0 (1)	84 (20)	6 (13)	42 (36)
12Y81	L	8920 (20)	19.8 (26)	5.0 (1)	83 (16)	1 (1)	42 (33)
11P507	M-blst	8880 (21)	21.3 (13)	5.0 (1)	82 (10)	65 (25)	41 (28)
11Y2071	SWX	8850 (22)	20.3 (21)	4.0 (37)	75 (1)	55 (21)	40 (23)
11Y2192	MPQ	8850 (23)	19.6 (27)	5.0 (1)	81 (6)	95 (31)	44 (38)
10Y3729	M	8770 (24)	23.1 (3)	5.0 (1)	84 (22)	90 (29)	38 (9)
M208	M	8760 (25)	23.4 (1)	5.0 (1)	84 (22)	97 (33)	41 (29)
10Y2094	MPQ	8570 (26)	22.4 (8)	5.0 (1)	82 (9)	99 (35)	40 (21)
09Y2184	SPQ	8340 (27)	23.4 (2)	4.7 (33)	89 (33)	1 (1)	37 (5)
A201	LA	8220 (28)	20.8 (19)	5.0 (1)	92 (35)	1 (1)	40 (18)
A301	LA	8190 (29)	20.7 (20)	5.0 (1)	99 (37)	1 (1)	34 (2)
CT202	LB	7910 (30)	17.3 (36)	5.0 (1)	86 (29)	1 (1)	34 (2)
12Y87	LJ	7580 (31)	19.5 (29)	5.0 (1)	99 (38)	1 (1)	34 (1)
CA201	SLA	7560 (32)	15.8 (38)	5.0 (1)	79 (3)	95 (32)	39 (12)
11Y2045	SLA	7500 (33)	22.5 (7)	5.0 (1)	86 (28)	97 (33)	40 (18)
11Y1079	LB	7480 (34)	18.2 (34)	5.0 (1)	82 (10)	35 (16)	38 (10)
11Y2049	SPQ	7270 (35)	20.0 (25)	5.0 (1)	84 (20)	99 (35)	38 (10)
10Y1199	LB	6560 (36)	18.4 (33)	5.0 (1)	94 (36)	40 (18)	41 (26)
11Y106	LJ	6090 (37)	19.1 (31)	5.0 (1)	85 (26)	75 (26)	42 (33)
11Y158	LB	5720 (38)	16.6 (37)	5.0 (1)	85 (26)	1 (1)	35 (4)
MEAN		8650	20.5	4.9	84	46	39
CV		3.9	4	5.6	1.4	48.9	2.9
LSD (.05)		680	1.7	0.6	2	46	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; A = aromatic; B=Basmati; BLST = blast resistance; SR=stem rot resistant, LA = 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.

Numbers in parentheses indicate relative rank in column.

Table 10. 2012 Colusa Early Advanced Rice Variety Trial

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)
08Y3269	M	10100 (1)	21.1 (5)	5.0 (1)	92 (15)	1 (1)	38 (5)
06Y575	L	9990 (2)	18.3 (14)	5.0 (1)	85 (9)	2 (6)	41 (14)
M206	M	9680 (3)	20.5 (9)	5.0 (1)	86 (11)	28 (8)	41 (15)
09Y2179	S	9650 (4)	20.8 (7)	5.0 (1)	85 (7)	1 (1)	42 (16)
11Y1008	L	9500 (5)	18.0 (16)	5.0 (1)	79 (4)	75 (10)	39 (9)
08Y3126	M	9480 (6)	21.1 (6)	5.0 (1)	85 (9)	78 (11)	40 (11)
L206	L	9400 (7)	18.8 (13)	5.0 (1)	81 (6)	80 (12)	37 (3)
09Y1122	L	9340 (8)	18.0 (15)	5.0 (1)	85 (7)	1 (1)	36 (2)
M205	M	9130 (9)	22.3 (4)	5.0 (1)	94 (16)	1 (1)	38 (4)
09Y2159	SLA	8760 (10)	17.6 (17)	5.0 (1)	89 (14)	17 (7)	38 (8)
09Y2141	SWX	8680 (11)	24.7 (1)	5.0 (1)	76 (2)	99 (16)	43 (17)
M202	M	8630 (12)	20.6 (8)	5.0 (1)	87 (12)	33 (9)	40 (12)
CM101	SWX	7700 (13)	19.8 (11)	5.0 (1)	76 (2)	99 (16)	40 (10)
S102	S	7460 (14)	19.5 (12)	5.0 (1)	75 (1)	98 (14)	40 (12)
09Y3887	M	7460 (15)	24.2 (2)	5.0 (1)	97 (17)	1 (1)	35 (1)
CH201	SPQ	7430 (16)	22.8 (3)	5.0 (1)	88 (13)	87 (13)	38 (7)
CH202	SPQ	7370 (17)	20.2 (10)	5.0 (1)	80 (5)	98 (14)	38 (5)
MEAN		8810	20.5	5.0	85	47	39
CV		5.3	8.7		1.7	27.3	3.1
LSD (.05)		660	2.5		2	18	2

Preliminary Lines and Varieties

11P503	M-blst	10020 (1)	20.3 (19)	5.0 (1)	88 (21)	21 (23)	42 (24)
10Y3754	M	9750 (2)	19.3 (30)	5.0 (1)	87 (17)	36 (26)	40 (20)
11P507	M-blst	9670 (3)	20.0 (23)	5.0 (1)	87 (19)	11 (20)	43 (32)
11P509	M-blst	9550 (4)	21.0 (13)	5.0 (1)	86 (15)	28 (24)	42 (24)
10Y3729	M	9550 (5)	22.3 (7)	5.0 (1)	93 (31)	1 (1)	38 (12)
09Y3517	M	9540 (6)	19.6 (24)	5.0 (1)	85 (11)	8 (19)	42 (24)
12Y81	L	9490 (7)	18.8 (33)	5.0 (1)	81 (6)	6 (17)	42 (24)
10Y3622	M	9460 (8)	19.0 (31)	5.0 (1)	86 (15)	70 (33)	41 (23)
12y82	L	9440 (9)	19.4 (28)	5.0 (1)	91 (26)	1 (1)	35 (3)
11Y2112	MPQ	9430 (10)	22.2 (9)	5.0 (1)	94 (34)	1 (1)	38 (8)
M208	M	9350 (11)	20.6 (15)	5.0 (1)	93 (31)	1 (1)	38 (12)
10Y2094	MPQ	9340 (12)	23.2 (6)	5.0 (1)	90 (25)	1 (1)	39 (15)
10Y3722	M	9280 (13)	20.0 (22)	5.0 (1)	88 (21)	30 (25)	43 (32)
11Y1049	LA	9260 (14)	19.4 (27)	5.0 (1)	84 (10)	1 (1)	41 (22)
09Y3805	M	9210 (15)	22.1 (10)	5.0 (1)	91 (27)	1 (1)	40 (16)
11Y1096	LA	9200 (16)	18.6 (35)	5.0 (1)	82 (7)	6 (17)	43 (37)
12Y84	L	9140 (17)	17.4 (37)	5.0 (1)	80 (4)	65 (32)	42 (30)
11P498	M-blst	9010 (18)	22.2 (8)	5.0 (1)	85 (11)	11 (20)	43 (34)
11Y1076	L	8920 (19)	18.4 (36)	5.0 (1)	80 (3)	36 (26)	42 (24)
10Y3536	M	8670 (20)	20.5 (17)	5.0 (1)	85 (11)	95 (35)	42 (30)
M105	M	8620 (21)	18.9 (32)	5.0 (1)	79 (2)	99 (37)	43 (38)
10Y3670	M	8590 (22)	21.5 (12)	5.0 (1)	92 (30)	1 (1)	38 (8)
10Y1059	LJ	8380 (23)	20.6 (16)	5.0 (1)	83 (8)	3 (14)	40 (18)
A201	LA	8140 (24)	19.4 (26)	5.0 (1)	89 (24)	1 (1)	38 (11)
11Y2182	MPQ	8010 (25)	20.5 (18)	4.7 (38)	97 (37)	1 (1)	37 (6)
09Y2184	SPQ	7920 (26)	22.0 (11)	5.0 (1)	102 (38)	1 (1)	37 (7)
12Y87	LJ	7400 (27)	17.4 (38)	5.0 (1)	91 (27)	1 (1)	36 (5)
11Y2045	SLA	7380 (28)	25.3 (2)	5.0 (1)	93 (31)	60 (30)	41 (21)
11Y2192	MPQ	7160 (29)	26.2 (1)	5.0 (1)	87 (17)	97 (36)	43 (36)
11Y2049	SPQ	7140 (30)	23.7 (4)	5.0 (1)	89 (23)	63 (31)	42 (29)
11Y2071	SWX	7030 (31)	20.1 (20)	5.0 (1)	75 (1)	99 (37)	40 (18)
A301	LA	6580 (32)	20.9 (14)	5.0 (1)	97 (36)	1 (1)	35 (4)
CA201	SLA	6320 (33)	23.7 (5)	5.0 (1)	83 (8)	83 (34)	40 (16)
11Y1079	LB	6130 (34)	25.1 (3)	5.0 (1)	80 (4)	50 (29)	38 (8)
11Y106	LJ	6070 (35)	18.8 (34)	5.0 (1)	85 (11)	3 (14)	43 (34)
10Y1199	LB	5900 (36)	19.5 (25)	5.0 (1)	94 (34)	40 (28)	39 (14)
CT202	LB	5340 (37)	19.4 (29)	5.0 (1)	91 (27)	11 (20)	34 (2)
11Y158	LB	4680 (38)	20.0 (21)	5.0 (1)	87 (19)	3 (14)	34 (1)
MEAN		8260	20.7	5.0	88	27	40
CV		5.4	8.9		1.5	64.3	3.6
LSD (.05)		910	3.7		3	36	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; A = aromatic; B=Basmati; BLST = blast resistance; SR=stem rot resistant, LA = 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.

Numbers in parentheses indicate relative rank in column.

Table 11. 2012 Yuba Early Advanced Rice Variety Trial

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield at 14% lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
06Y575	L	9560 (1)	18.3 (11)	5.0 (1)	93 (12)	1 (1)	42 (12)
11Y1008	L	9460 (2)	17.4 (13)	5.0 (1)	88 (8)	20 (4)	41 (9)
08Y3126	M	9460 (3)	19.7 (7)	5.0 (1)	87 (6)	98 (12)	45 (16)
09Y2141	SWX	9350 (4)	19.3 (9)	4.9 (15)	86 (4)	99 (14)	46 (17)
09Y1122	L	9240 (5)	17.2 (14)	5.0 (1)	88 (8)	26 (5)	40 (5)
M206	M	9240 (6)	19.4 (8)	5.0 (1)	87 (7)	96 (11)	43 (14)
M202	M	9220 (7)	20.3 (5)	5.0 (1)	89 (10)	99 (14)	44 (15)
L206	L	9100 (8)	18.1 (12)	4.9 (13)	85 (3)	64 (9)	38 (1)
08Y3269	M	9010 (9)	21.5 (4)	4.9 (13)	96 (16)	52 (8)	40 (6)
M205	M	8840 (10)	21.5 (3)	5.0 (1)	94 (14)	43 (7)	40 (8)
CH202	SPQ	8540 (11)	18.9 (10)	5.0 (1)	86 (5)	89 (10)	41 (10)
09Y3887	M	8170 (12)	22.0 (2)	5.0 (1)	94 (13)	2 (3)	40 (3)
S102	S	7970 (13)	15.0 (17)	5.0 (1)	82 (1)	99 (14)	42 (13)
09Y2159	SLA	7810 (14)	15.8 (15)	4.4 (17)	95 (15)	26 (5)	40 (7)
CM101	SWX	7360 (15)	15.7 (16)	5.0 (1)	84 (2)	99 (14)	42 (11)
09Y2179	S	6960 (16)	22.2 (1)	4.8 (16)	103 (17)	1 (1)	39 (2)
CH201	SPQ	6080 (17)	19.9 (6)	5.0 (1)	89 (11)	98 (12)	40 (4)
MEAN		8550	18.9	4.9	90	59	41
CV		4.5	4.1	2.8	1.1	36.5	2.9
LSD (.05)		550	1.1	0.2	1	31	2

Preliminary Lines and Varieties

12Y84	L	9840 (1)	18.4 (30)	4.6 (35)	90 (21)	6 (9)	43 (20)
11Y2182	MPQ	9420 (2)	20.7 (10)	2.5 (38)	100 (35)	16 (13)	39 (6)
11Y1076	L	9320 (3)	17.9 (33)	5.0 (1)	88 (5)	20 (15)	44 (29)
11P509	M-blst	9180 (4)	19.8 (17)	5.0 (1)	87 (3)	95 (26)	42 (15)
09Y3517	M	9110 (5)	19.4 (22)	5.0 (1)	88 (5)	99 (33)	44 (26)
09Y3805	M	9110 (6)	20.0 (15)	5.0 (1)	93 (27)	11 (11)	42 (13)
11P507	M-blst	8900 (7)	19.2 (24)	5.0 (1)	89 (14)	85 (24)	44 (26)
10Y3622	M	8890 (8)	19.8 (17)	4.9 (26)	90 (21)	78 (23)	43 (23)
10Y3754	M	8810 (9)	19.5 (21)	5.0 (1)	88 (5)	95 (26)	46 (36)
12Y81	L	8730 (10)	18.7 (29)	4.8 (29)	88 (5)	1 (1)	46 (37)
11P503	M-blst	8630 (11)	21.0 (8)	5.0 (1)	88 (5)	99 (33)	43 (24)
11Y2071	SWX	8590 (12)	18.8 (27)	5.0 (1)	82 (1)	97 (31)	42 (15)
10Y3729	M	8550 (13)	21.2 (6)	5.0 (1)	93 (27)	65 (21)	41 (11)
12y82	L	8530 (14)	17.3 (35)	5.0 (1)	94 (31)	1 (1)	38 (3)
M105	M	8510 (15)	20.2 (12)	4.9 (26)	86 (2)	95 (26)	44 (26)
10Y1059	LJ	8370 (16)	18.3 (31)	5.0 (1)	89 (14)	41 (16)	41 (12)
11P498	M-blst	8250 (17)	20.1 (14)	5.0 (1)	89 (14)	99 (33)	44 (31)
11Y1049	LA	8210 (18)	19.8 (16)	5.0 (1)	88 (5)	50 (18)	44 (30)
11Y2112	MPQ	8140 (19)	21.7 (4)	5.0 (1)	97 (32)	50 (18)	40 (7)
10Y3536	M	8120 (20)	20.3 (11)	5.0 (1)	87 (3)	99 (33)	44 (32)
10Y3722	M	8030 (21)	19.6 (20)	5.0 (1)	89 (14)	97 (31)	42 (14)
10Y2094	MPQ	8000 (22)	22.5 (2)	4.7 (34)	91 (24)	90 (25)	42 (15)
10Y3670	M	7820 (23)	22.5 (2)	4.5 (37)	91 (24)	50 (18)	43 (20)
M208	M	7810 (24)	21.6 (5)	5.0 (1)	90 (21)	95 (26)	44 (32)
11Y2192	MPQ	7720 (25)	18.8 (26)	5.0 (1)	88 (5)	99 (33)	46 (37)
09Y2184	SPQ	7680 (26)	20.9 (9)	4.8 (29)	100 (35)	1 (1)	38 (2)
11Y1096	LA	7320 (27)	17.4 (34)	5.0 (1)	89 (14)	1 (1)	46 (35)
A201	LA	7240 (28)	19.1 (25)	5.0 (1)	97 (32)	1 (1)	41 (10)
11Y2045	SLA	7140 (29)	22.9 (1)	5.0 (1)	93 (29)	95 (26)	44 (32)
11Y1079	LB	7020 (30)	18.7 (28)	4.9 (26)	88 (5)	15 (12)	40 (8)
11Y2049	SPQ	5800 (31)	20.1 (13)	4.8 (29)	91 (26)	46 (17)	42 (18)
12Y87	LJ	5730 (32)	18.3 (31)	5.0 (1)	103 (37)	1 (1)	38 (5)
A301	LA	5700 (33)	21.2 (7)	4.8 (29)	107 (38)	1 (1)	36 (1)
CA201	SLA	5570 (34)	19.8 (19)	5.0 (1)	88 (5)	99 (33)	43 (22)
CT202	LB	5570 (35)	16.0 (37)	5.0 (1)	89 (14)	6 (9)	38 (3)
10Y1199	LB	4720 (36)	19.4 (23)	5.0 (1)	99 (34)	73 (22)	43 (24)
11Y158	LB	4400 (37)	17.2 (36)	4.8 (29)	93 (29)	1 (1)	40 (8)
11Y106	LJ	3890 (38)	15.9 (38)	4.6 (35)	89 (20)	16 (13)	42 (19)
MEAN		7690	19.6	4.8	91	52	42
CV		6.9	5.5	3.5	0.7	45.2	3.7
LSD (.05)		1070	2.2	0.3	1	48	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; A = aromatic; J=Jasmine; A = aromatic; B=Basmati; BLST = blast resistance; SR=stem rot resistant, LA = 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.

Numbers in parentheses indicate relative rank in column.

Table 12. Grain Yield (lb/acre @14% moisture) Summary of Early Rice Varieties by Location and Year (2008-2012)

Location	Year	Calhikari				Calmati		
		201	S-102	M-202	M-105	M-205	M-206	202
Biggs (RES)	2008	9520	10950	10580	10590	10800	10620	7930
	2009	9090	9700	8940	8690	9430	9080	7650
	2010	9390	9400	10210	11530	10790	10990	8730
	2011	9210	10230	9660	9490	10610	10050	5410
	2012	8680	9500	9770	10250	10530	9980	7990
Location Mean		9178	9956	9832	10110	10432	10144	7542
Butte	2008	6360	7470	7150	8450	8220	8450	7020
	2009	8690	7800	9690	8530	9830	8170	7780
	2010	7900	7330	8190	8530	7950	8440	6770
	2011	8060	8280	8180	9270	8860	8520	8020
	2012	8080	8220	8650	9490	9600	9240	7910
Location Mean		7818	7820	8372	8854	8892	8564	7500
Colusa	2008	8640	9870	9950	10100	10080	10080	5740
	2009	7350	8130	8560	8880	9680	8800	5510
	2010	9510	10190	10910	10930	11190	10560	4690
	2011	6040	7420	9350	7580	9760	9960	5210
	2012	7430	7460	8630	8620	9130	9680	5340
Location Mean		7794	8614	9480	9222	9968	9816	5298
Yuba	2008	8880	9830	10140	10270	10500	10720	6250
	2009	6880	7950	7940	8160	8790	8530	5960
	2010	8350	10010	10220	10040	9370	10330	5470
	2011	7800	8740	9300	9800	10000	10190	6030
	2012	6080	7970	9220	8510	8840	9240	5570
Location Mean		7598	8900	9364	9356	9500	9802	5856
Loc/Years Mean		8097	8823	9262	9386	9698	9582	6549
Yield % M-202		87.4	95.3	100	101.3	104.7	103.4	70.7
Number of Tests		20	20	20	16	20	20	20

Table 13. 2012 Three Location Intermediate/Late Advanced Rice Variety Tests

Advanced Lines and Varieties

Variety	Grain Type	Ave Grain Yield at 14%		Single Location Yields			Ave Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		Moisture lbs/acre	Biggs	Glenn	Sutter						
06Y575	L	9950 (1)	10980 (4)	8800 (1)	10080 (1)	20.0 (5)	4.9 (8)	89 (6)	2 (3)	42 (8)	
M205	M	9690 (2)	11210 (1)	8220 (3)	9630 (4)	23.7 (3)	5.0 (4)	89 (5)	1 (1)	38 (4)	
L206	L	9580 (3)	11180 (2)	7680 (7)	9890 (2)	17.6 (8)	4.9 (6)	82 (2)	3 (5)	34 (1)	
M202	M	9480 (4)	11090 (3)	7660 (8)	9690 (3)	22.3 (4)	5.0 (1)	86 (4)	1 (1)	40 (6)	
M402	MPQ	9190 (5)	10260 (5)	8260 (2)	9040 (7)	24.6 (2)	5.0 (2)	97 (8)	2 (4)	39 (5)	
CH201	SWX	8820 (6)	9180 (7)	8000 (5)	9280 (5)	18.4 (7)	5.0 (2)	85 (3)	32 (7)	36 (3)	
09Y2176	MPQ	8770 (7)	10110 (6)	8120 (4)	8080 (8)	25.2 (1)	5.0 (5)	91 (7)	9 (6)	40 (7)	
CH202	SPQ	8720 (8)	9080 (8)	7970 (6)	9130 (6)	18.6 (6)	4.9 (6)	81 (1)	33 (8)	34 (2)	
MEAN		9280	10390	8090	9350	21.3	5.0	87	10	38	
CV		5	6.2	3.3	4.3	5.0	0.6	1.1	35.1	3.5	
LSD (.05)		380	950	400	600	0.9	0	1	3	1	

Preliminary Lines and Varieties

10Y3703	M	10050 (1)	11390 (4)	9490 (2)	9270 (5)	23.7 (6)	5.0 (1)	87 (13)	17 (26)	40 (20)
10Y3690	M	9830 (2)	11510 (2)	8500 (7)	9500 (3)	21.9 (15)	5.0 (1)	87 (15)	3 (14)	39 (11)
12Y131	L	9750 (3)	11430 (3)	7980 (21)	9860 (1)	18.0 (26)	4.9 (26)	85 (2)	3 (14)	40 (16)
11Y2183	MPQ	9620 (4)	11650 (1)	9360 (5)	7850 (21)	24.2 (4)	5.0 (16)	91 (26)	12 (24)	40 (22)
10Y3789	M	9620 (5)	11160 (8)	8230 (18)	9470 (4)	23.2 (8)	5.0 (1)	87 (13)	1 (1)	40 (20)
10Y3737	M	9500 (6)	11350 (6)	8430 (9)	8740 (11)	22.8 (10)	5.0 (1)	88 (17)	1 (1)	39 (14)
10Y3717	M	9460 (7)	11020 (12)	8300 (13)	9080 (7)	23.3 (7)	5.0 (1)	89 (23)	6 (19)	41 (25)
10Y3507	M	9420 (8)	11030 (11)	8450 (8)	8790 (9)	22.4 (12)	5.0 (1)	86 (4)	2 (13)	40 (17)
10Y3773	M	9400 (9)	11290 (7)	8430 (10)	8500 (15)	22.2 (13)	5.0 (16)	87 (9)	2 (11)	38 (9)
12Y130	LSR	9370 (10)	10740 (15)	8280 (15)	9080 (6)	18.7 (24)	5.0 (16)	86 (7)	2 (11)	39 (15)
09Y3502	M	9370 (11)	11110 (10)	8620 (6)	8370 (18)	23.1 (9)	5.0 (16)	88 (18)	7 (21)	41 (25)
12Y135	LJ	9360 (12)	8860 (24)	9360 (4)	9850 (2)	19.3 (20)	5.0 (1)	92 (28)	1 (1)	38 (10)
12Y139	LA	9180 (13)	10870 (14)	7620 (24)	9070 (8)	18.3 (25)	4.9 (26)	87 (15)	3 (14)	37 (8)
12Y132	L	9130 (14)	10650 (16)	8110 (19)	8630 (12)	17.7 (28)	5.0 (16)	86 (5)	3 (14)	42 (27)
10Y3748	M	8980 (15)	11010 (13)	7340 (25)	8580 (13)	19.5 (19)	4.9 (30)	86 (6)	6 (19)	40 (18)
09Y2173	MPQ	8970 (16)	10080 (19)	8310 (12)	8510 (14)	24.3 (3)	5.0 (1)	93 (29)	34 (30)	44 (30)
08Y3314	M	8930 (17)	11360 (5)	8270 (17)	7160 (28)	24.4 (2)	5.0 (1)	88 (18)	12 (23)	39 (13)
10Y2120	MPQ	8890 (18)	10370 (18)	8270 (16)	8040 (20)	22.7 (11)	4.9 (26)	89 (21)	16 (25)	41 (23)
10Y3661	M	8870 (19)	11140 (9)	7920 (22)	7550 (24)	22.2 (14)	4.9 (32)	87 (9)	9 (22)	37 (5)
A201	LA	8620 (20)	9450 (21)	7640 (23)	8770 (10)	19.0 (23)	5.0 (1)	90 (25)	1 (1)	37 (6)
M401	MPQ	8620 (21)	8630 (25)	10030 (1)	7200 (27)	27.8 (1)	5.0 (1)	103 (32)	34 (29)	42 (29)
10Y2081	MPQ	8500 (22)	10610 (17)	8360 (11)	6540 (30)	23.9 (5)	5.0 (16)	89 (21)	32 (28)	40 (19)
09Y2174	MPQ	8470 (23)	9410 (22)	8280 (14)	7720 (23)	21.7 (16)	5.0 (16)	87 (11)	68 (31)	42 (28)
10Y3247	M	8360 (24)	10070 (20)	7210 (26)	7800 (22)	20.5 (17)	5.0 (16)	84 (1)	3 (18)	37 (7)
12Y133	LJ	8100 (25)	7770 (28)	8100 (20)	8420 (16)	20.1 (18)	5.0 (1)	98 (31)	1 (1)	36 (4)
11Y106	LJ	8010 (26)	8320 (26)	9420 (3)	6290 (31)	19.1 (22)	4.9 (31)	89 (20)	18 (27)	46 (31)
08Y1115	LA	7820 (27)	9290 (23)	6830 (28)	7350 (26)	17.2 (29)	4.9 (26)	87 (8)	1 (1)	34 (11)
12Y138	LB	7360 (28)	7760 (29)	5910 (29)	8410 (17)	15.9 (32)	5.0 (1)	90 (24)	1 (1)	39 (12)
12Y137	LB	7060 (29)	7840 (27)	5900 (30)	7440 (25)	16.5 (30)	5.0 (1)	85 (3)	1 (1)	41 (24)
CT202	LB	6940 (30)	7150 (30)	5500 (31)	8170 (19)	16.4 (31)	5.0 (16)	87 (11)	1 (1)	34 (2)
11Y158	LB	6370 (31)	6710 (31)	5360 (32)	7040 (29)	17.7 (27)	5.0 (16)	92 (27)	1 (1)	35 (3)
KOSH	SPQ	5490 (32)	5180 (32)	6850 (27)	4440 (32)	19.2 (21)	5.0 (1)	94 (30)	95 (32)	47 (32)
MEAN		8670	9880	7960	8170	20.8	5.0	89	12	40
CV		5.8	3.2	6.4	7.7	4.9	0.8	0.7	103	3.5
LSD (.05)		570	640	1050	1280	1.2		1	15	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; B = Basmati; A = aromatic; J = Jasmine; SR = Stem Rot resistance.

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

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

Numbers in parentheses indicate relative rank in column.

Table 14. 2012 Biggs Late Advanced Rice Variety Trial

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield at 14% lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
M205	M	11210 (1)	24.4 (3)	4.9 (4)	87 (6)	1 (1)	38 (4)
L206	L	11180 (2)	17.6 (8)	4.8 (6)	81 (2)	1 (1)	33 (1)
M202	M	11090 (3)	22.5 (4)	5.0 (1)	85 (5)	1 (1)	42 (8)
06Y575	L	10980 (4)	21.6 (5)	4.8 (8)	85 (4)	1 (1)	41 (7)
M402	MPQ	10260 (5)	25.8 (2)	4.9 (2)	93 (8)	1 (1)	39 (5)
09Y2176	MPQ	10110 (6)	26.2 (1)	4.9 (5)	91 (7)	1 (1)	39 (6)
CH201	SWX	9180 (7)	19.6 (6)	4.9 (2)	82 (3)	90 (7)	37 (3)
CH202	SPQ	9080 (8)	19.3 (7)	4.8 (6)	80 (1)	90 (7)	34 (2)
MEAN		10390	22.1	4.9	85	23	38
CV		6.2	6.5	1	1.3		4
LSD (.05)		950	2.1	0.1	2		2

Preliminary Lines and Varieties

11Y2183	MPQ	11650 (1)	22.9 (8)	4.9 (16)	87 (18)	1 (1)	40 (18)
10Y3690	M	11510 (2)	22.1 (13)	4.9 (1)	86 (13)	1 (1)	39 (14)
12Y131	L	11430 (3)	18.2 (26)	4.8 (27)	81 (2)	1 (1)	39 (13)
10Y3703	M	11390 (4)	22.5 (11)	4.9 (1)	85 (8)	1 (1)	41 (23)
08Y3314	M	11360 (5)	24.0 (5)	4.9 (1)	88 (23)	1 (1)	40 (16)
10Y3737	M	11350 (6)	22.7 (10)	4.9 (1)	87 (18)	1 (1)	40 (16)
10Y3773	M	11290 (7)	21.9 (15)	4.9 (16)	85 (8)	1 (1)	38 (10)
10Y3789	M	11160 (8)	22.8 (9)	4.9 (1)	86 (13)	1 (1)	41 (24)
10Y3661	M	11140 (9)	21.5 (17)	4.8 (27)	85 (8)	1 (1)	37 (7)
09Y3502	M	11110 (10)	21.9 (14)	4.9 (16)	86 (15)	1 (1)	42 (28)
10Y3507	M	11030 (11)	22.3 (12)	4.9 (1)	84 (5)	1 (1)	40 (21)
10Y3717	M	11020 (12)	24.3 (3)	4.9 (1)	87 (18)	1 (1)	42 (27)
10Y3748	M	11010 (13)	19.3 (23)	4.9 (1)	84 (5)	1 (1)	41 (24)
12Y139	LA	10870 (14)	18.2 (27)	4.8 (30)	85 (8)	1 (1)	36 (6)
12Y130	LSR	10740 (15)	19.4 (22)	4.8 (25)	84 (7)	1 (1)	39 (12)
12Y132	L	10650 (16)	16.8 (30)	4.8 (25)	82 (4)	1 (1)	41 (26)
10Y2081	MPQ	10610 (17)	24.1 (4)	4.9 (16)	90 (26)	1 (1)	40 (18)
10Y2120	MPQ	10370 (18)	21.8 (16)	4.8 (27)	88 (21)	1 (1)	40 (21)
09Y2173	MPQ	10080 (19)	24.9 (2)	4.9 (1)	92 (28)	1 (1)	43 (30)
10Y3247	M	10070 (20)	19.6 (20)	4.9 (16)	82 (3)	1 (1)	38 (8)
A201	LA	9450 (21)	19.5 (21)	4.9 (12)	88 (23)	1 (1)	36 (5)
09Y2174	MPQ	9410 (22)	21.4 (18)	4.9 (16)	87 (17)	85 (31)	42 (29)
08Y1115	LA	9290 (23)	17.0 (29)	4.8 (30)	85 (8)	1 (1)	33 (1)
12Y135	LJ	8860 (24)	21.4 (19)	4.9 (12)	91 (27)	1 (1)	38 (9)
M401	MPQ	8630 (25)	30.6 (1)	4.9 (1)	101 (32)	1 (1)	39 (14)
11Y106	LJ	8320 (26)	24.0 (6)	4.7 (32)	89 (25)	1 (1)	46 (32)
12Y137	LB	7840 (27)	17.1 (28)	4.9 (16)	80 (1)	1 (1)	40 (20)
12Y133	LJ	7770 (28)	23.0 (7)	4.9 (12)	98 (31)	1 (1)	36 (4)
12Y138	LB	7760 (29)	15.5 (32)	4.9 (12)	86 (16)	1 (1)	38 (10)
CT202	LB	7150 (30)	16.6 (31)	4.9 (16)	88 (22)	1 (1)	33 (1)
11Y158	LB	6710 (31)	19.1 (24)	4.9 (16)	93 (30)	1 (1)	34 (3)
KOSH	SPQ	5180 (32)	19.1 (25)	4.9 (1)	92 (28)	90 (32)	44 (31)
MEAN		9880	21.1	4.9	87	6	39
CV		3.2	6.2	0.9	1	19.5	2.3
LSD (.05)		640	2.7	0.1	2	3	2

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

SR = Stem Rot resistance.

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 15. 2012 Glenn Late Advanced Rice Variety Trial

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield at 14% lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
06Y575	L	8800 (1)	15.7 (6)	5.0 (1)	90 (6)	1 (1)	40 (8)
M402	MPQ	8260 (2)	18.9 (3)	5.0 (1)	94 (8)	2 (6)	37 (6)
M205	M	8220 (3)	19.3 (2)	5.0 (1)	89 (5)	1 (1)	35 (4)
09Y2176	MPQ	8120 (4)	17.8 (4)	5.0 (1)	90 (6)	1 (1)	38 (7)
CH201	SWX	8000 (5)	15.5 (8)	5.0 (1)	88 (3)	3 (8)	34 (3)
CH202	SPQ	7970 (6)	16.0 (5)	5.0 (1)	83 (2)	2 (6)	31 (2)
L206	L	7680 (7)	15.5 (7)	5.0 (1)	82 (1)	1 (1)	31 (1)
M202	M	7660 (8)	19.4 (1)	5.0 (1)	88 (3)	1 (1)	36 (5)
MEAN		8090	17.3	5.0	88	2	35
CV		3.3	4.8		0.6	108.2	4.1
LSD (.05)		400	1.2		1		2

Preliminary Lines and Varieties

M401	MPQ	10030 (1)	19.0 (1)	5.0 (1)	97 (32)	99 (32)	44 (30)
10Y3703	M	9490 (2)	18.4 (4)	5.0 (1)	88 (14)	1 (1)	37 (16)
11Y106	LJ	9420 (3)	13.6 (30)	5.0 (1)	91 (24)	6 (27)	46 (31)
12Y135	LJ	9360 (4)	14.1 (27)	5.0 (1)	93 (29)	1 (1)	37 (17)
11Y2183	MPQ	9360 (5)	18.4 (5)	5.0 (1)	92 (25)	1 (1)	39 (25)
09Y3502	M	8620 (6)	18.0 (7)	5.0 (1)	89 (20)	1 (1)	38 (23)
10Y3690	M	8500 (7)	18.2 (6)	5.0 (1)	88 (14)	1 (1)	36 (13)
10Y3507	M	8450 (8)	17.5 (10)	5.0 (1)	86 (3)	1 (1)	35 (9)
10Y3737	M	8430 (9)	17.6 (9)	5.0 (1)	88 (14)	1 (1)	35 (9)
10Y3773	M	8430 (10)	17.5 (10)	5.0 (1)	88 (14)	1 (1)	36 (14)
10Y2081	MPQ	8360 (11)	16.5 (17)	5.0 (1)	87 (4)	1 (1)	38 (22)
09Y2173	MPQ	8310 (12)	16.8 (14)	5.0 (1)	92 (25)	26 (30)	42 (29)
10Y3717	M	8300 (13)	17.1 (13)	5.0 (1)	90 (23)	16 (28)	40 (28)
09Y2174	MPQ	8280 (14)	16.5 (16)	5.0 (1)	87 (4)	21 (29)	38 (24)
12Y130	LSR	8280 (15)	14.9 (20)	5.0 (1)	87 (4)	1 (1)	37 (19)
10Y2120	MPQ	8270 (16)	18.8 (2)	5.0 (1)	89 (20)	1 (1)	37 (19)
08Y3314	M	8270 (17)	17.8 (8)	5.0 (1)	87 (4)	1 (1)	35 (11)
10Y3789	M	8230 (18)	18.6 (3)	5.0 (1)	87 (4)	1 (1)	37 (17)
12Y132	L	8110 (19)	14.2 (24)	5.0 (1)	88 (14)	1 (1)	40 (27)
12Y133	LJ	8100 (20)	14.5 (22)	5.0 (1)	93 (29)	1 (1)	35 (8)
12Y131	L	7980 (21)	14.5 (23)	5.0 (1)	87 (4)	1 (1)	38 (21)
10Y3661	M	7920 (22)	17.4 (12)	5.0 (1)	87 (4)	1 (1)	34 (7)
A201	LA	7640 (23)	14.8 (21)	5.0 (1)	89 (20)	1 (1)	33 (4)
12Y139	LA	7620 (24)	14.2 (24)	5.0 (1)	88 (14)	1 (1)	33 (4)
10Y3748	M	7340 (25)	16.7 (15)	5.0 (1)	87 (4)	1 (1)	35 (11)
10Y3247	M	7210 (26)	16.5 (17)	5.0 (1)	83 (1)	1 (1)	34 (6)
KOSH	SPQ	6850 (27)	16.1 (19)	5.0 (1)	95 (31)	97 (31)	46 (32)
08Y1115	LA	6830 (28)	14.1 (26)	5.0 (1)	85 (2)	1 (1)	31 (2)
12Y138	LB	5910 (29)	12.7 (32)	5.0 (1)	92 (25)	1 (1)	36 (14)
12Y137	LB	5900 (30)	13.0 (31)	5.0 (1)	87 (4)	1 (1)	39 (25)
CT202	LB	5500 (31)	13.8 (29)	5.0 (1)	87 (4)	1 (1)	31 (1)
11Y158	LB	5360 (32)	13.9 (28)	5.0 (1)	92 (25)	1 (1)	32 (3)
MEAN		7960	16.1	5.0	89	9	37
CV		6.4	3.6			92.6	4.3
LSD (.05)		1050	1.2			17	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; B = Basmati; A= aromatic; J = Jasmine;
SR = Stem Rot resistance.

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. 2012 Sutter Late Advanced Rice Variety Trial

Advanced Lines and Varieties

Variety	Grain Type	Grain Yield at 14% lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
06Y575	L	10080 (1)	22.8 (5)	5.0 (1)	92 (7)	3 (4)	44 (7)
L206	L	9890 (2)	19.8 (8)	5.0 (1)	84 (3)	7 (6)	38 (2)
M202	M	9690 (3)	25.0 (4)	5.0 (1)	86 (4)	1 (1)	42 (6)
M205	M	9630 (4)	27.5 (3)	5.0 (1)	90 (5)	1 (1)	42 (5)
CH201	SWX	9280 (5)	20.0 (7)	5.0 (1)	84 (2)	3 (3)	39 (3)
CH202	SPQ	9130 (6)	20.6 (6)	5.0 (1)	81 (1)	7 (7)	38 (1)
M402	MPQ	9040 (7)	29.1 (2)	5.0 (1)	104 (8)	3 (4)	41 (4)
09Y2176	MPQ	8080 (8)	31.6 (1)	5.0 (1)	92 (6)	25 (8)	44 (8)
MEAN		9350	24.5	5.0	89	6	41
CV		4.3	3.4		1.4	96.8	2.4
LSD (.05)		600	1.2		2	9	1

Preliminary Lines and Varieties

12Y131	L	9860 (1)	21.3 (26)	5.0 (1)	86 (1)	6 (16)	42 (14)
12Y135	LJ	9850 (2)	22.3 (22)	5.0 (1)	91 (24)	1 (1)	41 (8)
10Y3690	M	9500 (3)	25.4 (16)	5.0 (1)	89 (11)	6 (16)	41 (9)
10Y3789	M	9470 (4)	28.3 (9)	5.0 (1)	89 (15)	1 (1)	43 (21)
10Y3703	M	9270 (5)	30.2 (6)	5.0 (1)	89 (11)	50 (28)	44 (22)
12Y130	LSR	9080 (6)	21.8 (25)	5.0 (1)	87 (4)	3 (13)	42 (12)
10Y3717	M	9080 (7)	28.6 (8)	5.0 (1)	91 (24)	1 (1)	43 (17)
12Y139	LA	9070 (8)	22.6 (21)	5.0 (1)	89 (15)	6 (16)	43 (18)
10Y3507	M	8790 (9)	27.3 (14)	5.0 (1)	87 (4)	5 (15)	44 (22)
A201	LA	8770 (10)	22.6 (20)	5.0 (1)	93 (27)	1 (1)	42 (11)
10Y3737	M	8740 (11)	27.9 (10)	5.0 (1)	90 (18)	1 (1)	42 (15)
12Y132	L	8630 (12)	22.0 (24)	5.0 (1)	87 (4)	6 (16)	44 (27)
10Y3748	M	8580 (13)	22.7 (18)	4.9 (31)	87 (4)	16 (21)	44 (24)
09Y2173	MPQ	8510 (14)	31.3 (3)	5.0 (1)	96 (30)	75 (29)	46 (30)
10Y3773	M	8500 (15)	27.4 (13)	5.0 (1)	88 (9)	3 (13)	39 (4)
12Y133	LJ	8420 (16)	22.7 (19)	5.0 (1)	103 (31)	1 (1)	38 (1)
12Y138	LB	8410 (17)	19.3 (31)	5.0 (1)	91 (24)	1 (1)	42 (15)
09Y3502	M	8370 (18)	29.2 (7)	5.0 (1)	90 (19)	20 (22)	44 (27)
CT202	LB	8170 (19)	18.9 (32)	5.0 (1)	86 (1)	1 (1)	39 (3)
10Y2120	MPQ	8040 (20)	27.7 (11)	5.0 (1)	90 (19)	45 (26)	44 (25)
11Y2183	MPQ	7850 (21)	31.4 (2)	5.0 (1)	93 (27)	35 (25)	41 (10)
10Y3247	M	7800 (22)	25.3 (17)	5.0 (1)	87 (8)	8 (20)	40 (7)
09Y2174	MPQ	7720 (23)	27.1 (15)	5.0 (1)	88 (9)	97 (31)	45 (29)
10Y3661	M	7550 (24)	27.7 (12)	4.9 (31)	89 (11)	26 (23)	39 (4)
12Y137	LB	7440 (25)	19.3 (30)	5.0 (1)	89 (11)	1 (1)	43 (20)
08Y1115	LA	7350 (26)	20.6 (27)	5.0 (1)	90 (19)	1 (1)	39 (2)
M401	MPQ	7200 (27)	33.9 (1)	5.0 (1)	111 (32)	1 (1)	44 (25)
08Y3314	M	7160 (28)	31.2 (4)	5.0 (1)	90 (19)	33 (24)	42 (12)
11Y158	LB	7040 (29)	20.2 (28)	5.0 (1)	89 (15)	1 (1)	40 (6)
10Y2081	MPQ	6540 (30)	31.0 (5)	5.0 (1)	90 (19)	95 (30)	43 (18)
11Y106	LJ	6290 (31)	19.6 (29)	5.0 (1)	86 (1)	48 (27)	47 (31)
KOSH	SPQ	4440 (32)	22.2 (23)	5.0 (1)	94 (29)	99 (32)	51 (32)
MEAN		8170	25.3	5.0	90	22	43
CV		7.7	4.1	1.1	0.6	94.6	3.6
LSD (.05)		1280	2.1		1	42	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; B = Basmati; A = aromatic; J = Jasmine;
SR = Stem Rot resistance.

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

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

Numbers in parentheses indicate relative rank in column.

Table 17. Grain Yield (lb/acre @14% moisture) Summary of Intermediate/
Late Rice Varieties by Location and Year (2008-2012)

Location	Year	M-205	M-402	M-202	L-206
Biggs (RES)	2008	10950	9220	10310	10740
	2009	9290	9110	8300	9950
	2010	11030	8240	10430	11610
	2011	10270	9200	9160	9990
	2012	11210	10260	11090	11180
<u>Location Mean</u>		10550	9206	9858	10694
Glenn	2008	8440	7240	8300	8710
	2009	10120	10610	9230	10440
	2010	9210	9360	7970	8340
	2011	9550	9820	9030	8900
	2012	8220	8260	7660	7680
<u>Location Mean</u>		9108	9058	8438	8814
Sutter	2008	8430	9180	8780	7830
	2009	8180	8010	7080	7470
	2010	9190	9300	10500	9390
	2011	9310	8000	9010	9780
	2012	9630	9040	9690	9890
<u>Location Mean</u>		8948	8706	9012	8872
<u>Loc/Years Mean</u>		9535	8990	9103	9460
Yield % M-202		104.8	98.8	100	105.2
<u>Number of Tests</u>		15	15	15	15

Table 18. 2012 Twitchell Island Large Plot Variety Test

Four varieties: CM101, S102, M104, and M206

Three replications, RCB

Drill Seeded 5-18-2012, Harvested 11-07-2012

Variety	Grain Type	Grain Yield at 14% lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
S102	S	8060 (1)	18.8 (4)	4.6 (4)	100 (1)	1 (1)	33 (4)
M104	M	8040 (2)	21.0 (3)	5.0 (1)	103 (2)	1 (1)	33 (3)
CM101	S	7160 (3)	21.5 (1)	4.8 (3)	105 (3)	1 (1)	29 (1)
M206	M	6960 (4)	21.2 (2)	5.0 (1)	110 (4)	1 (1)	32 (2)
MEAN		7550	20.6	4.9	105	1	32
CV		6.8	27.9	6.3	1.1		6.8
LSD (.05)					2		

S = short; M = medium; L = long.

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.

2012 TWITCHELL ISLAND SMALL PLOT RICE VARIETY TRIAL

Drill Seeded 5-18-2012, Harvested 11-07-2012

Variety	Grain Type	Grain Yield at 14% lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
M105	M	8250 (1)	22.3 (11)	5.0 (1)	106 (4)	1 (1)	33 (17)
S102	S	8060 (2)	18.1 (17)	5.0 (1)	109 (6)	1 (1)	32 (12)
09Y2141	SWX	7920 (3)	22.0 (13)	5.0 (1)	106 (3)	1 (1)	33 (14)
M104	M	7630 (4)	23.2 (9)	5.0 (1)	109 (7)	1 (1)	32 (13)
08Y3126	M	7480 (5)	24.9 (7)	5.0 (1)	112 (10)	1 (1)	31 (10)
M206	M	7440 (6)	25.4 (6)	5.0 (1)	113 (11)	1 (1)	33 (15)
06Y575	L	7430 (7)	22.1 (12)	5.0 (1)	115 (13)	1 (1)	33 (18)
11Y1044	L	7180 (8)	18.7 (16)	5.0 (1)	111 (8)	1 (1)	30 (6)
CM101	S	6930 (9)	17.3 (18)	4.8 (18)	105 (1)	1 (1)	31 (9)
09Y2179	S	6720 (10)	23.0 (10)	5.0 (1)	105 (2)	1 (1)	33 (16)
CH202	SPQ	6630 (11)	19.9 (14)	5.0 (1)	108 (5)	1 (1)	30 (7)
L206	L	6130 (12)	19.5 (15)	5.0 (1)	111 (9)	1 (1)	26 (1)
08Y3310	M	5190 (13)	29.3 (4)	4.9 (17)	122 (16)	1 (1)	28 (2)
M202	M	4650 (14)	27.8 (5)	5.0 (1)	121 (15)	1 (1)	31 (11)
09Y3887	M	3990 (15)	30.6 (2)	5.0 (1)	120 (14)	1 (1)	29 (4)
08Y3269	M	3640 (16)	32.5 (1)	5.0 (1)	122 (17)	1 (1)	31 (8)
CH201	SPQ	3520 (17)	23.8 (8)	5.0 (1)	114 (12)	1 (1)	29 (3)
M205	M	2990 (18)	29.9 (3)	5.0 (1)	124 (18)	1 (1)	29 (5)
MEAN		6210	23.9	5.0	113	1	31
CV		10.8	3.7	2	3.6		4.4
LSD (.05)		950	1.3		6		2

S = short; M = medium; L = long; PQ = premium quality; 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.