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

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OBJECTIVES AND EXPERIMENTS CONDUCTED BY LOCATION TO ACCOMPLISH OBJECTIVES:

Objective I

To evaluate newly developed cultivars and existing varieties in on-farm trials under grower conditions in cooperation with the Rice Experiment Station for the purpose of new variety development and release. Cultivar 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: Two 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 16 entries (nine commercial varieties and seven advanced breeding lines) in four replications. The Preliminary tests included 36 entries, 30 preliminary breeding lines and six commercial varieties as checks, in two replications.

Early Maturity Group: Two uniform tests were conducted at each of the following on-farm sites: the Larrabee Ranch (Glenn County), the Dennis Ranch (Colusa County), and the Charlie Matthews (Jr) Ranch (District 10, Yuba County). Two additional trials, Advanced and Preliminary, were conducted at the RES. The Advanced test at each site included 16 entries (eight commercial varieties and eight advanced breeding lines) in four replications. The Preliminary tests included 39 entries (eight commercial varieties and 31 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 11 entries (seven commercial varieties and four advanced breeding lines) in four replications. The Preliminary tests included 25 entries (seven commercial varieties and 18 preliminary breeding lines) in two replications.

Objective II

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.

To provide professional technical assistance to other UC research project leaders, we assisted in approximately 34 trials including the 16 variety tests. Equipment from the UCCE-based pool for planting and harvesting field experiments was used at 10 sites at different times during the season. The most heavily used equipment was the ALMACO combine followed by a Kincaid drill seed planter. The rice combines were maintained according to the established maintenance schedules.

The ALMACO rice combine was used to harvest all of the statewide trials and RES tests.

Objective III

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 other printed material. We hosted the annual Rice Breeders Field Tour. The UCCE rice website is back online and new materials are being added as they become available.

SUMMARY OF 2014 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 (2 or more years) of testing. 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 and preliminary 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 seven advanced breeding lines were compared in four very early advanced tests. The preliminary tests evaluated six commercial varieties and 30 preliminary lines in separate tests at each location. Commercial varieties at each location included S-102, A-202, CA-201, CH-201, CH-202, CM-101, M-104, M-105, M-202, M-203, M-205, M-206, M-208, M-402 and L-206.

Grain yields in the advanced tests averaged 9,030 overall, 8,530 lbs/ac at Biggs-RES, 9,210 lbs/ac at Sutter, 9,420 lbs/ac at Yolo and 9,010 lbs/ac at San Joaquin (Tables 1-5). The three highest yielding entries, on average, were advanced medium grain line 08Y3269, medium premium quality grain line 11Y2022, and medium blast resistant grain line 12Y113 (9,670, 9,630, and 9,620 lbs/ac respectively). The top yielding commercial varieties M-206, M-205, M-104 and L-206 ranked fifth, seventh, ninth, and eleventh respectively. Averaged across four locations, cultivar yields in the preliminary tests ranged from 10,320 to 6,160 lbs/ac (Table 1). Average grain moisture at harvest and lodging increased (0.6% and 20%

respectively) while days to 50% heading decreased 2 days in 2014 as compared to 2013. Seedling vigor and plant height were essentially the same as in 2013. Field preparation was completed earlier than normal due to a relatively dry spring. Planting was completed within the average time frame, however several districts experienced delayed water deliveries this year resulting in large areas being planted in a short period of time. Relatively dry weather resulted in a timely harvest and reasonably good grain quality.

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 eight advanced lines were compared in four early advanced tests. The preliminary tests included eight commercial varieties and 31 preliminary lines evaluated in separate tests at each location. Commercial varieties at each location were S-102, A-201, CH-201, CH-202, CM-101, M-105, M-202, M-203, M-205, M-206, M-208, M-402, A-202, CA-201, CT-202, and L-206.

Yields in the advanced line tests averaged 8790 lbs/ac overall, 8510 lbs/ac at the RES; 9060 lbs/ac at Butte, 8940 lbs/ac at Colusa and 8650 lbs/ac at Yuba (Tables 7-11). Advanced long grain 13Y1073 was the highest yielding entry (9,900 lbs/ac) when averaged over four locations in 2014 (Table 7). Advanced long grain lines 11Y1005 and 11Y1008 and the medium grain blast resistant line 12Y113 yielded second, third, and fourth respectively. The yield of commercial varieties M-206, L-206, M-205, M-202, and CH-202 ranked seventh, eighth, ninth, twelfth and thirteenth over all locations (Table 7). Average days to 50% heading ranged from 82 days at Biggs and Butte to 86 days at the slightly cooler Yuba County site. The commercial standard M-206 headed at 80 days at Biggs and 84 days at Yuba. The average yield of M-105 decreased 3.3% compared to 2013. Nine experimental lines averaged significantly higher yields than M-105 in the Preliminary tests.

L-206 was the highest yielding commercial variety (9,561 lbs/ac) followed by M-206 (9,543 lbs/ac) and M-205 (9,509 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) - Seven commercial varieties and four advanced lines were compared in three intermediate-late tests. The Sutter test was not included in the over-location yield summary table due to severe lodging resulting in unusually high yield CVs. The preliminary tests included seven commercial varieties and 18 preliminary lines that were evaluated in separate tests at each location. Commercial varieties at each location included CM-101, CH-201, CH-202, Koshihikari, M-105, M-202, M-203, M-205, M-206, M-208, M-401, M-402, L-206, and A-202.

Average yields in the advanced tests were 9520 lbs/ac overall, 10,220 lbs/ac at the RES, 8,820 lbs/ac at Glenn and 8,590 lbs/ac at Sutter (Tables 13-16). The 2014 advanced over location average yield increased 650 lbs/ac (7%) compared to the 2013 average. The average yields at the Biggs increased 660 lbs/ac and increased 200 lbs/ac at Glenn compared to the 2013 season. In the advanced tests, M-205 was the highest yielding commercial variety (9,730 lbs/ac), ranking fifth overall. L-206 and M-402 were the next highest yielding commercial varieties across locations, ranking sixth and seventh respectively (Table 13). The medium premium quality grain entry 11Y2183 was the highest yielding advanced entry across all locations at 10,350 lbs/ac. Average days to 50% heading decreased four days compared to 2013. M-401 and Koshihikari were the latest varieties (108 and 113 days respectively) to reach 50% heading among the commercial varieties at all locations.

Averaged over the last 5 years and across locations, L-206 is the highest yielding (9,512 lbs/ac) commercial variety closely followed by M-205 at 9,495 lbs/ac. L-206 and M-205 produced 107% and 105% of the yield of M-202 on average over the last 5 years and across all locations (Table 17).

Objective II - 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 test plots this year. Muddy field conditions were not a factor this year and the SWECO was not needed.

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 available for use along with personnel to provided technical assistance for numerous field experiments in 2014. Equipment from the UCCE-based pool for planting and harvesting field experiments was used at 16 sites at different times during the season. The ALMACO was used to harvest 16 variety tests, one chemical trial, two growth regulator trials, three fertility trials and four rice grain Arsenic trials. Over 1,500 experimental plots were harvested in 2014. 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, the annual rice breeders' field tour and to the several UC campus based Rice Research Board meetings held each year.

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

1. The Annual Agronomy Progress Report No. 317 "California Rice Varieties: Description and Performance Summary of the 2013 Multiyear Statewide Rice Variety Tests In California".
2. The UCCE website is online and is continually being updated.

Publications and Reports:

1. Linquist, B.A., K.J. van Groenigen, M.A. Adviento-Borbe, C. Pittelkow and C. van Kessel. 2012. An agronomic assessment of greenhouse gas emissions from major cereal crops. Global Change Biology 18:194-209 doi:10.1111/j.1365-2486.2011.02502.x

2. 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.

3. Lundy, M.E., D.F. Spencer, C. van Kessel, J.E. Hill and B.A. Linquist. 2012. Managing phosphorus fertilizer to reduce algae, maintain water quality, and sustain yields in water-seeded rice. Field Crops Research 131:81-87.

4. Linquist, B.A., M.A. Adviento-Borbe, C.M. Pittelkow, C. van Kessel and K.J. van Groenigen. 2012. Fertilizer management practices and greenhouse gas emissions from rice systems: A quantitative review and analysis. Field Crops Research 135:10-21.

5. Liang, X.Q., H. Li, S.X. Wang, Y.S. Ye1, Y.J. Ji, G.M. Tian, C. van Kessel and B.A. Linquist. 2013. Nitrogen source and rate influence yield-scaled global warming potential in rice cropping systems. Field Crops Research 146:66-74.

6. Simmonds, M.B., R.E. Plant, J.M. Peña-Barragán, C. van Kessel, J. Hill and B.A. Linquist. 2013. Underlying causes of yield spatial variability and potential for precision management in rice systems. Precision Agriculture 14:512-540.

7. Pittelkow, C.M., M.A. Adviento-Borbe, J.E. Hill, J. Six, C. van Kessel, B.A. Linquist 2013. Yield-scaled global warming potential of annual nitrous oxide and methane emissions from continuously flooded rice in response to nitrogen input. Agriculture, Ecosystems and Environment 177:10-20.

8. Adviento-Borbe, M.A., C.M. Pittelkow, M. Anders, C. van Kessel, J.E. Hill, A.M. McClung, J. Six, and B.A. Linquist. (2013). Optimal fertilizer N rates and yield-scaled global warming potential in drill seeded rice. Journal of Environmental Quality 42:1623-1634.

9. Linquist, B.A., L. Liu, C. van Kessel, and K.J. van Groenigen. (2013) Enhanced efficiency nitrogen fertilizers for rice systems: meta-analysis of yield and nitrogen uptake. Field Crops Research 154: 246-254

10. Hill, JE, Canevari, WM, Espino, LA, Greer, C.A., Mutters, RG, and Wennig, RL 2013. University of California Cooperative Extension (UCCE) rice variety adaptation and cultural practices research. *In* Annual Report Comprehensive Rice Research 2013. University of California and USDA. (available in e-version only).

11. Pittelkow, C., M.A. Adviento-Borbe, C. van Kessel, J. Hill, B. Linquist. (2014). Optimizing rice yields while minimizing yield-scaled global warming potential. Global Change Biology 20:1382-1393.

12. Lundy ,M. E., J.E. Hill, C. van Kessel, D. A. Owen, R. M. Pedroso, L. G. Boddy, A. J. Fischer, and B. A. Linquist. (2014). Site-specific, real-time temperatures improve the accuracy of weed emergence predictions in a direct-seeded rice system. Agricultural Systems 123:12-21.

13. Liang, X.Q., T. Harter, L. Porta, C. van Kessel, and B.A. Linquist. (2014) Nitrate leaching in Californian rice fields: a field and regional scale assessment. Journal of Environmental Quality: 43:881-894.

14. Linquist, B.A., M. Ruark, R. Mutters, C. Greer, and J. Hill. (2014). Nutrients and sediments in surface runoff water from rice fields: Implications for nutrient budgets and water quality. Journal of Environmental Quality 43:1725-1735.

15. Spencer, D. and B.A. Linquist. (2014) Reducing rice field algae and cyanobacteria by altering phosphorus fertilizer applications. Paddy and Water Environment 12:147-154.

16. Pittelkow, C.M., Y. Assa, M. Burger, W.R. Horwath, R.G. Mutters, C.A. Greer, L.A. Espino, J.E. Hill, C. van Kessel, B.A. Linquist. (2014). Nitrogen management and methane emissions as affected by alternative establishment practices in direct-seeded rice. Agronomy Journal 106:968-980.

17. Linquist, B.A., M. Anders, M.A. Adviento-Borbe, R.L. Chaney, L.L. Nalley, E. E.F. da Rosa, and C. van Kessel. (2014) Reducing greenhouse gas emissions, water use and grain arsenic levels in rice systems. Global Change Biology. doi:10.1111/gcb.12701.

18. Brodt, S., A. Kendall, Y. Mohammadi, A. Arslan, J.Yuan, I. Lee, B. Linquist. (2014) Life cycle greenhouse gas emissions in California rice production. Field Crops Research 169:89-98.

19. Simmonds, M.B., M. Anders, M.A. Adviento-Borbe, C. van Kessel, A. McClung, and B.A. Linquist. (In Press). Seasonal CH_4 and N_2O emissions and plant growth characteristics in direct seeded rice systems. Journal of Environmental Quality.

20. Nalley, L. L., M.M. Anders, K.F. Kovacs, and B. Linquist (In Press) The economic viability of alternate wetting and drying (AWD) irrigation in rice production in the mid-south. Agronomy Journal.

CONCISE GENERAL SUMMARY OF CURRENT YEAR'S RESULTS:

Sixteen 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 9,030 lbs/acre in the very early trials to 9,520 lbs/acre in the intermediate/late tests. In the early tests the advanced lines average yield was 8,790 lbs/acre. Field preparation was completed earlier than normal due to a relatively dry spring. Planting was also completed in a timely manner, however several areas experienced delayed water deliveries this year resulting in large areas being planted in a short period of time. Several advanced lines in 2014 produced high yields as well as demonstrating 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.

Project RM-2 was involved in the planting, sampling and harvesting of more than 10 trial sites throughout the rice growing areas. This project 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. 2014 Four Location Very Early Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	Over All Ave Grain Yield at 14% Moisture lbs/acre	Single Location Yields				Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
			Biggs	Sutter	Yolo	San Joaquin					
08Y3269	M	**9670 (1)**	10070 (1)	9310 (8)	9960 (3)	9350 (6)	17.6 (7)	5.0 (7)	91 (13)	16 (4)	38 (11)
11Y2022	MPQ	**9630 (2)**	9540 (5)	10020 (2)	9370 (11)	9590 (3)	17.9 (5)	4.9 (12)	85 (10)	34 (10)	39 (14)
12Y113	MB	**9620 (3)**	9750 (3)	9650 (5)	9540 (9)	9550 (4)	18.5 (3)	5.0 (7)	88 (11)	45 (14)	39 (15)
11Y1005	L	**9570 (4)**	9560 (4)	9860 (3)	10080 (1)	8770 (11)	15.5 (13)	4.9 (10)	85 (9)	3 (2)	40 (16)
M206	M	**9520 (5)**	9200 (7)	9710 (4)	9770 (6)	9390 (5)	17.6 (8)	4.9 (10)	85 (7)	41 (12)	39 (13)
11Y1008	L	**9500 (6)**	9220 (6)	10130 (1)	9630 (7)	9010 (7)	15.9 (12)	4.8 (16)	85 (8)	11 (3)	37 (8)
M205	M	**9380 (7)**	9770 (2)	9170 (10)	9780 (5)	8810 (10)	17.8 (6)	4.9 (13)	94 (15)	21 (7)	37 (5)
09Y2141	SWX	**9350 (8)**	8470 (10)	9300 (9)	9870 (4)	9740 (1)	18.5 (4)	5.0 (2)	81 (4)	41 (13)	38 (12)
M104	M	**9240 (9)**	8150 (11)	9510 (6)	9610 (8)	9680 (2)	16.1 (10)	5.0 (6)	80 (2)	37 (11)	37 (7)
09Y2179	S	**9050 (10)**	9020 (8)	8190 (15)	10040 (2)	8950 (8)	20.2 (1)	5.0 (5)	94 (15)	1 (1)	38 (10)
L206	L	**8860 (11)**	8580 (9)	9440 (7)	8760 (15)	8660 (12)	15.3 (14)	4.9 (14)	84 (6)	20 (6)	35 (1)
CH202	SPQ	**8710 (12)**	7930 (12)	8630 (14)	9340 (12)	8930 (9)	16.9 (9)	4.9 (15)	83 (5)	64 (16)	36 (2)
M202	M	**8620 (13)**	7330 (14)	9060 (11)	9450 (10)	8650 (13)	19.1 (2)	5.0 (1)	93 (14)	20 (5)	38 (9)
S102	S	**8470 (14)**	7640 (13)	8770 (13)	8980 (13)	8480 (14)	14.2 (16)	5.0 (2)	79 (1)	34 (9)	37 (6)
CH201	SPQ	**7870 (15)**	5720 (16)	8840 (12)	8800 (14)	8110 (16)	16.1 (10)	4.9 (9)	88 (12)	51 (15)	36 (3)
CM101	SWX	**7580 (16)**	6540 (15)	7780 (16)	7580 (16)	8440 (15)	14.3 (15)	5.0 (2)	80 (3)	32 (8)	36 (4)
MEAN		**9030**	8530	9210	9420	9010	17	4.9	86	29	37
CV		**5.1**	4.9	5.1	6.7	3.5	7.4	1.5	0.9	54.9	3.3
LSD (.05)		**320**	600	670	910	450	0.9	0.1	1	11	1

Preliminary Lines and Varieties

10Y2043	S	**10320 (1)**	10210 (1)	10730 (1)	10670 (1)	9650 (12)	14.7 (35)	4.9 (34)	81 (5)	62 (35)	36 (3)
13Y1073	L	**9970 (2)**	9850 (2)	9810 (5)	10240 (7)	9960 (2)	14.5 (36)	5.0 (12)	85 (17)	8 (5)	36 (4)
11Y3326	M	**9570 (3)**	8410 (15)	9960 (4)	10000 (12)	9890 (3)	16.5 (20)	4.9 (19)	84 (11)	39 (25)	39 (29)
12Y3097	MB	**9530 (4)**	9190 (4)	8910 (27)	10520 (3)	9490 (19)	16.8 (14)	4.9 (29)	85 (12)	32 (18)	37 (12)
11Y3672	M	**9500 (5)**	8990 (5)	9330 (19)	10070 (9)	9600 (15)	17.0 (10)	5.0 (12)	86 (21)	15 (11)	38 (18)
M105	M	**9470 (6)**	7680 (29)	10380 (2)	10150 (8)	9660 (11)	16.2 (25)	4.9 (19)	81 (3)	38 (24)	38 (20)
11Y3606	M	**9430 (7)**	8420 (14)	9710 (8)	10320 (6)	9280 (23)	16.9 (12)	5.0 (5)	84 (10)	34 (21)	37 (11)
13Y3046	M	**9410 (8)**	8090 (22)	9730 (6)	10070 (10)	9750 (6)	15.7 (30)	4.9 (29)	82 (6)	54 (33)	38 (25)
12Y2174	MPQ	**9400 (9)**	8880 (8)	9280 (20)	9720 (16)	9710 (10)	16.5 (17)	5.0 (5)	91 (30)	18 (12)	39 (31)
13Y3150	M	**9390 (10)**	7950 (24)	9680 (9)	10450 (4)	9460 (20)	15.8 (28)	4.9 (19)	87 (23)	9 (6)	38 (17)
08Y3126	M	**9340 (11)**	8570 (12)	9590 (13)	9490 (19)	9710 (9)	17.7 (6)	4.9 (19)	85 (19)	35 (22)	39 (30)
13Y3093	M	**9340 (12)**	8360 (16)	8940 (26)	10330 (5)	9730 (7)	16.6 (16)	5.0 (12)	85 (16)	9 (6)	37 (7)
13Y3192	M	**9290 (13)**	7990 (23)	9630 (10)	10600 (2)	8940 (32)	15.6 (31)	4.9 (19)	89 (28)	33 (20)	38 (16)
12Y2163	MPQ	**9280 (14)**	8790 (9)	9200 (22)	9790 (15)	9350 (21)	17.1 (9)	4.9 (19)	93 (35)	7 (4)	37 (8)
13Y3071	M	**9280 (15)**	8220 (21)	9430 (15)	9880 (13)	9590 (16)	15.8 (29)	4.9 (29)	83 (8)	32 (17)	38 (19)
13Y3043	M	**9270 (16)**	8270 (20)	9620 (11)	9540 (18)	9640 (13)	16.5 (19)	5.0 (12)	81 (4)	24 (14)	37 (10)
13Y2015	S	**9230 (17)**	8310 (19)	9360 (17)	9660 (17)	9610 (14)	18.3 (2)	4.9 (36)	87 (22)	18 (12)	37 (13)
13Y3012	M	**9210 (18)**	8970 (6)	9980 (3)	8190 (31)	9720 (8)	16.3 (24)	5.0 (5)	80 (1)	40 (27)	38 (24)
13Y3036	M	**9160 (19)**	7830 (26)	9410 (16)	9880 (14)	9540 (17)	16.1 (26)	4.9 (19)	83 (9)	48 (31)	37 (9)
13Y1037	LSR	**9150 (20)**	9280 (3)	9720 (7)	9090 (21)	8530 (34)	15.4 (33)	5.0 (5)	87 (24)	1 (1)	39 (33)
13Y3052	M	**9040 (21)**	8700 (10)	9060 (24)	8400 (29)	10030 (1)	16.5 (18)	5.0 (12)	82 (6)	39 (26)	38 (26)
12Y2108	MPQ	**9000 (22)**	8930 (7)	8760 (31)	8460 (28)	9850 (4)	16.9 (13)	4.9 (19)	91 (32)	27 (15)	40 (34)
12Y2104	MPQ	**8930 (23)**	7910 (25)	8830 (29)	10020 (11)	8950 (31)	17.7 (5)	4.9 (19)	92 (33)	1 (1)	38 (23)
13Y3216	MB	**8890 (24)**	7650 (30)	9340 (18)	9280 (20)	9270 (25)	17.7 (4)	5.0 (5)	86 (20)	45 (29)	38 (15)
A202	LA	**8850 (25)**	8670 (11)	9600 (12)	8580 (26)	8530 (35)	16.3 (23)	5.0 (5)	88 (26)	15 (10)	37 (14)
11Y3403	M	**8830 (26)**	8340 (18)	9150 (23)	8820 (23)	8990 (30)	16.0 (27)	4.9 (19)	85 (12)	1 (1)	35 (1)
M208	MB	**8590 (27)**	7780 (27)	8520 (32)	8770 (24)	9280 (24)	16.3 (22)	5.0 (12)	91 (30)	28 (16)	39 (32)
13Y3213	MB	**8480 (28)**	8350 (17)	9450 (14)	6630 (36)	9500 (18)	17.4 (7)	4.9 (33)	85 (15)	48 (31)	39 (28)
12Y2167	SPQ	**8480 (29)**	7730 (28)	8150 (33)	8850 (22)	9180 (27)	19.1 (1)	5.0 (5)	88 (27)	14 (9)	38 (21)
13Y3215	MB	**8410 (30)**	7330 (31)	9030 (25)	8070 (32)	9240 (26)	17.8 (3)	5.0 (12)	87 (24)	55 (34)	40 (35)
M402	MPQ	**8400 (31)**	8500 (13)	7830 (34)	8270 (30)	9000 (29)	16.7 (15)	5.0 (2)	99 (36)	35 (23)	39 (27)
09Y2064	SWX	**8380 (32)**	6220 (34)	9240 (21)	8740 (25)	9330 (22)	16.5 (21)	4.9 (29)	85 (12)	13 (8)	36 (5)
M203	MPQ	**8060 (33)**	7130 (32)	6790 (36)	8540 (27)	9780 (5)	16.9 (11)	5.0 (1)	90 (29)	45 (28)	42 (36)
11Y2223	S	**7910 (34)**	6460 (33)	8840 (28)	7700 (33)	8630 (33)	15.5 (32)	4.9 (35)	80 (2)	33 (19)	36 (6)
13Y3220	MPQ	**7720 (35)**	6060 (35)	8770 (30)	6960 (34)	9070 (28)	17.3 (8)	5.0 (3)	92 (34)	68 (36)	38 (22)
CA201	SLA	**6160 (36)**	4150 (36)	7240 (35)	6880 (35)	6380 (36)	14.8 (34)	5.0 (3)	85 (18)	46 (30)	35 (2)
MEAN		**8920**	8120	9190	9090	9330	16.5	4.9	86	30	38
CV		**5.5**	6.7	5.5	6.5	3.8	5.3	1.1	1.5	78.2	3.8
LSD (.05)		**490**	1100	1020	1250	730	0.9	0.1	1	23	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA = long grain aromatic; MB = medium blast resistant; SLA = short grain low amalose;

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 2. 2014 Biggs Very Early Rice Variety Trials

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	10070 (1)	18.1 (3)	4.8 (9)	84 (13)	1 (1)	38 (14)
M205	M	9770 (2)	18.3 (2)	4.7 (13)	86 (15)	1 (1)	37 (10)
12Y113	MB	9750 (3)	18.3 (1)	4.8 (9)	82 (12)	1 (1)	37 (11)
11Y1005	L	9560 (4)	15.3 (11)	4.8 (11)	80 (10)	1 (1)	41 (16)
11Y2022	MPQ	9540 (5)	17.5 (5)	4.7 (13)	80 (9)	1 (1)	39 (15)
11Y1008	L	9220 (6)	15.2 (12)	4.7 (13)	79 (7)	1 (1)	36 (9)
M206	M	9200 (7)	15.9 (9)	4.8 (11)	79 (7)	1 (1)	37 (12)
09Y2179	S	9020 (8)	17.4 (6)	4.9 (6)	87 (16)	1 (1)	36 (8)
L206	L	8580 (9)	14.9 (14)	4.7 (16)	77 (4)	1 (1)	33 (1)
09Y2141	SWX	8470 (10)	16.9 (7)	4.9 (2)	77 (4)	13 (14)	36 (7)
M104	M	8150 (11)	16.4 (8)	4.8 (7)	75 (2)	6 (12)	35 (5)
CH202	SPQ	7930 (12)	15.4 (10)	4.8 (7)	77 (6)	63 (16)	35 (6)
S102	S	7640 (13)	12.0 (16)	4.9 (2)	75 (3)	3 (11)	35 (4)
M202	M	7330 (14)	18.0 (4)	5.0 (1)	84 (14)	1 (1)	38 (13)
CM101	SWX	6540 (15)	13.2 (15)	4.9 (2)	74 (1)	8 (13)	34 (3)
CH201	SPQ	5720 (16)	15.0 (13)	4.9 (2)	82 (11)	25 (15)	34 (2)
MEAN		8530	16.1	4.8	80	8	36
CV		4.9	10.8	1.8	1	140.7	3.7
LSD (.05)		600	2.5	0.1	1	16	2

Preliminary Lines and Varieties

10Y2043	S	10210 (1)	13.5 (35)	4.8 (13)	76 (3)	11 (29)	33 (3)
13Y1073	L	9850 (2)	16.1 (30)	4.8 (13)	80 (20)	1 (1)	35 (7)
13Y1037	LSR	9280 (3)	15.1 (33)	4.9 (5)	80 (23)	1 (1)	38 (28)
12Y3097	MB	9190 (4)	16.7 (17)	4.7 (30)	80 (20)	1 (1)	36 (17)
11Y3672	M	8990 (5)	16.6 (21)	4.8 (13)	79 (13)	1 (1)	37 (24)
13Y3012	M	8970 (6)	16.2 (27)	4.9 (5)	76 (3)	1 (1)	37 (23)
12Y2108	MPQ	8930 (7)	19.2 (5)	4.8 (21)	84 (31)	1 (1)	40 (35)
12Y2174	MPQ	8880 (8)	17.9 (8)	4.9 (5)	84 (31)	1 (1)	40 (35)
12Y2163	MPQ	8790 (9)	18.0 (7)	4.8 (21)	86 (35)	1 (1)	36 (20)
13Y3052	M	8700 (10)	16.6 (22)	4.8 (13)	77 (7)	1 (1)	38 (25)
A202	LA	8670 (11)	15.5 (32)	4.9 (5)	82 (28)	1 (1)	38 (29)
08Y3126	M	8570 (12)	17.4 (12)	4.9 (5)	79 (13)	1 (1)	36 (17)
M402	MPQ	8500 (13)	19.1 (6)	5.0 (2)	101 (36)	1 (1)	38 (29)
11Y3606	M	8420 (14)	17.0 (14)	4.9 (5)	78 (9)	1 (1)	35 (10)
11Y3326	M	8410 (15)	16.7 (19)	4.8 (21)	78 (10)	1 (1)	36 (16)
13Y3093	M	8360 (16)	16.7 (19)	4.8 (13)	79 (13)	1 (1)	34 (6)
13Y3213	MB	8350 (17)	17.5 (11)	4.7 (35)	79 (13)	6 (26)	38 (31)
11Y3403	M	8340 (18)	16.1 (31)	4.8 (21)	79 (13)	1 (1)	34 (5)
13Y2015	S	8310 (19)	17.6 (10)	4.7 (30)	80 (23)	1 (1)	36 (21)
13Y3043	M	8270 (20)	16.6 (22)	4.8 (13)	76 (3)	6 (26)	35 (12)
13Y3071	M	8220 (21)	16.7 (17)	4.7 (30)	77 (7)	1 (1)	35 (7)
13Y3046	M	8090 (22)	17.1 (13)	4.7 (30)	76 (6)	35 (33)	35 (10)
13Y3192	M	7990 (23)	16.2 (27)	4.8 (21)	81 (25)	1 (1)	36 (15)
13Y3150	M	7950 (24)	16.3 (26)	4.8 (21)	79 (13)	1 (1)	35 (12)
12Y2104	MPQ	7910 (25)	19.4 (4)	4.8 (21)	85 (33)	1 (1)	39 (33)
13Y3036	M	7830 (26)	16.1 (29)	4.8 (21)	78 (10)	20 (31)	36 (17)
M208	MB	7780 (27)	16.4 (24)	4.8 (13)	82 (28)	1 (1)	39 (34)
12Y2167	SPQ	7730 (28)	17.7 (9)	4.9 (5)	82 (26)	1 (1)	35 (9)
M105	M	7680 (29)	16.8 (16)	4.8 (21)	75 (2)	6 (26)	36 (21)
13Y3216	MB	7650 (30)	19.9 (3)	4.9 (5)	80 (20)	11 (29)	35 (14)
13Y3215	MB	7330 (31)	22.2 (1)	4.8 (13)	82 (26)	21 (32)	38 (27)
M203	MPQ	7130 (32)	16.3 (25)	5.0 (1)	83 (30)	35 (33)	38 (26)
11Y2223	S	6460 (33)	12.8 (36)	4.7 (35)	74 (1)	1 (1)	33 (1)
09Y2064	SWX	6220 (34)	17.0 (15)	4.7 (30)	79 (12)	1 (1)	34 (4)
13Y3220	MPQ	6060 (35)	21.8 (2)	4.9 (3)	85 (34)	45 (35)	38 (31)
CA201	SLA	4150 (36)	14.4 (34)	4.9 (3)	79 (13)	45 (35)	33 (2)
MEAN		8120	17.0	4.8	80	7	36
CV		6.7	6.6	1.5	0.7	160.4	4.2
LSD (.05)		1100	2.3	0.1	1	24	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA = long grain aromatic;
MB = medium blast resistant; SLA = short grain low amalose; 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 3. 2014 Sutter Very Early Rice Variety Trials

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	10130 (1)	13.3 (10)	5.0 (1)	80 (6)	38 (5)	36 (5)
11Y2022	MPQ	10020 (2)	14.1 (6)	5.0 (1)	81 (9)	74 (8)	38 (10)
11Y1005	L	9860 (3)	12.7 (14)	5.0 (1)	81 (10)	10 (2)	39 (16)
M206	M	9710 (4)	14.8 (4)	5.0 (1)	80 (8)	92 (9)	38 (11)
12Y113	MB	9650 (5)	12.6 (15)	5.0 (1)	85 (11)	97 (10)	39 (14)
M104	M	9510 (6)	13.9 (7)	5.0 (1)	75 (2)	97 (11)	38 (11)
L206	L	9440 (7)	12.6 (16)	5.0 (1)	80 (7)	58 (7)	35 (1)
08Y3269	M	9310 (8)	13.8 (8)	5.0 (1)	88 (12)	30 (3)	37 (9)
09Y2141	SWX	9300 (9)	16.3 (2)	5.0 (1)	74 (1)	99 (13)	39 (15)
M205	M	9170 (10)	13.3 (11)	5.0 (1)	91 (14)	35 (4)	37 (7)
M202	M	9060 (11)	14.9 (3)	5.0 (1)	92 (15)	44 (6)	36 (4)
CH201	SPQ	8840 (12)	13.1 (13)	5.0 (1)	88 (12)	98 (12)	36 (3)
S102	S	8770 (13)	13.7 (9)	5.0 (1)	75 (2)	99 (13)	37 (8)
CH202	SPQ	8630 (14)	14.5 (5)	4.9 (16)	79 (5)	99 (13)	35 (2)
09Y2179	S	8190 (15)	19.3 (1)	5.0 (1)	94 (16)	1 (1)	38 (13)
CM101	SWX	7780 (16)	13.1 (12)	5.0 (1)	76 (4)	99 (13)	37 (6)
MEAN		9210	14.1	5.0	82	67	37
CV		5.1	4	0.8	0.7	27.1	3.5
LSD (.05)		670	0.8		1	26	2

Preliminary Lines and Varieties

10Y2043	S	10730 (1)	13.1 (21)	5.0 (1)	78 (7)	99 (29)	35 (2)
M105	M	10380 (2)	13.3 (16)	5.0 (1)	77 (5)	97 (27)	39 (32)
13Y3012	M	9980 (3)	13.3 (18)	5.0 (1)	75 (1)	99 (29)	39 (32)
11Y3326	M	9960 (4)	13.2 (20)	5.0 (1)	79 (9)	88 (26)	39 (26)
13Y1073	L	9810 (5)	11.7 (34)	5.0 (1)	82 (17)	31 (7)	35 (1)
13Y3046	M	9730 (6)	13.0 (22)	5.0 (1)	76 (3)	99 (29)	38 (21)
13Y1037	LSR	9720 (7)	13.6 (8)	5.0 (1)	84 (24)	1 (1)	38 (22)
11Y3606	M	9710 (8)	13.3 (14)	5.0 (1)	79 (11)	85 (24)	38 (19)
13Y3150	M	9680 (9)	12.8 (25)	5.0 (1)	84 (19)	11 (5)	39 (26)
13Y3192	M	9630 (10)	12.7 (27)	5.0 (1)	87 (30)	70 (17)	37 (13)
13Y3043	M	9620 (11)	13.4 (12)	5.0 (1)	76 (3)	48 (11)	37 (18)
A202	LA	9600 (12)	13.6 (8)	5.0 (1)	85 (28)	55 (15)	36 (6)
08Y3126	M	9590 (13)	13.6 (10)	5.0 (1)	81 (14)	73 (20)	39 (32)
13Y3213	MB	9450 (14)	12.3 (31)	5.0 (1)	81 (14)	99 (29)	38 (23)
13Y3071	M	9430 (15)	12.3 (31)	5.0 (1)	78 (7)	75 (21)	39 (30)
13Y3036	M	9410 (16)	12.8 (25)	5.0 (1)	79 (9)	85 (24)	37 (8)
13Y2015	S	9360 (17)	16.4 (2)	5.0 (1)	85 (27)	40 (8)	39 (26)
13Y3216	MB	9340 (18)	12.5 (30)	5.0 (1)	82 (16)	80 (23)	37 (12)
11Y3672	M	9330 (19)	12.8 (24)	5.0 (1)	84 (24)	45 (9)	37 (8)
12Y2174	MPQ	9280 (20)	12.9 (23)	5.0 (1)	84 (19)	60 (16)	37 (13)
09Y2064	SWX	9240 (21)	14.0 (5)	5.0 (1)	84 (19)	50 (12)	37 (8)
12Y2163	MPQ	9200 (22)	13.2 (19)	5.0 (1)	84 (19)	6 (4)	36 (7)
11Y3403	M	9150 (23)	14.1 (4)	5.0 (1)	80 (12)	1 (1)	36 (3)
13Y3052	M	9060 (24)	13.4 (12)	5.0 (1)	77 (6)	99 (29)	39 (26)
13Y3215	MB	9030 (25)	11.6 (35)	5.0 (1)	84 (19)	99 (29)	39 (31)
13Y3093	M	8940 (26)	13.3 (14)	5.0 (1)	83 (18)	25 (6)	37 (8)
12Y3097	MB	8910 (27)	13.5 (11)	5.0 (1)	80 (12)	70 (19)	37 (15)
11Y2223	S	8840 (28)	13.7 (7)	5.0 (1)	75 (2)	99 (29)	37 (15)
12Y2104	MPQ	8830 (29)	14.8 (3)	5.0 (1)	88 (34)	1 (1)	36 (4)
13Y3220	MPQ	8770 (30)	11.5 (36)	5.0 (1)	88 (32)	99 (29)	38 (19)
12Y2108	MPQ	8760 (31)	12.6 (28)	5.0 (1)	90 (35)	75 (21)	37 (15)
M208	MB	8520 (32)	13.3 (16)	5.0 (1)	87 (29)	70 (17)	38 (23)
12Y2167	SPQ	8150 (33)	17.5 (1)	5.0 (1)	87 (30)	46 (10)	40 (35)
M402	MPQ	7830 (34)	11.9 (33)	5.0 (1)	96 (36)	97 (27)	38 (23)
CA201	SLA	7240 (35)	12.6 (29)	5.0 (1)	84 (24)	50 (12)	36 (4)
M203	MPQ	6790 (36)	13.9 (6)	5.0 (1)	88 (32)	55 (14)	44 (36)
MEAN		9190	13.3	5.0	82	63	38
CV		5.5	3.8		2.2	49.9	3.1
LSD (.05)		1020	1		4	64	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA = long grain aromatic;
MB = medium blast resistant; SLA = short grain low amalose; 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 4. 2014 Yolo Very Early Rice Variety Trials

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)
11Y1005	L	10080 (1)	17.8 (13)	5.0 (1)	85 (6)	1 (1)	43 (11)
09Y2179	S	10040 (2)	20.9 (9)	5.0 (1)	86 (9)	1 (1)	42 (9)
08Y3269	M	9960 (3)	20.9 (8)	5.0 (1)	93 (15)	30 (6)	43 (14)
09Y2141	SWX	9870 (4)	22.5 (5)	5.0 (1)	82 (4)	50 (11)	43 (12)
M205	M	9780 (5)	21.2 (6)	5.0 (1)	95 (16)	45 (10)	41 (6)
M206	M	9770 (6)	22.6 (4)	5.0 (1)	85 (7)	69 (13)	43 (13)
11Y1008	L	9630 (7)	19.5 (11)	4.7 (16)	86 (11)	3 (3)	40 (4)
M104	M	9610 (8)	17.2 (14)	5.0 (1)	80 (3)	43 (9)	40 (5)
12Y113	MB	9540 (9)	24.7 (2)	5.0 (1)	89 (13)	81 (15)	44 (16)
M202	M	9450 (10)	24.8 (1)	5.0 (1)	93 (14)	33 (7)	43 (10)
11Y2022	MPQ	9370 (11)	23.0 (3)	5.0 (1)	85 (7)	61 (12)	43 (14)
CH202	SPQ	9340 (12)	21.0 (7)	4.9 (13)	82 (4)	93 (16)	39 (2)
S102	S	8980 (13)	16.3 (15)	5.0 (1)	78 (1)	33 (8)	41 (7)
CH201	SPQ	8800 (14)	20.9 (10)	4.9 (13)	87 (12)	80 (14)	41 (8)
L206	L	8760 (15)	17.9 (12)	4.9 (15)	86 (9)	21 (4)	38 (1)
CM101	SWX	7580 (16)	16.1 (16)	5.0 (1)	79 (2)	21 (4)	39 (2)
MEAN		9420	20.5	5.0	86	41	41
CV		6.7	8.1	1.9	1	58.2	2.7
LSD (.05)		910	2.4	0.1	1	34	2

Preliminary Lines and Varieties

10Y2043	S	10670 (1)	17.8 (32)	4.8 (36)	81 (3)	65 (27)	40 (6)
13Y3192	M	10600 (2)	18.1 (30)	5.0 (1)	89 (26)	62 (25)	44 (30)
12Y3097	MB	10520 (3)	20.1 (14)	5.0 (1)	85 (11)	55 (23)	41 (9)
13Y3150	M	10450 (4)	18.1 (29)	5.0 (1)	88 (23)	25 (12)	42 (14)
13Y3093	M	10330 (5)	20.2 (11)	5.0 (1)	85 (11)	11 (8)	40 (6)
11Y3606	M	10320 (6)	21.5 (4)	5.0 (1)	85 (11)	50 (20)	42 (22)
13Y1073	L	10240 (7)	15.6 (36)	5.0 (1)	86 (16)	1 (1)	41 (9)
M105	M	10150 (8)	18.8 (25)	5.0 (1)	81 (3)	48 (19)	42 (18)
11Y3672	M	10070 (9)	21.2 (6)	5.0 (1)	87 (19)	13 (10)	42 (18)
13Y3046	M	10070 (10)	18.2 (28)	5.0 (1)	83 (8)	80 (29)	44 (29)
12Y2104	MPQ	10020 (11)	20.1 (13)	5.0 (1)	93 (32)	1 (1)	42 (18)
11Y3326	M	10000 (12)	20.4 (8)	5.0 (1)	89 (24)	65 (27)	44 (33)
13Y3071	M	9880 (13)	19.6 (19)	5.0 (1)	84 (10)	50 (20)	42 (24)
13Y3036	M	9880 (14)	20.6 (7)	5.0 (1)	84 (9)	85 (30)	41 (12)
12Y2163	MPQ	9790 (15)	20.2 (12)	5.0 (1)	98 (36)	20 (11)	42 (14)
12Y2174	MPQ	9720 (16)	19.6 (20)	5.0 (1)	94 (34)	11 (8)	44 (32)
13Y2015	S	9660 (17)	20.0 (15)	4.9 (35)	86 (16)	30 (13)	38 (1)
13Y3043	M	9540 (18)	20.4 (8)	5.0 (1)	81 (3)	41 (17)	40 (3)
08Y3126	M	9490 (19)	21.3 (5)	5.0 (1)	87 (19)	65 (26)	43 (28)
13Y3216	MB	9280 (20)	22.3 (2)	5.0 (1)	87 (19)	90 (32)	42 (24)
13Y1037	LSR	9090 (21)	16.7 (35)	5.0 (1)	89 (24)	1 (1)	41 (9)
12Y2167	SPQ	8850 (22)	22.3 (1)	5.0 (1)	92 (31)	8 (7)	43 (27)
11Y3403	M	8820 (23)	17.2 (34)	5.0 (1)	86 (16)	1 (1)	39 (2)
M208	MB	8770 (24)	19.1 (22)	5.0 (1)	93 (32)	40 (16)	44 (30)
09Y2064	SWX	8740 (25)	18.0 (31)	5.0 (1)	83 (7)	1 (1)	40 (4)
A202	LA	8580 (26)	18.9 (24)	5.0 (1)	90 (28)	1 (1)	41 (13)
M203	MPQ	8540 (27)	19.3 (21)	5.0 (1)	91 (29)	90 (32)	49 (36)
12Y2108	MPQ	8460 (28)	19.6 (18)	5.0 (1)	91 (30)	31 (14)	45 (34)
13Y3052	M	8400 (29)	19.6 (17)	5.0 (1)	82 (6)	55 (22)	42 (14)
M402	MPQ	8270 (30)	19.7 (16)	5.0 (1)	97 (35)	43 (18)	42 (22)
13Y3012	M	8190 (31)	20.2 (10)	5.0 (1)	81 (1)	60 (24)	42 (18)
13Y3215	MB	8070 (32)	18.9 (23)	5.0 (1)	87 (19)	99 (36)	46 (35)
11Y2223	S	7700 (33)	18.4 (27)	5.0 (1)	81 (1)	31 (14)	40 (4)
13Y3220	MPQ	6960 (34)	18.8 (26)	5.0 (1)	89 (26)	97 (35)	43 (26)
CA201	SLA	6880 (35)	17.7 (33)	5.0 (1)	85 (11)	90 (32)	40 (8)
13Y3213	MB	6630 (36)	21.5 (3)	5.0 (1)	85 (11)	85 (30)	42 (14)
MEAN		9090	19.4	5.0	87	44	42
CV		6.5	6	1.4	1.7	71	4.3
LSD (.05)		1250	2.4		3	64	4

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

MB = medium blast resistant; SLA = short grain low amalose; 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 5. 2014 San Joaquin Very Early Rice Variety Trials

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	9740 (1)	18.4 (5)	5.0 (1)	90 (3)	1 (1)	35 (10)
M104	M	9680 (2)	17.0 (8)	5.0 (1)	89 (1)	1 (1)	34 (8)
11Y2022	MPQ	9590 (3)	17.1 (7)	5.0 (1)	96 (10)	1 (1)	35 (10)
12Y113	MB	9550 (4)	18.5 (4)	5.0 (1)	97 (12)	1 (1)	37 (15)
M206	M	9390 (5)	16.9 (9)	5.0 (1)	94 (8)	1 (1)	36 (12)
08Y3269	M	9350 (6)	17.5 (6)	5.0 (1)	101 (13)	1 (1)	34 (6)
11Y1008	L	9010 (7)	15.7 (13)	5.0 (14)	94 (8)	1 (1)	36 (14)
09Y2179	S	8950 (8)	23.4 (1)	5.0 (1)	108 (16)	1 (1)	36 (12)
CH202	SPQ	8930 (9)	16.8 (10)	4.8 (16)	92 (6)	1 (1)	32 (2)
M205	M	8810 (10)	18.6 (3)	4.9 (15)	104 (15)	1 (1)	33 (4)
11Y1005	L	8770 (11)	16.3 (11)	5.0 (1)	93 (7)	1 (1)	38 (16)
L206	L	8660 (12)	15.9 (12)	5.0 (1)	92 (5)	1 (1)	33 (3)
M202	M	8650 (13)	18.9 (2)	5.0 (1)	102 (14)	1 (1)	34 (6)
S102	S	8480 (14)	14.8 (16)	5.0 (1)	89 (1)	1 (1)	35 (9)
CM101	SWX	8440 (15)	15.0 (15)	5.0 (1)	91 (4)	1 (1)	33 (5)
CH201	SPQ	8110 (16)	15.6 (14)	5.0 (1)	96 (10)	1 (1)	32 (1)
MEAN		9010	17.3	5.0	95	1	35
CV		3.5	3	1.1	1		3.2
LSD (.05)		450	0.7	0.1	1		2

Preliminary Lines and Varieties

13Y3052	M	10030 (1)	16.4 (16)	5.0 (1)	92 (6)	1 (1)	36 (20)
13Y1073	L	9960 (2)	14.7 (32)	5.0 (1)	93 (8)	1 (1)	32 (1)
11Y3326	M	9890 (3)	15.6 (27)	5.0 (1)	93 (8)	1 (1)	36 (25)
12Y2108	MPQ	9850 (4)	16.2 (20)	5.0 (1)	102 (33)	1 (1)	37 (32)
M203	MPQ	9780 (5)	18.1 (6)	5.0 (1)	101 (29)	1 (1)	38 (35)
13Y3046	M	9750 (6)	14.4 (36)	5.0 (1)	92 (7)	1 (1)	36 (30)
13Y3093	M	9730 (7)	16.2 (21)	5.0 (1)	93 (12)	1 (1)	35 (15)
13Y3012	M	9720 (8)	15.4 (30)	5.0 (1)	90 (1)	1 (1)	35 (11)
08Y3126	M	9710 (9)	18.3 (4)	4.9 (34)	96 (23)	1 (1)	37 (32)
12Y2174	MPQ	9710 (10)	15.7 (25)	5.0 (1)	101 (29)	1 (1)	36 (18)
M105	M	9660 (11)	15.6 (26)	5.0 (1)	90 (2)	1 (1)	35 (12)
10Y2043	S	9650 (12)	14.4 (34)	5.0 (1)	91 (4)	75 (36)	34 (4)
13Y3043	M	9640 (13)	15.5 (29)	5.0 (1)	91 (3)	1 (1)	36 (25)
13Y2015	S	9610 (14)	19.1 (1)	4.9 (34)	96 (24)	1 (1)	36 (25)
11Y3672	M	9600 (15)	17.5 (7)	5.0 (1)	95 (19)	1 (1)	36 (22)
13Y3071	M	9590 (16)	14.6 (33)	5.0 (1)	93 (8)	1 (1)	36 (30)
13Y3036	M	9540 (17)	15.1 (31)	5.0 (1)	93 (8)	1 (1)	35 (10)
13Y3213	MB	9500 (18)	18.2 (5)	5.0 (1)	95 (19)	1 (1)	36 (25)
12Y3097	MB	9490 (19)	17.0 (12)	5.0 (1)	94 (15)	1 (1)	35 (15)
13Y3150	M	9460 (20)	16.2 (22)	5.0 (1)	98 (26)	1 (1)	36 (25)
12Y2163	MPQ	9350 (21)	17.0 (11)	5.0 (1)	106 (35)	1 (1)	34 (6)
09Y2064	SWX	9330 (22)	16.9 (13)	5.0 (1)	94 (15)	1 (1)	34 (8)
11Y3606	M	9280 (23)	15.8 (24)	5.0 (1)	94 (15)	1 (1)	34 (6)
M208	MB	9280 (24)	16.4 (18)	5.0 (1)	101 (28)	1 (1)	35 (12)
13Y3216	MB	9270 (25)	16.4 (18)	5.0 (1)	95 (19)	1 (1)	36 (22)
13Y3215	MB	9240 (26)	18.4 (3)	5.0 (1)	98 (27)	1 (1)	37 (34)
12Y2167	SPQ	9180 (27)	19.0 (2)	5.0 (1)	94 (15)	1 (1)	35 (15)
13Y3220	MPQ	9070 (28)	17.2 (8)	5.0 (1)	106 (35)	30 (35)	34 (9)
M402	MPQ	9000 (29)	16.0 (23)	5.0 (1)	102 (33)	1 (1)	36 (18)
11Y3403	M	8990 (30)	16.8 (14)	5.0 (1)	93 (12)	1 (1)	32 (1)
12Y2104	MPQ	8950 (31)	16.7 (15)	5.0 (1)	101 (29)	1 (1)	36 (22)
13Y3192	M	8940 (32)	15.5 (28)	5.0 (1)	101 (29)	1 (1)	35 (12)
11Y2223	S	8630 (33)	17.1 (10)	4.9 (36)	91 (4)	1 (1)	36 (20)
13Y1037	LSR	8530 (34)	16.4 (17)	5.0 (1)	97 (25)	1 (1)	40 (36)
A202	LA	8530 (35)	17.2 (9)	5.0 (1)	95 (22)	1 (1)	34 (4)
CA201	SLA	6380 (36)	14.4 (35)	5.0 (1)	93 (12)	1 (1)	33 (3)
MEAN		9330	16.4	5.0	96	4	35
CV		3.8	2.7	1	0.6	150.5	3.2
LSD (.05)		730	0.9		1	12	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA = long grain aromatic;
MB = medium blast resistant; SLA = short grain low amalose; 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 6. Grain Yield (lb/acre @14% moisture) Summary of Very Early Rice Varieties by Location and Year (2010-2014)

Location	Year	**M-104**	M-202	M-206	Calmochi 101	S-102	L-206
	2010	**-**	10470	11290	9470	9380	10200
Biggs (RES)	2011*	**-**	-	-	-	-	-
	2012	**10260**	10050	10420	8500	9370	10020
	2013	**9710**	8380	8610	8580	9120	9970
	2014	**8150**	7330	9200	6540	7640	8580
Location Mean		**9373**	**9058**	**9880**	**8273**	**8878**	**9693**
	2010	**8270**	6520	7890	9500	9360	8050
Sutter	2011*	**-**	-	-	-	-	-
	2012	**8990**	8810	9320	7500	8470	9570
	2013	**9510**	9990	9710	8340	9300	9700
	2014	**9510**	9060	9710	7780	8770	9440
Location Mean		**9070**	**8595**	**9158**	**8280**	**8975**	**9190**
	2010	**8050**	7890	8210	7190	7520	8230
Yolo	2011	**10020**	9590	10230	9320	9050	9490
	2012	**9610**	8930	9900	7450	8400	9060
	2013	**9420**	9260	9790	7830	8380	9000
	2014	**9610**	9450	9770	7580	8980	8760
Location Mean		**9342**	**9024**	**9580**	**7874**	**8466**	**8908**
	2010	**8360**	7760	7560	8070	7950	8170
San Joaquin	2011	**8800**	9090	9330	7850	7760	8340
	2012	**8460**	7490	8990	7880	8180	7570
	2013	**8140**	8140	8410	7680	7960	8180
	2014	**9680**	8650	9390	8440	8480	8660
Location Mean		**8688**	**8226**	**8736**	**7984**	**8066**	**8184**
Loc/Years Mean		**9091**	8714	9318	8083	8559	8944
Yield % M-104		**100.0**	**95.9**	**102.5**	**88.9**	**94.2**	**98.4**
Number of Tests		**17**	18	18	18	18	18

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

Table 7. 2014 Four Location Early Rice Variety Trials

Advanced Lines and Varieties

Variety	Grain Type	**Ave Grain Yield at 14% Moisture lbs/acre**	Single Location Yields Biggs	Butte	Colusa	Yuba	Ave Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
13Y1073	L	**9900 (1)**	10330 (1)	9450 (6)	9670 (3)	10120 (2)	14.1 (14)	4.9 (11)	82 (9)	9 (5)	38 (4)
11Y1005	L	**9630 (2)**	9280 (5)	8660 (12)	9760 (1)	10810 (1)	13.9 (15)	4.9 (9)	80 (5)	5 (2)	41 (16)
11Y1008	L	**9610 (3)**	9000 (8)	9680 (3)	9720 (2)	10050 (3)	14.2 (13)	4.9 (15)	81 (7)	5 (3)	40 (14)
12Y113	MB	**9530 (4)**	9600 (4)	10040 (1)	9650 (4)	8820 (8)	18.1 (4)	4.9 (10)	83 (10)	55 (11)	40 (13)
08Y3269	M	**9300 (5)**	9670 (3)	9140 (8)	9600 (6)	8800 (9)	18.0 (7)	5.0 (5)	88 (13)	10 (6)	40 (8)
11Y2183	MPQ	**9270 (6)**	9710 (2)	8930 (11)	9530 (7)	8920 (7)	19.0 (1)	4.9 (16)	92 (16)	12 (7)	39 (7)
M206	M	**9270 (7)**	9240 (6)	9610 (5)	9280 (10)	8950 (6)	17.1 (8)	5.0 (2)	81 (8)	46 (10)	40 (12)
L206	L	**9250 (8)**	8640 (10)	9730 (2)	9380 (8)	9260 (4)	13.6 (16)	4.9 (13)	80 (4)	42 (9)	36 (1)
M205	M	**9190 (9)**	9140 (7)	9140 (7)	9370 (9)	9120 (5)	18.0 (6)	5.0 (3)	90 (14)	5 (3)	38 (5)
09Y2179	S	**8920 (10)**	8760 (9)	8950 (10)	9640 (5)	8330 (10)	19.0 (2)	5.0 (5)	90 (15)	1 (1)	40 (11)
09Y2141	SWX	**8570 (11)**	8310 (11)	9650 (4)	8310 (12)	8010 (11)	18.9 (3)	5.0 (5)	79 (3)	72 (13)	41 (15)
M202	M	**8030 (12)**	7010 (14)	8360 (14)	8720 (11)	8010 (12)	18.1 (5)	5.0 (5)	88 (12)	19 (8)	40 (10)
CH202	SPQ	**7920 (13)**	7580 (12)	9120 (9)	7590 (15)	7370 (14)	16.9 (9)	4.9 (13)	80 (6)	87 (16)	38 (3)
S102	S	**7850 (14)**	7320 (13)	8570 (13)	8080 (13)	7420 (13)	14.5 (12)	5.0 (3)	77 (1)	71 (12)	40 (9)
CH201	SPQ	**7390 (15)**	6220 (16)	8310 (15)	7740 (14)	7290 (15)	16.0 (10)	5.0 (1)	86 (11)	84 (15)	37 (2)
CM101	SWX	**7040 (16)**	6400 (15)	7570 (16)	7070 (16)	7120 (16)	14.5 (11)	4.9 (12)	78 (2)	76 (14)	39 (6)
MEAN		**8790**	8510	9060	8940	8650	16.5	4.9	83	37	39
CV		**5**	4.5	3.1	5.7	6.4	6.7	1.2	1.7	47.1	3.5
LSD (.05)		**310**	540	400	730	790	0.8	0	1	12	1

Preliminary Lines and Varieties

13Y1156	LA	**9990 (1)**	10020 (3)	9410 (10)	9600 (2)	10940 (1)	14.4 (36)	5.0 (8)	85 (13)	8 (23)	38 (8)
12Y2175	MPQ	**9980 (2)**	10550 (2)	9740 (4)	9790 (1)	9850 (7)	17.0 (19)	4.9 (31)	89 (34)	3 (16)	41 (36)
10Y2043	S	**9660 (3)**	10950 (1)	10520 (1)	8970 (15)	8210 (27)	16.2 (25)	4.9 (14)	79 (3)	93 (39)	38 (11)
13Y3131	M	**9590 (4)**	9740 (7)	9350 (13)	9150 (8)	10100 (2)	17.5 (12)	4.9 (14)	86 (18)	3 (15)	41 (33)
13Y3146	M	**9500 (5)**	9550 (9)	9360 (12)	9220 (5)	9890 (6)	17.3 (15)	5.0 (11)	85 (15)	16 (29)	39 (16)
13Y1059	L	**9500 (6)**	9660 (8)	9430 (9)	9360 (3)	9560 (11)	15.0 (29)	5.0 (11)	84 (11)	1 (1)	40 (28)
13Y3176	M	**9470 (7)**	9790 (6)	8860 (24)	9170 (7)	10050 (4)	17.1 (17)	4.9 (19)	87 (30)	1 (1)	38 (13)
10Y3737	M	**9370 (8)**	9270 (13)	9500 (7)	9070 (11)	9630 (10)	17.4 (13)	4.8 (38)	88 (32)	7 (22)	39 (17)
13Y3156	M	**9300 (9)**	9460 (12)	9670 (5)	9040 (12)	9040 (18)	17.4 (14)	4.9 (19)	90 (35)	1 (1)	38 (9)
13Y1106	L	**9190 (10)**	8280 (24)	9370 (11)	9130 (9)	10000 (5)	14.5 (35)	4.9 (19)	83 (9)	13 (26)	38 (10)
11Y3655	M	**9190 (11)**	8820 (20)	9770 (2)	8990 (14)	9170 (17)	17.9 (8)	5.0 (8)	88 (33)	2 (14)	38 (12)
11Y2182	MPQ	**9170 (12)**	9480 (11)	8950 (22)	9260 (4)	8990 (20)	19.1 (4)	4.9 (31)	91 (37)	1 (1)	39 (23)
A202	LA	**9170 (13)**	9810 (5)	8660 (27)	9180 (6)	9020 (19)	15.8 (27)	5.0 (11)	85 (15)	6 (21)	40 (31)
M208	MB	**9150 (14)**	9070 (14)	9120 (17)	8640 (17)	9780 (8)	16.5 (23)	5.0 (4)	86 (22)	8 (25)	39 (21)
13Y3177	M	**9150 (15)**	9030 (15)	9200 (16)	8290 (25)	10090 (3)	17.1 (16)	4.9 (19)	85 (13)	4 (18)	39 (18)
13Y3193	M	**9090 (16)**	9820 (4)	8940 (23)	8920 (16)	8700 (21)	17.8 (9)	4.9 (19)	91 (36)	1 (1)	38 (4)
13Y1132	LJ	**9040 (17)**	9520 (10)	8970 (20)	8280 (26)	9370 (13)	14.9 (30)	4.9 (19)	87 (29)	1 (1)	38 (6)
13Y3181	M	**9040 (18)**	9010 (16)	8740 (26)	8990 (13)	9410 (12)	16.8 (20)	4.9 (19)	85 (17)	1 (1)	40 (29)
13P358	LJ	**8920 (19)**	8990 (17)	8990 (19)	8480 (20)	9220 (14)	16.3 (24)	4.9 (19)	87 (25)	4 (17)	40 (32)
10Y3703	M	**8880 (20)**	8910 (19)	9760 (3)	8590 (18)	8270 (26)	18.6 (6)	4.9 (36)	87 (27)	14 (28)	40 (30)
13Y3158	M	**8850 (21)**	8770 (21)	8590 (28)	8340 (23)	9710 (9)	16.1 (26)	5.0 (8)	87 (27)	1 (1)	38 (5)
M105	M	**8830 (22)**	8570 (23)	9070 (18)	9100 (10)	8590 (22)	16.7 (22)	4.9 (19)	78 (2)	39 (31)	39 (19)
A201	LA	**8750 (23)**	8090 (28)	9490 (8)	8250 (28)	9190 (15)	14.1 (37)	4.9 (14)	81 (7)	13 (26)	39 (25)
11Y2230	SPQ	**8520 (24)**	8220 (26)	9590 (6)	8430 (21)	7830 (28)	20.5 (2)	5.0 (1)	87 (25)	75 (33)	39 (15)
12Y2107	SWX	**8460 (25)**	7550 (31)	8540 (29)	8570 (19)	9180 (16)	17.7 (10)	4.9 (30)	83 (8)	21 (30)	39 (24)
M402	MPQ	**8380 (26)**	8690 (22)	8220 (33)	8320 (24)	8290 (24)	21.3 (1)	5.0 (1)	102 (39)	1 (1)	39 (22)
11Y2160	SWX	**8200 (27)**	7160 (33)	8960 (21)	8410 (22)	8270 (25)	17.0 (18)	4.9 (14)	80 (5)	60 (32)	39 (14)
13P296	LJ	**8040 (28)**	7230 (32)	8230 (32)	8200 (29)	8500 (23)	14.7 (34)	5.0 (4)	84 (10)	1 (1)	43 (38)
11Y106	LJ	**7940 (29)**	8980 (18)	8500 (30)	7860 (30)	6430 (35)	14.7 (32)	4.6 (39)	86 (19)	4 (18)	42 (37)
09Y2122	S	**7900 (30)**	7710 (30)	9350 (14)	7430 (35)	7130 (32)	17.7 (11)	4.9 (19)	80 (4)	78 (35)	41 (35)
13Y3224	MPQ	**7800 (31)**	7110 (34)	8780 (25)	7800 (31)	7510 (30)	18.3 (7)	4.9 (33)	86 (21)	86 (38)	41 (34)
M203	MPQ	**7720 (32)**	7750 (29)	9340 (15)	7760 (32)	6030 (37)	18.8 (5)	5.0 (4)	84 (12)	77 (34)	44 (39)
12Y133	LJ	**7710 (33)**	8240 (25)	7990 (35)	8260 (27)	6320 (36)	16.7 (21)	4.9 (19)	97 (38)	1 (1)	37 (1)
13Y1117	LA	**7560 (34)**	6520 (37)	8430 (31)	7660 (33)	7620 (29)	13.6 (38)	4.9 (33)	87 (30)	1 (1)	39 (20)
12Y1178	LJ	**7460 (35)**	8180 (27)	7070 (38)	7450 (34)	7120 (33)	15.7 (28)	4.9 (37)	86 (19)	1 (1)	40 (27)
13Y3223	MPQ	**7290 (36)**	6710 (35)	8050 (34)	7230 (36)	7170 (31)	19.6 (3)	4.9 (33)	86 (24)	83 (36)	40 (26)
CA201	SLA	**6440 (37)**	4950 (39)	7660 (36)	6220 (37)	6940 (34)	14.7 (31)	4.9 (14)	81 (6)	84 (37)	38 (7)
CT202	LB	**6280 (38)**	6310 (38)	7210 (37)	6150 (38)	5460 (38)	13.5 (39)	5.0 (4)	86 (22)	5 (20)	37 (3)
12Y1054	LB	**6040 (39)**	6710 (36)	6750 (39)	5520 (39)	5160 (39)	14.7 (33)	5.0 (3)	76 (1)	8 (24)	37 (2)
MEAN		**8580**	8540	8880	8390	8510	16.7	4.9	86	21	39
CV		**4.3**	2.8	4.1	4.4	5.6	5.4	1.4	2.4	74.9	3.2
LSD (.05)		**370**	480	740	740	970	0.9	0.1	2	16	1

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=Basmati; J=Jasmine; LA=long aromatic; MB=medium blast resistant; SLA= short low amalose; WX=waxy.

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

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

Numbers in parentheses indicate relative rank in column.

Table 8. 2014 Biggs Early Rice Variety Trials

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)
13Y1073	L	10330 (1)	15.0 (10)	4.7 (12)	79 (6)	1 (1)	35 (5)
11Y2183	MPQ	9710 (2)	18.1 (1)	4.8 (5)	91 (16)	1 (1)	36 (7)
08Y3269	M	9670 (3)	17.0 (5)	4.8 (5)	87 (12)	6 (8)	39 (15)
12Y113	MB	9600 (4)	17.6 (3)	4.8 (11)	83 (10)	60 (13)	38 (14)
11Y1005	L	9280 (5)	14.3 (11)	4.8 (10)	78 (5)	1 (1)	39 (16)
M206	M	9240 (6)	16.8 (6)	4.9 (2)	80 (8)	55 (12)	37 (11)
M205	M	9140 (7)	17.7 (2)	4.8 (4)	89 (15)	1 (1)	37 (9)
11Y1008	L	9000 (8)	14.3 (12)	4.6 (16)	79 (7)	1 (1)	36 (7)
09Y2179	S	8760 (9)	17.1 (4)	4.8 (5)	89 (14)	1 (1)	38 (13)
L206	L	8640 (10)	13.9 (13)	4.7 (14)	78 (4)	18 (9)	33 (2)
09Y2141	SWX	8310 (11)	15.3 (8)	4.8 (5)	77 (3)	50 (11)	37 (10)
CH202	SPQ	7580 (12)	15.2 (9)	4.7 (14)	80 (9)	85 (16)	33 (1)
S102	S	7320 (13)	12.4 (15)	4.9 (2)	75 (1)	70 (15)	36 (6)
M202	M	7010 (14)	16.2 (7)	4.8 (5)	88 (13)	1 (1)	38 (12)
CM101	SWX	6400 (15)	10.5 (16)	4.7 (13)	76 (2)	45 (10)	35 (4)
CH201	SPQ	6220 (16)	12.8 (14)	5.0 (1)	84 (11)	68 (14)	34 (3)
MEAN		8510	15.3	4.8	82	29	36
CV		4.5	7.4	2.1	2.1	40.8	3.2
LSD (.05)		540	1.6	0.1	2	17	2

Preliminary Lines and Varieties

10Y2043	S	10950 (1)	12.0 (38)	4.8 (14)	75 (2)	97 (39)	35 (5)
12Y2175	MPQ	10550 (2)	17.1 (9)	4.6 (33)	86 (30)	11 (25)	40 (37)
13Y1156	LA	10020 (3)	14.9 (26)	4.8 (10)	80 (9)	18 (30)	36 (12)
13Y3193	M	9820 (4)	17.4 (7)	4.7 (20)	87 (34)	1 (1)	37 (21)
A202	LA	9810 (5)	14.6 (27)	4.8 (11)	82 (18)	23 (31)	40 (36)
13Y3176	M	9790 (6)	16.3 (19)	4.7 (20)	84 (23)	1 (1)	38 (25)
13Y3131	M	9740 (7)	16.7 (13)	4.8 (14)	82 (14)	1 (1)	39 (31)
13Y1059	L	9660 (8)	15.3 (24)	4.8 (13)	80 (9)	1 (1)	38 (27)
13Y3146	M	9550 (9)	16.8 (12)	4.8 (11)	82 (14)	11 (25)	37 (18)
13Y1132	LJ	9520 (10)	14.5 (28)	4.7 (30)	83 (21)	1 (1)	37 (14)
11Y2182	MPQ	9480 (11)	17.9 (1)	4.6 (33)	89 (36)	1 (1)	37 (17)
13Y3156	M	9460 (12)	16.7 (13)	4.7 (20)	87 (33)	1 (1)	36 (10)
10Y3737	M	9270 (13)	16.9 (10)	4.3 (39)	87 (34)	1 (1)	38 (27)
M208	MB	9070 (14)	16.9 (10)	4.9 (4)	83 (19)	1 (1)	37 (22)
13Y3177	M	9030 (15)	16.6 (15)	4.7 (20)	82 (14)	11 (25)	37 (14)
13Y3181	M	9010 (16)	16.1 (21)	4.7 (20)	81 (13)	1 (1)	38 (27)
13P358	LJ	8990 (17)	15.5 (23)	4.7 (28)	83 (19)	13 (29)	40 (35)
11Y106	LJ	8980 (18)	15.2 (25)	4.6 (35)	89 (37)	1 (1)	42 (39)
10Y3703	M	8910 (19)	17.7 (3)	4.8 (14)	85 (27)	1 (1)	38 (30)
11Y3655	M	8820 (20)	17.4 (5)	4.9 (7)	86 (32)	1 (1)	37 (18)
13Y3158	M	8770 (21)	16.4 (18)	4.9 (7)	84 (25)	1 (1)	35 (5)
M402	MPQ	8690 (22)	17.5 (4)	5.0 (1)	107 (39)	1 (1)	38 (25)
M105	M	8570 (23)	16.5 (17)	4.7 (20)	75 (2)	11 (25)	36 (10)
13Y1106	L	8280 (24)	14.5 (29)	4.7 (20)	80 (12)	1 (1)	36 (8)
12Y133	LJ	8240 (25)	16.2 (20)	4.7 (28)	94 (38)	1 (1)	34 (3)
11Y2230	SPQ	8220 (26)	16.6 (16)	5.0 (1)	82 (14)	35 (32)	37 (14)
12Y1178	LJ	8180 (27)	15.7 (22)	4.6 (32)	84 (26)	1 (1)	38 (23)
A201	LA	8090 (28)	14.0 (35)	4.8 (14)	79 (6)	1 (1)	36 (7)
M203	MPQ	7750 (29)	17.2 (8)	4.9 (4)	83 (22)	60 (37)	42 (38)
09Y2122	S	7710 (30)	13.3 (37)	4.7 (20)	78 (5)	50 (35)	39 (33)
12Y2107	SWX	7550 (31)	13.4 (36)	4.7 (30)	79 (6)	6 (24)	38 (24)
13P296	LJ	7230 (32)	14.2 (31)	4.9 (6)	80 (8)	1 (1)	39 (34)
11Y2160	SWX	7160 (33)	14.1 (32)	4.8 (14)	76 (4)	55 (36)	36 (9)
13Y3224	MPQ	7110 (34)	17.4 (5)	4.6 (36)	86 (30)	45 (34)	39 (31)
13Y3223	MPQ	6710 (35)	17.8 (2)	4.6 (36)	85 (28)	35 (32)	37 (18)
12Y1054	LB	6710 (36)	14.4 (30)	4.9 (3)	68 (1)	1 (1)	33 (1)
13Y1117	LA	6520 (37)	14.1 (33)	4.5 (38)	85 (29)	1 (1)	36 (12)
CT202	LB	6310 (38)	14.0 (34)	4.9 (7)	84 (24)	1 (1)	33 (2)
CA201	SLA	4950 (39)	11.1 (39)	4.8 (14)	80 (9)	80 (38)	35 (4)
MEAN		8540	15.6	4.7	83	15	37
CV		2.8	6.5	2.5	1.3	52.1	2.8
LSD (.05)		480	2	0.2	2	16	2

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; WX=waxy; LB=Basmati; J=Jasmine;
MB=medium blast resistant; LA=long aromatic; SLA=short 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. 2014 Butte Early Rice Variety Trials

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)
12Y113	MB	10040 (1)	15.1 (8)	5.0 (1)	81 (9)	64 (14)	41 (13)
L206	L	9730 (2)	13.2 (12)	5.0 (1)	80 (8)	54 (12)	38 (1)
11Y1008	L	9680 (3)	12.8 (15)	5.0 (1)	78 (3)	1 (1)	40 (11)
09Y2141	SWX	9650 (4)	15.9 (3)	5.0 (1)	78 (5)	45 (11)	41 (16)
M206	M	9610 (5)	14.9 (9)	5.0 (1)	79 (7)	33 (10)	41 (15)
13Y1073	L	9450 (6)	13.2 (14)	5.0 (1)	81 (9)	1 (1)	38 (4)
M205	M	9140 (7)	15.2 (6)	5.0 (1)	87 (13)	1 (1)	38 (1)
08Y3269	M	9140 (8)	15.2 (5)	5.0 (1)	84 (11)	1 (1)	38 (6)
CH202	SPQ	9120 (9)	14.4 (10)	5.0 (1)	79 (6)	68 (15)	39 (8)
09Y2179	S	8950 (10)	16.7 (2)	5.0 (1)	90 (16)	1 (1)	40 (9)
11Y2183	MPQ	8930 (11)	16.7 (1)	5.0 (1)	89 (15)	1 (1)	38 (4)
11Y1005	L	8660 (12)	12.3 (16)	5.0 (1)	77 (2)	1 (1)	41 (14)
S102	S	8570 (13)	13.7 (11)	5.0 (1)	76 (1)	20 (9)	40 (9)
M202	M	8360 (14)	15.1 (7)	5.0 (1)	87 (13)	1 (1)	40 (12)
CH201	SPQ	8310 (15)	15.3 (4)	5.0 (1)	86 (12)	94 (16)	38 (3)
CM101	SWX	7570 (16)	13.2 (13)	5.0 (1)	78 (4)	61 (13)	39 (7)
MEAN		9060	14.6	5.0	82	28	39
CV		3.1	3.3		0.8	70	3.1
LSD (.05)		400	0.7		1	28	2

Preliminary Lines and Varieties

10Y2043	S	10520 (1)	14.6 (9)	5.0 (1)	79 (3)	78 (35)	37 (4)
11Y3655	M	9770 (2)	14.7 (7)	5.0 (1)	87 (35)	6 (25)	38 (7)
10Y3703	M	9760 (3)	14.6 (8)	5.0 (1)	85 (30)	10 (26)	41 (32)
12Y2175	MPQ	9740 (4)	13.5 (21)	5.0 (1)	86 (32)	1 (1)	41 (34)
13Y3156	M	9670 (5)	13.9 (18)	5.0 (1)	87 (34)	1 (1)	40 (29)
11Y2230	SPQ	9590 (6)	16.2 (2)	5.0 (1)	84 (21)	97 (36)	38 (10)
10Y3737	M	9500 (7)	13.9 (17)	5.0 (1)	83 (15)	26 (29)	39 (16)
A201	LA	9490 (8)	11.9 (36)	5.0 (1)	81 (8)	1 (1)	41 (33)
13Y1059	L	9430 (9)	12.1 (33)	5.0 (1)	81 (8)	1 (1)	40 (24)
13Y1156	LA	9410 (10)	12.0 (34)	5.0 (1)	82 (12)	11 (28)	39 (19)
13Y1106	L	9370 (11)	12.8 (28)	5.0 (1)	82 (11)	1 (1)	40 (22)
13Y3146	M	9360 (12)	14.5 (11)	5.0 (1)	84 (21)	1 (1)	39 (18)
13Y3131	M	9350 (13)	14.3 (14)	5.0 (1)	84 (21)	3 (23)	41 (31)
09Y2122	S	9350 (14)	15.5 (4)	5.0 (1)	80 (5)	65 (34)	40 (24)
M203	MPQ	9340 (15)	13.9 (18)	5.0 (1)	81 (10)	97 (36)	44 (38)
13Y3177	M	9200 (16)	14.8 (6)	5.0 (1)	83 (15)	5 (24)	39 (14)
M208	MB	9120 (17)	12.9 (27)	5.0 (1)	84 (21)	31 (31)	40 (22)
M105	M	9070 (18)	13.7 (20)	5.0 (1)	77 (2)	36 (32)	40 (24)
13P358	LJ	8990 (19)	12.7 (30)	5.0 (1)	84 (25)	1 (1)	41 (34)
13Y1132	LJ	8970 (20)	11.7 (38)	5.0 (1)	85 (30)	1 (1)	38 (9)
11Y2160	SWX	8960 (21)	14.3 (13)	5.0 (1)	79 (3)	30 (30)	40 (27)
11Y2182	MPQ	8950 (22)	14.8 (5)	5.0 (1)	86 (32)	1 (1)	40 (21)
13Y3193	M	8940 (23)	14.0 (16)	5.0 (1)	89 (37)	1 (1)	38 (6)
13Y3176	M	8860 (24)	13.4 (24)	5.0 (1)	84 (25)	1 (1)	38 (5)
13Y3224	MPQ	8780 (25)	14.5 (11)	5.0 (1)	83 (14)	99 (38)	42 (36)
13Y3181	M	8740 (26)	14.2 (15)	5.0 (1)	83 (15)	1 (1)	39 (12)
A202	LA	8660 (27)	13.3 (25)	5.0 (1)	84 (25)	1 (1)	41 (30)
13Y3158	M	8590 (28)	13.2 (26)	5.0 (1)	84 (25)	1 (1)	37 (3)
12Y2107	SWX	8540 (29)	14.6 (9)	5.0 (1)	80 (5)	1 (1)	39 (14)
11Y106	LJ	8500 (30)	12.3 (31)	5.0 (1)	84 (25)	10 (26)	42 (36)
13Y1117	LA	8430 (31)	11.8 (37)	5.0 (1)	87 (35)	1 (1)	39 (12)
13P296	LJ	8230 (32)	12.2 (32)	5.0 (1)	83 (15)	1 (1)	45 (39)
M402	MPQ	8220 (33)	18.5 (1)	5.0 (1)	99 (39)	1 (1)	39 (16)
13Y3223	MPQ	8050 (34)	15.6 (3)	5.0 (1)	83 (15)	99 (38)	40 (27)
12Y133	LJ	7990 (35)	13.5 (22)	5.0 (1)	93 (38)	1 (1)	37 (2)
CA201	SLA	7660 (36)	13.4 (23)	5.0 (1)	80 (5)	60 (33)	39 (19)
CT202	LB	7210 (37)	11.5 (39)	5.0 (1)	83 (15)	1 (1)	38 (7)
12Y1178	LJ	7070 (38)	12.8 (29)	5.0 (1)	82 (12)	1 (1)	38 (10)
12Y1054	LB	6750 (39)	12.0 (35)	5.0 (1)	73 (1)	1 (1)	37 (1)
MEAN		8880	13.7	5.0	83	20	40
CV		4.1	5.3		1	62.9	2.7
LSD (.05)		740	1.5		2	26	2

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=Basmati; J=Jasmine; LA=long aromatic; MB=medium blast resistant; SLA= short low amalose; 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. 2014 Colusa Early Rice Variety Trials

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)
11Y1005	L	9760 (1)	12.7 (16)	5.0 (1)	81 (5)	1 (1)	41 (15)
11Y1008	L	9720 (2)	13.6 (13)	4.9 (15)	83 (8)	1 (1)	41 (14)
13Y1073	L	9670 (3)	12.9 (15)	5.0 (1)	84 (10)	1 (1)	38 (5)
12Y113	MB	9650 (4)	17.7 (4)	5.0 (1)	83 (8)	23 (11)	40 (12)
09Y2179	S	9640 (5)	18.1 (3)	5.0 (1)	85 (11)	1 (1)	40 (13)
08Y3269	M	9600 (6)	16.9 (8)	5.0 (1)	90 (14)	1 (1)	40 (9)
11Y2183	MPQ	9530 (7)	19.4 (2)	4.7 (16)	94 (16)	1 (1)	39 (6)
L206	L	9380 (8)	13.0 (14)	5.0 (1)	83 (6)	1 (1)	35 (1)
M205	M	9370 (9)	17.5 (6)	5.0 (1)	90 (15)	1 (1)	37 (2)
M206	M	9280 (10)	15.7 (12)	5.0 (1)	83 (7)	6 (10)	39 (8)
M202	M	8720 (11)	17.2 (7)	5.0 (1)	86 (13)	3 (9)	39 (7)
09Y2141	SWX	8310 (12)	21.3 (1)	5.0 (1)	80 (4)	97 (14)	42 (16)
S102	S	8080 (13)	16.2 (10)	5.0 (14)	77 (1)	96 (13)	40 (11)
CH201	SPQ	7740 (14)	16.4 (9)	5.0 (1)	85 (12)	74 (12)	38 (3)
CH202	SPQ	7590 (15)	17.5 (5)	5.0 (1)	80 (3)	98 (15)	38 (4)
CM101	SWX	7070 (16)	16.1 (11)	5.0 (1)	79 (2)	98 (15)	40 (9)
MEAN		8940	16.4	5.0	84	31	39
CV		5.7	4.3	1.5	1.2	32	4.2
LSD (.05)		730	1	0.1	1	14	2

Preliminary Lines and Varieties

12Y2175	MPQ	9790 (1)	14.9 (27)	5.0 (1)	90 (33)	1 (1)	42 (35)
13Y1156	LA	9600 (2)	13.1 (35)	5.0 (1)	87 (21)	1 (1)	37 (3)
13Y1059	L	9360 (3)	13.5 (33)	5.0 (1)	86 (12)	1 (1)	40 (24)
11Y2182	MPQ	9260 (4)	18.4 (6)	5.0 (1)	90 (33)	1 (1)	40 (28)
13Y3146	M	9220 (5)	16.4 (18)	5.0 (1)	87 (20)	50 (30)	39 (14)
A202	LA	9180 (6)	14.3 (29)	5.0 (1)	86 (12)	1 (1)	40 (24)
13Y3176	M	9170 (7)	16.7 (13)	5.0 (1)	90 (33)	1 (1)	38 (8)
13Y3131	M	9150 (8)	15.9 (22)	5.0 (1)	86 (12)	6 (27)	39 (17)
13Y1106	L	9130 (9)	13.1 (34)	5.0 (1)	83 (7)	1 (1)	38 (8)
M105	M	9100 (10)	15.4 (25)	5.0 (1)	78 (2)	60 (33)	38 (8)
10Y3737	M	9070 (11)	16.5 (15)	5.0 (1)	90 (31)	1 (1)	39 (12)
13Y3156	M	9040 (12)	16.5 (15)	5.0 (1)	91 (37)	1 (1)	38 (11)
13Y3181	M	8990 (13)	16.2 (19)	5.0 (1)	86 (18)	1 (1)	41 (34)
11Y3655	M	8990 (14)	16.9 (12)	5.0 (1)	89 (29)	1 (1)	40 (24)
10Y2043	S	8970 (15)	16.0 (21)	5.0 (1)	78 (3)	99 (36)	40 (19)
13Y3193	M	8920 (16)	16.9 (11)	5.0 (1)	89 (29)	1 (1)	38 (6)
M208	MB	8640 (17)	16.4 (17)	5.0 (1)	86 (18)	1 (1)	39 (17)
10Y3703	M	8590 (18)	17.6 (7)	4.8 (37)	87 (21)	1 (1)	39 (14)
12Y2107	SWX	8570 (19)	18.8 (4)	5.0 (1)	86 (12)	6 (27)	40 (29)
13P358	LJ	8480 (20)	15.7 (23)	5.0 (1)	87 (21)	1 (1)	40 (19)
11Y2230	SPQ	8430 (21)	21.6 (2)	5.0 (1)	90 (31)	75 (34)	40 (23)
11Y2160	SWX	8410 (22)	17.3 (9)	5.0 (1)	82 (6)	55 (32)	39 (14)
13Y3158	M	8340 (23)	15.6 (24)	5.0 (1)	88 (27)	1 (1)	40 (19)
M402	MPQ	8320 (24)	23.4 (1)	5.0 (1)	99 (39)	1 (1)	40 (24)
13Y3177	M	8290 (25)	16.0 (20)	5.0 (1)	86 (12)	1 (1)	40 (29)
13Y1132	LJ	8280 (26)	14.8 (28)	5.0 (1)	91 (36)	1 (1)	37 (1)
12Y133	LJ	8260 (27)	16.6 (14)	5.0 (1)	97 (38)	1 (1)	38 (6)
A201	LA	8250 (28)	12.9 (36)	5.0 (1)	83 (8)	1 (1)	40 (19)
13P296	LJ	8200 (29)	13.8 (32)	5.0 (1)	85 (11)	1 (1)	43 (39)
11Y106	LJ	7860 (30)	13.9 (30)	3.7 (39)	85 (10)	1 (1)	42 (37)
13Y3224	MPQ	7800 (31)	17.4 (8)	5.0 (1)	86 (12)	99 (36)	41 (33)
M203	MPQ	7760 (32)	17.1 (10)	5.0 (1)	84 (9)	50 (30)	42 (37)
13Y1117	LA	7660 (33)	12.4 (37)	5.0 (1)	88 (27)	1 (1)	41 (32)
12Y1178	LJ	7450 (34)	13.8 (31)	4.8 (37)	87 (21)	1 (1)	42 (35)
09Y2122	S	7430 (35)	20.1 (3)	5.0 (1)	80 (4)	99 (36)	41 (31)
13Y3223	MPQ	7230 (36)	18.5 (5)	5.0 (1)	87 (21)	99 (36)	39 (13)
CA201	SLA	6220 (37)	15.1 (26)	5.0 (1)	80 (5)	97 (35)	38 (4)
CT202	LB	6150 (38)	11.8 (39)	5.0 (1)	87 (21)	1 (1)	38 (4)
12Y1054	LB	5520 (39)	12.0 (38)	5.0 (1)	72 (1)	21 (29)	37 (1)
MEAN		8390	16.0	5.0	86	22	40
CV		4.4	4.2	1.3	1.1	78	3.6
LSD (.05)		740	1.4	0.1	2	34	3

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=Basmati; J=Jasmine; LA=long aromatic; MB=medium blast resistant; SLA= short low amalose; WX=waxy.

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

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

Numbers in parentheses indicate relative rank in column.

Table 11. 2014 Yuba Early Rice Variety Trials

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)
11Y1005	L	10810 (1)	16.4 (12)	5.0 (1)	85 (9)	15 (2)	45 (15)
13Y1073	L	10120 (2)	15.4 (15)	5.0 (1)	84 (8)	33 (5)	41 (4)
11Y1008	L	10050 (3)	16.0 (13)	5.0 (1)	84 (7)	18 (3)	44 (14)
L206	L	9260 (4)	14.1 (16)	5.0 (1)	81 (2)	97 (11)	39 (1)
M205	M	9120 (5)	21.7 (7)	5.0 (1)	93 (14)	18 (3)	42 (7)
M206	M	8950 (6)	21.0 (8)	5.0 (1)	84 (5)	90 (10)	42 (10)
11Y2183	MPQ	8920 (7)	22.0 (5)	5.0 (1)	95 (15)	47 (7)	42 (6)
12Y113	MB	8820 (8)	21.9 (6)	5.0 (1)	85 (9)	72 (9)	42 (7)
08Y3269	M	8800 (9)	22.9 (4)	5.0 (1)	92 (13)	33 (5)	42 (9)
09Y2179	S	8330 (10)	24.0 (1)	5.0 (1)	97 (16)	1 (1)	42 (11)
09Y2141	SWX	8010 (11)	23.0 (3)	5.0 (1)	82 (4)	97 (11)	45 (16)
M202	M	8010 (12)	23.7 (2)	5.0 (1)	90 (12)	71 (8)	42 (12)
S102	S	7420 (13)	15.7 (14)	5.0 (1)	79 (1)	99 (14)	43 (13)
CH202	SPQ	7370 (14)	20.5 (9)	5.0 (1)	84 (6)	98 (13)	41 (4)
CH201	SPQ	7290 (15)	19.7 (10)	5.0 (1)	89 (11)	99 (14)	40 (2)
CM101	SWX	7120 (16)	18.3 (11)	5.0 (1)	81 (2)	99 (14)	41 (3)
MEAN		8650	19.8	5.0	86	62	42
CV		6.4	8.6		2.1	40.6	3.1
LSD (.05)		790	2.4		3	36	2

Preliminary Lines and Varieties

13Y1156	LA	10940 (1)	17.7 (34)	5.0 (1)	90 (18)	1 (1)	39 (6)
13Y3131	M	10100 (2)	23.0 (10)	5.0 (1)	92 (26)	1 (1)	43 (36)
13Y3177	M	10090 (3)	21.2 (22)	5.0 (1)	89 (13)	1 (1)	40 (17)
13Y3176	M	10050 (4)	21.9 (17)	5.0 (1)	92 (28)	1 (1)	40 (12)
13Y1106	L	10000 (5)	17.7 (36)	5.0 (1)	89 (13)	50 (28)	39 (5)
13Y3146	M	9890 (6)	21.5 (19)	5.0 (1)	88 (11)	1 (1)	39 (10)
12Y2175	MPQ	9850 (7)	22.4 (12)	5.0 (1)	96 (35)	1 (1)	40 (23)
M208	MB	9780 (8)	19.8 (28)	5.0 (1)	92 (26)	1 (1)	40 (12)
13Y3158	M	9710 (9)	19.3 (30)	5.0 (1)	92 (28)	1 (1)	39 (8)
10Y3737	M	9630 (10)	22.3 (14)	5.0 (1)	92 (28)	1 (1)	39 (10)
13Y1059	L	9560 (11)	18.9 (31)	5.0 (1)	88 (12)	1 (1)	41 (28)
13Y3181	M	9410 (12)	20.7 (24)	5.0 (1)	91 (23)	1 (1)	41 (28)
13Y1132	LJ	9370 (13)	18.4 (33)	5.0 (1)	91 (23)	1 (1)	40 (12)
13P358	LJ	9220 (14)	21.4 (20)	5.0 (1)	93 (33)	1 (1)	41 (24)
A201	LA	9190 (15)	17.7 (35)	5.0 (1)	83 (3)	50 (28)	41 (27)
12Y2107	SWX	9180 (16)	24.2 (7)	5.0 (1)	87 (8)	73 (31)	41 (24)
11Y3655	M	9170 (17)	22.7 (11)	5.0 (1)	91 (23)	1 (1)	38 (4)
13Y3156	M	9040 (18)	22.4 (13)	5.0 (1)	95 (34)	1 (1)	37 (1)
A202	LA	9020 (19)	21.0 (23)	5.0 (1)	87 (10)	1 (1)	40 (20)
11Y2182	MPQ	8990 (20)	25.4 (5)	5.0 (1)	99 (37)	1 (1)	40 (20)
13Y3193	M	8700 (21)	23.1 (9)	5.0 (1)	98 (36)	1 (1)	38 (2)
M105	M	8590 (22)	21.2 (21)	5.0 (1)	82 (2)	50 (28)	42 (30)
13P296	LJ	8500 (23)	18.4 (32)	5.0 (1)	87 (8)	1 (1)	45 (38)
M402	MPQ	8290 (24)	25.7 (4)	5.0 (1)	101 (38)	1 (1)	40 (12)
11Y2160	SWX	8270 (25)	22.3 (15)	5.0 (1)	84 (5)	99 (33)	39 (9)
10Y3703	M	8270 (26)	24.4 (6)	5.0 (1)	92 (28)	46 (27)	42 (32)
10Y2043	S	8210 (27)	22.3 (16)	5.0 (1)	83 (3)	99 (33)	41 (24)
11Y2230	SPQ	7830 (28)	27.7 (1)	5.0 (1)	92 (28)	95 (32)	40 (17)
13Y1117	LA	7620 (29)	16.1 (39)	5.0 (1)	89 (15)	1 (1)	40 (20)
13Y3224	MPQ	7510 (30)	23.8 (8)	5.0 (1)	90 (18)	99 (33)	42 (30)
13Y3223	MPQ	7170 (31)	26.4 (3)	5.0 (1)	89 (15)	99 (33)	43 (34)
09Y2122	S	7130 (32)	21.9 (18)	5.0 (1)	82 (1)	99 (33)	44 (37)
12Y1178	LJ	7120 (33)	20.5 (26)	5.0 (1)	89 (15)	1 (1)	42 (32)
CA201	SLA	6940 (34)	19.4 (29)	5.0 (1)	84 (6)	99 (33)	40 (17)
11Y106	LJ	6430 (35)	17.5 (37)	5.0 (1)	85 (7)	6 (24)	43 (34)
12Y133	LJ	6320 (36)	20.6 (25)	5.0 (1)	102 (39)	1 (1)	38 (2)
M203	MPQ	6030 (37)	27.1 (2)	5.0 (1)	90 (18)	99 (33)	48 (39)
CT202	LB	5460 (38)	16.8 (38)	5.0 (1)	90 (18)	15 (26)	39 (6)
12Y1054	LB	5160 (39)	20.3 (27)	5.0 (1)	90 (18)	11 (25)	40 (12)
MEAN		8510	21.4	5.0	90	28	41
CV		5.6	5.2		4.1	79.3	3.6
LSD (.05)		970	2.3		8	46	3

S=short; M=medium; L=long; PQ=premium quality; A=aromatic; LB=Basmati; J=Jasmine; LA=long aromatic; MB=medium blast resistant; SLA= short low amalose; WX=waxy.

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

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

Numbers in parentheses indicate relative rank in column.

Table 12. Grain Yield (lb/acre @14% moisture) Summary of Early Rice Varieties by Location and Year (2010-2014)

		Calhikari						Calmati	
Location	Year	201	S-102	**M-202**	M-105	M-205	M-206	202	L-206
Biggs (RES)	2010	9390	9400	**10210**	11530	10790	10990	8730	11090
	2011	9210	10230	**9660**	9490	10610	10050	5410	10020
	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
Location Mean		8398	9018	**8858**	9532	10060	9684	6828	9736
Butte	2010	7900	7330	**8190**	8530	7950	8440	6770	8400
	2011	8060	8280	**8180**	9270	8860	8520	8020	9330
	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
Location Mean		8038	8210	**8250**	9200	8902	8966	7272	9246
Colusa	2010	9510	10190	**10910**	10930	11190	10560	4690	10440
	2011	6040	7420	**9350**	7580	9760	9960	5210	9660
	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
Location Mean		7712	8074	**9350**	9196	9676	9828	5472	9826
Yuba	2010	8350	10010	**10220**	10040	9370	10330	5470	9070
	2011	7800	8740	**9300**	9800	10000	10190	6030	10160
	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
Location Mean		7512	8684	**9140**	9254	9396	9692	5656	9436
Loc/Years Mean		7915	8497	**8900**	9296	9509	9543	6307	9561
Yield % M-202		**88.9**	**95.5**	**100**	**104.4**	**106.8**	**107.2**	**70.9**	**107.4**
Number of Tests		20	20	**20**	20	20	20	20	20

Table 13. 2014 Two Location Intermediate/Late Rice Variety Trials*

Advanced Lines and Varieties

Variety	Grain Type	**Ave Grain Yield at 14% Moisture lbs/acre**	Single Location Yields Biggs	Glenn	Ave Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
11Y2183	MPQ	**10350 (1)**	10990 (3)	9720 (1)	17.1 (3)	4.7 (8)	91 (10)	1 (1)	40 (6)
13Y3212	MB	**10180 (2)**	11210 (2)	9140 (2)	16.9 (4)	4.8 (5)	85 (5)	14 (9)	40 (7)
11Y1005	L	**9970 (3)**	10990 (4)	8950 (3)	14.2 (10)	4.9 (3)	83 (4)	3 (5)	40 (8)
08Y3269	M	**9940 (4)**	11270 (1)	8610 (8)	16.4 (6)	4.7 (9)	88 (8)	1 (1)	41 (11)
M205	M	**9730 (5)**	10550 (6)	8910 (5)	17.4 (2)	4.6 (11)	90 (9)	1 (1)	39 (5)
L206	L	**9600 (6)**	10340 (7)	8870 (6)	14.7 (9)	4.8 (6)	81 (1)	10 (6)	36 (1)
M402	MPQ	**9480 (7)**	10040 (8)	8910 (4)	17.8 (1)	4.9 (3)	103 (11)	2 (4)	41 (10)
M206	M	**9420 (8)**	10570 (5)	8270 (11)	15.9 (7)	4.8 (6)	83 (3)	12 (8)	39 (4)
CH202	SPQ	**8830 (9)**	9050 (9)	8620 (7)	15.6 (8)	4.6 (10)	82 (2)	64 (11)	36 (2)
M202	M	**8690 (10)**	8870 (10)	8510 (9)	16.7 (5)	5 (1)	87 (7)	11 (7)	41 (9)
CH201	SPQ	**8510 (11)**	8560 (11)	8460 (10)	13.6 (11)	5 (1)	86 (6)	49 (10)	37 (3)
MEAN		**9520**	10220	8820	16	4.8	87	15	39
CV		**4.9**	4.9	5.0	5.1	4	1.4	112.8	4.2
LSD (.05)		**470**	720	630	0.8	0.2	1	17	2

Preliminary Lines and Varieties

12Y1022	LA	**10050 (1)**	10640 (2)	9460 (5)	14.2 (17)	4.9 (7)	86 (8)	1 (1)	40 (11)
13P266	LJ	**9990 (2)**	10090 (7)	9890 (2)	13.0 (21)	4.5 (21)	86 (11)	17 (14)	37 (3)
M208	MB	**9850 (3)**	10600 (3)	9100 (8)	15.1 (11)	4.7 (12)	86 (11)	3 (6)	40 (13)
12Y1176	L	**9790 (4)**	10460 (4)	9120 (7)	14.4 (16)	4.8 (10)	85 (5)	11 (13)	42 (21)
M401	MPQ	**9730 (5)**	9550 (12)	9900 (1)	22.1 (1)	4.9 (6)	108 (24)	21 (15)	43 (22)
11Y2182	MPQ	**9710 (6)**	10780 (1)	8650 (12)	17.2 (2)	4.3 (23)	92 (22)	6 (10)	41 (15)
09Y2141	SWX	**9540 (7)**	10260 (5)	8810 (10)	14.5 (14)	4.6 (18)	80 (2)	8 (11)	39 (8)
A202	LA	**9490 (8)**	10210 (6)	8760 (11)	14.5 (15)	5.0 (2)	85 (7)	8 (11)	40 (12)
12Y135	LJ	**9250 (9)**	8770 (14)	9740 (3)	15.0 (12)	5.0 (2)	92 (21)	5 (9)	38 (4)
12Y2178	SPQ	**9080 (10)**	9590 (11)	8570 (13)	14.6 (13)	4.7 (12)	93 (23)	23 (16)	38 (5)
11Y106	LJ	**9070 (11)**	9720 (9)	8420 (14)	14.1 (18)	4.7 (11)	88 (17)	43 (22)	43 (23)
13P277	LJ	**9040 (12)**	8490 (15)	9590 (4)	12.4 (24)	5.0 (1)	86 (9)	1 (1)	39 (7)
13Y3219	MB	**8980 (13)**	9900 (8)	8070 (16)	16.3 (4)	4.6 (19)	84 (4)	1 (1)	41 (17)
13Y1178	LJ	**8700 (14)**	8060 (19)	9330 (6)	12.8 (23)	4.6 (16)	86 (9)	3 (6)	39 (9)
M105	M	**8510 (15)**	9650 (10)	7370 (19)	16.0 (7)	3.7 (25)	81 (3)	35 (18)	40 (14)
13Y3224	MPQ	**8510 (16)**	7990 (20)	9030 (9)	16.1 (6)	3.8 (24)	86 (11)	40 (19)	41 (18)
13Y3220	MPQ	**8390 (17)**	8800 (13)	7980 (17)	15.5 (10)	4.8 (9)	87 (16)	43 (21)	40 (10)
13Y3223	MPQ	**8090 (18)**	8060 (18)	8120 (15)	15.9 (8)	4.3 (22)	87 (15)	51 (23)	41 (16)
M203	MPQ	**8040 (19)**	8280 (16)	7810 (18)	15.9 (9)	5.0 (2)	86 (11)	55 (24)	45 (25)
CM101	SWX	**7370 (20)**	8180 (17)	6570 (20)	12.1 (25)	4.7 (12)	78 (1)	40 (20)	38 (6)
13Y135	LB	**6910 (21)**	7330 (22)	6490 (21)	12.9 (22)	4.6 (16)	90 (19)	1 (1)	37 (2)
13Y1055	LB	**6670 (22)**	7590 (21)	5760 (23)	13.3 (20)	4.5 (20)	85 (5)	1 (1)	37 (1)
13P477	LB	**6200 (23)**	6600 (23)	5810 (22)	14.1 (19)	4.9 (7)	88 (17)	33 (17)	42 (20)
13P454	LB	**5680 (24)**	6200 (24)	5160 (25)	16.6 (3)	5.0 (2)	91 (20)	3 (6)	41 (19)
KOSH	SPQ	**5610 (25)**	5550 (25)	5660 (24)	16.2 (5)	4.7 (15)	113 (25)	95 (25)	45 (24)
MEAN		**8490**	8850	8130	15.0	4.6	88	22	40
CV		**5.4**	5.4	5.5	5.6	7.8	1.8	71.3	3.8
LSD (.05)		**660**	980	930	1.2	0.5	2	22	2

S=short; M=medium; L=long; PQ=premium quality; WX=waxy; A=aromatic; LB=long Basmati; J=Jasmine; MB=medium blast 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.

* The Sutter trial was not included in this summary due to an unusually high yield cv and low yields.

Table 14. 2014 Biggs Intermediate-Late Rice Variety Trials

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	11270 (1)	16.2 (6)	4.9 (4)	86 (8)	1 (1)	39 (11)
13Y3212	MB	11210 (2)	16.6 (4)	4.9 (4)	81 (5)	1 (1)	39 (10)
11Y2183	MPQ	10990 (3)	16.8 (3)	4.9 (4)	88 (10)	1 (1)	37 (5)
11Y1005	L	10990 (4)	13.5 (10)	4.9 (10)	79 (3)	1 (1)	37 (6)
M206	M	10570 (5)	16.5 (5)	4.9 (4)	79 (3)	23 (9)	38 (7)
M205	M	10550 (6)	16.9 (2)	4.9 (4)	87 (9)	1 (1)	36 (3)
L206	L	10340 (7)	14.3 (9)	4.9 (11)	78 (1)	1 (1)	36 (4)
M402	MPQ	10040 (8)	17.7 (1)	5.0 (1)	101 (11)	1 (1)	39 (9)
CH202	SPQ	9050 (9)	15.7 (8)	4.9 (9)	79 (2)	90 (11)	34 (1)
M202	M	8870 (10)	16.0 (7)	5.0 (2)	85 (7)	1 (1)	38 (8)
CH201	SPQ	8560 (11)	11.6 (11)	5.0 (2)	82 (6)	70 (10)	35 (2)
MEAN		10220	15.6	4.9	84	17	37
CV		4.9	6.1	1.3	1.7	72.9	3.6
LSD (.05)		720	1.4		2	18	2

Preliminary Lines and Varieties

11Y2182	MPQ	10780 (1)	16.4 (4)	4.9 (21)	89 (20)	1 (1)	39 (16)
12Y1022	LA	10640 (2)	13.6 (18)	4.9 (4)	81 (5)	1 (1)	38 (12)
M208	MB	10600 (3)	15.3 (10)	4.9 (4)	84 (12)	1 (1)	38 (14)
12Y1176	L	10460 (4)	14.0 (15)	4.9 (21)	80 (4)	1 (1)	40 (23)
09Y2141	SWX	10260 (5)	12.0 (24)	5.0 (2)	75 (2)	6 (17)	37 (8)
A202	LA	10210 (6)	14.2 (13)	4.9 (4)	83 (11)	1 (1)	39 (18)
13P266	LJ	10090 (7)	12.6 (22)	4.9 (4)	81 (8)	1 (1)	36 (3)
13Y3219	MB	9900 (8)	16.5 (3)	4.9 (4)	81 (6)	1 (1)	38 (13)
11Y106	LJ	9720 (9)	13.9 (16)	4.9 (21)	85 (16)	1 (1)	40 (22)
M105	M	9650 (10)	15.5 (9)	4.9 (4)	76 (3)	40 (22)	39 (18)
12Y2178	SPQ	9590 (11)	14.2 (14)	4.9 (4)	91 (23)	45 (23)	35 (2)
M401	MPQ	9550 (12)	21.1 (1)	5.0 (2)	106 (24)	1 (1)	39 (21)
13Y3220	MPQ	8800 (13)	16.0 (6)	4.9 (4)	86 (17)	11 (19)	37 (11)
12Y135	LJ	8770 (14)	14.3 (12)	4.9 (4)	89 (22)	1 (1)	36 (5)
13P277	LJ	8490 (15)	12.5 (23)	5.0 (1)	82 (9)	1 (1)	39 (17)
M203	MPQ	8280 (16)	15.5 (8)	4.9 (4)	85 (15)	15 (21)	44 (24)
CM101	SWX	8180 (17)	9.1 (25)	4.9 (4)	74 (1)	75 (24)	36 (7)
13Y3223	MPQ	8060 (18)	16.2 (5)	4.9 (4)	84 (13)	13 (20)	38 (15)
13Y1178	LJ	8060 (19)	12.8 (20)	4.9 (21)	81 (6)	1 (1)	37 (9)
13Y3224	MPQ	7990 (20)	16.6 (2)	4.9 (4)	84 (13)	10 (18)	39 (18)
13Y1055	LB	7590 (21)	12.8 (19)	4.9 (4)	82 (9)	1 (1)	35 (1)
13Y135	LB	7330 (22)	12.6 (21)	4.9 (4)	86 (19)	1 (1)	36 (3)
13P477	LB	6600 (23)	13.6 (17)	4.9 (21)	86 (17)	1 (1)	37 (10)
13P454	LB	6200 (24)	15.1 (11)	4.9 (4)	89 (21)	1 (1)	36 (5)
KOSH	SPQ	5550 (25)	15.6 (7)	4.9 (4)	124 (25)	90 (25)	45 (25)
MEAN		8850	14.5	4.9	85	13	38
CV		5.4	4.8	0.8	2.4	110.4	3.9
LSD (.05)		980	1.4		4	29	3

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

J=Jasmine; MB=medium blast 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 15. 2014 Glenn Intermediate-Late Rice Variety Trials

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)
11Y2183	MPQ	9720 (1)	17.4 (4)	4.5 (8)	94 (10)	1 (1)	43 (9)
13Y3212	MB	9140 (2)	17.1 (5)	4.7 (6)	89 (5)	28 (9)	41 (5)
11Y1005	L	8950 (3)	14.8 (11)	5.0 (1)	87 (4)	6 (6)	44 (11)
M402	MPQ	8910 (4)	18.0 (1)	4.9 (4)	106 (11)	3 (5)	43 (7)
M205	M	8910 (5)	17.9 (2)	4.3 (11)	93 (9)	1 (1)	43 (7)
L206	L	8870 (6)	15.1 (10)	4.7 (5)	85 (1)	18 (7)	36 (1)
CH202	SPQ	8620 (7)	15.6 (8)	4.3 (10)	86 (2)	38 (11)	38 (3)
08Y3269	M	8610 (8)	16.7 (6)	4.5 (9)	91 (8)	1 (1)	43 (9)
M202	M	8510 (9)	17.4 (3)	5.0 (1)	89 (5)	21 (8)	43 (6)
CH201	SPQ	8460 (10)	15.7 (7)	5.0 (1)	89 (7)	28 (9)	38 (2)
M206	M	8270 (11)	15.3 (9)	4.7 (7)	87 (3)	1 (1)	40 (4)
MEAN		8820	16.4	4.7	90	13	41
CV		5.0	4.1	5.6	1	157.9	4.7
LSD (.05)		630	1	0.4	1		3

Preliminary Lines and Varieties

M401	MPQ	9900 (1)	23.1 (1)	4.9 (6)	110 (25)	40 (18)	46 (21)
13P266	LJ	9890 (2)	13.4 (22)	4.1 (21)	91 (17)	33 (17)	39 (4)
12Y135	LJ	9740 (3)	15.7 (9)	5.0 (1)	94 (21)	8 (11)	39 (4)
13P277	LJ	9590 (4)	12.3 (25)	5.0 (1)	90 (13)	1 (1)	39 (3)
12Y1022	LA	9460 (5)	14.7 (18)	4.8 (8)	90 (14)	1 (1)	42 (12)
13Y1178	LJ	9330 (6)	12.8 (24)	4.4 (15)	91 (15)	6 (7)	42 (11)
12Y1176	L	9120 (7)	14.8 (16)	4.7 (10)	89 (10)	20 (15)	44 (19)
M208	MB	9100 (8)	14.9 (15)	4.5 (12)	89 (10)	6 (7)	43 (14)
13Y3224	MPQ	9030 (9)	15.6 (11)	2.8 (24)	89 (9)	70 (20)	43 (16)
09Y2141	SWX	8810 (10)	17.1 (4)	4.3 (18)	86 (2)	11 (13)	42 (10)
A202	LA	8760 (11)	14.8 (17)	5.0 (1)	88 (6)	15 (14)	41 (8)
11Y2182	MPQ	8650 (12)	18.1 (3)	3.7 (23)	96 (23)	10 (12)	43 (14)
12Y2178	SPQ	8570 (13)	15.1 (13)	4.5 (12)	95 (22)	1 (1)	40 (6)
11Y106	LJ	8420 (14)	14.3 (20)	4.6 (11)	91 (17)	85 (22)	46 (22)
13Y3223	MPQ	8120 (15)	15.7 (10)	3.8 (22)	89 (10)	90 (23)	43 (16)
13Y3219	MB	8070 (16)	16.1 (8)	4.2 (19)	87 (3)	1 (1)	44 (18)
13Y3220	MPQ	7980 (17)	15.0 (14)	4.7 (9)	88 (6)	75 (21)	42 (12)
M203	MPQ	7810 (18)	16.3 (7)	5.0 (1)	88 (6)	95 (24)	47 (25)
M105	M	7370 (19)	16.6 (6)	2.5 (25)	87 (3)	30 (16)	42 (9)
CM101	SWX	6570 (20)	15.1 (12)	4.5 (12)	83 (1)	6 (7)	41 (7)
13Y135	LB	6490 (21)	13.2 (23)	4.4 (17)	93 (19)	1 (1)	38 (1)
13P477	LB	5810 (22)	14.5 (19)	4.9 (7)	91 (15)	65 (19)	47 (23)
13Y1055	LB	5760 (23)	13.9 (21)	4.2 (20)	87 (3)	1 (1)	38 (1)
KOSH	SPQ	5660 (24)	16.8 (5)	4.4 (15)	101 (24)	99 (25)	45 (20)
13P454	LB	5160 (25)	18.2 (2)	5.0 (1)	93 (19)	6 (7)	47 (24)
MEAN		8130	15.5	4.4	91	31	43
CV		5.5	6.3	11.7	1.1	54.6	3.7
LSD (.05)		930	2	1.1	2	35	3

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

J=Jasmine; MB=medium blast 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. 2014 Sutter Intermediate-Late Rice Variety Trials

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	10010 (1)	17.5 (4)	5.0 (1)	89 (8)	99 (1)	44 (7)
L206	L	9660 (2)	12.3 (10)	5.0 (1)	82 (2)	99 (1)	42 (3)
M206	M	9270 (3)	21.6 (1)	5.0 (1)	82 (2)	99 (1)	43 (4)
M202	M	9030 (4)	17.8 (3)	5.0 (1)	88 (7)	99 (1)	45 (11)
11Y2183	MPQ	9010 (5)	16.4 (8)	5.0 (1)	95 (10)	99 (1)	43 (5)
11Y1005	L	8830 (6)	16.4 (7)	5.0 (1)	82 (4)	99 (1)	45 (10)
M205	M	8680 (7)	18.3 (2)	5.0 (1)	91 (9)	99 (1)	43 (6)
13Y3212	MB	8310 (8)	17.0 (5)	5.0 (1)	83 (5)	99 (1)	44 (7)
CH201	SPQ	7520 (9)	15.1 (9)	5.0 (1)	85 (6)	99 (1)	41 (2)
CH202	SPQ	7140 (10)	16.5 (6)	5.0 (1)	79 (1)	99 (1)	39 (1)
M402	MPQ	7020 (11)	9.7 (11)	5.0 (1)	101 (11)	99 (1)	45 (9)
MEAN		8590	16.2	5.0	87	99	43
CV		10.9	8		0.8		3.7
LSD (.05)		1350	1.9		1		2

Preliminary Lines and Varieties

11Y2182	MPQ	9800 (1)	20.3 (8)	5.0 (1)	95 (21)	99 (10)	44 (6)
13P266	LJ	9670 (2)	13.4 (23)	3.8 (25)	90 (19)	85 (4)	43 (4)
09Y2141	SWX	9650 (3)	21.2 (5)	5.0 (1)	78 (2)	99 (10)	44 (7)
A202	LA	9550 (4)	19.5 (11)	5.0 (1)	87 (12)	99 (10)	44 (7)
13P277	LJ	9500 (5)	12.5 (24)	5.0 (1)	89 (18)	99 (10)	45 (13)
12Y1176	L	9480 (6)	20.6 (6)	5.0 (1)	87 (13)	90 (5)	46 (16)
12Y1022	LA	8710 (7)	19.0 (13)	5.0 (1)	88 (15)	99 (10)	46 (19)
13Y1178	LJ	8380 (8)	14.2 (22)	5.0 (1)	88 (16)	90 (6)	45 (10)
M208	MB	7890 (9)	19.3 (12)	5.0 (1)	85 (10)	99 (10)	46 (16)
M105	M	7890 (10)	25.7 (2)	5.0 (1)	79 (3)	99 (10)	42 (3)
13Y3219	MB	7850 (11)	21.6 (4)	5.0 (1)	83 (5)	99 (10)	45 (14)
12Y2178	SPQ	7830 (12)	14.6 (21)	4.4 (24)	87 (13)	99 (10)	41 (1)
12Y135	LJ	7770 (13)	22.5 (3)	5.0 (1)	96 (23)	99 (10)	45 (10)
13Y135	LB	7750 (14)	18.5 (14)	5.0 (1)	92 (20)	65 (3)	43 (5)
13Y1055	LB	7720 (15)	16.8 (17)	4.9 (23)	81 (4)	60 (2)	45 (12)
13Y3220	MPQ	6660 (16)	17.2 (16)	5.0 (1)	84 (8)	99 (10)	46 (18)
13Y3224	MPQ	6440 (17)	20.0 (9)	5.0 (1)	83 (5)	99 (10)	44 (7)
CM101	SWX	6180 (18)	16.4 (18)	5.0 (1)	77 (1)	99 (10)	41 (2)
M203	MPQ	5990 (19)	20.3 (7)	5.0 (1)	86 (11)	97 (9)	47 (21)
13Y3223	MPQ	5910 (20)	17.6 (15)	5.0 (1)	83 (5)	99 (10)	47 (20)
M401	MPQ	5530 (21)	11.6 (25)	5.0 (1)	106 (25)	99 (10)	49 (23)
11Y106	LJ	5360 (22)	15.9 (20)	5.0 (1)	84 (8)	95 (8)	46 (15)
13P477	LB	3950 (23)	19.6 (10)	5.0 (1)	88 (16)	90 (6)	51 (24)
KOSH	SPQ	3690 (24)	16.4 (19)	5.0 (1)	95 (21)	99 (10)	47 (21)
13P454	LB	2750 (25)	29.3 (1)	5.0 (1)	103 (24)	25 (1)	52 (25)
MEAN		7280	18.6	4.9	88	91	45
CV		11.4	7.6	3.5	0.9	9.4	5
LSD (.05)		1720	2.9	0.4	2	18	5

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

J=Jasmine; MB=medium blast 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 17. Grain Yield (lb/acre @14% moisture) Summary of Intermediate/ Late Rice Varieties by Location and Year (2010-2014)

Location	Year	M-205	M-402	**M-202**	L-206
Biggs (RES)	2010	11030	8240	**10430**	11610
	2011	10270	9200	**9160**	9990
	2012	11210	10260	**11090**	11180
	2013	9730	9830	**8700**	9460
	2014	10550	10040	**8870**	10340
Location Mean		10558	9514	**9650**	10516
Glenn	2010	9210	9360	**7970**	8340
	2011	9550	9820	**9030**	8900
	2012	8220	8260	**7660**	7680
	2013	8400	8970	**8270**	8870
	2014	8910	8910	**8510**	8870
Location Mean		8858	9064	**8288**	8532
Sutter	2010	9190	9300	**10500**	9390
	2011	9310	8000	**9010**	9780
	2012	9630	9040	**9690**	9890
	2013	8540	6900	**7890**	8720
	2014	8680	7020	**9030**	9660
Location Mean		9070	8052	**9224**	9488
Loc/Years Mean		9495	8877	**9054**	9512
Yield % M-202		**104.9**	**98.0**	**100**	**107.2**
Number of Tests		15	15	**15**	15