

**ANNUAL REPORT
COMPREHENSIVE RESEARCH ON RICE**

January 1, 2010 – March 31, 2011

PROJECT TITLE: Cooperative Extension Rice Variety Adaptation and Cultural Practice Research

PROJECT LEADERS:

James E. Hill, Specialist in UCCE, UC Davis

PRINCIPAL UC INVESTIGATORS:

L.A. Espino, UCCE Farm Advisor, Colusa, Glenn, Yolo

C.A. Greer, UCCE Farm Advisor, Sacramento, Sutter, Placer, Yuba

R.G. Mutters, UCCE Farm Advisor, Butte

R.L. Wennig, Staff Research Associate, UCCE/UC Davis

LEVEL OF 2010 FUNDING: \$125,740

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 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 18 entries (seven commercial varieties and eleven advanced breeding lines) in four replications. The Preliminary tests included 31 entries, 28 preliminary breeding lines and three 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 19 entries (eight

commercial varieties and eleven advanced breeding lines) in four replications. The Preliminary tests included 34 entries, four commercial varieties and 30 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 12 entries (six commercial varieties and six advanced breeding lines) in four replications. The Preliminary tests consisted of two commercial varieties and 22 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 above four commercial varieties as standards plus S-102, M-202, and L-206 with 11 advanced cold tolerant lines. The purpose of the small plot test was to provide the RES breeders with additional information under very cold conditions. A third test was added this year to compare water and drill seeding methods. M-104 was used and the methods were replicated four times.

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.

To provide professional technical assistance to other UC research project leaders, we assisted in approximately 33 trials including the 21 variety tests. Equipment from the UCCE-based pool for planting and harvesting field experiments was used at 14 sites at different times during the season. The most heavily used equipment were the combines followed by the Kincaid seed drill planter. We also continued with the prescribed maintenance program for the SWECO plot combine and initiated a maintenance program for the new ALMACO combine.

The ALMACO combine was used to harvest two Statewide trials, the remainder were harvested with the SWECO. Following repairs, the ALMACO was used to harvest an additional eleven county trials.

Objective IV

Extension Education: We disseminated research-based information to California rice producers, dryer operators, millers and the general public through two winter grower meetings, field demonstrations, personal communication and through the distribution of one fact sheet (re-publication of the 2010 Characteristics of Publicly Developed Varieties), the Rice Field Day Program and other printed material. We hosted the Rice Breeders Tour. Progress was made updating the UCCE rice website.

SUMMARY OF 2010 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 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): Seven commercial varieties and eleven advanced breeding lines were compared in four very early advanced tests. Commercial varieties at each location included S-102, CH-201, CM-101, M-104, M-202, M-206 and L-206. The preliminary tests included three commercial varieties and 28 preliminary lines evaluated in separate tests at each location.

Grain yields in the advanced tests averaged 10,170 lb/ac at Biggs-RES, 7,070 lb/ac at Sutter, 7,920 lb/ac at Yolo and 8,140 lb/ac at San Joaquin (Table 1). Over all locations, the three highest yielding entries on average were advanced long grain line 06Y575, advanced short grain line 05Y343, and M-206 (9,690, 8,860, and 8,740 lb/ac respectively). Other top yielding commercial varieties L-206, CM-101, S-102, and M-202 ranked fourth, sixth, seventh, and thirteenth, respectively. Severe bird damage, resulting in the extreme yield loss of M-104 at Biggs, caused M-104 to be dropped from the advanced Biggs test and over location summaries. However, the yield for M-104 ranked fifth, seventh, and fourth at Sutter, Yolo, and San Joaquin respectively. Averaged across locations, cultivar yields in the preliminary tests ranged from 5,180 to 9,370 lb/ac (Table 1). The average number of days to 50% heading for varieties in 2010 was seven

days more than in 2009. Spring rains delayed field preparation, planting, and prevented a significant percentage of the projected acreage from being planted. Cooler than normal daytime and nighttime temperatures increased the number of days to 50% heading and caused a slight increase in lodging.

Comparing the commercial standard entries over a 5-year period and across locations, M-206, L-206 and S-102 were the highest yielding varieties (Table 6).

Early Maturity Tests (90-97 days to 50% heading at Biggs): Eight commercial varieties and eleven advanced lines were compared in four early advanced tests. The preliminary tests included four commercial varieties and 30 preliminary lines evaluated in separate tests at each location. Commercial varieties at each location were CH-201, CM-101, Koshihikari, S-102, M-202, M-205, M-206, M-208, A-201, CT-202 and L-206.

Yields in the advanced line tests averaged 10,490 lb/ac at the RES; 8,160 lb/ac at Butte, 9,260 lb/ac at Yuba and 10,460 lb/ac at Colusa (Table 7). Advanced short grain 05Y343 was the highest yielding entry (10,630 lb/ac) when averaged over four locations in 2010 (Table 7). Other entries with yields averaging greater than 10,000 lbs/ac were long grains 06Y575 and 08Y1092 and medium grains 05Y471 and M-206. The yield of commercial varieties M-202, M-205, L-206, M-208, and S-102, ranked sixth, seventh, ninth, eleventh, and fifteenth over all locations (Table 7). Average days to 50% heading ranged from 89 days at Yuba and Biggs to 94 days at the Colusa County site. The commercial standard M-206 headed at 85 days at Yuba and 91 days at Colusa.

M-205 was the highest yielding commercial variety (9,461 lb/ac) followed by M-206 (9,322 lb/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 six advanced lines were compared in three intermediate -late tests. The preliminary tests included two commercial varieties and 22 preliminary lines were evaluated in separate tests at each location. Commercial varieties at each location included CH-201, Koshihikari, M-202, M-205, M-402, L-206 and CT-202.

Average yields in the advanced tests were 9,940 lb/ac at the RES, 8,380 lb/ac at Glenn and 9,130 lb/ac at Sutter (Table 13). The 2010 advanced over location average yield was 50 lb/ac less than the 2009 season average. The average yields at the RES and Sutter increased 470 and 1,210 lb/ac respectively, while decreasing 280 lb/ac at Glenn compared to the 2009 season. M-205 was the highest yielding commercial variety (9,810 lb/ac), ranking third over all. L-206 and M-202 were the next highest yielding commercial varieties across locations, ranking fourth and fifth respectively (Table 13). The long grain Newrex entry 06Y575 was the highest yielding advanced entry across locations, at 10,620 lb/ac. Average days to 50% heading increased seven days compared to 2009, ranging from 97 days at the RES and Sutter locations to 100 days at the Glenn location. M-402 required the longest time to 50% heading among the commercial varieties at all locations, (average is 110 days).

Averaged over the last 5 years and across locations, M-205 is the highest yielding (9,334 lb/ac) commercial variety. Both M-205 and L-206 produced 106% of the yield of M-202 on average over the last 5 years (Table 17).

Objective II - Cultural Practices

Table 18 shows the results of the large plot variety test on Twitchell Island. The leading variety was Calmochi-101 followed by S-102, M-104 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. In the large plot test Calmochi-101 yielded the highest but was not significantly higher in yield than S-102 and M-104. M-206 (4,467 lbs/ac) yielded significantly less than the other entries and took nine more days than M-104 to reach 50% heading.

The commercial varieties in the small plot tests were similar in ranking to the large plot test with Calmochi-101 ranking at the top followed by S-102, M-104 and M-206. The other two commercial varieties, M-202 and L-206 were the lowest yielding varieties in the test (Table 19). In the small plot test, there were no significant differences between the top three commercial varieties. However the unusually large yield CV, compared to typical small plot variety tests, is likely due to an undetermined soil condition variable soil condition that resulted in a 7 to 10 day increase in days to 50% heading from the bottom to the top of the field. Three advanced line medium grain cultivars ranked second, fourth, and sixth in yield thus indicating the continued potential for medium grain Calrose types to yield at the level of Calmochi-101 in cold environments. At Twitchell Island, the average time to 50% heading for these very early varieties was 118 days after planting and fully 10 days later than the average days to heading for intermediate to late maturing varieties in Sacramento Valley tests, again demonstrating the challenges of growing rice in this environment.

A third trial was conducted to compare water and drill seeding methods of planting (Table 20). M104 (the field variety) was replicated four times for each of the two planting methods. On average, the water seeding method yielded 2,300 lbs/ac higher than the drill seeding. Water management, weed control, and variable soil conditions may have contributed to the extremely high yield CV, resulting in the average yields of the two methods not being statistically different. Water seeding delayed the days to 50% heading by 5 days. Many of the weeds at this location are not the traditional rice weeds found in the Sacramento Valley rice fields. The water seeding method dramatically reduced total weed populations by 70-80% compared to the drill seeded basins.

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

We continued the maintenance program for the UC SWECO plot combine. Following a major overhaul in 2001, an annual maintenance was established to ensure combine durability and performance. All items listed in the maintenance schedule were inspected and replaced as 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 used along with personnel who provided technical assistance for numerous field experiments in 2010. The SWECO 324 plot combine was used to harvest 6 variety trials, two strip trials, and two cold temperature variety tests and a planting methods test at Twitchell Island. The ALMACO was used to harvest 2 variety trials, 6 potassium tests, and 5 sequential harvests of a rice quality test at the RES. Over 1,300 experimental plots were harvested in 2010. 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 the annual 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. Rice Field Day Program 2010, for the California Cooperative Rice Research Foundation, RES, 42 pp.
2. The UCCE website was updated.
3. UCCE winter grower meetings were held at Colusa and Yuba City.
4. Two activities were held in conjunction with the RES -- the annual California Rice Field day, and the Rice Breeders' field tour.

Publications and Reports:

MD Ruark, BA Linquist, J Six, C van Kessel, CA Greer, RG Mutters, and JE Hill. Seasonal losses of dissolved organic carbon and total dissolved solids from rice production systems in northern California. *J. Env Qual* 38:304-313

Linquist BA, K Koffler, JE Hill and C van Kessel. The impact of rice field drainage on nitrogen management. *Cal Agic* *in press*

Hill, JE, Canevari, WM, Espino, LA, Greer, C.A., Mutters, RG, and Wennig, RL 2009. University of California Cooperative Extension (UCCE) rice variety adaptation and cultural practices research. *In Annual Report Comprehensive Rice Research 2009.* University of California and USDA. (available in e-version only).

Pittelkow, C.M., Linquist, B.A., van Kessel, C., Hill, J.E., Espino, L., Greer, C.A.,

and Mutters, R.G. 2010. Nitrogen fertility management in alternative rice establishment systems of California. Proceedings of the 33rd Rice Technical Working Group. p 118. Feb 22-25, 2010. Biloxi, Mississippi

Lundy, M.E., van Kessel, C., Hill, J.E., and Linquist, B.A. 2010. The effect of variations in P fertilizer timing on the growth of flooded rice in California. Proceedings of the 33rd Rice Technical Working Group. p 135. Feb 22-25, 2010. Biloxi, Mississippi

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

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.

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 8,300 lb/acre in the very early trials to 9,590 lb/acre in the early tests. In the intermediate to late tests the advanced lines average yield was 9,150 lb/acre. Frequent spring rains delayed field preparation and planting by 7 to 10 days. Several advanced lines in 2010 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 Calmochi-101 will produce reasonable yields. However, the variety trials were somewhat variable in yield and 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. 2010 Very Early Rice Variety Tests - Four Location Summary

Advanced Lines and Varieties

Variety	Type	Ave Grain Yield at 14%		Single Location Yields			Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
		Grain Type	Moisture lbs/acre	Biggs	Sutter	Yolo					
06Y575	LR	9690 (1)	11030 (3)	9410 (2)	8860 (1)	9450 (1)	18.5 (10)	4.9 (7)	96 (10)	1 (7)	36 (16)
05Y343	SWX	8860 (2)	12140 (1)	6530 (13)	8000 (8)	8810 (2)	21.8 (1)	4.8 (16)	100 (17)	9 (14)	36 (10)
M206	M	8740 (3)	11290 (2)	7890 (7)	8210 (5)	7560 (18)	20.3 (4)	4.9 (7)	95 (9)	3 (11)	36 (13)
L206	L	8660 (4)	10200 (11)	8050 (6)	8230 (4)	8170 (8)	16.8 (16)	4.9 (13)	95 (7)	1 (1)	31 (1)
05Y471	M	8650 (5)	10600 (5)	8350 (4)	7430 (16)	8210 (7)	19.5 (7)	4.8 (17)	91 (3)	5 (12)	36 (15)
CM101	S	8560 (6)	9470 (13)	9500 (1)	7190 (17)	8070 (9)	17.7 (14)	5.0 (3)	90 (2)	39 (17)	35 (7)
S102	S	8550 (7)	9380 (14)	9360 (3)	7520 (14)	7950 (11)	16.7 (17)	4.9 (7)	87 (1)	32 (15)	35 (8)
07Y508	L	8530 (8)	10040 (12)	7820 (8)	8370 (3)	7890 (13)	18.4 (11)	4.9 (15)	94 (6)	1 (1)	37 (17)
07Y843	M	8420 (9)	10610 (4)	6810 (11)	7930 (10)	8340 (5)	20.0 (5)	5.0 (5)	93 (4)	2 (8)	36 (11)
06Y513	L	8290 (10)	10400 (7)	6620 (12)	7940 (9)	8220 (6)	17.8 (13)	4.9 (7)	98 (13)	1 (1)	33 (2)
04Y177	S	8210 (11)	8810 (16)	7350 (9)	8810 (2)	7870 (14)	17.9 (12)	4.9 (11)	93 (5)	38 (16)	33 (4)
09Y1094	L	8180 (12)	9180 (15)	7000 (10)	7760 (12)	8780 (3)	17.5 (15)	5.0 (5)	99 (16)	1 (1)	33 (3)
M202	M	8160 (13)	10470 (6)	6520 (14)	7890 (11)	7760 (15)	20.4 (3)	5.0 (2)	96 (11)	1 (6)	35 (9)
07Y186	MPQ	8120 (14)	10380 (8)	6510 (15)	7660 (13)	7910 (12)	19.9 (6)	5.0 (4)	95 (8)	2 (9)	36 (14)
07Y293	SPQ	7460 (15)	10300 (9)	3390 (18)	8120 (6)	8020 (10)	21.5 (2)	4.9 (11)	98 (15)	3 (10)	36 (12)
09Y1053	L	7270 (16)	10230 (10)	4160 (16)	7120 (18)	7570 (17)	19.0 (8)	4.9 (14)	98 (14)	1 (1)	34 (6)
CH201	S	6800 (17)	8340 (17)	3800 (17)	7450 (15)	7630 (16)	18.9 (9)	5.0 (1)	98 (12)	7 (13)	33 (5)
* M104	M	-	-	8270 (5)	8050 (7)	8360 (4)	-	-	-	-	-
MEAN		8300	10170	7070	7920	8140	19	4.9	95	9	35
CV		7.8	7.3	10.5	7.2	6.1	4.9	1.5	1.5	111.2	3.3
LSD (.05)		450	1060	1050	810	700	0.6	0.1	1	7	1

Preliminary Lines and Varieties

08Y3076	M	9370 (1)	11070 (1)	8820 (8)	8580 (4)	9000 (1)	19.1 (14)	5.0 (4)	96 (17)	10 (24)	36 (23)
08Y2049	SSR	9230 (2)	10790 (3)	8970 (6)	8870 (1)	8280 (2)	19.1 (13)	5.0 (4)	89 (1)	12 (28)	34 (7)
09Y2036	S	9020 (3)	10270 (10)	9550 (3)	8450 (5)	7800 (7)	19.1 (15)	5.0 (9)	93 (8)	20 (30)	36 (27)
08Y3016	M	8690 (4)	9370 (26)	9190 (5)	8200 (8)	8010 (4)	19.5 (10)	5.0 (4)	90 (2)	11 (25)	35 (21)
08Y3224	M	8580 (5)	10900 (2)	7590 (17)	7870 (13)	7950 (5)	18.7 (20)	4.9 (17)	94 (11)	11 (25)	35 (16)
08Y3036	M	8480 (6)	9300 (28)	10020 (1)	6760 (28)	7830 (6)	18.1 (24)	4.9 (25)	91 (4)	3 (12)	35 (19)
08Y3225	M	8460 (7)	10110 (13)	7400 (20)	8680 (2)	7670 (9)	19.2 (12)	5.0 (9)	93 (10)	15 (29)	35 (13)
M206	M	8420 (8)	10620 (5)	7900 (12)	8140 (9)	7020 (13)	19.8 (9)	4.9 (17)	95 (15)	3 (14)	36 (25)
08Y3020	M	8390 (9)	9660 (21)	8860 (7)	7880 (12)	7170 (12)	19.4 (11)	5.0 (4)	91 (5)	5 (18)	35 (12)
09Y1099	L	8390 (10)	9950 (18)	7590 (16)	7800 (16)	8200 (3)	17.4 (27)	5.0 (9)	98 (27)	1 (1)	33 (3)
08Y3080	M	8350 (11)	10700 (4)	7160 (22)	8360 (6)	7170 (11)	18.5 (21)	4.9 (17)	96 (19)	5 (20)	36 (28)
09Y1043	L	8200 (12)	10090 (14)	7870 (13)	8000 (11)	6830 (18)	17.7 (25)	4.9 (25)	95 (14)	1 (1)	34 (11)
08Y3052	M	8140 (13)	9500 (23)	8760 (9)	7290 (21)	7000 (14)	18.7 (19)	4.6 (31)	90 (3)	7 (23)	36 (22)
08Y3040	M	8100 (14)	10280 (9)	7820 (14)	8050 (10)	6260 (23)	20.4 (5)	5.0 (9)	97 (23)	5 (19)	35 (20)
08Y3039	M	7930 (15)	9280 (29)	7940 (11)	8590 (3)	5910 (27)	20.2 (7)	4.9 (17)	94 (13)	4 (15)	35 (14)
08Y1092	L	7930 (16)	10570 (7)	5620 (30)	8280 (7)	7250 (10)	17.4 (28)	4.9 (17)	97 (25)	1 (1)	33 (6)
08Y2083	MPQ	7900 (17)	10380 (8)	6770 (25)	7860 (14)	6580 (20)	20.8 (3)	5.0 (9)	96 (20)	3 (12)	34 (10)
09Y1067	LJ	7870 (18)	10000 (15)	7590 (15)	7050 (24)	6850 (16)	18.2 (23)	5.0 (2)	97 (23)	1 (1)	35 (17)
09Y2062	SWX	7860 (19)	9370 (27)	9310 (4)	5910 (30)	6850 (15)	17.1 (29)	5.0 (9)	93 (9)	6 (22)	35 (17)
08Y2085	MPQ	7860 (20)	9980 (17)	7550 (18)	7060 (23)	6840 (17)	20.6 (4)	5.0 (4)	95 (15)	6 (21)	37 (29)
08Y2014	MPQ	7800 (21)	10580 (6)	6880 (24)	7080 (22)	6650 (19)	20.2 (6)	4.9 (25)	96 (22)	11 (27)	36 (24)
L205	LR	7740 (22)	10140 (12)	7450 (19)	7390 (18)	5970 (26)	16.8 (30)	4.9 (25)	99 (28)	1 (1)	34 (8)
08Y3041	M	7620 (23)	9470 (24)	7310 (21)	7350 (20)	6360 (22)	20.9 (2)	5.0 (9)	97 (25)	4 (15)	36 (26)
08Y2048	SSR	7620 (24)	9450 (25)	9730 (2)	6980 (25)	4310 (31)	19.9 (8)	4.9 (17)	92 (7)	1 (1)	33 (4)
08Y2025	S	7570 (25)	9700 (20)	6730 (26)	7640 (17)	6220 (24)	19.0 (16)	5.0 (2)	91 (6)	4 (15)	35 (15)
09Y1074	LIM	7510 (26)	9140 (30)	5790 (29)	7360 (19)	7760 (8)	17.7 (26)	4.9 (17)	96 (17)	1 (1)	31 (1)
08Y3185	M	7500 (27)	9990 (16)	6920 (23)	6640 (29)	6440 (21)	19.0 (18)	4.9 (29)	96 (20)	1 (1)	37 (30)
09Y1062	LJ	7460 (28)	10260 (11)	6630 (27)	7840 (15)	5120 (28)	16.8 (31)	4.9 (17)	94 (11)	1 (1)	33 (5)
09Y1013	Lsr	7320 (29)	9790 (19)	8050 (10)	6850 (27)	4590 (29)	19.0 (17)	4.8 (30)	101 (30)	1 (1)	34 (9)
09Y1038	L	7260 (30)	9630 (22)	6310 (28)	6910 (26)	6200 (25)	18.5 (22)	5.0 (9)	99 (29)	1 (1)	32 (2)
KOSH	SPQ	5180 (31)	5530 (31)	4810 (31)	5810 (31)	4560 (30)	21.9 (1)	5.0 (1)	104 (31)	73 (31)	42 (31)
MEAN		7990	9870	7710	7600	6800	19	4.9	95	7	35
CV		8.3	4.8	11	6.4	11.4	4.7	1.6	1.5	87.7	3.8
LSD (.05)		660	970	1730	1000	1580	0.9	0.1	1	6	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, J=Jasmine; R = Newrex.

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.

* M104 Not included in Biggs (bird damage) Advanced and over-location summaries.

Table 2. 2010 Very Early Rice Variety Test - Biggs

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)
05Y343	SWX	12140 (1)	21.4 (2)	4.8 (14)	90 (14)	28 (15)	37 (10)
M206	M	11290 (2)	22.4 (1)	4.8 (11)	88 (8)	9 (13)	40 (17)
06Y575	LR	11030 (3)	20.1 (5)	4.8 (11)	91 (16)	0 (1)	40 (17)
07Y843	M	10610 (4)	19.9 (7)	4.8 (6)	86 (6)	4 (10)	38 (12)
05Y471	M	10600 (5)	18.5 (11)	4.7 (16)	81 (2)	6 (12)	39 (16)
M202	M	10470 (6)	20.7 (4)	4.9 (2)	90 (15)	1 (9)	38 (11)
06Y513	L	10400 (7)	18.7 (10)	4.8 (11)	92 (18)	0 (1)	34 (3)
07Y186	MPQ	10380 (8)	19.9 (8)	4.9 (4)	89 (11)	0 (1)	39 (14)
07Y293	SPQ	10300 (9)	21.0 (3)	4.8 (6)	90 (13)	0 (1)	36 (7)
09Y1053	L	10230 (10)	18.7 (9)	4.7 (16)	89 (12)	0 (1)	36 (6)
L206	L	10200 (11)	16.4 (17)	4.7 (15)	87 (7)	0 (1)	32 (1)
07Y508	L	10040 (12)	20.0 (6)	4.6 (18)	88 (9)	0 (1)	39 (15)
CM101	S	9470 (13)	18.3 (12)	4.9 (3)	82 (4)	60 (17)	39 (13)
S102	S	9380 (14)	15.4 (18)	4.8 (5)	81 (3)	35 (16)	36 (8)
09Y1094	L	9180 (15)	18.1 (13)	4.8 (6)	92 (17)	0 (1)	35 (5)
04Y177	S	8810 (16)	16.6 (16)	4.8 (6)	85 (5)	70 (18)	34 (2)
CH201	S	8340 (17)	17.6 (14)	5.0 (1)	88 (9)	18 (14)	34 (4)
M104	M	- (-)	17.2 (15)	4.8 (6)	79 (1)	5 (11)	36 (9)
MEAN		10170	18.9	4.8	87	13	37
CV		7.3	7.6	1.2	1.5	74.3	3
LSD (.05)		1060	2	0.1	2	14	2

Preliminary Lines and Varieties

08Y3076	M	11070 (1)	19.4 (9)	4.9 (4)	87 (17)	25 (25)	37 (15)
08Y3224	M	10900 (2)	17.8 (23)	4.8 (17)	82 (4)	30 (27)	37 (11)
08Y2049	SSR	10790 (3)	18.8 (16)	4.9 (4)	83 (6)	3 (12)	36 (8)
08Y3080	M	10700 (4)	17.3 (27)	4.8 (17)	86 (12)	17 (20)	38 (24)
M206	M	10620 (5)	19.6 (7)	4.8 (17)	86 (12)	10 (16)	38 (19)
08Y2014	MPQ	10580 (6)	19.9 (6)	4.7 (25)	88 (19)	33 (28)	38 (19)
08Y1092	L	10570 (7)	18.8 (16)	4.7 (23)	90 (25)	0 (1)	35 (5)
08Y2083	MPQ	10380 (8)	20.6 (2)	4.8 (9)	88 (19)	8 (13)	36 (8)
08Y3040	M	10280 (9)	19.4 (9)	4.8 (9)	87 (17)	18 (21)	38 (19)
09Y2036	S	10270 (10)	17.9 (22)	4.8 (9)	87 (14)	70 (30)	38 (19)
09Y1062	LJ	10260 (11)	16.2 (30)	4.7 (25)	85 (11)	0 (1)	37 (10)
L205	LR	10140 (12)	18.1 (20)	4.7 (28)	92 (28)	0 (1)	35 (6)
08Y3225	M	10110 (13)	19.6 (7)	4.8 (9)	84 (8)	33 (28)	37 (12)
09Y1043	L	10090 (14)	19.1 (13)	4.7 (28)	88 (19)	0 (1)	36 (7)
09Y1067	LJ	10000 (15)	17.7 (24)	4.9 (3)	88 (23)	0 (1)	39 (27)
08Y3185	M	9990 (16)	17.5 (26)	4.7 (30)	87 (14)	0 (1)	39 (29)
08Y2085	MPQ	9980 (17)	20.0 (5)	4.9 (4)	90 (26)	18 (21)	40 (30)
09Y1099	L	9950 (18)	18.6 (19)	4.8 (17)	93 (30)	0 (1)	35 (3)
09Y1013	Lsr	9790 (19)	19.3 (11)	4.5 (31)	93 (29)	0 (1)	37 (13)
08Y2025	S	9700 (20)	16.0 (31)	4.9 (2)	82 (4)	13 (17)	38 (17)
08Y3020	M	9660 (21)	18.7 (18)	4.9 (4)	80 (1)	8 (13)	38 (17)
09Y1038	L	9630 (22)	19.3 (12)	4.8 (16)	92 (27)	0 (1)	35 (3)
08Y3052	M	9500 (23)	17.2 (28)	4.8 (9)	80 (3)	25 (25)	38 (26)
08Y3041	M	9470 (24)	20.1 (3)	4.8 (9)	88 (19)	13 (17)	39 (28)
08Y2048	SSR	9450 (25)	17.7 (24)	4.8 (17)	84 (8)	0 (1)	34 (1)
08Y3016	M	9370 (26)	20.1 (4)	4.9 (4)	80 (1)	20 (23)	38 (24)
09Y2062	SWX	9370 (27)	16.5 (29)	4.8 (9)	87 (14)	20 (23)	37 (16)
08Y3036	M	9300 (28)	17.9 (21)	4.7 (25)	83 (7)	8 (13)	38 (19)
08Y3039	M	9280 (29)	18.9 (15)	4.8 (17)	84 (10)	13 (17)	37 (13)
09Y1074	LIM	9140 (30)	19.0 (14)	4.7 (23)	90 (24)	0 (1)	34 (2)
KOSH	SPQ	5530 (31)	24.4 (1)	5.0 (1)	100 (31)	100 (31)	44 (31)
MEAN		9870	18.7	4.8	87	15	37
CV		4.8	8.1	1.2	2	42.4	3.5
LSD (.05)		970	3.1	0.1	3	13	3

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, J=Jasmine; R = Newrex.

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.

* M104 Yield not included in Advanced test (bird damage).

Table 3. 2010 Very Early Rice Variety Test - Sutter

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)
CM101	S	9500 (1)	19.6 (12)	5.0 (1)	82 (2)	94 (18)	34 (7)
06Y575	LR	9410 (2)	18.8 (14)	5.0 (1)	91 (12)	1 (1)	35 (11)
S102	S	9360 (3)	19.0 (13)	5.0 (14)	81 (1)	84 (17)	35 (14)
05Y471	M	8350 (4)	19.8 (9)	5.0 (14)	86 (4)	11 (14)	35 (13)
M104	M	8270 (5)	20.2 (8)	5.0 (1)	84 (3)	22 (15)	36 (16)
L206	L	8050 (6)	18.4 (16)	5.0 (14)	89 (7)	1 (1)	30 (1)
M206	M	7890 (7)	19.7 (11)	5.0 (1)	90 (10)	1 (1)	35 (12)
07Y508	L	7820 (8)	18.6 (15)	5.0 (1)	87 (5)	1 (1)	36 (18)
04Y177	S	7350 (9)	19.7 (10)	5.0 (14)	87 (5)	49 (16)	34 (7)
09Y1094	L	7000 (10)	17.9 (18)	5.0 (1)	93 (15)	1 (1)	32 (4)
07Y843	M	6810 (11)	21.4 (4)	5.0 (1)	90 (8)	1 (1)	36 (15)
06Y513	L	6620 (12)	18.2 (17)	5.0 (1)	95 (16)	1 (1)	31 (2)
05Y343	SWX	6530 (13)	23.4 (2)	5.0 (1)	93 (14)	1 (1)	34 (9)
M202	M	6520 (14)	20.7 (6)	5.0 (1)	91 (12)	1 (1)	34 (6)
07Y186	MPQ	6510 (15)	21.4 (5)	5.0 (1)	90 (9)	1 (1)	35 (10)
09Y1053	L	4160 (16)	20.6 (7)	5.0 (1)	90 (10)	1 (1)	32 (3)
CH201	S	3800 (17)	22.8 (3)	5.0 (1)	96 (17)	1 (1)	33 (5)
07Y293	SPQ	3390 (18)	24.3 (1)	5.0 (14)	96 (18)	1 (1)	36 (17)
MEAN		7070	20.3	5.0	89	15	34
CV		10.5	3.6	0.9	0.7	84.9	3.3
LSD (.05)		1050	1		1	18	2

Preliminary Lines and Varieties

08Y3036	M	10020 (1)	18.8 (23)	5.0 (1)	82 (3)	1 (1)	34 (15)
08Y2048	SSR	9730 (2)	21.3 (6)	5.0 (1)	80 (2)	1 (1)	34 (8)
09Y2036	S	9550 (3)	20.3 (13)	5.0 (1)	84 (5)	8 (24)	36 (28)
09Y2062	SWX	9310 (4)	18.5 (25)	5.0 (1)	85 (7)	1 (1)	35 (19)
08Y3016	M	9190 (5)	20.8 (8)	5.0 (1)	88 (11)	21 (28)	34 (8)
08Y2049	SSR	8970 (6)	20.7 (11)	5.0 (1)	79 (1)	45 (30)	34 (8)
08Y3020	M	8860 (7)	20.1 (15)	5.0 (1)	85 (7)	11 (25)	35 (18)
08Y3076	M	8820 (8)	19.3 (21)	5.0 (1)	91 (21)	11 (25)	36 (25)
08Y3052	M	8760 (9)	19.1 (22)	4.3 (31)	83 (4)	1 (1)	34 (8)
09Y1013	Lsr	8050 (10)	17.7 (30)	5.0 (1)	95 (27)	1 (1)	32 (5)
08Y3039	M	7940 (11)	21.1 (7)	5.0 (1)	89 (12)	1 (1)	34 (12)
M206	M	7900 (12)	20.0 (16)	5.0 (1)	90 (14)	1 (1)	36 (27)
09Y1043	L	7870 (13)	18.1 (27)	5.0 (1)	86 (9)	1 (1)	35 (23)
08Y3040	M	7820 (14)	21.5 (5)	5.0 (1)	90 (14)	1 (1)	35 (24)
09Y1067	LJ	7590 (15)	19.6 (20)	5.0 (1)	91 (21)	1 (1)	35 (19)
09Y1099	L	7590 (16)	17.8 (29)	5.0 (1)	93 (26)	1 (1)	31 (4)
08Y3224	M	7590 (17)	19.6 (19)	5.0 (1)	90 (14)	11 (25)	35 (19)
08Y2085	MPQ	7550 (18)	20.7 (12)	5.0 (1)	90 (14)	1 (1)	36 (28)
L205	LR	7450 (19)	16.5 (31)	5.0 (1)	91 (21)	1 (1)	33 (6)
08Y3225	M	7400 (20)	19.9 (17)	5.0 (1)	90 (14)	21 (28)	34 (12)
08Y3041	M	7310 (21)	22.5 (2)	5.0 (1)	95 (28)	1 (1)	34 (17)
08Y3080	M	7160 (22)	20.2 (14)	5.0 (1)	95 (28)	1 (1)	35 (19)
08Y3185	M	6920 (23)	20.8 (9)	5.0 (1)	91 (21)	1 (1)	36 (30)
08Y2014	MPQ	6880 (24)	20.7 (10)	5.0 (1)	95 (28)	1 (1)	36 (25)
08Y2083	MPQ	6770 (25)	22.2 (3)	5.0 (1)	90 (14)	1 (1)	34 (12)
08Y2025	S	6730 (26)	21.7 (4)	5.0 (1)	84 (5)	1 (1)	34 (15)
09Y1062	LJ	6630 (27)	17.8 (28)	5.0 (1)	86 (9)	1 (1)	31 (2)
09Y1038	L	6310 (28)	19.7 (18)	5.0 (1)	91 (21)	1 (1)	31 (3)
09Y1074	LIM	5790 (29)	18.6 (24)	5.0 (1)	90 (14)	1 (1)	30 (1)
08Y1092	L	5620 (30)	18.2 (26)	5.0 (1)	89 (12)	1 (1)	33 (7)
KOSH	SPQ	4810 (31)	23.4 (1)	5.0 (1)	95 (28)	97 (31)	43 (31)
MEAN		7710	19.9	5.0	89	8	34
CV		11	3	2.6	0.4	133.4	2.7
LSD (.05)		1730	1.2	0.3	1	22	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, J=Jasmine; R = Newrex.

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

Subjective rating of 1-99 where 1 = none and 99 = completelylodged.

Numbers in parentheses indicate relative rank in column.

Table 4. 2010 Very Early Rice Variety Test - Yolo

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	LR	8860 (1)	20.3 (9)	5.0 (1)	99 (15)	3 (11)	39 (14)
04Y177	S	8810 (2)	18.9 (15)	5.0 (1)	91 (4)	33 (18)	35 (6)
07Y508	L	8370 (3)	19.5 (12)	5.0 (1)	96 (12)	1 (1)	39 (18)
L206	L	8230 (4)	18.1 (16)	5.0 (1)	96 (14)	1 (1)	33 (1)
M206	M	8210 (5)	21.4 (4)	5.0 (1)	95 (9)	2 (9)	38 (10)
07Y293	SPQ	8120 (6)	21.4 (5)	5.0 (1)	96 (10)	11 (17)	39 (16)
M104	M	8050 (7)	20.2 (10)	5.0 (1)	90 (3)	1 (1)	38 (12)
05Y343	SWX	8000 (8)	22.7 (1)	4.6 (18)	103 (16)	6 (13)	38 (8)
06Y513	L	7940 (9)	19.9 (11)	5.0 (1)	96 (12)	1 (1)	35 (3)
07Y843	M	7930 (10)	20.9 (7)	5.0 (1)	91 (5)	2 (9)	38 (8)
M202	M	7890 (11)	22.4 (3)	5.0 (1)	92 (6)	1 (1)	39 (15)
09Y1094	L	7760 (12)	19.3 (13)	5.0 (1)	103 (17)	1 (1)	35 (2)
07Y186	MPQ	7660 (13)	20.9 (8)	5.0 (1)	93 (7)	7 (14)	39 (16)
S102	S	7520 (14)	16.9 (18)	5.0 (1)	88 (1)	9 (16)	38 (11)
CH201	S	7450 (15)	19.0 (14)	5.0 (1)	96 (11)	8 (15)	35 (4)
05Y471	M	7430 (16)	22.6 (2)	4.7 (17)	94 (8)	1 (1)	38 (13)
CM101	S	7190 (17)	17.0 (17)	5.0 (1)	90 (2)	3 (11)	36 (7)
09Y1053	L	7120 (18)	21.1 (6)	5.0 (1)	104 (18)	1 (1)	35 (5)
MEAN		7920	20.1	5.0	95	5	37
CV		7.2	3.4	2.5	1.4	210	2.9
LSD (.05)		810	1	0.2	2	15	2

Preliminary Lines and Varieties

08Y2049	SSR	8870 (1)	19.3 (23)	5.0 (1)	91 (4)	1 (1)	35 (6)
08Y3225	M	8680 (2)	20.4 (14)	5.0 (1)	92 (7)	8 (29)	37 (15)
08Y3039	M	8590 (3)	21.6 (7)	5.0 (1)	91 (4)	1 (1)	37 (17)
08Y3076	M	8580 (4)	20.9 (11)	5.0 (1)	95 (19)	3 (26)	38 (19)
09Y2036	S	8450 (5)	20.3 (16)	5.0 (1)	92 (7)	1 (1)	38 (21)
08Y3080	M	8360 (6)	19.8 (20)	5.0 (1)	92 (10)	3 (26)	39 (27)
08Y1092	L	8280 (7)	18.0 (29)	5.0 (1)	99 (27)	1 (1)	35 (5)
08Y3016	M	8200 (8)	19.8 (19)	5.0 (1)	90 (3)	1 (1)	38 (22)
M206	M	8140 (9)	22.1 (3)	5.0 (1)	94 (16)	1 (1)	39 (24)
08Y3040	M	8050 (10)	22.1 (5)	5.0 (1)	94 (16)	1 (1)	37 (15)
09Y1043	L	8000 (11)	19.0 (24)	5.0 (1)	96 (23)	1 (1)	35 (8)
08Y3020	M	7880 (12)	21.5 (8)	5.0 (1)	92 (7)	1 (1)	35 (10)
08Y3224	M	7870 (13)	20.6 (13)	5.0 (1)	95 (21)	1 (1)	38 (22)
08Y2083	MPQ	7860 (14)	22.5 (2)	5.0 (1)	95 (19)	1 (1)	35 (8)
09Y1062	LJ	7840 (15)	18.6 (27)	5.0 (1)	96 (22)	1 (1)	36 (11)
09Y1099	L	7800 (16)	18.5 (28)	5.0 (1)	97 (25)	1 (1)	34 (4)
08Y2025	S	7640 (17)	18.8 (25)	5.0 (1)	89 (2)	1 (1)	36 (12)
L205	LR	7390 (18)	17.9 (30)	5.0 (1)	102 (31)	1 (1)	35 (7)
09Y1074	LIM	7360 (19)	18.8 (26)	5.0 (1)	97 (24)	1 (1)	32 (1)
08Y3041	M	7350 (20)	22.1 (3)	5.0 (1)	93 (12)	1 (1)	39 (25)
08Y3052	M	7290 (21)	21.9 (6)	4.5 (31)	93 (11)	1 (1)	39 (27)
08Y2014	MPQ	7080 (22)	21.5 (9)	5.0 (1)	93 (12)	11 (30)	40 (30)
08Y2085	MPQ	7060 (23)	23.4 (1)	5.0 (1)	91 (4)	3 (26)	39 (29)
09Y1067	LJ	7050 (24)	20.0 (18)	5.0 (1)	98 (26)	1 (1)	37 (14)
08Y2048	SSR	6980 (25)	20.8 (12)	5.0 (1)	94 (15)	1 (1)	33 (3)
09Y1038	L	6910 (26)	20.2 (17)	5.0 (1)	101 (29)	1 (1)	33 (2)
09Y1013	Lsr	6850 (27)	19.6 (21)	4.7 (30)	101 (28)	1 (1)	36 (12)
08Y3036	M	6760 (28)	19.5 (22)	5.0 (1)	89 (1)	1 (1)	37 (17)
08Y3185	M	6640 (29)	20.4 (14)	5.0 (1)	94 (16)	1 (1)	39 (25)
09Y2062	SWX	5910 (30)	17.8 (31)	5.0 (1)	93 (12)	1 (1)	38 (20)
KOSH	SPQ	5810 (31)	20.9 (10)	5.0 (1)	101 (29)	93 (31)	42 (31)
MEAN		7600	20.3	5.0	94	5	37
CV		6.4	2.7	1.5	1.4	59.3	5
LSD (.05)		1000	1.1	0.1	3	6	4

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, J=Jasmine; R = Newrex.

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

Subjective rating of 1-99 where 1 = none and 99 = completelylodged.

Numbers in parentheses indicate relative rank in column.

Table 5. 2010 Very Early Rice Variety Test - San Joaquin

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	LR	9450 (1)	15.0 (15)	5.0 (1)	104 (4)	1 (1)	33 (16)
05Y343	SWX	8810 (2)	19.6 (1)	5.0 (1)	115 (18)	1 (1)	33 (17)
09Y1094	L	8780 (3)	14.8 (16)	5.0 (1)	109 (10)	1 (1)	30 (5)
M104	M	8360 (4)	17.8 (4)	5.0 (1)	101 (2)	1 (1)	30 (5)
07Y843	M	8340 (5)	17.7 (5)	5.0 (1)	104 (5)	1 (1)	31 (9)
06Y513	L	8220 (6)	14.5 (18)	5.0 (1)	109 (10)	1 (1)	30 (5)
05Y471	M	8210 (7)	17.0 (8)	5.0 (1)	103 (3)	1 (1)	32 (13)
L206	L	8170 (8)	14.5 (17)	5.0 (1)	106 (7)	1 (1)	30 (2)
CM101	S	8070 (9)	16.0 (11)	5.0 (1)	107 (8)	1 (1)	31 (8)
07Y293	SPQ	8020 (10)	19.4 (2)	5.0 (1)	112 (16)	1 (1)	32 (12)
S102	S	7950 (11)	15.5 (13)	5.0 (1)	99 (1)	1 (1)	30 (2)
07Y186	MPQ	7910 (12)	17.3 (7)	5.0 (1)	109 (9)	1 (1)	32 (14)
07Y508	L	7890 (13)	15.6 (12)	5.0 (1)	105 (6)	1 (1)	33 (18)
04Y177	S	7870 (14)	16.4 (9)	5.0 (1)	110 (14)	1 (1)	30 (1)
M202	M	7760 (15)	17.8 (3)	5.0 (1)	111 (15)	1 (1)	31 (10)
CH201	S	7630 (16)	16.1 (10)	5.0 (1)	112 (17)	1 (1)	30 (4)
09Y1053	L	7570 (17)	15.5 (14)	5.0 (1)	110 (13)	1 (1)	32 (14)
M206	M	7560 (18)	17.6 (6)	5.0 (1)	109 (10)	1 (1)	31 (11)
MEAN		8140	16.6	5.0	107	1	31
CV		6.1	3.1		1.9		3.8
LSD (.05)		700	0.7		3		2

Preliminary Lines and Varieties

08Y3076	M	9000 (1)	16.9 (18)	5.0 (1)	110 (15)	1 (1)	33 (29)
08Y2049	SSR	8280 (2)	17.8 (12)	5.0 (1)	102 (1)	1 (1)	30 (2)
09Y1099	L	8200 (3)	14.7 (27)	5.0 (1)	109 (8)	1 (1)	31 (11)
08Y3016	M	8010 (4)	17.4 (13)	5.0 (1)	103 (2)	1 (1)	32 (18)
08Y3224	M	7950 (5)	16.7 (21)	5.0 (1)	109 (8)	1 (1)	31 (6)
08Y3036	M	7830 (6)	16.4 (22)	5.0 (1)	109 (8)	1 (1)	32 (18)
09Y2036	S	7800 (7)	17.9 (11)	5.0 (1)	109 (8)	1 (1)	33 (26)
09Y1074	LIM	7760 (8)	14.3 (31)	5.0 (1)	106 (4)	1 (1)	29 (1)
08Y3225	M	7670 (9)	17.0 (17)	5.0 (1)	108 (6)	1 (1)	31 (9)
08Y1092	L	7250 (10)	14.6 (30)	5.0 (1)	109 (8)	1 (1)	30 (4)
08Y3080	M	7170 (11)	16.7 (20)	5.0 (1)	110 (18)	1 (1)	33 (28)
08Y3020	M	7170 (12)	17.4 (14)	5.0 (1)	108 (6)	1 (1)	31 (11)
M206	M	7020 (13)	17.4 (15)	5.0 (1)	112 (25)	1 (1)	32 (21)
08Y3052	M	7000 (14)	16.9 (19)	5.0 (1)	105 (3)	1 (1)	31 (11)
09Y2062	SWX	6850 (15)	15.7 (23)	5.0 (1)	107 (5)	1 (1)	31 (11)
09Y1067	LJ	6850 (16)	15.5 (24)	5.0 (1)	109 (8)	1 (1)	31 (6)
08Y2085	MPQ	6840 (17)	18.5 (9)	5.0 (1)	110 (18)	1 (1)	33 (26)
09Y1043	L	6830 (18)	14.6 (28)	5.0 (1)	110 (18)	1 (1)	32 (18)
08Y2014	MPQ	6650 (19)	18.8 (7)	5.0 (1)	110 (18)	1 (1)	31 (9)
08Y2083	MPQ	6580 (20)	18.0 (10)	5.0 (1)	111 (22)	1 (1)	32 (25)
08Y3185	M	6440 (21)	17.1 (16)	5.0 (1)	112 (25)	1 (1)	34 (30)
08Y3041	M	6360 (22)	19.0 (5)	5.0 (1)	111 (22)	1 (1)	32 (23)
08Y3040	M	6260 (23)	18.7 (8)	5.0 (1)	115 (29)	1 (1)	31 (16)
08Y2025	S	6220 (24)	19.5 (2)	5.0 (1)	110 (15)	1 (1)	32 (21)
09Y1038	L	6200 (25)	14.8 (25)	5.0 (1)	113 (28)	1 (1)	30 (5)
L205	LR	5970 (26)	14.8 (26)	5.0 (1)	109 (8)	1 (1)	31 (17)
08Y3039	M	5910 (27)	19.1 (4)	5.0 (1)	113 (27)	1 (1)	31 (11)
09Y1062	LJ	5120 (28)	14.6 (29)	5.0 (1)	110 (15)	1 (1)	30 (3)
09Y1013	LSR	4590 (29)	19.3 (3)	5.0 (1)	118 (30)	1 (1)	32 (23)
KOSH	SPQ	4560 (30)	18.9 (6)	5.0 (1)	120 (31)	1 (1)	38 (31)
08Y2048	SSR	4310 (31)	19.8 (1)	5.0 (1)	111 (22)	1 (1)	31 (6)
MEAN		6800	17.1	5.0	110	1	32
CV		11.4	3.1		1.8		3.2
LSD (.05)		1580	1.1		4		2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; SR = stem rot resistant, J=Jasmine; R = Newrex.

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

Subjective rating of 1-99 where 1 = none and 99 = completelylodged.

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 (2006-2010)

Location	Year	M-104	M-202	M-206	Calmochi			
					101	S-102	L-205	L-206
Biggs (RES)	2006	7970	8960	9280	8490	9170	9350	9990
	2007	8930	10250	11030	6740	10730	9550	10360
	2008	10000	10170	10900	9960	10240	10010	11180
	2009	7180	8080	8940	7640	8230	9430	9710
	2010	-	10470	11290	9470	9380	10140	10200
Location Mean		8520	9586	10288	8460	9550	9696	10288
Sutter	2006	8480	8580	8780	8640	9780	7970	9030
	2007	10680	10740	11250	11140	11100	10000	10440
	2008	10100	9540	9800	10010	10190	9490	9840
	2009	10040	9070	9390	7870	8480	9070	10160
	2010	8270	6520	7890	9500	9360	7450	8050
Location Mean		9514	8890	9422	9432	9782	8796	9504
Yolo	2006	8020	8700	8360	7610	8730	8570	8290
	2007	7510	7220	7350	7500	7140	7010	7520
	2008	9930	10140	10480	9830	10340	9590	10210
	2009	11770	11400	12570	10760	11930	11220	10880
	2010	8050	7890	8210	7190	7520	7390	8230
Location Mean		9056	9070	9394	8578	9132	8756	9026
San Joaquin	2006*	-	-	-	-	-	-	-
	2007	9050	6130	9380	9650	10340	7430	9850
	2008	9780	7770	9360	9470	10000	7580	8160
	2009	8530	8720	8440	7650	7480	6970	8120
	2010	8360	7760	7560	8070	7950	5970	8170
Location Mean		8930	7595	8685	8710	8943	6988	8575
Loc/Years Mean		9036	8848	9487	8799	9373	8642	9389
Yield % M-104		100.0	97.9	105.0	97.4	103.7	95.6	103.9
Number of Tests		18	19	19	19	19	19	19

* Test location not planted in 2006.

Table 7. 2010 Early Rice Variety Tests - Four Location Summary

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	Biggs	Butte	Colusa					
		Ibs/acre									
05Y343	SWX	10630 (1)	11870 (1)	8880 (3)	11890 (1)	9890 (5)	22.0 (2)	4.9 (17)	91 (14)	19 (13)	40 (13)
06Y575	LR	10360 (2)	11010 (6)	9020 (2)	11700 (2)	9720 (6)	19.0 (12)	5.0 (4)	91 (13)	1 (1)	41 (18)
05Y471	M	10260 (3)	11530 (2)	8530 (6)	10930 (5)	10040 (3)	19.4 (10)	4.8 (18)	83 (3)	9 (12)	40 (17)
08Y1092	L	10160 (4)	11480 (3)	9410 (1)	10600 (8)	9140 (11)	17.5 (14)	4.9 (14)	88 (8)	1 (1)	36 (3)
M206	M	10080 (5)	10990 (7)	8440 (7)	10560 (9)	10330 (1)	20.1 (8)	4.9 (13)	85 (6)	2 (10)	40 (14)
M202	M	9880 (6)	10210 (14)	8190 (10)	10910 (6)	10220 (2)	21.6 (3)	5.0 (6)	90 (11)	2 (9)	41 (19)
M205	M	9830 (7)	10790 (9)	7950 (12)	11190 (3)	9370 (9)	22.4 (1)	4.9 (12)	93 (19)	1 (1)	38 (8)
08Y2098	MPQ	9800 (8)	10970 (8)	7880 (14)	10870 (7)	9470 (7)	20.7 (6)	5.0 (6)	89 (9)	24 (14)	40 (16)
L206	L	9750 (9)	11090 (5)	8400 (8)	10440 (10)	9070 (12)	15.7 (19)	4.9 (16)	84 (4)	1 (1)	36 (1)
09Y1013	LSR	9750 (10)	10720 (12)	8550 (5)	10260 (12)	9470 (8)	19.3 (11)	4.5 (19)	92 (18)	1 (1)	39 (9)
M208	M	9700 (11)	11370 (4)	8210 (9)	10390 (11)	8840 (15)	20.1 (7)	5.0 (10)	90 (12)	1 (1)	39 (11)
07Y732	M	9470 (12)	10610 (13)	7870 (15)	10120 (16)	9290 (10)	20.7 (5)	4.9 (15)	88 (7)	3 (11)	36 (2)
06Y513	L	9390 (13)	10770 (11)	8140 (11)	10200 (13)	8450 (17)	16.9 (17)	5.0 (2)	91 (16)	1 (8)	37 (5)
09Y1094	L	9380 (14)	10770 (10)	8560 (4)	10130 (15)	8070 (19)	17.1 (16)	5.0 (6)	91 (17)	1 (1)	37 (7)
S102	S	9230 (15)	9400 (15)	7330 (18)	10190 (14)	10010 (4)	15.9 (18)	5.0 (3)	79 (1)	42 (16)	39 (11)
08Y2082	MPQ	9110 (16)	9370 (17)	7660 (16)	10930 (4)	8460 (16)	21.2 (4)	5.0 (6)	91 (15)	51 (18)	40 (15)
CH201	SPQ	8790 (17)	9390 (16)	7900 (13)	9510 (17)	8350 (18)	17.9 (13)	5.0 (1)	89 (10)	38 (15)	37 (6)
04Y177	SPQ	8450 (18)	8950 (18)	7390 (17)	8510 (19)	8960 (13)	19.4 (9)	5.0 (11)	85 (5)	67 (19)	37 (4)
CM101	SWX	8260 (19)	7990 (19)	6770 (19)	9390 (18)	8870 (14)	17.5 (15)	5.0 (4)	83 (2)	49 (17)	39 (10)
MEAN		9590	10490	8160	10460	9260	19.2	4.9	88	16	38
CV		5.4	5.9	5.3	5.4	4.6	6.2	2	1.2	80.1	3.2
LSD (.05)		360	870	610	800	610	0.8	0.1	1	9	1

Preliminary Lines and Varieties

09Y2141	SWX	10940 (1)	10740 (13)	9540 (1)	12380 (1)	11110 (1)	20.5 (17)	4.9 (30)	84 (2)	10 (28)	41 (33)
07Y671	SSR	10480 (2)	11190 (3)	8960 (8)	11180 (2)	10590 (3)	22.7 (4)	4.9 (28)	89 (16)	3 (22)	38 (22)
08Y3269	M	10430 (3)	10930 (8)	9380 (3)	11110 (3)	10320 (7)	21.5 (6)	5.0 (6)	92 (26)	1 (3)	39 (27)
08Y3126	M	10260 (4)	11780 (1)	8960 (7)	10080 (19)	10220 (8)	20.3 (19)	5.0 (13)	85 (6)	6 (25)	40 (32)
08Y3168	M	10250 (5)	11120 (4)	9520 (2)	10310 (9)	10050 (9)	20.5 (16)	5.0 (13)	86 (13)	17 (32)	38 (21)
08Y3197	M	10220 (6)	11060 (6)	9030 (5)	10290 (12)	10510 (5)	20.1 (20)	5.0 (13)	86 (12)	7 (26)	39 (29)
07Y414	M	10150 (7)	11100 (5)	8870 (10)	10730 (5)	9880 (14)	20.7 (12)	5.0 (13)	86 (10)	4 (23)	40 (31)
08Y3182	M	10120 (8)	10910 (9)	8780 (13)	10230 (13)	10570 (4)	22.2 (5)	5.0 (6)	90 (20)	1 (3)	37 (12)
M206	M	10100 (9)	10680 (14)	8330 (17)	10870 (4)	10500 (6)	20.6 (13)	5.0 (3)	85 (7)	5 (24)	40 (30)
09Y2171	MPQ	9970 (10)	11490 (2)	8200 (21)	10690 (6)	9500 (19)	20.5 (15)	5.0 (6)	90 (18)	54 (33)	39 (28)
08Y3175	M	9880 (11)	10760 (12)	9000 (6)	10300 (10)	9480 (21)	23.2 (3)	4.9 (26)	92 (27)	1 (3)	38 (19)
08Y3140	M	9850 (12)	9770 (24)	8660 (16)	9890 (24)	11090 (2)	20.4 (18)	4.9 (23)	85 (8)	1 (3)	38 (25)
09Y1122	L	9820 (13)	10640 (15)	8740 (14)	9930 (23)	9970 (11)	17.2 (31)	4.9 (25)	90 (21)	1 (3)	36 (7)
08Y3239	M	9750 (14)	10870 (11)	8900 (9)	9490 (26)	9750 (17)	19.4 (23)	4.9 (28)	86 (11)	2 (20)	36 (8)
09Y1053	L	9710 (15)	10360 (19)	9170 (4)	10180 (16)	9150 (22)	18.5 (28)	5.0 (13)	88 (14)	1 (3)	37 (13)
08Y3232	M	9700 (16)	10890 (10)	7600 (27)	10390 (8)	9920 (13)	21.5 (7)	4.9 (21)	91 (22)	1 (2)	37 (11)
09Y2163	MPQ	9660 (17)	10590 (17)	8190 (23)	10220 (15)	9650 (18)	21.3 (9)	5.0 (12)	90 (17)	2 (19)	38 (20)
08Y3181	M	9630 (18)	10600 (16)	8100 (25)	9980 (21)	9840 (15)	19.5 (22)	5.0 (6)	84 (5)	10 (29)	38 (23)
08Y2101	MPQ	9630 (19)	10530 (18)	8790 (12)	10140 (17)	9050 (23)	20.7 (11)	5.0 (5)	91 (23)	9 (27)	36 (9)
09Y2184	SPQ	9630 (20)	10190 (22)	8690 (15)	10120 (18)	9500 (20)	21.0 (10)	4.9 (31)	94 (28)	14 (30)	37 (15)
09Y2136	SPQ	9620 (21)	10290 (20)	7960 (26)	10290 (11)	9920 (12)	21.4 (8)	4.9 (26)	85 (9)	14 (31)	37 (17)
08Y3240	M	9490 (22)	9410 (26)	8300 (19)	10460 (7)	9790 (16)	19.6 (21)	4.9 (22)	84 (4)	1 (1)	38 (24)
09Y1077	L	9430 (23)	10230 (21)	8810 (11)	9930 (22)	8740 (26)	19.4 (24)	5.0 (1)	89 (15)	2 (20)	36 (5)
08Y3147	M	9380 (24)	11050 (7)	7190 (29)	9310 (27)	9980 (10)	20.6 (14)	4.9 (23)	84 (3)	1 (3)	39 (26)
08Y1167	L	9340 (25)	10070 (23)	8190 (22)	10220 (14)	8880 (25)	18.9 (25)	5.0 (6)	94 (28)	1 (3)	34 (1)
09Y1183	LIM	9100 (26)	9770 (25)	8300 (18)	10050 (20)	8280 (27)	18.3 (29)	4.9 (32)	95 (30)	1 (3)	35 (4)
07Y599	LJ	8410 (27)	8820 (29)	8180 (24)	9160 (29)	7480 (30)	15.5 (34)	5.0 (13)	90 (19)	1 (3)	37 (18)
07Y301	SPQ	8320 (28)	8600 (31)	6130 (33)	9660 (25)	8900 (24)	23.3 (2)	5.0 (4)	95 (31)	1 (3)	36 (10)
07Y489	LA	8260 (29)	8950 (27)	8210 (20)	8300 (31)	7590 (28)	17.4 (30)	4.9 (32)	82 (1)	1 (3)	36 (6)
08Y1109	LJ	8000 (30)	8520 (33)	6860 (31)	9250 (28)	7360 (31)	18.6 (27)	4.8 (34)	95 (32)	1 (3)	37 (16)
A201	LA	7960 (31)	8530 (32)	7110 (30)	8690 (30)	7520 (29)	18.8 (26)	5.0 (1)	95 (32)	1 (3)	37 (14)
08Y1115	LA	7720 (32)	8910 (28)	7440 (28)	7640 (32)	6890 (32)	17.2 (32)	5.0 (13)	91 (24)	1 (3)	35 (3)
CT202	LB	6420 (33)	8730 (30)	6770 (32)	4690 (34)	5470 (33)	16.2 (33)	5.0 (6)	91 (25)	1 (3)	35 (2)
KOSH	SPQ	4980 (34)	5580 (34)	4650 (34)	4880 (33)	4820 (34)	24.6 (1)	5 (13)	98 (34)	46 (34)	
MEAN		9240	10110	8060	9670	9110	20	4.9	89	8	38
CV		5.3	5.8	6.6	3.6	4.8	5.8	1.9	1.3	132.3	2.9
LSD (.05)		360	1190	770	500	630	0.9	0.1	1	8	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; R = Newrex; SR=stem rot resistant; A = aromatic;

B=Basmati; IM=IMMI herbicide 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 8. 2010 Early Rice Variety Test- Biggs

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)
05Y343	SWX	11870 (1)	22.1 (3)	4.6 (15)	91 (16)	23 (14)	38 (15)
05Y471	M	11530 (2)	19.7 (11)	4.6 (17)	82 (3)	31 (15)	39 (17)
08Y1092	L	11480 (3)	20.3 (9)	4.7 (14)	87 (7)	0 (1)	35 (4)
M208	M	11370 (4)	19.9 (10)	4.8 (10)	90 (10)	0 (1)	37 (12)
L206	L	11090 (5)	18.4 (16)	4.6 (18)	85 (6)	0 (1)	34 (1)
06Y575	LR	11010 (6)	21.3 (5)	4.9 (4)	90 (11)	0 (1)	39 (17)
M206	M	10990 (7)	19.1 (13)	4.7 (13)	84 (5)	0 (1)	37 (11)
08Y2098	MPQ	10970 (8)	21.0 (6)	4.9 (6)	90 (11)	5 (11)	39 (19)
M205	M	10790 (9)	20.9 (7)	4.8 (12)	92 (17)	0 (1)	36 (8)
09Y1094	L	10770 (10)	18.7 (15)	4.9 (6)	90 (11)	0 (1)	35 (4)
06Y513	L	10770 (11)	19.2 (12)	5.0 (2)	91 (15)	0 (1)	35 (6)
09Y1013	LSR	10720 (12)	21.6 (4)	4.5 (19)	93 (18)	0 (1)	37 (10)
07Y732	M	10610 (13)	20.9 (8)	4.6 (15)	88 (8)	6 (12)	34 (2)
M202	M	10210 (14)	22.6 (2)	4.9 (6)	91 (14)	0 (1)	38 (14)
S102	S	9400 (15)	14.7 (19)	5.0 (3)	79 (1)	65 (16)	38 (13)
CH201	SPQ	9390 (16)	18.8 (14)	5.0 (1)	90 (9)	74 (18)	35 (7)
08Y2082	MPQ	9370 (17)	22.7 (1)	4.9 (6)	93 (19)	18 (13)	38 (16)
04Y177	SPQ	8950 (18)	18.4 (16)	4.8 (11)	84 (4)	93 (19)	35 (3)
CM101	SWX	7990 (19)	18.2 (18)	4.9 (4)	81 (2)	65 (16)	37 (9)
MEAN		10490	19.9	4.8	88	20	37
CV		5.9	8.6	1.7	1	37	3.4
LSD (.05)		870	2.4	0.1	1	10	2

Preliminary Lines and Varieties

08Y3126	M	11780 (1)	21.1 (11)	4.8 (16)	85 (9)	13 (28)	39 (31)
09Y2171	MPQ	11490 (2)	21.1 (13)	4.8 (9)	91 (25)	43 (33)	38 (30)
07Y671	SSR	11190 (3)	21.1 (11)	4.6 (34)	88 (16)	8 (27)	35 (10)
08Y3168	M	11120 (4)	20.9 (15)	4.8 (16)	87 (14)	35 (31)	36 (24)
07Y414	M	11100 (5)	21.6 (5)	4.8 (16)	84 (7)	5 (26)	38 (28)
08Y3197	M	11060 (6)	20.3 (18)	4.8 (16)	86 (10)	23 (29)	38 (28)
08Y3147	M	11050 (7)	21.3 (10)	4.7 (23)	83 (3)	0 (1)	37 (25)
08Y3269	M	10930 (8)	19.7 (23)	4.8 (9)	90 (18)	0 (1)	37 (26)
08Y3182	M	10910 (9)	22.1 (4)	4.8 (9)	91 (20)	0 (1)	35 (18)
08Y3232	M	10890 (10)	21.4 (7)	4.9 (6)	91 (20)	0 (1)	36 (20)
08Y3239	M	10870 (11)	18.9 (26)	4.7 (28)	86 (10)	0 (1)	35 (18)
08Y3175	M	10760 (12)	24.1 (1)	4.7 (23)	92 (26)	0 (1)	36 (21)
09Y2141	SWX	10740 (13)	17.8 (31)	4.8 (16)	83 (3)	0 (1)	40 (33)
M206	M	10680 (14)	19.4 (25)	4.9 (3)	83 (3)	0 (1)	39 (32)
09Y1122	L	10640 (15)	18.3 (30)	4.6 (29)	91 (20)	0 (1)	34 (7)
08Y3181	M	10600 (16)	21.3 (9)	4.8 (9)	83 (1)	33 (30)	38 (27)
09Y2163	MPQ	10590 (17)	23.3 (2)	4.8 (16)	92 (26)	0 (1)	35 (15)
08Y2101	MPQ	10530 (18)	22.2 (3)	4.9 (6)	91 (20)	0 (1)	35 (12)
09Y1053	L	10360 (19)	19.9 (21)	4.7 (23)	86 (12)	0 (1)	35 (17)
09Y2136	SPQ	10290 (20)	20.0 (20)	4.8 (9)	87 (14)	40 (32)	35 (12)
09Y1077	L	10230 (21)	20.4 (17)	5.0 (1)	86 (13)	0 (1)	33 (4)
09Y2184	SPQ	10190 (22)	19.8 (22)	4.6 (32)	93 (29)	0 (1)	34 (9)
08Y1167	L	10070 (23)	18.5 (29)	4.8 (15)	91 (20)	0 (1)	33 (4)
08Y3140	M	9770 (24)	20.1 (19)	4.7 (23)	85 (8)	0 (1)	36 (23)
09Y1183	LIM	9770 (25)	18.8 (27)	4.6 (29)	93 (30)	0 (1)	33 (6)
08Y3240	M	9410 (26)	18.5 (28)	4.8 (16)	83 (3)	0 (1)	35 (11)
07Y489	LA	8950 (27)	19.6 (24)	4.6 (32)	83 (2)	0 (1)	32 (1)
08Y1115	LA	8910 (28)	17.7 (32)	4.7 (23)	90 (19)	0 (1)	34 (7)
07Y599	LJ	8820 (29)	17.5 (34)	4.9 (5)	89 (17)	0 (1)	35 (15)
CT202	LB	8730 (30)	17.6 (33)	4.8 (9)	93 (31)	0 (1)	33 (2)
07Y301	SPQ	8600 (31)	21.5 (6)	4.9 (3)	95 (32)	0 (1)	33 (3)
A201	LA	8530 (32)	20.6 (16)	5.0 (1)	97 (33)	0 (1)	35 (14)
08Y1109	LJ	8520 (33)	21.0 (14)	4.6 (29)	92 (28)	0 (1)	36 (22)
KOSH	SPQ	5580 (34)	21.4 (7)	4.9 (6)	99 (34)	96 (34)	45 (34)
MEAN		10110	20.2	4.8	89	9	36
CV		5.8	8.5	1.4	1.3	138.5	1.9
LSD (.05)		1190		0.1	2	24	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; R = Newrex;

SR=stem rot resistant; A = aromatic; B=Basmati; IM=IMMI herbicide 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 9. 2010 Early Rice Variety Test- Butte

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)
08Y1092	L	9410 (1)	18.3 (14)	5.0 (1)	84 (7)	1 (1)	35 (2)
06Y575	LR	9020 (2)	20.1 (10)	5.0 (1)	86 (15)	1 (1)	40 (19)
05Y343	SWX	8880 (3)	22.3 (4)	5.0 (1)	85 (12)	1 (1)	40 (18)
09Y1094	L	8560 (4)	18.3 (13)	5.0 (1)	86 (16)	1 (1)	35 (4)
09Y1013	LSR	8550 (5)	19.9 (11)	5.0 (1)	87 (17)	1 (1)	38 (9)
05Y471	M	8530 (6)	19.2 (12)	5.0 (1)	76 (1)	1 (1)	39 (10)
M206	M	8440 (7)	21.7 (7)	5.0 (1)	81 (5)	1 (1)	40 (17)
L206	L	8400 (8)	15.7 (19)	5.0 (1)	79 (3)	1 (1)	35 (3)
M208	M	8210 (9)	20.7 (9)	5.0 (1)	85 (11)	1 (1)	39 (12)
M202	M	8190 (10)	22.5 (2)	5.0 (1)	84 (9)	1 (1)	39 (10)
06Y513	L	8140 (11)	17.8 (16)	5.0 (1)	87 (17)	1 (1)	35 (4)
M205	M	7950 (12)	26.1 (1)	5.0 (1)	87 (19)	1 (1)	36 (7)
CH201	SPQ	7900 (13)	18.0 (15)	5.0 (1)	84 (10)	13 (16)	36 (8)
08Y2098	MPQ	7880 (14)	21.7 (6)	5.0 (1)	85 (12)	1 (1)	39 (12)
07Y732	M	7870 (15)	22.4 (3)	5.0 (1)	82 (6)	1 (1)	34 (1)
08Y2082	MPQ	7660 (16)	22.3 (5)	5.0 (1)	85 (12)	41 (18)	39 (16)
04Y177	SPQ	7390 (17)	20.8 (8)	5.0 (1)	84 (7)	76 (19)	36 (6)
S102	S	7330 (18)	15.9 (18)	5.0 (1)	78 (2)	1 (1)	39 (15)
CM101	SWX	6770 (19)	17.3 (17)	5.0 (1)	81 (4)	28 (17)	39 (12)
MEAN		8160	20.1	5.0	83	9	38
CV		5.3	6		1.3	116.8	2.9
LSD (.05)		610	1.7		2	15	2

Preliminary Lines and Varieties

09Y2141	SWX	9540 (1)	23.0 (10)	5.0 (2)	79 (3)	1 (2)	39 (33)
08Y3168	M	9520 (2)	21.7 (14)	5.0 (2)	81 (8)	1 (2)	35 (7)
08Y3269	M	9380 (3)	25.2 (4)	5.0 (2)	87 (28)	1 (2)	37 (22)
09Y1053	L	9170 (4)	19.1 (30)	5.0 (2)	84 (20)	1 (2)	36 (20)
08Y3197	M	9030 (5)	21.0 (20)	5.0 (2)	82 (12)	1 (2)	36 (17)
08Y3175	M	9000 (6)	25.6 (3)	4.9 (30)	87 (26)	1 (2)	36 (14)
08Y3126	M	8960 (7)	21.2 (18)	5.0 (2)	79 (3)	1 (2)	39 (32)
07Y671	SSR	8960 (8)	23.7 (8)	5.0 (2)	86 (24)	1 (2)	37 (27)
08Y3239	M	8900 (9)	19.6 (27)	5.0 (2)	80 (6)	1 (2)	35 (7)
07Y414	M	8870 (10)	21.4 (16)	5.0 (2)	82 (12)	1 (2)	38 (30)
09Y1077	L	8810 (11)	21.1 (19)	5.0 (2)	86 (24)	1 (2)	36 (16)
08Y2101	MPQ	8790 (12)	22.3 (11)	5.0 (2)	85 (22)	1 (2)	35 (13)
08Y3182	M	8780 (13)	24.1 (6)	5.0 (2)	83 (16)	1 (2)	35 (10)
09Y1122	L	8740 (14)	19.1 (29)	5.0 (2)	83 (14)	1 (2)	35 (11)
09Y2184	SPQ	8690 (15)	23.9 (7)	4.9 (30)	90 (30)	1 (2)	37 (22)
08Y3140	M	8660 (16)	22.0 (13)	5.0 (2)	81 (10)	1 (2)	36 (20)
M206	M	8330 (17)	23.2 (9)	5.0 (1)	82 (11)	1 (31)	37 (28)
09Y1183	LIM	8300 (18)	19.9 (24)	4.9 (30)	89 (29)	1 (2)	33 (2)
08Y3240	M	8300 (19)	21.6 (15)	5.0 (2)	79 (5)	1 (2)	36 (17)
07Y489	LA	8210 (20)	17.8 (31)	5.0 (2)	77 (1)	1 (2)	36 (15)
09Y2171	MPQ	8200 (21)	21.0 (20)	5.0 (2)	83 (16)	6 (32)	38 (30)
08Y1167	L	8190 (22)	19.6 (26)	5.0 (2)	87 (26)	1 (2)	32 (1)
09Y2163	MPQ	8190 (23)	21.4 (16)	5.0 (2)	83 (14)	1 (2)	36 (17)
07Y599	LJ	8180 (24)	15.5 (33)	5.0 (2)	85 (22)	1 (2)	37 (24)
08Y3181	M	8100 (25)	19.5 (28)	5.0 (2)	80 (7)	1 (2)	37 (24)
09Y2136	SPQ	7960 (26)	22.0 (12)	4.9 (30)	81 (8)	6 (32)	38 (29)
08Y3232	M	7600 (27)	24.5 (5)	5.0 (29)	84 (19)	1 (1)	34 (5)
08Y1115	LA	7440 (28)	17.4 (32)	5.0 (2)	85 (21)	1 (2)	35 (11)
08Y3147	M	7190 (29)	20.9 (22)	5.0 (2)	78 (2)	1 (2)	37 (24)
A201	LA	7110 (30)	20.1 (23)	5.0 (2)	90 (30)	1 (2)	35 (7)
08Y1109	LJ	6860 (31)	19.7 (25)	4.9 (30)	94 (32)	1 (2)	34 (6)
CT202	LB	6770 (32)	15.5 (34)	5.0 (2)	84 (18)	1 (2)	34 (3)
07Y301	SPQ	6130 (33)	28.3 (2)	5.0 (2)	94 (32)	1 (2)	34 (4)
KOSH	SPQ	4650 (34)	28.3 (1)	5.0 (2)	99 (34)	94 (34)	45 (34)
MEAN		8060	21.7	5.0	85	4	36
CV		6.6	4.2	1.1	1.8	47.4	2.8
LSD (.05)		770	1.3		2	3	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; R = Newrex;

SR=stem rot resistant; A = aromatic; B=Basmati; IM=IMMI herbicide 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 10. 2010 Early Rice Variety Test- Colusa

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)
05Y343	SWX	11890 (1)	21.5 (1)	5.0 (17)	95 (12)	34 (15)	41 (14)
06Y575	LR	11700 (2)	16.9 (14)	5.0 (1)	94 (10)	1 (1)	41 (17)
M205	M	11190 (3)	20.1 (3)	5.0 (1)	99 (19)	1 (1)	39 (8)
08Y2082	MPQ	10930 (4)	20.0 (4)	5.0 (1)	95 (12)	67 (18)	40 (10)
05Y471	M	10930 (5)	19.0 (9)	4.7 (18)	91 (4)	2 (9)	41 (17)
M202	M	10910 (6)	20.0 (6)	5.0 (1)	94 (10)	3 (11)	42 (19)
08Y2098	MPQ	10870 (7)	20.0 (5)	5.0 (1)	95 (12)	25 (14)	41 (15)
08Y1092	L	10600 (8)	15.4 (18)	5.0 (1)	92 (7)	1 (1)	36 (5)
M206	M	10560 (9)	19.2 (8)	5.0 (1)	91 (5)	1 (1)	41 (15)
L206	L	10440 (10)	14.8 (19)	5.0 (1)	91 (5)	1 (1)	34 (1)
M208	M	10390 (11)	19.4 (7)	5.0 (1)	95 (12)	1 (1)	40 (12)
09Y1013	LSR	10260 (12)	16.6 (15)	4.3 (19)	98 (16)	1 (1)	39 (9)
06Y513	L	10200 (13)	15.5 (17)	5.0 (1)	98 (16)	2 (9)	36 (3)
S102	S	10190 (14)	17.5 (12)	5.0 (1)	83 (1)	66 (17)	40 (10)
09Y1094	L	10130 (15)	15.6 (16)	5.0 (1)	98 (18)	1 (1)	38 (7)
07Y732	M	10120 (16)	19.0 (10)	5.0 (1)	92 (7)	3 (12)	36 (3)
CH201	SPQ	9510 (17)	17.3 (13)	5.0 (1)	93 (9)	22 (13)	36 (2)
CM101	SWX	9390 (18)	17.8 (11)	5.0 (1)	88 (2)	69 (19)	40 (12)
04Y177	SPQ	8510 (19)	20.8 (2)	5.0 (1)	89 (3)	65 (16)	37 (6)
MEAN		10460	18.2	4.9	93	19	39
CV		5.4	5	2.7	1.3	84.9	3.4
LSD (.05)		800	1.3	0.2	2	23	2

Preliminary Lines and Varieties

09Y2141	SWX	12380 (1)	20.2 (6)	5.0 (1)	88 (1)	36 (32)	40 (30)
07Y671	SSR	11180 (2)	22.1 (2)	5.0 (1)	95 (18)	2 (1)	40 (31)
08Y3269	M	11110 (3)	19.0 (16)	5.0 (1)	98 (25)	2 (1)	39 (26)
M206	M	10870 (4)	19.0 (17)	5.0 (1)	91 (6)	2 (1)	40 (27)
07Y414	M	10730 (5)	18.9 (18)	5.0 (1)	91 (6)	2 (1)	41 (32)
09Y2171	MPQ	10690 (6)	20.0 (7)	5.0 (1)	95 (18)	65 (33)	38 (16)
08Y3240	M	10460 (7)	18.8 (20)	5.0 (1)	90 (3)	2 (1)	40 (28)
08Y3232	M	10390 (8)	19.4 (10)	5.0 (1)	96 (23)	2 (1)	38 (20)
08Y3168	M	10310 (9)	19.0 (15)	5.0 (1)	94 (16)	9 (29)	38 (16)
08Y3175	M	10300 (10)	20.3 (5)	5.0 (1)	98 (25)	2 (1)	38 (18)
09Y2136	SPQ	10290 (11)	20.8 (4)	5.0 (1)	90 (5)	9 (28)	36 (10)
08Y3197	M	10290 (12)	18.9 (19)	5.0 (1)	92 (13)	2 (1)	40 (28)
08Y3182	M	10230 (13)	19.7 (8)	5.0 (1)	94 (16)	2 (1)	36 (9)
08Y1167	L	10220 (14)	16.6 (27)	5.0 (1)	99 (28)	2 (1)	33 (2)
09Y2163	MPQ	10220 (15)	19.1 (13)	5.0 (1)	95 (18)	2 (1)	38 (23)
09Y1053	L	10180 (16)	16.5 (28)	5.0 (1)	91 (6)	2 (1)	35 (7)
08Y2101	MPQ	10140 (17)	18.7 (21)	5.0 (1)	98 (25)	11 (30)	36 (12)
09Y2184	SPQ	10120 (18)	19.3 (12)	5.0 (1)	99 (28)	16 (31)	38 (20)
08Y3126	M	10080 (19)	18.6 (22)	5.0 (1)	91 (6)	2 (1)	41 (33)
09Y1183	LIM	10050 (20)	17.1 (25)	5.0 (1)	99 (28)	2 (1)	35 (5)
08Y3181	M	9980 (21)	18.1 (23)	5.0 (1)	90 (3)	4 (25)	37 (15)
09Y1077	L	9930 (22)	17.5 (24)	5.0 (1)	92 (11)	5 (26)	35 (6)
09Y1122	L	9930 (23)	15.3 (33)	5.0 (1)	99 (28)	2 (1)	34 (4)
08Y3140	M	9890 (24)	19.4 (9)	5.0 (1)	92 (13)	2 (1)	38 (22)
07Y301	SPQ	9660 (25)	21.8 (3)	5.0 (1)	97 (24)	2 (1)	38 (23)
08Y3239	M	9490 (26)	19.1 (14)	5.0 (1)	92 (11)	5 (26)	36 (11)
08Y3147	M	9310 (27)	19.3 (11)	5.0 (1)	91 (6)	2 (1)	38 (23)
08Y1109	LJ	9250 (28)	15.7 (31)	5.0 (1)	95 (18)	2 (1)	38 (18)
07Y599	LJ	9160 (29)	14.2 (34)	5.0 (1)	92 (13)	2 (1)	36 (12)
A201	LA	8690 (30)	16.8 (26)	5.0 (1)	99 (28)	2 (1)	37 (14)
07Y489	LA	8300 (31)	15.8 (30)	5.0 (1)	88 (1)	2 (1)	36 (8)
08Y1115	LA	7640 (32)	15.4 (32)	5.0 (1)	95 (18)	2 (1)	34 (3)
KOSH	SPQ	4880 (33)	24.4 (1)	5.0 (1)	100 (34)	100 (34)	46 (34)
CT202	LB	4690 (34)	16.1 (29)	5.0 (1)	99 (28)	2 (1)	33 (1)
MEAN		9670	18.4	5	94	8	38
CV		3.6	4		1.3	134.6	3.7
LSD (.05)		500	1.1		2	16	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; R = Newrex;

SR=stem rot resistant; A = aromatic; B=Basmati; IM=IMMI herbicide 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 11. 2010 Early Rice Variety Test- Yuba

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)
M206	M	10330 (1)	20.5 (4)	5.0 (1)	85 (6)	6 (12)	42 (13)
M202	M	10220 (2)	21.3 (3)	5.0 (1)	91 (11)	3 (11)	44 (19)
05Y471	M	10040 (3)	19.8 (9)	5.0 (1)	84 (4)	1 (1)	43 (17)
S102	S	10010 (4)	15.7 (17)	5.0 (1)	78 (1)	34 (15)	42 (12)
05Y343	SWX	9890 (5)	22.2 (2)	4.9 (18)	92 (15)	20 (13)	40 (5)
06Y575	LR	9720 (6)	17.9 (11)	5.0 (1)	93 (17)	1 (1)	42 (16)
08Y2098	MPQ	9470 (7)	20.0 (7)	5.0 (1)	87 (7)	66 (18)	42 (15)
09Y1013	LSR	9470 (8)	19.0 (10)	4.0 (19)	92 (16)	1 (1)	41 (8)
M205	M	9370 (9)	22.6 (1)	5.0 (1)	94 (19)	1 (1)	41 (11)
07Y732	M	9290 (10)	20.5 (5)	5.0 (1)	89 (8)	1 (1)	37 (1)
08Y1092	L	9140 (11)	16.2 (15)	5.0 (1)	91 (10)	1 (1)	39 (2)
L206	L	9070 (12)	14.1 (19)	5.0 (1)	83 (3)	1 (1)	39 (3)
04Y177	SPQ	8960 (13)	17.8 (12)	5.0 (1)	84 (4)	33 (14)	39 (4)
CM101	SWX	8870 (14)	16.6 (14)	5.0 (1)	83 (2)	36 (16)	41 (10)
M208	M	8840 (15)	20.5 (6)	5.0 (1)	93 (17)	1 (1)	42 (14)
08Y2082	MPQ	8460 (16)	20.0 (8)	5.0 (1)	91 (12)	76 (19)	43 (17)
06Y513	L	8450 (17)	14.9 (18)	5.0 (1)	90 (9)	1 (1)	41 (8)
CH201	SPQ	8350 (18)	17.3 (13)	5.0 (1)	91 (12)	43 (17)	40 (6)
09Y1094	L	8070 (19)	15.8 (16)	5.0 (1)	91 (12)	1 (1)	41 (7)
MEAN		9260	18.6	4.9	88	17	41
CV		4.6	3.6	2.2	1.3	92.5	3
LSD (.05)		610	1	0.2	2	23	2

Preliminary Lines and Varieties

09Y2141	SWX	11110 (1)	21.0 (11)	4.8 (33)	84 (6)	1 (1)	46 (33)
08Y3140	M	11090 (2)	20.1 (18)	5.1 (2)	83 (3)	3 (3)	43 (30)
07Y671	SSR	10590 (3)	23.8 (2)	5.1 (2)	88 (14)	3 (3)	41 (20)
08Y3182	M	10570 (4)	23.0 (4)	5.1 (2)	92 (22)	3 (3)	41 (18)
08Y3197	M	10510 (5)	20.0 (21)	5.1 (2)	85 (10)	3 (3)	43 (32)
M206	M	10500 (6)	21.0 (10)	5.1 (2)	85 (10)	17 (29)	43 (26)
08Y3269	M	10320 (7)	22.1 (6)	5.1 (2)	93 (26)	3 (3)	43 (28)
08Y3126	M	10220 (8)	20.4 (16)	5.1 (2)	83 (3)	10 (28)	43 (30)
08Y3168	M	10050 (9)	20.4 (17)	5.1 (2)	84 (7)	22 (30)	42 (23)
08Y3147	M	9980 (10)	20.7 (14)	5.1 (2)	83 (3)	3 (3)	42 (25)
09Y1122	L	9970 (11)	16.0 (32)	5.1 (2)	88 (14)	3 (3)	40 (12)
09Y2136	SPQ	9920 (12)	23.0 (3)	5.0 (26)	84 (7)	3 (3)	40 (11)
08Y3232	M	9920 (13)	20.6 (15)	5.0 (26)	92 (23)	3 (3)	39 (8)
07Y414	M	9880 (14)	20.8 (13)	5.1 (2)	85 (12)	7 (27)	43 (26)
08Y3181	M	9840 (15)	19.3 (24)	5.1 (2)	84 (7)	3 (3)	42 (22)
08Y3240	M	9790 (16)	19.5 (23)	5.0 (25)	83 (2)	1 (1)	43 (29)
08Y3239	M	9750 (17)	20.0 (19)	5.0 (26)	87 (13)	3 (3)	38 (5)
09Y2163	MPQ	9650 (18)	21.2 (8)	5.1 (1)	89 (18)	4 (26)	41 (17)
09Y2171	MPQ	9500 (19)	20.0 (20)	5.1 (2)	89 (19)	101 (33)	42 (23)
09Y2184	SPQ	9500 (20)	21.0 (9)	5.1 (2)	93 (26)	37 (32)	39 (6)
08Y3175	M	9480 (21)	22.9 (5)	5.1 (2)	92 (23)	3 (3)	41 (18)
09Y1053	L	9150 (22)	18.4 (26)	5.1 (2)	89 (16)	3 (3)	40 (14)
08Y2101	MPQ	9050 (23)	19.6 (22)	5.1 (2)	90 (20)	22 (30)	39 (6)
07Y301	SPQ	8900 (24)	21.7 (7)	5.1 (2)	93 (26)	3 (3)	40 (12)
08Y1167	L	8880 (25)	21.0 (12)	5.1 (2)	98 (33)	3 (3)	37 (2)
09Y1077	L	8740 (26)	18.5 (25)	5.1 (2)	90 (20)	3 (3)	38 (4)
09Y1183	LIM	8280 (27)	17.4 (30)	5.0 (26)	97 (32)	3 (3)	38 (3)
07Y489	LA	7590 (28)	16.4 (31)	4.9 (31)	79 (1)	3 (3)	39 (8)
A201	LA	7520 (29)	17.6 (29)	5.1 (2)	94 (29)	3 (3)	41 (20)
07Y599	LJ	7480 (30)	14.8 (34)	4.9 (31)	92 (23)	3 (3)	40 (14)
08Y1109	LJ	7360 (31)	18.0 (28)	4.5 (34)	99 (34)	3 (3)	40 (14)
08Y1115	LA	6890 (32)	18.2 (27)	5.1 (2)	94 (29)	3 (3)	36 (1)
CT202	LB	5470 (33)	15.6 (33)	5.1 (2)	89 (16)	3 (3)	39 (8)
KOSH	SPQ	4820 (34)	24.2 (1)	5.0 (26)	94 (29)	101 (33)	48 (34)
MEAN		9110	19.4	5	89	10	40
CV		4.8	4.8	3.4	0.7	120.6	2.8
LSD (.05)		630	1.3		1	17	2

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; LA=low amalose; J=Jasmine; R = Newrex;

SR=stem rot resistant; A = aromatic; B=Basmati; IM=IMMI herbicide 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 12. Grain Yield (lb/acre @14% moisture) Summary of Early Rice Varieties by Location and Year (2006-2010)

Location	Year	Calhikari				Calmati	
		201	M-202	S-102	M-205	M-206	201
Biggs (RES)	2006	8650	9000	9740	9250	9560	7480
	2007	6230	6940	8730	8920	9430	6960
	2008	9520	10580	10950	10800	10620	8120
	2009	9090	8940	9700	9430	9080	-
	2010	9390	10210	9400	10790	10990	-
<u>Location Mean</u>		8576	9134	9704	9838	9936	7520
Butte	2006	6930	7970	8430	8820	8080	7230
	2007	7430	7640	8580	8310	8060	7640
	2008	6360	7150	7470	8220	8450	6780
	2009	8690	9690	7800	9830	8170	-
	2010	7900	8190	7330	7950	8440	-
<u>Location Mean</u>		7462	8128	7922	8626	8240	7217
Colusa	2006	8530	9970	9060	10720	9300	7590
	2007	8270	9030	9040	9630	9960	7190
	2008	8640	9950	9870	10080	10080	6610
	2009	7350	8560	8130	9680	8800	-
	2010	9510	10910	10190	11190	10560	-
<u>Location Mean</u>		8460	9684	9258	10260	9740	7130
Yuba	2006	-	-	-	-	-	-
	2007	5910	7040	6170	7480	7960	5550
	2008	8880	10140	9830	10500	10720	7660
	2009	6880	7940	7950	8790	8530	-
	2010	8350	10220	10010	9370	10330	-
<u>Location Mean</u>		7505	8835	8490	9035	9385	6605
<u>Loc/Years Mean</u>		8027	8951	6918	9461	9322	7165
Yield % M-202		89.7	100	77.3	105.7	104.1	80.0
Number of Tests		19	19	19	19	19	11
							15

Table 13. 2010 Intermediate-Late Rice Variety Tests - Over Location Summary

Advanced Lines and Varieties

Variety	Grain Type	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	Glenn	Sutter							
06Y575	LR	10620 (1)	10920 (5)	9780 (3)	11150 (1)	18.7 (9)	5.0 (4)	96 (6)	15 (6)	41 (11)	
09Y2179	S	10210 (2)	11380 (2)	9850 (2)	9390 (5)	19.9 (7)	4.9 (8)	92 (4)	6 (2)	40 (10)	
M205	M	9810 (3)	11030 (3)	9210 (5)	9190 (9)	21.6 (5)	4.9 (11)	100 (8)	13 (5)	37 (7)	
L206	L	9780 (4)	11610 (1)	8340 (8)	9390 (6)	17.1 (12)	4.9 (10)	92 (3)	33 (8)	34 (1)	
M202	M	9630 (5)	10430 (6)	7970 (9)	10500 (2)	21.1 (6)	5.0 (5)	95 (5)	33 (8)	38 (9)	
06Y513	L	9340 (6)	9970 (8)	8840 (7)	9230 (8)	18.6 (10)	5.0 (2)	98 (7)	23 (7)	37 (6)	
07Y722	M	9290 (7)	10930 (4)	9000 (6)	7940 (10)	23.1 (1)	4.9 (9)	104 (10)	11 (4)	37 (5)	
CH201	SPQ	9250 (8)	10280 (7)	7950 (10)	9520 (4)	17.6 (11)	5.0 (3)	91 (2)	43 (10)	37 (4)	
M402	MPQ	8960 (9)	8240 (10)	9360 (4)	9300 (7)	22.6 (3)	5.0 (1)	110 (12)	6 (3)	38 (8)	
09Y2185	SPQ	8630 (10)	8060 (11)	9940 (1)	7910 (11)	23.0 (2)	4.4 (12)	109 (11)	1 (1)	35 (2)	
04Y177	SPQ	8510 (11)	9550 (9)	6030 (11)	9950 (3)	18.9 (8)	5.0 (5)	89 (1)	66 (11)	36 (3)	
KOSH	SPQ	5760 (12)	6870 (12)	4330 (12)	6090 (12)	22.6 (4)	4.9 (7)	104 (9)	95 (12)	45 (12)	
MEAN		9150	9940	8380	9130	20.4	4.9	98	29	38	
CV		9.1	12.3	7.5	4.6	6.2	2.1	1.3	54.1	4.3	
LSD (.05)		670	1760	900	600	1	0.1	1	13	1	

Preliminary Lines and Varieties

09Y1077	L	10480 (1)	11020 (5)	9700 (3)	10720 (1)	17.6 (20)	5 (2)	96 (6)	1 (1)	36 (7)	
09Y2159	SLA	10180 (2)	10450 (10)	10040 (1)	10050 (3)	17.7 (17)	4.8 (18)	96 (6)	12 (17)	37 (16)	
08Y3310	M	10080 (3)	11120 (3)	9050 (11)	10070 (2)	19.8 (10)	4.9 (16)	95 (4)	1 (1)	37 (13)	
08Y3314	M	10070 (4)	10810 (6)	9500 (4)	9910 (5)	21.1 (1)	5 (5)	100 (18)	1 (1)	37 (15)	
09Y1094	L	10060 (5)	11310 (1)	9140 (9)	9740 (7)	17.6 (19)	5 (1)	96 (6)	20 (21)	37 (18)	
08Y3236	M	10010 (6)	10800 (7)	9440 (6)	9790 (6)	20.7 (4)	4.9 (11)	99 (15)	1 (9)	36 (10)	
08Y3344	M	9880 (7)	11050 (4)	9270 (7)	9340 (12)	20.9 (2)	4.9 (6)	100 (16)	5 (16)	39 (22)	
08Y3328	M	9690 (8)	11180 (2)	8980 (12)	8900 (14)	20.7 (3)	4.9 (6)	98 (12)	20 (22)	36 (11)	
08Y2163	SPQ	9600 (9)	10210 (12)	9230 (8)	9350 (11)	19.7 (11)	5 (3)	91 (3)	1 (1)	37 (17)	
08Y3323	M	9600 (10)	10630 (8)	9480 (5)	8680 (16)	19.7 (12)	4.8 (18)	99 (14)	1 (1)	39 (20)	
M205	M	9580 (11)	10400 (11)	8820 (15)	9520 (9)	20.7 (5)	4.9 (14)	100 (17)	14 (18)	37 (14)	
08Y3338	M	9510 (12)	10470 (9)	9070 (10)	8980 (13)	20.5 (7)	4.9 (6)	98 (13)	2 (13)	36 (5)	
09Y2176	MPQ	9450 (13)	9550 (14)	8830 (14)	9970 (4)	20.3 (9)	4.9 (17)	101 (19)	19 (19)	41 (23)	
08Y3234	M	9400 (14)	9870 (13)	8930 (13)	9400 (10)	20.6 (6)	4.9 (14)	97 (10)	19 (20)	36 (9)	
09Y1183	LIM	9230 (15)	9540 (15)	8500 (16)	9630 (8)	17.8 (16)	4.8 (21)	103 (21)	1 (1)	35 (1)	
08Y3308	M	9110 (16)	8770 (17)	9840 (2)	8700 (15)	20.3 (8)	4.9 (11)	102 (20)	1 (1)	38 (19)	
07Y1174	LJ	8030 (17)	7650 (22)	8410 (17)	8020 (17)	18.9 (13)	4.7 (22)	106 (23)	1 (1)	36 (8)	
09Y1059	LJ	7910 (18)	8470 (18)	8230 (18)	7030 (20)	17.1 (21)	4.9 (11)	91 (2)	1 (9)	39 (21)	
10Y150	LJ	7850 (19)	9040 (16)	7530 (20)	6980 (21)	17.7 (18)	4.9 (6)	96 (5)	1 (9)	36 (6)	
10Y151	LB	7820 (20)	8440 (19)	7400 (21)	7600 (19)	18.1 (15)	4.9 (6)	96 (6)	2 (13)	35.0 (4)	
08Y1114	LJ	7810 (21)	7820 (21)	7850 (19)	7770 (18)	18.2 (14)	4.8 (18)	104 (22)	1 (9)	37 (12)	
CT202	LB	6630 (22)	7970 (20)	6530 (22)	5390 (23)	17 (22)	5 (3)	97 (11)	2 (13)	35 (2)	
09Y1081	LB	5450 (23)	5450 (23)	4600 (24)	6310 (22)	16.2 (23)	4.7 (22)	89 (1)	28 (23)	35 (3)	
09Y139*	L	-	3440 (24)	5040 (23)	-	-	-	-	-	-	
MEAN		9020	9400	8480	8780	19.1	4.9	98	7	37	
CV		6.2	8.3	4.6	4.3	5.2	2	0.9	195.5	4.4	
LSD (.05)		650	1620	810	790	1.2	0.1	1	15	2	

S = short; M = medium; L = long; PQ = premium quality; B = Basmati; LA = low amalose; J = Jasmine; IM = IMMI herbicide resistance; R = Newrex..

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.

* 09Y139 dropped from Sutter and OLS.

Table 14. 2010 Intermediate-Late Rice Variety Test - Biggs

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)
L206	L	11610 (1)	19.1 (11)	4.7 (11)	92 (4)	0 (1)	33 (2)
09Y2179	S	11380 (2)	21.9 (9)	4.8 (8)	90 (3)	0 (1)	36 (9)
M205	M	11030 (3)	26.2 (4)	4.8 (9)	97 (8)	0 (1)	36 (6)
07Y722	M	10930 (4)	27.6 (3)	4.8 (9)	101 (9)	0 (1)	34 (5)
06Y575	LR	10920 (5)	24.0 (7)	4.9 (5)	97 (7)	0 (1)	39 (11)
M202	M	10430 (6)	24.4 (6)	4.9 (6)	95 (5)	0 (1)	37 (10)
CH201	SPQ	10280 (7)	18.6 (12)	5.0 (3)	90 (2)	28 (10)	33 (2)
06Y513	L	9970 (8)	22.2 (8)	5.0 (2)	97 (6)	0 (1)	36 (8)
04Y177	SPQ	9550 (9)	19.3 (10)	4.9 (4)	86 (1)	63 (11)	33 (4)
M402	MPQ	8240 (10)	29.5 (1)	5.0 (1)	110 (12)	0 (1)	36 (6)
09Y2185	SPQ	8060 (11)	28.1 (2)	4.6 (12)	105 (11)	0 (1)	31 (1)
KOSH	SPQ	6870 (12)	25.2 (5)	4.9 (6)	103 (10)	90 (12)	43 (12)
MEAN		9940	23.8	4.9	97	15	36
CV		12.3	7.4	2.3	0.9	66.5	5.2
LSD (.05)		1760	2.6	0.2	1	14	3

Preliminary Lines and Varieties

09Y1094	L	11310 (1)	20.8 (20)	5.0 (1)	94 (6)	0 (1)	37 (21)
08Y3328	M	11180 (2)	23.9 (9)	4.8 (7)	97 (12)	0 (1)	36 (17)
08Y3310	M	11120 (3)	22.5 (14)	4.6 (18)	93 (4)	0 (1)	36 (15)
08Y3344	M	11050 (4)	25.3 (6)	4.8 (7)	97 (15)	0 (1)	38 (23)
09Y1077	L	11020 (5)	22.6 (13)	5.0 (2)	93 (5)	0 (1)	33 (9)
08Y3314	M	10810 (6)	25.4 (5)	4.9 (5)	98 (18)	0 (1)	36 (17)
08Y3236	M	10800 (7)	25.6 (3)	4.7 (12)	98 (17)	0 (1)	35 (14)
08Y3323	M	10630 (8)	22.0 (16)	4.5 (20)	97 (12)	0 (1)	38 (22)
08Y3338	M	10470 (9)	22.9 (11)	4.9 (5)	97 (12)	0 (1)	33 (6)
09Y2159	SLA	10450 (10)	20.2 (22)	4.8 (7)	96 (9)	0 (1)	33 (3)
M205	M	10400 (11)	25.4 (4)	4.7 (16)	97 (15)	0 (1)	32 (1)
08Y2163	SPQ	10210 (12)	20.9 (19)	4.9 (3)	90 (2)	0 (1)	34 (12)
08Y3234	M	9870 (13)	26.3 (1)	4.7 (16)	95 (8)	0 (1)	36 (15)
09Y2176	MPQ	9550 (14)	22.9 (11)	4.7 (12)	99 (19)	0 (1)	39 (24)
09Y1183	LIM	9540 (15)	22.3 (15)	4.4 (22)	101 (21)	0 (1)	32 (2)
10Y150	LJ	9040 (16)	21.0 (18)	4.8 (7)	96 (11)	0 (1)	35 (13)
08Y3308	M	8770 (17)	23.3 (10)	4.7 (12)	100 (20)	0 (1)	36 (19)
09Y1059	LJ	8470 (18)	20.4 (21)	4.7 (12)	91 (3)	0 (1)	37 (20)
10Y151	LB	8440 (19)	21.5 (17)	4.8 (7)	94 (7)	0 (1)	33 (6)
CT202	LB	7970 (20)	20.1 (23)	4.9 (3)	96 (10)	0 (1)	33 (4)
08Y1114	LJ	7820 (21)	24.6 (8)	4.6 (18)	102 (22)	0 (1)	33 (10)
07Y1174	LJ	7650 (22)	26.3 (1)	4.5 (20)	104 (24)	0 (1)	34 (11)
09Y1081	LB	5450 (23)	18.9 (24)	4.2 (23)	86 (1)	0 (1)	33 (6)
09Y139	L	3440 (24)	25.0 (7)	3.6 (24)	103 (23)	0 (1)	33 (5)
MEAN		9400	22.9	4.6	96	0	35
CV		8.3	6.3	4.2	0.9		5.8
LSD (.05)		1620	3	0.4	2		

S = short; M = medium; L = long; PQ = premium quality; B = Basmati; LA=low amalose; J = Jasmine; R = Newrex; IM=IMMI herbicide 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. 2010 Intermediate-Late Rice Variety Test - Glenn

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)
09Y2185	SPQ	9940 (1)	19.3 (5)	3.5 (12)	111 (11)	3 (1)	39 (2)
09Y2179	S	9850 (2)	17.9 (8)	5.0 (9)	89 (1)	18 (2)	43 (10)
06Y575	LR	9780 (3)	16.6 (11)	5.0 (1)	98 (8)	45 (6)	44 (11)
M402	MPQ	9360 (4)	19.4 (4)	5.0 (1)	112 (12)	18 (3)	40 (8)
M205	M	9210 (5)	18.1 (7)	4.9 (11)	97 (6)	39 (5)	39 (2)
07Y722	M	9000 (6)	18.5 (6)	5.0 (9)	98 (8)	33 (4)	39 (5)
06Y513	L	8840 (7)	17.0 (10)	5.0 (1)	98 (7)	68 (7)	39 (2)
L206	L	8340 (8)	15.6 (12)	5.0 (1)	89 (2)	99 (9)	37 (1)
M202	M	7970 (9)	19.8 (3)	5.0 (1)	90 (3)	99 (9)	39 (7)
CH201	SPQ	7950 (10)	17.4 (9)	5.0 (8)	91 (5)	96 (8)	41 (9)
04Y177	SPQ	6030 (11)	19.9 (2)	5.0 (1)	90 (4)	99 (9)	39 (5)
KOSH	SPQ	4330 (12)	21.2 (1)	5.0 (1)	108 (10)	99 (9)	49 (12)
MEAN		8380	18.4	4.9	98	60	41
CV		7.5	5.4	2.8	1.7	37.6	3.7
LSD (.05)		900	1.4	0.2	2	32	2

Preliminary Lines and Varieties

09Y2159	SLA	10040 (1)	16.4 (13)	4.7 (23)	100 (19)	6 (14)	41 (19)
08Y3308	M	9840 (2)	16.9 (10)	5.0 (1)	99 (17)	1 (1)	39 (14)
09Y1077	L	9700 (3)	14.7 (18)	5.0 (1)	102 (20)	1 (1)	37 (1)
08Y3314	M	9500 (4)	17.4 (5)	5.0 (1)	98 (15)	1 (1)	39 (9)
08Y3323	M	9480 (5)	16.9 (11)	5.0 (1)	98 (11)	1 (1)	40 (17)
08Y3236	M	9440 (6)	16.8 (12)	5.0 (1)	98 (15)	3 (10)	38 (6)
08Y3344	M	9270 (7)	17.3 (6)	5.0 (1)	97 (8)	13 (18)	40 (18)
08Y2163	SPQ	9230 (8)	17.8 (1)	5.0 (1)	93 (4)	1 (1)	42 (21)
09Y1094	L	9140 (9)	16.3 (14)	5.0 (1)	98 (11)	58 (22)	39 (13)
08Y3338	M	9070 (10)	17.0 (9)	5.0 (1)	96 (6)	6 (14)	38 (8)
08Y3310	M	9050 (11)	17.1 (7)	5.0 (1)	93 (3)	1 (1)	39 (10)
08Y3328	M	8980 (12)	17.5 (4)	5.0 (1)	97 (8)	60 (23)	38 (5)
08Y3234	M	8930 (13)	17.7 (2)	5.0 (1)	95 (5)	55 (21)	38 (6)
09Y2176	MPQ	8830 (14)	17.7 (3)	4.9 (20)	97 (8)	50 (20)	42 (23)
M205	M	8820 (15)	17.0 (8)	5.0 (1)	98 (11)	41 (19)	42 (22)
09Y1183	LIM	8500 (16)	14.5 (22)	5.0 (19)	105 (22)	1 (1)	38 (3)
07Y1174	LJ	8410 (17)	14.6 (21)	4.8 (22)	106 (23)	1 (1)	39 (10)
09Y1059	LJ	8230 (18)	14.3 (23)	5.0 (1)	89 (1)	3 (10)	43 (24)
08Y1114	LJ	7850 (19)	14.7 (20)	4.9 (20)	107 (24)	3 (10)	40 (15)
10Y150	LJ	7530 (20)	15.0 (17)	5.0 (1)	98 (11)	3 (10)	38 (3)
10Y151	LB	7400 (21)	15.6 (15)	5.0 (1)	100 (18)	6 (14)	39 (12)
CT202	LB	6530 (22)	14.7 (19)	5.0 (1)	96 (6)	6 (14)	40 (16)
09Y139	L	5040 (23)	13.4 (24)	3.1 (24)	104 (21)	1 (1)	41 (20)
09Y1081	LB	4600 (24)	15.2 (16)	5.0 (1)	92 (2)	83 (24)	37 (1)
MEAN		8480	16.1	4.9	98	17	39
CV		4.6	3.5	2.1	1.1	126.4	3.3
LSD (.05)		810	1.2	0.2	2	44	3

S = short; M = medium; L = long; PQ = premium quality; B = Basmati; LA=low amalose; J = Jasmine; R = Newrex; IM=IMMI herbicide 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. 2010 Intermediate-Late Rice Variety Test - Sutter

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	LR	11150 (1)	15.6 (12)	5.0 (1)	94 (3)	1 (1)	40 (10)
M202	M	10500 (2)	19.2 (6)	5.0 (1)	99 (6)	1 (1)	40 (9)
04Y177	SPQ	9950 (3)	17.4 (8)	5.0 (10)	92 (1)	38 (11)	37 (6)
CH201	SPQ	9520 (4)	16.9 (9)	5.0 (1)	93 (2)	4 (10)	36 (3)
09Y2179	S	9390 (5)	19.9 (5)	5.0 (1)	98 (5)	1 (1)	41 (11)
L206	L	9390 (6)	16.5 (11)	5.0 (1)	95 (4)	1 (1)	34 (1)
M402	MPQ	9300 (7)	18.9 (7)	5.0 (1)	107 (10)	1 (1)	37 (7)
06Y513	L	9230 (8)	16.5 (10)	5.0 (1)	101 (7)	1 (1)	35 (2)
M205	M	9190 (9)	20.6 (4)	5.0 (1)	106 (9)	1 (1)	37 (8)
07Y722	M	7940 (10)	23.1 (1)	5.0 (1)	113 (12)	1 (1)	36 (5)
09Y2185	SPQ	7910 (11)	21.7 (2)	5.0 (10)	110 (11)	1 (1)	36 (4)
KOSH	SPQ	6090 (12)	21.3 (3)	5.0 (10)	101 (8)	97 (12)	43 (12)
MEAN		9130	19	5.0	101	12	38
CV		4.6	4.2	1	1.4	95	4.1
LSD (.05)		600	1.1		2	17	2

Preliminary Lines and Varieties

09Y1077	L	10720 (1)	15.4 (21)	5.0 (1)	94 (5)	1 (1)	36 (12)
08Y3310	M	10070 (2)	19.8 (10)	5.0 (1)	101 (10)	1 (1)	36 (11)
09Y2159	SLA	10050 (3)	16.7 (16)	5.0 (1)	93 (4)	30 (23)	38 (22)
09Y2176	MPQ	9970 (4)	20.3 (6)	5.0 (1)	106 (20)	6 (22)	41 (23)
08Y3314	M	9910 (5)	20.5 (4)	5.0 (1)	105 (18)	1 (1)	36 (12)
08Y3236	M	9790 (6)	19.8 (9)	5.0 (1)	102 (13)	1 (1)	36 (9)
09Y1094	L	9740 (7)	15.7 (19)	5.0 (1)	97 (8)	1 (1)	36 (12)
09Y1183	LIM	9630 (8)	16.7 (15)	5.0 (1)	103 (16)	1 (1)	34 (3)
M205	M	9520 (9)	19.6 (11)	5.0 (1)	106 (19)	1 (1)	37 (16)
08Y3234	M	9400 (10)	17.8 (12)	5.0 (1)	102 (14)	1 (1)	35 (6)
08Y2163	SPQ	9350 (11)	20.4 (5)	5.0 (1)	91 (2)	1 (1)	36 (12)
08Y3344	M	9340 (12)	20.2 (7)	5.0 (1)	106 (20)	1 (1)	38 (20)
08Y3338	M	8980 (13)	21.6 (1)	4.9 (23)	103 (16)	1 (1)	35 (7)
08Y3328	M	8900 (14)	20.8 (2)	5.0 (1)	101 (10)	1 (1)	35 (8)
08Y3308	M	8700 (15)	20.8 (3)	5.0 (1)	107 (23)	1 (1)	38 (19)
08Y3323	M	8680 (16)	20.1 (8)	5.0 (1)	102 (14)	1 (1)	38 (20)
07Y1174	LJ	8020 (17)	15.6 (20)	5.0 (1)	106 (20)	1 (1)	36 (10)
08Y1114	LJ	7770 (18)	15.4 (22)	5.0 (1)	101 (10)	1 (1)	37 (18)
10Y151	LB	7600 (19)	17.3 (13)	5.0 (1)	95 (6)	1 (1)	34 (2)
09Y1059	LJ	7030 (20)	16.6 (17)	5.0 (1)	93 (3)	1 (1)	37 (17)
10Y150	LJ	6980 (21)	17.2 (14)	5.0 (1)	95 (6)	1 (1)	35 (4)
09Y1081	LB	6310 (22)	14.6 (23)	5.0 (1)	90 (1)	1 (1)	35 (4)
CT202	LB	5390 (23)	16.3 (18)	5.0 (1)	101 (9)	1 (1)	33 (1)
MEAN		8780	18.2	5.0	100	2	36
CV		4.3	4.1	0.6	0.5	243.7	4
LSD (.05)		790	1.5		1	12	3

S = short; M = medium; L = long; PQ = premium quality; B = Basmati; LA=low amalose; J = Jasmine; R = Newrex; IM=IMMI herbicide 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.

* 09Y139 dropped from Sutter test (no stand).

Table 17. Grain Yield (lb/acre @14% moisture) Summary of Intermediate/
Late Rice Varieties by Location and Year (2006-2010)

Location	Year	M-205	M-402	M-202	L-205	L-206
Biggs (RES)	2006	8830	8280	8620	8920	9210
	2007	10080	8940	8960	9430	10390
	2008	10950	9220	10310	9890	10740
	2009	9290	9110	8300	9170	9950
	2010	11030	8240	10430	-	11610
Location Mean		10036	8758	9324	9352.5	10380
Glenn	2006	7050	7990	6820	6780	6700
	2007	10400	9080	9110	9150	9670
	2008	8440	7240	8300	8820	8710
	2009	10120	10610	9230	9910	10440
	2010	9210	9360	7970	-	8340
Location Mean		9044	8856	8286	8665	8772
Sutter	2006	8490	7290	7760	8730	8810
	2007	10320	8900	9800	10010	9580
	2008	8430	9180	8780	7760	7830
	2009	8180	8010	7080	6570	7470
	2010	9190	9300	10500	-	9390
Location Mean		8922	8536	8784	8268	8616
Loc/Years Mean		9334	8717	8798	8762	9256
Yield % M-202		106.1	99.1	100	99.6	105.6
Number of Tests		15	15	15	12	15

Table 18. Twitchell Island Very Early Large Plot Variety Trial

Variety	Grain Type	Grain Yield at 14% (lbs/acre)	Grain Moisture at Harvest (%)	Days to 50% Heading	Plant Height (in)
CM101	S	7580 (1)	17.4 (3)	109 (2)	27 (2)
S102	S	6970 (2)	17.2 (4)	108 (1)	27 (3)
M104	M	6490 (3)	19.6 (2)	116 (3)	25 (1)
M206	M	4467 (4)	27.0 (1)	125 (4)	28 (4)
MEAN		6377	20.3	115	26.8
CV		12	4.9	1.4	7.3
LSD (.05)		1528	2.0	3.2	

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

Numbers in parentheses indicate relative rank in column.

Table 19. Twitchell Island Very Early Small Plot Variety Trial

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)
CM101	S	6230 (1)	16.7 (18)	5.0 (1)	112 (1)	1 (1)	27 (6)
05Y471E	M	5820 (2)	18.8 (12)	5.0 (1)	113 (4)	1 (1)	29 (17)
S102	S	5820 (3)	17.7 (16)	5.0 (1)	113 (2)	1 (1)	26 (4)
08Y3016	M	5500 (4)	18.5 (13)	5.0 (1)	117 (7)	1 (1)	26 (3)
M104	M	5370 (5)	18.1 (14)	5.0 (1)	113 (3)	1 (1)	27 (9)
08Y3036	M	5370 (6)	18.9 (11)	5.0 (1)	117 (7)	1 (1)	27 (8)
06Y575	L	5290 (7)	17.1 (17)	5.0 (1)	119 (11)	1 (1)	29 (18)
05Y343	S	5070 (8)	25.2 (1)	5.0 (1)	122 (15)	1 (1)	28 (11)
07Y843	M	4850 (9)	21.2 (8)	5.0 (1)	120 (12)	1 (1)	28 (14)
08Y3039	M	4400 (10)	22.4 (7)	5.0 (1)	121 (13)	1 (1)	27 (5)
08Y3020	M	4320 (11)	20.1 (9)	5.0 (1)	115 (5)	1 (1)	28 (11)
06Y513	L	4140 (12)	18.0 (15)	5.0 (1)	118 (9)	1 (1)	27 (7)
M206	M	4090 (13)	22.5 (6)	5.0 (1)	122 (16)	1 (1)	27 (10)
04Y177	S	3840 (14)	22.6 (5)	5.0 (1)	118 (9)	1 (1)	28 (13)
07Y732	M	3350 (15)	25.1 (2)	5.0 (1)	124 (18)	1 (1)	25 (2)
08Y2098	M	3250 (16)	23.0 (4)	5.0 (1)	123 (17)	1 (1)	28 (15)
M202	M	2940 (17)	24.3 (3)	5.0 (1)	121 (13)	1 (1)	29 (16)
L206	L	2650 (18)	20.0 (10)	5.0 (1)	116 (6)	1 (1)	24 (1)
MEAN		4570	20.6	5.0	118	1	27
CV		15.2	5.3		2.3		7.1
LSD (.05)		990	1.5		4		

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.

Table 20. Twitchell Island Planting Method Test

Planting Method	Grain Yield at 14% (lbs/acre)	Grain Moisture at Harvest (%)	Days to 50% Heading	Plant Height (in)
Water Seeded	8213 (1)	18.4 (1)	115 (2)	29 (1)
Drill Seeded	5916 (2)	19.7 (2)	110 (1)	31 (2)
MEAN	7064	19.1	113	30
CV	34.2	9.08	1.6	8.4