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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. 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) and the Erdman Ranch (District 108, Yolo County). The San Joaquin site was not planted this year due to our inability to find a replacement for long-time cooperator Brumley who is no longer growing rice. In addition to the two on-farm sites, two additional tests were conducted at the Rice Experiment Station (RES) in Butte County. The Advanced test at each site included seventeen entries (seven commercial varieties and ten advanced breeding lines) in four replications. The Preliminary tests included thirty-four entries, all preliminary breeding lines in two replications (four replications at RES).

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 Quad 4 Ranch (Yuba County). The Yuba site was planted and maintained through maturity at which time we decided that harvest data would be unusable due to a severe watergrass infestation, thus the test was abandoned. Two additional trials, Advanced and Preliminary, were conducted at the RES. The Advanced test at each site included twenty entries (ten commercial varieties and ten advanced breeding lines) in four replications. The Preliminary tests included two commercial varieties and thirty breeding lines in two replications (four replications at RES).

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 fourteen entries (six commercial varieties and eight advanced breeding lines) in four replications. The Preliminary tests consisted of two commercial varieties and eighteen preliminary breeding lines in two replications (four replications at RES).

Objective II

The Rice Systems Project: To provide research on alternative crop establishment systems and more efficient cultural practices to manage weed resistance a long-term project was continued at the RES for the third year. The crop establishment systems included 1) conventional water seeded 2) conventional drill seeded 3) spring-tilled delayed stale seedbed water seeded 4) minimum tilled (no spring tillage) water seeded and 5) minimum tilled (no spring tillage). Treatments 3-5 received intermittent irrigation to germinate weeds subsequently killed with glyphosate (Roundup). Following the Roundup treatment, plots were either water or drill seeded and treated with appropriate herbicides (see Project RP-1 report) to control late germinating weeds (an area was also left untreated for weeds in each plot)..

Temperature Based Degree Day Model: Rice degree day phenology models are not widely utilized for scheduling field management decisions in California. Degree day models developed for California are 10-15 years old and need to be updated consistent with current varieties. The purpose of this study is to collect morphologically accurate phonological data for several of the most commonly grown rice cultivars in the Sacramento Valley and determine if these data can be useful for California rice management decisions. Detailed studies on rice growth and development were expanded to three sites and two additional varieties in 2006.

Objective III

Extension-Based Equipment and Service: To maintain an Extension-based pool of research equipment for planting, fertilizing, treatment application, and harvesting of rice and to provide professional technical assistance to UC research project leaders engaged in rice research a common equipment pool is maintained by this project..

To provide professional technical assistance to other UC research project leaders we assisted in approximately 35 trials including the 14 variety tests. Equipment from the UCCE-based pool for planting, fertilizing and harvesting field experiments was used at more than 20 sites at different times during the season. The most heavily used equipment was the harvester followed by the Clampco precision fertilizer rig. We also continued with the prescribed maintenance program for the SWECO plot combine.

The new ALMACO rice combine was delivered in March of 2006, too late for field testing in 2005. Field testing of the new combine was conducted in an early maturing field at the RES prior to 2006 statewide plot harvests. Specific design flaws were discovered that required the combine to be returned to the Iowa factory for modifications. As a result the SWECO was used for all plot harvests of the 2006 season to ensure data uniformity. The ALMACO was subsequently returned in time for late season field testing and performed well. It will now be used as the primary combine in the 2007 season.

Objective IV

Extension Education: We disseminated research-based information to California rice producers, dryer operators, millers and the general public through five winter grower meetings, three field demonstrations, and the Rice Production Workshop (Yuba City), personal communication, and through the distribution of a fact sheet on the characteristics of publicly developed varieties, the Rice Field Day Program and other printed material. We also maintained and updated the UCCE rice website.

SUMMARY OF 2006 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 late tests across years and locations are summarized in Tables 5, 10 and 15. 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): Ten commercial varieties and seven advanced breeding lines were compared in three very early advanced tests. Commercial varieties at each location included S-102, CM-101, M-104, M-202, M-206, L-205 and L-206. Thirty-four cultivars were tested in the preliminary trails at each location.

Grain yields in the advanced tests averaged 9020 lb/ac at the Biggs-RES, 8530 lb/ac at Sutter, and 8310 lb/ac at Yolo (Table 1). Over all locations, the highest yielding entry on average was S-102 (9230 lb/ac) followed by the advanced long grain 04Y508 (9150 lb/ac), L-206 (9100 lb/ac), and advanced long Newrex grain type 01Y655 (8980 lb/ac). Other top yielding commercial varieties M-206, M-202, L-205, and M-104 ranked sixth, ninth, tenth, and fourteenth, respectively. Averaged across locations, yields in the preliminary tests ranged from 7700 to 9210 lb/ac (Table 1). Days to 50% heading for most varieties in 2006 were 2-6 days less than in 2005. A significant percentage of the rice acreage was planted later than normal due to frequent spring rains that delayed field preparation. An unusual two weeks of temperatures in excess of 100 ºF in July shortened the days to 50% heading. Average lodging scores across all three locations were similar to the 2004-05 seasons. Over a 5-year period and across locations, S-102 was the highest yielding variety followed by M-206 at 9456 lbs/ac and 9185 lbs/ac respectively (Table 5).

Early Maturity Tests (90-97 days to 50% heading at Biggs): Ten commercial varieties and ten advanced lines were compared in four early tests. The preliminary tests included two commercial varieties and twenty-eight preliminary lines evaluated in separate tests at each location. Commercial varieties at each location were CH-201, CM-101, S-102, M-202, M-205, M-206, M-207, M208, CT-201, CT-202, L-205, and L-206.

Yields in the advanced line tests averaged 9370 lb/ac at the RES; 8370 lb/ac at Butte and 9390 lb/ac at Colusa, (Table 6). The advanced stem rot resistant long grain 03Y496 was the highest yielding entry (10090 lb/ac) when averaged over three locations in 2006 (Table 6). Other consistently high yielding entries were 04Y404, 99Y529, 03Y151, M-205, L-206, and M-208, all ranking within the top ten at two of the three locations. The yield of commercial varieties M-205, L-206, M-208, S-102, M-207, M-206, and M-202, ranked fifth, sixth, seventh, tenth, eleventh, thirteenth, and fourteenth over all locations (Table 6). Average days to 50% heading ranged from 77 days at the RES to 82 days at the Colusa County site. The commercial standard M-202 headed at 81 days at the RES and 85 days at Colusa. Days to 50% heading were similar to the 2005 season. M-205 was the highest yielding commercial variety (9551 lb/ac) followed by M-206 (9050 lb/ac) when averaged over the last five years and across locations (Table 10).

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

Average yields in the advanced tests were 9030 lb/ac at the RES, 6970 lb/ac at Glenn, and 8510 lb/ac at Sutter (Tables 11). The 2006 advanced over location average yield was 490 lb/ac less than the 2005 season average. L-206 was the highest yielding commercial variety (9210 lb/ac at RES) but ranked sixth over all. L-205 and M-205 were the next highest yielding commercial varieties across locations (Table 11). The stem rot resistant short grain entry 04Y641 was the highest yielding advanced entry across locations, at 8740 lb/ac. Average days to 50% heading ranged from 80 days at the Sutter County site to 82 days at the Glenn County and RES locations. The environmental conditions described earlier had a similar effect of decreasing the number of days to 50% heading an average of 4-6 days compared to 2005. M-402 required the longest time to 50% heading among the commercial varieties at all locations, (average 102 days). The high temperatures in July could not compensate for the delayed planting dates of M-402, thus days to 50% heading were similar to the 2005 season.

Averaged over the last five years and across locations, M-205 is the highest yielding (9582 lb/ac) commercial variety (Table 15). M-205 and M-402 produced 107% and 98%, respectively, of the yield of M-202 on average over the last 5 years (Table 15).

Objective II - Cultural Practices

Rice Growth and Development Studies: Initial field studies were conducted in 2005 in commercial fields located at the southern and northern ends of the Sacramento valley. An additional site was added in Yolo County, District 108 in 2006. One short grain cultivar, CM101 and three medium grain Calrose cultivars M104, M202, and M206 were grown in replicated plots at the three sites. The Glenn site also included M401. The plots were direct seeded by hand into a continuously flooded field environment. The northern Glenn County (warmer) site was planted 9 and 14 days earlier than the cooler Sutter and Yolo County sites, respectively. Water and air temperatures were recorded at all sites from planting to grain maturity. The Counce ‘Uniform, Objective, and Adaptive System for Expressing Rice Development’ was used to record leaf and reproductive stage development. These results are highly detailed and are still being summarized at the writing of this report.

Stand Establishment Trials: In 2004 we established a rice systems project at the RES to investigate different planting methods on rice seedling establishment and weed resistance management. The five treatments are 1) conventional water seeded, 2) conventional drill seeded, 3) spring tilled delayed stale seedbed water seeding, 4) minimum till (no spring till) water seeding, and 5) minimum till (no spring till) drill seeding. Treatments 3, 4 and 5 are pre-flush irrigated and treated with Roundup to kill the initial flush of weeds. Weeds are treated as necessary in the main plot areas but one area remains untreated to evaluate weed germination and recruitment (reported under RP-1). Different approaches are used for N management. In the conventional water seeded (treatment 1) and the delayed spring-tilled stale seedbed (treatment 3) where the soil is spring tilled we incorporated N preplant as is normally recommended for water seeded rice. In the drill seeded treatment (2) N was applied in splits. In the no-spring till drill and water seeded treatments (4 and 5) where soil disturbance would defeat the purpose of non tillage with respect to weed recruitment, N was also applied in splits. Phosphorus was applied to the entire block and incorporated where spring tillage occurred. We will use fall P applications in the future and incorporate P with fall tillage across the whole block. Table 16 shows comparative yields for these five treatments in each year and over the three years of the experiment. Yields were determined in the main plots, small fertility plots and by hand harvested plots. The data in table 16 are the best comparative estimates we have for all three years. In the

first two years we use main plot combine harvested data but because of errors in fertilization in some of the 2006 main plots, we use yield data from the N fertility plots—still combine harvested. For each year the data is comparable across treatments and there were no significant differences in yields between any of the treatments—but there were definite trends. The far right column compares these treatments when combined for statistical power over three years. This data shows that treatment 3 is significantly lower than treatments 1, 2 and 5 when all are compared at 150 lb N/ac. We attribute the lower yields in treatment 3 to the fact that water was lowered after preplant N was applied and thus the 10-14 days of drainage to encourage weed growth and treat with Roundup allowed adequate time for significant N losses. When 200 lb N/ac were used in treatment 3, yields were increased to the level of the other treatments. This data clearly shows the impact of draining fields with respect to N losses. More importantly, the data show that different systems for growing rice are feasible for California rice production.
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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 fifth year maintenance schedule were inspected and replaced as needed.

The rice equipment pool, including a precision Clampco fertilizer applicator, SWECO 324 plot combine, moisture meters, backpack CO_2 sprayers, and other equipment were used along with personnel who provided technical assistance for numerous field experiments in 2006. The Clampco precision fertilizer applicator was used for the Rice Systems Project at the RES. The SWECO 324 plot combine was used to harvest twelve variety trials, the Rice System Project, one rice fungicide experiment, and a blast strip trial. Over 1200 experimental plots were harvested in 2006. 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 breeder's 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, 2006 for the California Cooperative Rice Research Foundation, RES, 40 pp.
2. The UCCE website was updated.
3. One UCCE Rice Production Workshop was given in Yuba City.
4. Five UCCE winter grower meetings were held in the Sacramento and San Joaquin valleys.
5. A quick reference guide entitled "Herbicide Resistance Stewardship in Rice" was updated and distributed to all rice growers.
6. Three field days were held, two at the RES on the Systems Project, Rice Breeeder's Tour..

Publications and Reports:

Hill, J.E., Fischer, A.J., Greer, C.A., and Mutters, R.G. 2006. Herbicide Resistance Stewardship in Rice. University of California CooperativeExtension. 2 pp.

Fischer, A.J., Eckert, J.W., Hill, J.E., Boddy, L., Marchesi, C., Ruiz, M.O., Lang, J., and Johnson, S. 2006. Rice Weed Control: Herbicide Performance, Combinations, New Chemicals, and Weed

Management. Rice Field Day, 30 August, California Cooperative Rice Research Foundation, Inc. USDA-Univ of California, P.O. Box 306, Biggs, CA 95917-0306. pp. 32-33.

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Hill, JE, WM Canevari, CA Greer, RG Mutters and RL Wennig. 2006. University of California Cooperative Extension (UCCE) rice variety adaptation and cultural practices research. *In* Annual Report Comprehensive Rice Research 2005. University of California and USDA. 11 pp (available in e-version only).

Linquist, BA, SM Brouder and JE Hill. 2006.Winter straw and water management effects on soil nitrogen dynamics in California rice systems. Agron J. 98: 1050-1059

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McKenzie, KS, CW Johnson, F Jodari, JJ Oster, JE Hill, RG Mutters, CA Greer, WM Canevari and K Takami. 2006. Registration of 'Calamylow-201' Rice. Crop Sci; 46:2321-2322

CONCISE GENERAL SUMMARY OF CURRENT YEAR'S RESULTS:

Fourteen 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 8,620 lb/acre in the very early trials to 9,040 lb/acre in the early tests. In the intermediate to late tests the advanced lines average yield was 8,170 lb/acre. Similar to the exceptionally wet 2003 planting season, the 2006 season resulted in reduced acres planted and lowered average yields. A two week period of 100 ^{0}F + temperatures helped shorten the days to harvest but may have had a negative effect on yield. Several advanced lines in 2006 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 long-term rice cropping systems experiment on rice stand establishment was continued at the RES. Five different methods of stand establishment were evaluated with respect to N fertility management and for their impact on weed management (reported under RP-1). Three years of data on rice yield indicate that four of the five treatments including conventional water and drill seeded rice as well as non spring tilled rice either water or drill seeded were not significantly different in yield. One treatment, delayed stale seedbed water seeded rice was lower in yield than the other treatments. This was attributed to high N losses where N was applied preplant and the soil was drained to allow weeds to germinate and for treatment with Roundup. Yields were restored in this treatment with an additional 50 lb N/ac. Even though we flushed and drained the no-spring till treatments, N loss was not an issue because it was applied post plant in splits timed for maximum uptake by the rice plant. This work demonstrates the feasibility of different stand establishment practices that may reduce both resistant weeds and lower costs in California rice production.
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Project RM-2 was involved in the planting, sampling and harvesting of more than 40 trial sites throughout the rice growing areas. This project also was also involved in several educational activities including the winter rice grower meetings, the rice production workshop, the UCCE rice website, rice field day, newsletters, fact sheets and other publications.

Table 1. 2006 Very Early Rice Variety Tests - Three Location Summary

Variety	Grain Type	Average Yield at 14% Moisture lbs/acre	Yield Biggs	Yield Sutter	Yield Yolo	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
Advanced Lines and Varieties										
S102	S	9230 (1)	9170 (8)	9780 (1)	8730 (4)	16.1 (11)	4.9 (14)	74 (3)	59 (14)	37 (11)
04Y508	L	9150 (2)	9800 (2)	8520 (8)	9130 (2)	15.9 (12)	4.9 (13)	81 (14)	6 (1)	37 (8)
L206	L	9100 (3)	9990 (1)	9030 (2)	8290 (11)	14.7 (17)	4.9 (11)	76 (7)	32 (9)	34 (3)
01Y655	REX	8980 (4)	9490 (4)	8270 (14)	9180 (1)	17.1 (5)	4.9 (9)	90 (17)	8 (2)	38 (12)
04Y501	REX	8850 (5)	9510 (3)	8490 (9)	8540 (8)	14.9 (16)	5.0 (6)	78 (12)	14 (5)	38 (14)
M206	M	8810 (6)	9280 (6)	8780 (5)	8360 (10)	18.3 (3)	5.0 (1)	75 (5)	56 (12)	37 (9)
03Y254	M	8770 (7)	9070 (9)	8870 (3)	8370 (9)	18.0 (4)	5.0 (2)	77 (10)	36 (10)	39 (15)
02Y516	L	8770 (8)	9000 (10)	8440 (12)	8860 (3)	15.8 (13)	4.9 (7)	76 (7)	10 (4)	39 (16)
M202	M	8750 (9)	8960 (11)	8580 (7)	8700 (5)	18.9 (1)	5.0 (2)	83 (15)	24 (8)	37 (10)
L205	REX	8630 (10)	9350 (5)	7970 (16)	8570 (6)	15.6 (15)	4.9 (7)	83 (16)	15 (6)	36 (5)
04Y177	SPQ	8520 (11)	9210 (7)	8160 (15)	8190 (12)	17.1 (6)	4.9 (14)	75 (6)	59 (13)	35 (4)
04Y227	M	8460 (12)	8000 (16)	8820 (4)	8560 (7)	16.7 (8)	4.9 (12)	72 (2)	70 (17)	39 (17)
CM101	WX	8250 (13)	8490 (15)	8640 (6)	7610 (14)	16.8 (7)	5.0 (4)	76 (9)	63 (15)	38 (13)
M104	M	8160 (14)	7970 (17)	8480 (10)	8020 (13)	16.5 (9)	5.0 (4)	70 (1)	68 (16)	36 (7)
05Y176	SPQ	8150 (15)	8620 (13)	8450 (11)	7380 (16)	15.8 (14)	4.8 (17)	74 (4)	42 (11)	33 (1)
03Y164	SPQ	8140 (16)	8510 (14)	8300 (13)	7600 (15)	16.5 (10)	4.9 (9)	80 (13)	19 (7)	36 (6)
03Y166	SPQ	7800 (17)	8930 (12)	7380 (17)	7100 (17)	18.3 (2)	4.8 (16)	77 (11)	8 (3)	34 (2)
MEAN		8620	9020	8530	8310	16.6	4.9	77	35	37
CV		6	8.2	4.4	4	5.4	1.5	1.9	39.8	3
LSD (.05)		420	1050	540	470	0.7	0.1	1	11	1
Preliminary Lines and Varieties										
05Y379	M	9210 (1)	9080 (8)	9690 (1)	8850 (6)	17.2 (16)	5.0 (1)	75 (7)	61 (31)	37 (23)
05Y724	M	8990 (2)	9340 (4)	9270 (2)	8370 (17)	17.3 (13)	5.0 (1)	74 (4)	48 (24)	37 (25)
05Y552	JAS	8900 (3)	9510 (1)	8750 (10)	8440 (16)	14.2 (34)	4.9 (16)	75 (6)	9 (6)	35 (5)
04Y523	L	8850 (4)	8650 (23)	8840 (7)	9040 (2)	14.9 (33)	5.0 (1)	78 (22)	15 (10)	37 (24)
05Y490	L	8820 (5)	9390 (3)	8040 (27)	9040 (3)	15.0 (30)	4.9 (29)	81 (30)	13 (8)	35 (3)
05Y869	M	8820 (6)	8710 (21)	8870 (6)	8880 (5)	17.3 (13)	4.9 (21)	76 (9)	57 (27)	39 (33)
05Y282	M	8800 (7)	8560 (26)	9040 (4)	8800 (7)	17.0 (19)	4.9 (12)	76 (12)	51 (26)	37 (21)
05Y196	SPQ	8770 (8)	8790 (17)	8300 (17)	9220 (1)	17.6 (11)	4.9 (12)	78 (24)	88 (34)	36 (12)
99Y529	L	8760 (9)	8940 (12)	9070 (3)	8280 (21)	15.0 (31)	4.9 (21)	79 (25)	3 (3)	38 (31)
05Y528	LBL	8710 (10)	9420 (2)	8110 (24)	8600 (11)	15.3 (27)	4.9 (26)	76 (14)	20 (14)	38 (26)
04Y332	MPQ	8670 (11)	9020 (9)	8500 (13)	8480 (15)	17.9 (6)	4.9 (24)	79 (28)	20 (13)	38 (27)
05Y330	MPQ	8660 (12)	8950 (11)	8410 (15)	8620 (10)	18.7 (3)	4.9 (30)	79 (26)	27 (18)	37 (18)
05Y547	L	8660 (13)	8800 (16)	8190 (21)	8980 (4)	15.3 (28)	4.9 (21)	79 (29)	13 (9)	38 (30)
05Y830	M	8650 (14)	8830 (15)	8760 (9)	8350 (18)	17.7 (10)	4.9 (18)	76 (10)	36 (19)	37 (17)
05Y299	MPQ	8620 (15)	8740 (20)	8460 (14)	8670 (8)	17.9 (8)	5.0 (7)	76 (13)	62 (32)	38 (28)
05Y471	M	8610 (16)	8780 (18)	8720 (11)	8340 (19)	17.7 (9)	5.0 (8)	73 (1)	44 (22)	39 (34)
05Y536	L	8540 (17)	8750 (19)	8280 (18)	8600 (12)	14.9 (32)	4.9 (19)	81 (31)	3 (4)	37 (22)
05Y519	REX	8470 (18)	9260 (6)	8220 (20)	7950 (28)	16.6 (23)	4.8 (32)	82 (32)	2 (1)	35 (9)
04Y218	SWX	8450 (19)	9110 (7)	8360 (16)	7870 (29)	19.6 (1)	4.8 (31)	76 (10)	21 (15)	36 (13)
05Y455	M	8430 (20)	8140 (30)	8920 (5)	8230 (23)	17.0 (21)	4.9 (12)	73 (3)	48 (25)	38 (32)
05Y262	M	8410 (21)	8490 (28)	8680 (12)	8050 (26)	18.4 (4)	4.9 (26)	79 (26)	24 (17)	37 (15)
05Y468	M	8400 (22)	7790 (34)	8780 (8)	8640 (9)	16.6 (22)	4.9 (24)	76 (15)	45 (23)	37 (20)
03Y151	REX	8400 (23)	8850 (13)	8020 (28)	8320 (20)	16.5 (24)	4.9 (26)	85 (33)	2 (2)	35 (6)
05Y802	M	8310 (24)	9320 (5)	7100 (32)	8510 (14)	19.1 (2)	4.9 (9)	87 (34)	19 (12)	36 (14)
04Y492	L	8300 (25)	8680 (22)	8090 (26)	8110 (25)	15.1 (29)	5.0 (5)	77 (18)	6 (5)	38 (29)
05Y426	M	8140 (26)	8580 (24)	7720 (29)	8110 (24)	17.2 (15)	5.0 (6)	75 (5)	60 (30)	36 (10)
05Y178	SPQ	8130 (27)	8040 (32)	8110 (25)	8250 (22)	17.9 (7)	4.9 (12)	78 (21)	57 (28)	35 (8)
05Y850	M	8070 (28)	8830 (14)	7370 (31)	8000 (27)	17.1 (18)	5.0 (1)	77 (16)	59 (29)	36 (11)
05Y804	M	8020 (29)	8070 (31)	8270 (19)	7700 (32)	17.0 (20)	4.9 (16)	75 (8)	23 (16)	37 (19)
05Y1072	M	8010 (30)	8030 (33)	8150 (23)	7860 (30)	16.2 (25)	4.9 (9)	73 (2)	44 (21)	37 (16)
05Y194	SPQ	7980 (31)	8570 (25)	7630 (30)	7750 (31)	17.4 (12)	4.9 (19)	77 (20)	16 (11)	35 (4)
05Y175	SPQ	7960 (32)	8290 (29)	7080 (33)	8520 (13)	16.1 (26)	4.9 (9)	77 (16)	87 (33)	35 (7)
03Y167	SPQ	7750 (33)	8980 (10)	7070 (34)	7210 (33)	17.9 (5)	4.7 (33)	78 (22)	9 (7)	35 (2)
03Y170	SPQ	7700 (34)	8540 (27)	8160 (22)	6420 (34)	17.1 (17)	4.7 (34)	77 (19)	43 (20)	34 (1)
MEAN		8540	8760	8320	8330	16.6	4.9	76	38	37
CV		6.9	8.1	3.4	4.3	5.6	2.6	2.2	43.4	3.5
LSD (.05)		580		580	720	0.9	0.1	2	16	1

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; REX = Newrex; JAS = Jasmine.

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. 2006 Very Early Rice Variety Test - Biggs (RES)

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)	
Advanced Lines and Varieties													
L206	L	9990	(1)	14.7	(13)	4.8	(11)	71	(4)	29	(5)	36	(3)
04Y508	L	9800	(2)	15.6	(7)	4.8	(11)	76	(13)	16	(2)	38	(8)
04Y501	REX	9510	(3)	14.5	(14)	4.9	(5)	72	(8)	37	(6)	41	(15)
01Y655	REX	9490	(4)	16.0	(5)	4.9	(6)	81	(17)	11	(1)	40	(13)
L205	REX	9350	(5)	14.5	(15)	4.9	(6)	77	(14)	38	(7)	37	(5)
M206	M	9280	(6)	17.3	(2)	5.0	(1)	71	(3)	74	(11)	39	(9)
04Y177	SPQ	9210	(7)	15.5	(9)	4.7	(15)	71	(7)	93	(16)	37	(4)
S102	S	9170	(8)	14.3	(16)	4.8	(14)	73	(9)	82	(12)	39	(10)
03Y254	M	9070	(9)	16.8	(3)	4.9	(2)	75	(11)	88	(14)	41	(15)
02Y516	L	9000	(10)	14.8	(12)	4.8	(10)	71	(4)	26	(4)	41	(14)
M202	M	8960	(11)	17.9	(1)	4.9	(2)	80	(16)	59	(9)	40	(12)
03Y166	SPQ	8930	(12)	15.7	(6)	4.7	(16)	75	(12)	17	(3)	36	(2)
05Y176	SPQ	8620	(13)	13.3	(17)	4.7	(17)	71	(6)	68	(10)	34	(1)
03Y164	SPQ	8510	(14)	15.5	(8)	4.8	(11)	78	(15)	49	(8)	38	(6)
CM101	WX	8490	(15)	16.3	(4)	4.9	(6)	74	(10)	97	(17)	40	(11)
04Y227	M	8000	(16)	14.9	(11)	4.9	(2)	68	(2)	82	(13)	42	(17)
M104	M	7970	(17)	15.4	(10)	4.9	(6)	67	(1)	91	(15)	38	(7)
MEAN		9020		15.5		4.8		73		56		39	
CV		8.2		7.7		1.8		2.5		28.5		3	
LSD (.05)		1050		1.7		0.1		3		23		2	
Preliminary Lines and Varieties													
05Y552	JAS	9510	(1)	14.1	(34)	4.8	(23)	71	(11)	24	(6)	37	(5)
05Y528	LBL	9420	(2)	15.4	(19)	4.8	(19)	74	(26)	44	(13)	40	(30)
05Y490	L	9390	(3)	14.6	(27)	4.9	(6)	76	(31)	37	(10)	37	(6)
05Y724	M	9340	(4)	17.0	(6)	5.0	(1)	70	(4)	58	(21)	39	(26)
05Y802	M	9320	(5)	18.5	(1)	4.8	(12)	80	(34)	47	(16)	40	(27)
05Y519	REX	9260	(6)	15.8	(14)	4.8	(23)	75	(30)	4	(1)	38	(16)
04Y218	SWX	9110	(7)	17.4	(2)	4.6	(34)	74	(24)	44	(13)	38	(12)
05Y379	M	9080	(8)	16.1	(11)	5.0	(1)	72	(13)	96	(33)	39	(22)
04Y332	MPQ	9020	(9)	17.3	(4)	4.8	(17)	74	(24)	43	(11)	39	(24)
03Y167	SPQ	8980	(10)	15.2	(22)	4.7	(29)	75	(28)	25	(7)	37	(4)
05Y330	MPQ	8950	(11)	17.4	(3)	4.7	(27)	74	(26)	26	(8)	38	(17)
99Y529	L	8940	(12)	14.6	(26)	4.7	(31)	75	(28)	7	(3)	39	(24)
03Y151	REX	8850	(13)	14.4	(31)	4.8	(19)	79	(33)	5	(2)	38	(10)
05Y850	M	8830	(14)	16.7	(7)	5.0	(1)	72	(12)	81	(26)	38	(9)
05Y830	M	8830	(15)	15.9	(12)	4.9	(8)	70	(4)	48	(17)	39	(18)
05Y547	L	8800	(16)	14.3	(32)	4.8	(12)	72	(13)	36	(9)	41	(32)
05Y196	SPQ	8790	(17)	15.5	(16)	4.8	(12)	72	(15)	92	(31)	37	(8)
05Y471	M	8780	(18)	17.3	(4)	4.9	(11)	70	(6)	66	(22)	41	(34)
05Y536	L	8750	(19)	14.6	(27)	4.7	(29)	76	(31)	7	(4)	39	(19)
05Y299	MPQ	8740	(20)	16.5	(8)	4.9	(8)	72	(15)	93	(32)	40	(31)
05Y869	M	8710	(21)	15.4	(18)	4.7	(31)	71	(9)	85	(29)	41	(32)
04Y492	L	8680	(22)	14.9	(25)	5.0	(5)	73	(17)	13	(5)	39	(22)
04Y523	L	8650	(23)	14.6	(27)	5.0	(1)	73	(18)	44	(13)	40	(28)
05Y426	M	8580	(24)	16.3	(10)	4.9	(6)	70	(3)	81	(26)	38	(11)
05Y194	SPQ	8570	(25)	14.5	(30)	4.8	(23)	73	(22)	43	(11)	36	(2)
05Y282	M	8560	(26)	15.3	(21)	4.9	(8)	71	(9)	70	(23)	39	(21)
03Y170	SPQ	8540	(27)	15.5	(15)	4.7	(31)	73	(18)	91	(30)	35	(1)
05Y262	M	8490	(28)	16.5	(8)	4.7	(27)	73	(20)	48	(17)	38	(12)
05Y175	SPQ	8290	(29)	14.1	(33)	4.8	(12)	73	(20)	97	(34)	37	(3)
05Y455	M	8140	(30)	15.4	(19)	4.8	(19)	69	(2)	71	(24)	40	(29)
05Y804	M	8070	(31)	15.8	(13)	4.8	(17)	70	(7)	51	(19)	39	(19)
05Y178	SPQ	8040	(32)	15.5	(16)	4.8	(19)	74	(23)	83	(28)	37	(7)
05Y1072	M	8030	(33)	14.9	(24)	4.8	(12)	68	(1)	55	(20)	38	(14)
05Y468	M	7790	(34)	15.1	(23)	4.8	(23)	70	(7)	75	(25)	38	(14)
MEAN		8760		15.6		4.8		73		53		39	
CV		8.1		7.1		2.8		2.7		36.6		3.3	
LSD (.05)				1.6		0.2		3		27		2	

S = short; M = medium; L = long; PQ = premium quality; WX = waxy; REX = Newrex; JAS = Jasmine.

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. 2006 Very Early Rice Variety Test - Sutter County

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)	
S102	S	9780	(1)	14.3	(11)	5.0	(1)	77	(2)	94	(16)	36	(13)
L206	L	9030	(2)	13.1	(16)	5.0	(1)	79	(4)	68	(11)	33	(2)
03Y254	M	8870	(3)	16.6	(2)	5.0	(1)	80	(7)	20	(9)	36	(15)
04Y227	M	8820	(4)	15.3	(5)	4.8	(17)	77	(3)	92	(15)	37	(17)
M206	M	8780	(5)	15.1	(7)	5.0	(1)	80	(6)	94	(16)	35	(10)
CM101	WX	8640	(6)	14.1	(13)	5.0	(1)	80	(7)	88	(14)	35	(12)
M202	M	8580	(7)	16.2	(3)	5.0	(1)	86	(14)	8	(7)	34	(8)
04Y508	L	8520	(8)	13.7	(14)	5.0	(1)	87	(15)	1	(1)	34	(6)
04Y501	REX	8490	(9)	13.3	(15)	5.0	(1)	83	(13)	6	(3)	36	(14)
M104	M	8480	(10)	15.9	(4)	5.0	(1)	76	(1)	86	(13)	34	(9)
05Y176	SPQ	8450	(11)	15.0	(8)	5.0	(1)	79	(5)	56	(10)	33	(2)
02Y516	L	8440	(12)	14.1	(12)	5.0	(1)	81	(9)	2	(2)	37	(16)
03Y164	SPQ	8300	(13)	14.6	(9)	5.0	(1)	83	(12)	7	(5)	35	(11)
01Y655	REX	8270	(14)	12.9	(17)	5.0	(1)	94	(17)	13	(8)	34	(7)
04Y177	SPQ	8160	(15)	15.3	(6)	5.0	(1)	82	(10)	68	(11)	33	(4)
L205	REX	7970	(16)	14.3	(10)	5.0	(16)	87	(15)	6	(3)	34	(5)
03Y166	SPQ	7380	(17)	17.3	(1)	5.0	(1)	82	(10)	7	(6)	32	(1)
MEAN		8530		14.8		5.0		82		42		35	
CV		4.4		4.8		0.8		1.7		37		2.7	
LSD (.05)		540		1		0.1		2		22		1	

Preliminary Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre		Grain Moisture at Harvest (%)		Seedling Vigor (1-5)		Days to 50% Heading		Lodging (1-99)		Plant Height (in)	
05Y379	M	9690	(1)	16.0	(3)	5.0	(1)	78	(5)	85	(28)	35	(23)
05Y724	M	9270	(2)	15.0	(15)	5.0	(1)	77	(1)	85	(28)	36	(31)
99Y529	L	9070	(3)	13.5	(27)	5.0	(1)	85	(27)	1	(1)	36	(31)
05Y282	M	9040	(4)	15.5	(11)	5.0	(1)	82	(14)	83	(26)	35	(26)
05Y455	M	8920	(5)	14.9	(17)	5.0	(1)	77	(1)	70	(24)	37	(33)
05Y869	M	8870	(6)	14.8	(18)	5.0	(1)	81	(13)	85	(27)	37	(33)
04Y523	L	8840	(7)	12.9	(31)	5.0	(1)	84	(20)	1	(1)	34	(8)
05Y468	M	8780	(8)	14.6	(19)	5.0	(28)	83	(17)	55	(21)	35	(23)
05Y830	M	8760	(9)	15.6	(9)	4.9	(31)	82	(14)	60	(22)	34	(15)
05Y552	LJ	8750	(10)	13.1	(30)	5.0	(1)	78	(6)	1	(1)	32	(2)
05Y471	M	8720	(11)	15.7	(5)	5.0	(1)	77	(1)	60	(22)	35	(26)
05Y262	M	8680	(12)	15.6	(10)	5.0	(1)	86	(28)	18	(15)	35	(19)
04Y332	MPQ	8500	(13)	15.2	(14)	5.0	(1)	84	(23)	15	(13)	36	(30)
05Y299	MPQ	8460	(14)	15.7	(6)	5.0	(1)	79	(7)	93	(30)	35	(22)
05Y330	MPQ	8410	(15)	15.3	(13)	4.9	(31)	80	(10)	53	(20)	35	(25)
04Y218	SWX	8360	(16)	17.5	(1)	5.0	(1)	79	(7)	18	(15)	34	(9)
05Y196	SPQ	8300	(17)	14.2	(24)	5.0	(28)	86	(30)	97	(33)	35	(21)
05Y536	L	8280	(18)	12.9	(33)	5.0	(1)	86	(30)	1	(1)	34	(13)
05Y804	M	8270	(19)	14.9	(16)	5.0	(28)	83	(17)	18	(15)	34	(18)
05Y519	REX	8220	(20)	13.4	(29)	5.0	(1)	85	(26)	1	(1)	33	(6)
05Y547	L	8190	(21)	13.7	(26)	5.0	(1)	84	(23)	3	(9)	36	(28)
03Y170	SPQ	8160	(22)	15.6	(8)	5.0	(1)	83	(16)	33	(18)	33	(3)
05Y1072	M	8150	(23)	14.4	(22)	5.0	(1)	77	(1)	73	(25)	34	(9)
05Y528	LBL	8110	(24)	12.9	(32)	5.0	(1)	79	(9)	15	(13)	35	(19)
05Y178	SPQ	8110	(25)	15.5	(12)	5.0	(1)	87	(32)	50	(19)	34	(9)
04Y492	L	8090	(26)	13.4	(28)	5.0	(1)	84	(20)	6	(11)	36	(29)
05Y490	L	8040	(27)	12.8	(34)	4.9	(31)	84	(23)	1	(1)	33	(5)
03Y151	REX	8020	(28)	15.7	(7)	4.9	(31)	89	(33)	1	(1)	32	(1)
05Y426	M	7720	(29)	14.4	(23)	5.0	(1)	80	(10)	99	(34)	34	(9)
05Y194	SPQ	7630	(30)	16.0	(4)	5.0	(1)	86	(28)	3	(9)	34	(15)
05Y850	M	7370	(31)	14.1	(25)	5.0	(1)	81	(12)	95	(31)	34	(15)
05Y802	M	7100	(32)	14.6	(20)	5.0	(1)	94	(34)	6	(11)	34	(13)
05Y175	SPQ	7080	(33)	14.5	(21)	5.0	(1)	83	(17)	95	(31)	33	(6)
03Y167	SPQ	7070	(34)	17.4	(2)	5.0	(1)	84	(20)	1	(1)	33	(3)
MEAN		8320		14.7		5.0		82		40		34	
CV		3.4		3.9		1.4		1.5		37.7		3.4	
LSD (.05)		580		1.2				3		31		2	

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

Table 4. 2006 Very Early Rice Variety Test - Yolo County

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)
01Y655	REX	9180 (1)	22.3 (3)	4.9 (15)	95 (17)	1 (1)	39 (15)
04Y508	L	9130 (2)	18.5 (13)	4.9 (13)	81 (14)	1 (1)	38 (10)
02Y516	L	8860 (3)	18.6 (12)	5.0 (1)	76 (10)	1 (1)	39 (16)
S102	S	8730 (4)	19.7 (9)	4.9 (13)	72 (4)	2 (11)	37 (8)
M202	M	8700 (5)	22.7 (1)	5.0 (1)	83 (15)	6 (13)	38 (13)
L205	REX	8570 (6)	17.9 (15)	5.0 (1)	85 (16)	1 (1)	36 (5)
04Y227	M	8560 (7)	20.0 (7)	5.0 (1)	71 (2)	35 (17)	39 (17)
04Y501	REX	8540 (8)	16.9 (16)	5.0 (11)	78 (13)	1 (1)	38 (10)
03Y254	M	8370 (9)	20.5 (6)	5.0 (1)	75 (8)	1 (1)	38 (14)
M206	M	8360 (10)	22.5 (2)	5.0 (1)	74 (7)	1 (1)	38 (9)
L206	L	8290 (11)	16.4 (17)	5.0 (10)	78 (11)	1 (1)	34 (3)
04Y177	SPQ	8190 (12)	20.5 (5)	5.0 (11)	72 (5)	17 (15)	36 (6)
M104	M	8020 (13)	18.3 (14)	5.0 (1)	67 (1)	28 (16)	37 (7)
CM101	WX	7610 (14)	20.0 (8)	5.0 (1)	74 (6)	6 (13)	38 (12)
03Y164	SPQ	7600 (15)	19.3 (10)	5.0 (1)	78 (11)	2 (11)	35 (4)
05Y176	SPQ	7380 (16)	19.2 (11)	4.8 (17)	71 (3)	1 (1)	33 (1)
03Y166	SPQ	7100 (17)	22 (4)	4.8 (16)	76 (9)	1 (1)	34 (2)
MEAN		8310	19.7	5.0	77	6	37
CV		4	3.5	1.8	1.3	141.8	3.3
LSD (.05)		470	1	0.1	1	12	2

Preliminary Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
05Y196	SPQ	9220 (1)	23.1 (4)	5.0 (1)	76 (18)	75 (34)	37 (13)
04Y523	L	9040 (2)	17.3 (31)	5.0 (1)	78 (23)	1 (1)	38 (26)
05Y490	L	9040 (3)	17.7 (29)	4.9 (27)	84 (31)	1 (1)	35 (3)
05Y547	L	8980 (4)	17.9 (27)	4.9 (27)	81 (28)	1 (1)	37 (19)
05Y869	M	8880 (5)	21.8 (7)	5.0 (1)	75 (12)	1 (1)	38 (26)
05Y379	M	8850 (6)	19.3 (25)	5.0 (1)	76 (15)	1 (1)	37 (17)
05Y282	M	8800 (7)	20.4 (16)	4.9 (25)	75 (12)	1 (1)	37 (15)
05Y299	MPQ	8670 (8)	21.5 (10)	5.0 (1)	78 (24)	1 (1)	38 (28)
05Y468	M	8640 (9)	20.2 (21)	5.0 (23)	76 (18)	6 (27)	38 (21)
05Y330	MPQ	8620 (10)	23.3 (3)	5.0 (1)	83 (29)	1 (1)	37 (13)
05Y528	LBL	8600 (11)	17.8 (28)	4.9 (27)	76 (18)	1 (1)	38 (21)
05Y536	L	8600 (12)	17.4 (30)	5.0 (1)	83 (29)	1 (1)	38 (30)
05Y175	SPQ	8520 (13)	19.8 (23)	5.0 (1)	74 (7)	70 (33)	36 (12)
05Y802	M	8510 (14)	24.2 (1)	5.0 (1)	87 (34)	6 (27)	36 (11)
04Y332	MPQ	8480 (15)	21.3 (11)	4.9 (27)	79 (27)	1 (1)	38 (25)
05Y552	LJ	8440 (16)	15.5 (34)	5.0 (1)	75 (10)	1 (1)	36 (10)
05Y724	M	8370 (17)	20.0 (22)	5.0 (1)	74 (7)	1 (1)	37 (15)
05Y830	M	8350 (18)	21.7 (8)	5.0 (1)	76 (15)	1 (1)	37 (20)
05Y471	M	8340 (19)	20.2 (20)	5.0 (1)	71 (1)	6 (27)	39 (32)
03Y151	REX	8320 (20)	19.4 (24)	5.0 (1)	86 (32)	1 (1)	35 (6)
99Y529	L	8280 (21)	16.8 (33)	5.0 (1)	76 (18)	1 (1)	39 (32)
05Y178	SPQ	8250 (22)	22.8 (6)	5.0 (1)	73 (4)	38 (32)	35 (5)
05Y455	M	8230 (23)	20.8 (14)	5.0 (1)	74 (5)	3 (24)	39 (31)
05Y426	M	8110 (24)	20.9 (13)	5.0 (1)	74 (7)	1 (1)	35 (9)
04Y492	L	8110 (25)	17.0 (32)	5.0 (1)	75 (10)	1 (1)	39 (32)
05Y262	M	8050 (26)	23.0 (5)	4.9 (25)	78 (24)	6 (27)	37 (17)
05Y850	M	8000 (27)	20.4 (17)	5.0 (1)	78 (24)	1 (1)	35 (7)
05Y519	REX	7950 (28)	20.6 (15)	4.6 (32)	86 (33)	1 (1)	35 (7)
04Y218	SWX	7870 (29)	23.9 (2)	4.8 (31)	75 (12)	1 (1)	38 (21)
05Y1072	M	7860 (30)	19.3 (26)	5.0 (1)	73 (2)	3 (24)	38 (28)
05Y194	SPQ	7750 (31)	21.5 (9)	5.0 (23)	74 (5)	3 (24)	35 (3)
05Y804	M	7700 (32)	20.4 (18)	5.0 (1)	73 (2)	1 (1)	38 (21)
03Y167	SPQ	7210 (33)	21.2 (12)	4.5 (33)	76 (15)	1 (1)	34 (2)
03Y170	SPQ	6420 (34)	20.3 (19)	4.5 (33)	77 (22)	6 (27)	34 (1)
MEAN		8330	20.3	4.9	77	7	37
CV		4.3	2.6	2.9	1.5	80.2	4
LSD (.05)		720	1.1	0.3	2	12	3

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

Table 5. Grain Yield (lb/acre @14% moisture) Summary of Very Early Rice Varieties by Location and Year (2002-2006)

Location	Year	M-103*	**M-104**	M-202	M-206	Calmochi 101	S-102	L-204*	L-205
Biggs (RES)	2002	8740	**10170**	9710	10670	8890	9910	10120	10910
	2003	6720	**7470**	7760	7950	8630	10150	9480	9370
	2004	9380	**9380**	9050	10210	8150	9620	10830	10350
	2005	7460	**5860**	7560	7970	7220	8350	8140	8920
	2006	-	**7970**	8960	9280	8490	9170	-	9350
Location Mean		8075	**8170**	8608	9216	8276	9440	9642.5	9780
San Joaquin	2002	9027	**9833**	9153	9310	8944	9320	8159	7615
	2003	8713	**8860**	8347	9299	9027	9487	8567	8253
	2004	8260	**8880**	8530	9110	9250	8330	8190	8050
	2005	7490	**7810**	7530	7550	8480	8430	7360	7450
	2006**	-	**-**	-	-	-	-	-	-
Location Mean		8373	**8846**	8390	8817	8925	8892	8069	7842
Sutter	2002	8692	**10063**	9351	10324	9425	10408	9268	9467
	2003	9749	**8808**	8630	8975	7688	8849	8755	9006
	2004	10110	**10400**	11090	10150	10750	11050	11350	10400
	2005	7040	**7800**	7220	7570	7090	8510	6980	7440
	2006	-	**8480**	8580	8780	8640	9780	-	7970
Location Mean		8898	**9110**	8974	9160	8719	9719	9088	8857
Yolo	2002	10165	**10482**	9497	10044	9727	10756	8283	8950
	2003	9530	**9716**	10230	10176	9279	9902	9399	9880
	2004	-	**-**	-	-	-	-	-	-
	2005	8810	**8830**	9750	9600	8800	9460	9030	9740
	2006	-	**8020**	8700	8360	7610	8730	-	8570
Location Mean		9502	**9262**	9544	9545	8854	9712	8904	9285
Loc/Years Mean		8659	**8824**	8869	9185	8672	9456	8927	8983
Yield % M-104		**98.1**	**100.0**	**100.5**	**104.1**	**98.3**	**107.2**	**101.2**	**101.8**
Number of Tests		15	**18**	18	18	18	18	15	18

* Note: entries M103 and L204 have been discontinued in the very early tests as of the 2006 season.

** Test location not planted in 2006.

Table 6. 2006 Early Rice Variety Tests - Three Location Summary

Variety	Grain Type	Average Yield at 14% Moisture lbs/acre	Yield Biggs	Yield Butte	Yield Colusa	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
Advanced Lines and Varieties										
03Y496	LSR	10090 (1)	10660 (1)	9600 (1)	10010 (4)	18.8 (11)	4.8 (18)	83 (15)	1 (2)	42 (19)
04Y404	M	9750 (2)	9870 (4)	9230 (3)	10160 (3)	21.0 (4)	4.5 (20)	83 (18)	14 (8)	39 (8)
99Y529	L	9700 (3)	9490 (9)	8780 (6)	10830 (1)	15.9 (19)	4.8 (15)	78 (7)	6 (4)	41 (17)
03Y151	REX	9620 (4)	10100 (2)	9270 (2)	9500 (9)	17.5 (15)	4.8 (19)	82 (14)	1 (1)	39 (5)
M205	M	9600 (5)	9250 (13)	8820 (5)	10720 (2)	21.4 (2)	4.8 (14)	86 (20)	6 (5)	38 (3)
L206	L	9420 (6)	10040 (3)	8640 (7)	9580 (8)	15.4 (20)	4.9 (12)	74 (4)	33 (12)	38 (2)
M208	M	9250 (7)	9310 (10)	8620 (8)	9830 (7)	20.1 (7)	4.9 (6)	80 (8)	27 (10)	41 (18)
04Y308	MPQ	9130 (8)	9130 (14)	8370 (11)	9880 (6)	21.3 (3)	4.9 (7)	81 (9)	14 (7)	40 (9)
01Y655	REX	9080 (9)	8870 (16)	9000 (4)	9380 (11)	17.0 (17)	4.9 (12)	85 (19)	8 (6)	42 (20)
S102	S	9080 (10)	9740 (5)	8430 (10)	9060 (14)	17.4 (16)	5.0 (2)	72 (1)	87 (19)	41 (15)
M207	M	9060 (11)	9530 (8)	8230 (13)	9430 (10)	19.8 (8)	5.0 (4)	76 (6)	66 (18)	41 (12)
04Y165	SPQ	9050 (12)	9550 (7)	8490 (9)	9100 (13)	18.7 (13)	4.9 (11)	82 (11)	23 (9)	37 (1)
M206	M	8980 (13)	9560 (6)	8080 (16)	9300 (12)	20.9 (5)	5.0 (2)	73 (2)	49 (16)	41 (16)
M202	M	8980 (14)	9000 (15)	7970 (18)	9970 (5)	21.5 (1)	5.0 (5)	82 (12)	27 (11)	41 (13)
04Y189	SPQ	8680 (15)	9270 (12)	8240 (12)	8540 (18)	19.2 (10)	4.8 (15)	82 (10)	40 (14)	39 (6)
L205	REX	8680 (16)	9280 (11)	8090 (15)	8660 (17)	16.1 (18)	4.9 (10)	82 (13)	5 (3)	38 (4)
05Y300	MPQ	8620 (17)	8850 (17)	8000 (17)	9000 (15)	20.9 (6)	4.8 (17)	83 (17)	46 (15)	40 (10)
03Y804	M	8560 (18)	8750 (18)	8150 (14)	8780 (16)	19.2 (9)	4.9 (7)	74 (3)	38 (13)	41 (14)
CH201	SPQ	8040 (19)	8650 (19)	6930 (19)	8530 (19)	17.7 (14)	5.0 (1)	83 (16)	63 (17)	39 (7)
CM101	WX	7520 (20)	8590 (20)	6380 (20)	7570 (20)	18.7 (12)	4.9 (9)	75 (5)	96 (20)	40 (11)
MEAN		9040	9370	8370	9390	18.9	4.9	80	33	40
CV		5.2	5.7	4.4	5.2	3.8	2.6	1.8	52	3.3
LSD (.05)		380	760	520	690	0.6	0.1	1	14	1
Preliminary Lines and Varieties										
02Y565	LSR	10010 (1)	10220 (1)	9590 (1)	10220 (4)	16.6 (24)	4.8 (26)	80 (12)	2 (4)	40 (25)
05Y566	L	9790 (2)	9830 (3)	9410 (2)	10150 (6)	15.9 (27)	5.0 (8)	81 (16)	4 (8)	39 (11)
05Y408	M	9680 (3)	9940 (2)	8770 (6)	10350 (2)	21.3 (2)	4.8 (25)	86 (31)	5 (10)	38 (5)
05Y446	M	9610 (4)	9490 (5)	9090 (4)	10240 (3)	19.8 (13)	4.9 (24)	82 (25)	12 (16)	39 (13)
05Y727	M	9530 (5)	9430 (7)	9230 (3)	9930 (9)	20.0 (10)	4.9 (15)	80 (13)	15 (18)	38 (7)
05Y704	M	9370 (6)	9210 (9)	8760 (7)	10130 (7)	20.0 (9)	4.8 (28)	83 (28)	7 (12)	38 (6)
05Y698	M	9350 (7)	8980 (13)	8450 (12)	10610 (1)	19.8 (12)	4.9 (10)	84 (29)	11 (14)	39 (15)
05Y906	M	9270 (8)	9490 (4)	8520 (10)	9810 (12)	17.6 (20)	5.0 (6)	74 (4)	15 (18)	41 (30)
05Y543	L	9240 (9)	9300 (8)	8930 (5)	9490 (15)	15.5 (28)	4.8 (28)	79 (9)	3 (5)	41 (29)
05Y712	M	9160 (10)	9010 (12)	8380 (13)	10080 (8)	20.7 (5)	4.9 (17)	82 (26)	15 (20)	40 (19)
05Y453	M	9150 (11)	8670 (18)	8560 (9)	10210 (5)	20.9 (4)	4.8 (31)	85 (30)	9 (13)	38 (2)
05Y281	M	8990 (12)	8920 (15)	8690 (8)	9350 (17)	19.9 (11)	4.9 (10)	73 (2)	57 (28)	40 (24)
05Y244	M	8960 (13)	8620 (19)	8350 (14)	9910 (11)	19.5 (15)	4.9 (10)	81 (17)	11 (15)	41 (27)
05Y757	LBL	8880 (14)	9020 (11)	8300 (15)	9330 (18)	15.0 (30)	5.0 (6)	79 (10)	1 (1)	38 (4)
05Y754	LSR	8880 (15)	8750 (17)	8470 (11)	9410 (16)	16.5 (25)	4.8 (27)	83 (27)	3 (6)	39 (10)
05Y625	L	8730 (16)	9180 (10)	7800 (23)	9210 (19)	16.7 (23)	5.0 (2)	80 (14)	1 (3)	39 (8)
04Y178	SPQ	8640 (17)	8940 (14)	8200 (16)	8790 (21)	18.3 (18)	4.9 (22)	77 (7)	44 (27)	38 (3)
05Y900	M	8620 (18)	8330 (24)	8030 (18)	9490 (14)	17.2 (22)	5.0 (8)	74 (3)	16 (22)	39 (9)
04Y314	MPQ	8600 (19)	8260 (25)	7830 (21)	9700 (13)	20.4 (6)	4.9 (17)	81 (18)	38 (26)	40 (21)
04Y702	SSR	8580 (20)	9450 (6)	8130 (17)	8160 (27)	19.1 (17)	4.5 (32)	87 (32)	1 (1)	35 (1)
05Y284	M	8490 (21)	8820 (16)	7980 (19)	8680 (23)	21.0 (3)	4.9 (10)	72 (1)	80 (30)	40 (19)
03Y559	MPQ	8450 (22)	7960 (27)	7500 (26)	9910 (10)	20.3 (7)	4.8 (30)	81 (18)	16 (21)	39 (16)
05Y334	SSR	8400 (23)	8460 (22)	7800 (22)	8930 (20)	16.4 (26)	4.9 (17)	79 (8)	18 (23)	40 (23)
05Y1150	M	8370 (24)	8470 (21)	7860 (20)	8780 (22)	19.3 (16)	4.9 (15)	75 (6)	3 (7)	39 (12)
05Y172	SPQ	8150 (25)	8490 (20)	7720 (24)	8260 (25)	20.2 (8)	4.9 (21)	82 (23)	91 (32)	40 (17)
05Y357	SLA	7820 (26)	8030 (26)	7330 (27)	8090 (28)	17.3 (21)	4.9 (17)	82 (22)	74 (29)	39 (13)
05Y192	SPQ	7770 (27)	8350 (23)	7560 (25)	7400 (30)	22.0 (1)	4.9 (23)	80 (11)	81 (31)	40 (18)
05Y202	MPQ	7710 (28)	7700 (29)	7150 (30)	8280 (24)	19.7 (14)	5.0 (3)	80 (14)	14 (17)	41 (28)
CT201	BAS	7430 (29)	7480 (30)	7230 (28)	7590 (29)	15.2 (29)	5.0 (5)	82 (24)	4 (9)	42 (32)
05Y629	BAS	7340 (30)	7710 (28)	7180 (29)	7130 (31)	17.7 (19)	5.0 (3)	81 (20)	23 (25)	41 (31)
04Y537	BAS	7300 (31)	6940 (31)	6800 (31)	8160 (26)	13.8 (32)	5.0 (1)	74 (5)	5 (11)	40 (26)
CT202	BAS	6460 (32)	6740 (32)	6450 (32)	6190 (32)	14.4 (31)	4.9 (10)	82 (21)	21 (24)	40 (22)
MEAN		8660	8690	8130	9120	17.7	4.9	79	25	39
CV		6.0	6.8	4.8	4.4	3.8	3.1	1.9	55.8	3.2
LSD (.05)		510	820	800	820	0.7	0.1	2	14	1

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex; '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 7. 2006 Early Rice Variety Test - Biggs (RES)

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)
03Y496	LSR	10660 (1)	17.3 (4)	4.8 (11)	78 (9)	1 (2)	42 (19)
03Y151	REX	10100 (2)	15.5 (12)	4.8 (8)	80 (13)	1 (1)	38 (4)
L206	L	10040 (3)	13.6 (19)	4.7 (16)	71 (3)	36 (9)	37 (2)
04Y404	M	9870 (4)	17.2 (5)	4.4 (20)	82 (18)	35 (8)	39 (6)
S102	S	9740 (5)	13.5 (20)	4.9 (2)	71 (2)	95 (20)	40 (13)
M206	M	9560 (6)	16.6 (7)	4.9 (2)	70 (1)	58 (10)	42 (18)
04Y165	SPQ	9550 (7)	15.2 (13)	4.8 (8)	81 (17)	60 (12)	37 (1)
M207	M	9530 (8)	16.3 (8)	4.9 (4)	74 (6)	88 (17)	41 (16)
99Y529	L	9490 (9)	14.8 (15)	4.7 (18)	75 (7)	16 (5)	41 (14)
M208	M	9310 (10)	16.2 (9)	4.8 (8)	79 (10)	59 (11)	40 (12)
L205	REX	9280 (11)	13.6 (18)	4.8 (7)	79 (11)	14 (4)	37 (3)
04Y189	SPQ	9270 (12)	15.7 (11)	4.7 (16)	80 (13)	91 (18)	39 (5)
M205	M	9250 (13)	17.3 (3)	4.8 (13)	84 (20)	16 (5)	39 (7)
04Y308	MPQ	9130 (14)	17.6 (1)	4.9 (6)	78 (8)	29 (7)	39 (9)
M202	M	9000 (15)	17.2 (6)	4.9 (5)	81 (15)	71 (13)	40 (11)
01Y655	REX	8870 (16)	15.1 (14)	4.8 (13)	82 (19)	5 (3)	43 (20)
05Y300	MPQ	8850 (17)	17.5 (2)	4.7 (19)	81 (15)	80 (15)	41 (15)
03Y804	M	8750 (18)	15.7 (10)	4.8 (11)	72 (5)	73 (14)	41 (16)
CH201	SPQ	8650 (19)	14.0 (17)	5.0 (1)	80 (12)	83 (16)	39 (8)
CM101	WX	8590 (20)	14.6 (16)	4.8 (13)	72 (4)	93 (19)	39 (9)
MEAN		9370	15.7	4.8	77	50	40
CV		5.7	4.4	2.7	3	29.3	3.5
LSD (.05)		760	1	0.2	3	21	2

Preliminary Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
02Y565	LSR	10220 (1)	15.2 (19)	4.9 (8)	76 (11)	5 (5)	40 (23)
05Y408	M	9940 (2)	17.4 (2)	4.6 (30)	83 (32)	13 (11)	38 (4)
05Y566	L	9830 (3)	15.3 (17)	4.9 (13)	78 (20)	8 (9)	38 (7)
05Y906	M	9490 (4)	14.7 (24)	4.9 (5)	70 (4)	39 (20)	40 (28)
05Y446	M	9490 (5)	16.0 (15)	4.8 (25)	80 (26)	34 (19)	39 (12)
04Y702	SSR	9450 (6)	16.7 (6)	4.6 (30)	81 (30)	1 (1)	35 (1)
05Y727	M	9430 (7)	16.3 (12)	4.8 (19)	77 (12)	41 (23)	38 (8)
05Y543	L	9300 (8)	14.3 (26)	4.8 (25)	76 (10)	6 (6)	39 (18)
05Y704	M	9210 (9)	16.5 (10)	4.5 (32)	80 (28)	18 (14)	39 (14)
05Y625	L	9180 (10)	15.1 (21)	5.0 (2)	75 (8)	2 (3)	38 (8)
05Y757	LBL	9020 (11)	13.8 (29)	4.9 (9)	75 (8)	1 (1)	37 (2)
05Y712	M	9010 (12)	17.3 (3)	4.8 (22)	79 (25)	44 (25)	39 (14)
05Y698	M	8980 (13)	16.7 (8)	4.8 (15)	81 (29)	27 (16)	39 (13)
04Y178	SPQ	8940 (14)	15.1 (20)	4.8 (19)	75 (7)	80 (30)	38 (4)
05Y281	M	8920 (15)	16.3 (13)	4.8 (15)	69 (3)	68 (26)	39 (14)
05Y284	M	8820 (16)	16.2 (14)	4.8 (15)	69 (2)	78 (28)	40 (24)
05Y754	LSR	8750 (17)	14.9 (23)	4.7 (28)	78 (18)	7 (7)	37 (2)
05Y453	M	8670 (18)	16.8 (5)	4.8 (25)	82 (31)	24 (15)	38 (8)
05Y244	M	8620 (19)	16.6 (9)	4.8 (15)	79 (22)	31 (18)	40 (25)
05Y172	SPQ	8490 (20)	17.4 (1)	4.9 (9)	80 (27)	99 (31)	39 (19)
05Y1150	M	8470 (21)	15.1 (21)	4.8 (19)	71 (6)	8 (8)	38 (6)
05Y334	SSR	8460 (22)	14.3 (26)	4.9 (9)	78 (20)	43 (24)	40 (27)
05Y192	SPQ	8350 (23)	16.7 (6)	4.9 (9)	77 (12)	100 (32)	40 (26)
05Y900	M	8330 (24)	14.7 (24)	4.9 (13)	70 (5)	16 (13)	39 (11)
04Y314	MPQ	8260 (25)	16.5 (10)	4.8 (22)	77 (12)	68 (27)	40 (22)
05Y357	SLA	8030 (26)	13.8 (30)	4.8 (22)	79 (24)	79 (29)	39 (20)
03Y559	MPQ	7960 (27)	16.8 (4)	4.7 (28)	77 (17)	40 (21)	39 (14)
05Y629	BAS	7710 (28)	15.3 (17)	5.0 (3)	78 (18)	28 (17)	43 (31)
05Y202	MPQ	7700 (29)	15.9 (16)	5.0 (3)	77 (16)	15 (12)	40 (21)
CT201	BAS	7480 (30)	13.7 (31)	4.9 (5)	79 (22)	11 (10)	43 (32)
04Y537	BAS	6940 (31)	13.9 (28)	5.0 (1)	69 (1)	2 (4)	41 (30)
CT202	BAS	6740 (32)	13.4 (32)	4.9 (5)	77 (12)	40 (21)	41 (29)
MEAN		8690	15.6	4.8	76	33	39
CV		6.8	4.3	3	2.4	44.9	2.9
LSD (.05)		820	0.9	0.2	3	21	2

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex;
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 8. 2006 Early Rice Variety Test - Butte County

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)
03Y496	LSR	9600 (1)	20.2 (11)	4.8 (18)	86 (19)	1 (1)	41 (16)
03Y151	REX	9270 (2)	18.5 (15)	4.6 (19)	85 (17)	1 (1)	39 (6)
04Y404	M	9230 (3)	23.7 (3)	4.6 (19)	82 (12)	1 (1)	39 (10)
01Y655	REX	9000 (4)	18.8 (14)	5.0 (10)	87 (20)	2 (7)	42 (20)
M205	M	8820 (5)	24.3 (1)	4.9 (14)	85 (16)	1 (1)	38 (2)
99Y529	L	8780 (6)	16.5 (19)	5.0 (10)	80 (9)	1 (1)	41 (16)
L206	L	8640 (7)	16.0 (20)	4.9 (16)	75 (4)	31 (15)	37 (1)
M208	M	8620 (8)	22.1 (7)	5.0 (1)	79 (7)	9 (11)	41 (18)
04Y165	SPQ	8490 (9)	19.6 (13)	4.8 (17)	83 (14)	6 (9)	38 (3)
S102	S	8430 (10)	18.2 (16)	5.0 (1)	72 (1)	66 (19)	40 (14)
04Y308	MPQ	8370 (11)	23.4 (5)	5.0 (10)	79 (7)	3 (8)	39 (8)
04Y189	SPQ	8240 (12)	20.2 (12)	5.0 (1)	82 (12)	28 (14)	38 (5)
M207	M	8230 (13)	21.2 (8)	5.0 (1)	76 (5)	33 (16)	39 (8)
03Y804	M	8150 (14)	21.0 (9)	5.0 (1)	73 (2)	21 (13)	40 (13)
L205	REX	8090 (15)	17.7 (18)	5.0 (1)	86 (18)	1 (1)	38 (4)
M206	M	8080 (16)	23.5 (4)	5.0 (1)	74 (3)	40 (17)	40 (15)
05Y300	MPQ	8000 (17)	22.8 (6)	4.9 (14)	82 (11)	19 (12)	39 (11)
M202	M	7970 (18)	24.2 (2)	5.0 (1)	81 (10)	6 (9)	42 (19)
CH201	SPQ	6930 (19)	18.1 (17)	5.0 (10)	83 (14)	64 (18)	39 (7)
CM101	WX	6380 (20)	20.5 (10)	5.0 (1)	78 (6)	98 (20)	40 (12)
MEAN		8370	20.5	4.9	80	22	39
CV		4.4	3.7	2.9	0.7	89.8	3
LSD (.05)		520	1.1	0.2	1	27	2

Preliminary Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
02Y565	LSR	9590 (1)	17.8 (23)	4.8 (29)	82 (19)	1 (1)	40 (20)
05Y566	L	9410 (2)	17.1 (26)	5.0 (1)	83 (21)	1 (1)	40 (22)
05Y727	M	9230 (3)	22.1 (6)	5.0 (1)	79 (9)	1 (1)	38 (11)
05Y446	M	9090 (4)	22.6 (4)	4.9 (27)	82 (15)	1 (1)	39 (12)
05Y543	L	8930 (5)	16.3 (28)	5.0 (25)	83 (21)	1 (1)	42 (31)
05Y408	M	8770 (6)	23.8 (1)	4.9 (26)	87 (31)	1 (1)	38 (8)
05Y704	M	8760 (7)	22.0 (7)	5.0 (1)	83 (21)	1 (1)	37 (4)
05Y281	M	8690 (8)	20.9 (13)	5.0 (1)	74 (3)	10 (28)	41 (28)
05Y453	M	8560 (9)	23.5 (2)	4.5 (31)	86 (30)	1 (1)	36 (2)
05Y906	M	8520 (10)	18.6 (19)	5.0 (1)	75 (4)	1 (1)	40 (27)
05Y754	LSR	8470 (11)	17.4 (25)	4.9 (27)	84 (27)	1 (1)	38 (8)
05Y698	M	8450 (12)	21.5 (11)	5.0 (1)	83 (21)	1 (1)	39 (14)
05Y712	M	8380 (13)	22.4 (5)	5.0 (1)	82 (15)	1 (1)	40 (22)
05Y244	M	8350 (14)	20.5 (15)	5.0 (1)	80 (11)	1 (1)	40 (26)
05Y757	LBL	8300 (15)	15.5 (30)	5.0 (1)	82 (15)	1 (1)	37 (4)
04Y178	SPQ	8200 (16)	19.2 (18)	5.0 (1)	78 (6)	3 (26)	37 (3)
04Y702	SSR	8130 (17)	20.5 (16)	4.4 (32)	91 (32)	1 (1)	34 (1)
05Y900	M	8030 (18)	18.5 (20)	5.0 (1)	74 (2)	1 (1)	39 (16)
05Y284	M	7980 (19)	22.6 (3)	5.0 (1)	72 (1)	65 (31)	39 (12)
05Y1150	M	7860 (20)	21.4 (12)	5.0 (1)	76 (5)	1 (1)	39 (16)
04Y314	MPQ	7830 (21)	21.5 (10)	5.0 (1)	81 (12)	1 (1)	38 (6)
05Y334	SSR	7800 (22)	16.9 (27)	5.0 (1)	79 (9)	3 (26)	39 (14)
05Y625	L	7800 (23)	18.0 (22)	5.0 (1)	82 (19)	1 (1)	38 (6)
05Y172	SPQ	7720 (24)	20.3 (17)	5.0 (1)	83 (21)	85 (32)	40 (24)
05Y192	SPQ	7560 (25)	21.9 (9)	5.0 (1)	81 (14)	55 (29)	41 (28)
03Y559	MPQ	7500 (26)	21.9 (8)	4.8 (29)	81 (12)	1 (1)	39 (16)
05Y357	SLA	7330 (27)	17.6 (24)	5.0 (1)	83 (21)	60 (30)	38 (8)
CT201	BAS	7230 (28)	15.8 (29)	5.0 (1)	82 (15)	1 (1)	42 (32)
05Y629	BAS	7180 (29)	18.4 (21)	5.0 (1)	85 (29)	1 (1)	40 (20)
05Y202	MPQ	7150 (30)	20.8 (14)	5.0 (1)	79 (8)	1 (1)	41 (28)
04Y537	BAS	6800 (31)	13.1 (32)	5.0 (1)	78 (6)	1 (1)	39 (19)
CT202	BAS	6450 (32)	14.2 (31)	5.0 (1)	84 (27)	1 (1)	40 (25)
MEAN		8130	19.5	4.9	81	10	39
CV		4.8	3.4	4.4	1.2	77.9	4.1
LSD (.05)		800	1.3		2	15	3

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex;
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 9. 2006 Early Rice Variety Test - Colusa County

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)	
99Y529	L	10830	(1)	16.5	(20)	4.9	(14)	78	(6)	1	(1)	42	(17)
M205	M	10720	(2)	22.6	(3)	4.9	(15)	89	(20)	2	(6)	39	(3)
04Y404	M	10160	(3)	22.1	(6)	4.6	(20)	86	(17)	6	(9)	40	(8)
03Y496	LSR	10010	(4)	18.8	(15)	4.8	(18)	84	(13)	1	(1)	42	(17)
M202	M	9970	(5)	23.3	(1)	5.0	(1)	85	(14)	6	(8)	40	(10)
04Y308	MPQ	9880	(6)	23.0	(2)	5.0	(9)	86	(16)	9	(10)	40	(9)
M208	M	9830	(7)	22.0	(7)	5.0	(1)	82	(9)	12	(11)	42	(20)
L206	L	9580	(8)	16.6	(19)	5.0	(9)	77	(4)	33	(14)	39	(3)
03Y151	REX	9500	(9)	18.6	(16)	4.9	(12)	82	(10)	1	(1)	39	(2)
M207	M	9430	(10)	21.7	(8)	5.0	(1)	79	(7)	79	(18)	42	(14)
01Y655	REX	9380	(11)	17.0	(17)	4.9	(15)	87	(18)	17	(12)	42	(16)
M206	M	9300	(12)	22.6	(4)	5.0	(1)	75	(3)	49	(17)	42	(13)
04Y165	SPQ	9100	(13)	21.3	(10)	5.0	(1)	81	(8)	2	(6)	36	(1)
S102	S	9060	(14)	20.5	(14)	5.0	(1)	72	(1)	99	(20)	42	(19)
05Y300	MPQ	9000	(15)	22.4	(5)	4.9	(12)	87	(18)	40	(15)	41	(11)
03Y804	M	8780	(16)	20.8	(13)	5.0	(1)	78	(5)	22	(13)	41	(12)
L205	REX	8660	(17)	17.0	(18)	4.9	(15)	83	(12)	1	(1)	40	(7)
04Y189	SPQ	8540	(18)	21.6	(9)	4.8	(19)	82	(11)	1	(1)	40	(6)
CH201	SPQ	8530	(19)	21.1	(11)	5.0	(1)	86	(15)	43	(16)	40	(5)
CM101	WX	7570	(20)	21.1	(12)	5.0	(9)	75	(2)	98	(19)	42	(15)
MEAN		9390		20.5		4.9		82		26		40	
CV		5.2		3.3		2		0.9		63.4		3.4	
LSD (.05)		690		1		0.1		1		23		2	

Preliminary Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre		Grain Moisture at Harvest (%)		Seedling Vigor (1-5)		Days to 50% Heading		Lodging (1-99)		Plant Height (in)	
05Y698	M	10610	(1)	21.4	(13)	5.0	(1)	89	(31)	6	(17)	40	(15)
05Y408	M	10350	(2)	22.7	(5)	5.0	(1)	88	(29)	1	(1)	39	(10)
05Y446	M	10240	(3)	20.9	(16)	5.0	(1)	86	(21)	1	(1)	40	(15)
02Y565	LSR	10220	(4)	16.8	(26)	4.8	(26)	82	(12)	1	(1)	41	(20)
05Y453	M	10210	(5)	22.5	(7)	5.0	(1)	88	(29)	1	(1)	39	(3)
05Y566	L	10150	(6)	15.5	(31)	5.0	(1)	81	(10)	3	(15)	39	(7)
05Y704	M	10130	(7)	21.3	(14)	4.8	(26)	87	(27)	1	(1)	39	(3)
05Y712	M	10080	(8)	22.4	(8)	5.0	(1)	87	(27)	1	(1)	41	(24)
05Y727	M	9930	(9)	21.5	(11)	5.0	(1)	85	(20)	3	(15)	39	(3)
03Y559	MPQ	9910	(10)	22.1	(10)	4.8	(26)	86	(21)	6	(17)	40	(17)
05Y244	M	9910	(11)	21.4	(12)	5.0	(1)	84	(17)	1	(1)	42	(27)
05Y906	M	9810	(12)	19.5	(20)	5.0	(21)	78	(5)	6	(17)	42	(29)
04Y314	MPQ	9700	(13)	23.2	(3)	5.0	(1)	86	(23)	45	(26)	42	(29)
05Y900	M	9490	(14)	18.5	(22)	5.0	(1)	78	(5)	30	(24)	39	(3)
05Y543	L	9490	(15)	15.9	(28)	4.6	(31)	79	(7)	1	(1)	42	(32)
05Y754	LSR	9410	(16)	17.2	(24)	4.8	(29)	86	(23)	1	(1)	41	(22)
05Y281	M	9350	(17)	22.6	(6)	5.0	(1)	75	(1)	95	(31)	40	(19)
05Y757	LBL	9330	(18)	15.8	(29)	5.0	(1)	81	(10)	1	(1)	39	(7)
05Y625	L	9210	(19)	17.0	(25)	5.0	(1)	84	(18)	1	(1)	39	(12)
05Y334	SSR	8930	(20)	18.2	(23)	4.9	(22)	79	(7)	8	(20)	41	(24)
04Y178	SPQ	8790	(21)	20.4	(17)	4.9	(24)	77	(4)	50	(27)	39	(12)
05Y1150	M	8780	(22)	21.3	(15)	5.0	(1)	79	(7)	1	(1)	40	(18)
05Y284	M	8680	(23)	24.0	(2)	5.0	(1)	75	(1)	97	(32)	41	(26)
05Y202	MPQ	8280	(24)	22.3	(9)	5.0	(1)	86	(23)	26	(23)	42	(27)
05Y172	SPQ	8260	(25)	22.9	(4)	4.9	(24)	82	(12)	90	(30)	39	(10)
04Y537	BAS	8160	(26)	14.4	(32)	5.0	(1)	75	(1)	13	(21)	41	(20)
04Y702	SSR	8160	(27)	20.2	(19)	4.4	(32)	89	(31)	1	(1)	36	(1)
05Y357	SLA	8090	(28)	20.4	(18)	5.0	(1)	83	(16)	85	(28)	40	(14)
CT201	BAS	7590	(29)	15.9	(27)	5.0	(1)	86	(23)	1	(1)	42	(29)
05Y192	SPQ	7400	(30)	27.5	(1)	4.8	(29)	82	(12)	90	(29)	38	(2)
05Y629	BAS	7130	(31)	19.5	(21)	5.0	(1)	82	(12)	40	(25)	41	(22)
CT202	BAS	6190	(32)	15.7	(30)	4.9	(22)	84	(18)	21	(22)	39	(7)
MEAN		9120		20		4.9		83		23		40	
CV		4.4		3.4		1.6		1.2		65.8		2.9	
LSD (.05)		820		1.4		0.2		2		30		2	

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex;
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 10. Grain Yield (lb/acre @14% moisture) Summary of Early Rice Varieties by Location and Year (2002-2006)

Location	Year	Calhikari 201	**M-202**	M-204	M-205	M-206	Calmati 201	L-205
Biggs (RES)	2002	8910	**10620**	10180	11230	10210	9040	10890
	2003	8310	**8530**	9280	9860	8320	7910	9290
	2004	8120	**9500**	9590	10270	9650	8500	9810
	2005	7740	**7350**	7560	7980	7890	6900	8760
	2006	8650	**9000**	-	9250	9560	7480	9280
Location Mean		8346	**9000**	9153	9718	9126	7966	9606
Butte	2002	8677	**9333**	9683	9913	9858	8086	9191
	2003	6828	**8294**	8907	9257	8808	6379	8283
	2004	8200	**8990**	8800	9490	8800	7380	8060
	2005	-	**-**	-	-	-	-	-
Glenn	2006	6930	**7970**	-	8820	8080	7230	8090
Location Mean		7659	**8647**	9130	9370	8887	7269	8406
Colusa	2002	8452	**9247**	9362	10136	9592	8065	9697
	2003	7762	**9205**	9383	10010	8389	7981	8713
	2004	9570	**10330**	10830	10750	10200	8440	10450
	2005	7580	**8030**	8840	9330	8160	7330	8570
	2006	8530	**9970**	-	10720	9300	7590	8660
Location Mean		8379	**9356**	9604	10189	9128	7881	9218
Yuba	2002	8609	**9456**	7866	8598	9948	7103	8431
	2003	8389	**8305**	8190	9027	8504	7186	7897
	2004	8240	**9850**	9050	9120	9960	6720	8510
	2005	7470	**7100**	7950	8150	7670	7110	7490
	2006*	-	**-**	-	-	-	-	-
Location Mean		8177	**8678**	8264	8724	9020	7030	8082
Loc/Years Mean		8165	**8949**	9031	9551	9050	7579	8893
Yield % M-202		**91.2**	**100**	**100.9**	**106.7**	**101.1**	**84.7**	**99.4**
Number of Tests		18	**18**	15	18	18	18	18

* Yuba site not harvested due to heavy watergrass infestation.

Table 11. 2006 Intermediate/Late Rice Variety Tests - Three Location Summary

Advanced Lines and Varieties

Variety	Grain Type	Average Yield at 14% Moisture lbs/acre	Yield Biggs	Yield Glenn	Yield Sutter	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
04Y641	SSR	8740 (1)	9980 (2)	7330 (2)	8900 (4)	16.8 (7)	5.0 (5)	83 (9)	9 (5)	40 (11)
04Y706	L	8680 (2)	9500 (5)	6870 (8)	9680 (2)	14.9 (11)	4.8 (9)	82 (4)	7 (4)	39 (9)
03Y151	REX	8560 (3)	9640 (4)	6270 (14)	9770 (1)	15.2 (10)	4.9 (6)	83 (8)	4 (3)	38 (8)
99Y529	L	8530 (4)	9310 (7)	7100 (4)	9180 (3)	13.8 (13)	4.8 (10)	80 (3)	12 (6)	40 (14)
03Y576	SSR	8450 (5)	10130 (1)	6940 (7)	8290 (10)	19.4 (2)	4.5 (14)	86 (13)	3 (2)	36 (1)
05Y657	SSR	8440 (6)	9940 (3)	7080 (5)	8300 (9)	16.8 (6)	4.7 (12)	85 (11)	14 (7)	40 (13)
L206	L	8240 (7)	9210 (8)	6700 (12)	8810 (5)	13.9 (12)	4.9 (7)	77 (1)	47 (12)	37 (3)
04Y656	M	8190 (8)	9360 (6)	7130 (3)	8080 (11)	17.1 (4)	4.6 (13)	84 (10)	42 (11)	37 (5)
L205	REX	8150 (9)	8920 (9)	6780 (11)	8730 (6)	13.8 (14)	4.9 (8)	83 (6)	15 (8)	38 (7)
M205	M	8120 (10)	8830 (10)	7050 (6)	8490 (8)	17.0 (5)	4.8 (10)	85 (12)	31 (9)	37 (4)
05Y663	SPQ	8000 (11)	8540 (12)	6840 (9)	8610 (7)	15.2 (9)	5.0 (2)	82 (5)	37 (10)	37 (2)
M402	MPQ	7850 (12)	8280 (14)	7990 (1)	7290 (13)	22.4 (1)	5.0 (3)	102 (14)	3 (1)	40 (12)
M202	M	7730 (13)	8620 (11)	6820 (10)	7760 (12)	17.1 (3)	5.0 (4)	83 (7)	50 (13)	40 (10)
CH201	SPQ	7430 (14)	8420 (13)	6620 (13)	7240 (14)	15.8 (8)	5.0 (1)	78 (2)	64 (14)	38 (6)
MEAN		8220	9190	6970	8510	16.4	4.8	84	24	38
CV		6.9	6.8	6.6	7	5.8	3.2	5.4	60.4	7
LSD (.05)		460	890	660	850	0.8	0.1	4	12	2

Preliminary Lines and Varieties

Variety	Grain Type	Average Yield at 14% Moisture lbs/acre	Yield Biggs	Yield Glenn	Yield Sutter	Grain Moisture at Harvest (%)	Seedling Vigor (1-5)	Days to 50% Heading	Lodging (1-99)	Plant Height (in)
99Y494	LW	8660 (1)	9450 (3)	7530 (5)	9000 (1)	13.0 (20)	5.0 (1)	86 (18)	2 (2)	37 (1)
01Y501	LSR	8650 (2)	9730 (2)	7280 (8)	8940 (2)	14.0 (16)	4.9 (9)	78 (4)	2 (1)	38 (7)
05Y343	SWX	8510 (3)	10110 (1)	7140 (10)	8290 (5)	17.6 (1)	4.7 (17)	83 (14)	46 (16)	39 (12)
04Y625	MPQ	8230 (4)	8170 (15)	7810 (2)	8720 (3)	16.6 (3)	4.8 (14)	87 (19)	27 (8)	40 (16)
05Y441	M	8170 (5)	9000 (7)	7560 (4)	7950 (9)	15.5 (13)	4.9 (12)	81 (10)	14 (4)	39 (11)
05Y758	LBL	8130 (6)	9090 (6)	6980 (13)	8320 (4)	13.7 (18)	4.8 (13)	83 (15)	2 (3)	37 (2)
05Y301	MPQ	8000 (7)	8590 (11)	7300 (7)	8120 (6)	17.0 (2)	4.9 (5)	85 (17)	57 (18)	38 (4)
05Y1274	L	7940 (8)	8720 (10)	7130 (11)	7990 (8)	13.6 (19)	4.9 (11)	78 (6)	26 (7)	38 (5)
05Y387	M	7920 (9)	9120 (5)	7400 (6)	7250 (15)	16.3 (6)	4.7 (19)	81 (11)	42 (13)	38 (6)
05Y450	M	7910 (10)	8850 (9)	7080 (12)	7810 (10)	15.9 (8)	4.8 (16)	84 (16)	19 (5)	37 (3)
05Y744	JAS	7880 (11)	7640 (18)	8260 (1)	7750 (11)	14.6 (15)	4.2 (20)	88 (20)	57 (17)	40 (19)
05Y386	M	7830 (12)	9250 (4)	7140 (9)	7110 (16)	16.4 (5)	4.8 (15)	82 (12)	45 (14)	38 (8)
05Y949	M	7830 (13)	8480 (13)	7570 (3)	7440 (14)	16.0 (7)	4.9 (5)	81 (9)	38 (11)	39 (15)
05Y714	M	7700 (14)	8900 (8)	6740 (14)	7450 (13)	15.9 (10)	5.0 (2)	79 (7)	41 (12)	40 (16)
05Y913	M	7660 (15)	8580 (12)	6320 (17)	8070 (7)	15.8 (11)	4.9 (8)	75 (1)	59 (20)	39 (10)
05Y1000	M	7350 (16)	8000 (16)	6500 (15)	7550 (12)	15.6 (12)	4.9 (10)	79 (8)	22 (6)	38 (9)
05Y979	M	6850 (17)	8270 (14)	5210 (20)	7060 (17)	15.9 (9)	4.9 (5)	77 (3)	45 (15)	40 (18)
05Y226	M	6740 (18)	7790 (17)	5420 (19)	7000 (18)	16.5 (4)	4.7 (18)	75 (2)	31 (10)	39 (13)
CT201	BAS	6730 (19)	7140 (19)	6350 (16)	6700 (19)	14.0 (17)	5.0 (2)	82 (13)	28 (9)	41 (20)
CT202	BAS	6260 (20)	6480 (20)	6060 (18)	6250 (20)	14.8 (14)	4.9 (4)	78 (5)	59 (19)	39 (14)
MEAN		7950	8570	6940	7740	15.7	4.8	81	38	39
CV		6.6	6.5	7.4	5.8	5.7	3.4	3.4	44.1	3.6
LSD (.05)		520	790	1070	940	0.9	0.2	3	17	1

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex; SR = stem rot resistant; JAS= Jasmine.

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. 2006 Intermediate/Late Rice Variety Test - Biggs (RES)

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)	
03Y576	SSR	10130	(1)	18.4	(2)	4.2	(14)	76	(2)	8	(3)	32	(1)
04Y641	SSR	9980	(2)	17.0	(3)	4.9	(5)	83	(7)	24	(5)	39	(9)
05Y657	SSR	9940	(3)	16.8	(5)	4.5	(13)	84	(12)	39	(8)	41	(14)
03Y151	REX	9640	(4)	15.5	(9)	4.8	(8)	84	(11)	8	(2)	38	(3)
04Y706	L	9500	(5)	15.6	(8)	4.8	(7)	82	(6)	18	(4)	40	(11)
04Y656	M	9360	(6)	16.8	(6)	4.8	(8)	84	(9)	65	(11)	38	(5)
99Y529	L	9310	(7)	14.5	(12)	4.7	(10)	79	(3)	25	(6)	40	(12)
L206	L	9210	(8)	15.0	(11)	4.7	(10)	73	(1)	80	(12)	38	(3)
L205	REX	8920	(9)	14.1	(14)	4.8	(6)	82	(5)	25	(6)	38	(6)
M205	M	8830	(10)	17.0	(4)	4.7	(12)	87	(13)	53	(9)	38	(7)
M202	M	8620	(11)	16.8	(6)	4.9	(3)	83	(8)	84	(13)	40	(12)
05Y663	SPQ	8540	(12)	15.0	(10)	4.9	(3)	84	(9)	59	(10)	37	(2)
CH201	SPQ	8420	(13)	14.4	(13)	5.0	(1)	80	(4)	90	(14)	39	(8)
M402	MPQ	8280	(14)	23.1	(1)	5.0	(2)	103	(14)	3	(1)	40	(10)
MEAN		9190		16.4		4.8		83		42		38	
CV		6.8		5.6		3.3		9.1		42.1		10.7	
LSD (.05)		890		1.3		0.2		11		25			

Preliminary Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre		Grain Moisture at Harvest (%)		Seedling Vigor (1-5)		Days to 50% Heading		Lodging (1-99)		Plant Height (in)	
05Y343	SWX	10110	(1)	17.8	(2)	4.8	(15)	85	(17)	76	(16)	41	(16)
01Y501	LSR	9730	(2)	16.1	(13)	4.9	(8)	77	(4)	3	(1)	40	(9)
99Y494	LW	9450	(3)	14.8	(18)	5.0	(1)	91	(19)	4	(2)	38	(5)
05Y386	M	9250	(4)	17.1	(6)	4.8	(11)	81	(10)	68	(12)	40	(10)
05Y387	M	9120	(5)	17.3	(4)	4.7	(16)	82	(11)	78	(17)	40	(6)
05Y758	LBL	9090	(6)	15.7	(16)	4.7	(19)	84	(14)	5	(3)	38	(2)
05Y441	M	9000	(7)	16.5	(11)	4.9	(8)	82	(12)	40	(4)	41	(14)
05Y714	M	8900	(8)	16.4	(12)	4.9	(4)	79	(6)	74	(14)	41	(11)
05Y450	M	8850	(9)	16.7	(10)	4.8	(12)	84	(14)	51	(9)	37	(1)
05Y1274	L	8720	(10)	14.0	(20)	4.8	(12)	77	(5)	41	(5)	38	(2)
05Y301	MPQ	8590	(11)	18.0	(1)	4.8	(12)	85	(16)	81	(18)	38	(4)
05Y913	M	8580	(12)	15.7	(15)	5.0	(1)	71	(1)	91	(20)	41	(17)
05Y949	M	8480	(13)	16.8	(7)	4.9	(8)	80	(7)	70	(13)	42	(19)
05Y979	M	8270	(14)	16.8	(7)	5.0	(3)	74	(3)	74	(14)	42	(20)
04Y625	MPQ	8170	(15)	17.6	(3)	4.7	(18)	88	(18)	56	(11)	41	(14)
05Y1000	M	8000	(16)	16.1	(14)	4.9	(4)	80	(9)	49	(8)	40	(8)
05Y226	M	7790	(17)	16.7	(9)	4.7	(16)	73	(2)	48	(7)	41	(13)
05Y744	JAS	7640	(18)	17.1	(5)	4.2	(20)	93	(20)	45	(6)	41	(12)
CT201	BAS	7140	(19)	15.4	(17)	4.9	(4)	83	(13)	53	(10)	41	(18)
CT202	BAS	6480	(20)	14.5	(19)	4.9	(4)	80	(7)	85	(19)	40	(7)
MEAN		8570		16.3		4.8		81		55		40	
CV		6.5		5.7		3.2		4.2		31		3.8	
LSD (.05)		790		1.3		0.2		5		24		2	

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex;
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 13. 2006 Intermediate/Late Rice Variety Test - Glenn County

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)	
M402	MPQ	7990	(1)	17.6	(1)	5.0	(6)	99	(14)	1	(1)	41	(14)
04Y641	SSR	7330	(2)	15.7	(5)	5.0	(1)	85	(9)	1	(1)	40	(12)
04Y656	M	7130	(3)	15.5	(7)	4.9	(7)	86	(11)	2	(11)	38	(5)
99Y529	L	7100	(4)	13.8	(11)	4.9	(10)	81	(5)	1	(1)	41	(13)
05Y657	SSR	7080	(5)	16.3	(3)	4.7	(13)	86	(10)	1	(1)	39	(11)
M205	M	7050	(6)	15.7	(4)	4.9	(7)	86	(11)	1	(1)	38	(9)
03Y576	SSR	6940	(7)	17.3	(2)	4.4	(14)	89	(13)	1	(1)	35	(2)
04Y706	L	6870	(8)	14.4	(10)	4.8	(12)	80	(4)	1	(1)	38	(6)
05Y663	SPQ	6840	(9)	13.7	(12)	5.0	(1)	78	(1)	11	(14)	35	(1)
M202	M	6820	(10)	15.5	(6)	5.0	(1)	85	(8)	1	(1)	39	(10)
L205	LREX	6780	(11)	13.3	(14)	4.9	(11)	83	(7)	1	(1)	38	(6)
L206	L	6700	(12)	13.5	(13)	4.9	(7)	78	(1)	2	(11)	37	(4)
CH201	SPQ	6620	(13)	14.8	(9)	5.0	(1)	78	(3)	9	(13)	36	(3)
03Y151	LREX	6270	(14)	15.5	(8)	5.0	(1)	83	(6)	1	(1)	38	(8)
MEAN		6970		15.2		4.9		84		2		38	
CV		6.6		5		3.6		1.4		158.8		4.1	
LSD (.05)		660		1.1		0.3		2		5		2	

Preliminary Lines and Varieties

Variety	Grain Type	Grain Yield at 14% Moisture lbs/acre		Grain Moisture at Harvest (%)		Seedling Vigor (1-5)		Days to 50% Heading		Lodging (1-99)		Plant Height (in)	
05Y744	JAS	8260	(1)	11.3	(19)	4.0	(20)	87	(19)	75	(20)	42	(20)
04Y625	MPQ	7810	(2)	14.5	(9)	5.0	(6)	88	(20)	1	(1)	40	(15)
05Y949	M	7570	(3)	14.8	(3)	5.0	(1)	83	(15)	1	(1)	40	(16)
05Y441	M	7560	(4)	14.5	(7)	4.9	(9)	83	(11)	1	(1)	39	(11)
99Y494	LWX	7530	(5)	11.1	(20)	5.0	(1)	83	(11)	1	(1)	37	(2)
05Y387	M	7400	(6)	14.5	(8)	4.7	(15)	83	(11)	1	(1)	38	(6)
05Y301	MPQ	7300	(7)	14.3	(12)	5.0	(6)	87	(17)	11	(18)	38	(8)
01Y501	LSR	7280	(8)	11.9	(15)	4.9	(9)	79	(3)	1	(1)	38	(5)
05Y386	M	7140	(9)	14.4	(10)	4.7	(15)	85	(16)	1	(1)	38	(7)
05Y343	SWX	7140	(10)	14.9	(2)	4.7	(15)	81	(9)	6	(17)	37	(2)
05Y1274	L	7130	(11)	12.4	(14)	4.9	(9)	80	(6)	1	(1)	37	(1)
05Y450	M	7080	(12)	14.7	(4)	4.5	(19)	87	(17)	1	(1)	38	(8)
05Y758	LBL	6980	(13)	11.9	(16)	4.9	(9)	82	(10)	1	(1)	38	(8)
05Y714	M	6740	(14)	14.3	(11)	5.0	(1)	80	(6)	3	(16)	41	(18)
05Y1000	M	6500	(15)	14.2	(13)	4.8	(13)	80	(6)	1	(1)	39	(12)
CT201	BAS	6350	(16)	11.4	(18)	5.0	(1)	83	(11)	1	(1)	41	(19)
05Y913	M	6320	(17)	14.7	(5)	4.8	(14)	78	(1)	1	(1)	37	(4)
CT202	BAS	6060	(18)	11.8	(17)	5.0	(6)	79	(3)	11	(18)	39	(14)
05Y226	M	5420	(19)	15.1	(1)	4.7	(15)	78	(2)	1	(1)	40	(16)
05Y979	M	5210	(20)	14.6	(6)	5.0	(1)	80	(5)	1	(1)	39	(12)
MEAN		6940		13.6		4.8		82		6		39	
CV		7.4		3.2		4.5		0.8		112.3		3.2	
LSD (.05)		1070		0.9		0.5		1		14		3	

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex;
SR = stem rot resistant; JAS= Jasmine.
Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling emergence.
Subjective rating of 1-99 where 1 = none and 99 = completely lodged.
Numbers in parentheses indicate relative rank in column.

Table 14. 2006 Intermediate/Late Rice Variety Test - Sutter County

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)	
Advanced Lines and Varieties													
03Y151	REX	9770	(1)	14.5	(11)	5.0	(7)	83	(8)	4	(5)	38	(6)
04Y706	L	9680	(2)	14.8	(10)	5.0	(1)	83	(5)	1	(1)	40	(11)
99Y529	L	9180	(3)	13.1	(14)	4.8	(13)	80	(3)	9	(7)	40	(14)
04Y641	SSR	8900	(4)	17.6	(7)	5.0	(1)	83	(5)	1	(1)	40	(13)
L206	L	8810	(5)	13.2	(13)	5.0	(1)	79	(2)	59	(12)	36	(2)
L205	REX	8730	(6)	14.1	(12)	4.9	(9)	83	(8)	20	(8)	38	(5)
05Y663	SPQ	8610	(7)	16.9	(9)	5.0	(1)	84	(11)	41	(10)	38	(4)
M205	M	8490	(8)	18.4	(5)	4.8	(12)	83	(5)	39	(9)	36	(1)
05Y657	SSR	8300	(9)	17.3	(8)	4.9	(11)	85	(12)	1	(1)	40	(10)
03Y576	SSR	8290	(10)	22.5	(2)	4.9	(10)	92	(13)	1	(1)	40	(11)
04Y656	M	8080	(11)	18.9	(4)	4.2	(14)	83	(10)	58	(11)	37	(3)
M202	M	7760	(12)	18.9	(3)	5.0	(7)	81	(4)	64	(13)	39	(7)
M402	MPQ	7290	(13)	26.6	(1)	5.0	(1)	105	(14)	6	(6)	40	(9)
CH201	SPQ	7240	(14)	18.3	(6)	5.0	(1)	76	(1)	95	(14)	39	(8)
MEAN		8510		17.5		4.9		84		28		39	
CV		7		6.5		2.8		1.4		62.5		3.7	
LSD (.05)		850		1.6		0.2		2		25		2	
Preliminary Lines and Varieties													
99Y494	LWX	9000	(1)	13.1	(20)	5.0	(1)	84	(18)	1	(1)	36	(4)
01Y501	LSR	8940	(2)	14.0	(18)	5.0	(1)	79	(8)	1	(1)	36	(5)
04Y625	MPQ	8720	(3)	17.7	(4)	4.8	(15)	85	(20)	25	(7)	38	(16)
05Y758	LBL	8320	(4)	13.7	(19)	5.0	(1)	83	(16)	1	(1)	35	(1)
05Y343	SWX	8290	(5)	20.1	(1)	4.8	(17)	82	(15)	55	(15)	39	(17)
05Y301	MPQ	8120	(6)	18.6	(2)	5.0	(1)	83	(16)	80	(18)	37	(9)
05Y913	M	8070	(7)	17.2	(7)	5.0	(1)	75	(1)	85	(20)	37	(12)
05Y1274	L	7990	(8)	14.4	(17)	5.0	(1)	78	(7)	35	(9)	39	(18)
05Y441	M	7950	(9)	15.6	(14)	4.9	(14)	79	(8)	1	(1)	37	(9)
05Y450	M	7810	(10)	16.4	(11)	5.0	(1)	81	(13)	6	(5)	37	(9)
05Y744	JAS	7750	(11)	15.3	(15)	4.6	(20)	84	(19)	50	(14)	38	(14)
05Y1000	M	7550	(12)	16.5	(10)	5.0	(1)	77	(4)	18	(6)	36	(5)
05Y714	M	7450	(13)	17.0	(9)	5.0	(1)	77	(4)	45	(11)	38	(14)
05Y949	M	7440	(14)	16.4	(13)	4.9	(13)	79	(10)	43	(10)	37	(7)
05Y387	M	7250	(15)	17.1	(8)	4.6	(19)	79	(10)	48	(13)	37	(7)
05Y386	M	7110	(16)	17.6	(5)	5.0	(12)	79	(10)	65	(17)	36	(3)
05Y979	M	7060	(17)	16.4	(12)	4.8	(15)	77	(4)	60	(16)	38	(13)
05Y226	M	7000	(18)	17.6	(6)	4.8	(17)	75	(1)	45	(11)	36	(2)
CT201	BAS	6700	(19)	15.0	(16)	5.0	(1)	82	(14)	31	(8)	39	(18)
CT202	BAS	6250	(20)	18.2	(3)	5.0	(1)	76	(3)	80	(18)	39	(18)
MEAN		7740		16.4		4.9		80		39		37	
CV		5.8		6.7		2.4		1.6		60		3.1	
LSD (.05)		940		2.3		0.3		3		48		2	

S = short; M = medium; L = long; PQ = premium quality; BAS = Basmati; WX = waxy; REX = Newrex;
SR = stem rot resistant; JAS= Jasmine.

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. Grain Yield (lb/acre @14% moisture) Summary of Intermediate/ Late Rice Varieties by Location and Year (2002-2006)

Location	Year	M-205	M-402	**M-202**	L-205
Biggs (RES)	2002	11600	10800	**9970**	11330
	2003	10180	8130	**8650**	10580
	2004	10180	9310	**9480**	10150
	2005	9110	8570	**8610**	9110
	2006	8830	8280	**8620**	8920
Location Mean		9980	9018	**9066**	10018
Glenn	2002	9247	9257	**8368**	7782
	2003	8483	7887	**6862**	7500
	2004	10210	9860	**9040**	9140
	2005	8190	9040	**8430**	7510
	2006	7050	7990	**6820**	6780
Location Mean		8636	8807	**7904**	7742
Sutter	2002	10115	8692	**10743**	8933
	2003	11151	9613	**10356**	9310
	2004	10850	9430	**11140**	10970
	2005	10040	7530	**9500**	9560
	2006	8490	7290	**7760**	8730
Location Mean		10129	8511	**9900**	9501
Loc/Years Mean		9582	8779	**8957**	9087
Yield % M-202		**107.0**	**98.0**	**100**	**101.5**
Number of Tests		15	15	**15**	15

Table 16. Rice yields as affected by different establishment practices. All treatments received 150 lb N/ac.

System	2004[1]	2005[1]	2006[2]	Mean
	lb/ac 14% moisture			
WS-conventional	9511	7295	7923	8243 a
DS-conventional	9644	7509	8140	8431 a
WS-stale	8426	6555	7379	7453 b
WS-stale-notill	9303	7299	7457	8020 ab
DS-stale-notill	9191	7404	8966	8520 a
ANOVA (P value)	ns	ns	ns	0.0042

[1] Combine yields from main plot
[2] Combine yields from the 150 lb N/ac sub-plot

- Highest yields were recorded in 2004 (9215 lb/ac) and were lowest in 2005 (7212 lb/ac). These are in line with county wide yield trends.
- No significant difference between treatments when years are analyzed separately.
- Analyzed across years the WS-stale seedbed system produced significantly lower yields. This treatment record the lowest or second to yields in each year of the study. With applications of an additional 50 lb N/ac, yields in this system were comparable to the others. The flush for the stale seedbed combined with tillage, likely resulted in denitirfication losses of native soil N when the system was flooded for planting.