Management Guidelines. The following guidelines are based on research, observation and experience gained in developing M-205. These suggested cultural practices are intended to assist in the production of optimum yields and quality of M-205.

- Uniform water depth, fertility, seed distribution and weed control are important because they affect heading, harvest moisture and in turn head rice milling yield.

- Fertilizer rates and management should be similar to those for M-204 in your production area.

- Preferred seeding dates are May 1 to May 24. There are better variety alternatives when planting later. M-205 should be seeded at the rate of 130 to 150 lbs/acre or similar to the rate utilized for M-204 in your area. Excessive seeding rates reduce yield potential and increase susceptibility to disease.

- Water depth should be increased to about 8 inches before panicle initiation (50 to 55 days after planting) to heading to protect panicles from low temperature exposure during occasional cool nights.

Authors

F. Jodari and, C.W. Johnson, Plant Breeders and J.J. Oster, Plant Pathologist, K.S. McKenzie, Plant Breeder and Director, Rice Experiment Station, California Cooperative Rice Research Foundation, Inc., Biggs, CA.

R.G. Mutters Interim, Extension Agronomist, Department of Agronomy and Range Science, UC Davis.

W.M. Canevari, M.W. Hair, R.G. Mutters and J.F. Williams are Farm Advisors, UC Cooperative Extension, San Joaquin, Colusa/Yolo, Butte/Glenn and Sacramento/Sutter/Yuba Counties, respectively.

R.L. Wennig, Staff Research Associate, Department of Agronomy and Range Science, UC Davis.

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M-205 RICE: DESCRIPTION AND MANAGEMENT GUIDELINES

2001

Department of Agronomy and Range Science
University of California, Davis

M-205

Introduction. M-205 is an early, semidwarf, glabrous, Calrose quality medium grain. It was developed by CCRRF at the Rice Experiment Station (RES) and released to growers in March 2000. Its pedigree consists of all Calrose medium-grain varieties developed at RES.

Description. M-205 comparisons for evaluation purposes were made to M-202, M-204 and M-201 for certain agronomic characteristics. M-205 heads 3 days later but is more synchronous than M-202. M-205 is 5 cm shorter, has significantly improved lodging resistance, a lower stem rot score, slightly lower seedling vigor, similar milling yields and an 11% yield advantage over M-202. Milling yields are similar to M-202. While seedling vigor is slightly lower, M-205 has a similar resistance to blanking caused by cool temperatures 10 to 14 days before heading during microsporogensis as M-202 and M-204. M-205 is similar to M-204 except it has a 6% yield advantage. Compared to M-201, M-205 has improved resistance to blanking and improved whole grain and total milled rice yield. M-205 is susceptible to the blast race IG-1 found in California.

Performance. M-205 has high yield potential. The 1999 M-205 foundation seed field yielded 10,000 lbs/acre compared to 8700 lbs/acre for M-202, marking the first time any RES foundation seed field has achieved a 10,000 lb/acre yield. Kernels of M-205 are slightly larger and have a higher 1000 kernel weight than M-202. M-205 kernels are similar to M-204. Laboratory analysis for physiochemical characteristics (apparent amylose content, protein and gelatinization temperature) by the USDA Rice Quality Laboratory indicate that it fits medium-grain standards. Milled rice samples of M-205, M-202 and M-204 were distributed to various California rice marketing organizations and individual rice quality evaluators between 1997 and 1999. Responses from evaluators indicate M-205 is similar to M-202 and M-204. M-205 can be commingled with other Calrose medium varieties.

Area of adaption. M-205 is being released as a Calrose medium grain. It is a viable replacement for M-202 in the warmer production areas with its improved resistance to lodging and higher yield. M-205 headingdates at the cooler sites in 1999 were delayed an additional 5 days when compared to the heading dates at warmer sites. The previous 4 test years did not show this difference. Taking into account the potential for delayed heading and the shorter height of M-205, it may not be the first choice for cooler production areas. Its area of primary adaptation may be west of Highway 70 and north of Highway 20. It would provide an alternative to M-202 and hopefully take the place of M-204. M-205 can be described as an early maturing Calrose medium grain with improved lodging resistance and higher yield potential than M-202 in warmer production areas.

SUMMARY OF AGRONOMIC CHARACTERISTICS FOR M-205, M-204, M-202, AND M-201, 1994 TO 1999.

Character	M-205	M-204	M-202	M-201
Seedling vigor (score)	4.1	4.3	4.4	4.2
Days to 50% heading	89	88	86	89
Plant height (cm)	93	94	98	92
Lodging (%)	16	23	49	9
Blanking - Greenhouse	26	24	23	52
Blanking - Davis	8	10	11	15
Blanking - San Joaquin	12	16	21	33
Overall blanking mean	15	17	18	33
Stem rot (score)	5.4	5.5	6.0	5.1
Harvest moisture (%)	18.6	18.2	18.9	19.3
Yield (lb/acre @ 14%)	9490*	8954	8448	8705
Milling (%) total	68.9	68.1	67.2	65.9
Milling (%) whole grain	61.8	62.9	61.0	60.5
Brown rice 1000 grain wt (gms)	25.2	25.3	24.0	--
Brown rice length (cm)	6.4	6.3	6.2	--
Brown rice width (cm)	2.8	3.0	3.0	--
Ratio (L/W)	2.29	2.10	2.06	--

*M-205 yielded significantly higher than other entries (LSD 0.05)