

Proper management of varieties to obtain high yields and milling quality includes:

1. Maintain water continuous flood depth of 4 to 6 inches for optimum plant growth and weed control.
2. Obtain an adequate stand of 12-18 plants/ft².
3. Good weed control.
4. Adequate nitrogen fertilization.
5. Water depth at least 8 inches 65 to 70 days after seeding.
6. Drain as late as possible before harvest.
7. Harvest short and medium-grain varieties at 20 to 24% and long-grain varieties at 17 to 19% grain moisture content for maximum head rice and total milling yield.

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.

J.E. Hill, Extension Agronomist, Department of Agronomy and Range Science, UC Davis.

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

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

In accordance with applicable State and Federal laws and University policy, the University of California does not discriminate in any of its policies, procedures, or practices on the basis of race, religion, color, national origin, sex, marital status, sexual orientation, age, veteran status, medical condition, or handicap. Inquiries regarding this policy may be addressed to the Affirmative Action Director, University of California, Agriculture and Natural Resources, 300 Lakeside Drive, 6th Floor, Oakland, CA, 94612-3560. (510) 987-0097.

Cover graphic art by Linda Seaman.

**Agronomy Fact Sheet Series
2003-1**

**CHARACTERISTICS
OF
PUBLIC
CALIFORNIA
RICE
VARIETIES**



2003

**Department of Agronomy and
Range Science
University of California, Davis**

CHARACTERISTICS OF PUBLIC CALIFORNIA RICE VARIETIES - 2003

Grain Type	Maturity	Year Seed Widely Available	Stem Rot Score ¹ (0-10)	Seedling Vigor ² (1-5)	Comments
Short Grain					
S-102	Very Early ³	1998	5.9	4.3	Very high yield potential. Good resistance to blanking with larger and less chalky grain. Rough leaves and hulls, grain dries down rapidly during ripening. Susceptible to stem rot.
Medium Grains					
M-103	Very Early ³	1990	5.5	3.9	Earliest medium grain, vigor less than M-202. Excellent resistance to blanking. Very good head and total milled rice yields. Moderate lodging and good yield potential.
M-104	Very Early ³	2002	5.6	4.4	Potential replacement for M-103 in San Joaquin Valley and as an alternative to M-202 in other cool rice areas. Improved seedling vigor, lodging resistance, and yield compared to M-103. Milling yields similar to M-103. Heads 8 to 10 days earlier than M-202. Early planting in warm areas could limit yield and quality.
M-202	Early	1987	5.8	4.4	Very high yield potential. Moderate lodging potential. Long time favorite variety that threshes easily.
M-204	Early	1993	5.7	4.2	Very high yield potential. Seedling vigor slightly less than M-202. Height 3 inches shorter and heading 3 days later than M-202. Better lodging resistance and improved total and head rice yields than M-202. Resistance to blanking similar to M-202. Threshes easily. Not recommended for Escalon, Natomas or other cool areas.
M-205	Early	2002	5.5	4.1	Very high yield potential. Primary adaptation area west of Highway 70 and north of Highway 20. Height, seedling vigor, and blanking resistance similar to M-204. Matures 4-7 days later than M-202. Improved milling yields relative to M-202. Not recommended for Escalon, Natomas or other cool areas.
Long Grains					
L-204	Early	1998	5.6	4.1	High yield potential. Resistant to lodging. Seedling vigor fair, may be affected by deep water. Improved head rice and cooking characteristics. Avoid early draining (requires 40-45 days after 50% heading to mature) and harvest at 18-19% moisture to maximize milling yield.
L-205	Early	2001	5.7	3.9	Newrex type, dry cooking long grain. High yield potential. Two days later than L-204. Resistant to lodging. More resistant to blanking than L-204. Seedling vigor fair. Seed size slightly smaller than L-204. Similar milling yield to L-204. Avoid early draining (requires 40-45 days after 50% heading to mature) and harvest at 16-18% grain moisture to maximize milling yield.
Premium Quality					
M-401	Late	1983	5.4	4.3	<i>Premium quality</i> medium grain rice with large kernels. Good yield potential but susceptible to blanking, lodging and damage from premature drainage. Use 20-25% less nitrogen than on other medium grain varieties. Best adapted to warmer areas. Milling yields lower than other medium grain varieties.
M-402	Late	2001	5.4	4.2	<i>Premium quality</i> medium grain. Kernel size is smaller than M-401, much higher head rice potential. About 5-7 days earlier than M-401 with better straw strength. Adapted to warmer areas.
Calhikari-201	Early	2001	6.0	4.4	<i>Premium quality</i> short grain developed for the Japanese premium short-grain market. Has very good seedling vigor. A semidwarf with much greater yield potential and resistance to lodging than Japanese varieties. Rough leaves and hulls. Cold delays maturity and increases blanking. Use low nitrogen to maximize market quality.
Specialty Rices					
Calmochi-101	Very Early ^{3,4}	1987	5.6	4.2	Glutinous (sweet, waxy) rice. Excellent blanking resistance. Has rough leaves and hulls, no awns. Grain dries down rapidly during ripening.
A-201	Early ⁴	1998	6.2	4.2	Aromatic (popcorn aroma) long grain. Moderate yield potential. Becomes leafy under excessive nitrogen. Poor milling yield, use slower cylinder speed and harvest at 18-20% grain moisture. Air dry without heat to retain aroma.
Calmati-201	Early ⁴	2001	5.4	3.9	A basmati type aromatic long grain. Moderate yield potential. Five days later than L-204. Pubescent leaves and hull. Milling yield is considerably higher than A-201. Very susceptible to blanking and should not be grown in cool areas. Excessive nitrogen and late planting will delay maturity and increase blanking. Harvest at 17-18% grain moisture.

¹ Average stem rot score over last four years: 0 = no disease and 10 = severe disease.

² Subjective rating of 1-5 where 1 = poor and 5 = excellent seedling vigor.

³ Milling quality and yield may be reduced by early planting in warmer areas.

⁴ Specialty varieties should not be grown unless arrangements have first been made with a marketing agency.