

**M-208 RICE:
DESCRIPTION
AND
MANAGEMENT
GUIDELINES**



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M-208

Introduction:

M-208 is an early maturing, semi-dwarf, glabrous, Calrose medium grain (CRMG) quality rice variety that has *Pi-z* gene resistance to race IG-1 of the rice blast pathogen found in California. It was developed by the CCRRF at the Rice Experiment Station (RES) and released to growers in 2006. M-208 parents involved M-204 and RES developed germplasm from M-401 crossed to Lafitte. Lafitte is a medium grain release from Louisiana State University and the source of the *Pi-z* blast resistance gene.

Agronomic Characteristics:

M-208 was compared very-early to early M-206, M-207 (first CRMG with *Pi-z* blast resistance) and M-202 (Table 1). M-208 is essentially an M-202 agronomic type CRMG that is a significant improvement over M-207. Days to 50% heading for M-208 averaged 1 day and 6 days later than M-202 and M-206, respectively. M-208 is similar to M-202 in seedling vigor and lodging (even though it is 2 cm taller). Kernels of M-208 are slightly larger in size and weight compared to M-206, M-207 and M-202. Laboratory analysis for physicochemical characteristics by the USDA-ARS Rice Research Unit, Beaumont, Texas, indicates M-208 fits Calrose medium grain standards. Evaluations of milled rice samples by California rice marketing organizations and individual evaluators indicate M-208 is similar to M-206 M-207 and M-202 with small improvements noted in taste and texture for M-208. M-208 may be commingled with other Calrose medium grains.

Table 1. Summary of Agronomic Characteristics For M-206, M-208, M-207 and M-202 In The Very Early and Early 2003 to 2005
Statewide Yield Tests

Character	M-206	M-208	M-207	M-202
Seedling vigor (score)	4.9	5.0	4.8	4.9
Days to 50% heading	80	86*	82	85
Plant height (cm)	98	100	98	98
Lodging (%)	33	33	42	32
Blanking - Greenhouse (%)	8	9	11	12
Blanking - Davis (%)	9	15	25	17
Blanking - San Joaquin (%)	7	10	11	13
Overall blanking mean (%)	8	11	16	14
Stem rot (score)1	6.4	6.6	7.5	6.3
Harvest moisture (%)	20.9	19.7	18.9	20.9
Yield (lb/acre @ 14%)	8812	8641	8334	8465
Milling (%) total	68.4	67.9	66.7	68.2
Milling (%) whole grain	64.7	63.8	61.3	63.1
Brown weight 1000 grain wt (g)	23.8	24.4	21.6	23.2
Brown length (mm)	6.26	6.60	6.42	6.24
Brown width (mm)	2.82	2.85	2.71	2.85
Ratio (L/W)	2.22:1	2.32:1	2.36:1	2.19:1

* Significantly different than M-206 and M-207 (LSD 5%).

Area of adaptation:

M-208 is adapted to the majority of M-202 growing areas north of the Yolo/Colusa County line and west of Highway 70. It has specific applications in those areas of Glenn and Colusa Counties that have recurring blast damage associated with reduced yields and milling quality. M-208 also provides another variety option for medium grain production in other areas.

Management Guidelines:

The following guidelines are based on research, observation and experience gained in developing M-208. These suggested cultural practices are intended to assist in the production of optimum yields and quality from M-208.

- Uniform water depth, adequate fertility, uniform seed distribution and good weed control practices are important because they maintain uniform heading and harvest moisture which in turn increase head rice milling yield.
- Fertilizer rates and other management practices should be similar to those for M-206 and M-202 in your production area.
- Preferred seeding dates are the same as for M-206 and M-202. M-208 should be seeded at the rate of 130 to 150 lbs/acre. 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 protect developing panicles from low temperature exposure during occasional cool nights.