

M-204



M-204 is an early maturing medium grain released in 1991. It has shown improved milling yield potential. Its pedigree is: M-201/M7/3/M7//ESD7-3/Kokuhorose.

U.S. MARKET TYPE:
MEDIUM GRAIN

2000 2001 2002

Grain Dimensions (Paddy)

Average Length (mm)	8.41	8.38	8.71
Average Width (mm)	3.01	3.07	3.21
L/W Ratio	2.8	2.7	2.7

Grain Dimensions (Brown)

Average Length (mm)	6.22	6.16	6.17
Average Width (mm)	2.80	2.74	2.80
L/W Ratio	2.2	2.2	2.2
1000 Grain Weight (g)	25.1	24.2	24.2

Grain Dimensions (Milled)

Average Length (mm)	5.91	5.78	5.89
Average Width (mm)	2.73	2.67	2.70
L/W Ratio	2.2	2.2	2.2
Apparent Amylose (%)	18.8	18.0	18.0

Protein (%)

Brown	7.2	8.2	6.2
Milled	7.0	6.9	5.8

Alkali Spreading Value (1.5% KOH) 6.5 6.0 6.0

Alkali Spreading Value (1.7% KOH) 7.0 7.0 6.2

Cooking Time (min) 16.7 19.3 20.0

Differential Scanning Calorimetry

Gelatinization Temperature (°C) 65.2 68.0 67.6

QUALITY TYPE:
CALROSE

2000 2001 2002

Rapid Visco Analyzer

AACC Method:

Peak	242	272	262
Hot Paste	143	152	151
Cool Paste	251	262	263
Setback	9	-10	1
Consistency	96	110	112
Breakdown	111	120	111
Pasting Temperature (°C)	70.7	73.3	72.0

Japanese Method:

Peak	276	313	270
Hot Paste	135	135	124
Cool Paste	252	253	242
Setback	-24	-60	-28
Consistency	117	118	118
Breakdown	141	178	146
Pasting Temperature (°C)	70.7	72.9	72.6

Controlled Stress Rheometer (Pa.s)

Peak	0.48	0.67	0.46
Hot Paste	0.29	0.36	0.27
Cool Paste	0.59	0.76	0.58
Setback	0.10	0.09	0.12
Consistency	0.30	0.40	0.31
Breakdown	0.19	0.31	0.19
Pasting Temperature (°C)	67.2	67.2	67.7



Physiochemical testing provided by: the USDA-ARS Rice End-Use Quality Research Laboratory, Rice Experiment Station, and Department of Food Science and Technology, U.C. Davis. • Samples grown and processed at the Rice Experiment Station. • Research supported in-part by a grant from the California Rice Commission.