## Calmochi-101



Paddy



Brown



Milled



Calmochi-101 is a very early maturing waxy (also known as sweet, mochi, or glutinous) short grain released in 1985. It has excellent resistance to cool temperature sterility. Its pedigree is: Tatsumi mochi/M7//S6.

**U.S. Market Type:** Glutinous Short Grain **Quality Type:** Glutinous Short Grain

Year 1         Year 2         Year 3         Average           Grain Dimensions (Paddy)         3.47         7.91         7.55         7.62           Average Length (mm)         3.47         3.50         3.46         3.48           L/W Ratio         2.1         2.3         2.2         2.2           Grain Dimensions (Brown)           Average Length (mm)         5.22         5.44         5.26         5.31           Average Width (mm)         2.94         2.88         2.87         2.90           L/W Ratio         1.8         1.9         1.8         1.8           1000 Grain Weight (g)         23.1         23.7         21.3         22.7           Grain Dimensions (Milled)           Average Length (mm)         4.89         4.97         4.83         4.90           Average Width (mm)         2.90         2.78         2.75         2.81           L/W Ratio         1.7         1.8         1.8         1.8           Physicochemical Tests           Apparent Amylose (%)         0.0         0.0         0.3         0.1           Alkali Spreading Value (1.7% KOH)         6.6         6.1         6.0         6.2		•			
Average Length (mm)  Average Width (mm)  3.47  3.50  3.46  3.48  L/W Ratio  2.1  2.3  2.2  2.2   Grain Dimensions (Brown)  Average Length (mm)  5.22  5.44  5.26  5.31  Average Width (mm)  2.94  2.88  2.87  2.90  L/W Ratio  1.8  1.9  1.8  1.9  1.8  1.8  1000 Grain Weight (g)  23.1  23.7  21.3  22.7   Grain Dimensions (Milled)  Average Length (mm)  4.89  4.97  4.83  4.90  Average Width (mm)  2.90  2.78  2.75  2.81  L/W Ratio  1.7  1.8  1.8  1.8  Physicochemical Tests  Apparent Amylose (%)  Alkali Spreading Value (1.7% KOH)  Brown  7.3  7.5  5.7  6.8  Milled  6.3  6.3  6.3  6.1  6.1  Rapid Visco Analyzer (AACC Method)  Peak  Hot Paste  54  60  55  66  70  Setback  Cool Paste  Setback  Consistency  52  17  16  28  Breakdown  55  92  81  76		Year 1	Year 2	Year 3	Average
Average Width (mm)  L/W Ratio  2.1  2.3  2.2  2.2  Grain Dimensions (Brown)  Average Length (mm)  Average Width (mm)  L/W Ratio  1.8  1.9  1.8  1.9  1.8  1.8  1.00 Grain Weight (g)  23.1  23.7  21.3  22.7  Grain Dimensions (Milled)  Average Length (mm)  Average Length (mm)  Average Width (mm)  2.90  2.78  2.75  2.81  L/W Ratio  1.7  1.8  1.8  1.8  Physicochemical Tests  Apparent Amylose (%)  Alkali Spreading Value (1.7% KOH)  Brown  Milled  Rapid Visco Analyzer (AACC Method)  Peak  Hot Paste  Cool Paste  Setback  Consistency  Breakdown  55  92  81  76	Grain Dimensions (Paddy)				
L/W Ratio 2.1 2.3 2.2 2.2  Grain Dimensions (Brown)  Average Length (mm) 5.22 5.44 5.26 5.31  Average Width (mm) 2.94 2.88 2.87 2.90  L/W Ratio 1.8 1.9 1.8 1.8  1000 Grain Weight (g) 23.1 23.7 21.3 22.7  Grain Dimensions (Milled)  Average Length (mm) 4.89 4.97 4.83 4.90  Average Width (mm) 2.90 2.78 2.75 2.81  L/W Ratio 1.7 1.8 1.8 1.8  Physicochemical Tests  Apparent Amylose (%) 0.0 0.0 0.3 0.1  Alkali Spreading Value (1.7% KOH) 6.6 6.1 6.0 6.2  Protein (%)  Brown 7.3 7.5 5.7 6.8  Milled 6.3 6.8 5.1 6.1  Rapid Visco Analyzer (AACC Method)  Peak 145 152 131 143  Hot Paste 54 60 50 55  Cool Paste 69 76 66 70  Setback -75 -26 -65 -55  Consistency 52 17 16 28  Breakdown 55 92 81 76	Average Length (mm)	7.41	7.91	7.55	7.62
Grain Dimensions (Brown)         5.22         5.44         5.26         5.31           Average Length (mm)         2.94         2.88         2.87         2.90           L/W Ratio         1.8         1.9         1.8         1.8           1000 Grain Weight (g)         23.1         23.7         21.3         22.7           Grain Dimensions (Milled)           Average Length (mm)         4.89         4.97         4.83         4.90           Average Width (mm)         2.90         2.78         2.75         2.81           L/W Ratio         1.7         1.8         1.8         1.8           Physicochemical Tests           Apparent Amylose (%)         0.0         0.0         0.3         0.1           Alkali Spreading Value (1.7% KOH)         6.6         6.1         6.0         6.2           Protein (%)         8         5.1         6.1           Rapid Visco Analyzer (AACC Method)         7         7.5         5.7         6.8           Milled         6.3         6.8         5.1         6.1           Rapid Visco Analyzer (AACC Method)         7         7         1.5         1.7         1.8         1.8           Peak	Average Width (mm)	3.47	3.50	3.46	3.48
Average Length (mm)  Average Width (mm)  2.94  2.88  2.87  2.90  L/W Ratio  1.8  1.9  1.8  1.9  1.8  1.8  1000 Grain Weight (g)  23.1  23.7  21.3  22.7    Grain Dimensions (Milled)  Average Length (mm)  4.89  4.97  4.83  4.90  Average Width (mm)  2.90  2.78  2.75  2.81  L/W Ratio  1.7  1.8  1.8  1.8  Physicochemical Tests  Apparent Amylose (%)  Alkali Spreading Value (1.7% KOH)  Brown  7.3  7.5  5.7  6.8  Milled  6.3  6.3  6.8  5.1  6.1  Rapid Visco Analyzer (AACC Method)  Peak  145  152  131  143  Hot Paste  54  60  50  55  Cool Paste  69  76  66  70  Setback  -75  -26  -65  -55  Consistency  52  17  16  28  Breakdown  55  92  81  76	L/W Ratio	2.1	2.3	2.2	2.2
Average Width (mm)  L/W Ratio  1.8  1.9  1.8  1.9  1.8  1.00 Grain Weight (g)  23.1  23.7  21.3  22.7    Grain Dimensions (Milled)  Average Length (mm)  Average Width (mm)  2.90  2.78  2.75  2.81  L/W Ratio  1.7  1.8  1.8  Physicochemical Tests  Apparent Amylose (%)  Alkali Spreading Value (1.7% KOH)  Brown  7.3  7.5  6.1  Rapid Visco Analyzer (AACC Method)  Peak  Hot Paste  Cool Paste  69  76  66  70  Setback  -75  -26  -65  -55  Consistency  Breakdown  55  92  81  76	Grain Dimensions (Brown)				
L/W Ratio 1.8 1.9 1.8 1.8 1000 Grain Weight (g) 23.1 23.7 21.3 22.7 21.3 21.3 22.7 21.3 21.3 22.7 21.3 21.3 21.3 21.3 21.3 21.3 21.3 21.3	Average Length (mm)	5.22	5.44	5.26	5.31
1000 Grain Weight (g)  23.1  23.7  21.3  22.7   Grain Dimensions (Milled)  Average Length (mm)  Average Width (mm)  2.90  2.78  2.75  2.81  L/W Ratio  1.7  1.8  1.8  1.8  Physicochemical Tests  Apparent Amylose (%)  Alkali Spreading Value (1.7% KOH)  Brown  Milled  6.3  6.3  6.8  5.1  6.1  Rapid Visco Analyzer (AACC Method)  Peak  Hot Paste  Cool Paste  69  76  66  70  Setback  -75  -26  -65  -55  Consistency  52  17  16  28  Breakdown  55  92  81  76	Average Width (mm)	2.94	2.88	2.87	2.90
Grain Dimensions (Milled)         Average Length (mm)       4.89       4.97       4.83       4.90         Average Width (mm)       2.90       2.78       2.75       2.81         L/W Ratio       1.7       1.8       1.8       1.8         Physicochemical Tests         Apparent Amylose (%)       0.0       0.0       0.3       0.1         Alkali Spreading Value (1.7% KOH)       6.6       6.1       6.0       6.2         Protein (%)       8       5.7       6.8         Milled       6.3       6.8       5.1       6.1         Rapid Visco Analyzer (AACC Method)       9       76       66       70       55         Cool Paste       54       60       50       55       55         Cool Paste       69       76       66       70       55         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	L/W Ratio	1.8	1.9	1.8	1.8
Average Length (mm)  Average Width (mm)  2.90  2.78  2.75  2.81  L/W Ratio  1.7  1.8  1.8  Physicochemical Tests  Apparent Amylose (%)  Alkali Spreading Value (1.7% KOH)  Brown  Milled  Rapid Visco Analyzer (AACC Method)  Peak  Hot Paste  Cool Paste  Consistency  Breakdown  4.89  4.97  4.83  4.90  4.83  4.90  4.80  4.97  4.83  4.90  4.83  4.90  4.81  4.90  4.83  4.90  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.80  4.81  4.81  4.90  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.90  4.83  4.90  4.81  4.81  4.81  4.81  4.90  4.83  4.90  4.81  4.81  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.81  4.90  4.81  4.81  4.81  4.81  4.81  4.90  6.6  6.1  6.6  6.1  6.1  6.2  8.1  4.1  4.83  4.90  6.6  6.1  6.1  6.2  8.1  4.1  4.1  4.1  4.1  4.1  4.1  4.1	1000 Grain Weight (g)	23.1	23.7	21.3	22.7
Average Width (mm)  L/W Ratio  1.7  1.8  1.8  Physicochemical Tests  Apparent Amylose (%)  Alkali Spreading Value (1.7% KOH)  Brown  Milled  Rapid Visco Analyzer (AACC Method)  Peak  Hot Paste  Cool Paste  Consistency  Breakdown  55  92  81  1.8  2.81  3.8  3.9  3.0  3.0  3.0  3.0  3.0  3.0  3.0	Grain Dimensions (Milled)				
L/W Ratio       1.7       1.8       1.8       1.8         Physicochemical Tests         Apparent Amylose (%)       0.0       0.0       0.3       0.1         Alkali Spreading Value (1.7% KOH)       6.6       6.1       6.0       6.2         Protein (%)       8       5.7       6.8         Milled       6.3       6.8       5.1       6.1         Rapid Visco Analyzer (AACC Method)       8       5.1       6.1       6.1         Peak       145       152       131       143       143       140       145       152       131       143       143       140       145       152       131       143       143       143       144       145       152       131       143       143       143       145       152       131       143       143       145       152       131       143       143       145       152	Average Length (mm)	4.89	4.97	4.83	4.90
Physicochemical Tests           Apparent Amylose (%)         0.0         0.0         0.3         0.1           Alkali Spreading Value (1.7% KOH)         6.6         6.1         6.0         6.2           Protein (%)         7.3         7.5         5.7         6.8           Milled         6.3         6.8         5.1         6.1           Rapid Visco Analyzer (AACC Method)         7.2         1.52         1.31         143           Hot Paste         54         60         50         55           Cool Paste         69         76         66         70           Setback         -75         -26         -65         -55           Consistency         52         17         16         28           Breakdown         55         92         81         76	Average Width (mm)	2.90	2.78	2.75	2.81
Apparent Amylose (%)       0.0       0.0       0.3       0.1         Alkali Spreading Value (1.7% KOH)       6.6       6.1       6.0       6.2         Protein (%)       7.3       7.5       5.7       6.8         Milled       6.3       6.8       5.1       6.1         Rapid Visco Analyzer (AACC Method)       7.2       1.2       1.31       1.43         Hot Paste       54       60       50       55         Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	L/W Ratio	1.7	1.8	1.8	1.8
Alkali Spreading Value (1.7% KOH)  Brown  Milled  Rapid Visco Analyzer (AACC Method)  Peak  Hot Paste  Cool Paste  Setback  Consistency  Breakdown  Alkali Spreading Value (1.7% KOH)  6.6  6.1  6.0  6.2  6.2  6.3  6.8  5.7  6.8  6.1  6.8  5.7  6.8  6.1  6.0  6.2  6.2  6.2  6.3  6.4  6.5  6.5  6.5  6.5  6.6  6.7  6.8  6.8  6.1  6.0  6.2  6.2  6.8  6.1  6.0  6.2  6.2  6.3  6.8  6.1  6.0  6.2  6.2  6.3  6.4  6.5  6.5  6.5  6.5  6.6  6.7  6.8  6.7  6.8  6.8  6.1  6.8  6.8  6.1  6.0  6.2  6.2  6.8  6.1  6.0  6.2  6.2  6.3  6.8  6.1  6.0  6.2  6.2  6.3  6.8  6.1  6.0  6.2  6.2  6.3  6.3  6.4  6.5  6.5  6.5  6.5  6.5  6.6  6.7  6.8  6.8  6.8  6.1  6.0  6.2  6.2  6.8  6.1  6.0  6.2  6.2  6.8  6.1  6.0  6.2  6.2  6.8  6.8  6.1  6.0  6.2  6.2  6.8  6.8  6.1  6.0  6.2  6.8  6.8  6.1  6.0  6.2  6.2  6.8  6.8  6.1  6.0  6.2  6.8  6.8  6.1  6.8  6.8  6.8  6.1  6.8  6.8	Physicochemical Tests				
Protein (%)       7.3       7.5       5.7       6.8         Milled       6.3       6.8       5.1       6.1         Rapid Visco Analyzer (AACC Method)       7.5       1.52       1.31       1.43         Hot Paste       54       60       50       55         Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	Apparent Amylose (%)	0.0	0.0	0.3	0.1
Brown       7.3       7.5       5.7       6.8         Milled       6.3       6.8       5.1       6.1         Rapid Visco Analyzer (AACC Method)       145       152       131       143         Hot Paste       54       60       50       55         Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	Alkali Spreading Value (1.7% KOH)	6.6	6.1	6.0	6.2
Milled       6.3       6.8       5.1       6.1         Rapid Visco Analyzer (AACC Method)       145       152       131       143         Hot Paste       54       60       50       55         Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	Protein (%)				
Rapid Visco Analyzer (AACC Method)         Peak       145       152       131       143         Hot Paste       54       60       50       55         Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	Brown	7.3	7.5	5.7	6.8
Peak       145       152       131       143         Hot Paste       54       60       50       55         Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	Milled	6.3	6.8	5.1	6.1
Hot Paste       54       60       50       55         Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	Rapid Visco Analyzer (AACC Method)				
Cool Paste       69       76       66       70         Setback       -75       -26       -65       -55         Consistency       52       17       16       28         Breakdown       55       92       81       76	Peak	145	152	131	143
Setback         -75         -26         -65         -55           Consistency         52         17         16         28           Breakdown         55         92         81         76	Hot Paste	54	60	50	55
Consistency         52         17         16         28           Breakdown         55         92         81         76	Cool Paste	69	76	66	70
Breakdown 55 92 81 76	Setback	-75	-26	-65	-55
	Consistency	52	17	16	28
Pasting Temperature (°C) 68 69 69	Breakdown	55	92	81	76
	Pasting Temperature (°C)	68	69	69	69

<sup>\*</sup> Physicochemical testing provided by: the Rice Experiment Station and USDA-ARS Rice End-Use Quality Research Laboratory. Samples were grown and processed at the Rice Experiment Station. Research supported in-part by a grant from the California Rice Commission.