

California DURUM

2021 CROP QUALITY

Sacramento and San Joaquin Valleys

Milling, Semolina, and Pasta Characteristics of Durum Varieties

WHEAT Location	Desert Gold		Desert Gold		Desert King HP	
	Sac Valley		San Joaquin Valley		San Joaquin Valley	
	2021		2021	2020	2021	2020
Protein (12% MB)	12.0		14.2	13.4	13.7	13.8
Ash (12% MB)	1.52		1.80	1.75	1.71	1.90
Moisture	8.0		7.4	7.4	6.8	7.3
Falling Number (sec)	385		518	594	491	533
Micro Sedimentation (CC)	46		54	61	59	62
Test Weight						
lb/bu	64.6		62.5	64.0	62.2	62.2
kg/hl	84.1		81.3	83.3	81.0	80.9
1000 Kernel Weight (g)	53.2		44.8	47.3	44.7	44.3
Kernel Size Distribution						
Large/Medium/Small	96/4/0		83/17/0	93/7/0	85/14/1	86/14/0
SEMOLINA						
Lab Mill Extraction (%)	77.9		79.2	77.7	78.6	77.1
Semolina Extraction (%)	74.4		73.8	72.9	74.2	72.8
Protein (14% MB)	10.8		13.0	12.3	12.8	12.9
Ash (14% MB)	0.78		0.83	0.83	0.87	0.91
Specks (no/10 sp in)	20		20	16	26	16
Wet Gluten (14% MB)	27.1		32.3	32.1	32.9	33.8
Gluten Index	82		79	75	75	63
Color b* value	31		33	31	33	30
MIXOGRAPH						
Absorption%	59.7		63.2	62.3	62.9	63.2
Peak Time (min)	2.9		3.2	3.2	3.0	3.0
Peak Height (mu)	4.6		5.0	4.8	4.8	4.9
MT Score (1-8)	7		7	7	7	7
ALVEOGRAPH						
P (mm)	100		68	76	70	77
L (mm)	46		110	75	95	63
P/L Ratio	2.2		0.6	1.0	0.7	1.2
W (10 ⁻⁴ joules)	163.0		196.3	174.3	189.0	152.6
PASTA						
Color L*	59.2		56.4	57.8	56.3	56.8
a*	-0.1		0.4	0.1	0.0	0.5
b*	41.7		43.0	43.1	41.9	40.7
Color Score	10.0		10.0	10.0	9.0	9.0
Cooked weight (gm)	31.3		29.5	30.0	29.5	28.8
Cooking Loss (%)	6.3		5.9	6.2	6.5	6.2
Cooked Firmness (g cm)	6.3		7.1	6.4	6.4	6.9

Pasta and semolina color - Minolta Chromameter Model CR-200. Weather, soils, and cultural practices can influence the quality of all varieties between years and of particular lots of any one variety. Wheat and semolina protein - Leco Combustion Nitrogen Analyzer Model TruSpec.

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WHEAT Location	Tiburon		Shasta	
	San Joaquin Valley		San Joaquin Valley	
	2021	2020	2021	2020
Protein (12% MB)	13.6	13.5	14.2	13.3
Ash (12% MB)	1.69	1.79	1.51	1.69
Moisture	6.7	7.9	6.9	7.1
Falling Number (sec)	634	466	566	560
Micro Sedimentation (CC)	73	65	68	59
Test Weight				
lb/bu	63.0	63.3	64.5	64.6
kg/hl	82.0	82.4	83.9	84.1
1000 Kernel Weight (g)	53.0	58.4	60.4	62.3
Kernel Size Distribution				
Large/Medium/Small	92/7/1	96/4/0	97/3/0	96/4/0
SEMOLINA				
Lab Mill Extraction (%)	74.7	78.0	80.8	77.6
Semolina Extraction (%)	71.4	74.1	74.8	72.4
Protein (14% MB)	12.4	12.5	13.0	12.2
Ash (14% MB)	0.84	0.84	0.69	0.76
Specks (no/10 sp in)	17	17	33	22
Wet Gluten (14% MB)	32.3	31.9	35.9	32.9
Gluten Index	77	72	53	55
Color b* value	32	31	29	27
MIXOGRAPH				
Absorption%	62.3	62.4	63.1	61.3
Peak Time (min)	2.9	3.0	2.6	2.7
Peak Height (mu)	5.1	4.7	5.3	4.8
MT Score (1-8)	7	7	6	6
ALVEOGRAPH				
P (mm)	83	76	74	69
L (mm)	95	69	84	40
P/L Ratio	0.9	1.1	0.9	1.7
W (10-4 joules)	239.3	164.9	171.0	104.0
PASTA				
Color L*	57.2	57.4	58.3	58.2
a*	-0.5	0.2	-0.6	-0.5
b*	42.4	41.0	40.3	37.5
Color Score	10.0	9.0	9.0	8.0
Cooked weight (gm)	30.6	29.0	31.2	30.3
Cooking Loss (%)	5.7	6.3	6.1	6.2
Cooked Firmness (g cm)	6.2	6.5	6.4	6.0

Pasta and semolina color - Minolta Chromameter Model CR-200. Weather, soils, and cultural practices can influence the quality of all varieties between years and of particular lots of any one variety. Wheat and semolina protein - Leco Combustion Nitrogen Analyzer Model TruSpec.