

California DURUM

2020 CROP QUALITY

Sacramento and San Joaquin Valleys

Milling, Semolina, and Pasta Characteristics of Durum Varieties

WHEAT Location	Desert King HP Sac Valley		Desert King HP San Joaquin Valley		Desert Gold San Joaquin Valley
	2020	2019	2020	2019	2020
	Protein (12% MB)	11.0	11.1	13.8	13.0
Ash (12% MB)	1.71	1.83	1.90	1.83	1.75
Moisture	8.2	9.1	7.3	6.8	7.4
Falling Number (sec)	459	515	533	684	594
Micro Sedimentation (CC)	54	58	62	56	61
Test Weight					
lb/bu	64.5	62.8	62.2	61.2	64.0
kg/hl	83.9	81.7	80.9	79.7	83.3
1000 Kernel Weight (g)	43.3	42.5	44.3	39.8	47.3
Kernel Size Distribution					
Large/Medium/Small	88/12/0	87/13/0	86/14/0	84/16/0	93/7/0
SEMOLINA					
Lab Mill Extraction (%)	77.3	75.4	77.1	75.8	77.7
Semolina Extraction (%)	72.8	72.5	72.8	71.4	72.9
Protein (14% MB)	10.1	10.2	12.9	12.1	12.3
Ash (14% MB)	0.87	0.88	0.91	0.91	0.83
Specks (no/10 sp in)	17	26	16	24	16
Wet Gluten (14% MB)	25.8	27.9	33.8	33.7	32.1
Gluten Index	83	74	63	75	75
Color 'b' value	29	29	30	28	31
MIXOGRAPH					
Absorption%	58.9	59.3	63.2	61.2	62.3
Peak Time (min)	3.0	3.4	3.0	3.3	3.2
Peak Height (mu)	4.4	4.6	4.9	5.3	4.8
MT Score (1-8)	7	8	7	7	7
ALVEOGRAPH					
P (mm)	72	112	77	109	76
L (mm)	53	36	63	43	75
P/L Ratio	1.4	3.3	1.4	2.7	1.1
W (10 ⁻⁴ joules)	125.3	169.1	152.6	189.2	174.3
PASTA					
Color L	59.1	57.5	56.8	57.8	57.8
a	0.6	0.7	0.5	0.3	0.1
b	39.6	40.3	40.7	41.8	43.1
Color Score	8.8	9.0	9.0	9.5	9.7
Cooked weight (gm)	29.7	29.3	28.8	28.9	30.0
Cooking Loss (%)	6.1	5.6	6.2	5.5	6.2
Cooked Firmness (g cm)	6.0	5.9	6.9	7.1	6.4

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. 2020 samples are milled using a new modified milling method. Lab Mill Extraction (%) and Semolina Extraction (%) are not comparable to 2019 Data.

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WHEAT	Tiburon	Shasta	Volante
Location	San Joaquin Valley	San Joaquin Valley	San Joaquin Valley
	2020	2020	2020
Protein (12% MB)	13.5	13.3	13.3
Ash (12% MB)	1.79	1.69	1.69
Moisture	7.9	7.1	7.1
Falling Number (sec)	466	560	560
Micro Sedimentation (CC)	65	59	59
Test Weight			
lb/bu	63.3	64.6	64.6
kg/hl	82.4	84.1	84.1
1000 Kernel Weight (g)	58.4	62.3	62.3
Kernel Size Distribution			
Large/Medium/Small	96/4/0	96/4/0	96/4/0
SEMOLINA			
Lab Mill Extraction (%)	78.0	77.6	77.6
Semolina Extraction (%)	74.1	72.4	72.4
Protein (14% MB)	12.5	12.2	12.2
Ash (14% MB)	0.84	0.76	0.76
Specks (no/10 sp in)	17	22	22
Wet Gluten (14% MB)	31.9	32.9	32.9
Gluten Index	72	55	55
Color 'b' value	31	27	27
MIXOGRAPH			
Absorption%	62.4	61.3	61.3
Peak Time (min)	3.0	2.7	2.7
Peak Height (mu)	4.7	4.8	4.8
MT Score (1-8)	7	6	6
ALVEOGRAPH			
P (mm)	76	69	69
L (mm)	69	40	40
P/L Ratio	1.2	1.8	1.8
W (10-4 joules)	164.9	104.0	104.0
PASTA			
Color L	57.4	58.2	58.2
a	0.2	-0.5	-0.5
b	41.0	37.5	37.5
Color Score	9.2	8.0	8.0
Cooked weight (gm)	29.0	30.3	30.3
Cooking Loss (%)	6.3	6.2	6.2
Cooked Firmness (g cm)	6.5	6.0	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. 2020 samples are milled using a new modified milling method. Lab Mill Extraction (%) and Semolina Extraction (%) are not comparable to 2019 Data.