

Table 6: Regional quality weighted averages

	Winter rainfall area (Western Cape)	Summer rainfall and Irrigation area (Free State)	Irrigation areas	RSA average
Number of samples per area	120	62	151	333
Regions	1 - 6	21 - 28	10 - 11, 12 - 20, 29 - 33, 34, 35, 36	All
Hectolitre mass dirty, kg/hl	77.2	77.4	80.7	78.9
1000 kernel mass (13% mb), g	34.0	32.4	38.2	35.6
Falling number, sec	367	308	360	353
Screenings (1.8 mm sieve), %	2.39	1.85	1.36	1.92
Protein (12% mb), % (WWF)	12.8	13.7	12.6	12.9
Mixogram peak time, min (Quadromat Junior)	2.9	3.1	3.0	3.0
<i>Composite samples per class and grade</i>	<i>Super B1 B2</i>	<i>Super B1 B2</i>	<i>Super B1 B2</i>	<i>Super B1 B2</i>
	<i>B3 COW</i>	<i>B3 COW</i>	<i>B3 COW</i>	<i>B3 COW</i>
<i>Composite samples, n = 69</i>	<i>5 4 3</i>	<i>6 1 -</i>	<i>14 8 6</i>	<i>25 13 9</i>
	<i>3 6</i>	<i>- 5</i>	<i>1 7</i>	<i>4 18</i>
Bühler extraction, %	74.2 74.6 74.0	74.7 76.8 -	75.2 76.1 76.7	74.9 75.7 75.8
	73.5 73.6	- 73.8	76.0 73.7	74.1 73.7
Flour colour, KJ (wet)	-4.6 -4.9 -4.7	-4.4 -4.6 -	-4.9 -4.9 -5.0	-4.7 -4.9 -4.9
	-4.8 -4.7	- -3.7	-5.0 -4.4	-4.9 -4.3
Flour colour, Konica Minolta CM-5 (dry)				
L*	93.82 93.92 93.80	92.98 93.57 -	93.69 93.78 93.85	93.54 93.81 93.83
	94.06 93.93	- 92.75	93.79 93.60	93.99 93.48
a*	0.45 0.42 0.41	0.55 0.45 -	0.49 0.49 0.48	0.50 0.46 0.46
	0.37 0.42	- 0.48	0.51 0.42	0.40 0.44
b*	10.45 10.46 10.32	11.09 9.73 -	9.99 10.17 10.63	10.35 10.22 10.53
	10.40 10.56	- 10.78	10.09 9.64	10.32 10.26
Ash (db), %	0.65 0.61 0.64	0.65 0.68 -	0.65 0.66 0.62	0.65 0.65 0.63
	0.62 0.64	- 0.65	0.58 0.61	0.61 0.63

WWF = Whole Wheat Flour

Table 6: Regional quality weighted averages (continue)

	Winter rainfall area (Western Cape)			Summer rainfall and Irrigation area (Free State)			Irrigation areas			RSA average		
Regions	1 - 6			21 - 28			10 - 11, 12 - 20, 29 - 33, 34, 35, 36			All		
Composite samples per class and grade	Super	B1	B2	Super	B1	B2	Super	B1	B2	Super	B1	B2
	B3	COW		B3	COW		B3	COW		B3	COW	
Composite samples, n = 69	5	4	3	6	1	-	14	8	6	25	13	9
	3	6		-	5		1	7		4	18	
Flour protein (12% mb), %	12.3	11.3	10.6	13.3	11.0	-	12.6	11.2	10.2	12.7	11.2	10.3
	11.9	11.8		-	13.1		9.1	11.5		11.2	12.1	
Wet gluten (14% mb), %	32.6	28.9	27.0	35.2	29.2	-	33.3	29.9	26.4	33.6	29.5	26.6
	30.8	31.6		-	34.6		24.1	29.7		29.2	31.7	
Dry gluten (14% mb), %	11.2	9.8	9.0	12.3	10.1	-	11.3	10.0	8.8	11.5	9.9	8.8
	10.5	10.7		-	11.7		7.9	10.0		9.9	10.7	
Gluten Index	94	96	95	96	97	-	95	94	97	95	95	96
	95	96		-	95		98	97		96	96	
Farinogram: Water absorption (14% mb), %	60.1	58.9	57.7	62.5	60.2	-	61.7	60.8	59.6	61.5	60.2	59.0
	58.6	59.9		-	60.9		58.3	57.9		58.6	59.4	
Farinogram: Development time, min	5.0	4.7	4.8	6.7	6.0	-	6.1	5.5	5.7	6.0	5.3	5.4
	4.9	5.4		-	5.7		5.0	4.0		4.9	4.9	
Farinogram: Stability, min	8.0	7.5	7.4	9.0	7.3	-	8.7	7.5	7.9	8.7	7.5	7.8
	8.6	7.8		-	8.2		8.9	7.2		8.7	7.7	
Alveogram: Strength (S), cm ²	42.7	38.5	37.2	51.2	38.2	-	47.3	40.7	36.7	47.3	39.8	36.8
	42.4	41.8		-	46.3		33.6	37.3		40.2	41.3	
Alveogram: P/L	0.45	0.54	0.49	0.63	0.73	-	0.62	0.74	0.85	0.59	0.68	0.73
	0.41	0.49		-	0.67		0.99	0.39		0.56	0.50	
Extensogram: Strength, cm ²	116	107	98	122	112	-	122	104	98	121	106	98
	113	109		-	119		82	115		105	114	
Mixogram peak time, min	2.4	2.6	2.7	2.5	2.8	-	2.6	2.7	2.9	2.5	2.7	2.8
	2.5	2.5		-	2.7		3.3	2.9		2.7	2.7	
Relationship between protein and bread volume	EX	EX	EX	EX	EX	-	EX	EX	EX	EX	EX	EX
	EX	EX		-	EX		EX	EX		EX	EX	

EX = Excellent