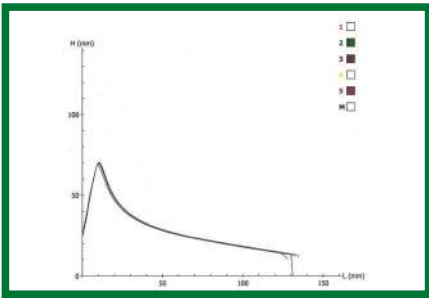
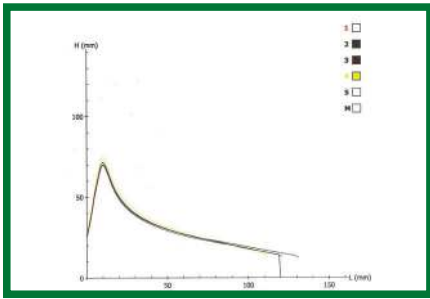
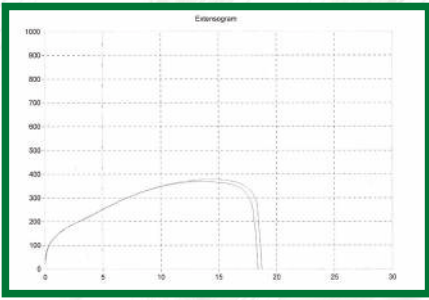
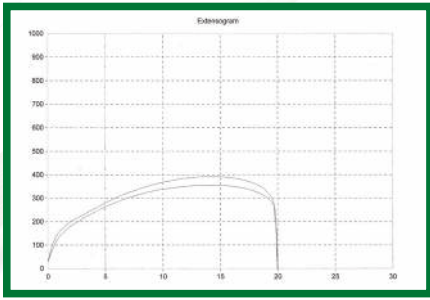
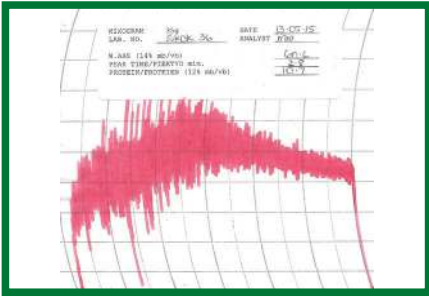
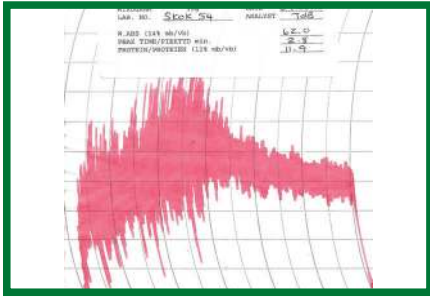


RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2014/2015 and 2015/2016 Seasons

Country of origin	RSA Crop Average 2014/2015							RSA Crop Average 2015/2016						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	105	59	42	17	89	25	337	124	56	18	11	39	4	252
WHEAT GRADING														
Protein (12% mb), %	12.91	11.53	10.78	9.68	11.51	11.35	11.75	13.34	11.68	11.16	13.27	13.02	14.90	12.79
Moisture, %	11.0	11.1	11.1	12.3	11.2	11.3	11.2	10.3	10.8	10.9	10.6	10.6	10.4	10.5
Falling number, sec	364	369	375	375	369	364	368	401	391	367	405	383	375	393
1000 Kernel mass (13% mb), g	38.0	39.6	40.3	41.9	38.2	38.2	38.8	36.3	39.4	39.3	34.6	34.9	30.6	36.8
Hlm (dirty), kg/hl	80.9	80.7	80.6	81.0	79.1	78.6	80.2	82.3	81.6	80.2	79.3	78.6	73.8	81.1
Screenings (<1.8 mm sieve), %	1.17	1.26	1.32	1.42	2.19	2.01	1.55	1.33	1.36	1.28	2.73	3.05	4.47	1.71
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.20	0.01
Foreign matter, %	0.09	0.07	0.09	0.07	0.18	0.12	0.11	0.09	0.11	0.13	0.18	0.30	0.58	0.14
Other grain & unthreshed ears, %	0.42	0.44	0.43	0.38	0.98	0.58	0.58	0.41	0.41	0.43	0.47	1.36	2.16	0.59
Heat damaged kernels, %	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Immature kernels, %	0.13	0.05	0.05	0.04	0.10	0.03	0.09	0.08	0.06	0.03	0.10	0.04	0.12	0.06
Insect damaged kernels, %	0.44	0.71	0.76	0.85	1.71	1.22	0.94	0.34	0.43	0.56	0.37	0.78	2.16	0.47
Heavily frost damaged kernels, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.01
Sprouted kernels, %	0.04	0.04	0.04	0.10	0.10	0.08	0.06	0.02	0.01	0.00	0.02	0.01	0.02	0.02
Total damaged kernels, %	0.62	0.79	0.85	0.99	1.92	1.34	1.09	0.44	0.51	0.59	0.49	0.83	2.30	0.56
Combined deviations, %	2.29	2.57	2.69	2.86	5.27	4.05	3.34	2.26	2.38	2.43	3.87	5.54	9.51	2.99
Field fungi, %	0.23	0.16	0.09	0.06	0.11	1.76	0.27	0.09	0.09	0.12	0.28	0.06	0.06	0.10
Storage fungi, %	0.01	0.01	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ergot, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Noxious seeds (<i>Crotalaria spp.</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noxious seeds (<i>Argemone mexicana</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Live insects	No	No	No	No	No	Yes	No	No	No	No	No	No	No	No
Undesirable odour	No	No	No	No	No	No	No	No	No	No	No	No	No	No
	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	24	15	15	6	9	1	70	25	19	9	8	9	-	70
BÜHLER EXTRACTION, %	73.5	73.6	73.3	73.9	72.8	70.9	73.4	73.7	73.8	73.2	73.0	72.4	-	73.4
FLOUR														
Colour, KJ (wet)	-3.3	-3.3	-3.5	-3.7	-3.2	-2.2	-3.3	-3.6	-3.6	-3.3	-3.5	-3.4	-	-3.5
Colour, Minolta CM5 (dry)														
L*	93.66	93.72	93.93	94.07	93.77	92.98	93.77	93.79	93.80	93.68	93.76	93.85	-	93.78
a*	0.47	0.45	0.41	0.39	0.41	0.56	0.44	0.49	0.47	0.42	0.47	0.47	-	0.47
b*	9.58	9.81	9.87	9.49	9.82	9.78	9.72	9.73	9.66	9.83	9.74	9.90	-	9.75
Protein (12% mb), %	11.9	10.5	9.7	8.9	10.9	10.9	10.7	12.4	11.2	10.9	11.9	12.0	-	11.8
Wet Gluten (14% mb), %	31.8	28.9	25.7	24.1	30.2	27.2	28.9	33.8	30.1	29.3	32.2	32.4	-	31.9
Dry Gluten (14% mb), %	10.8	9.7	8.6	8.3	10.4	9.2	9.8	11.8	10.4	9.7	11.2	11.1	-	11.0
Gluten Index	88	86	88	90	86	94	88	95	95	95	95	94	-	95
100g BAKING TEST														
Baking water absorption, %	61.8	60.3	59.4	58.7	60.7	60.3	60.6	62.5	61.1	60.7	62.1	62.3	-	61.8
Loaf volume, cm ³	938	875	831	786	917	1132	889	1097	1012	985	1029	1060	-	1047
Evaluation	1	0	0	0	0	0	0	0	0	0	1	0	-	0
FARINOGRAM														
Water absorption, %	60.6	59.2	58.7	58.0	59.7	58.0	59.5	61.4	60.8	59.6	60.6	60.5	-	60.8
Development time, min	6.8	4.9	3.8	3.8	5.5	4.3	5.3	6.2	5.3	5.7	5.8	5.9	-	5.8
Stability, mm	10.1	6.9	7.6	6.6	8.4	6.7	8.3	8.4	7.2	8.1	8.1	8.5	-	8.0
Mixing tolerance index, BU	30	41	35	39	36	39	35	37	39	38	39	36	-	38

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Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	24	15	15	6	9	1	70	25	19	9	8	9	-	70
ALVEOGRAM														
Strength (S), cm ²	46.1	34.2	34.1	28.3	37.6	26.9	38.1	41.5	35.6	33.6	39.8	38.1	-	38.3
Stability (P), mm	77	71	79	72	72	50	75	83	83	78	78	79	-	81
Distensibility (L), mm	148	136	113	103	139	163	133	120	104	108	127	117	-	115
P/L	0.53	0.55	0.75	0.71	0.54	0.31	0.59	0.72	0.82	0.81	0.65	0.71	-	0.75
														
EXTENSOGRAM														
Strength, cm ²	122	87	85	73	94	74	98	114	94	100	111	105	-	105
Max. height, BU	405	331	351	314	344	238	360	395	357	365	367	359	-	373
Extensibility, mm	218	191	176	166	198	219	196	207	186	187	207	204	-	198
														
MIXOGRAM														
Peak time, min	2.8	2.6	2.8	2.7	2.5	3.1	2.7	2.5	2.6	2.7	2.5	2.6	-	2.6
Absorption, %	62.0	60.4	59.6	58.8	60.8	60.8	60.7	62.8	61.2	61.0	62.4	62.3	-	62.0
														
MYCOTOXINS														
Afla G ₁ (µg/kg)	ND							ND						
Afla B ₁ (µg/kg)	ND							ND						
Afla G ₂ (µg/kg)	ND							ND						
Afla B ₂ (µg/kg)	ND							ND						
Fum B ₁ (µg/kg)	ND							ND						
Fum B ₂ (µg/kg)	ND							ND						
Fum B ₃ (µg/kg)	ND							ND						
Deoxynivalenol (µg/kg) [max. value]	<100 [361]							<100 [593]						
Ochratoxin A (µg/kg)	ND							ND						
Zearalenone (µg/kg)	ND							ND						
T-2 Toxin (µg/kg)	ND							ND						
No. of samples	40							40						