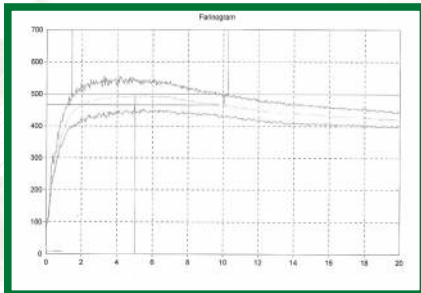
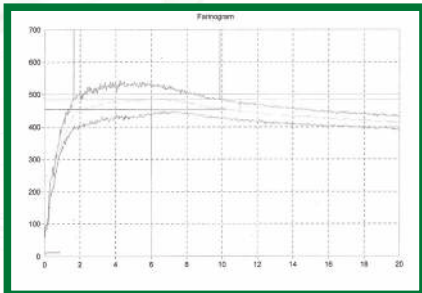
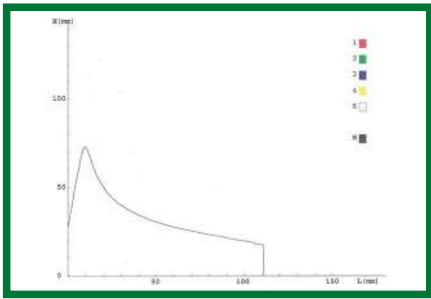
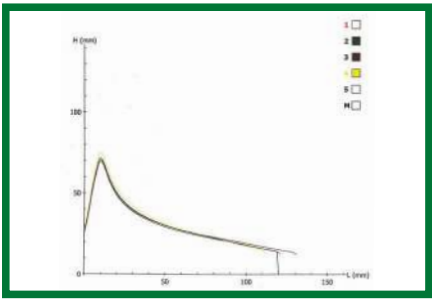
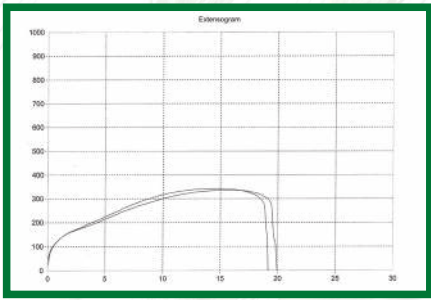
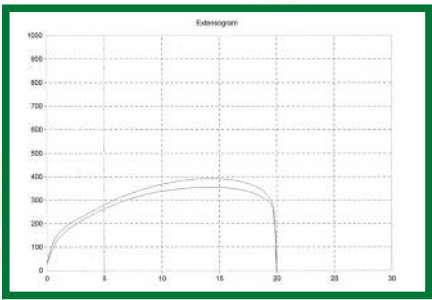
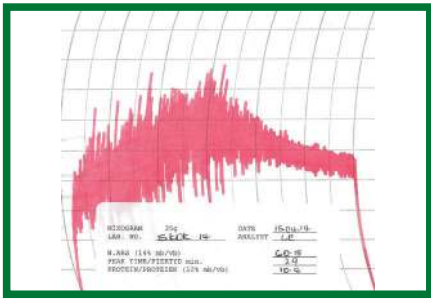
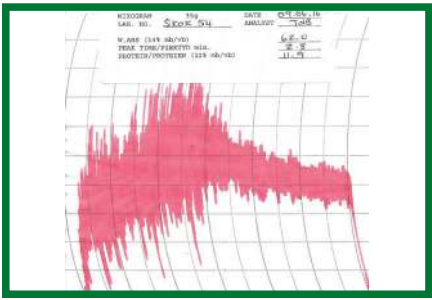


RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2013/2014 and 2015/2016 Seasons

Country of origin	RSA Crop Average 2013/2014							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	93	74	70	47	43	13	340	124	56	18	11	39	4	252
WHEAT GRADING														
Protein (12% mb), %	12.90	11.49	10.62	9.77	12.06	12.80	11.58	13.34	11.68	11.16	13.27	13.02	14.90	12.79
Moisture, %	11.5	11.4	11.3	11.3	11.6	11.6	11.4	10.3	10.8	10.9	10.6	10.6	10.4	10.5
Falling number, sec	344	350	349	344	322	163	337	401	391	367	405	383	375	393
1000 Kernel mass (13% mb), g	38.3	40.6	40.3	39.7	37.3	38.4	39.3	36.3	39.4	39.3	34.6	34.9	30.6	36.8
Hlm (dirty), kg/hl	80.4	80.4	79.4	78.7	78.5	76.4	79.5	82.3	81.6	80.2	79.3	78.6	73.8	81.1
Screenings (<1.8 mm sieve), %	1.25	1.19	1.43	1.88	2.56	2.58	1.58	1.33	1.36	1.28	2.73	3.05	4.47	1.71
Gravel, stones, turf and glass, %	0.01	0.01	0.00	0.00	0.00	0.07	0.01	0.00	0.01	0.01	0.00	0.01	0.20	0.01
Foreign matter, %	0.14	0.16	0.22	0.18	0.37	0.38	0.20	0.09	0.11	0.13	0.18	0.30	0.58	0.14
Other grain & unthreshed ears, %	0.30	0.35	0.47	0.40	0.77	0.67	0.43	0.41	0.41	0.43	0.47	1.36	2.16	0.59
Heat damaged kernels, %	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Immature kernels, %	0.11	0.05	0.03	0.02	0.19	0.12	0.08	0.08	0.06	0.03	0.10	0.04	0.12	0.06
Insect damaged kernels, %	0.18	0.18	0.13	0.10	0.20	0.16	0.16	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, %	0.14	0.08	0.09	0.04	0.31	2.02	0.20	0.02	0.01	0.00	0.02	0.01	0.02	0.02
Total damaged kernels, %	0.43	0.31	0.26	0.17	0.71	2.32	0.44	0.44	0.51	0.59	0.49	0.83	2.30	0.56
Combined deviations, %	2.12	2.00	2.28	2.59	4.29	5.95	2.61	2.26	2.38	2.43	3.87	5.54	9.51	2.99
Field fungi, %	0.10	0.07	0.06	0.05	0.12	0.07	0.08	0.09	0.09	0.12	0.28	0.06	0.06	0.10
Storage fungi, %	0.03	0.02	0.01	0.01	0.02	0.10	0.02	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	No	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	23	18	11	8	8	2	70	25	19	9	8	9	-	70
BÜHLER EXTRACTION, %	73.0	73.5	73.8	73.1	72.8	70.9	73.2	73.7	73.8	73.2	73.0	72.4	-	73.4
FLOUR														
Colour, KJ (wet)	-2.8	-2.9	-3.1	-3.1	-2.8	-2.3	-2.9	-3.6	-3.6	-3.3	-3.5	-3.4	-	-3.5
Colour, Minolta CM5 (dry)														
L*	93.88	94.01	94.16	94.10	93.97	93.62	93.99	93.79	93.80	93.68	93.76	93.85	-	93.78
a*	0.42	0.41	0.36	0.37	0.38	0.34	0.40	0.49	0.47	0.42	0.47	0.47	-	0.47
b*	9.40	9.38	9.54	9.92	9.60	9.65	9.50	9.73	9.66	9.83	9.74	9.90	-	9.75
Protein (12% mb), %	11.8	10.5	9.7	8.9	10.9	12.9	10.7	12.4	11.2	10.9	11.9	12.0	-	11.8
Wet Gluten (14% mb), %	32.5	29.2	27.6	23.1	29.9	36.6	29.5	33.8	30.1	29.3	32.2	32.4	-	31.9
Dry Gluten (14% mb), %	11.5	10.1	9.9	8.1	10.5	12.9	10.4	11.8	10.4	9.7	11.2	11.1	-	11.0
Gluten Index	87	86	83	83	90	93	86	95	95	95	95	94	-	95
100g BAKING TEST														
Baking water absorption, %	61.6	60.2	59.3	58.7	60.8	62.7	60.5	62.5	61.1	60.7	62.1	62.3	-	61.8
Loaf volume, cm ³	917	854	820	764	886	1034	868	1097	1012	985	1029	1060	-	1047
Evaluation	0	0	0	0	0	0	0	0	0	0	1	0	-	0
FARINOGRAM														
Water absorption, %	61.6	60.2	58.9	57.6	59.8	60.4	60.1	61.4	60.8	59.6	60.6	60.5	-	60.8
Development time, min	6.5	5.1	4.2	3.0	5.1	5.7	5.2	6.2	5.3	5.7	5.8	5.9	-	5.8
Stability, mm	9.7	7.4	6.3	6.1	8.1	8.8	8.0	8.4	7.2	8.1	8.1	8.5	-	8.0
Mixing tolerance index, BU	34	39	43	41	37	37	38	37	39	38	39	36	-	38
														

RSA Crop Quality of 2013/2014 and 2015/2016 Seasons

Country of origin	RSA Crop Average 2013/2014							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	23	18	11	8	8	2	70	25	19	9	8	9	-	70
ALVEOGRAM														
Strength (S), cm ²	44.7	35.8	30.1	27.4	39.8	45.7	37.6	41.5	35.6	33.6	39.8	38.1	-	38.3
Stability (P), mm	87	80	72	74	79	71	80	83	83	78	78	79	-	81
Distensibility (L), mm	122	113	110	94	125	156	116	120	104	108	127	117	-	115
P/L	0.75	0.74	0.69	0.91	0.69	0.47	0.74	0.72	0.82	0.81	0.65	0.71	-	0.75
														
EXTENSOGRAM														
Strength, cm ²	110	85	71	72	99	129	92	114	94	100	111	105	-	105
Max. height, BU	374	325	284	317	364	425	341	395	357	365	367	359	-	373
Extensibility, mm	215	188	175	162	194	225	194	207	186	187	207	204	-	198
														
MIXOGRAM														
Peak time, min	2.8	2.7	2.7	3.0	3.0	2.9	2.8	2.5	2.6	2.7	2.5	2.6	-	2.6
Absorption, %	61.9	60.4	59.5	58.8	61.0	63.4	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 [151]							<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						