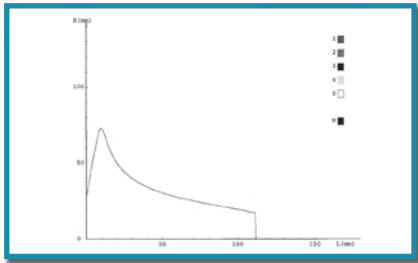
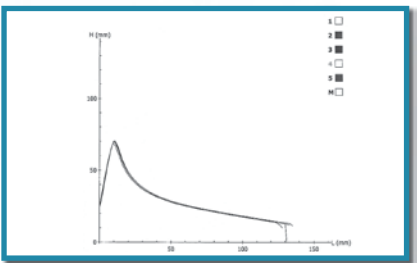
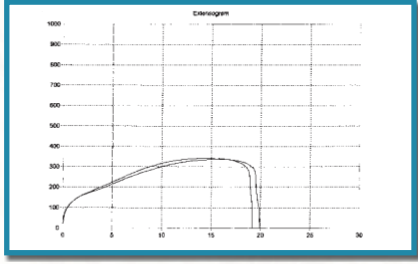
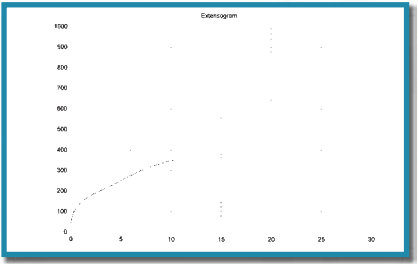
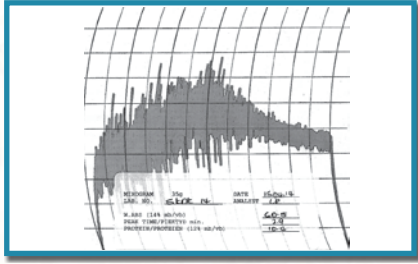
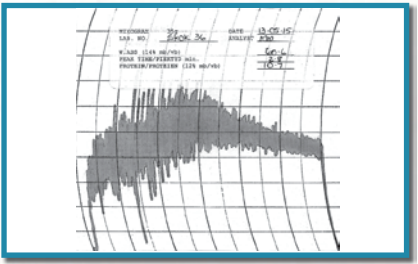


RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2013/2014 and 2014/2015 Seasons

Country of origin	RSA Crop Average 2013/2014							RSA Crop Average 2014/2015						
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	105	59	42	17	89	25	337
WHEAT GRADING														
Protein (12% mb), %	12.90	11.49	10.62	9.77	12.06	12.80	11.58	12.91	11.53	10.78	9.68	11.51	11.35	11.75
Moisture, %	11.5	11.4	11.3	11.3	11.6	11.6	11.4	11.0	11.1	11.1	12.3	11.2	11.3	11.2
Falling number, sec	344	350	349	344	322	163	337	364	369	375	375	369	364	368
1000 Kernel mass (13% mb), g	38.3	40.6	40.3	39.7	37.3	38.4	39.3	38.0	39.6	40.3	41.9	38.2	38.2	38.8
Hlm (dirty), kg/hl	80.4	80.4	79.4	78.7	78.5	76.4	79.5	80.9	80.7	80.6	81.0	79.1	78.6	80.2
Screenings (<1,8mm), %	1.25	1.19	1.43	1.88	2.56	2.58	1.58	1.17	1.26	1.32	1.42	2.19	2.01	1.55
Gravel, stones, turf and glass, %	0.01	0.01	0.00	0.00	0.00	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.14	0.16	0.22	0.18	0.37	0.38	0.20	0.09	0.07	0.09	0.07	0.18	0.12	0.11
Other grain & unthreshed ears, %	0.30	0.35	0.47	0.40	0.77	0.67	0.43	0.42	0.44	0.43	0.38	0.98	0.58	0.58
Heat damaged kernels, %	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00
Immature kernels, %	0.11	0.05	0.03	0.02	0.19	0.12	0.08	0.13	0.05	0.05	0.04	0.10	0.03	0.09
Insect damaged kernels, %	0.18	0.18	0.13	0.10	0.20	0.16	0.16	0.44	0.71	0.76	0.85	1.71	1.22	0.94
Heavily frost damaged kernels, %	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
Sprouted kernels, %	0.14	0.08	0.09	0.04	0.31	2.02	0.20	0.04	0.04	0.04	0.10	0.10	0.08	0.06
Total damaged kernels, %	0.43	0.31	0.26	0.17	0.71	2.32	0.44	0.62	0.79	0.85	0.99	1.92	1.34	1.09
Combined deviations, %	2.12	2.00	2.28	2.59	4.29	5.95	2.61	2.29	2.57	2.69	2.86	5.27	4.05	3.34
Field fungi, %	0.10	0.07	0.06	0.05	0.12	0.07	0.08	0.23	0.16	0.09	0.06	0.11	1.76	0.27
Storage fungi, %	0.03	0.02	0.01	0.01	0.02	0.10	0.02	0.01	0.01	0.00	0.00	0.01	0.00	0.01
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	Yes	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	24	15	15	6	9	1	70
BÜHLER EXTRACTION, %	73.0	73.5	73.8	73.1	72.8	70.9	73.2	73.5	73.6	73.3	73.9	72.8	70.9	73.4
FLOUR														
Colour, KJ (wet)	-2.8	-2.9	-3.1	-3.1	-2.8	-2.3	-2.9	-3.3	-3.3	-3.5	-3.7	-3.2	-2.2	-3.3
Colour, Minolta CM5 (dry)														
L*	93.88	94.01	94.16	94.10	93.97	93.62	93.99	93.66	93.72	93.93	94.07	93.77	92.98	93.77
a*	0.42	0.41	0.36	0.37	0.38	0.34	0.40	0.47	0.45	0.41	0.39	0.41	0.56	0.44
b*	9.40	9.38	9.54	9.92	9.60	9.65	9.50	9.58	9.81	9.87	9.49	9.82	9.78	9.72
Protein (12% mb), %	11.8	10.5	9.7	8.9	10.9	12.9	10.7	11.9	10.5	9.7	8.9	10.9	10.9	10.7
Wet Gluten (14% mb), %	32.5	29.2	27.6	23.1	29.9	36.6	29.5	31.8	28.9	25.7	24.1	30.2	27.2	28.9
Dry Gluten (14% mb), %	11.5	10.1	9.9	8.1	10.5	12.9	10.4	10.8	9.7	8.6	8.3	10.4	9.2	9.8
Gluten Index	87	86	83	83	90	93	86	88	86	88	90	86	94	88
100g BAKING TEST														
Baking water absorption, %	61.6	60.2	59.3	58.7	60.8	62.7	60.5	61.8	60.3	59.4	58.7	60.7	60.3	60.6
Loaf volume, cm ³	917	854	820	764	886	1034	868	938	875	831	786	917	1132	889
Evaluation	0	0	0	0	0	0	0	1	0	0	0	0	0	0
FARINOGRAM														
Water absorption, %	61.6	60.2	58.9	57.6	59.8	60.4	60.1	60.6	59.2	58.7	58.0	59.7	58.0	59.5
Development time, min	6.5	5.1	4.2	3.0	5.1	5.7	5.2	6.8	4.9	3.8	3.8	5.5	4.3	5.3
Stability, mm	9.7	7.4	6.3	6.1	8.1	8.8	8.0	10.1	6.9	7.6	6.6	8.4	6.7	8.3
Mixing tolerance index, BU	34	39	43	41	37	37	38	30	41	35	39	36	39	35

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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	23	18	11	8	8	2	70	24	15	15	6	9	1	70
ALVEOGRAM														
Strength (S), cm ²	44.7	35.8	30.1	27.4	39.8	45.7	37.6	46.1	34.2	34.1	28.3	37.6	26.9	38.1
Stability (P), mm	87	80	72	74	79	71	80	77	71	79	72	72	50	75
Distensibility (L), mm	122	113	110	94	125	156	116	148	136	113	103	139	163	133
P/L	0.75	0.74	0.69	0.91	0.69	0.47	0.74	0.53	0.55	0.75	0.71	0.54	0.31	0.59
														
EXTENSOGRAM														
Strength, cm ²	110	85	71	72	99	129	92	122	87	85	73	94	74	98
Max. height, BU	374	325	284	317	364	425	341	405	331	351	314	344	238	360
Extensibility, mm	215	188	175	162	194	225	194	218	191	176	166	198	219	196
														
MIXOGRAM														
Peak time, min	2.8	2.7	2.7	3.0	3.0	2.9	2.8	2.8	2.6	2.8	2.7	2.5	3.1	2.7
Absorption, %	61.9	60.4	59.5	58.8	61.0	63.4	60.7	62.0	60.4	59.6	58.8	60.8	60.8	60.7
														
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]	ND [151]							ND [361]						
Ochratoxin A (µg/kg)	ND							ND						
Zearalenone (µg/kg)	ND							ND						
T-2 Toxin (µg/kg)	ND							ND						
No. of samples	40							40						