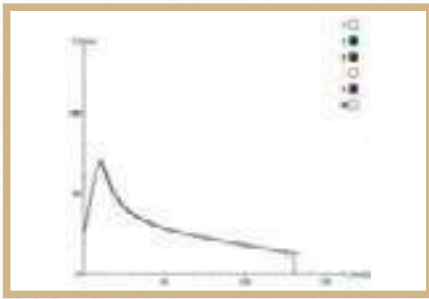
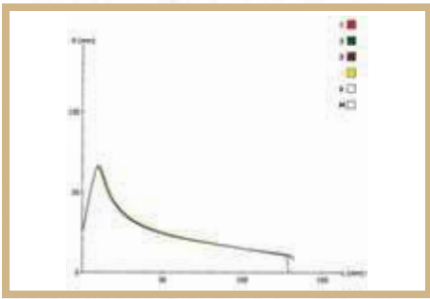
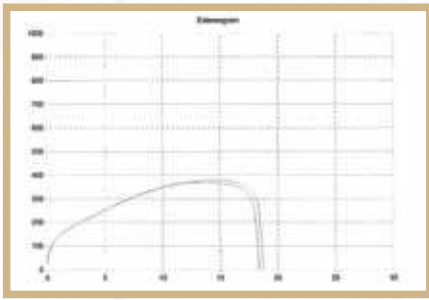
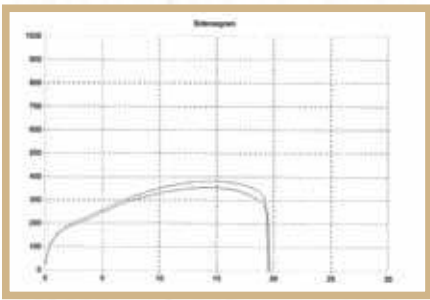
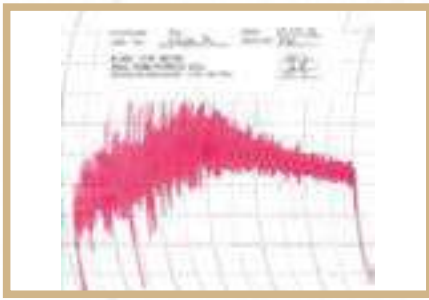
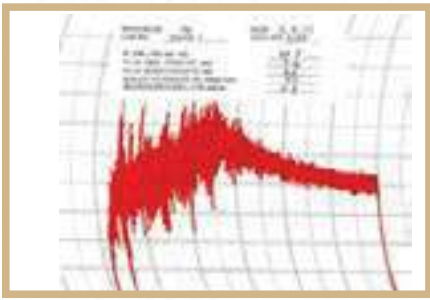


RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2014/2015 and 2016/2017 Seasons

Country of origin	RSA Crop Average 2014/2015							RSA Crop Average 2016/2017						
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	130	91	33	28	48	7	337
WHEAT GRADING														
Protein (12% mb), %	12.9	11.5	10.8	9.7	11.5	11.4	11.8	13.0	11.5	11.0	11.0	11.4	13.6	12.0
Moisture, %	11.0	11.1	11.1	12.3	11.2	11.3	11.2	9.9	9.8	9.8	9.9	9.7	10.2	9.9
Falling number, sec	364	369	375	375	369	364	368	358	361	343	359	349	358	356
1000 Kernel mass (13% mb), g	38.0	39.6	40.3	41.9	38.2	38.2	38.8	37.7	39.6	40.5	37.8	38.6	35.6	38.6
Hlm (dirty), kg/hl	80.9	80.7	80.6	81.0	79.1	78.6	80.2	81.7	82.0	81.8	81.5	80.7	77.7	81.5
Screenings (<1.8 mm sieve), %	1.17	1.26	1.32	1.42	2.19	2.01	1.55	1.35	1.64	1.53	2.70	3.03	4.37	1.86
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.39	0.02
Foreign matter, %	0.09	0.07	0.09	0.07	0.18	0.12	0.11	0.16	0.16	0.15	0.15	0.31	0.82	0.19
Other grain & unthreshed ears, %	0.42	0.44	0.43	0.38	0.98	0.58	0.58	0.34	0.36	0.29	0.29	0.74	0.44	0.40
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	0.01	0.00
Immature kernels, %	0.13	0.05	0.05	0.04	0.10	0.03	0.09	0.04	0.03	0.04	0.01	0.04	0.03	0.03
Insect damaged kernels, %	0.44	0.71	0.76	0.85	1.71	1.22	0.94	0.36	0.48	0.41	0.49	0.94	0.32	0.49
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, %	0.04	0.04	0.04	0.10	0.10	0.08	0.06	0.16	0.14	0.11	0.06	0.16	1.09	0.16
Total damaged kernels, %	0.62	0.79	0.85	0.99	1.92	1.34	1.09	0.56	0.64	0.56	0.55	1.14	1.45	0.68
Combined deviations, %	2.29	2.57	2.69	2.86	5.27	4.05	3.34	2.40	2.82	2.55	3.70	5.21	7.21	3.14
Field fungi, %	0.23	0.16	0.09	0.06	0.11	1.76	0.27	0.32	0.35	0.32	0.43	0.41	0.57	0.36
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
Poisonous seeds (<i>Crotalaria spp.</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Poisonous seeds (<i>Argemone mexicana</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	1	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	23	14	11	10	11	1	70
BÜHLER EXTRACTION, %	73.5	73.6	73.3	73.9	72.8	70.9	73.4	72.8	72.7	72.2	72.8	71.6	73.1	72.5
FLOUR														
Colour, KJ (wet)	-3.3	-3.3	-3.5	-3.7	-3.2	-2.2	-3.3	-3.7	-3.8	-3.6	-4.0	-3.8	-3.4	-3.8
Colour, Minolta CM5 (dry)														
L*	93.66	93.72	93.93	94.07	93.77	92.98	93.77	93.65	93.68	93.68	93.90	93.77	93.38	93.71
a*	0.47	0.45	0.41	0.39	0.41	0.56	0.44	0.46	0.49	0.44	0.45	0.43	0.44	0.46
b*	9.58	9.81	9.87	9.49	9.82	9.78	9.72	9.91	10.21	10.17	10.48	10.05	10.15	10.12
Protein (12% mb), %	11.9	10.5	9.7	8.9	10.9	10.9	10.7	12.1	11.1	10.7	9.9	11.2	12.6	11.2
Wet Gluten (14% mb), %	31.8	28.9	25.7	24.1	30.2	27.2	28.9	33.0	30.7	29.5	25.9	31.0	34.3	30.7
Dry Gluten (14% mb), %	10.8	9.7	8.6	8.3	10.4	9.2	9.8	11.5	10.5	10.0	8.8	10.6	12.0	10.5
Gluten Index	88	86	88	90	86	94	88	95	93	94	96	93	96	94
100g BAKING TEST														
Baking water absorption, %	61.8	60.3	59.4	58.7	60.7	60.3	60.6	62.4	61.3	60.8	59.7	61.3	63.0	61.3
Loaf volume, cm ³	938	875	831	786	917	1132	889	1104	1029	987	957	1036	1167	1040
Evaluation	1	0	0	0	0	0	0	0	0	0	0	0	0	0
FARINOGRAM														
Water absorption, %	60.6	59.2	58.7	58.0	59.7	58.0	59.5	60.8	60.1	60.2	57.8	60.3	59.7	60.1
Development time, min	6.8	4.9	3.8	3.8	5.5	4.3	5.3	6.2	5.3	5.0	3.7	4.7	6.5	5.2
Stability, mm	10.1	6.9	7.6	6.6	8.4	6.7	8.3	9.0	8.0	7.8	7.3	8.3	9.3	8.3
Mixing tolerance index, BU	30	41	35	39	36	39	35	35	38	39	40	36	34	37

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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	23	14	11	10	11	1	70
ALVEOGRAM														
Strength (S), cm ²	46.1	34.2	34.1	28.3	37.6	26.9	38.1	42.4	34.9	34.1	31.3	36.2	37.8	37.0
Stability (P), mm	77	71	79	72	72	50	75	74	72	77	69	76	71	73
Distensibility (L), mm	148	136	113	103	139	163	133	155	133	116	126	127	120	135
P/L	0.53	0.55	0.75	0.71	0.54	0.31	0.59	0.49	0.57	0.68	0.56	0.61	0.59	0.57
														
EXTENSOGRAM														
Strength, cm ²	122	87	85	73	94	74	98	113	93	85	89	97	126	99
Max. height, BU	405	331	351	314	344	238	360	388	359	326	368	348	420	364
Extensibility, mm	218	191	176	166	198	219	196	210	186	184	168	195	217	193
														
MIXOGRAM														
Peak time, min	2.8	2.6	2.8	2.7	2.5	3.1	2.7	2.6	2.5	2.6	2.8	2.5	2.9	2.6
Absorption, %	62.0	60.4	59.6	58.8	60.8	60.8	60.7	62.4	61.1	60.9	59.9	61.4	63.0	61.4
														
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 [501]						
Ochratoxin A (µg/kg)	ND							ND						
Zearalenone (µg/kg)	ND							ND						
T-2 Toxin (µg/kg)	ND							ND						
No. of samples	40							40						