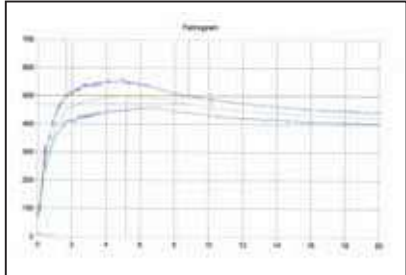
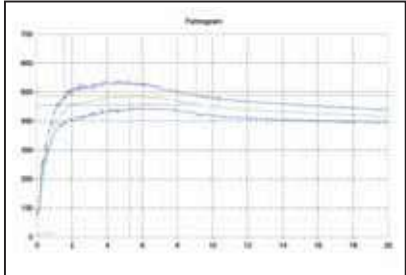
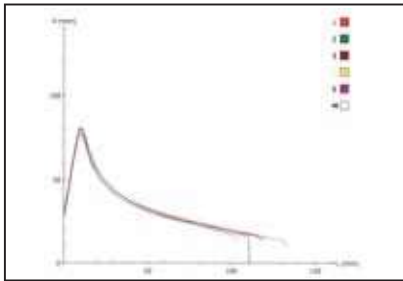
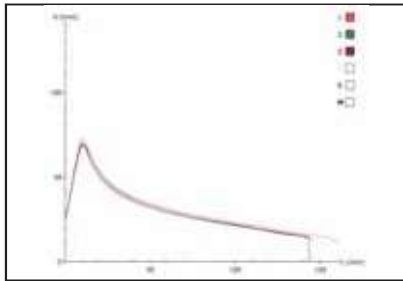
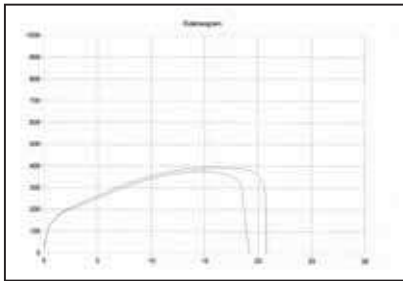
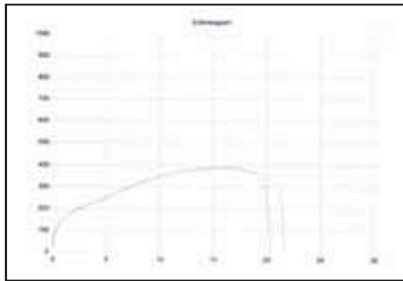
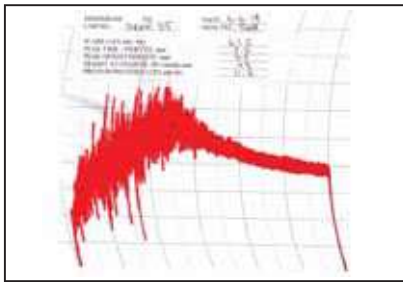
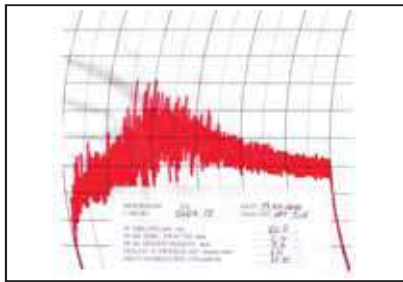


RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2017/18 and 2019/20 Seasons

Country of origin	RSA Crop Average 2017/2018							RSA Crop Average 2019/20						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	Super	B1	B2	B3	COW	Average	
No. of samples	142	77	22	15	42	6	304	132	56	25	15	105	333	
WHEAT GRADING														
Protein (12% mb), %	13.1	12.0	11.0	11.9	13.0	13.3	12.6	13.5	12.0	11.1	12.4	13.2	12.9	
Moisture, %	10.0	10.1	10.0	9.5	10.3	10.2	10.0	10.3	10.1	10.1	10.2	10.3	10.2	
Falling number, sec	379	368	367	380	360	301	371	382	387	355	370	295	353	
1000 Kernel mass (13% mb), g	36.9	39.4	40.9	37.0	36.4	34.2	37.7	36.1	38.7	37.8	33.3	33.2	35.6	
Hlm (dirty), kg/hl	80.9	81.7	81.6	81.3	78.4	75.8	80.7	80.0	81.3	80.6	77.1	75.9	78.9	
Screenings (<1.8 mm sieve), %	1.31	1.21	0.98	1.98	2.61	3.24	1.51	1.31	1.27	1.21	1.56	3.26	1.92	
Gravel, stones, turf and glass, %	0.01	0.01	0.02	0.00	0.01	0.07	0.01	0.01	0.01	0.00	0.00	0.01	0.01	
Foreign matter, %	0.11	0.13	0.10	0.10	0.29	0.39	0.14	0.10	0.09	0.08	0.06	0.25	0.14	
Other grain & unthreshed ears, %	0.35	0.38	0.28	0.42	0.94	0.86	0.45	0.29	0.28	0.32	0.32	0.65	0.41	
Heat damaged kernels, %	0.00	0.00	0.00	0.00	0.01	0.05	0.00	0.00	0.00	0.01	0.01	0.08	0.03	
Immature kernels, %	0.05	0.04	0.02	0.01	0.11	0.30	0.06	0.07	0.05	0.05	0.01	0.09	0.07	
Insect damaged kernels, %	0.59	0.54	0.60	0.55	1.20	3.44	0.72	0.27	0.27	0.18	0.14	0.44	0.31	
Sprouted kernels, %	0.02	0.02	0.02	0.00	0.05	1.93	0.06	0.04	0.03	0.09	0.11	3.17	1.03	
Total damaged kernels, %	0.66	0.61	0.65	0.56	1.36	5.73	0.84	0.38	0.34	0.34	0.28	3.77	1.44	
Combined deviations, %	2.43	2.32	2.01	3.06	5.20	10.22	2.94	2.08	1.98	1.95	2.22	7.93	3.91	
Heavily frost damaged kernels, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.01	0.02	
Field fungi, %	0.10	0.08	0.07	0.11	0.13	1.23	0.12	0.11	0.15	0.14	0.07	0.60	0.27	
Storage fungi, %	0.00	0.00	0.00	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.00	0.01	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	
Poisonous seeds (<i>Crotalaria spp.</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0	
Poisonous seeds (<i>Argemone mexicana</i> , etc.)	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	
Undesirable odour	No	No	No	No	No	No	No	No	No	No	No	No	No	
	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	COW	Average	
No. of samples	25	19	9	7	8	2	70	25	13	9	4	18	69	
Bühler Extraction, %	73.2	73.6	73.6	72.8	71.6	71.2	73.1	74.9	75.7	75.8	74.1	73.7	74.8	
FLOUR														
Colour, KJ (wet)	-4.1	-4.2	-4.2	-4.3	-3.9	-3.5	-4.1	-4.7	-4.9	-4.9	-4.9	-4.3	-4.7	
Colour, Konica Minolta CM5 (dry)														
L*	93.68	93.83	93.85	93.95	93.77	93.59	93.78	93.54	93.81	93.83	93.99	93.48	93.64	
a*	0.44	0.44	0.45	0.38	0.41	0.31	0.43	0.50	0.46	0.46	0.40	0.44	0.47	
b*	9.69	9.79	9.99	9.84	10.25	9.78	9.84	10.35	10.22	10.53	10.32	10.26	10.32	
Ash (db), %	0.60	0.61	0.61	0.58	0.60	0.65	0.60	0.65	0.65	0.63	0.61	0.63	0.64	
Protein (12% mb), %	12.0	11.1	10.2	10.0	11.7	11.9	11.3	12.7	11.2	10.3	11.2	12.1	11.9	
Wet Gluten (14% mb), %	32.7	30.6	27.5	26.7	31.7	31.6	30.7	33.6	29.5	26.6	29.2	31.7	31.1	
Dry Gluten (14% mb), %	11.1	10.3	9.2	9.0	10.8	10.9	10.4	11.5	9.9	8.8	9.9	10.7	10.6	
Gluten Index	93	93	94	94	92	90	93	95	95	96	96	96	95	
100 g BAKING TEST														
Baking water absorption, %	62.2	61.1	60.2	60.2	61.9	62.3	61.4	63.2	61.1	60.1	61.3	62.3	62.1	
Loaf volume, cm ³	1145	1104	1013	997	1109	1083	1096	1185	1083	1036	1106	1140	1130	
Evaluation (see page 79)	0	0	0	0	0	0	0	0	0	0	0	0	0	
FARINOGRAM														
Water absorption (14% mb), %	60.9	60.1	59.5	58.8	60.9	60.4	60.3	61.5	60.2	59	58.6	59.4	60.2	
Development time, min	6.3	5.2	4.3	4.7	5.4	5.2	5.5	6.0	5.3	5.4	4.9	4.9	5.4	
Stability, mm	9.0	7.1	7.2	7.8	8.8	7.2	8.0	8.7	7.5	7.8	8.7	7.7	8.1	
Mixing tolerance index, BU	37	45	43	43	35	42	40	38	41	41	33	48	41	
														

RSA Crop Quality of 2017/18 and 2019/20 Seasons

Country of origin	RSA Crop Average 2017/2018							RSA Crop Average 2019/20					
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	25	19	9	7	8	2	70	25	13	9	4	18	69
ALVEOGRAM													
Strength (S), cm ²	44.6	36.1	34.0	34.6	40.6	36.1	39.2	47.3	39.8	36.8	40.2	41.3	42.6
Stability (P), mm	85	79	86	78	86	79	83	83	82	80	74	72	79
Distensibility (L), mm	122	113	102	106	119	123	115	146	127	117	148	163	143
P/L	0.72	0.75	1.22	0.81	0.80	0.69	0.81	0.59	0.68	0.73	0.56	0.50	0.60
													
EXTENSOGRAM													
Strength, cm ²	121	100	89	89	109	95	106	121	106	98	105	114	112
Max. height, BU	421	365	352	347	373	328	382	387	382	375	381	383	383
Extensibility, mm	209	197	180	178	206	200	198	223	201	190	197	216	211
													
MIXOGRAM													
Peak time, min	2.8	2.6	2.7	2.7	2.4	2.5	2.6	2.5	2.7	2.8	2.7	2.7	2.6
Water absorption (14% mb), %	62.2	61.1	60.2	60.2	61.9	62.3	61.4	63.2	61.1	60.1	61.3	62.4	62.1
													
MYCOTOXINS													
Aflatoxin B ₁ (µg/kg)	ND							0 [0]					
Aflatoxin B ₂ (µg/kg)	ND							0 [0]					
Aflatoxin G ₁ (µg/kg)	ND							0 [0]					
Aflatoxin G ₂ (µg/kg)	ND							0 [0]					
Fumonisin B ₁ (µg/kg)	ND							0 [0]					
Fumonisin B ₂ (µg/kg)	ND							0 [0]					
Fumonisin B ₃ (µg/kg)	ND							0 [0]					
Deoxynivalenol (µg/kg) [max. value]	<100 [570]							<100 [1 017]					
Ochratoxin A (µg/kg)	ND							0 [0]					
Zearalenone (µg/kg)	ND							<20 [29]					
T-2 Toxin (µg/kg)	ND							0 [0]					
No. of samples	40							40					