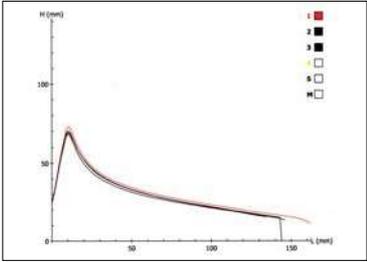
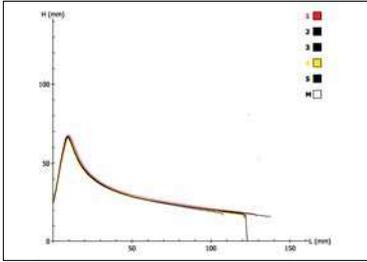
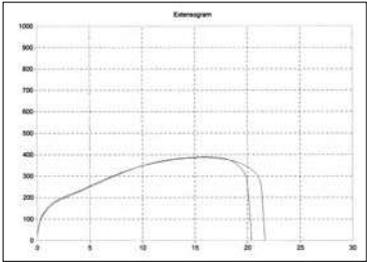
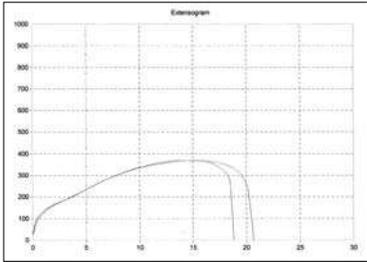
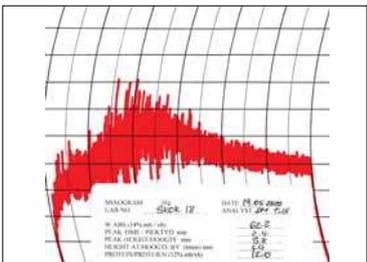
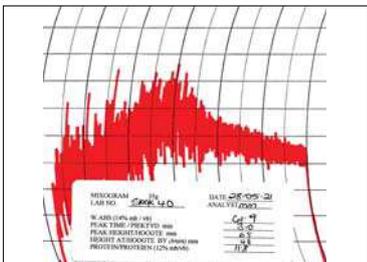


RSA Wheat Crop Quality Summary

RSA Crop Quality 2019/20 and 2020/21 Seasons

Country of origin	RSA Crop Average 2019/20						RSA Crop Average 2020/21					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	132	56	25	15	105	333	70	34	31	30	85	250
WHEAT GRADING												
Protein (12% mb), %	13.5	12.0	11.1	12.4	13.2	12.9	13.2	12.0	11.0	10.0	11.9	12.0
Moisture, %	10.3	10.1	10.1	10.2	10.3	10.2	11.3	11.0	11.1	11.0	11.1	11.1
Falling number, sec	382	387	355	370	295	353	367	389	403	399	348	372
1000 Kernel mass (13% mb), g	36.1	38.7	37.8	33.3	33.2	35.6	37.3	38.7	39.2	39.3	38.0	38.2
Hlm (dirty), kg/hl	80.0	81.3	80.6	77.1	75.9	78.9	80.8	79.8	79.3	78.0	77.0	78.9
Screenings (<1.8 mm sieve), %	1.31	1.27	1.21	1.56	3.26	1.92	1.07	1.04	1.54	1.55	2.38	1.63
Gravel, stones, turf and glass, %	0.01	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.10	0.09	0.08	0.06	0.25	0.14	0.03	0.05	0.04	0.03	0.13	0.07
Other grain & unthreshed ears, %	0.29	0.28	0.32	0.32	0.65	0.41	0.25	0.24	0.40	0.34	0.87	0.49
Heat damaged kernels, %	0.00	0.00	0.01	0.01	0.08	0.03	0.01	0.02	0.01	0.02	0.20	0.08
Immature kernels, %	0.07	0.05	0.05	0.01	0.09	0.07	0.09	0.04	0.01	0.01	0.06	0.05
Insect damaged kernels, %	0.27	0.27	0.18	0.14	0.44	0.31	0.31	0.43	0.47	0.59	0.98	0.61
Sprouted kernels, %	0.04	0.03	0.09	0.11	3.17	1.03	0.13	0.06	0.03	0.01	0.45	0.20
Total damaged kernels, %	0.38	0.34	0.34	0.28	3.77	1.44	0.54	0.54	0.53	0.64	1.69	0.94
Combined deviations, %	2.08	1.98	1.95	2.22	7.93	3.91	1.89	1.86	2.51	2.56	5.07	3.12
Heavily frost damaged kernels, %	0.03	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.01	0.01	0.00
Field fungi, %	0.11	0.15	0.14	0.07	0.60	0.27	0.57	0.45	0.27	0.25	1.04	0.64
Storage fungi, %	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.06	0.02
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
Poisonous seeds (<i>Crotalaria spp.</i> , etc.)	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
Live insects	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
	B1	B2	B3	B4	COW	Average	B1	B2	B3	B4	COW	Average
No. of samples	25	13	9	4	18	69	21	9	7	5	7	49
Bühler Extraction, %	74.9	75.7	75.8	74.1	73.7	74.8	74.3	74.2	74.3	73.9	73.6	74.1
FLOUR												
Colour, KJ (wet)	-4.7	-4.9	-4.9	-4.9	-4.3	-4.7	-4.7	-4.8	-5.0	-5.0	-4.7	-4.8
Colour, Konica Minolta CM5 (dry)												
L*	93.54	93.81	93.83	93.99	93.48	93.64	93.72	93.91	94.16	94.44	94.03	93.93
a*	0.50	0.46	0.46	0.40	0.44	0.47	0.48	0.46	0.40	0.35	0.39	0.44
b*	10.35	10.22	10.53	10.32	10.26	10.32	9.74	9.89	9.79	9.47	9.87	9.77
Ash (db), %	0.65	0.65	0.63	0.61	0.63	0.64	0.60	0.60	0.60	0.59	0.60	0.60
Protein (12% mb), %	12.7	11.2	10.3	11.2	12.1	11.9	12.3	11.0	10.0	9.6	10.6	11.2
Wet Gluten (14% mb), %	33.6	29.5	26.6	29.2	31.7	31.1	32.8	29.8	26.8	24.1	28.5	29.9
Dry Gluten (14% mb), %	11.5	9.9	8.8	9.9	10.7	10.6	11.4	10.0	8.8	7.9	9.6	10.1
Gluten Index	95	95	96	96	96	95	96	95	95	95	94	95
100 g BAKING TEST												
Baking water absorption, %	63.2	61.1	60.1	61.3	62.3	62.1	62.5	60.9	59.9	59.2	60.5	61.2
Loaf volume, cm ³	1185	1083	1036	1106	1140	1130	1189	1095	1023	958	1043	1104
Evaluation (see page 74)	0	0	0	0	0	0	0	0	0	0	0	0
FARINOGRAM												
Water absorption (14% mb), %	61.5	60.2	59.0	58.6	59.4	60.2	60.2	59.2	58.7	57.5	59.0	59.3
Development time, min	6.0	5.3	5.4	4.9	4.9	5.4	6.4	5.2	5.0	4.0	5.0	5.6
Stability, mm	8.7	7.5	7.8	8.7	7.7	8.1	9.2	8.1	7.7	7.8	7.9	8.5
Mixing tolerance index, BU	38	41	41	33	48	41	36	37	39	33	36	36

RSA Crop Quality 2019/20 and 2020/21 Seasons

Country of origin	RSA Crop Average 2019/20						RSA Crop Average 2020/21					
	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	25	13	9	4	15	69	21	9	7	5	7	49
ALVEOGRAM												
Strength (S), cm ²	47.3	39.8	36.8	40.2	41.3	42.6	43.2	37.1	33.4	30.9	35.2	38.3
Stability (P), mm	83	82	80	74	72	79	75	74	77	77	76	75
Distensibility (L), mm	146	127	117	148	163	143	147	126	111	97	119	129
P/L	0.59	0.68	0.73	0.56	0.50	0.60	0.54	0.62	0.72	0.83	0.67	0.63
												
EXTENSOGRAM												
Strength, cm ²	121	106	98	105	114	112	115	97	82	74	91	99
Max. height, BU	387	382	375	381	383	383	390	366	324	315	342	362
Extensibility, mm	223	201	190	197	216	211	217	195	182	170	192	200
												
MIXOGRAM												
Peak time, min	2.5	2.7	2.8	2.7	2.7	2.6	3.0	2.8	2.8	3.2	2.9	2.9
Water absorption (14% mb), %	63.2	61.1	60.1	61.3	62.4	62.1	62.5	60.9	59.9	59.2	60.5	61.2
												
MYCOTOXINS												
Aflatoxin B ₁ (µg/kg)	ND						ND					
Aflatoxin B ₂ (µg/kg)	ND						ND					
Aflatoxin G ₁ (µg/kg)	ND						ND					
Aflatoxin G ₂ (µg/kg)	ND						ND					
Fumonisin B ₁ (µg/kg)	ND						ND					
Fumonisin B ₂ (µg/kg)	ND						ND					
Fumonisin B ₃ (µg/kg)	ND						ND					
Deoxynivalenol (µg/kg) [max. value]	<100 [1 017]						386 [3 088]					
Ochratoxin A (µg/kg)	ND						ND					
Zearalenone (µg/kg)	<20 [29]						ND					
HT-2 (µg/kg)	ND						ND					
T-2 Toxin (µg/kg)	ND						ND					
No. of samples	40						30					