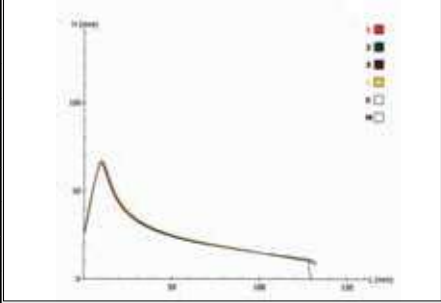
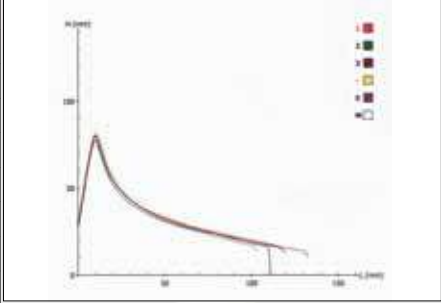
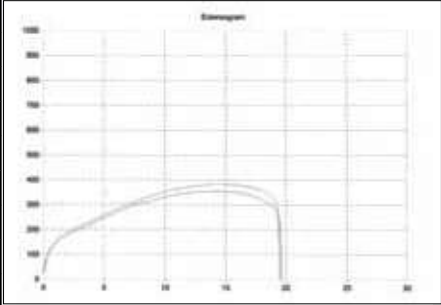
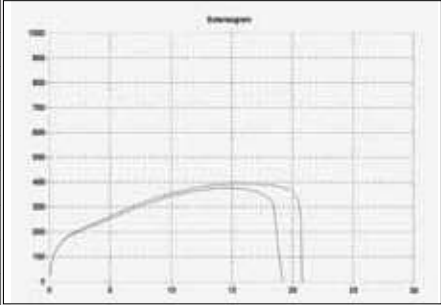
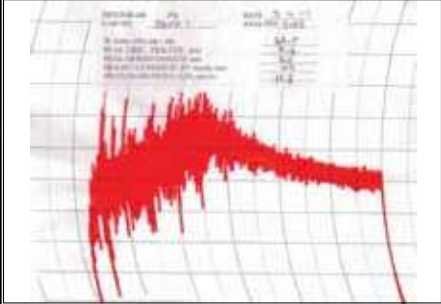
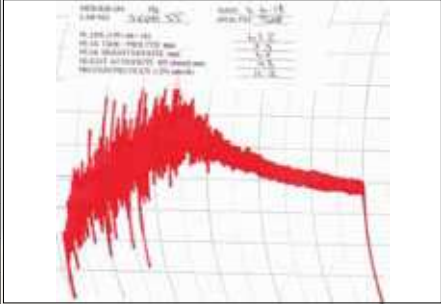


# RSA WHEAT CROP QUALITY SUMMARY

## RSA Crop Quality 2016/2017 and 2017/2018 Seasons

Country of origin	RSA Crop Average 2016/2017							RSA Crop Average 2017/2018						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	130	91	33	28	48	7	337	142	77	22	15	42	6	304
<b>WHEAT GRADING</b>														
Protein (12% mb), %	13.0	11.5	11.0	11.0	11.4	13.6	12.0	13.1	12.0	11.0	11.9	13.0	13.3	12.6
Moisture, %	9.9	9.8	9.8	9.9	9.7	10.2	9.9	10.0	10.1	10.0	9.5	10.3	10.2	10.0
Falling number, sec	358	361	343	359	349	358	356	379	368	367	380	360	301	371
1000 Kernel mass (13% mb), g	37.7	39.6	40.5	37.8	38.6	35.6	38.6	36.9	39.4	40.9	37.0	36.4	34.2	37.7
Hlm (dirty), kg/hl	81.7	82.0	81.8	81.5	80.7	77.7	81.5	80.9	81.7	81.6	81.3	78.4	75.8	80.7
Screenings (<1.8 mm sieve), %	1.35	1.64	1.53	2.70	3.03	4.37	1.86	1.31	1.21	0.98	1.98	2.61	3.24	1.51
Gravel, stones, turf and glass, %	0.01	0.01	0.01	0.00	0.01	0.39	0.02	0.01	0.01	0.02	0.00	0.01	0.07	0.01
Foreign matter, %	0.16	0.16	0.15	0.15	0.31	0.82	0.19	0.11	0.13	0.10	0.10	0.29	0.39	0.14
Other grain & unthreshed ears, %	0.34	0.36	0.29	0.29	0.74	0.44	0.40	0.35	0.38	0.28	0.42	0.94	0.86	0.45
Heat damaged kernels, %	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.00
Immature kernels, %	0.04	0.03	0.04	0.01	0.04	0.03	0.03	0.05	0.04	0.02	0.01	0.11	0.30	0.06
Insect damaged kernels, %	0.36	0.48	0.41	0.49	0.94	0.32	0.49	0.59	0.54	0.60	0.55	1.20	3.44	0.72
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, %	0.16	0.14	0.11	0.06	0.16	1.09	0.16	0.02	0.02	0.02	0.00	0.05	1.93	0.06
Total damaged kernels, %	0.56	0.64	0.56	0.55	1.14	1.45	0.68	0.66	0.61	0.65	0.56	1.36	5.73	0.84
Combined deviations, %	2.40	2.82	2.55	3.70	5.21	7.21	3.14	2.43	2.32	2.01	3.06	5.20	10.22	2.94
Field fungi, %	0.32	0.35	0.32	0.43	0.41	0.57	0.36	0.10	0.08	0.07	0.11	0.13	1.23	0.12
Storage fungi, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.08	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	1	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	0	0	0	0	0	1	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	14	11	10	11	1	70	25	19	9	7	8	2	70
Bühler Extraction, %	72.8	72.7	72.2	72.8	71.6	73.1	72.5	73.2	73.6	73.6	72.8	71.6	71.2	73.1
<b>FLOUR</b>														
Colour, KJ (wet)	-3.7	-3.8	-3.6	-4.0	-3.8	-3.4	-3.8	-4.1	-4.2	-4.2	-4.3	-3.9	-3.5	-4.1
Colour, Konica Minolta CM5 (dry)														
L*	93.65	93.68	93.68	93.90	93.77	93.38	93.71	93.68	93.83	93.85	93.95	93.77	93.59	93.78
a*	0.46	0.49	0.44	0.45	0.43	0.44	0.46	0.44	0.44	0.45	0.38	0.41	0.31	0.43
b*	9.91	10.21	10.17	10.48	10.05	10.15	10.12	9.69	9.79	9.99	9.84	10.25	9.78	9.84
Protein (12% mb), %	12.1	11.1	10.7	9.9	11.2	12.6	11.2	12.0	11.1	10.2	10.0	11.7	11.9	11.3
Wet Gluten (14% mb), %	33.0	30.7	29.5	25.9	31.0	34.3	30.7	32.7	30.6	27.5	26.7	31.7	31.6	30.7
Dry Gluten (14% mb), %	11.5	10.5	10.0	8.8	10.6	12.0	10.5	11.1	10.3	9.2	9.0	10.8	10.9	10.4
Gluten Index	95	93	94	96	93	96	94	93	93	94	94	92	90	93
<b>100g BAKING TEST</b>														
Baking water absorption, %	62.4	61.3	60.8	59.7	61.3	63.0	61.3	62.2	61.1	60.2	60.2	61.9	62.3	61.4
Loaf volume, cm <sup>3</sup>	1104	1029	987	957	1036	1167	1040	1145	1104	1013	997	1109	1083	1096
Evaluation	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	60.8	60.1	60.2	57.8	60.3	59.7	60.1	60.9	60.1	59.5	58.8	60.9	60.4	60.3
Development time, min	6.2	5.3	5.0	3.7	4.7	6.5	5.2	6.3	5.2	4.3	4.7	5.4	5.2	5.5
Stability, mm	9.0	8.0	7.8	7.3	8.3	9.3	8.3	9.0	7.1	7.2	7.8	8.8	7.2	8.0
Mixing tolerance index, BU	35	38	39	40	36	34	37	37	45	43	43	35	42	40

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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	14	11	10	11	1	70	25	19	9	7	8	2	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	42.4	34.9	34.1	31.3	36.2	37.8	37.0	44.6	36.1	34.0	34.6	40.6	36.1	39.2
Stability (P), mm	74	72	77	69	76	71	73	85	79	86	78	86	79	83
Distensibility (L), mm	155	133	116	126	127	120	135	122	113	102	106	119	123	115
P/L	0.49	0.57	0.68	0.56	0.61	0.59	0.57	0.72	0.75	1.22	0.81	0.80	0.69	0.81
														
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	113	93	85	89	97	126	99	121	100	89	89	109	95	106
Max. height, BU	388	359	326	368	348	420	364	421	365	352	347	373	328	382
Extensibility, mm	210	186	184	168	195	217	193	209	197	180	178	206	200	198
														
<b>MIXOGRAM</b>														
Peak time, min	2.6	2.5	2.6	2.8	2.5	2.9	2.6	62.2	61.1	60.2	60.2	61.9	62.3	61.4
Water absorption (14% mb), %	62.4	61.1	60.9	59.9	61.4	63.0	61.4	2.8	2.6	2.7	2.7	2.4	2.5	2.6
														
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	ND							ND						
Aflatoxin B <sub>2</sub> (µg/kg)	ND							ND						
Aflatoxin G <sub>1</sub> (µg/kg)	ND							ND						
Aflatoxin G <sub>2</sub> (µg/kg)	ND							ND						
Fumonisin B <sub>1</sub> (µg/kg)	ND							ND						
Fumonisin B <sub>2</sub> (µg/kg)	ND							ND						
Fumonisin B <sub>3</sub> (µg/kg)	ND							ND						
Deoxynivalenol (µg/kg) [max. value]	<100 [501]							<100 [570]						
Ochratoxin A (µg/kg)	ND							ND						
Zearalenone (µg/kg)	ND							ND						
T-2 Toxin (µg/kg)	ND							ND						
<b>No. of samples</b>	<b>40</b>							<b>40</b>						