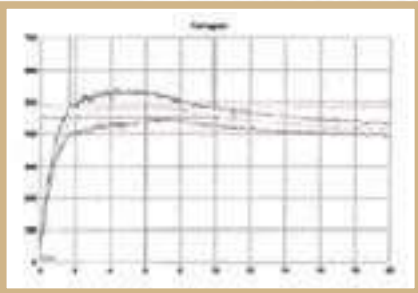
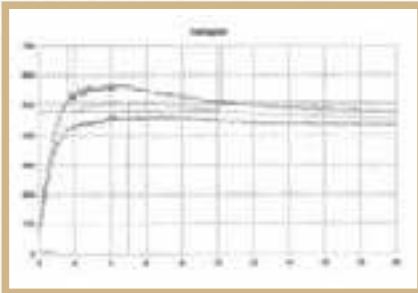
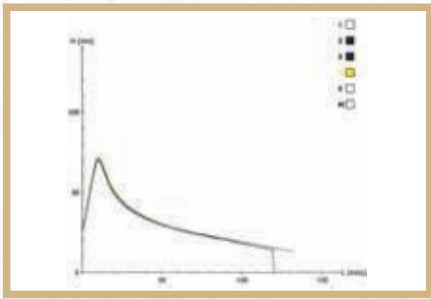
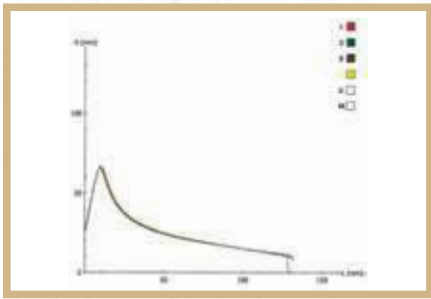
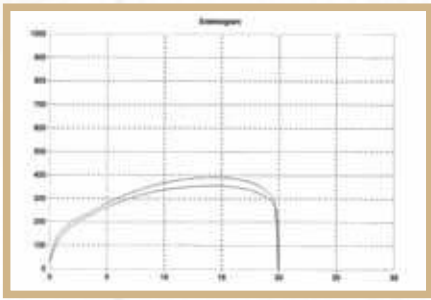
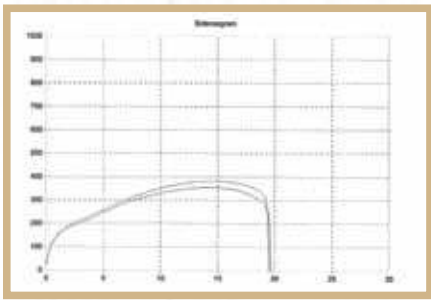
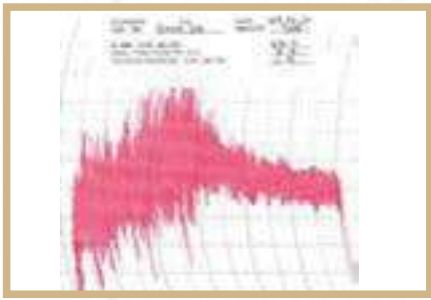
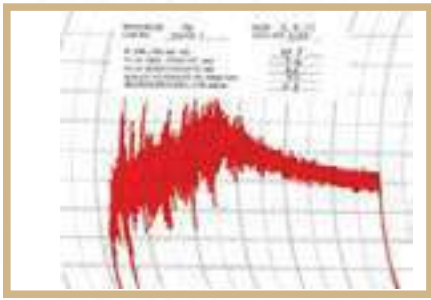


# RSA WHEAT CROP QUALITY SUMMARY

## RSA Crop Quality 2015/2016 and 2016/2017 Seasons

Country of origin	RSA Crop Average 2015/2016							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	124	56	18	11	39	4	252	130	91	33	28	48	7	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	13.3	11.7	11.2	13.3	13.0	14.9	12.8	13.0	11.5	11.0	11.0	11.4	13.6	12.0
Moisture, %	10.3	10.8	10.9	10.6	10.6	10.4	10.5	9.9	9.8	9.8	9.9	9.7	10.2	9.9
Falling number, sec	401	391	367	405	383	375	393	358	361	343	359	349	358	356
1000 Kernel mass (13% mb), g	36.3	39.4	39.3	34.6	34.9	30.6	36.8	37.7	39.6	40.5	37.8	38.6	35.6	38.6
Hlm (dirty), kg/hl	82.3	81.6	80.2	79.3	78.6	73.8	81.1	81.7	82.0	81.8	81.5	80.7	77.7	81.5
Screenings (<1.8 mm sieve), %	1.33	1.36	1.28	2.73	3.05	4.47	1.71	1.35	1.64	1.53	2.70	3.03	4.37	1.86
Gravel, stones, turf and glass, %	0.00	0.01	0.01	0.00	0.01	0.20	0.01	0.01	0.01	0.01	0.00	0.01	0.39	0.02
Foreign matter, %	0.09	0.11	0.13	0.18	0.30	0.58	0.14	0.16	0.16	0.15	0.15	0.31	0.82	0.19
Other grain & unthreshed ears, %	0.41	0.41	0.43	0.47	1.36	2.16	0.59	0.34	0.36	0.29	0.29	0.74	0.44	0.40
Heat 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	0.01	0.00
Immature kernels, %	0.08	0.06	0.03	0.10	0.04	0.12	0.06	0.04	0.03	0.04	0.01	0.04	0.03	0.03
Insect damaged kernels, %	0.34	0.43	0.56	0.37	0.78	2.16	0.47	0.36	0.48	0.41	0.49	0.94	0.32	0.49
Heavily frost damaged kernels, %	0.00	0.00	0.05	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sprouted kernels, %	0.02	0.01	0.00	0.02	0.01	0.02	0.02	0.16	0.14	0.11	0.06	0.16	1.09	0.16
Total damaged kernels, %	0.44	0.51	0.59	0.49	0.83	2.30	0.56	0.56	0.64	0.56	0.55	1.14	1.45	0.68
Combined deviations, %	2.26	2.38	2.43	3.87	5.54	9.51	2.99	2.40	2.82	2.55	3.70	5.21	7.21	3.14
Field fungi, %	0.09	0.09	0.12	0.28	0.06	0.06	0.10	0.32	0.35	0.32	0.43	0.41	0.57	0.36
Storage fungi, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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
<b>No. of samples</b>	<b>25</b>	<b>19</b>	<b>9</b>	<b>8</b>	<b>9</b>	<b>-</b>	<b>70</b>	<b>23</b>	<b>14</b>	<b>11</b>	<b>10</b>	<b>11</b>	<b>1</b>	<b>70</b>
<b>BÜHLER EXTRACTION, %</b>	<b>73.7</b>	<b>73.8</b>	<b>73.2</b>	<b>73.0</b>	<b>72.4</b>	<b>-</b>	<b>73.4</b>	<b>72.8</b>	<b>72.7</b>	<b>72.2</b>	<b>72.8</b>	<b>71.6</b>	<b>73.1</b>	<b>72.5</b>
<b>FLOUR</b>														
Colour, KJ (wet)	-3.6	-3.6	-3.3	-3.5	-3.4	-	-3.5	-3.7	-3.8	-3.6	-4.0	-3.8	-3.4	-3.8
Colour, Minolta CM5 (dry)														
L*	93.79	93.80	93.68	93.76	93.85	-	93.78	93.65	93.68	93.68	93.90	93.77	93.38	93.71
a*	0.49	0.47	0.42	0.47	0.47	-	0.47	0.46	0.49	0.44	0.45	0.43	0.44	0.46
b*	9.73	9.66	9.83	9.74	9.90	-	9.75	9.91	10.21	10.17	10.48	10.05	10.15	10.12
Protein (12% mb), %	12.4	11.2	10.9	11.9	12.0	-	11.8	12.1	11.1	10.7	9.9	11.2	12.6	11.2
Wet Gluten (14% mb), %	33.8	30.1	29.3	32.2	32.4	-	31.9	33.0	30.7	29.5	25.9	31.0	34.3	30.7
Dry Gluten (14% mb), %	11.8	10.4	9.7	11.2	11.1	-	11.0	11.5	10.5	10.0	8.8	10.6	12.0	10.5
Gluten Index	95	95	95	95	94	-	95	95	93	94	96	93	96	94
<b>100g BAKING TEST</b>														
Baking water absorption, %	62.5	61.1	60.7	62.1	62.3	-	61.8	62.4	61.3	60.8	59.7	61.3	63.0	61.3
Loaf volume, cm <sup>3</sup>	1097	1012	985	1029	1060	-	1047	1104	1029	987	957	1036	1167	1040
Evaluation	0	0	0	1	0	-	0	0	0	0	0	0	0	0
<b>FARINOGRAM</b>														
Water absorption, %	61.4	60.8	59.6	60.6	60.5	-	60.8	60.8	60.1	60.2	57.8	60.3	59.7	60.1
Development time, min	6.2	5.3	5.7	5.8	5.9	-	5.8	6.2	5.3	5.0	3.7	4.7	6.5	5.2
Stability, mm	8.4	7.2	8.1	8.1	8.5	-	8.0	9.0	8.0	7.8	7.3	8.3	9.3	8.3
Mixing tolerance index, BU	37	39	38	39	36	-	38	35	38	39	40	36	34	37
														

## RSA Crop Quality of 2015/2016 and 2016/2017 Seasons

Country of origin	RSA Crop Average 2015/2016							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	25	19	9	8	9	-	70	23	14	11	10	11	1	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	41.5	35.6	33.6	39.8	38.1	-	38.3	42.4	34.9	34.1	31.3	36.2	37.8	37.0
Stability (P), mm	83	83	78	78	79	-	81	74	72	77	69	76	71	73
Distensibility (L), mm	120	104	108	127	117	-	115	155	133	116	126	127	120	135
P/L	0.72	0.82	0.81	0.65	0.71	-	0.75	0.49	0.57	0.68	0.56	0.61	0.59	0.57
														
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	114	94	100	111	105	-	105	113	93	85	89	97	126	99
Max. height, BU	395	357	365	367	359	-	373	388	359	326	368	348	420	364
Extensibility, mm	207	186	187	207	204	-	198	210	186	184	168	195	217	193
														
<b>MIXOGRAM</b>														
Peak time, min	2.5	2.6	2.7	2.5	2.6	-	2.6	2.6	2.5	2.6	2.8	2.5	2.9	2.6
Absorption, %	62.8	61.2	61.0	62.4	62.3	-	62.0	62.4	61.1	60.9	59.9	61.4	63.0	61.4
														
<b>MYCOTOXINS</b>														
Afla G <sub>1</sub> (µg/kg)	ND							ND						
Afla B <sub>1</sub> (µg/kg)	ND							ND						
Afla G <sub>2</sub> (µg/kg)	ND							ND						
Afla B <sub>2</sub> (µg/kg)	ND							ND						
Fum B <sub>1</sub> (µg/kg)	ND							ND						
Fum B <sub>2</sub> (µg/kg)	ND							ND						
Fum B <sub>3</sub> (µg/kg)	ND							ND						
Deoxynivalenol (µg/kg) [max. value]	<100 [593]							<100 [501]						
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>						