

# RSA WHEAT CROP QUALITY SUMMARY

## RSA Crop Quality 2008/2009 and 2009/2010 Seasons

Country of origin	RSA Crop Average 2008/2009							RSA Crop Average 2009/2010						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	126	121	101	49	16	67	480	159	138	79	30	16	58	480
<b>WHEAT</b>														
<b>GRADING</b>														
Protein (12% mb), %	13.27	12.00	11.25	10.69	12.69	11.54	12.00	12.84	11.50	10.62	9.64	11.29	11.51	11.68
Moisture, %	11.5	11.1	11.0	10.9	11.6	11.0	11.2	11.5	11.3	11.3	10.8	11.0	11.0	11.3
Falling number, sec	364	395	382	346	364	393	378	382	375	359	339	240	365	367
1000 Kernel mass (13% mb), g	37.5	38.5	39.1	40.6	36.6	37.4	38.3	38.7	39.5	40.4	40.2	36.6	38.1	39.2
Hlm (dirty), kg/hl	78.6	77.8	77.2	77.4	76.0	76.4	77.6	80.8	80.0	79.5	79.7	75.2	79.0	79.9
Screenings (<1,8mm), %	1.36	1.52	1.74	1.33	2.76	2.77	1.72	1.36	1.30	1.47	1.44	3.36	3.03	1.63
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.01	0.13	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.09	0.09	0.08	0.10	0.29	0.17	0.11	0.05	0.05	0.09	0.09	0.12	0.11	0.07
Other grain & unthreshed ears, %	0.20	0.24	0.29	0.26	0.32	0.34	0.26	0.25	0.26	0.30	0.35	0.64	0.65	0.33
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	0.05	0.00	0.00
Immature kernels, %	0.12	0.07	0.04	0.05	0.04	0.06	0.07	0.07	0.05	0.04	0.03	0.01	0.06	0.05
Insect damaged kernels, %	0.27	0.42	0.46	0.54	4.02	1.13	0.62	0.19	0.26	0.29	0.27	1.10	0.52	0.30
Heavily frost damaged kernels, %	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.01
Sprouted kernels, %	0.10	0.09	0.11	0.10	1.01	0.14	0.13	0.09	0.11	0.16	0.14	2.73	0.36	0.23
Total damaged kernels, %	0.49	0.58	0.62	0.75	5.07	1.40	0.85	0.36	0.43	0.50	0.44	3.96	0.96	0.60
Combined deviations, %	2.14	2.42	2.71	2.27	8.44	4.49	2.88	2.02	2.04	2.34	2.32	8.07	4.76	2.63
Field fungi, %	0.08	0.12	0.09	0.04	0.23	0.12	0.10	0.19	0.19	0.21	0.15	0.54	0.16	0.20
Storage fungi, %	0.01	0.01	0.01	0.00	0.04	0.01	0.01	0.01	0.01	0.01	0.00	0.03	0.01	0.01
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
Noxious seeds (Crotalaria sp, Datura sp..)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noxious seeds (Argemone mexicana..)	0	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	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>22</b>	<b>23</b>	<b>22</b>	<b>12</b>	<b>5</b>	<b>16</b>	<b>100</b>	<b>26</b>	<b>28</b>	<b>20</b>	<b>10</b>	<b>5</b>	<b>11</b>	<b>100</b>
<b>BÜHLER EXTRACTION, %</b>	76.0	76.1	75.7	75.2	75.1	75.2	75.7	74.8	75.1	74.8	73.8	74.1	74.9	74.7
<b>FLOUR</b>														
Colour, KJ	-1.3	-1.7	-1.7	-1.6	-0.9	-1.5	-1.5	-2.2	-2.3	-2.3	-2.3	-1.7	-2.2	-2.2
<b>100g BAKING TEST</b>														
Baking water absorption, %	61.9	60.8	60.0	60.0	60.1	60.3	60.7	61.5	60.3	59.3	58.2	59.5	60.4	60.2
Loaf volume, cm <sup>3</sup>	956	909	870	849	926	892	902	902	853	803	727	868	847	843
Evaluation	1	0	0	1	0	0	0	1	0	0	0	0	0	0
<b>FARINOGRAM</b>														
Water absorption, %	62.2	61.1	60.4	60.9	60.6	60.7	61.1	62.3	61.3	60.5	59.3	58.3	60.6	61.0
Development time, min	5.0	4.1	3.6	3.1	3.7	3.8	4.0	4.8	3.4	2.9	2.0	2.7	3.7	3.5
Stability, mm	8.6	7.7	7.3	6.8	7.4	7.4	7.6	8.4	6.8	5.7	3.8	4.9	6.9	6.6
Mixing tolerance index, BU	42	42	44	46	43	45	43	39	44	52	71	71	48	49

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<b>Class and Grade bread wheat</b>	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
<b>No. of samples</b>	22	23	22	12	5	16	100	26	28	20	10	5	11	100
<b>ALVEOGRAM</b>														
Strength (S) , cm <sup>2</sup>	42.4	38.0	35.6	35.8	36.6	37.2	38.0	42.4	36.5	32.7	25.0	26.8	35.4	35.5
Stability (P), mm	85	83	82	87	78	82	83	93	90	90	87	61	83	89
Distensibility (L), mm	111	103	95	88	114	101	101	97	86	75	58	101	90	85
P/L	0.80	0.86	0.93	1.10	0.91	0.94	0.90	1.03	1.13	1.31	1.80	0.61	0.97	1.17
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	101	89	83	85	89	90	90	96	85	74	61	71	87	83
Max. height, BU	348	330	330	337	325	340	336	355	344	327	304	295	345	337
Extensibility, mm	201	184	172	174	187	179	183	187	174	158	139	171	173	170
<b>MIXOGRAM</b>														
Peak time, min	2.5	2.6	2.7	2.7	2.8	2.7	2.6	2.6	2.6	2.7	2.8	2.8	2.5	2.6
Absorption, %	62.3	61.0	60.6	60.6	61.4	61.1	61.2	61.8	60.4	59.4	58.5	60.3	60.6	60.4
<b>MYCOTOXINS</b>														
Aflatoxin, ppb [max.value]	1.23 [3.00]							1.00 [4.00]						
Deoxynivalenol, ppm [max. value]	0.47 [3.00]							0.05 [0.48]						
Ochratoxin A, ppb [max. value]	0.03 [1.00]							0.17 [1.00]						
<b>No. of samples</b>	<b>30</b>							<b>30</b>						