

RSA WHEAT CROP QUALITY

RSA Crop Quality 2005/2006 and 2007/2008 Seasons

Country of origin	RSA Crop Average 2005/2006							RSA Crop Average 2007/2008						
	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
Class and Grade bread wheat														
No. of samples	178	104	85	21	69	23	480	64	137	131	70	54	24	480
WHEAT GRADING														
Protein (12% mb), %	13.37	12.04	11.34	10.44	12.30	13.07	12.43	12.48	11.42	10.59	9.58	10.99	11.66	11.03
Moisture, %	11.2	11.2	11.0	10.9	10.9	11.2	11.1	11.6	11.4	12.0	11.1	11.4	11.8	11.6
Falling number, sec	370	384	385	357	374	364	375	369	368	359	351	364	323	360
1000 Kernel mass (13% mb), g	35.5	37.0	36.6	37.8	34.4	32.6	35.8	38.9	38.7	39.1	39.7	36.4	38.1	38.7
Hlm (dirty), kg/hl	78.8	78.3	78.2	78.7	77.4	75.6	78.2	78.9	78.7	78.0	78.5	76.2	75.5	78.1
Screenings (<1,8mm), %	1.41	1.55	1.52	1.38	2.87	1.89	1.69	1.42	1.36	1.33	1.16	3.01	3.02	1.60
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	0.11	0.01	0.01	0.00	0.00	0.00	0.00	0.02	0.00
Foreign matter, %	0.09	0.11	0.12	0.11	0.12	0.27	0.12	0.05	0.05	0.05	0.07	0.08	0.19	0.06
Other grain & unthreshed ears, %	0.27	0.30	0.34	0.30	0.50	0.37	0.33	0.23	0.25	0.30	0.26	0.54	0.32	0.30
Heat damaged kernels, %	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Immature kernels, %	0.16	0.09	0.07	0.05	0.07	0.16	0.11	0.12	0.11	0.06	0.06	0.16	0.14	0.10
Insect damaged kernels, %	0.29	0.41	0.45	0.44	0.65	5.85	0.67	0.24	0.17	0.15	0.16	0.75	2.08	0.33
Heavily frost damaged kernels, %	0.00	0.03	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sprouted kernels, %	0.03	0.06	0.02	0.02	0.17	0.56	0.08	0.23	0.19	0.15	0.14	0.17	1.08	0.22
Total damaged kernels, %	0.48	0.56	0.57	0.51	0.90	6.89	0.88	0.59	0.47	0.36	0.35	1.08	3.30	0.65
Combined deviations, %	2.26	2.50	2.54	2.30	4.39	7.96	2.95	2.30	2.13	2.04	1.85	4.71	6.85	2.61
Field fungi, %	0.08	0.11	0.12	0.08	0.10	0.25	0.11	0.14	0.10	0.09	0.06	0.18	0.14	0.11
Storage fungi, %	0.01	0.01	0.01	0.00	0.01	0.02	0.01	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
Noxious seeds (Crotalaria sp, Datura sp..)	0	0	0	0	0	0	0	0	0	0	0	0	1	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	0	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	30	22	19	11	14	4	100	23	26	18	14	13	6	100
BÜHLER EXTRACTION, %	75.4	75.9	75.4	75.6	75.2	74.6	75.5	75.7	76.0	75.7	74.9	75.1	75.4	75.6
FLOUR														
Colour, KJ	-1.8	-1.9	-1.9	-1.8	-1.4	-0.3	-1.8	-1.7	-1.9	-2.1	-2.4	-1.7	-0.8	-1.9
100g BAKING TEST														
Baking water absorption, %	62.3	61	60.9	60.9	61.2	63.3	61.5	61.5	60.3	59.4	57.7	59.6	61.2	60.0
Loaf volume, cm3	951	912	874	820	895	970	906	892	857	802	704	800	873	827
Evaluation	0	0	0	1	0	1	0	1	1	1	2	1	1	1
FARINOGRAM														
Water absorption, %	63.1	62.6	61.6	61.7	61.9	62.0	62.3	62.3	61.0	60.2	59.3	59.8	61.0	60.8
Development time, min	6.0	4.9	4.2	4.1	4.7	5.8	5.0	4.8	3.8	2.9	2.0	3.0	4.4	3.5
Stability, mm	10.7	9.0	8.5	7.5	9.1	10.7	9.3	9.0	7.6	6.6	4.5	6.4	7.9	7.2
Mixing tolerance index, BU	33	37	36	43	35	32	36	37	41	44	58	46	43	44

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No. of samples	30	22	19	11	14	4	100	23	26	18	14	13	6	100
ALVEOGRAM														
Strength (S) , cm	44.5	39.9	36.9	37.6	39.6	46.7	40.7	47.9	42.8	39.8	33.0	39.5	46.9	41.9
Stability (P), mm	84	82	80	86	80	73	82	92	86	89	96	86	83	89
Distensibility (L), mm	117	106	102	93	111	133	109	118	114	101	75	101	127	106
P/L	0.73	0.79	0.84	1.16	0.75	0.57	0.81	0.81	0.78	0.98	1.54	0.93	0.67	0.94
EXTENSOGRAM														
Strength, cm	117	105	98	96	110	137	108	106	98	93	77	97	114	97
Max. height, BU	372	356	357	354	377	425	366	377	371	384	371	388	392	378
Extensibility, mm	213	199	186	175	198	218	199	195	184	172	142	170	200	178
MIXOGRAM														
Peak time, min	2.4	2.5	2.5	2.6	2.5	2.5	2.5	2.6	2.6	2.9	3.0	2.8	2.8	2.8
Absorption, %	62.5	61.4	60.8	60.8	61.5	63.9	61.7	62.4	61.0	60.0	58.7	60.2	61.8	60.8
MYCOTOXINS														
Aflatoxin, ppb [max.value]	0.43 [7.00]							0.33 [5.00]						
Deoxynivalenol, ppm [max. value]	0.94 [1.50]							1.36 [2.70]						
Ochratoxin A, ppb [max. value]	0.09 [0.67]							0.33 [2.80]						
No. of samples	30							30						