

RSA WHEAT CROP QUALITY

RSA Crop Quality 2003/2004 and 2005/2006 Seasons

Country of origin	RSA Crop Average 2003/2004							RSA Crop Average 2005/2006						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	140	93	81	34	97	27	472	178	104	85	21	69	23	480
WHEAT GRADING														
Protein (12% mb), %	13.39	12.37	12.66	12.23	13.27	12.68	12.91	13.37	12.04	11.34	10.44	12.30	13.07	12.43
Moisture, %	11.0	10.9	11.1	11.0	10.8	11.2	11.0	11.2	11.2	11.0	10.9	10.9	11.2	11.1
Falling number, sec	365	364	370	355	366	348	364	370	384	385	357	374	364	375
1000 Kernel mass (13% mb), g	34.3	34.1	34.2	33.7	31.1	32.9	33.5	35.5	37.0	36.6	37.8	34.4	32.6	35.8
Hlm (dirty), kg/hl	79.0	77.8	76.8	76.1	75.4	75.9	77.2	78.8	78.3	78.2	78.7	77.4	75.6	78.2
Screenings (<1,8mm), %	1.46	1.73	1.81	1.85	3.52	3.39	2.14	1.41	1.55	1.52	1.38	2.87	1.89	1.69
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.01
Foreign matter, %	0.10	0.10	0.13	0.20	0.27	0.20	0.15	0.09	0.11	0.12	0.11	0.12	0.27	0.12
Other grain & unthreshed ears, %	0.21	0.28	0.31	0.36	0.71	0.66	0.38	0.27	0.30	0.34	0.30	0.50	0.37	0.33
Heat damaged kernels, %	0.00	0.01	0.01	0.00	0.01	0.44	0.03	0.00	0.00	0.00	0.00	0.00	0.02	0.00
Immature kernels, %	0.18	0.12	0.17	0.12	0.20	0.18	0.17	0.16	0.09	0.07	0.05	0.07	0.16	0.11
Insect damaged kernels, %	0.22	0.21	0.22	0.22	0.41	0.44	0.27	0.29	0.41	0.45	0.44	0.65	5.85	0.67
Heavily frost damaged kernels, %	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.03	0.00	0.00	0.00	0.04	0.01
Sprouted kernels, %	0.06	0.13	0.04	0.02	0.14	0.05	0.08	0.03	0.06	0.02	0.02	0.17	0.56	0.08
Total Damaged kernels, %	0.46	0.47	0.44	0.36	0.76	1.11	0.55	0.48	0.56	0.57	0.51	0.90	6.89	0.88
Combined deviations, %	2.23	2.58	2.69	2.77	5.26	5.36	3.22	2.26	2.50	2.54	2.30	4.39	7.96	2.95
Field fungi, %	0.23	0.30	0.36	0.32	0.41	0.50	0.33	0.08	0.11	0.12	0.08	0.10	0.25	0.11
Storage fungi, %	0.03	0.04	0.03	0.03	0.03	0.13	0.04	0.01	0.01	0.01	0.00	0.01	0.02	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	0	0	0	0	0	0	0	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	25	19	22	14	-	-	80	30	22	19	11	14	4	100
BÜHLER EXTRACTION, %	75.0	74.7	74.1	73.3	-	-	74.4	75.4	75.9	75.4	75.6	75.2	74.6	75.5
FLOUR														
Colour, KJ	-0.6	-0.8	-0.6	-0.6	-	-	-0.6	-1.8	-1.9	-1.9	-1.8	-1.4	-0.3	-1.8
100g BAKING TEST														
Baking water absorption, %	62.7	61.6	61.9	61.8	-	-	62.1	62.3	61.0	60.9	60.9	61.2	63.3	61.5
Loaf volume, cm3	954	906	916	897	-	-	922	951	912	874	820	895	970	906
Evaluation	1	0	1	1	-	-	1	0	0	0	1	0	1	0
FARINOGRAM														
Water absorption, %	62.4	61.4	61.0	60.8	-	-	61.5	63.1	62.6	61.6	61.7	61.9	62.0	62.3
Development time, min	4.7	4.6	4.5	4.2	-	-	4.5	6.0	4.9	4.2	4.1	4.7	5.8	5.0
Stability, mm	6.6	6.9	6.8	6.6	-	-	6.7	10.7	9.0	8.5	7.5	9.1	10.7	9.3
Mixing tolerance index, BU	53	54	55	56	-	-	54	33	37	36	43	35	32	36

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No. of samples	25	19	22	14	-	-	80	30	22	19	11	14	4	100
ALVEOGRAM														
Strength, cm ²	43.5	40.7	40.0	38.8	-	-	41.1	44.5	39.9	36.9	37.6	39.6	46.7	40.7
Stability, mm	88	88	85	83	-	-	86	84	82	80	86	80	73	82
Distensibility, mm	116	106	109	106	-	-	110	117	106	102	93	111	133	109
P/L	0.77	0.88	0.85	0.90	-	-	0.84	0.73	0.79	0.84	1.16	0.75	0.57	0.81
EXTENSOGRAM														
Strength, cm ²	103	97	97	90	-	-	98	117	105	98	96	110	137	108
Max. height, BU	365	373	364	344	-	-	363	372	356	357	354	377	425	366
Extensibility, mm	190	176	178	173	-	-	180	213	199	186	175	198	218	199
MIXOGRAM														
Peak time, min	2.3	2.4	2.5	2.5	-	-	2.4	2.4	2.5	2.5	2.6	2.5	2.5	2.5
Absorption, %	62.7	61.6	62.0	61.7	-	-	62.1	62.5	61.4	60.8	60.8	61.5	63.9	61.7
MYCOTOXINS														
Aflatoxin, ppb								0.43						
Deoxynivalenol, ppm								1.01						
Ochratoxin A, ppb								0.09						
No. of samples								30						