

RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2009/2010 and 2010/2011 Seasons

Country of origin	RSA Crop Average 2009/2010							RSA Crop Average 2010/2011						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	159	138	79	30	16	58	480	164	93	48	23	16	28	372
WHEAT														
GRADING														
Protein (12% mb), %	12.84	11.50	10.62	9.64	11.29	11.51	11.68	12.91	11.53	10.69	11.20	13.31	12.28	12.14
Moisture, %	11.5	11.3	11.3	10.8	11.0	11.0	11.3	11.8	11.7	11.6	11.6	12.2	11.8	11.8
Falling number, sec	382	375	359	339	240	365	367	385	389	371	359	180	358	372
1000 Kernel mass (13% mb), g	38.7	39.5	40.4	40.2	36.6	38.1	39.2	39.1	40.0	39.9	40.8	39.3	38.5	39.5
Hlm (dirty), kg/hl	80.8	80.0	79.5	79.7	75.2	79.0	79.9	80.9	80.4	80.6	80.8	76.6	78.1	80.3
Screenings (<1,8mm), %	1.36	1.30	1.47	1.44	3.36	3.03	1.63	1.34	1.61	1.51	2.66	1.49	3.48	1.68
Gravel, stones, turf and glass, %	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.01
Foreign matter, %	0.05	0.05	0.09	0.09	0.12	0.11	0.07	0.07	0.08	0.07	0.10	0.42	0.18	0.10
Other grain & unthreshed ears, %	0.25	0.26	0.30	0.35	0.64	0.65	0.33	0.28	0.34	0.33	0.43	0.26	0.85	0.35
Heat damaged kernels, %	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Immature kernels, %	0.07	0.05	0.04	0.03	0.01	0.06	0.05	0.06	0.02	0.02	0.02	0.10	0.06	0.04
Insect damaged kernels, %	0.19	0.26	0.29	0.27	1.10	0.52	0.30	0.24	0.28	0.29	0.27	0.28	0.35	0.27
Heavily frost damaged kernels, %	0.00	0.00	0.00	0.00	0.13	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01
Sprouted kernels, %	0.09	0.11	0.16	0.14	2.73	0.36	0.23	0.04	0.03	0.03	0.06	1.43	0.15	0.11
Total damaged kernels, %	0.36	0.43	0.50	0.44	3.96	0.96	0.60	0.34	0.33	0.35	0.35	1.83	0.56	0.42
Combined deviations, %	2.02	2.04	2.34	2.32	8.07	4.76	2.63	2.03	2.36	2.26	3.55	3.99	5.07	2.55
Field fungi, %	0.19	0.19	0.21	0.15	0.54	0.16	0.20	0.18	0.12	0.10	0.14	1.12	0.29	0.20
Storage fungi, %	0.01	0.01	0.01	0.00	0.03	0.01	0.01	0.02	0.01	0.01	0.02	0.14	0.03	0.02
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 (<i>Crotalaria spp.</i> , <i>Datura spp.</i>)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noxious seeds (<i>Argemone mexicana</i>)	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
No. of samples	26	28	20	10	5	11	100	29	24	17	11	8	10	99
BÜHLER EXTRACTION, %	74.8	75.1	74.8	73.8	74.1	74.9	74.7	75.1	75.1	75.0	74.7	74.2	74.4	74.9
FLOUR														
Colour, KJ	-2.2	-2.3	-2.3	-2.3	-1.7	-2.2	-2.2	-2.0	-2.1	-2.0	-1.9	0.4	-1.5	-1.8
Protein (12% mb), %	11.7	10.6	9.6	8.6	10.4	10.6	10.5	12.0	10.5	9.7	9.8	12.1	11.5	11.0
Wet Gluten (14% mb), %	32.1	29.0	25.9	22.2	28.3	29.1	28.6	32.7	28.4	25.7	28.0	31.1	31.4	29.7
Dry Gluten (14% mb), %	11.3	10.1	9.0	7.9	9.6	10.2	10.0	11.6	9.9	9.0	9.6	11.1	11.1	10.4
100g BAKING TEST														
Baking water absorption, %	61.5	60.3	59.3	58.2	59.5	60.4	60.2	62.3	60.5	59.6	59.9	62.4	61.8	61.1
Loaf volume, cm ³	902	853	803	727	868	847	843	882	824	766	789	853	846	832
Evaluation	1	0	0	0	0	0	0	2	1	1	1	2	2	1
FARINOGRAM														
Water absorption, %	62.3	61.3	60.5	59.3	58.3	60.6	61.0	64.2	62.7	61.7	62.3	64.0	63.8	63.2
Development time, min	4.8	3.4	2.9	2.0	2.7	3.7	3.5	7.0	5.3	5.0	4.0	4.7	5.2	5.5
Stability, mm	8.4	6.8	5.7	3.8	4.9	6.9	6.6	9.1	7.3	7.5	6.0	7.6	8.1	7.8
Mixing tolerance index, BU	39	44	52	71	71	48	49	33	39	38	43	40	37	37

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No. of samples	26	28	20	10	5	11	100	164	93	48	23	16	28	372
ALVEOGRAM														
Strength (S) , cm ²	42.4	36.5	32.7	25.0	26.8	35.4	35.5	43.1	32.6	30.5	29.2	39.4	39.5	36.2
Stability (P), mm	93	90	90	87	61	83	89	98	91	92	91	102	98	95
Distensibility (L), mm	97	86	75	58	101	90	85	94	78	69	70	78	87	81
P/L	1.03	1.13	1.31	1.80	0.61	0.97	1.17	1.08	1.21	1.44	1.55	1.57	1.28	1.29
EXTENSOGRAM														
Strength, cm ²	96	85	74	61	71	87	83	110	93	85	80	109	101	97
Max. height, BU	355	344	327	304	295	345	337	381	357	358	323	378	371	362
Extensibility, mm	187	174	158	139	171	173	170	204	181	166	170	203	193	187
MIXOGRAM														
Peak time, min	2.6	2.6	2.7	2.8	2.8	2.5	2.6	2.8	2.6	2.8	2.6	3.2	2.8	2.8
Absorption, %	61.8	60.4	59.4	58.5	60.3	60.6	60.4	62.2	60.4	59.6	59.8	62.3	61.7	61.0
MYCOTOXINS														
Aflatoxin, ppb [max.value]	1.00 [4.00]							0 [0]						
Deoxynivalenol, ppm [max. value]	0.05 [0.48]							0 [0]						
Ochratoxin A, ppb [max. value]	0.17 [1.00]							0 [0]						
No. of samples	30							30						