

RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2008/2009 and 2010/2011 Seasons

Country of origin	RSA Crop Average 2008/2009							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	126	121	101	49	16	67	480	164	93	48	23	16	28	372
WHEAT GRADING														
Protein (12% mb), %	13.27	12.00	11.25	10.69	12.69	11.54	12.00	12.91	11.53	10.69	11.20	13.31	12.28	12.14
Moisture, %	11.5	11.1	11.0	10.9	11.6	11.0	11.2	11.8	11.7	11.6	11.6	12.2	11.8	11.8
Falling number, sec	364	395	382	346	364	393	378	385	389	371	359	180	358	372
1000 Kernel mass (13% mb), g	37.5	38.5	39.1	40.6	36.6	37.4	38.3	39.1	40.0	39.9	40.8	39.3	38.5	39.5
Hlm (dirty), kg/hl	78.6	77.8	77.2	77.4	76.0	76.4	77.6	80.9	80.4	80.6	80.8	76.6	78.1	80.3
Screenings (<1,8mm), %	1.36	1.52	1.74	1.33	2.76	2.77	1.72	1.34	1.61	1.51	2.66	1.49	3.48	1.68
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.01	0.13	0.00	0.01	0.00	0.00	0.00	0.00	0.07	0.00	0.01
Foreign matter, %	0.09	0.09	0.08	0.10	0.29	0.17	0.11	0.07	0.08	0.07	0.10	0.42	0.18	0.10
Other grain & unthreshed ears, %	0.20	0.24	0.29	0.26	0.32	0.34	0.26	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Immature kernels, %	0.12	0.07	0.04	0.05	0.04	0.06	0.07	0.06	0.02	0.02	0.02	0.10	0.06	0.04
Insect damaged kernels, %	0.27	0.42	0.46	0.54	4.02	1.13	0.62	0.24	0.28	0.29	0.27	0.28	0.35	0.27
Heavily frost damaged kernels, %	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.01
Sprouted kernels, %	0.10	0.09	0.11	0.10	1.01	0.14	0.13	0.04	0.03	0.03	0.06	1.43	0.15	0.11
Total damaged kernels, %	0.49	0.58	0.62	0.75	5.07	1.40	0.85	0.34	0.33	0.35	0.35	1.83	0.56	0.42
Combined deviations, %	2.14	2.42	2.71	2.27	8.44	4.49	2.88	2.03	2.36	2.26	3.55	3.99	5.07	2.55
Field fungi, %	0.08	0.12	0.09	0.04	0.23	0.12	0.10	0.18	0.12	0.10	0.14	1.12	0.29	0.20
Storage fungi, %	0.01	0.01	0.01	0.00	0.04	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	22	23	22	12	5	16	100	29	24	17	11	8	10	99
BÜHLER EXTRACTION, %	76.0	76.1	75.7	75.2	75.1	75.2	75.7	75.1	75.1	75.0	74.7	74.2	74.4	74.9
FLOUR														
Colour, KJ	-1.3	-1.7	-1.7	-1.6	-0.9	-1.5	-1.5	-2.0	-2.1	-2.0	-1.9	0.4	-1.5	-1.8
Protein (12% mb), %	12.1	11.1	10.6	10.5	11.3	11.0	11.1	12.0	10.5	9.7	9.8	12.1	11.5	11.0
Wet Gluten (14% mb), %	-	-	-	-	-	-	-	32.7	28.4	25.7	28.0	31.1	31.4	29.7
Dry Gluten (14% mb), %	-	-	-	-	-	-	-	11.6	9.9	9.0	9.6	11.1	11.1	10.4
100g BAKING TEST														
Baking water absorption, %	61.9	60.8	60.0	60.0	60.1	60.3	60.7	62.3	60.5	59.6	59.9	62.4	61.8	61.1
Loaf volume, cm ³	956	909	870	849	926	892	902	882	824	766	789	853	846	832
Evaluation	1	0	0	1	0	0	0	2	1	1	1	2	2	1
FARINOGRAM														
Water absorption, %	62.2	61.1	60.4	60.9	60.6	60.7	61.1	64.2	62.7	61.7	62.3	64.0	63.8	63.2
Development time, min	5.0	4.1	3.6	3.1	3.7	3.8	4.0	7.0	5.3	5.0	4.0	4.7	5.2	5.5
Stability, mm	8.6	7.7	7.3	6.8	7.4	7.4	7.6	9.1	7.3	7.5	6.0	7.6	8.1	7.8
Mixing tolerance index, BU	42	42	44	46	43	45	43	33	39	38	43	40	37	37

RSA Crop Quality of 2008/2009 and 2010/2011 Seasons

Country of origin	RSA Crop Average 2008/2009							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	22	23	22	12	5	16	100	164	93	48	23	16	28	372
ALVEOGRAM														
Strength (S) , cm ²	42.4	38.0	35.6	35.8	36.6	37.2	38.0	43.1	32.6	30.5	29.2	39.4	39.5	36.2
Stability (P), mm	85	83	82	87	78	82	83	98	91	92	91	102	98	95
Distensibility (L), mm	111	103	95	88	114	101	101	94	78	69	70	78	87	81
P/L	0.80	0.86	0.93	1.10	0.91	0.94	0.90	1.08	1.21	1.44	1.55	1.57	1.28	1.29
EXTENSOGRAM														
Strength, cm ²	101	89	83	85	89	90	90	110	93	85	80	109	101	97
Max. height, BU	348	330	330	337	325	340	336	381	357	358	323	378	371	362
Extensibility, mm	201	184	172	174	187	179	183	204	181	166	170	203	193	187
MIXOGRAM														
Peak time, min	2.5	2.6	2.7	2.7	2.8	2.7	2.6	2.8	2.6	2.8	2.6	3.2	2.8	2.8
Absorption, %	62.3	61.0	60.6	60.6	61.4	61.1	61.2	62.2	60.4	59.6	59.8	62.3	61.7	61.0
MYCOTOXINS														
Aflatoxin, ppb [max.value]	1.23 [3.00]							0 [0]						
Deoxynivalenol, ppm [max. value]	0.47 [3.00]							0 [0]						
Ochratoxin A, ppb [max. value]	0.03 [1.00]							0 [0]						
No. of samples	30							30						