

RSA WHEAT CROP QUALITY SUMMARY

RSA Crop Quality 2010/2011 and 2011/2012 Seasons

Country of origin	RSA Crop Average 2010/2011							RSA Crop Average 2011/2012						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	164	93	48	23	28	16	372	176	120	61	39	25	12	433
WHEAT GRADING														
Protein (12% mb), %	12.91	11.53	10.69	11.20	12.28	13.31	12.14	12.78	11.52	10.48	10.33	11.72	10.78	11.77
Moisture, %	11.8	11.7	11.6	11.6	11.8	12.2	11.8	11.1	11.0	10.9	10.9	11.0	11.4	11.0
Falling number, sec	385	389	371	359	358	180	372	397	393	384	372	376	274	387
1000 Kernel mass (13% mb), g	39.1	40.0	39.9	40.8	38.5	39.3	39.5	37.7	38.8	38.9	38.2	34.1	36.7	38.0
Hlm (dirty), kg/hl	80.9	80.4	80.6	80.8	78.1	76.6	80.3	81.1	81.0	80.7	79.9	78.8	79.9	80.7
Screenings (<1,8mm), %	1.34	1.61	1.51	2.66	3.48	1.49	1.68	1.32	1.36	1.36	2.21	3.20	2.62	1.56
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.07	0.08	0.07	0.10	0.18	0.42	0.10	0.08	0.09	0.10	0.10	0.14	0.13	0.09
Other grain & unthreshed ears, %	0.28	0.34	0.33	0.43	0.85	0.26	0.35	0.24	0.29	0.27	0.30	0.64	0.20	0.28
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, %	0.06	0.02	0.02	0.02	0.06	0.10	0.04	0.05	0.04	0.02	0.03	0.03	0.03	0.04
Insect damaged kernels, %	0.24	0.28	0.29	0.27	0.35	0.28	0.27	0.37	0.43	0.43	0.36	0.84	0.24	0.42
Heavily frost damaged kernels, %	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sprouted kernels, %	0.04	0.03	0.03	0.06	0.15	1.43	0.11	0.03	0.02	0.04	0.02	0.10	0.42	0.04
Total damaged kernels, %	0.34	0.33	0.35	0.35	0.56	1.83	0.42	0.46	0.48	0.49	0.41	0.96	0.70	0.50
Combined deviations, %	2.03	2.36	2.26	3.55	5.07	3.99	2.55	2.10	2.23	2.23	3.06	4.94	3.65	2.45
Field fungi, %	0.18	0.12	0.10	0.14	0.29	1.12	0.20	0.10	0.11	0.14	0.19	0.06	0.06	0.12
Storage fungi, %	0.02	0.01	0.01	0.02	0.03	0.14	0.02	0.01	0.01	0.02	0.02	0.01	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 (<i>Crotalaria spp.</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Noxious seeds (<i>Agronome mexicana</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Live insects	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	29	24	17	11	10	8	99	28	23	15	15	8	2	90
BÜHLER EXTRACTION, %	75.1	75.1	75.0	74.7	74.4	74.2	74.9	74.4	74.2	74.8	73.8	72.8	73.3	74.1
FLOUR														
Colour, KJ	-2.0	-2.1	-2.0	-1.9	-1.5	0.4	-1.8	-2.7	-2.7	-3.0	-2.8	-2.7	-3.0	-2.8
Protein (12% mb), %	12.0	10.5	9.7	9.8	11.5	12.1	11.0	11.7	10.5	9.6	9.6	10.6	9.7	10.6
Wet Gluten (14% mb), %	32.7	28.4	25.7	28.0	31.4	31.1	29.7	32.0	28.4	26.0	26.0	28.5	25.6	28.7
Dry Gluten (14% mb), %	11.6	9.9	9.0	9.6	11.1	11.1	10.4	11.1	9.8	8.8	8.8	9.7	9.0	9.9
100g BAKING TEST														
Baking water absorption, %	62.3	60.5	59.6	59.9	61.8	62.4	61.1	61.7	60.3	59.3	59.2	60.6	59.1	60.4
Loaf volume, cm ³	882	824	766	789	846	853	832	916	847	811	802	821	778	852
Evaluation	2	1	1	1	2	2	1	0	0	0	0	1	1	0
FARINOGRAM														
Water absorption, %	64.2	62.7	61.7	62.3	63.8	64.0	63.2	62.3	61.3	60.9	60.3	60.7	60.1	61.3
Development time, min	7.0	5.3	5.0	4.0	5.2	4.7	5.5	5.6	3.8	3.2	2.8	4.4	3.1	4.1
Stability, mm	9.1	7.3	7.5	6.0	8.1	7.6	7.8	10.7	8.1	6.7	6.8	8.9	6.4	8.5
Mixing tolerance index, BU	33	39	38	43	37	40	37	34	39	47	43	37	50	39

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No. of samples	29	24	17	11	10	8	99	28	23	14	15	8	2	90
ALVEOGRAM														
Strength (S) , cm ²	43.1	32.6	30.5	29.2	39.5	39.4	36.2	41.7	34.6	29.4	29.8	33.7	30.4	35.0
Stability (P), mm	98	91	92	91	98	102	95	85	83	80	79	82	78	82
Distensibility (L), mm	94	78	69	70	87	78	81	112	94	86	89	96	86	98
P/L	1.08	1.21	1.44	1.55	1.28	1.57	1.29	0.79	0.92	0.97	0.97	0.90	0.90	0.89
EXTENSOGRAM														
Strength, cm ²	110	93	85	80	101	109	97	110	87	72	74	86	82	90
Max. height, BU	381	357	358	323	371	378	362	379	337	294	311	349	315	340
Extensibility, mm	204	181	166	170	193	203	187	211	184	174	170	175	183	188
MIXOGRAM														
Peak time, min	2.8	2.6	2.8	2.6	2.8	3.2	2.8	2.9	3.0	2.8	3.1	3.3	3.2	3.0
Absorption, %	62.2	60.4	59.6	59.8	61.7	62.3	61.0	61.9	60.4	59.4	59.4	60.6	59.5	60.5
MYCOTOXINS														
Afla G ₁ (µg/kg) [max. value]	0 [0]							0 [0]						
Afla B ₁ (µg/kg) [max. value]	0 [0]							0 [0]						
Afla G ₂ (µg/kg) [max. value]	0 [0]							0 [0]						
Afla B ₂ (µg/kg) [max. value]	0 [0]							0 [0]						
Fum B ₁ (µg/kg) [max. value]	0 [0]							0 [0]						
Fum B ₂ (µg/kg) [max. value]	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	0 [0]							6 [119]						
Ochratoxin A (µg/kg) [max. value]	0 [0]							0 [0]						
Zearalenone (µg/kg) [max. value]	0 [0]							0 [0]						
T-2 Toxin (µg/kg) [max. value]	0 [0]							0 [0]						
No. of samples	30							40						