

Table 9: Summary of the quality results of imported wheat during the 2023/24 season

Quality parameter	Argentina				Australia				Canada				Estonia				Latvia				Lithuania			
	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev
Hectolitre mass, kg/hl	76.2	76.1	76.4	0.15	82.2	79.8	92.2	2.19	83.4	83.3	83.5	0.14	79.7	79.4	80.5	0.45	77.2	76.0	78.3	0.77	78.1	70.9	81.8	2.41
Screenings (<1.8mm), %	2.15	1.58	2.56	0.51	2.46	1.03	10.92	1.97	1.35	1.34	1.36	0.01	0.81	0.72	0.90	0.07	1.69	0.98	3.00	0.62	1.38	0.45	2.63	0.53
1000 Kernel mass, g (13 % mb)	34.6	33.0	37.5	2.49	35.4	22.2	45.3	4.30	33.8	33.3	34.2	0.64	42.4	37.4	44.4	2.85	41.6	36.7	44.2	1.98	43.0	35.6	49.7	2.76
WWF Moisture, %	11.9	11.8	12.2	0.23	10.8	9.3	12.5	0.92	12.9	12.7	13.0	0.21	11.9	11.3	12.3	0.42	12.3	11.3	14.4	0.75	12.4	11.4	13.9	0.54
WWF Protein (12% mb), %	11.5	11.5	11.5	0.03	12.5	11.4	13.8	0.66	14.8	14.8	14.8	0.01	11.3	11.2	11.3	0.06	11.6	11.1	12.6	0.55	11.5	10.6	12.5	0.46
WWF Falling number, sec	284	277	297	11.02	513	316	711	96.35	375	365	385	14.14	308	291	327	14.49	312	258	378	31.02	342	132	449	60.06
Number of samples	3			30				2				5				15				44				
Extraction, % (Bühler)	72.7	72.4	72.9	0.25	71.9	69.9	73.7	1.21	71.5	71.3	71.6	0.21	72.6	72.1	73.0	0.36	73.0	71.5	73.9	0.80	74.0	72.6	75.9	0.70
Flour moisture, %	13.5	13.2	13.7	0.25	13.3	12.5	13.8	0.33	14.5	14.4	14.5	0.07	12.9	12.4	13.4	0.41	13.6	13.0	14.1	0.36	13.6	12.5	14.5	0.47
Flour Protein, % (12 % mb)	10.3	10.3	10.3	0.0	11.4	9.9	12.6	0.7	13.6	13.6	13.7	0.0	10.0	9.9	10.1	0.1	10.2	9.7	11.3	0.5	10.2	9.6	11.2	0.4
Ash, % (db)	0.56	0.56	0.56	0.00	0.57	0.48	0.70	0.04	0.55	0.55	0.55	0.00	0.53	0.52	0.55	0.01	0.55	0.49	0.63	0.05	0.50	0.44	0.61	0.03
Konica Minolta CM-5 colour, L*	93.21	93.16	93.28	0.06	93.94	92.79	94.29	0.30	92.83	92.80	92.85	0.04	93.18	93.00	93.33	0.14	92.96	90.73	93.39	0.67	93.11	91.28	93.57	0.41
Konica Minolta CM-5 colour, a*	0.43	0.43	0.43	0.00	0.53	0.39	0.62	0.06	0.68	0.67	0.68	0.01	0.48	0.47	0.49	0.01	0.48	0.42	0.54	0.03	0.51	0.36	0.62	0.06
Konica Minolta CM-5 colour, b*	10.35	10.32	10.37	0.03	9.81	8.94	10.51	0.44	10.27	10.23	10.31	0.06	9.67	9.56	9.84	0.10	9.43	0.74	11.24	2.46	10.07	9.18	10.52	0.30
Gluten																								
Wet gluten, % (14 % mb)	25.6	24.9	26.3	0.70	29.6	25.4	33.8	2.28	33.6	33.3	33.8	0.35	26.7	25.7	27.6	0.68	25.1	24.2	27.6	0.96	25.4	16.2	28.3	1.93
Dry gluten, % (14 % mb)	8.4	8.3	8.5	0.12	10.7	8.6	29.1	3.59	11.9	11.7	12.0	0.21	8.9	8.7	9.1	0.18	8.5	8.1	9.1	0.30	8.6	6.0	9.8	0.61
Gluten Index	98	97	99	1.00	98	97	99	0.78	97	96	98	1.41	97	95	99	1.48	98	96	99	1.01	98	97	99	0.70
Farinogram																								
Water absorption, % (14% mb)	55.8	55.7	55.8	0.06	59.4	54.5	62.5	1.71	61.4	61.1	61.6	0.35	56.3	55.5	56.9	0.58	56.7	56.1	59.7	0.86	55.8	54.1	57.5	0.76
Dev. time,min	1.4	1.3	1.4	0.06	6.5	1.4	9.1	1.87	7.8	7.2	8.3	0.78	2.1	1.4	4.3	1.24	2.4	1.4	7.4	1.88	2.0	1.3	10.2	1.62
Stability, mm	10.2	5.3	18.1	6.91	17.7	7.1	20.0	3.38	20.0	20.0	20.0	0.00	9.4	8.3	10.1	0.75	7.7	3.3	12.4	3.25	10.1	2.3	20.0	5.12
Alveogram																								
Strength, cm²	39.1	38.4	39.6	0.62	50.0	34.1	58.9	5.13	63.7	62.8	64.5	1.20	32.1	31.0	33.5	1.04	35.3	22.0	40.4	4.23	37.0	32.4	44.2	2.69
Stability, mm	83	82	84	1.15	86	68	95	6.17	94	92	96	2.83	73	71	77	2.55	81	74	92	4.58	76	60	115	8.71
Distensibility, mm	89	88	89	0.58	129	87	164	15.73	138	131	144	9.19	96	87	101	5.66	90	79	112	10.67	101	60	124	12.55
P/L	0.93	0.92	0.94	0.01	0.68	0.52	1.09	0.11	0.69	0.64	0.73	0.06	0.76	0.70	0.85	0.07	0.92	0.67	1.14	0.14	0.77	0.50	1.92	0.23
Extensogram																								
Strength, cm²	126	118	138	10.58	147	98	179	18.69	160	158	161	2.12	87	83	94	4.39	98	82	120	8.88	110	88	139	11.26
Max. height, BU	528	488	586	51.60	543	403	658	50.83	565	557	572	10.61	367	367	425	22.98	476	435	586	43.96	497	363	629	47.84
Extensibility, mm	180	155	214	30.37	202	153	234	19.02	215	214	215	0.71	160	157	165	3.16	151	105	177	17.19	162	127	190	11.40
Mixogram																								
Water absorption, % (14% mb)	60.1	60.1	60.1	0.00	61.4	59.7	63.0	0.84	64.5	64.4	64.5	0.07	59.8	59.7	59.9	0.07	60.1	59.5	61.3	0.60	60.1	59.4	61.2	0.46
Peak time, min	5.6	5.4	5.7	0.15	3.8	3.0	5.3	0.51	3.6	3.5	3.6	0.07	4.0	3.4	4.4	0.39	4.6	3.5	5.4	0.44	4.5	3.6	5.5	0.42
100 g Baking Test																								
Loaf volume, cm³	952	942	964	11.24	1077	952	1192	52.92	1244	1220	1268	33.94	953	900	1000	36.89	980	786	1111	74.76	982	774	1073	67.76
Number of samples	3			30				2				5				15				44				

Table 9: Summary of the quality results of imported wheat during the 2023/24 season
(continue)

Quality parameter	Poland			Russian Federation			USA			RSA crop average 2023/24		
	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max
Hectolitre mass, kg/hl	78.2	76.0	80.5	76.8	73.8	78.8	79.2	77.9	80.1	80.7	69.6	86.3
Screenings (<1.8mm), %	2.08	0.73	3.70	2.66	1.07	5.59	1.44	1.05	1.90	1.45	0.00	9.18
1000 Kernel mass, g (13 % mb)	38.7	35.4	41.5	38.3	31.6	44.0	36.4	35.8	36.9	39.1	24.9	47.3
WWF Moisture, %	12.1	11.3	13.1	11.8	10.9	13.1	12.4	11.8	13.2	11.1	8.4	13.1
WWF Protein (12% mb), %	11.0	9.2	12.5	11.2	10.8	12.2	9.4	9.2	9.4	11.8	8.9	15.1
WWF Falling number, sec	329	238	462	47.20	353	548	79.23	348	404	375	197	551
Number of samples	31			31			5			335		
Extraction, % (Bühler)	73.1	70.8	74.2	73.3	72.5	74.7	70.8	68.8	72.2	72.8	69.6	75.7
Flour moisture, %	13.6	12.7	14.3	13.3	12.4	13.8	13.1	12.9	13.5	13.6	12.9	14.1
Flour Protein, % (12 % mb)	9.6	7.5	11.4	1.0	9.9	10.9	7.4	7.3	7.5	10.8	8.6	14.1
Ash, % (db)	0.51	0.44	0.56	0.04	0.58	0.68	0.46	0.44	0.49	0.59	0.49	0.74
Konica Minolta CM-5 colour, L*	93.64	93.02	95.20	0.63	93.32	94.40	95.07	94.95	95.19	93.73	92.72	94.45
Konica Minolta CM-5 colour, a*	0.44	0.22	0.64	0.11	0.48	0.42	0.19	0.15	0.22	0.52	0.36	0.78
Konica Minolta CM-5 colour, b*	9.89	8.28	11.16	0.73	10.88	10.20	8.37	8.29	8.44	10.08	8.67	11.53
Gluten												
Wet gluten, % (14 % mb)	25.1	18.3	32.8	27.4	24.6	22.2	17.7*	-	-	29.1	22.9	35.8
Dry gluten, % (14 % mb)	8.5	5.8	11.0	0.96	8.2	7.0	5.6*	-	-	9.6	6.9	11.9
Gluten Index	98	95	99	1.03	98	95	98*	-	-	96	92	99
Fairingram												
Water absorption, % (14% mb)	55.3	50.5	60.4	2.29	56.3	53.5	49.2	48.3	50.0	60.0	54.6	63.4
Dev. time, min	1.6	1.0	4.2	0.61	1.7	1.3	1.0	1.0	1.0	5.1	1.4	14.4
Stability, min	6.4	1.2	16.1	3.97	8.4	2.6	2.0	1.3	4.2	11.2	5.6	20.0
Alveogram												
Strength, cm²	33.8	13.1	46.8	9.23	34.1	25.1	13.9	12.4	16.4	15.9	39.3	55.7
Stability, mm	72	41	87	13.80	78	57	39	32	48	7.98	80	132
Distensibility, mm	94	59	135	16.83	87	67	81	59	96	16.43	122	187
P/L	0.77	0.50	1.01	0.14	0.90	0.66	0.51	0.33	0.81	0.22	0.71	2.24
Extensogram												
Strength, cm²	91	56	122	15.66	91	78	56	48	65	6.11	110	163
Max. height, BU	422	257	531	49.43	455	387	349	224	422	75.67	403	612
Extensibility, mm	158	105	193	22.38	148	134	117	103	149	18.32	137	275
Mixogram												
Water absorption, % (14% mb)	59.5	57.8	61.4	0.90	59.7	59.4	57.7	57.7	57.8	60.8	58.5	65.1
Peak time, min	4.5	2.9	5.5	0.61	4.9	4.0	4.9	4.4	5.5	0.55	3.0	4.5
100 g Baking Test												
Loaf volume, cm³	953	725	1096	93.53	979	871	889	872	954	34.46	1038	1260
Number of samples	31			31			5			65		

*Note: Only one sample's gluten results are available due to clogging of the 88 µm Glutomatic sieve.