

Table 9: Summary of the quality results of imported wheat during the 2022/23 season

Quality parameter	Argentina			Australia			Brazil			Canada			Germany			Latvia							
	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max					
Hectolitre mass, kg/hl	80.2	78.5	81.1	1.00	80.7	79.5	82.6	0.83	80.4	75.0	82.3	2.30	85.0	-	-	77.8	74.7	81.2	2.54	77.2	76.2	0.39	
Screenings (<1.8mm), %	1.75	1.50	2.13	0.22	1.84	1.14	2.67	0.46	2.39	1.51	3.44	0.50	1.39	-	-	1.97	1.49	2.96	0.47	1.98	3.42	0.55	
1000 Kernel mass, g (13 % mb)	32.9	31.7	34.3	1.15	35.8	31.1	44.4	4.41	32.7	31.2	36.2	1.81	34.6	-	-	41.9	38.4	44.7	1.82	38.5	37.2	0.96	
WWF Protein (12% mb), %	10.9	10.5	11.7	0.52	11.7	10.0	12.4	0.64	10.9	10.4	12.0	0.56	14.44	-	-	10.8	10.4	11.3	0.36	11.5	11.2	0.23	
WWF Falling number, sec	403	388	428	14.60	377	147	528	106.38	383	288	435	39.29	384	-	-	369	294	438	45.83	365	319	28.74	
Number of samples	7			16			14			1			12			10							
Flour moisture, %	13.4	13.2	13.8	0.25	13.6	13.0	14.5	0.38	13.3	12.9	13.8	0.26	13.7	-	-	13.7	13.1	14.5	0.40	13.6	13.3	14.1	0.28
Flour Protein, % (12 % mb)	9.8	9.4	10.6	0.45	10.6	9.8	11.3	0.57	10.0	9.4	11.0	0.61	13.43	-	-	9.6	9.1	10.1	0.43	10.3	10.0	10.6	0.29
Ash, % (db)	0.57	0.54	0.60	0.03	0.56	0.50	0.62	0.04	0.57	0.51	0.62	0.03	0.58	-	-	0.51	0.46	0.56	0.03	0.57	0.55	0.61	0.02
Colour, KJ (wet)	-4.6	-5.0	-4.0	0.48	-4.7	-5.0	-4.2	0.22	-4.9	-5.0	-4.5	0.15	-5.0	-	-	-4.5	-5.0	-4.0	0.36	-4.4	-4.5	-4.3	0.07
Konica Minolta CM-5 colour, L*	93.47	93.30	93.69	0.15	94.04	93.73	94.32	0.19	93.16	92.78	93.35	0.18	93.22	-	-	93.51	93.29	93.71	0.14	93.43	93.36	93.50	0.05
Konica Minolta CM-5 colour, b*	10.73	9.98	11.44	0.66	9.00	8.22	9.46	0.41	11.35	10.87	11.75	0.30	10.85	-	-	10.38	10.12	10.79	0.19	9.86	9.55	9.99	0.12
Wet gluten, % (14 % mb)	24.0	21.7	26.3	1.43	29.0	24.4	31.9	1.86	25.7	23.6	29.0	2.08	33.6	-	-	25.2	22.1	27.8	2.18	27.1	26.1	28.0	0.73
Dry gluten, % (14 % mb)	8.2	7.6	8.9	0.51	9.6	8.2	10.4	0.66	8.4	7.6	9.8	0.75	11.4	-	-	8.3	7.3	9.3	0.71	9.1	8.6	9.7	0.34
Gluten Index	99	97	99	0.76	95	84	99	4.00	98	97	99	0.77	97	-	-	97	95	98	1.06	98	97	99	0.92
Farinogram																							
Water absorption, % (14% mb)	56.3	54.9	57.3	0.84	58.8	55.7	60.8	1.54	57.7	55.4	58.8	1.09	62.7	-	-	54.6	53.4	55.9	0.99	56.2	55.8	56.6	0.28
Development time, min	1.8	1.4	2.0	0.24	5.1	2.7	6.7	1.28	3.3	1.5	9.8	2.86	7.8	-	-	2.9	1.7	7.9	1.85	2.6	2.2	3.0	0.32
Stability, mm	12.0	2.4	18.9	6.75	9.3	7.0	11.6	1.46	10.4	1.8	17.4	5.82	14.0	-	-	10.3	4.5	14.7	3.09	9.3	8.1	10.7	0.91
Alveogram																							
Strength, cm ²	41.6	33.5	45.3	3.98	43.3	33.5	53.7	6.83	42.1	37.2	46.6	3.54	61.5	-	-	33.0	29.1	39.3	3.41	34.5	32.1	37.6	1.73
Stability, mm	99	90	107	6.77	84	71	104	9.64	102	73	118	15.09	89	-	-	71	63	79	5.88	71	70	73	0.88
Distensibility, mm	76	63	86	7.64	115	88	144	18.36	81	56	115	21.01	151	-	-	102	91	118	8.49	116	105	124	5.58
P/L	1.32	1.14	1.51	0.15	0.76	0.53	1.18	0.18	1.37	0.68	2.11	0.50	0.59	-	-	0.70	0.55	0.81	0.07	0.61	0.57	0.70	0.04
Extensogram																							
Strength, cm ²	105	90	132	15.08	114	74	136	21.54	103	88	120	9.59	132	-	-	90	76	106	12.38	82	75	88	4.65
Max. height, BU	525	431	618	68.97	445	326	524	69.79	506	438	564	35.26	379	-	-	438	389	476	32.22	360	327	390	18.71
Extensibility, mm	149	137	161	9.98	189	161	221	17.35	151	136	160	7.23	154	-	-	148	131	166	12.60	162	149	172	6.83
Mixogram																							
Water absorption, % (14% mb)	59.6	59.2	60.5	0.50	60.5	59.6	61.3	0.64	59.9	59.2	60.9	0.66	64.1	-	-	59.4	59.0	59.9	0.42	60.2	59.8	60.5	0.33
Peak time, min	5.3	4.5	5.9	0.50	3.8	2.9	9.9	1.67	4.6	4.0	5.2	0.39	3.0	-	-	3.8	3.3	4.4	0.34	3.5	3.2	3.9	0.29
100 g Baking Test																							
Loaf volume, cm ³	855	780	997	75.94	1016	866	1189	89.30	804	742	887	40.13	1142	-	-	917	839	974	45.90	1043	971	1096	44.10
Evaluation	0	0	0	0	0	0	0	0	0	0	1	0	0	-	-	0	0	0	0	0	0	0	0
Number of samples	7			16			14			1			12			10							

Table 9: Summary of the quality results of imported wheat during the 2022/23 season (continue)

Quality parameter	Lithuania			Poland			Russian Federation			USA			RSA crop average 2022/23							
	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Stdev	Stdev			
Hectolitre mass, kg/hl	76.4	74.2	78.0	78.8	74.2	82.0	80.8	77.4	83.7	2.13	79.7	79.6	79.7	70.6	85.7	2.05				
Screenings (<1.8mm), %	2.61	1.34	3.54	2.82	0.75	4.47	3.01	1.94	4.58	0.58	2.40	2.15	2.57	0.05	19.09	1.86				
1000 Kernel mass, g (13 % mb)	36.7	33.9	46.9	32.7	35.6	46.3	37.5	34.4	43.0	1.83	35.0	31.7	41.6	23.0	49.7	3.65				
WWF Protein (12% mb), %	11.3	10.8	12.3	0.43	11.5	12.2	11.1	10.9	11.6	0.18	10.2	9.7	10.8	8.1	15.7	1.27				
WWF Falling number, sec	339	289	424	35.34	349	280	437	37.43	347	253	446	341	376	116	858	71.37				
Number of samples	27			46			27			3			65							
Flour moisture, %	13.7	13.2	14.3	0.29	13.7	12.9	14.5	0.34	13.5	13.1	14.2	0.27	13.1	13.1	13.2	0.06	13.6	12.9	14.3	0.27
Flour Protein, % (12 % mb)	10.0	9.3	10.9	0.43	10.2	9.4	10.9	0.48	10.1	9.8	11.1	0.27	8.6	8.0	9.7	0.98	11.0	8.9	12.8	1.04
Ash, % (db)	0.53	0.42	0.59	0.04	0.52	0.43	0.57	0.03	0.55	0.49	0.75	0.05	0.50	0.48	0.53	0.03	0.59	0.51	0.66	0.03
Colour, KJ (wet)	-4.4	-5.0	-3.6	0.52	-4.4	-5.0	-3.6	0.41	-4.6	-5.0	-3.8	0.40	-5.0	-5.0	-5.0	0.00	-5.0	-4.4	-5.0	0.11
Konica Minolta CM-5 colour, L*	93.53	93.19	93.85	0.19	93.54	93.18	94.07	0.18	93.33	92.71	94.01	0.23	94.28	93.31	94.80	0.84	96.68	92.80	94.21	0.32
Konica Minolta CM-5 colour, b*	10.04	9.23	10.45	0.32	10.02	9.21	11.26	0.48	10.81	9.80	11.57	0.34	9.32	8.77	10.27	0.83	10.20	9.06	12.16	0.59
Wet gluten, % (14 % mb)	26.6	24.2	29.8	1.61	27.0	22.8	31.4	2.14	25.1	23.5	28.0	1.11	25.6	25.0	26.1	0.78	29.5	23.4	36.1	3.03
Dry gluten, % (14 % mb)	8.9	8.2	10.1	0.55	9.0	7.5	10.5	0.68	8.3	7.8	9.2	0.36	8.2	8.1	8.3	0.14	9.8	7.4	11.8	1.14
Gluten Index	98	96	100	0.98	96	82	100	3.21	98	96	100	0.83	96	95	96	0.71	96	87	99	2.88
Fainogram																				
Water absorption, % (14% mb)	55.2	53.6	56.8	0.97	55.7	51.6	57.3	1.18	56.2	55.1	57.5	0.59	51.9	49.3	56.7	4.19	59.4	55.7	61.9	1.44
Development time, min	2.4	1.9	3.5	0.44	2.5	1.4	5.8	0.84	2.1	1.7	2.8	0.28	1.3	1.0	1.7	0.36	5.4	2.2	14.4	1.77
Stability, mm	8.8	4.3	15.9	3.28	9.9	3.3	18.8	2.87	11.4	3.8	18.9	4.22	3.1	2.2	4.7	1.39	12.6	6.1	20.0	4.51
Alveogram																				
Strength, cm ²	36.0	31.2	39.8	2.20	36.9	20.5	46.8	4.56	38.3	32.3	48.0	3.51	22.3	15.0	36.2	12.07	41.4	24.9	59.8	7.40
Stability, mm	75	68	85	4.65	78	59	94	8.28	92	73	102	7.30	54	38	83	25.42	80	53	101	10.36
Distensibility, mm	106	87	122	10.92	100	64	125	15.04	79	65	93	7.64	89	83	96	6.56	130	67	192	28.04
P/L	0.72	0.56	0.98	0.11	0.80	0.57	1.21	0.17	1.18	0.83	1.45	0.17	0.59	0.45	0.86	0.23	0.66	0.30	1.24	0.21
Extensogram																				
Strength, cm ²	99	74	109	7.87	95	59	134	11.76	96	82	117	8.92	64	50	80	15.18	109	52	172	26.63
Max. height, BU	448	338	512	39.04	434	353	537	42.74	482	407	557	38.99	341	267	390	65.01	411	228	585	74.18
Extensibility, mm	161	144	189	10.57	161	105	186	15.23	148	130	175	10.04	133	115	151	18.01	192	139	256	26.03
Mixogram																				
Water absorption, % (14% mb)	59.8	59.1	60.8	0.47	60.1	59.2	60.8	0.51	59.9	59.6	61.0	0.29	58.6	58.1	59.5	0.81	60.9	58.7	63.2	1.21
Peak time, min	4.4	3.4	5.0	0.47	4.1	3.0	6.0	0.61	4.9	4.0	5.3	0.34	5.2	4.6	5.5	0.49	3.1	2.3	5.2	0.50
100 g Baking Test																				
Loaf volume, cm ³	938	687	1062	89.29	966	821	1107	79.21	918	830	1039	63.12	766	715	825	55.43	966	793	1196	98.27
Evaluation	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0.51
Number of samples	27			46			27			3			65							