

**Table 8: Summary of the quality results of imported wheat during the 2019/20 season**

Quality parameter	Canada				Finland				Germany				Latvia				Lithuania			
	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev
Hectolitre mass, kg/hl	83.0	77.7	85.5	2.49	83.7	83.6	83.8	0.14	79.9	76.8	82.0	1.48	79.0	75.8	80.2	1.62	78.7	76.3	81.3	1.40
Screenings (<1.8mm), %	2.90	1.32	7.50	2.01	1.10	1.06	1.14	0.06	2.22	1.39	3.47	0.57	1.78	1.58	1.89	0.11	2.09	1.22	2.64	0.44
1000 Kernel mass, g (13 % mb)	37.7	34.1	43.4	2.82	45.4	45.2	45.6	0.28	41.4	37.5	44.0	1.76	42.9	41.7	44.1	0.69	40.6	36.3	42.8	1.75
WWF Protein (12% mb), %	13.3	11.0	14.7	1.31	10.9	10.7	11.1	0.30	11.5	10.4	12.9	0.62	11.8	11.1	12.1	0.45	12.2	10.8	14.6	0.98
WWF Falling number, sec	390	322	540	63.58	344	338	349	7.78	382	292	498	45.01	347	288	389	39.70	353	309	443	35.43
<b>Number of samples</b>	<b>11</b>				<b>2</b>				<b>31</b>				<b>8</b>				<b>28</b>			
Flour moisture, %	13.6	12.5	14.4	0.55	14.2	14.0	14.3	0.21	13.5	12.4	14.6	0.46	13.7	13.4	13.9	0.16	13.8	13.0	14.5	0.38
Flour Protein, % (12 % mb)	12.3	10.0	13.6	1.24	9.7	9.5	9.9	0.32	10.2	9.4	11.5	0.57	10.6	9.9	11.0	0.53	11.0	9.6	13.6	0.98
Ash, % (db)	0.56	0.50	0.67	0.04	0.52	0.51	0.53	0.01	0.53	0.47	0.56	0.02	0.54	0.50	0.61	0.04	0.54	0.50	0.60	0.02
Colour, KJ (wet)	-4.6	-5.0	-4.0	0.41	-4.8	-4.9	-4.7	0.14	-4.2	-4.9	-3.4	0.36	-3.9	-4.3	-2.9	0.49	-4.1	-4.9	-3.7	0.31
Konica Minolta CM-5 colour, L*	93.20	92.65	93.74	0.37	93.62	93.57	93.67	0.07	93.54	92.87	93.82	0.24	93.42	92.96	93.54	0.19	93.51	92.59	94.05	0.28
Konica Minolta CM-5 colour, b*	10.65	10.13	12.34	0.58	9.27	9.22	9.31	0.06	10.45	9.78	12.10	0.53	9.57	9.02	9.84	0.32	9.91	9.26	10.77	0.33
Wet gluten, % (14 % mb)	32.9	24.5	37.5	4.47	24.5	23.9	25.0	0.78	27.3	24.4	32.6	1.88	27.8	25.2	29.6	2.00	29.2	24.4	36.6	3.09
Dry gluten, % (14 % mb)	11.5	8.5	13.1	1.57	8.4	8.2	8.5	0.21	9.3	8.3	11.0	0.65	9.8	9.0	10.4	0.58	10.2	8.3	12.8	1.11
Gluten Index	97	92	100	2.12	100	99	100	0.71	98	95	100	1.33	98	96	99	1.04	98	96	99	1.03
<b>Farinogram</b>																				
Water absorption, % (14% mb)	60.8	54.2	64.7	3.82	56.9	55.7	58.1	1.70	55.8	53.7	59.1	1.28	57.1	56.4	57.4	0.43	56.6	54.5	62.7	1.92
Development time, min	6.6	2.2	9.2	2.29	1.5	1.5	1.5	0.00	3.2	1.7	6.8	1.15	2.4	1.9	3.2	0.45	3.1	1.7	6.7	1.27
Stability, mm	13.4	10.9	15.8	1.50	2.9	2.6	3.1	0.35	8.8	4.8	14.5	2.09	10.1	8.5	11.5	1.13	13.5	9.7	18.1	2.05
<b>Alveogram</b>																				
Strength, cm <sup>2</sup>	49.3	32.0	56.4	9.17	32.1	31.0	33.2	1.56	34.6	26.8	44.6	4.16	37.1	32.3	41.0	2.73	40.3	34.7	51.4	4.24
Stability, mm	95	74	113	12.98	95	82	108	18.38	77	68	87	5.21	86	79	105	8.71	81	71	105	8.52
Distensibility, mm	105	87	130	12.31	66	48	83	24.75	99	77	120	12.05	94	64	118	18.97	107	84	141	14.75
P/L	0.91	0.68	1.13	0.14	1.62	0.99	2.25	0.89	0.78	0.59	0.96	0.11	0.97	0.68	1.64	0.32	0.77	0.52	1.11	0.17
<b>Extensogram</b>																				
Strength, cm <sup>2</sup>	112	91	138	13.11	79	76	82	4.24	90	66	105	10.35	95	90	102	3.83	104	91	126	9.76
Max. height, BU	390	330	436	29.31	374	361	387	18.38	359	298	471	37.13	371	339	414	22.33	394	353	484	24.58
Extensibility, mm	211	168	237	25.14	156	144	167	16.26	180	153	209	12.56	186	169	200	12.67	193	170	235	15.39
<b>Mixogram</b>																				
Water absorption, % (14% mb)	62.6	59.8	64.4	1.55	59.5	59.3	59.7	0.28	60.1	59.2	61.5	0.63	60.5	59.7	60.9	0.59	61.1	59.4	64.4	1.17
Peak time, min	3.4	2.8	4.0	0.45	4.3	4.2	4.4	0.14	3.5	2.9	4.5	0.43	3.8	3.1	4.6	0.53	4.1	3.0	5.1	0.56
<b>100 g Baking Test</b>																				
Loaf volume, cm <sup>3</sup>	1102	948	1212	73.40	922	897	946	34.65	1030	938	1125	54.13	1014	927	1070	64.12	1043	941	1258	63.66
Evaluation	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
<b>Number of samples</b>	<b>11</b>				<b>2</b>				<b>31</b>				<b>8</b>				<b>28</b>			

**Table 8: Summary of the quality results of imported wheat during the 2019/20 season (continue)**

Quality parameter	Poland				Russian Federation				Ukraine				USA				RSA crop average 2019/20			
	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev	Ave	Min	Max	Stdev
Hectolitre mass, kg/hl	77.7	75.1	80.2	1.42	78.9	77.2	80.9	1.04	80.4	78.3	82.5	1.69	78.0	76.4	80.9	1.19	78.9	58.8	85.8	3.80
Screenings (<1.8mm), %	3.59	2.23	4.89	0.67	4.01	1.44	7.52	1.52	4.88	2.16	7.27	2.13	3.87	2.42	6.13	1.21	1.92	0.05	11.87	1.61
1000 Kernel mass, g (13 % mb)	37.2	31.2	40.6	2.19	34.7	29.2	41.1	2.19	40.4	35.0	44.0	3.30	33.0	29.0	37.2	3.03	35.6	23.8	51.8	4.55
WWF Protein (12% mb), %	12.6	12.1	13.2	0.30	11.6	10.7	12.6	0.51	11.7	11.1	12.4	0.62	11.3	9.8	12.8	1.31	12.9	9.3	17.6	1.26
WWF Falling number, sec	356	261	485	52.00	401	277	527	77.89	384	315	467	46.82	429	313	718	135.79	353	46	584	95.90
<b>Number of samples</b>	<b>45</b>				<b>48</b>				<b>8</b>				<b>14</b>				<b>333</b>			
Flour moisture, %	13.9	12.9	14.9	0.41	13.4	11.8	14.2	0.44	13.8	13.1	14.3	0.36	13.9	13.5	14.3	0.27	13.8	12.9	14.4	0.30
Flour Protein, % (12 % mb)	11.3	10.8	12.1	0.31	10.5	9.7	11.5	0.51	10.4	9.6	11.3	0.81	9.9	7.9	11.6	1.59	11.9	9.1	14.4	1.16
Ash, % (db)	0.55	0.48	0.62	0.03	0.60	0.53	0.67	0.03	0.52	0.47	0.56	0.04	0.53	0.46	0.59	0.04	0.64	0.54	0.76	0.04
Colour, KJ (wet)	-4.1	-4.5	-3.6	0.19	-4.2	-4.5	-3.6	0.21	-4.4	-4.5	-4.2	0.08	-4.1	-4.5	-3.1	0.36	-4.7	-5.0	-2.6	0.44
Konica MinoIta CM-5 colour, L*	93.33	92.87	93.74	0.22	93.34	92.78	98.32	0.76	93.47	93.17	93.71	0.20	93.79	92.76	94.81	0.76	93.64	92.14	94.30	0.41
Konica MinoIta CM-5 colour, b*	10.10	9.64	10.62	0.25	11.55	9.88	12.84	0.77	10.72	10.36	12.10	0.57	9.72	8.69	10.61	0.74	10.32	8.70	12.22	0.65
Wet gluten, % (14 % mb)	29.8	28.0	33.3	1.14	26.2	22.7	30.6	1.99	26.8	24.4	29.0	1.86	24.6	17.8	30.6	5.04	31.1	23.7	39.1	3.37
Dry gluten, % (14 % mb)	10.1	9.5	10.9	0.39	8.9	7.7	10.8	0.65	9.3	8.6	10.0	0.61	8.3	6.1	10.6	1.79	10.6	7.9	13.4	1.25
Gluten Index	96	90	99	2.29	98	86	100	2.07	99	97	100	0.93	97	94	100	1.65	95	79	99	3.64
<b>Farinogram</b>																				
Water absorption, % (14% mb)	55.7	54.4	58.3	0.72	56.3	54.5	58.3	0.85	55.0	53.7	56.2	0.97	53.5	48.8	56.6	3.43	60.2	55.6	67.5	1.99
Development time, min	2.6	1.8	5.3	0.73	3.9	1.7	8.2	2.42	2.5	2.3	2.8	0.15	2.1	1.0	6.9	1.52	5.4	2.2	9.5	1.34
Stability, mm	8.5	6.1	11.1	1.23	10.3	3.0	16.7	3.74	11.7	9.7	13.6	1.16	5.5	1.4	11.8	4.17	8.1	3.3	17.2	2.62
<b>Alveogram</b>																				
Strength, cm <sup>2</sup>	36.7	29.1	41.0	2.67	35.3	9.8	45.4	5.43	34.8	30.0	41.6	3.34	29.4	12.8	43.6	12.71	42.6	21.2	66.1	7.85
Stability, mm	72	61	87	5.89	89	48	108	9.91	78	72	89	5.32	69	33	110	29.23	79	39	110	13.57
Distensibility, mm	112	77	140	15.73	76	56	145	16.16	92	70	117	16.18	89	51	129	26.62	143	81	273	35.22
P/L	0.67	0.46	1.08	0.15	1.22	0.50	1.79	0.29	0.88	0.62	1.27	0.20	0.91	0.31	2.16	0.63	0.60	0.14	1.36	0.23
<b>Extensogram</b>																				
Strength, cm <sup>2</sup>	94	81	106	5.96	88	2	113	15.35	99	88	109	6.77	87	50	124	28.32	112	69	187	22.70
Max. height, BU	368	316	418	23.91	401	41	476	60.94	422	401	458	18.05	393	281	533	95.63	383	242	552	58.04
Extensibility, mm	184	171	205	7.60	159	32	204	22.12	174	153	188	10.58	155	122	184	22.84	211	150	300	23.72
<b>Mixogram</b>																				
Water absorption, % (14% mb)	61.3	60.7	62.3	0.40	60.4	59.5	61.5	0.61	60.3	59.4	61.3	0.91	59.9	58.0	61.7	1.60	62.1	59.0	65.6	1.47
Peak time, min	3.9	3.1	4.8	0.39	4.5	2.8	6.3	0.63	4.3	4.1	4.6	0.17	5.2	3.8	6.8	0.98	2.6	1.4	4.5	0.44
<b>100 g Baking Test</b>																				
Loaf volume, cm <sup>3</sup>	1075	970	1161	35.59	987	724	1122	72.51	1035	871	1161	104.04	969	801	1094	103.77	1130	880	1298	91.33
Evaluation	0	0	0	0.00	0	0	5	0.72	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
<b>Number of samples</b>	<b>45</b>				<b>48</b>				<b>8</b>				<b>14</b>				<b>69</b>			