

Table 10: Summary of the quality results of imported wheat during the 2018/19 season

Quality parameter	Argentina			Canada			Czech Republic			Germany			Latvia			Lithuania									
	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max							
Hectolitre mass, kg/hl	79.8	78.6	80.7	0.93	81.5	78.2	85.2	2.57	83.1	82.2	84.0	0.88	81.4	78.9	83.7	1.49	80.9	80.8	80.9	0.07	78.8	75.4	81.1	1.88	
Screenings (<1.8mm), %	2.13	1.65	2.70	0.42	1.69	1.18	2.79	0.43	2.27	1.70	2.67	0.37	2.30	0.50	5.41	1.06	2.39	2.34	2.43	2.43	0.06	1.88	0.80	2.72	0.54
1000 Kernel mass, g (13 % mb)	35.1	34.3	35.8	0.48	38.9	34.5	46.6	4.33	40.7	40.4	40.9	0.23	40.0	29.9	47.6	3.35	38.0	37.7	38.3	38.3	0.42	42.6	36.6	47.0	2.64
WWF Protein (12% mb), %	11.2	10.5	12.5	0.70	13.0	11.2	13.9	1.00	12.4	12.4	12.5	0.06	11.5	10.4	12.8	0.77	11.6	11.5	11.6	11.6	0.08	11.7	11.2	12.8	0.52
WWF Falling number, sec	292	255	342	26.46	342	273	396	38.64	364	356	374	6.88	367	296	551	52.88	280	254	305	305	36.06	334	227	427	41.16
Number of samples	9			18			5			39			2			22									
Flour moisture, %	13.0	12.8	13.2	0.13	13.5	13.1	14.0	0.24	13.7	13.5	13.8	0.13	13.5	12.9	14.1	0.30	13.8	13.7	13.9	13.9	0.14	13.7	12.8	14.6	0.40
Flour Protein, % (12 % mb)	9.8	9.2	11.1	0.71	11.7	9.8	12.7	1.09	11.0	10.9	11.0	0.05	10.2	7.6	11.3	0.81	10.2	10.2	10.3	10.3	0.03	10.3	9.8	11.5	0.58
Ash, % (db)	0.57	0.55	0.61	0.02	0.55	0.52	0.58	0.02	0.49	0.48	0.50	0.01	0.51	0.46	0.65	0.04	0.52	0.51	0.53	0.53	0.01	0.56	0.50	0.60	0.03
Colour, KJ (wet)	-3.9	-4.3	-3.6	0.22	-4.1	-4.7	-3.0	0.59	-3.8	-3.9	-3.7	0.08	-3.9	-4.6	-3.4	0.26	-3.9	-3.9	-3.9	-3.9	0.00	-3.4	-3.8	-3.0	0.30
Konica Minolta CM-5 colour, L*	93.65	93.21	94.00	0.25	93.24	93.02	93.46	0.11	93.28	93.01	93.44	0.17	93.47	93.12	95.03	0.31	93.56	93.49	93.62	93.62	0.09	93.09	92.88	93.39	0.13
Konica Minolta CM-5 colour, b*	10.16	9.88	10.45	0.21	10.02	9.49	10.79	0.47	10.01	9.83	10.14	0.11	9.90	0.45	10.88	1.60	9.98	9.92	10.03	10.03	0.08	10.19	9.63	11.09	0.50
Wet gluten, % (14 % mb)	24.3	22.1	28.7	2.33	31.5	25.1	35.7	3.78	29.4	27.9	30.1	0.86	27.8	24.0	35.1	2.37	26.6	26.3	26.9	26.9	0.42	26.7	24.6	30.6	2.33
Dry gluten, % (14 % mb)	8.5	7.8	9.8	0.80	11.0	8.6	12.7	1.40	10.3	10.0	10.5	0.19	9.4	4.6	13.0	1.23	9.2	8.9	9.5	9.5	0.42	9.3	8.5	10.6	0.77
Gluten Index	99	98	100	0.71	97	94	98	1.34	97	95	99	1.48	95	55	99	6.86	99	99	99	99	0.00	98	95	100	1.34
Fariogram																									
Water absorption, % (14% mb)	54.6	53.7	55.6	0.61	60.8	57.5	62.6	1.71	57.7	57.3	57.9	0.23	57.4	52.6	59.3	1.24	56.7	56.4	57.0	57.0	0.42	58.3	57.0	60.1	1.02
Development time, min	1.9	1.5	2.5	0.31	5.8	1.9	8.3	2.46	3.5	2.7	4.0	0.51	2.8	1.7	4.7	0.75	2.3	2.0	2.5	2.5	0.35	2.4	1.7	4.2	0.68
Stability, min	9.3	6.4	13.0	2.28	11.8	3.1	15.9	4.29	10.1	9.8	10.4	0.24	9.6	2.6	17.3	3.39	10.1	8.3	11.9	11.9	2.55	8.8	2.7	18.5	6.07
Alveogram																									
Strength, cm ²	31.8	28.3	38.5	2.88	46.6	23.5	60.4	12.07	41.5	38.4	43.0	1.81	36.5	11.9	43.9	5.36	41.0	39.6	42.4	42.4	1.98	36.8	23.7	51.4	7.76
Stability, mm	66	60	71	3.64	103	89	120	8.87	91	87	96	4.28	90	32	101	10.79	89	84	94	94	7.07	111	98	129	8.62
Distensibility, mm	96	79	119	13.56	91	30	130	31.90	96	90	108	7.09	85	66	134	12.49	91	91	91	91	0.00	61	31	100	19.24
P/L	0.70	0.50	0.87	0.12	1.45	0.74	4.00	1.02	0.96	0.81	1.06	0.10	1.09	0.24	1.53	0.22	0.98	0.92	1.03	1.03	0.08	2.07	1.08	4.13	0.85
Extensogram																									
Strength, cm ²	102	79	120	12.06	120	86	144	19.60	90	87	94	2.77	93	41	121	14.35	110	106	114	114	5.66	103	83	122	11.00
Max. height, BU	436	368	499	37.88	448	404	520	30.10	373	364	387	8.58	388	140	556	65.61	438	437	438	438	0.71	458	371	577	53.17
Extensibility, mm	175	158	183	8.50	199	145	237	31.12	175	170	181	4.66	173	153	194	10.40	187	182	191	191	6.36	165	140	193	15.15
Mixogram																									
Water absorption, % (14% mb)	59.6	59.0	61.0	0.74	61.9	59.6	63.1	1.34	60.9	60.8	60.9	0.04	60.1	59.0	61.3	0.75	60.1	60.0	60.1	60.1	0.07	60.2	59.6	61.5	0.67
Peak time, min	4.9	4.0	5.3	0.40	3.6	3.0	5.0	0.63	3.3	2.9	3.5	0.25	3.4	2.0	4.6	0.51	4.3	4.0	4.5	4.5	0.35	5.0	3.6	7.5	1.13
100 g Baking Test																									
Loaf volume, cm ³	962	884	1076	59.48	1032	885	1152	68.05	1002	990	1023	13.70	986	919	1065	40.65	989	986	991	991	3.54	946	893	1017	39.84
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	0.00	0	0	0	0.00
Number of samples	9			18			5			39			2			22									

Table 10: Summary of the quality results of imported wheat during the 2018/19 season (continue)

Quality parameter	Poland			Russian Federation			Ukraine			USA			RSA crop average 2018/19							
	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Stdev				
Hectolitre mass, kg/hl	78.5	78.4	78.6	0.14	79.7	76.0	81.9	1.42	78.8	78.4	79.3	0.31	80.8	75.9	82.2	1.47	81.3	75.4	86.5	2.34
Screenings (<1.8mm), %	2.82	2.69	2.94	0.18	3.61	2.00	5.73	1.00	1.73	1.15	2.29	0.35	2.89	1.56	5.62	1.02	1.49	0.08	7.81	1.11
1000 Kernel mass, g (13 % mb)	39.9	39.1	40.6	1.06	34.7	30.0	43.2	3.42	43.4	37.2	47.5	4.86	33.2	27.5	41.6	4.41	39.2	27.9	54.3	3.68
WWF Protein (12% mb), %	12.4	12.3	12.6	0.20	11.3	10.7	12.9	0.43	12.0	11.7	12.2	0.19	11.4	9.5	12.8	0.92	12.1	9.0	16.4	1.12
WWF Falling number, sec	345	327	362	24.75	419	262	503	51.49	337	283	382	28.67	446	317	563	97.24	397	203	639	57.58
Number of samples	2			43			8			20			337							
Flour moisture, %	13.5	13.4	13.6	0.14	13.2	12.3	14.1	0.35	13.2	12.8	13.6	0.26	13.4	12.8	13.9	0.25	13.4	12.6	14.4	0.38
Flour Protein, % (12 % mb)	10.9	10.8	11.0	0.13	10.1	9.5	11.3	0.36	10.4	10.1	10.6	0.26	9.9	7.4	11.1	1.10	10.9	7.8	13.8	1.10
Ash, % (db)	0.50	0.47	0.53	0.04	0.57	0.52	0.65	0.03	0.51	0.48	0.59	0.04	0.53	0.45	0.62	0.05	0.60	0.53	0.71	0.03
Colour, KJ (wet)	-3.9	-4.0	-3.8	0.14	-3.9	-4.2	-3.2	0.22	-3.3	-3.8	-2.9	0.40	-3.9	-4.4	-3.4	0.26	-4.5	-5.0	-3.7	0.28
Konica Minolta CM-5 colour, L*	93.49	93.45	93.53	0.06	93.31	92.88	93.72	0.19	93.30	93.00	93.73	0.32	93.60	93.13	94.96	0.50	93.78	92.82	94.43	0.28
Konica Minolta CM-5 colour, b*	9.98	9.88	10.08	0.14	11.99	10.18	12.82	0.55	9.49	9.33	9.83	0.20	10.11	8.20	10.66	0.63	10.12	9.12	11.43	0.57
Wet gluten, % (14 % mb)	29.5	29.3	29.7	0.28	25.5	22.9	30.7	1.48	25.1	24.6	25.5	0.29	24.8	17.6	31.1	3.94	30.1	23.1	38.9	3.29
Dry gluten, % (14 % mb)	10.2	10.0	10.4	0.28	8.6	7.7	10.5	0.52	9.1	8.8	9.4	0.18	8.6	5.8	11.8	1.53	10.1	7.7	13.1	1.16
Gluten Index	99	98	99	0.71	98	92	100	1.62	100	99	100	0.35	97	94	100	2.04	94	71	99	4.37
Farinogram																				
Water absorption, % (14% mb)	57.1	56.0	58.2	1.56	56.5	54.2	60.1	1.65	54.9	53.5	56.0	1.07	55.0	46.2	57.5	3.48	60.5	53.8	64.7	1.83
Development time, min	2.6	2.5	2.7	0.14	3.6	1.5	8.0	2.31	2.1	1.9	2.3	0.13	2.4	1.0	4.3	0.93	5.0	1.4	8.0	1.04
Stability, min	13.6	11.3	15.8	3.18	11.4	2.3	17.5	3.29	6.6	4.6	9.1	1.40	9.8	1.7	19.0	5.28	7.0	3.0	12.6	1.73
Alveogram																				
Strength, cm ²	39.8	35.3	44.3	6.36	33.0	23.7	48.5	4.55	35.6	33.2	39.8	2.05	33.1	12.2	43.0	9.66	34.6	21.7	50.8	5.92
Stability, mm	90	77	103	18.38	93	62	117	13.23	83	77	90	5.37	85	29	105	23.95	82	62	102	8.88
Distensibility, mm	88	83	92	6.36	67	33	112	18.52	76	70	86	6.12	76	53	101	14.13	104	59	157	17.94
P/L	1.04	0.84	1.24	0.28	1.56	0.55	3.55	0.71	1.10	0.90	1.27	0.15	1.19	0.30	1.87	0.44	0.81	0.43	1.36	0.18
Extensogram																				
Strength, cm ²	99	90	108	12.73	87	70	117	9.85	113	95	142	15.49	95	48	119	17.16	92	58	132	15.72
Max. height, BU	395	368	421	37.48	417	349	474	27.85	472	409	590	55.49	428	244	508	68.92	350	251	491	49.61
Extensibility, mm	181	175	187	8.49	154	120	189	14.62	178	158	191	12.28	162	124	190	15.32	191	132	229	19.05
Mixogram																				
Water absorption, % (14% mb)	60.8	60.7	60.9	0.14	59.9	59.3	61.3	0.39	60.3	59.9	60.5	0.31	59.8	57.7	61.0	1.01	60.9	58.0	64.7	1.26
Peak time, min	4.4	4.1	4.6	0.35	4.7	3.3	5.9	0.52	5.6	5.4	5.8	0.15	4.9	3.0	6.9	1.18	2.6	1.9	4.5	0.37
100 g Baking Test																				
Loaf volume, cm ³	1002	1000	1004	2.83	898	718	1010	71.62	1017	892	1100	64.25	931	845	1032	60.55	1033	815	1237	93.42
Evaluation	0	0	0	0.00	0	0	2	0.37	0	0	0	0.00	0	0	0	0.00	0	0	0	0.00
Number of samples	2			43			8			20			70							