

## 2018/19 IMPORTED WHEAT QUALITY - ARGENTINA (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Argentina Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	1	3	5	-	-	-	9	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.5	11.6	10.6	-	-	-	11.2	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	10.9	10.6	10.0	-	-	-	10.3	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	255	285	303	-	-	-	292	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	35.3	35.5	34.9	-	-	-	35.1	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	79.4	78.7	80.6	-	-	-	79.8	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.70	2.50	1.79	-	-	-	2.13	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.12	0.21	0.11	-	-	-	0.15	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.14	0.15	0.22	-	-	-	0.19	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.14	0.09	0.00	-	-	-	0.04	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.60	0.60	0.43	-	-	-	0.51	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.40	0.28	0.14	-	-	-	0.22	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	1.14	0.97	0.58	-	-	-	0.77	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	4.10	3.83	2.69	-	-	-	3.23	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.00	0.00	0.00	-	-	-	0.00	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.32	0.21	0.34	-	-	-	0.30	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.08	0.03	0.00	-	-	-	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ergot, %	0.00	0.00	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	0	0	0	-	-	-	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	0	0	0	-	-	-	0	0	0	0	0	0	0	0
Live insects	No	No	No	-	-	-	No	No	No	No	No	No	No	No
Undesirable odour	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	1	3	5	-	-	-	9	28	21	11	7	3	-	70
Bühler Extraction, %	71.0	70.3	70.8	-	-	-	70.7	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ (wet)	-3.6	-3.8	-4.1	-	-	-	-3.9	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	93.21	93.47	93.84	-	-	-	93.65	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.49	0.41	0.41	-	-	-	0.42	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	10.08	9.91	10.32	-	-	-	10.16	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.61	0.56	0.57	-	-	-	0.57	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	11.1	10.2	9.2	-	-	-	9.8	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	28.7	25.7	22.6	-	-	-	24.3	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	9.8	9.0	7.9	-	-	-	8.5	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	98	99	99	-	-	-	99	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	61.0	60.0	59.0	-	-	-	59.6	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	981	1008	930	-	-	-	962	1088	1014	936	994	1085	-	1033
Evaluation	0	0	0	-	-	-	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	55.6	54.8	54.3	-	-	-	54.6	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	2.5	2.0	1.8	-	-	-	1.9	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	10.3	11.7	7.6	-	-	-	9.3	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	9	25	37	-	-	-	30	40	41	43	38	40	-	41
							<b>121</b>							
							<b>117</b>							

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Argentina Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	1	3	5	-	-	-	9	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	32.3	33.6	30.7	-	-	-	31.8	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	60	68	67	-	-	-	66	84	82	76	81	80	-	82
Distensibility (L), mm	119	96	91	-	-	-	96	114	100	95	87	118	-	104
P/L	0.50	0.72	0.74	-	-	-	0.70	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>122</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	-	113	95	-	-	-	102	101	90	76	85	96	-	92
Max. height, BU	-	470	415	-	-	-	436	364	351	323	344	348	-	350
Extensibility, mm	-	181	171	-	-	-	175	204	187	172	177	201	-	191
<b>123</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	4.0	4.9	5.0	-	-	-	4.9	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	61.0	60.0	59.0	-	-	-	59.6	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>124</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	503 [545]							<100 [361]						
15-ADON (µg/kg) [max. value]	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg)	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>2</b>							<b>40</b>						

## 2018/19 IMPORTED WHEAT QUALITY - CANADA (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Canada Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	5	4	-	-	4	5	18	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.9	11.3	-	-	13.8	13.7	13.0	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	10.7	12.5	-	-	12.0	12.2	11.8	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	369	376	-	-	319	306	342	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	35.0	46.3	-	-	37.0	38.5	38.9	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	84.7	78.4	-	-	80.8	81.6	81.5	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.07	1.35	-	-	1.99	1.35	1.69	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.00	0.00	-	-	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.10	0.10	-	-	0.10	0.08	0.09	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.24	0.51	-	-	0.29	0.22	0.30	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.02	0.02	-	-	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.00	0.02	-	-	0.00	0.04	0.02	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.05	0.32	-	-	0.12	0.03	0.12	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.11	0.16	-	-	0.20	0.11	0.14	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	0.18	0.52	-	-	0.34	0.19	0.29	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	2.58	2.47	-	-	2.71	1.83	2.37	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.00	0.00	-	-	8.21	6.35	3.59	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.13	0.14	-	-	0.20	0.15	0.15	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.00	0.00	-	-	0.10	0.05	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ergot, %	0.01	0.00	-	-	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	0	0	-	-	0	0	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	0	0	-	-	0	2	0	0	0	0	0	0	0	0
Live insects	No	No	-	-	No	No	No	No	No	No	No	No	No	No
Undesirable odour	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	5	4	-	-	4	5	18	28	21	11	7	3	-	70
Bühler Extraction, %	71.0	68.9	-	-	69.8	70.5	70.1	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-4.6	-3.1	-	-	-4.4	-4.3	-4.1	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	93.29	93.17	-	-	93.25	93.25	93.24	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.57	0.49	-	-	0.45	0.52	0.51	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	10.68	9.67	-	-	9.66	9.93	10.02	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.57	0.56	-	-	0.55	0.54	0.55	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	11.7	9.9	-	-	12.7	12.4	11.7	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	31.6	25.4	-	-	34.5	34.1	31.5	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	11.0	8.8	-	-	12.1	12.1	11.0	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	96	98	-	-	96	97	97	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	61.8	59.7	-	-	63.1	62.7	61.9	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	1065	936	-	-	1044	1066	1032	1088	1014	936	994	1085	-	1033
Evaluation	0	0	-	-	0	0	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	61.1	58.0	-	-	62.1	61.8	60.8	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	7.1	2.0	-	-	7.0	6.7	5.8	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	13.1	4.2	-	-	14.4	14.5	11.8	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	21	44	-	-	17	20	25	40	41	43	38	40	-	41
	<b>125</b>							<b>117</b>						

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Canada Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	5	4	-	-	4	5	18	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	47.3	26.3	-	-	55.9	54.7	46.6	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	94	115	-	-	101	103	103	84	82	76	81	80	-	82
Distensibility (L), mm	104	36	-	-	112	107	91	114	100	95	87	118	-	104
P/L	0.91	3.25	-	-	0.92	0.97	1.45	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>126</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	123	89	-	-	131	135	120	101	90	76	85	96	-	92
Max. height, BU	434	438	-	-	474	451	448	364	351	323	344	348	-	350
Extensibility, mm	213	149	-	-	211	223	199	204	187	172	177	201	-	191
<b>127</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	3.3	4.8	-	-	3.4	3.3	3.6	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	61.8	59.7	-	-	63.1	62.7	61.9	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>128</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	0 [<100]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg) [max. value]	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>6</b>							<b>40</b>						

## 2018/19 IMPORTED WHEAT QUALITY - CZECH REPUBLIC (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Czech Republic Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	5	-	-	-	-	-	5	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.4	-	-	-	-	-	12.4	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	11.1	-	-	-	-	-	11.1	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	364	-	-	-	-	-	364	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	40.7	-	-	-	-	-	40.7	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	83.1	-	-	-	-	-	83.1	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.27	-	-	-	-	-	2.27	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.00	-	-	-	-	-	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.04	-	-	-	-	-	0.04	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.16	-	-	-	-	-	0.16	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.00	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.00	-	-	-	-	-	0.00	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.00	-	-	-	-	-	0.00	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.00	-	-	-	-	-	0.00	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	0.00	-	-	-	-	-	0.00	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	2.47	-	-	-	-	-	2.47	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.10	-	-	-	-	-	0.10	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.00	-	-	-	-	-	0.00	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.00	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ergot, %	0.00	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	0	-	-	-	-	-	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	0	-	-	-	-	-	0	0	0	0	0	0	0	0
Live insects	No	-	-	-	-	-	No	No	No	No	No	No	No	No
Undesirable odour	No	-	-	-	-	-	No	No	No	No	No	No	No	No
No. of samples	5	-	-	-	-	-	5	28	21	11	7	3	-	70
<b>Bühler Extraction, %</b>	72.3	-	-	-	-	-	72.3	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-3.8	-	-	-	-	-	-3.8	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	93.28	-	-	-	-	-	93.28	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.54	-	-	-	-	-	0.54	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	10.01	-	-	-	-	-	10.01	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.49	-	-	-	-	-	0.49	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	11.0	-	-	-	-	-	11.0	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	29.4	-	-	-	-	-	29.4	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	10.3	-	-	-	-	-	10.3	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	97	-	-	-	-	-	97	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	60.9	-	-	-	-	-	60.9	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	1002	-	-	-	-	-	1002	1088	1014	936	994	1085	-	1033
Evaluation	0	-	-	-	-	-	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	57.7	-	-	-	-	-	57.7	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	3.5	-	-	-	-	-	3.5	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	10.1	-	-	-	-	-	10.1	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	23	-	-	-	-	-	23	40	41	43	38	40	-	41
129								117						

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Czech Republic Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	5	-	-	-	-	-	5	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	41.5	-	-	-	-	-	41.5	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	91	-	-	-	-	-	91	84	82	76	81	80	-	82
Distensibility (L), mm	96	-	-	-	-	-	96	114	100	95	87	118	-	104
P/L	0.96	-	-	-	-	-	0.96	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>130</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	90	-	-	-	-	-	90	101	90	76	85	96	-	92
Max. height, BU	373	-	-	-	-	-	373	364	351	323	344	348	-	350
Extensibility, mm	175	-	-	-	-	-	175	204	187	172	177	201	-	191
<b>131</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	3.3	-	-	-	-	-	3.3	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	60.9	-	-	-	-	-	60.9	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>132</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	0 [0]							<100 [361]						
15-ADON (µg/kg) [max. value]	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg) [max. value]	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>1</b>							<b>40</b>						

## 2018/19 IMPORTED WHEAT QUALITY - GERMANY (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Germany Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	9	11	10	3	6	-	39	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.5	11.3	10.8	11.8	11.7	-	11.5	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	10.8	11.0	11.1	10.2	10.7	-	10.9	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	381	345	343	358	433	-	367	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	39.6	41.5	41.3	41.0	35.4	-	40.0	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	81.5	81.3	81.7	81.4	80.9	-	81.4	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.02	1.87	1.89	3.56	3.56	-	2.30	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.10	0.09	0.12	0.11	0.28	-	0.13	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.28	0.50	0.71	0.72	1.00	-	0.60	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.00	0.00	0.00	0.00	0.04	-	0.01	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.03	0.01	0.00	0.07	0.07	-	0.02	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.06	0.03	0.02	0.12	0.64	-	0.13	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.05	0.09	0.00	0.00	0.06	-	0.05	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	0.14	0.12	0.02	0.19	0.48	-	0.16	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	2.54	2.58	2.74	4.57	5.32	-	3.18	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.09	0.02	0.00	0.00	0.00	-	0.03	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.12	0.20	0.07	0.17	0.18	-	0.14	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.00	0.02	0.02	0.00	0.00	-	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	0	0	0	0	0	-	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	0	0	0	0	0	-	0	0	0	0	0	0	0	0
Live insects	No	No	No	No	No	-	No	No	No	No	No	No	No	No
Undesirable odour	No	No	No	No	No	-	No	No	No	No	No	No	No	No
No. of samples	9	11	10	3	6	-	39	28	21	11	7	3	-	70
<b>Bühler Extraction, %</b>	71.8	71.7	71.8	71.3	70.2	-	71.5	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-3.9	-3.8	-4.0	-3.7	-3.8	-	-3.9	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	93.42	93.56	93.44	93.33	93.47	-	93.47	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.53	0.50	0.50	0.50	0.52	-	0.51	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	10.12	9.01	10.45	9.98	10.22	-	9.90	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.51	0.52	0.49	0.51	0.53	-	0.51	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	11.1	10.0	9.3	10.5	10.3	-	10.2	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	30.3	27.9	25.7	27.9	27.2	-	27.8	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	10.4	9.6	8.3	9.5	9.3	-	9.4	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	96	93	97	98	96	-	95	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	61.0	59.9	59.3	60.4	60.2	-	60.1	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	1030	960	973	1002	978	-	986	1088	1014	936	994	1085	-	1033
Evaluation	0	0	0	0	0	-	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	58.2	57.2	57.1	58.1	56.7	-	57.4	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	3.5	2.6	2.6	3.0	2.4	-	2.8	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	11.0	8.1	7.9	12.3	11.9	-	9.6	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	23	37	33	16	29	-	30	40	41	43	38	40	-	41
<b>133</b>														
<b>117</b>														

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Germany Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	9	11	10	3	6	-	39	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	39.8	35.0	34.5	36.1	38.1	-	36.5	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	90	88	90	97	92	-	90	84	82	76	81	80	-	82
Distensibility (L), mm	91	88	82	72	82	-	85	114	100	95	87	118	-	104
P/L	1.00	1.06	1.10	1.36	1.13	-	1.09	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>134</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	100	86	87	95	104	-	93	101	90	76	85	96	-	92
Max. height, BU	400	356	373	402	449	-	388	364	351	323	344	348	-	350
Extensibility, mm	182	175	166	172	170	-	173	204	187	172	177	201	-	191
<b>135</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	3.4	3.4	3.1	3.5	3.8	-	3.4	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	61.0	59.9	59.3	60.4	60.2	-	60.1	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>136</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	0 [<100]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg)	0 [0]							0 [0]						
HT-2 (µg/kg) [max. value]	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>14</b>							<b>40</b>						



2018/19 IMPORTED WHEAT QUALITY - LATVIA (29 Sep 2018 to 27 Sep 2019)

2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Latvia Average							RSA Crop Average							
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average	
No. of samples	-	2	-	-	-	-	2	153	88	29	14	48	5	337	
<b>WHEAT GRADING</b>															
Protein (12% mb), %	-	11.6	-	-	-	-	11.6	12.8	11.6	10.5	10.7	12.0	11.5	12.1	
Moisture, %	-	11.2	-	-	-	-	11.2	9.3	9.3	9.2	9.6	9.0	9.7	9.3	
Falling number, sec	-	280	-	-	-	-	280	402	401	378	354	400	359	397	
1000 Kernel mass (13% mb), g	-	38.0	-	-	-	-	38.0	38.9	39.7	39.9	37.0	39.0	42.9	39.2	
Hlm (dirty), kg/hl	-	80.9	-	-	-	-	80.9	81.7	81.7	82.0	79.9	79.5	82.3	81.3	
Screenings (<1.8 mm sieve), %	-	2.39	-	-	-	-	2.39	1.30	1.23	1.18	2.44	2.58	0.69	1.49	
Gravel, stones, turf and glass, %	-	0.00	-	-	-	-	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	
Foreign matter, %	-	0.07	-	-	-	-	0.07	0.14	0.13	0.11	0.14	0.27	0.12	0.15	
Other grain & unthreshed ears, %	-	0.28	-	-	-	-	0.28	0.31	0.36	0.31	0.42	1.03	0.09	0.43	
Heat damaged kernels, %	-	0.00	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	
Immature kernels, %	-	0.00	-	-	-	-	0.00	0.09	0.07	0.06	0.09	0.04	0.18	0.08	
Insect damaged kernels, %	-	0.27	-	-	-	-	0.27	0.49	0.47	0.53	0.49	0.81	1.50	0.55	
Sprouted kernels, %	-	0.08	-	-	-	-	0.08	0.02	0.02	0.01	0.00	0.10	0.16	0.03	
Total damaged kernels, %	-	0.35	-	-	-	-	0.35	0.60	0.56	0.60	0.58	0.95	1.94	0.66	
Combined deviations, %	-	3.09	-	-	-	-	3.09	2.35	2.29	2.20	3.58	4.83	2.85	2.73	
Heavily frost damaged kernels, %	-	0.00	-	-	-	-	0.00	0.01	0.06	0.00	0.00	0.50	8.68	0.22	
Field fungi, %	-	0.17	-	-	-	-	0.17	0.12	0.14	0.10	0.12	0.12	0.08	0.12	
Storage fungi, %	-	0.08	-	-	-	-	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ergot, %	-	0.00	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	-	0	-	-	-	-	0	0	0	0	0	0	0	0	
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	-	0	-	-	-	-	0	0	0	0	0	0	0	0	
Live insects	-	No	-	-	-	-	No	No	No	No	No	No	No	No	
Undesirable odour	-	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	-	2	-	-	-	-	2	28	21	11	7	3	-	70	
Bühler Extraction, %	-	72.0	-	-	-	-	72.0	71.5	71.7	71.5	69.2	70.7	-	71.3	
<b>FLOUR</b>															
Colour, KJ	-	-3.9	-	-	-	-	-3.9	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5	
Colour, Konica Minolta CM5 (dry)															
L*	-	93.56	-	-	-	-	93.56	93.74	93.80	93.89	93.61	93.99	-	93.78	
a*	-	0.50	-	-	-	-	0.50	0.45	0.45	0.44	0.48	0.41	-	0.45	
b*	-	9.98	-	-	-	-	9.98	10.04	10.05	10.23	10.65	9.82	-	10.12	
Ash (db), %	-	0.52	-	-	-	-	0.52	0.60	0.60	0.61	0.61	0.57	-	0.60	
Protein (12% mb), %	-	10.2	-	-	-	-	10.2	11.8	10.6	9.6	10.4	11.3	-	10.9	
Wet Gluten (14% mb), %	-	26.6	-	-	-	-	26.6	32.7	28.9	25.6	30.1	31.3	-	30.1	
Dry Gluten (14% mb), %	-	9.2	-	-	-	-	9.2	11.0	9.7	8.5	10.1	10.6	-	10.1	
Gluten Index	-	99	-	-	-	-	99	92	95	96	96	93	-	94	
<b>100 g BAKING TEST</b>															
Baking water absorption, %	-	60.1	-	-	-	-	60.1	61.9	60.5	59.4	60.5	61.3	-	60.9	
Loaf volume, cm <sup>3</sup>	-	989	-	-	-	-	989	1088	1014	936	994	1085	-	1033	
Evaluation	-	0	-	-	-	-	0	0	0	0	0	0	-	0	
<b>FARINOGRAM</b>															
Water absorption (14% mb), %	-	56.7	-	-	-	-	56.7	61.6	60.4	58.9	58.6	61.1	-	60.5	
Development time, min	-	2.3	-	-	-	-	2.3	5.4	4.9	4.5	4.5	4.5	-	5.0	
Stability, mm	-	10.1	-	-	-	-	10.1	7.4	6.8	6.4	7.1	6.8	-	7.0	
Mixing tolerance index, BU	-	31	-	-	-	-	31	40	41	43	38	40	-	41	
							<b>137</b>								<b>117</b>

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Latvia Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	-	2	-	-	-	-	2	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	-	41.0	-	-	-	-	41.0	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	-	89	-	-	-	-	89	84	82	76	81	80	-	82
Distensibility (L), mm	-	91	-	-	-	-	91	114	100	95	87	118	-	104
P/L	-	0.98	-	-	-	-	0.98	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>138</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	-	110	-	-	-	-	110	101	90	76	85	96	-	92
Max. height, BU	-	438	-	-	-	-	438	364	351	323	344	348	-	350
Extensibility, mm	-	187	-	-	-	-	187	204	187	172	177	201	-	191
<b>139</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	-	4.3	-	-	-	-	4.3	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	-	60.1	-	-	-	-	60.1	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>140</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	0 [0]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg)	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>1</b>							<b>40</b>						

## 2018/19 IMPORTED WHEAT QUALITY - LITHUANIA (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Lithuania Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	6	8	2	-	2	4	22	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.4	11.4	11.8	-	11.4	11.3	11.7	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	11.5	11.9	11.1	-	12.2	12.1	11.8	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	332	358	352	-	283	306	334	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	41.9	44.8	42.3	-	40.4	40.7	42.6	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	80.8	78.6	75.6	-	79.3	77.7	78.8	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.00	1.62	0.93	-	2.63	2.29	1.88	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.01	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.11	0.17	0.46	-	0.16	0.32	0.20	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.26	0.51	0.62	-	1.48	4.49	1.26	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.07	0.01	0.00	-	0.08	0.06	0.04	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.13	0.00	0.00	-	0.00	0.03	0.04	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.05	0.20	0.31	-	0.06	0.19	0.15	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.01	0.02	0.00	-	0.04	0.02	0.02	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	0.27	0.23	0.31	-	0.18	0.30	0.26	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	2.64	2.53	2.32	-	4.45	7.40	3.60	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.00	0.00	0.00	-	0.53	0.32	0.11	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.11	0.09	0.16	-	0.16	0.06	0.10	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.03	0.00	0.00	-	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	0	0	0	-	0	0	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	0	2	0	-	0	2	1	0	0	0	0	0	0	0
Live insects	No	No	No	-	No	No	No	No	No	No	No	No	No	No
Undesirable odour	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	6	8	2	-	2	4	22	28	21	11	7	3	-	70
Bühler Extraction, %	70.6	70.1	70.8	-	70.0	69.6	70.2	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-3.7	-3.2	-3.1	-	-3.4	-3.3	-3.4	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	92.97	93.08	93.06	-	93.23	93.24	93.09	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.61	0.53	0.53	-	0.52	0.46	0.54	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	10.95	9.87	9.85	-	10.25	9.85	10.19	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.55	0.55	0.56	-	0.59	0.58	0.56	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	11.2	10.0	10.3	-	10.1	9.8	10.3	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	30.3	25.3	25.1	-	26.7	25.1	26.7	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	10.4	8.8	9.0	-	9.2	8.7	9.3	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	97	99	99	-	99	99	98	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	61.2	59.8	60.2	-	59.9	59.6	60.2	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	1004	923	924	-	912	934	946	1088	1014	936	994	1085	-	1033
Evaluation	0	0	0	-	0	0	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	59.8	58.0	57.8	-	57.9	57.4	58.3	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	3.4	2.0	2.3	-	2.0	2.0	2.4	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	16.1	7.6	3.9	-	6.3	3.9	8.8	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	12	40	46	-	43	49	35	40	41	43	38	40	-	41
	<b>141</b>							<b>117</b>						

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Lithuania Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	6	8	2	-	2	4	22	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	46.8	32.3	32.3	-	37.2	32.8	36.8	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	111	114	123	-	103	104	111	84	82	76	81	80	-	82
Distensibility (L), mm	83	48	42	-	69	56	61	114	100	95	87	118	-	104
P/L	1.36	2.56	2.93	-	1.50	2.03	2.07	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>142</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	117	99	105	-	92	95	103	101	90	76	85	96	-	92
Max. height, BU	485	474	507	-	386	397	458	364	351	323	344	348	-	350
Extensibility, mm	180	152	151	-	174	173	165	204	187	172	177	201	-	191
<b>143</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	3.8	5.3	6.6	-	4.7	5.5	5.0	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	61.2	59.8	60.2	-	59.9	59.6	60.2	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>144</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	0 [0]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg)	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>8</b>							<b>40</b>						

## 2018/19 IMPORTED WHEAT QUALITY - POLAND (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Poland Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	2	-	-	-	-	-	2	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.4	-	-	-	-	-	12.4	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	11.9	-	-	-	-	-	11.9	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	345	-	-	-	-	-	345	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	39.9	-	-	-	-	-	39.9	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	78.5	-	-	-	-	-	78.5	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.82	-	-	-	-	-	2.82	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.00	-	-	-	-	-	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.11	-	-	-	-	-	0.11	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.59	-	-	-	-	-	0.59	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.04	-	-	-	-	-	0.04	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.00	-	-	-	-	-	0.00	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.00	-	-	-	-	-	0.00	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.12	-	-	-	-	-	0.12	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	0.16	-	-	-	-	-	0.16	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	3.68	-	-	-	-	-	3.68	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.00	-	-	-	-	-	0.00	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.16	-	-	-	-	-	0.16	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.00	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ergot, %	0.00	-	-	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	0	-	-	-	-	-	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	3	-	-	-	-	-	3	0	0	0	0	0	0	0
Live insects	No	-	-	-	-	-	No	No	No	No	No	No	No	No
Undesirable odour	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	2	-	-	-	-	-	2	28	21	11	7	3	-	70
Bühler Extraction, %	71.5	-	-	-	-	-	71.5	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-3.9	-	-	-	-	-	-3.9	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	93.49	-	-	-	-	-	93.49	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.48	-	-	-	-	-	0.48	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	9.98	-	-	-	-	-	9.98	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.50	-	-	-	-	-	0.50	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	10.9	-	-	-	-	-	10.9	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	29.5	-	-	-	-	-	29.5	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	10.2	-	-	-	-	-	10.2	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	99	-	-	-	-	-	99	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	60.8	-	-	-	-	-	60.8	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	1002	-	-	-	-	-	1002	1088	1014	936	994	1085	-	1033
Evaluation	0	-	-	-	-	-	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	57.1	-	-	-	-	-	57.1	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	2.6	-	-	-	-	-	2.6	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	13.6	-	-	-	-	-	13.6	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	23	-	-	-	-	-	23	40	41	43	38	40	-	41
	<b>145</b>							<b>117</b>						

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Poland Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	2	-	-	-	-	-	2	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	39.8	-	-	-	-	-	39.8	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	90	-	-	-	-	-	90	84	82	76	81	80	-	82
Distensibility (L), mm	88	-	-	-	-	-	88	114	100	95	87	118	-	104
P/L	1.04	-	-	-	-	-	1.04	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>146</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	99	-	-	-	-	-	99	101	90	76	85	96	-	92
Max. height, BU	395	-	-	-	-	-	395	364	351	323	344	348	-	350
Extensibility, mm	181	-	-	-	-	-	181	204	187	172	177	201	-	191
<b>147</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	4.4	-	-	-	-	-	4.4	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	60.8	-	-	-	-	-	60.8	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>148</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	169 [169]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg)	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>1</b>							<b>40</b>						

## 2018/19 IMPORTED WHEAT QUALITY - RUSSIAN FEDERATION (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Russian Federation Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	1	4	4	6	5	23	43	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.9	11.2	10.9	11.1	11.1	11.5	11.3	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	12.1	10.1	8.9	9.8	10.3	10.2	10.1	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	311	396	447	421	423	422	419	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	40.6	39.1	38.7	35.1	35.6	32.8	34.7	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	80.7	80.9	81.1	80.7	80.0	78.9	79.7	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.18	2.53	2.70	3.29	3.38	4.15	3.61	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.08	0.23	0.27	0.17	0.31	0.21	0.22	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.32	0.35	0.21	0.41	3.14	0.54	0.77	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.00	0.00	0.00	0.03	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.16	0.05	0.00	0.00	0.02	0.00	0.01	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.00	0.07	0.15	0.04	0.09	0.14	0.11	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.00	0.06	0.02	0.03	0.10	0.13	0.09	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	0.16	0.18	0.17	0.09	0.20	0.31	0.24	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	2.74	3.28	3.34	3.97	7.03	5.22	4.84	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.00	0.96	0.12	0.15	0.00	0.03	0.14	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.12	0.15	0.13	0.12	0.16	0.13	0.13	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.00	0.04	0.00	0.00	0.05	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	0	3	1	2	2	13	8	0	0	0	0	0	0	0
Live insects	No	No	No	No	No	No	No	No	No	No	No	No	No	No
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	1	4	4	6	5	23	43	28	21	11	7	3	-	70
Bühler Extraction, %	70.7	70.1	70.7	70.0	69.7	70.3	70.2	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-3.6	-3.7	-3.8	-4.0	-4.1	-4.0	-3.9	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	92.93	93.25	93.10	93.18	93.36	93.39	93.31	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.62	0.49	0.48	0.50	0.51	0.50	0.50	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	10.65	11.76	12.47	12.24	12.33	11.87	11.99	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.58	0.56	0.55	0.57	0.58	0.58	0.57	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	11.3	9.9	9.7	9.9	9.9	10.3	10.1	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	30.7	24.9	24.4	25.2	25.1	25.7	25.5	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	10.5	8.4	8.2	8.4	8.6	8.7	8.6	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	97	97	96	98	97	98	98	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	61.3	59.7	59.5	59.8	59.7	60.1	59.9	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	1010	844	766	852	893	941	989	1088	1014	936	994	1085	-	1033
Evaluation	0	0	1	0	0	0	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	60.1	58.1	58.9	57.2	56.4	55.4	56.5	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	3.3	1.8	2.0	3.0	2.0	4.6	3.6	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	16.4	7.9	9.3	10.7	9.2	12.8	11.4	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	5	32	20	21	23	17	20	40	41	43	38	40	-	41
	<b>149</b>							<b>117</b>						

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Russian Federation Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	1	4	4	6	5	23	43	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	48.5	32.8	26.8	31.7	31.1	34.1	33.0	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	108	107	111	99	92	85	93	84	82	76	81	80	-	82
Distensibility (L), mm	88	53	39	58	62	77	67	114	100	95	87	118	-	104
P/L	1.23	2.11	2.94	1.82	1.62	1.15	1.56	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>150</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	117	86	78	85	82	88	87	101	90	76	85	96	-	92
Max. height, BU	459	425	410	437	417	410	417	364	351	323	344	348	-	350
Extensibility, mm	189	147	138	145	147	161	154	204	187	172	177	201	-	191
<b>151</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	3.8	4.5	4.4	4.6	4.4	4.9	4.7	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	61.3	59.7	59.5	59.8	59.7	60.1	59.9	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>152</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	0 [<100]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg) [max. value]	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>14</b>							<b>40</b>						



## 2018/19 IMPORTED WHEAT QUALITY - UKRAINE (29 Sep 2018 to 27 Sep 2019)

### 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Ukraine Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	-	1	-	-	-	7	8	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	-	11.7	-	-	-	12.1	12.0	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	-	11.7	-	-	-	12.0	11.9	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	-	361	-	-	-	333	337	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	-	37.2	-	-	-	44.2	43.4	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	-	78.5	-	-	-	78.9	78.8	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	-	2.14	-	-	-	1.67	1.73	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	-	0.00	-	-	-	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	-	0.06	-	-	-	0.11	0.10	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	-	0.38	-	-	-	0.13	0.17	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	-	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	-	0.00	-	-	-	0.00	0.00	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	-	0.00	-	-	-	0.09	0.08	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	-	0.00	-	-	-	0.00	0.00	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	-	0.00	-	-	-	0.09	0.08	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	-	2.58	-	-	-	2.11	2.17	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	-	0.00	-	-	-	0.00	0.00	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	-	0.16	-	-	-	0.18	0.18	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	-	0.00	-	-	-	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ergot, %	-	0.00	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Poisonous seeds ( <i>Crotalaria spp.</i> , etc.)	-	0	-	-	-	0	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana</i> , etc.)	-	6	-	-	-	14	13	0	0	0	0	0	0	0
Live insects	-	No	-	-	-	No	No	No	No	No	No	No	No	No
Undesirable odour	-	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	-	1	-	-	-	7	8	28	21	11	7	3	-	70
Bühler Extraction, %	-	72.4	-	-	-	73.1	73.0	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-	-3.7	-	-	-	-3.2	-3.3	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	-	93.68	-	-	-	93.24	93.30	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	-	0.46	-	-	-	0.46	0.43	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	-	9.69	-	-	-	9.46	9.49	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	-	0.51	-	-	-	0.51	0.51	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	-	10.1	-	-	-	10.5	10.4	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	-	25.4	-	-	-	25.0	25.1	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	-	9.2	-	-	-	9.1	9.1	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	-	100	-	-	-	100	100	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	-	59.9	-	-	-	60.3	60.3	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm <sup>3</sup>	-	991	-	-	-	1021	1017	1088	1014	936	994	1085	-	1033
Evaluation	-	0	-	-	-	0	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	-	53.6	-	-	-	55.1	54.9	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	-	2.0	-	-	-	2.1	2.1	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	-	5.6	-	-	-	6.7	6.6	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	-	49	-	-	-	41	42	40	41	43	38	40	-	41
153							117							

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	Ukraine Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	-	1	-	-	-	7	8	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	-	34.4	-	-	-	35.8	35.6	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	-	78	-	-	-	84	83	84	82	76	81	80	-	82
Distensibility (L), mm	-	80	-	-	-	76	76	114	100	95	87	118	-	104
P/L	-	0.98	-	-	-	1.12	1.10	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>154</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	-	95	-	-	-	116	113	101	90	76	85	96	-	92
Max. height, BU	-	450	-	-	-	475	472	364	351	323	344	348	-	350
Extensibility, mm	-	158	-	-	-	180	178	204	187	172	177	201	-	191
<b>155</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	-	5.7	-	-	-	5.6	5.6	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	-	59.9	-	-	-	60.3	60.3	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>156</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	59 [118]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg) [max. value]	0 [0]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>2</b>							<b>40</b>						

**2018/19 IMPORTED WHEAT QUALITY - USA** (29 Sep 2018 to 27 Sep 2019)

**2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality**

Country of origin	USA Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	2	3	2	4	9	-	20	153	88	29	14	48	5	337
<b>WHEAT GRADING</b>														
Protein (12% mb), %	12.5	11.1	10.9	10.1	11.9	-	11.4	12.8	11.6	10.5	10.7	12.0	11.5	12.1
Moisture, %	10.6	10.5	10.7	11.5	10.6	-	10.8	9.3	9.3	9.2	9.6	9.0	9.7	9.3
Falling number, sec	377	519	502	392	448	-	446	402	401	378	354	400	359	397
1000 Kernel mass (13% mb), g	40.4	30.6	31.5	32.6	33.2	-	33.2	38.9	39.7	39.9	37.0	39.0	42.9	39.2
Hlm (dirty), kg/hl	82.2	81.4	81.7	78.6	81.1	-	80.8	81.7	81.7	82.0	79.9	79.5	82.3	81.3
Screenings (<1.8 mm sieve), %	2.12	2.78	2.72	2.66	3.25	-	2.89	1.30	1.23	1.18	2.44	2.58	0.69	1.49
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
Foreign matter, %	0.06	0.30	0.21	0.14	0.18	-	0.18	0.14	0.13	0.11	0.14	0.27	0.12	0.15
Other grain & unthreshed ears, %	0.24	0.31	0.27	0.36	0.77	-	0.52	0.31	0.36	0.31	0.42	1.03	0.09	0.43
Heat damaged kernels, %	0.00	0.23	0.16	0.16	0.16	-	0.15	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Immature kernels, %	0.06	0.00	0.00	0.02	0.04	-	0.03	0.09	0.07	0.06	0.09	0.04	0.18	0.08
Insect damaged kernels, %	0.04	0.35	0.24	0.07	0.33	-	0.24	0.49	0.47	0.53	0.49	0.81	1.50	0.55
Sprouted kernels, %	0.00	0.08	0.08	0.45	0.06	-	0.14	0.02	0.02	0.01	0.00	0.10	0.16	0.03
Total damaged kernels, %	0.10	0.66	0.40	0.69	0.59	-	0.55	0.60	0.56	0.60	0.58	0.95	1.94	0.66
Combined deviations, %	2.52	4.05	3.60	3.84	4.79	-	4.14	2.35	2.29	2.20	3.58	4.83	2.85	2.73
Heavily frost damaged kernels, %	0.00	0.00	0.00	0.00	0.00	-	0.00	0.01	0.06	0.00	0.00	0.50	8.68	0.22
Field fungi, %	0.08	0.35	0.27	0.48	0.13	-	0.24	0.12	0.14	0.10	0.12	0.12	0.08	0.12
Storage fungi, %	0.00	0.05	0.00	0.04	0.01	-	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
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
Poisonous seeds ( <i>Crotalaria spp., etc.</i> )	0	0	0	0	0	-	0	0	0	0	0	0	0	0
Poisonous seeds ( <i>Argemone mexicana, etc.</i> )	0	0	0	0	0	-	0	0	0	0	0	0	0	0
Live insects	No	No	No	No	No	-	No	No	No	No	No	No	No	No
Undesirable odour	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	2	3	2	4	9	-	20	28	21	11	7	3	-	70
Bühler Extraction, %	71.8	70.0	69.4	68.7	70.5	-	70.1	71.5	71.7	71.5	69.2	70.7	-	71.3
<b>FLOUR</b>														
Colour, KJ	-3.9	-3.8	-3.9	-4.1	-3.8	-	-3.9	-4.5	-4.6	-4.7	-4.4	-4.5	-	-4.5
Colour, Konica Minolta CM5 (dry)														
L*	93.41	93.40	93.42	94.32	93.42	-	93.60	93.74	93.80	93.89	93.61	93.99	-	93.78
a*	0.55	0.51	0.47	0.29	0.52	-	0.47	0.45	0.45	0.44	0.48	0.41	-	0.45
b*	10.11	10.52	10.57	9.21	10.27	-	10.11	10.04	10.05	10.23	10.65	9.82	-	10.12
Ash (db), %	0.51	0.57	0.55	0.49	0.54	-	0.53	0.60	0.60	0.61	0.61	0.57	-	0.60
Protein (12% mb), %	11.0	9.6	9.6	8.2	10.5	-	9.9	11.8	10.6	9.6	10.4	11.3	-	10.9
Wet Gluten (14% mb), %	30.7	22.8	23.2	19.4	26.8	-	24.8	32.7	28.9	25.6	30.1	31.3	-	30.1
Dry Gluten (14% mb), %	11.2	7.8	8.2	6.5	9.3	-	8.6	11.0	9.7	8.5	10.1	10.6	-	10.1
Gluten Index	95	99	99	96	98	-	97	92	95	96	96	93	-	94
<b>100 g BAKING TEST</b>														
Baking water absorption, %	60.9	59.4	59.0	58.1	60.3	-	59.7	61.9	60.5	59.4	60.5	61.3	-	60.9
Loaf volume, cm³	1017	915	898	874	950	-	931	1088	1014	936	994	1085	-	1033
Evaluation	0	0	0	0	0	-	0	0	0	0	0	0	-	0
<b>FARINOGRAM</b>														
Water absorption (14% mb), %	57.5	55.5	55.9	49.3	56.7	-	55.0	61.6	60.4	58.9	58.6	61.1	-	60.5
Development time, min	3.4	1.8	1.8	1.4	2.9	-	2.4	5.4	4.9	4.5	4.5	4.5	-	5.0
Stability, mm	10.2	11.0	9.0	4.5	12.0	-	9.8	7.4	6.8	6.4	7.1	6.8	-	7.0
Mixing tolerance index, BU	20	31	34	71	26	-	36	40	41	43	38	40	-	41
	<b>157</b>							<b>117</b>						

## 2018/19 Imported Wheat Quality Versus 2018/19 RSA Wheat Quality

Country of origin	USA Average							RSA Crop Average						
Class and Grade bread wheat	B1	B2	B3	B4	UT	COW	Average	B1	B2	B3	B4	UT	COW	Average
No. of samples	2	3	2	4	9	-	20	28	21	11	7	3	-	70
<b>ALVEOGRAM</b>														
Strength (S), cm <sup>2</sup>	41.1	33.3	33.5	18.2	37.9	-	33.1	38.5	33.2	29.0	31.2	36.5	-	34.6
Stability (P), mm	89	93	100	47	96	-	85	84	82	76	81	80	-	82
Distensibility (L), mm	97	65	60	82	76	-	76	114	100	95	87	118	-	104
P/L	0.92	1.43	1.69	0.62	1.30	-	1.19	0.75	0.85	0.83	0.96	0.68	-	0.81
<b>158</b>							<b>118</b>							
<b>EXTENSOGRAM</b>														
Strength, cm <sup>2</sup>	93	101	98	69	102	-	95	101	90	76	85	96	-	92
Max. height, BU	385	491	454	352	436	-	428	364	351	323	344	348	-	350
Extensibility, mm	176	151	158	141	171	-	162	204	187	172	177	201	-	191
<b>159</b>							<b>119</b>							
<b>MIXOGRAM</b>														
Peak time, min	3.1	5.1	5.3	5.7	4.8	-	4.9	61.9	60.5	59.4	60.5	61.3	-	60.9
Water absorption (14% mb), %	60.9	59.4	59.4	58.3	60.4	-	59.8	2.5	2.6	2.7	3.0	2.3	-	2.6
<b>160</b>							<b>120</b>							
<b>MYCOTOXINS</b>														
Aflatoxin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Aflatoxin G <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>1</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>2</sub> (µg/kg)	0 [0]							0 [0]						
Fumonisin B <sub>3</sub> (µg/kg)	0 [0]							0 [0]						
Deoxynivalenol (µg/kg) [max. value]	208 [884]							<100 [361]						
15-ADON (µg/kg)	0 [0]							0 [0]						
Ochratoxin A (µg/kg)	0 [0]							0 [0]						
Zearalenone (µg/kg) [max. value]	<20 [27]							0 [0]						
HT-2 (µg/kg)	0 [0]							0 [0]						
T-2 Toxin (µg/kg)	0 [0]							0 [0]						
<b>No. of samples</b>	<b>8</b>							<b>40</b>						