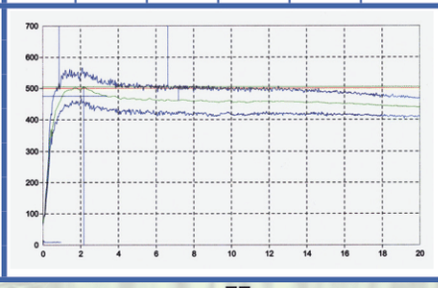
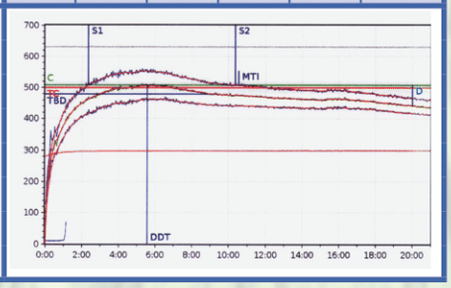
2021/22 Imported Wheat Quality – Argentina (25 Sep 2021 to 30 Sep 2022)

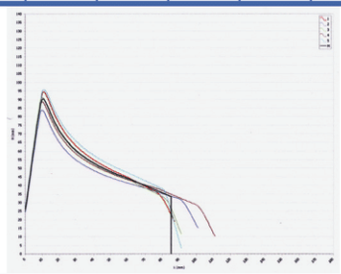
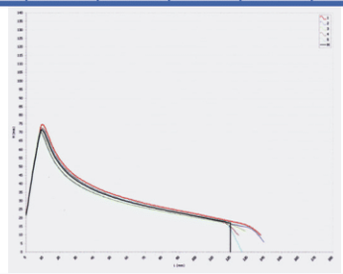
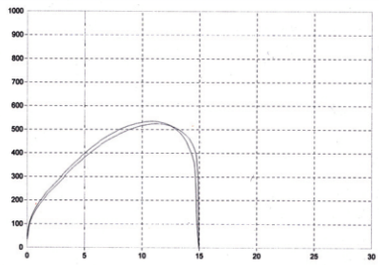
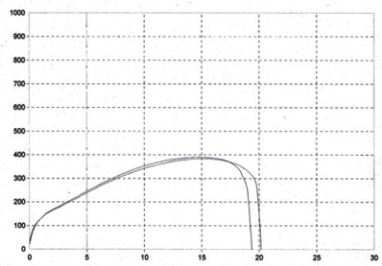
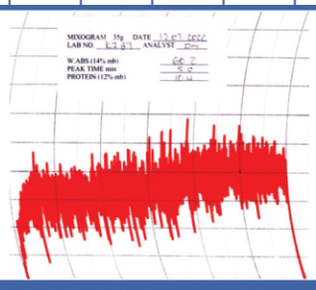
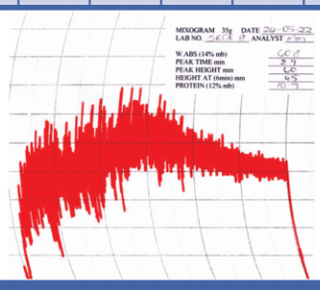
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

Country of origin	Argentina Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*2*	*14*	*9*	*2*	*5*	*32*	*73*	*64*	*46*	*47*	*105*	*335*
WHEAT												
GRADING												
Protein (12% mb), %	12.7	12.0	11.0	10.2	12.7	11.7	13.3	12.0	11.0	10.1	12.0	11.9
Moisture, %	12.1	11.8	11.5	11.6	12.2	11.8	11.3	11.2	11.1	11.2	11.1	11.2
Falling number, sec	360	345	334	328	368	346	344	349	366	367	311	341
1000 Kernel mass (13% mb), g	30.1	33.5	34.4	35.5	31.1	33.3	40.1	41.8	42.1	41.8	38.1	40.3
Hlm (dirty), kg/hl	80.8	79.9	79.3	78.4	80.1	79.7	81.2	81.3	79.9	79.8	78.1	79.9
Screenings (<1.8 mm sieve), %	2.20	1.70	1.54	1.16	3.52	1.94	0.69	0.82	0.92	0.91	2.04	1.20
Gravel, stones, turf and glass, %	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.10	0.09	0.17	0.20	0.12	0.13	0.01	0.02	0.04	0.02	0.15	0.06
Other grain & unthreshed ears, %	0.16	0.26	0.18	0.29	0.21	0.22	0.29	0.23	0.42	0.39	1.12	0.57
Heat damaged kernels, %	0.00	0.02	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.04	0.01
Immature kernels, %	0.15	0.04	0.03	0.00	0.08	0.05	0.09	0.04	0.02	0.02	0.03	0.04
Insect damaged kernels, %	0.10	0.25	0.34	0.35	0.20	0.26	0.18	0.17	0.28	0.32	0.58	0.34
Sprouted kernels, %	0.04	0.01	0.02	0.08	0.06	0.03	0.09	0.09	0.06	0.04	0.44	0.19
Total damaged kernels, %	0.29	0.32	0.38	0.43	0.35	0.35	0.37	0.31	0.35	0.39	1.08	0.58
Combined deviations, %	2.75	2.37	2.27	2.08	4.20	2.63	1.35	1.39	1.73	1.71	4.39	2.41
Heavily frost damaged kernels, %	0.00	0.02	0.02	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.03	0.01
Field fungi, %	1.11	0.42	0.17	0.24	1.40	0.53	0.44	0.38	0.23	0.17	0.77	0.47
Storage fungi, %	0.00	0.00	0.00	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	0.00	0.00	0.00
Poisonous seeds (*Crotalaria spp., etc.*)	0	0	0	0	0	0	0	0	0	0	1	0
Poisonous seeds (*Argemone mexicana, etc.*)	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
Undesirable odour	No	No	No	No	No	No	No	No	No	No	No	No
	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*2*	*14*	*9*	*2*	*5*	*32*	*19*	*16*	*14*	*8*	*8*	*65*
Bühler Extraction, %	71.6	73.6	73.9	74.0	72.8	73.5	74.0	74.1	73.7	73.8	73.3	73.9
FLOUR												
Colour, KJ	-4.5	-4.6	-4.8	-4.9	-4.2	-4.6	-4.9	-5.0	-5.0	-4.9	-4.8	-4.9
Colour, Konica Minolta CM5 (dry)												
L*	92.67	93.10	93.54	93.76	92.51	93.15	93.60	93.73	93.75	93.96	93.55	93.70
a*	0.67	0.54	0.47	0.43	0.75	0.55	0.51	0.48	0.46	0.47	0.49	0.49
b*	11.69	11.04	10.70	10.75	11.72	11.07	9.83	9.89	9.84	9.77	9.91	9.85
Ash (db), %	0.66	0.61	0.55	0.56	0.65	0.60	0.59	0.60	0.61	0.62	0.60	0.60
Protein (12% mb), %	11.5	10.8	9.9	9.0	11.4	10.6	12.3	10.9	10.0	9.1	11.1	10.9
Wet Gluten (14% mb), %	29.5	26.9	23.6	-	30.2	26.8	32.5	28.9	26.6	23.4	29.7	28.9
Dry Gluten (14% mb), %	9.8	9.0	8.1	-	9.9	9.0	11.0	9.5	8.8	7.8	9.9	9.6
Gluten Index	97	98	98	-	93	97	96	96	96	96	96	96
100 g BAKING TEST												
Baking water absorption, %	61.6	60.7	59.7	59.0	61.4	60.5	62.4	60.8	60.1	59.0	61.1	61.0
Loaf volume, cm³	1077	966	935	909	926	955	1150	1064	1018	938	1078	1065
Evaluation	0	0	0	0	0	0	0	0	0	0	0	0
FARINOGRAM												
Water absorption (14% mb), %	59.1	56.9	55.5	55.1	59.0	56.9	61.5	59.9	59.3	58.0	59.6	60.0
Development time, min	8.4	3.8	1.8	1.6	8.3	4.1	7.9	5.3	4.5	4.0	4.9	5.7
Stability, mm	11.7	14.0	3.2	2.2	11.2	9.7	12.2	9.1	8.1	7.3	10.1	9.7
Mixing tolerance index, BU	33	30	55	67	31	39	33	44	48	52	41	42





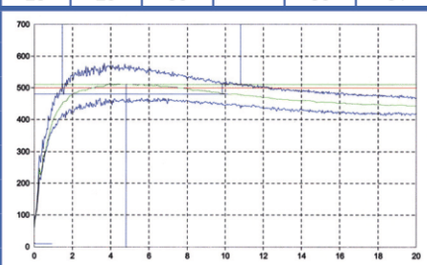
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

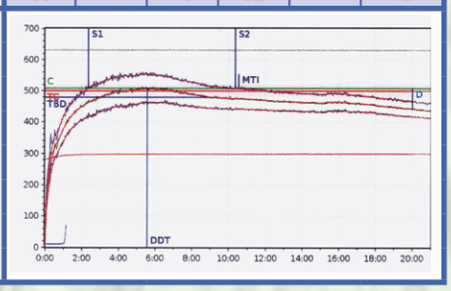
Country of origin	Argentina Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*2*	*14*	*9*	*2*	*5*	*32*	*19*	*16*	*14*	*8*	*8*	*65*
ALVEOGRAM												
Strength (S), cm²	47.9	46.3	40.2	33.7	45.0	43.7	51.3	41.1	37.2	33.2	43.2	42.5
Stability (P), mm	97	98	96	91	97	97	89	80	88	85	85	86
Distensibility (L), mm	101	89	74	66	94	84	136	127	108	93	126	121
P/L	0.97	1.13	1.31	1.39	1.04	1.17	0.69	0.66	0.98	0.92	0.69	0.77
												
EXTENSOGRAM												
Strength, cm²	107	112	108	98	100	108	123	108	87	72	106	103
Max. height, BU	479	559	559	528	461	537	426	401	360	346	405	393
Extensibility, mm	171	152	145	135	162	152	215	198	177	152	188	191
												
MIXOGRAM												
Peak time, min	4.0	4.6	5.4	5.5	3.8	4.7	3.0	2.9	2.9	2.9	3.0	2.9
Water absorption (14% mb), %	61.6	60.7	59.7	59.0	61.4	60.5	62.6	60.8	59.8	59.0	61.2	60.9
												
MYCOTOXINS												
Aflatoxin B_1 (µg/kg)	ND						ND					
Aflatoxin B_2 (µg/kg)	ND						ND					
Aflatoxin G_1 (µg/kg)	ND						ND					
Aflatoxin G_2 (µg/kg)	ND						ND					
Fumonisin B_1 (µg/kg)	ND						ND					
Fumonisin B_2 (µg/kg)	ND						ND					
Fumonisin B_3 (µg/kg)	ND						ND					
Deoxynivalenol (µg/kg) [max. value]	340 [1 320]						169 [1 085]					
15-ADON (µg/kg)	0 [<100]						16 [183]					
Ochratoxin A (µg/kg)	ND						ND					
Zearalenone (µg/kg)	ND						4 [144]					
HT-2 (µg/kg)	ND						ND					
T-2 Toxin (µg/kg)	ND						ND					
No. of samples	*9*						*40*					

2021/22 Imported Wheat Quality – Australia (25 Sep 2021 to 30 Sep 2022)

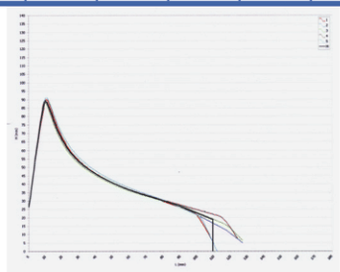
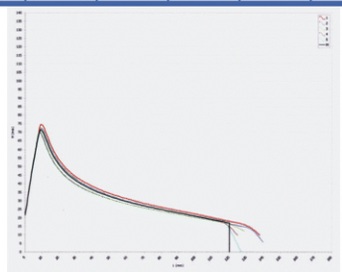
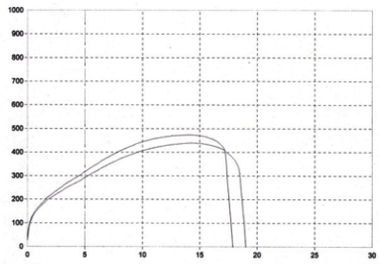
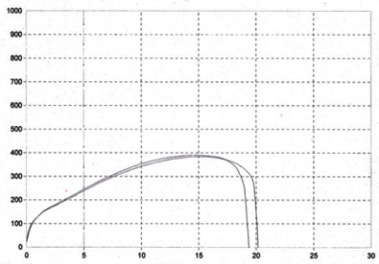
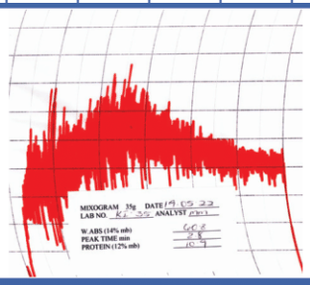
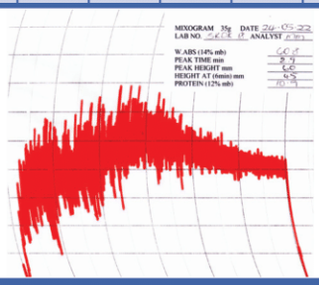
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

Country of origin	Australia Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*24*	*5*	*-*	*5*	*35*	*73*	*64*	*46*	*47*	*105*	*335*
WHEAT												
GRADING												
Protein (12% mb), %	13.3	12.1	10.9	-	11.5	11.9	13.3	12.0	11.0	10.1	12.0	11.9
Moisture, %	10.9	11.0	10.7	-	10.5	10.9	11.3	11.2	11.1	11.2	11.1	11.2
Falling number, sec	481	389	370	-	190	360	344	349	366	367	311	341
1000 Kernel mass (13% mb), g	40.5	41.1	47.5	-	43.7	42.4	40.1	41.8	42.1	41.8	38.1	40.3
Hlm (dirty), kg/hl	85.2	83.3	83.3	-	84.4	83.5	81.2	81.3	79.9	79.8	78.1	79.9
Screenings (<1.8 mm sieve), %	0.94	1.09	0.55	-	0.84	0.98	0.69	0.82	0.92	0.91	2.04	1.20
Gravel, stones, turf and glass, %	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.14	0.20	0.34	-	0.11	0.21	0.01	0.02	0.04	0.02	0.15	0.06
Other grain & unthreshed ears, %	0.20	0.31	0.52	-	0.22	0.32	0.29	0.23	0.42	0.39	1.12	0.57
Heat damaged kernels, %	0.00	0.00	0.17	-	0.02	0.03	0.01	0.01	0.00	0.00	0.04	0.01
Immature kernels, %	0.00	0.02	0.00	-	0.00	0.01	0.09	0.04	0.02	0.02	0.03	0.04
Insect damaged kernels, %	0.00	0.05	0.03	-	0.04	0.04	0.18	0.17	0.28	0.32	0.58	0.34
Sprouted kernels, %	0.00	0.46	0.03	-	0.72	0.43	0.09	0.09	0.06	0.04	0.44	0.19
Total damaged kernels, %	0.00	0.53	0.23	-	0.78	0.51	0.37	0.31	0.35	0.39	1.08	0.58
Combined deviations, %	1.28	2.13	1.65	-	1.95	2.01	1.35	1.39	1.73	1.71	4.39	2.41
Heavily frost damaged kernels, %	0.00	0.00	0.07	-	0.00	0.01	0.00	0.02	0.00	0.00	0.03	0.01
Field fungi, %	0.16	0.21	0.25	-	0.48	0.25	0.44	0.38	0.23	0.17	0.77	0.47
Storage fungi, %	0.00	0.00	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	0.00	0.00
Poisonous seeds (*Crotalaria spp., etc.*)	0	0	0	-	0	0	0	0	0	0	1	0
Poisonous seeds (*Argemone mexicana, 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
	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*24*	*5*	*-*	*5*	*35*	*19*	*16*	*14*	*8*	*8*	*65*
Bühler Extraction, %	73.1	74.7	74.4	-	74.3	74.5	74.0	74.1	73.7	73.8	73.3	73.9
FLOUR												
Colour, KJ	-5.0	-5.0	-5.0	-	-5.0	-5.0	-4.9	-5.0	-5.0	-4.9	-4.8	-4.9
Colour, Konica Minolta CM5 (dry)												
L*	93.91	93.82	93.97	-	93.86	93.85	93.60	93.73	93.75	93.96	93.55	93.70
a*	0.42	0.47	0.45	-	0.43	0.46	0.51	0.48	0.46	0.47	0.49	0.49
b*	9.31	9.31	9.18	-	9.11	9.26	9.83	9.89	9.84	9.77	9.91	9.85
Ash (db), %	0.56	0.54	0.55	-	0.54	0.54	0.59	0.60	0.61	0.62	0.60	0.60
Protein (12% mb), %	11.5	11.2	9.9	-	10.4	10.9	12.3	10.9	10.0	9.1	11.1	10.9
Wet Gluten (14% mb), %	30.1	29.9	26.0	-	27.9	29.1	32.5	28.9	26.6	23.4	29.7	28.9
Dry Gluten (14% mb), %	10.1	9.9	8.6	-	9.1	9.6	11.0	9.5	8.8	7.8	9.9	9.6
Gluten Index	96	96	96	-	96	96	96	96	96	96	96	96
100 g BAKING TEST												
Baking water absorption, %	61.5	61.1	59.7	-	60.3	60.8	62.4	60.8	60.1	59.0	61.1	61.0
Loaf volume, cm³	1163	1056	911	-	999	1030	1150	1064	1018	938	1078	1065
Evaluation	0	0	0	-	0	0	0	0	0	0	0	0
FARINOGRAM												
Water absorption (14% mb), %	60.9	60.5	60.2	-	59.0	60.2	61.5	59.9	59.3	58.0	59.6	60.0
Development time, min	5.2	5.2	4.6	-	3.7	4.9	7.9	5.3	4.5	4.0	4.9	5.7
Stability, mm	11.1	9.5	7.8	-	7.5	9.0	12.2	9.1	8.1	7.3	10.1	9.7
Mixing tolerance index, BU	25	29	36	-	36	31	33	44	48	52	41	42





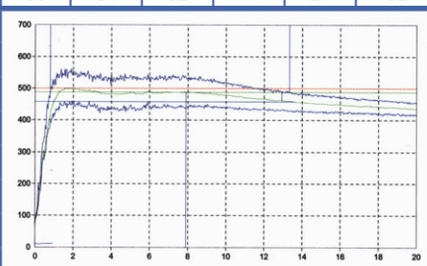
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

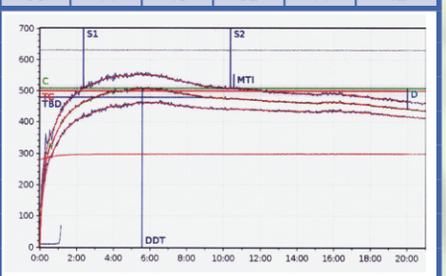
Country of origin	Australia Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*24*	*5*	*-*	*5*	*35*	*19*	*16*	*14*	*8*	*8*	*65*
ALVEOGRAM												
Strength (S), cm²	59.9	49.6	38.8	-	44.2	47.6	51.3	41.1	37.2	33.2	43.2	42.5
Stability (P), mm	113	97	105	-	88	97	89	80	88	85	85	86
Distensibility (L), mm	106	113	79	-	109	107	136	127	108	93	126	121
P/L	1.07	0.86	1.40	-	0.82	0.94	0.69	0.66	0.98	0.92	0.69	0.77
												
EXTENSOGRAM												
Strength, cm²	141	118	82	-	121	114	123	108	87	72	106	103
Max. height, BU	531	452	374	-	481	447	426	401	360	346	405	393
Extensibility, mm	205	194	157	-	185	188	215	198	177	152	188	191
												
MIXOGRAM												
Peak time, min	3.2	3.0	2.7	-	3.0	3.0	3.0	2.9	2.9	2.9	3.0	2.9
Water absorption (14% mb), %	61.5	61.1	59.7	-	60.3	60.8	62.6	60.8	59.8	59.0	61.2	60.9
												
MYCOTOXINS												
Aflatoxin B_1 (µg/kg)	ND						ND					
Aflatoxin B_2 (µg/kg)	ND						ND					
Aflatoxin G_1 (µg/kg)	ND						ND					
Aflatoxin G_2 (µg/kg)	ND						ND					
Fumonisin B_1 (µg/kg)	ND						ND					
Fumonisin B_2 (µg/kg)	ND						ND					
Fumonisin B_3 (µg/kg)	ND						ND					
Deoxynivalenol (µg/kg) [max. value]	ND						169 [1 085]					
15-ADON (µg/kg)	ND						16 [183]					
Ochratoxin A (µg/kg)	ND						ND					
Zearalenone (µg/kg)	ND						4 [144]					
HT-2 (µg/kg)	ND						ND					
T-2 Toxin (µg/kg)	ND						ND					
No. of samples	*9*						*40*					

2021/22 Imported Wheat Quality – Brazil (25 Sep 2021 to 30 Sep 2022)

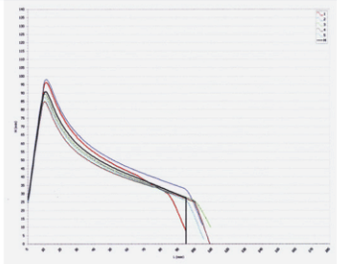
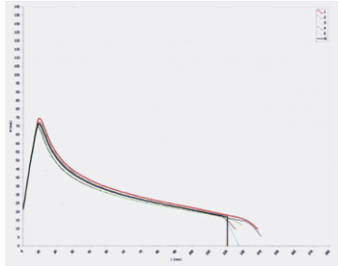
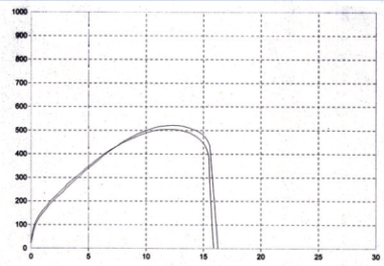
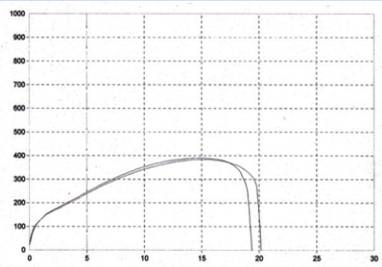
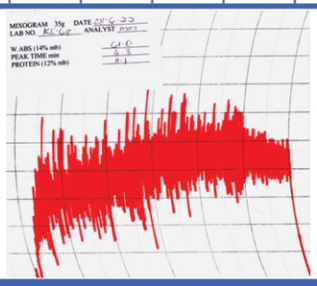
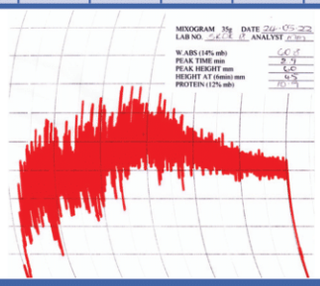
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

Country of origin	Brazil Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*8*	*1*	*-*	*3*	*13*	*73*	*64*	*46*	*47*	*105*	*335*
WHEAT												
GRADING												
Protein (12% mb), %	12.6	12.1	11.4	-	12.3	12.1	13.3	12.0	11.0	10.1	12.0	11.9
Moisture, %	12.0	12.1	11.6	-	12.3	12.1	11.3	11.2	11.1	11.2	11.1	11.2
Falling number, sec	350	358	370	-	370	361	344	349	366	367	311	341
1000 Kernel mass (13% mb), g	31.2	32.8	35.9	-	30.7	32.4	40.1	41.8	42.1	41.8	38.1	40.3
Hlm (dirty), kg/hl	80.5	79.9	79.5	-	78.7	79.6	81.2	81.3	79.9	79.8	78.1	79.9
Screenings (<1.8 mm sieve), %	1.84	1.85	1.53	-	3.20	2.13	0.69	0.82	0.92	0.91	2.04	1.20
Gravel, stones, turf and glass, %	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.20	0.18	0.12	-	0.16	0.17	0.01	0.02	0.04	0.02	0.15	0.06
Other grain & unthreshed ears, %	0.10	0.25	0.28	-	0.61	0.32	0.29	0.23	0.42	0.39	1.12	0.57
Heat damaged kernels, %	0.00	0.01	0.00	-	0.00	0.00	0.01	0.01	0.00	0.00	0.04	0.01
Immature kernels, %	0.00	0.08	0.00	-	0.11	0.07	0.09	0.04	0.02	0.02	0.03	0.04
Insect damaged kernels, %	0.16	0.26	0.36	-	0.12	0.22	0.18	0.17	0.28	0.32	0.58	0.34
Sprouted kernels, %	0.00	0.18	0.00	-	0.00	0.11	0.09	0.09	0.06	0.04	0.44	0.19
Total damaged kernels, %	0.16	0.52	0.36	-	0.23	0.41	0.37	0.31	0.35	0.39	1.08	0.58
Combined deviations, %	2.30	2.79	2.29	-	4.20	3.04	1.35	1.39	1.73	1.71	4.39	2.41
Heavily frost damaged kernels, %	0.00	0.00	0.00	-	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.01
Field fungi, %	0.94	0.55	0.26	-	0.85	0.63	0.44	0.38	0.23	0.17	0.77	0.47
Storage fungi, %	0.00	0.00	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	0.00	0.00
Poisonous seeds (*Crotalaria spp., etc.*)	0	0	0	-	0	0	0	0	0	0	1	0
Poisonous seeds (*Argemone mexicana, 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
	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*8*	*1*	*-*	*3*	*13*	*19*	*16*	*14*	*8*	*8*	*65*
Bühler Extraction, %	71.8	73.0	74.5	-	72.8	73.0	74.0	74.1	73.7	73.8	73.3	73.9
FLOUR												
Colour, KJ	-4.7	-4.9	-5.0	-	-4.7	-4.8	-4.9	-5.0	-5.0	-4.9	-4.8	-4.9
Colour, Konica Minolta CM5 (dry)												
L*	93.09	93.03	93.43	-	92.76	93.00	93.60	93.73	93.75	93.96	93.55	93.70
a*	0.62	0.58	0.51	-	0.68	0.60	0.51	0.48	0.46	0.47	0.49	0.49
b*	11.43	11.03	10.46	-	11.33	11.09	9.83	9.89	9.84	9.77	9.91	9.85
Ash (db), %	0.63	0.61	0.61	-	0.67	0.62	0.59	0.60	0.61	0.62	0.60	0.60
Protein (12% mb), %	11.3	10.9	10.2	-	11.1	10.9	12.3	10.9	10.0	9.1	11.1	10.9
Wet Gluten (14% mb), %	29.8	27.6	23.0	-	28.9	27.7	32.5	28.9	26.6	23.4	29.7	28.9
Dry Gluten (14% mb), %	9.7	9.2	8.0	-	9.6	9.2	11.0	9.5	8.8	7.8	9.9	9.6
Gluten Index	96	97	100	-	96	97	96	96	96	96	96	96
100 g BAKING TEST												
Baking water absorption, %	61.3	60.9	60.0	-	61.1	60.9	62.4	60.8	60.1	59.0	61.1	61.0
Loaf volume, cm³	1085	1024	976	-	1036	1028	1150	1064	1018	938	1078	1065
Evaluation	0	0	0	-	0	0	0	0	0	0	0	0
FARINOGRAM												
Water absorption (14% mb), %	58.5	57.4	56.4	-	58.2	57.6	61.5	59.9	59.3	58.0	59.6	60.0
Development time, min	7.5	5.0	2.0	-	8.7	5.8	7.9	5.3	4.5	4.0	4.9	5.7
Stability, mm	11.4	12.9	18.7	-	12.7	13.2	12.2	9.1	8.1	7.3	10.1	9.7
Mixing tolerance index, BU	30	34	32	-	27	32	33	44	48	52	41	42





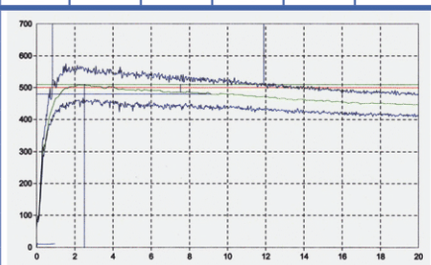
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

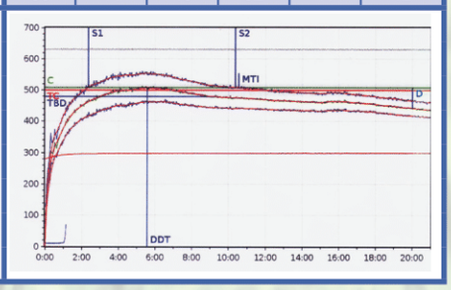
Country of origin	Brazil Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*8*	*1*	*-*	*3*	*13*	*19*	*16*	*14*	*8*	*8*	*65*
ALVEOGRAM												
Strength (S), cm²	44.7	47.6	42.8	-	47.8	47.0	51.3	41.1	37.2	33.2	43.2	42.5
Stability (P), mm	89	97	104	-	100	97	89	80	88	85	85	86
Distensibility (L), mm	104	94	70	-	95	93	136	127	108	93	126	121
P/L	0.86	1.05	1.49	-	1.05	1.07	0.69	0.66	0.98	0.92	0.69	0.77
												
EXTENSOGRAM												
Strength, cm²	110	112	125	-	114	113	123	108	87	72	106	103
Max. height, BU	487	524	603	-	514	525	426	401	360	346	405	393
Extensibility, mm	170	162	154	-	167	163	215	198	177	152	188	191
												
MIXOGRAM												
Peak time, min	3.8	4.4	5.3	-	4.1	4.4	3.0	2.9	2.9	2.9	3.0	2.9
Water absorption (14% mb), %	61.3	60.9	60.0	-	61.1	60.9	62.6	60.8	59.8	59.0	61.2	60.9
												
MYCOTOXINS												
Aflatoxin B_1 (µg/kg)	ND						ND					
Aflatoxin B_2 (µg/kg)	ND						ND					
Aflatoxin G_1 (µg/kg)	ND						ND					
Aflatoxin G_2 (µg/kg)	ND						ND					
Fumonisin B_1 (µg/kg)	ND						ND					
Fumonisin B_2 (µg/kg)	ND						ND					
Fumonisin B_3 (µg/kg)	ND						ND					
Deoxynivalenol (µg/kg) [max. value]	741 [1 160]						169 [1 085]					
15-ADON (µg/kg) [max. value]	ND						16 [183]					
Ochratoxin A (µg/kg)	ND						ND					
Zearalenone (µg/kg)	ND						4 [144]					
HT-2 (µg/kg)	ND						ND					
T-2 Toxin (µg/kg)	ND						ND					
No. of samples	*3*						*40*					

2021/22 Imported Wheat Quality – Lithuania (25 Sep 2021 to 30 Sep 2022)

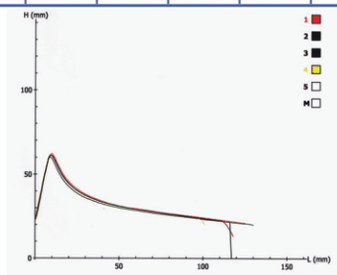
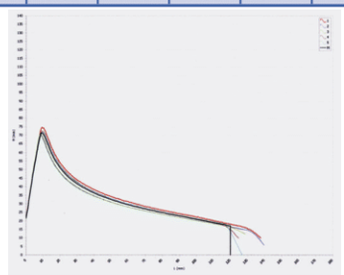
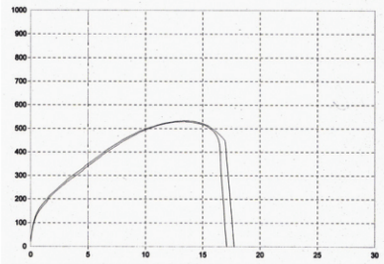
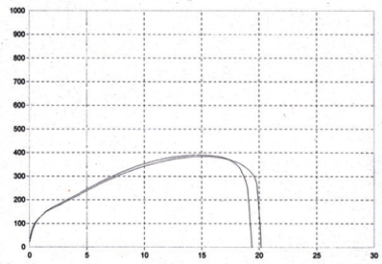
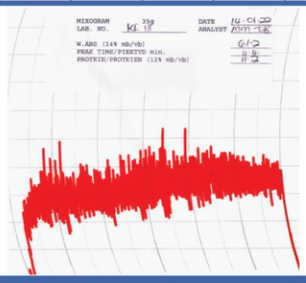
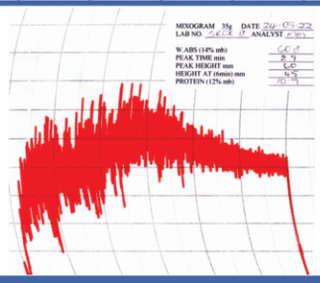
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

Country of origin	Lithuania Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*4*	*-*	*1*	*13*	*19*	*73*	*64*	*46*	*47*	*105*	*335*
WHEAT												
GRADING												
Protein (12% mb), %	12.5	12.4	-	12.4	12.5	12.5	13.3	12.0	11.0	10.1	12.0	11.9
Moisture, %	12.5	12.7	-	12.5	12.4	12.5	11.3	11.2	11.1	11.2	11.1	11.2
Falling number, sec	379	380	-	354	370	372	344	349	366	367	311	341
1000 Kernel mass (13% mb), g	36.2	36.1	-	36.1	36.3	36.2	40.1	41.8	42.1	41.8	38.1	40.3
Hlm (dirty), kg/hl	77.8	76.9	-	75.9	77.3	77.2	81.2	81.3	79.9	79.8	78.1	79.9
Screenings (<1.8 mm sieve), %	2.96	2.52	-	2.52	3.36	3.12	0.69	0.82	0.92	0.91	2.04	1.20
Gravel, stones, turf and glass, %	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.16	0.09	-	0.06	0.13	0.12	0.01	0.02	0.04	0.02	0.15	0.06
Other grain & unthreshed ears, %	0.76	0.52	-	0.88	0.80	0.74	0.29	0.23	0.42	0.39	1.12	0.57
Heat damaged kernels, %	0.00	0.00	-	0.00	0.01	0.00	0.01	0.01	0.00	0.00	0.04	0.01
Immature kernels, %	0.00	0.00	-	0.00	0.02	0.01	0.09	0.04	0.02	0.02	0.03	0.04
Insect damaged kernels, %	0.16	0.03	-	0.00	0.03	0.03	0.18	0.17	0.28	0.32	0.58	0.34
Sprouted kernels, %	0.00	0.04	-	0.24	0.04	0.05	0.09	0.09	0.06	0.04	0.44	0.19
Total damaged kernels, %	0.16	0.07	-	0.24	0.09	0.10	0.37	0.31	0.35	0.39	1.08	0.58
Combined deviations, %	4.04	3.19	-	3.70	4.37	4.07	1.35	1.39	1.73	1.71	4.39	2.41
Heavily frost damaged kernels, %	0.00	0.00	-	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.01
Field fungi, %	0.34	0.18	-	0.08	0.11	0.14	0.44	0.38	0.23	0.17	0.77	0.47
Storage fungi, %	0.00	0.04	-	0.00	0.00	0.01	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 (*Crotalaria spp., etc.*)	0	0	-	0	0	0	0	0	0	0	1	0
Poisonous seeds (*Argemone mexicana, 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
	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*4*	*-*	*1*	*13*	*19*	*19*	*16*	*14*	*8*	*8*	*65*
Bühler Extraction, %	75.3	74.7	-	74.2	73.8	74.1	74.0	74.1	73.7	73.8	73.3	73.9
FLOUR												
Colour, KJ	-4.4	-4.5	-	-4.6	-4.6	-4.5	-4.9	-5.0	-5.0	-4.9	-4.8	-4.9
Colour, Konica Minolta CM5 (dry)												
L*	93.21	93.47	-	93.54	93.53	93.50	93.60	93.73	93.75	93.96	93.55	93.70
a*	0.61	0.59	-	0.57	0.60	0.60	0.51	0.48	0.46	0.47	0.49	0.49
b*	10.88	11.09	-	11.14	11.06	11.06	9.83	9.89	9.84	9.77	9.91	9.85
Ash (db), %	0.57	0.55	-	0.54	0.54	0.54	0.59	0.60	0.61	0.62	0.60	0.60
Protein (12% mb), %	11.3	11.2	-	11.2	11.2	11.2	12.3	10.9	10.0	9.1	11.1	10.9
Wet Gluten (14% mb), %	28.7	28.8	-	28.6	29.0	28.9	32.5	28.9	26.6	23.4	29.7	28.9
Dry Gluten (14% mb), %	9.6	9.8	-	10.0	10.1	10.0	11.0	9.5	8.8	7.8	9.9	9.6
Gluten Index	98	97	-	99	98	98	96	96	96	96	96	96
100 g BAKING TEST												
Baking water absorption, %	61.3	61.1	-	61.2	61.2	61.2	62.4	60.8	60.1	59.0	61.1	61.0
Loaf volume, cm^3	1059	1088	-	1152	1089	1091	1150	1064	1018	938	1078	1065
Evaluation	0	0	-	0	0	0	0	0	0	0	0	0
FARINOGRAM												
Water absorption (14% mb), %	54.8	54.3	-	54.0	55.1	54.8	61.5	59.9	59.3	58.0	59.6	60.0
Development time, min	3.5	2.4	-	2.5	2.4	2.4	7.9	5.3	4.5	4.0	4.9	5.7
Stability, mm	11.5	10.1	-	10.6	10.1	10.2	12.2	9.1	8.1	7.3	10.1	9.7
Mixing tolerance index, BU	22	24	-	20	26	25	33	44	48	52	41	42





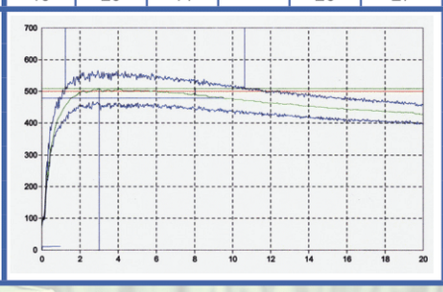
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

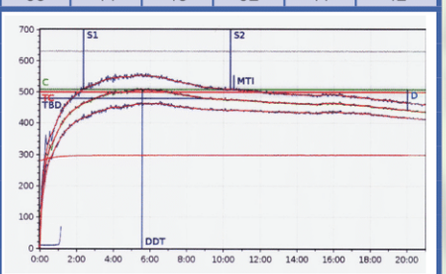
Country of origin	Lithuania Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*1*	*4*	*-*	*1*	*13*	*19*	*19*	*16*	*14*	*8*	*8*	*65*
ALVEOGRAM												
Strength (S), cm²	45.9	38.2	-	39.1	38.0	38.5	51.3	41.1	37.2	33.2	43.2	42.5
Stability (P), mm	73	68	-	67	67	67	89	80	88	85	85	86
Distensibility (L), mm	130	117	-	124	119	120	136	127	108	93	126	121
P/L	0.56	0.59	-	0.54	0.57	0.57	0.69	0.66	0.98	0.92	0.69	0.77
												
EXTENSOGRAM												
Strength, cm²	119	110	-	125	124	121	123	108	87	72	106	103
Max. height, BU	506	503	-	567	530	525	426	401	360	346	405	393
Extensibility, mm	174	165	-	169	175	172	215	198	177	152	188	191
												
MIXOGRAM												
Peak time, min	4.7	4.4	-	4.6	4.7	4.6	3.0	2.9	2.9	2.9	3.0	2.9
Water absorption (14% mb), %	61.3	61.1	-	61.2	61.2	61.2	62.6	60.8	59.8	59.0	61.2	60.9
												
MYCOTOXINS												
Aflatoxin B_1 (µg/kg)	ND						ND					
Aflatoxin B_2 (µg/kg)	ND						ND					
Aflatoxin G_1 (µg/kg)	ND						ND					
Aflatoxin G_2 (µg/kg)	ND						ND					
Fumonisin B_1 (µg/kg)	ND						ND					
Fumonisin B_2 (µg/kg)	ND						ND					
Fumonisin B_3 (µg/kg)	ND						ND					
Deoxynivalenol (µg/kg) [max. value]	ND						169 [1 085]					
15-ADON (µg/kg)	22 [109]						16 [183]					
Ochratoxin A (µg/kg)	ND						ND					
Zearalenone (µg/kg)	ND						4 [144]					
HT-2 (µg/kg)	ND						ND					
T-2 Toxin (µg/kg)	ND						ND					
No. of samples	*5*						*40*					

2021/22 Imported Wheat Quality – Poland (25 Sep 2021 to 30 Sep 2022)

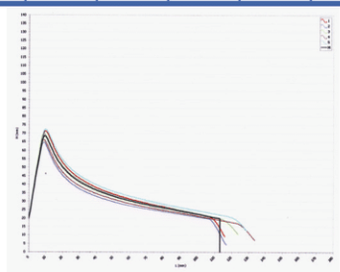
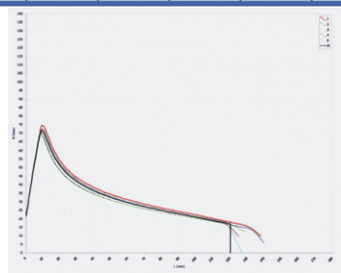
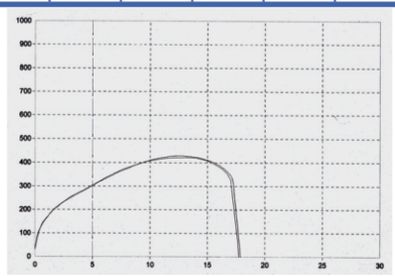
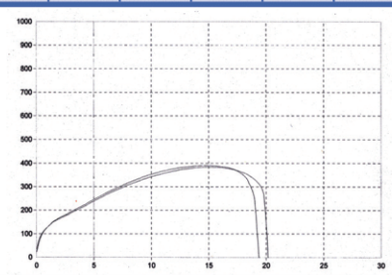
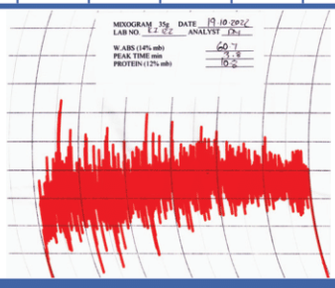
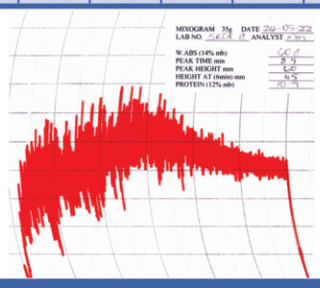
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

Country of origin	Poland Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*2*	*10*	*1*	*-*	*10*	*23*	*73*	*64*	*46*	*47*	*105*	*335*
WHEAT												
GRADING												
Protein (12% mb), %	12.6	12.2	11.5	-	12.5	12.3	13.3	12.0	11.0	10.1	12.0	11.9
Moisture, %	12.4	12.3	12.5	-	12.5	12.4	11.3	11.2	11.1	11.2	11.1	11.2
Falling number, sec	383	342	316	-	378	360	344	349	366	367	311	341
1000 Kernel mass (13% mb), g	36.2	36.7	39.1	-	35.0	36.0	40.1	41.8	42.1	41.8	38.1	40.3
Hlm (dirty), kg/hl	77.5	77.4	76.8	-	76.5	77.0	81.2	81.3	79.9	79.8	78.1	79.9
Screenings (<1.8 mm sieve), %	2.81	2.71	2.19	-	3.12	2.87	0.69	0.82	0.92	0.91	2.04	1.20
Gravel, stones, turf and glass, %	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	0.05	0.07	0.08	-	0.08	0.07	0.01	0.02	0.04	0.02	0.15	0.06
Other grain & unthreshed ears, %	0.92	0.80	0.66	-	0.89	0.84	0.29	0.23	0.42	0.39	1.12	0.57
Heat damaged kernels, %	0.00	0.03	0.00	-	0.01	0.02	0.01	0.01	0.00	0.00	0.04	0.01
Immature kernels, %	0.00	0.01	0.00	-	0.00	0.01	0.09	0.04	0.02	0.02	0.03	0.04
Insect damaged kernels, %	0.12	0.03	0.08	-	0.08	0.06	0.18	0.17	0.28	0.32	0.58	0.34
Sprouted kernels, %	0.00	0.03	0.16	-	0.06	0.04	0.09	0.09	0.06	0.04	0.44	0.19
Total damaged kernels, %	0.12	0.10	0.24	-	0.15	0.13	0.37	0.31	0.35	0.39	1.08	0.58
Combined deviations, %	3.90	3.67	3.14	-	4.55	4.05	1.35	1.39	1.73	1.71	4.39	2.41
Heavily frost damaged kernels, %	0.00	0.00	0.00	-	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.01
Field fungi, %	0.15	0.24	0.16	-	0.32	0.26	0.44	0.38	0.23	0.17	0.77	0.47
Storage fungi, %	0.00	0.01	0.00	-	0.02	0.01	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 (*Crotalaria spp., etc.*)	0	0	0	-	0	0	0	0	0	0	1	0
Poisonous seeds (*Argemone mexicana, 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
	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*2*	*10*	*1*	*-*	*10*	*23*	*19*	*16*	*14*	*8*	*8*	*65*
Bühler Extraction, %	74.6	73.7	72.7	-	74.1	73.9	74.0	74.1	73.7	73.8	73.3	73.9
FLOUR												
Colour, KJ	-4.5	-4.3	-4.3	-	-4.3	-4.3	-4.9	-5.0	-5.0	-4.9	-4.8	-4.9
Colour, Konica Minolta CM5 (dry)												
L*	92.97	93.28	93.64	-	93.27	93.27	93.60	93.73	93.75	93.96	93.55	93.70
a*	0.66	0.58	0.48	-	0.57	0.58	0.51	0.48	0.46	0.47	0.49	0.49
b*	10.48	10.50	10.05	-	10.53	10.49	9.83	9.89	9.84	9.77	9.91	9.85
Ash (db), %	0.57	0.56	0.51	-	0.56	0.55	0.59	0.60	0.61	0.62	0.60	0.60
Protein (12% mb), %	11.4	10.9	10.0	-	11.1	11.0	12.3	10.9	10.0	9.1	11.1	10.9
Wet Gluten (14% mb), %	30.4	28.8	25.4	-	29.7	29.2	32.5	28.9	26.6	23.4	29.7	28.9
Dry Gluten (14% mb), %	10.3	9.6	8.8	-	9.8	9.7	11.0	9.5	8.8	7.8	9.9	9.6
Gluten Index	98	97	98	-	93	95	96	96	96	96	96	96
100 g BAKING TEST												
Baking water absorption, %	61.4	60.9	59.8	-	61.1	60.9	62.4	60.8	60.1	59.0	61.1	61.0
Loaf volume, cm^3	1019	1062	1020	-	1065	1058	1150	1064	1018	938	1078	1065
Evaluation	0	0	0	-	0	0	0	0	0	0	0	0
FARINOGRAM												
Water absorption (14% mb), %	57.2	55.8	54.5	-	55.3	55.6	61.5	59.9	59.3	58.0	59.6	60.0
Development time, min	3.0	2.5	2.2	-	2.9	2.7	7.9	5.3	4.5	4.0	4.9	5.7
Stability, mm	12.1	8.9	5.7	-	9.8	9.4	12.2	9.1	8.1	7.3	10.1	9.7
Mixing tolerance index, BU	19	29	44	-	26	27	33	44	48	52	41	42





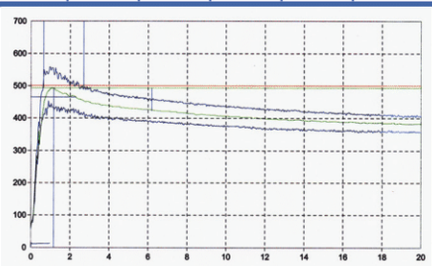
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

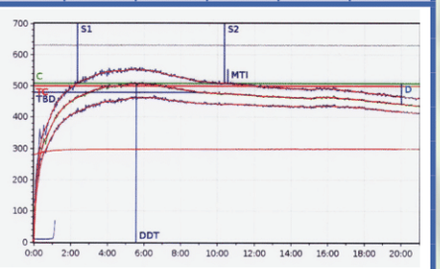
Country of origin	Poland Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	*2*	*10*	*1*	*-*	*10*	*23*	*19*	*16*	*14*	*8*	*8*	*65*
ALVEOGRAM												
Strength (S), cm²	45.2	40.8	36.4	-	38.0	39.8	51.3	41.1	37.2	33.2	43.2	42.5
Stability (P), mm	87	78	83	-	136	104	89	80	88	85	85	86
Distensibility (L), mm	113	115	86	-	134	122	136	127	108	93	126	121
P/L	0.77	0.70	0.97	-	0.55	0.65	0.69	0.66	0.98	0.92	0.69	0.77
												
EXTENSOGRAM												
Strength, cm²	102	102	107	-	95	99	123	108	87	72	106	103
Max. height, BU	419	447	490	-	413	431	426	401	360	346	405	393
Extensibility, mm	177	199	162	-	168	182	215	198	177	152	188	191
												
MIXOGRAM												
Peak time, min	3.4	3.9	4.2	-	3.6	3.7	3.0	2.9	2.9	2.9	3.0	2.9
Water absorption (14% mb), %	61.4	60.9	59.8	-	61.0	60.9	62.6	60.8	59.8	59.0	61.2	60.9
												
MYCOTOXINS												
Aflatoxin B_1 (µg/kg)	ND						ND					
Aflatoxin B_2 (µg/kg)	ND						ND					
Aflatoxin G_1 (µg/kg)	ND						ND					
Aflatoxin G_2 (µg/kg)	ND						ND					
Fumonisin B_1 (µg/kg)	ND						ND					
Fumonisin B_2 (µg/kg)	ND						ND					
Fumonisin B_3 (µg/kg)	ND						ND					
Deoxynivalenol (µg/kg) [max. value]	32 [190]						169 [1 085]					
15-ADON (µg/kg)	58 [143]						16 [183]					
Ochratoxin A (µg/kg)	ND						ND					
Zearalenone (µg/kg)	ND						4 [144]					
HT-2 (µg/kg)	ND						ND					
T-2 Toxin (µg/kg)	ND						ND					
No. of samples	*6*						*40*					

2021/22 Imported Wheat Quality – USA (25 Sep 2021 to 30 Sep 2022)

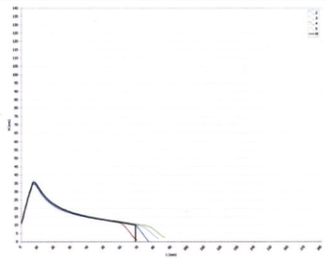
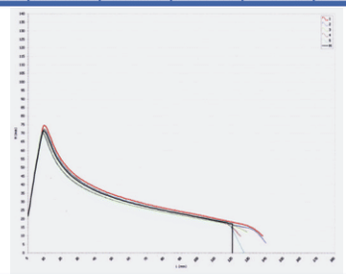
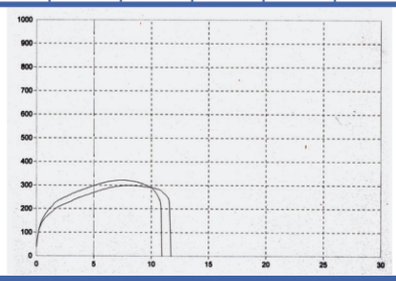
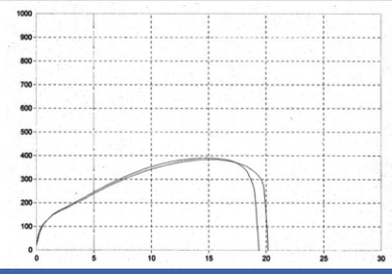
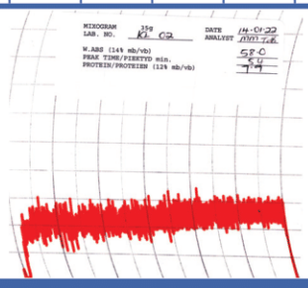
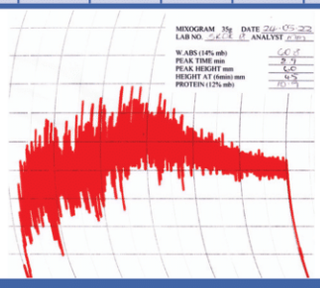
2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

Country of origin	USA Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	-	-	-	3	5	8	73	64	46	47	105	335
WHEAT												
GRADING												
Protein (12% mb), %	-	-	-	9.6	9.1	9.3	13.3	12.0	11.0	10.1	12.0	11.9
Moisture, %	-	-	-	12.4	12.5	12.4	11.3	11.2	11.1	11.2	11.1	11.2
Falling number, sec	-	-	-	365	317	335	344	349	366	367	311	341
1000 Kernel mass (13% mb), g	-	-	-	33.1	35.0	34.3	40.1	41.8	42.1	41.8	38.1	40.3
Hlm (dirty), kg/hl	-	-	-	80.9	79.3	79.9	81.2	81.3	79.9	79.8	78.1	79.9
Screenings (<1.8 mm sieve), %	-	-	-	1.88	2.41	2.21	0.69	0.82	0.92	0.91	2.04	1.20
Gravel, stones, turf and glass, %	-	-	-	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Foreign matter, %	-	-	-	0.23	0.11	0.16	0.01	0.02	0.04	0.02	0.15	0.06
Other grain & unthreshed ears, %	-	-	-	0.30	0.24	0.27	0.29	0.23	0.42	0.39	1.12	0.57
Heat damaged kernels, %	-	-	-	0.16	0.40	0.31	0.01	0.01	0.00	0.00	0.04	0.01
Immature kernels, %	-	-	-	0.00	0.03	0.02	0.09	0.04	0.02	0.02	0.03	0.04
Insect damaged kernels, %	-	-	-	0.11	0.04	0.06	0.18	0.17	0.28	0.32	0.58	0.34
Sprouted kernels, %	-	-	-	0.11	0.07	0.08	0.09	0.09	0.06	0.04	0.44	0.19
Total damaged kernels, %	-	-	-	0.37	0.54	0.48	0.37	0.31	0.35	0.39	1.08	0.58
Combined deviations, %	-	-	-	2.79	3.30	3.11	1.35	1.39	1.73	1.71	4.39	2.41
Heavily frost damaged kernels, %	-	-	-	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.01
Field fungi, %	-	-	-	0.13	0.38	0.29	0.44	0.38	0.23	0.17	0.77	0.47
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 (*Crotalaria spp., etc.*)	-	-	-	0	0	0	0	0	0	0	1	0
Poisonous seeds (*Argemone mexicana, 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
	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	-		-	3	5	8	19	16	14	8	8	65
Bühler Extraction, %	-	-	-	72.6	74.3	73.7	74.0	74.1	73.7	73.8	73.3	73.9
FLOUR												
Colour, KJ	-	-	-	-5.0	-4.7	-4.8	-4.9	-5.0	-5.0	-4.9	-4.8	-4.9
Colour, Konica Minolta CM5 (dry)												
L*	-	-	-	95.11	94.55	94.76	93.60	93.73	93.75	93.96	93.55	93.70
a*	-	-	-	0.28	0.35	0.33	0.51	0.48	0.46	0.47	0.49	0.49
b*	-	-	-	9.04	8.70	8.82	9.83	9.89	9.84	9.77	9.91	9.85
Ash (db), %	-	-	-	0.49	0.51	0.50	0.59	0.60	0.61	0.62	0.60	0.60
Protein (12% mb), %	-	-	-	7.9	7.5	7.6	12.3	10.9	10.0	9.1	11.1	10.9
Wet Gluten (14% mb), %	-	-	-	19.8	17.5	18.9	32.5	28.9	26.6	23.4	29.7	28.9
Dry Gluten (14% mb), %	-	-	-	6.3	6.0	6.2	11.0	9.5	8.8	7.8	9.9	9.6
Gluten Index	-	-	-	94	92	93	96	96	96	96	96	96
100 g BAKING TEST												
Baking water absorption, %	-	-	-	58.0	55.7	56.6	62.4	60.8	60.1	59.0	61.1	61.0
Loaf volume, cm³	-	-	-	903	781	827	1150	1064	1018	938	1078	1065
Evaluation	-	-	-	0	0	0	0	0	0	0	0	0
FARINOGRAM												
Water absorption (14% mb), %	-	-	-	49.4	48.6	48.9	61.5	59.9	59.3	58.0	59.6	60.0
Development time, min	-	-	-	1.2	1.1	1.2	7.9	5.3	4.5	4.0	4.9	5.7
Stability, mm	-	-	-	2.3	2.0	2.1	12.2	9.1	8.1	7.3	10.1	9.7
Mixing tolerance index, BU	-	-	-	61	75	70	33	44	48	52	41	42





2021/22 Imported Wheat Quality Versus 2021/22 RSA Wheat Quality

Country of origin	USA Average						RSA Crop Average					
Class and Grade bread wheat	Super	B1	B2	B3	COW	Average	Super	B1	B2	B3	COW	Average
No. of samples	-	-	-	3	5	8	19	16	14	8	8	65
ALVEOGRAM												
Strength (S), cm²	-	-	-	14.9	12.3	13.3	51.3	41.1	37.2	33.2	43.2	42.5
Stability (P), mm	-	-	-	44	38	40	89	80	88	85	85	86
Distensibility (L), mm	-	-	-	71	69	70	136	127	108	93	126	121
P/L	-	-	-	0.62	0.56	0.58	0.69	0.66	0.98	0.92	0.69	0.77
												
EXTENSOGRAM												
Strength, cm²	-	-	-	64	54	58	123	108	87	72	106	103
Max. height, BU	-	-	-	368	325	341	426	401	360	346	405	393
Extensibility, mm	-	-	-	123	114	117	215	198	177	152	188	191
												
MIXOGRAM												
Peak time, min	-	-	-	5.4	4.6	4.9	3.0	2.9	2.9	2.9	3.0	2.9
Water absorption (14% mb), %	-	-	-	58.0	57.8	57.9	62.6	60.8	59.8	59.0	61.2	60.9
												
MYCOTOXINS												
Aflatoxin B_1 (µg/kg)	ND						ND					
Aflatoxin B_2 (µg/kg)	ND						ND					
Aflatoxin G_1 (µg/kg)	ND						ND					
Aflatoxin G_2 (µg/kg)	ND						ND					
Fumonisin B_1 (µg/kg)	ND						ND					
Fumonisin B_2 (µg/kg)	ND						ND					
Fumonisin B_3 (µg/kg)	ND						ND					
Deoxynivalenol (µg/kg) [max. value]	657 [710]						169 [1 085]					
15-ADON (µg/kg)	0 [<100]						16 [183]					
Ochratoxin A (µg/kg)	ND						ND					
Zearalenone (µg/kg)	ND						4 [144]					
HT-2 (µg/kg)	ND						ND					
T-2 Toxin (µg/kg)	ND						ND					
No. of samples	3						40					