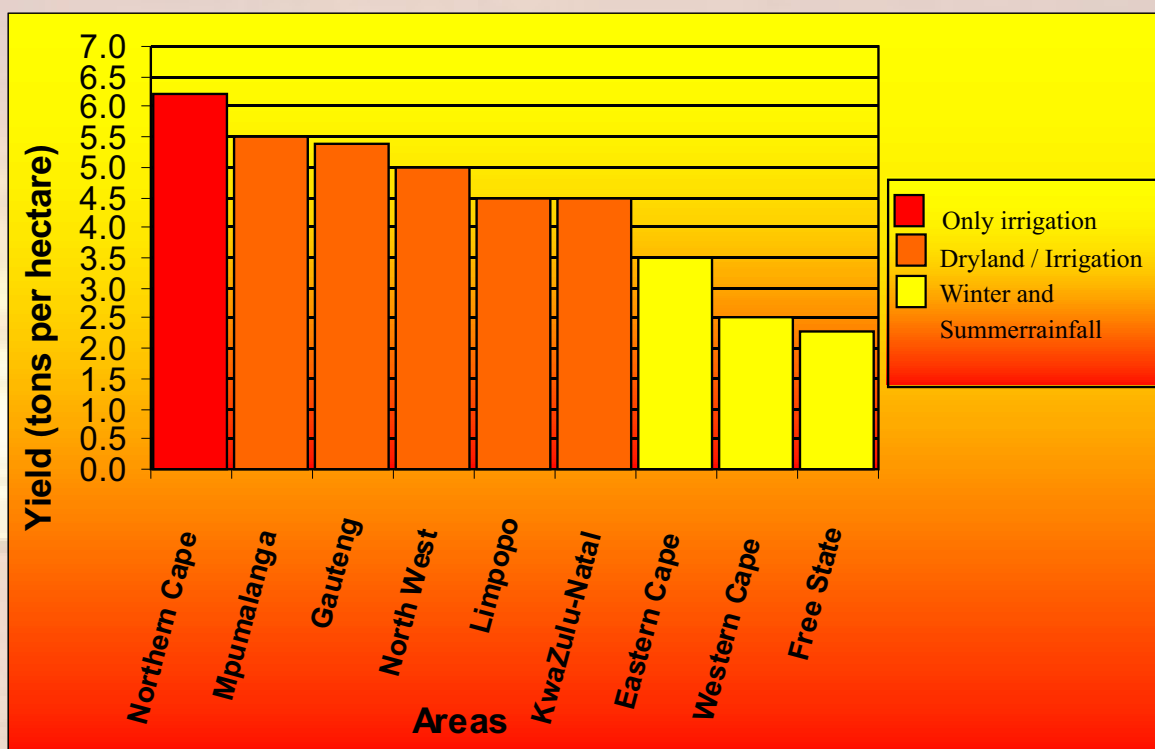


## Average yield per area (Irrigation versus summer and winter rainfall areas)

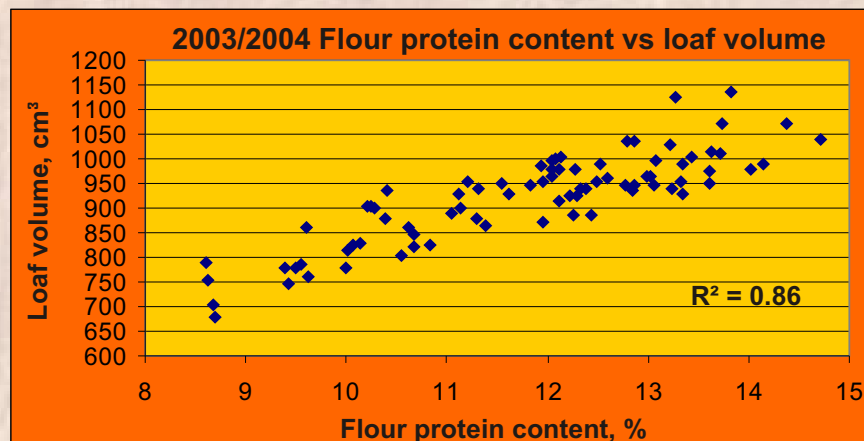
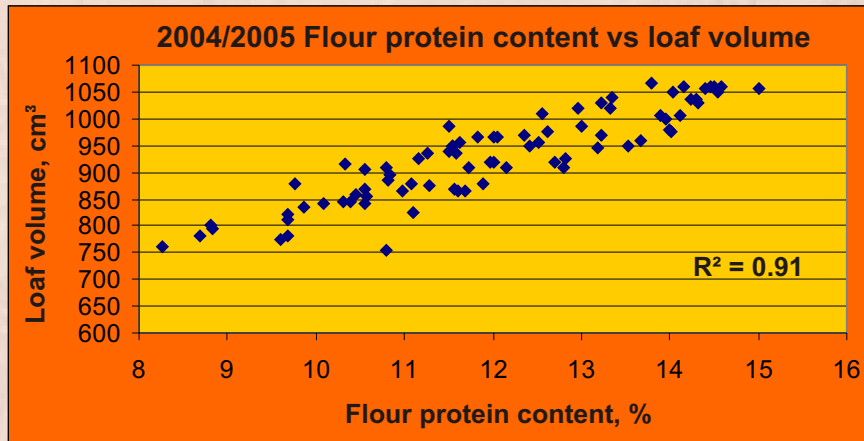
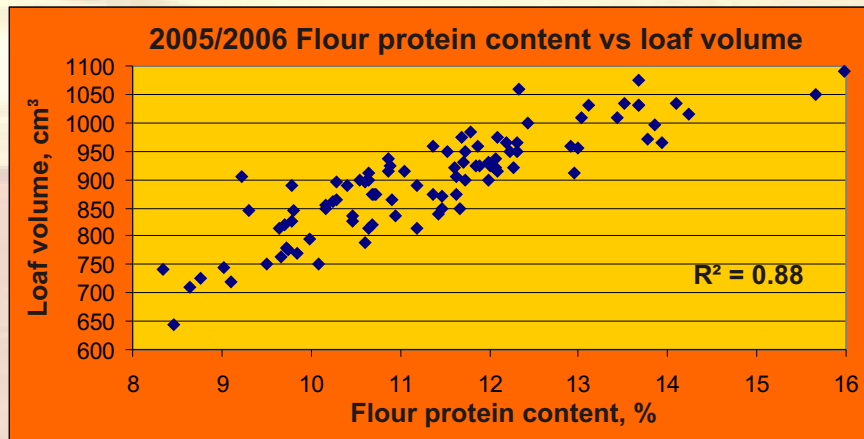
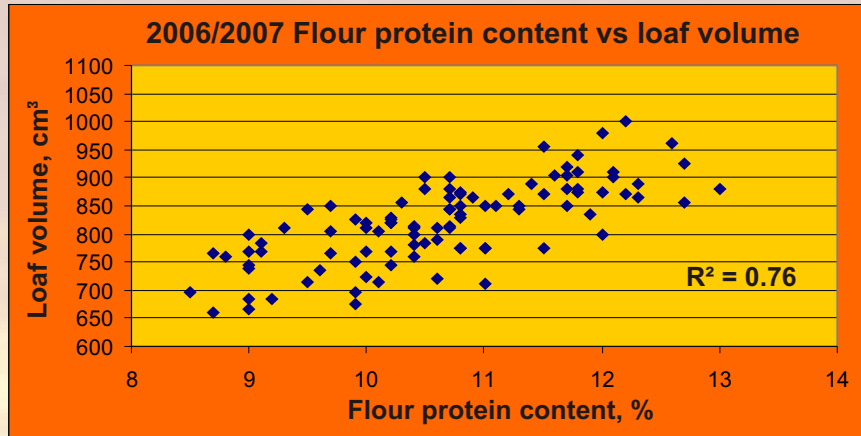


## Average quality data of imported wheat during the 2005 / 2006 season (previous season)

	America	Argentina	Australia	Germany	France	Canada	Ukraine	RSA
Protein (12 % mb) (%)	11.96	11.56	12.79	11.99	11.12	12.92	10.97	12.43
Hlm (Kg/hl)	76.7	77.1	80.9	76.5	77.1	79.1	77.0	78.2
Screenings (%)	2.32	2.42	1.32	2.52	3.00	2.56	2.35	1.69
Extraction (%)	72.6	73.8	73.9	73.7	74.7	74.0	73.4	75.5
Flour colour (KJ)	-0.3	0.2	-2.4	0.4	-0.2	-1.1	-0.2	-1.8
<b>Farinogram</b>								
Waterabsorption (%)	60.7	61.7	65.0	60.4	59.3	62.8	58.5	62.3
Dev. Time (min)	2.3	2.3	5.7	2.2	1.7	4.2	1.9	5.0
<b>Alveogram</b>								
Strength (cm <sup>2</sup> )	37.4	38.3	51.7	38.9	41.2	51.0	34.3	40.7
<b>Mixogram (Bühler)</b>								
Peak time (min)	4.1	4.1	2.8	4.1	4.1	3.5	4.5	2.5
<b>Baking test 100-gram</b>								
Volume (cm <sup>3</sup> )	807	763	871	805	760	875	760	906
Samples tested	23	48	8	53	2	5	16	480
Tonnage	88 651	392 930	59 927	354 718	9 920	62 643	85 979	1 905 000

# Straight - dough optimized 100g Baking test

## Comparison of protein vs loaf volume over the last four seasons



## Comparison of Flour Quality over the last four seasons

Flour Quality 2006/2007 season			
Flour protein (12 % mb)	10.6	Farinogram water abs, (%)	61.4
Bread volume 100g (cm <sup>3</sup> )	816	Farinogram dev. time (min)	3.4
Mixogram (Bühler) peak time (min)	2.6	Alveogram strength (cm <sup>2</sup> )	36.8
Extensogram strength (cm <sup>2</sup> )	82	Alveogram P/L	0.93

Flour Quality 2005/2006 season			
Flour protein (12 % mb)	11.5	Farinogram water abs, (%)	62.3
Bread volume 100g (cm <sup>3</sup> )	906	Farinogram dev. time (min)	5.0
Mixogram (Bühler) peak time (min)	2.5	Alveogram strength (cm <sup>2</sup> )	40.7
Extensogram strength (cm <sup>2</sup> )	108	Alveogram P/L	0.81

Flour Quality 2004/2005 season			
Flour protein (12 % mb)	12.0	Farinogram water abs, (%)	61.0
Bread volume 100g (cm <sup>3</sup> )	930	Farinogram dev. time (min)	5.1
Mixogram (Bühler) peak time (min)	2.6	Alveogram strength (cm <sup>2</sup> )	39.6
Extensogram strength (cm <sup>2</sup> )	115	Alveogram P/L	0.62

Flour Quality 2003/2004 season			
Flour protein (12 % mb)	11.8	Farinogram water abs, (%)	61.5
Bread volume 100g (cm <sup>3</sup> )	922	Farinogram dev. time (min)	4.5
Mixogram (Bühler) peak time (min)	2.4	Alveogram strength (cm <sup>2</sup> )	41.1
Extensogram strength (cm <sup>2</sup> )	98	Alveogram P/L	0.84

**SOUTH AFRICAN  
WINTER RAINFALL WHEAT  
Western Cape Province**

PRODUCTION REGION	(2) Swartland Western Region					(3) Swartland Central Region							
	Intake silos					Eendekuil Klipheuwel Koringberg Malmesbury Moorreesburg Moravia Piketberg Pools Ruststasie							
<b>WHEAT</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>				
Protein (12% mb), %	11.27	9.50	12.60	0.94		11.11	9.30	13.20	0.96				
Falling number, sec	393	370	431	16.59		362	255	414	29.53				
1000 Kernel mass (13% mb), g	36.6	32.7	39.4	1.95		37.2	28.3	41.0	2.51				
Hectolitre mass (dirty), kg/hl	77.2	75.0	79.6	1.48		77.7	74.9	81.7	1.80				
Screenings (<1.8mm), %	2.78	1.79	5.12	0.89		1.77	0.18	5.17	1.23				
Total damaged kernels, %	0.69	0.00	1.56	0.39		0.83	0.24	2.52	0.35				
<b>Number of samples</b>	<b>18</b>					<b>65</b>							
<b>CULTIVARS</b>													
	SST 88 46.5					SST 88 35.4							
cultivars	SST 027 20.8					SST 027 29.5							
with highest %	SST 57 14.9					SST 015 15.2							
occurrence	SST 015 12.7					SST 57 14.9							
	PAN 3490 1.7					SST 65 1.9							
<b>Number of samples</b>	<b>18</b>					<b>65</b>							
<b>MIXOGRAM (Quadromat)</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>				
Peak time, min	2.6	2.3	2.9	0.20		2.5	2.0	3.2	0.26				
Tail height (6min), mm	46	41	50	2.72		46	40	52	2.40				
<b>Number of samples</b>	<b>18</b>					<b>65</b>							
<b>BÜHLER EXTRACTION, %</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>	
	74.3	74.4	74.7	-	74.7	-	74.6	75.1	75.1	75.1	75.0	-	
<b>FLOUR</b>													
Protein (12% mb), %	11.7	11.0	9.9	-	10.2	-	11.8	11.0	10.0	9.0	10.8	-	
Colour, KJ	-1.7	-1.5	-1.5	-	-0.5	-	-1.7	-1.8	-2.0	-2.0	-1.5	-	
<b>FARINOGRAM</b>													
Water absorption (14% mb), %	62.9	61.5	60.6	-	60.8	-	62.6	61.0	60.6	59.1	61.4	-	
Development time, min	3.5	3.5	3.2	-	3.2	-	4.5	4.7	2.2	1.8	4.0	-	
Stability, min	7.0	7.8	6.3	-	5.7	-	7.5	6.9	6.2	4.5	5.6	-	
Mixing tolerance index, BU	38	34	40	-	51	-	42	47	37	63	56	-	
<b>EXTENSOGRAM (45 min pull)</b>													
Area, cm <sup>2</sup>	82	85	67	-	78	-	86	78	66	65	81	-	
Maximum height, BU	325	350	305	-	325	-	330	335	315	315	305	-	
Extensibility, mm	168	166	140	-	170	-	178	164	147	146	174	-	
<b>ALVEOGRAM</b>													
Strength (S), cm <sup>2</sup>	38.8	37.8	32.3	-	33.5	-	38.4	33.9	32.0	27.4	34.3	-	
Stability (P), mm	93	93	89	-	84	-	85	79	84	78	81	-	
Distensibility (L), mm	96	92	80	-	93	-	110	106	86	78	103	-	
Configuration ratio (P/L)	0.97	1.01	1.11	-	0.90	-	0.77	0.75	0.98	1.00	0.79	-	
<b>MIXOGRAM</b>													
Peak time, min	2.3	2.3	2.3	-	2.3	-	2.3	2.3	2.3	2.3	2.3	-	
<b>100g BAKING TEST</b>													
Loaf volume, cm <sup>3</sup>	850	775	750	-	770	-	875	775	725	665	775	-	
Evaluation	2	3	2	-	1	-	1	3	3	3	2	-	

# RHEOLOGICAL GRAPHS PER PRODUCTION REGION

**MIXOGRAM**

**FARINOGRAM**

**EXTENSOGRAM**

**ALVEOGRAM**

**SOUTH AFRICAN  
WINTER RAINFALL WHEAT  
Western Cape Province**

PRODUCTION REGION	(4)					(5)							
	Swartland Eastern Region					Rüens Western Region							
Intake silos	Ceres Gouda Halfmanshof Leliedam Porterville Riebeeck-Wes					Bredasdorp Caledon Klipdale Krige Napier Protem Rietpoel Villiersdorp							
<b>WHEAT</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>				
Protein (12% mb), %	10.41	8.80	12.40	1.00		11.34	10.20	12.70	0.70				
Falling number, sec	353	312	406	23.55		366	262	423	44.34				
1000 Kernel mass (13% mb), g	37.3	33.2	40.9	2.76		40.2	35.9	44.5	1.89				
Hectolitre mass (dirty), kg/hl	78.9	76.1	83.6	2.18		76.3	72.0	78.9	1.80				
Screenings (<1.8mm), %	1.04	0.31	2.78	0.81		2.19	0.83	3.83	0.80				
Total damaged kernels, %	0.90	0.18	2.22	0.58		0.82	0.24	1.88	0.46				
<b>Number of samples</b>	<b>17</b>					<b>27</b>							
<b>CULTIVARS</b>													
	SST 88 34.5					SST 88 47.7							
cultivars	SST 027 28.2					SST 57 21.0							
with highest %	SST 57 21.4					SST 015 16.9							
occurrence	SST 015 11.3					SST 027 7.2							
	SST 65 2.2					PAN 3404 2.5							
<b>Number of samples</b>	<b>17</b>					<b>27</b>							
<b>MIXOGRAM (Quadromat)</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>				
Peak time, min	2.7	2.2	3.3	0.32		2.5	2.2	2.8	0.17				
Tail height (6min), mm	44	39	52	3.26		48	43	52	2.03				
<b>Number of samples</b>	<b>17</b>					<b>27</b>							
<b>BÜHLER EXTRACTION, %</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>	
	74.1	75.4	74.9	75.0	-	-	75.3	75.4	74.8	75.0	74.9	-	
<b>FLOUR</b>													
Protein (12% mb), %	11.4	10.7	9.6	9.0	-	-	11.3	10.7	10.4	9.1	10.2	-	
Colour, KJ	-1.5	-1.4	-2.0	-2.1	-	-	-1.2	-1.5	-1.3	-1.8	-1.2	-	
<b>FARINOGRAM</b>													
Water absorption (14% mb), %	61.4	60.4	60.7	59.1	-	-	61.8	61.1	61.1	58.2	61.2	-	
Development time, min	4.8	4.0	2.5	1.7	-	-	4.2	4.0	3.0	3.7	2.8	-	
Stability, min	8.1	6.2	5.3	4.6	-	-	6.7	6.0	5.3	5.9	5.1	-	
Mixing tolerance index, BU	42	49	52	50	-	-	43	53	63	50	58	-	
<b>EXTENSOGRAM (45 min pull)</b>													
Area, cm <sup>2</sup>	102	71	66	53	-	-	82	79	65	67	65		
Maximum height, BU	375	290	310	295	-	-	305	305	260	285	260		
Extensibility, mm	184	166	140	132	-	-	185	179	172	165	169		
<b>ALVEOGRAM</b>													
Strength (S), cm <sup>2</sup>	43.4	32.6	28.1	26.3	-	-	38.2	32.7	29.2	25.7	29.5	-	
Stability (P), mm	83	74	85	77	-	-	86	76	73	60	76	-	
Distensibility (L), mm	132	110	69	76	-	-	106	106	99	110	95	-	
Configuration ratio (P/L)	0.63	0.67	1.23	1.02	-	-	0.81	0.71	0.74	0.54	0.80	-	
<b>MIXOGRAM</b>													
Peak time, min	2.3	2.3	2.3	2.5	-	-	2.3	2.4	2.4	2.4	2.3	-	
<b>100g BAKING TEST</b>													
Loaf volume, cm <sup>3</sup>	890	865	735	740	-	-	845	810	760	770	745	-	
Evaluation	0	0	2	0	-	-	1	1	2	0	2	-	

# RHEOLOGICAL GRAPHS PER PRODUCTION REGION

**MIXOGRAM**

**FARINOGRAM**

**EXTENSOGRAM**

**ALVEOGRAM**

**SOUTH AFRICAN  
WINTER RAINFALL WHEAT  
Western Cape Province**

**IRRIGATION WHEAT  
Vaal and Orange river area**

PRODUCTION REGION	(6) Rüens Eastern Region						(10) Griqualand - West					
Intake silos	Albertinia Ashton Camfer Heidelberg Karringmelksrivier Kleinberg Protem Riversdal Swellendam						Britstown Douglas Havenga Brug Marydale Modderrivier Oranjerivierstasie Prieska Rietrivier Upington					
<b>WHEAT</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>			<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		
Protein (12% mb), %	11.12	9.10	12.60	0.83			11.87	10.90	13.60	0.71		
Falling number, sec	359	228	426	46.65			387	325	450	29.39		
1000 Kernel mass (13% mb), g	39.1	32.2	46.2	3.82			37.8	30.3	46.6	3.19		
Hectolitre mass (dirty), kg/hl	76.4	72.0	79.1	1.58			80.8	75.5	82.1	1.39		
Screenings (<1.8mm), %	1.38	0.31	2.77	0.67			1.38	0.20	2.72	0.65		
Total damaged kernels, %	1.08	0.36	1.96	0.40			0.41	0.08	1.54	0.30		
<b>Number of samples</b>	<b>33</b>						<b>27</b>					
<b>CULTIVARS</b>												
	SST 88			43.4			SST 806			35.5		
cultivars	SST 57			26.5			CRN 826			20.5		
with highest %	SST 015			10.8			Krokodil			9.4		
occurrence	SST 027			7.3			Duzi			9.2		
	SST 825			4.4			SST 876			7.0		
<b>Number of samples</b>	<b>33</b>						<b>27</b>					
<b>MIXOGRAM (Quadromat)</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>			<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		
Peak time, min	2.9	2.3	6.0	0.74			2.2	1.3	2.5	0.22		
Tail height (6min), mm	48	40	53	3.11			46	41	51	2.40		
<b>Number of samples</b>	<b>33</b>						<b>27</b>					
<b>BÜHLER EXTRACTION, %</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>
	74.6	75.2	74.7	74.4	74.6	-	76.0	76.9	75.7	-	-	-
<b>FLOUR</b>												
Protein (12% mb), %	11.3	10.4	9.7	9.0	10.0	-	11.8	10.7	11.0	-	-	-
Colour, KJ	-0.7	-0.3	-0.3	-0.1	1.3	-	-1.2	-1.6	-1.8	-	-	-
<b>FARINOGRAM</b>												
Water absorption (14% mb), %	63.1	63.0	61.7	58.7	63.3	-	62.8	62.2	62.8	-	-	-
Development time, min	3.8	2.7	2.4	1.7	2.0	-	4.2	3.5	3.3	-	-	-
Stability, min	6.5	6.4	6.3	5.0	6.0	-	6.2	5.5	3.7	-	-	-
Mixing tolerance index, BU	45	41	45	59	43	-	49	52	72	-	-	-
<b>EXTENSOGRAM (45 min pull)</b>												
Area, cm2	67	60	68	47	75	-	94	77	57	-	-	-
Maximum height, BU	260	240	255	240	270	-	315	295	215	-	-	-
Extensibility, mm	185	178	178	137	193	-	204	180	179	-	-	-
<b>ALVEOGRAM</b>												
Strength (S), cm2	35.3	32.7	32.4	24.6	36.2	-	36.2	32.7	26.3	-	-	-
Stability (P), mm	84	84	84	65	92	-	79	79	75	-	-	-
Distensibility (L), mm	97	89	88	88	92	-	108	96	85	-	-	-
Configuration ratio (P/L)	0.87	0.94	0.96	0.74	1.00	-	0.73	0.83	0.88	-	-	-
<b>MIXOGRAM</b>												
Peak time, min	2.4	2.3	2.3	3.0	2.5	-	2.2	2.3	1.8	-	-	-
<b>100g BAKING TEST</b>												
Loaf volume, cm3	850	810	765	745	810	-	940	900	850	-	-	-
Evaluation	1	0	1	0	0	-	0	0	0	-	-	-



# RHEOLOGICAL GRAPHS PER PRODUCTION REGION

**MIXOGRAM**

**FARINOGRAM**

**EXTENSOGRAM**

**ALVEOGRAM**

**SOUTH AFRICAN  
IRRIGATION WHEAT  
Vaal and Orange river area**

**MAINLY IRRIGATION  
North-West Province**

PRODUCTION REGION	(11) Vaalharts						(12) North-West Western Region					
Intake silos	Barkly-Wes Hartswater Jan Kemp Magogong Taung						Bloubank Buhmannsdrif Kameel Kraaipan Madibogo Mafikeng Mareetsane Piet Plessis Springbokpan Vergeleë Vryburg Vryhof					
<b>WHEAT</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>			<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		
Protein (12% mb), %	11.17	10.10	12.50	0.74			11.08	9.80	11.70	0.87		
Falling number, sec	389	357	433	23.25			356	330	379	25.63		
1000 Kernel mass (13% mb), g	36.6	32.9	38.8	1.86			39.0	37.3	42.6	2.45		
Hectolitre mass (dirty), kg/hl	77.1	73.1	80.1	1.95			81.3	79.7	82.6	1.20		
Screenings (<1.8mm), %	3.19	2.29	4.99	0.98			2.02	1.04	4.64	1.75		
Total damaged kernels, %	0.46	0.16	0.92	0.25			0.32	0.24	0.40	0.09		
<b>Number of samples</b>	<b>14</b>						<b>4</b>					
<b>CULTIVARS</b>												
	CRN 826			44.4			SST 806			67.5		
cultivars	SST 806			29.7			SST 822			11.8		
with highest %	SST 876			6.1			SST 876			8.3		
occurrence	Baviaans			5.6			CRN 826			5.0		
	SST 825			3.3			Krokodil			4.3		
<b>Number of samples</b>	<b>14</b>						<b>4</b>					
<b>MIXOGRAM (Quadromat)</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>			<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>		
Peak time, min	2.7	2.3	3.0	0.23			2.5	2.0	3.5	0.67		
Tail height (6min), mm	46	43	51	1.83			46	45	48	1.50		
<b>Number of samples</b>	<b>14</b>						<b>4</b>					
<b>BÜHLER EXTRACTION, %</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>
	77.2	77.1	77.0	-	76.5	-	-	76.3	-	-	72.7	-
<b>FLOUR</b>												
Protein (12% mb), %	12.0	10.7	10.1	-	10.6		-	10.8	-	-	9.0	-
Colour, KJ	-1.0	-1.4	-1.5	-	-1.1		-	-1.3	-	-	0.1	-
<b>FARINOGRAM</b>												
Water absorption (14% mb), %	61.2	58.8	58.2	-	59.0	-	-	62.5	-	-	58.7	-
Development time, min	4.8	3.8	3.5	-	3.3	-	-	4.0	-	-	1.5	-
Stability, min	6.3	5.9	5.6	-	6.3	-	-	5.2	-	-	4.6	-
Mixing tolerance index, BU	46	55	64	-	48	-	-	59	-	-	63	-
<b>EXTENSOGRAM (45 min pull)</b>												
Area, cm <sup>2</sup>	94	86	76	-	97	-	-	67	-	-	57	-
Maximum height, BU	315	330	315	-	345	-	-	245	-	-	270	-
Extensibility, mm	205	181	167	-	190	-	-	193	-	-	142	-
<b>ALVEOGRAM</b>												
Strength (S), cm <sup>2</sup>	35.3	34.9	32.0	-	34.4	-	-	32.7	-	-	25.4	-
Stability (P), mm	71	63	60	-	65	-	-	75	-	-	67	-
Distensibility (L), mm	123	143	141	-	135	-	-	119	-	-	93	-
Configuration ratio (P/L)	0.58	0.44	0.43	-	0.48	-	-	0.63	-	-	0.72	-
<b>MIXOGRAM</b>												
Peak time, min	2.3	2.5	2.3	-	2.7	-	-	2.3	-	-	2.8	-
<b>100g BAKING TEST</b>												
Loaf volume, cm <sup>3</sup>	980	815	805	-	790	-	-	850	-	-	685	-
Evaluation	0	1	0	-	2	-	-	0	-	-	2	-

# RHEOLOGICAL GRAPHS PER PRODUCTION REGION

**MIXOGRAM**

**FARINOGRAM**

**EXTENSOGRAM**

**ALVEOGRAM**

**SOUTH AFRICAN  
MAINLY IRRIGATION  
North-West Province**

PRODUCTION REGION	(14) North-West Southern Region				(15) North-West South-Eastern Region							
	Intake silos											
	Amalia Barberspan Delareyville Excelsior Geysdorp Hallat's Hope Migdol Nooitgedacht Schweizer-Reneke Taaibospan				Bloemhof Christiana Hertzogville Hoopstad Kingswood							
<b>WHEAT</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>				
Protein (12% mb), %	12.37	11.50	13.30	0.90	12.01	11.10	13.20	0.68				
Falling number, sec	346	335	364	15.72	300	200	384	59.26				
1000 Kernel mass (13% mb), g	37.4	36.3	39.2	1.57	35.7	33.7	38.8	1.58				
Hectolitre mass (dirty), kg/hl	80.0	79.9	80.2	0.17	79.7	78.0	82.1	1.22				
Screenings (<1.8mm), %	1.88	1.43	2.69	0.70	2.21	0.80	3.69	0.86				
Total damaged kernels, %	0.33	0.30	0.36	0.03	0.22	0.00	0.42	0.13				
<b>Number of samples</b>	<b>3</b>				<b>13</b>							
<b>CULTIVARS</b>												
	SST 806		45.3		PAN 3118		35.2					
cultivars	CRN 826		28.3		SST 806		17.9					
with highest %	SST 822		8.0		CRN 826		13.9					
occurrence	SST 876		4.3		PAN 3191		12.0					
	Krokodil		4.0		SST 876		5.1					
<b>Number of samples</b>	<b>3</b>				<b>13</b>							
<b>MIXOGRAM (Quadromat)</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>	<b>ave</b>	<b>min</b>	<b>max</b>	<b>stdev</b>				
Peak time, min	2.4	2.4	2.5	0.06	2.9	2.3	3.4	0.37				
Tail height (6min), mm	46	46	46	0.00	50	46	53	1.93				
<b>Number of samples</b>	<b>3</b>				<b>13</b>							
<b>BÜHLER EXTRACTION, %</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>	<b>B1</b>	<b>B2</b>	<b>B3</b>	<b>B4</b>	<b>UT</b>	<b>COW</b>
	75.5	76.9	-	-	-	-	75.2	67.5	-	73.6	74.6	-
<b>FLOUR</b>												
Protein (12% mb), %	11.7	10.8	-	-	-	-	11.5	10.4	-	9.9	11.1	-
Colour, KJ	-0.8	-1.3	-	-	-	-	-0.7	-1.1	-	-1.6	-1.4	-
<b>FARINOGRAM</b>												
Water absorption (14% mb), %	63.6	61.6	-	-	-	-	63.6	62.8	-	65.8	62.2	-
Development time, min	4.5	3.5	-	-	-	-	4.0	1.9	-	1.9	2.5	-
Stability, min	5.5	4.7	-	-	-	-	7.4	5.3	-	3.0	7.7	-
Mixing tolerance index, BU	58	78	-	-	-	-	38	44	-	69	28	-
<b>EXTENSOGRAM (45 min pull)</b>												
Area, cm2	77	82	-	-	-	-	79	74	-	94	101	-
Maximum height, BU	250	285	-	-	-	-	315	340	-	410	405	-
Extensibility, mm	211	198	-	-	-	-	178	153	-	168	173	-
<b>ALVEOGRAM</b>												
Strength (S), cm2	37.0	31.7	-	-	-	-	42.5	39.3	-	45.6	44.0	-
Stability (P), mm	79	71	-	-	-	-	97	114	-	144	99	-
Distensibility (L), mm	119	112	-	-	-	-	92	64	-	51	94	-
Configuration ratio (P/L)	0.66	0.63	-	-	-	-	1.05	1.79	-	2.84	1.05	-
<b>MIXOGRAM</b>												
Peak time, min	2.3	2.3	-	-	-	-	2.4	2.8	-	3.8	2.8	-
<b>100g BAKING TEST</b>												
Loaf volume, cm3	880	875	-	-	-	-	870	780	-	695	850	-
Evaluation	1	0	-	-	-	-	1	2	-	4	1	-

# RHEOLOGICAL GRAPHS PER PRODUCTION REGION

**MIXOGRAM**

**FARINOGRAM**

**EXTENSOGRAM**

**ALVEOGRAM**