2022 / 2023 Crop

TRIGO ARGENTINO

Institutional quality report

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Bread wheat
2022/2023 Crop

Planted acreage, harvested acreage, production and yield, by sub-regions

SUBREGION	AREA PLANTED	AREA HARVESTED	YIELD	PRODUCTION
Sub I	538.859	531.884	2,61	1.388.915
Sub II N	866.445	743.500	1,74	1.299.289
Sub II S	1.264.053	1.141.649	2,34	2.672.600
Sub III	625.400	602.790	3,23	1.949.559
IV	460.528	460.528	2,64	1.217.818
Sub V N	498.690	456.905	1,84	844.768
Sub V S	1.025.605	1.016.505	2,42	2.463.762
NEA	245.985	201.294	1,13	227.729
NOA	277.063	232.863	1,16	271.541
TOTAL	**5.802.628**	**5.387.918**	**2,29**	**12.335.981**

SUBREGION	LOCALITY COMPOSITE	SAMPLING (TONS)	PRODUCTION (TONS)	PRODUCTION SAMPLED
Sub I	26	91170	1.388.915	11,26%
Sub II N	44	132498	1.299.289	10,53%
Sub II S	29	106464	2.672.600	21,67%
Sub III	37	127629	1.949.559	15,80%
IV	15	57461	1.217.818	9,87%
Sub V N	22	88960	844.768	6,85%
Sub V S	45	135869	2.463.762	19,97%
NEA	2	9000	227.729	1,85%
NOA	8	29500	271.541	2,20%
National	**228**	**778551**	**12.335.981**	**100,00%**

Procedure to ontain analytical results

SAMPLING

228
locality composite sample

9
subregion

WHEAT ANALYSIS

Commercial analysis (grade)
Weight of 1000 grams
Kernels. Ash. Protein content

Commercial analysis (grade)
Weight of 1000 grams
Kernels. Ash

MILLING
Flour yield

Flours analysis:
- Wet and dry gluten
- Falling number
- Ash
- Farinogram
- Alveogram

Flours analysis:
- Wet and dry gluten
- Index gluten
- Falling number
- Ash
- Zeleny test
- Farinogram
- Alveogram
- Mixogram
- Baking tests

National summary by subregions
Results of all the analyzed variables

SUBREGIONS	I	II N	II S	III	IV	V N	V S	NEA	NOA	* Pondered Average
GRAIN										
Test Weight (kg/hl)	80,41	78,42	76,34	81,13	76,66	78,0	79,22	79,25	81,25	**78,89**
Weight of 1000 kernels (gr)	34,1	33	34,82	36,55	35,5	32,6	34,64	35,36	36,34	**34,53**
Ahs (dry basis) %	1,78	1,82	1,74	1,25	1,73	1,88	1,79	1,93	1,76	**1,70**
Protein (13,5% Moisture) (%)	11,3	12,7	12,9	9,6	12,2	12,1	11,6	10,6	10,2	**11,66**
Protein (dry basis) (%)	13	14,7	14,9	11,1	14,1	14,0	13,4	12,2	11,8	**13,47**
Ash (dry basis) %	0,611	0,491	0,593	0,565	0,609	0,564	0,620	0,543	0,594	**0,56**
Color										
L	88,32	88,83	88,26	89,65	88,97	90,35	89,75	89,58	90,32	**89,24**
a	-1,74	-1,81	-1,50	-1,86	-1,47	-1,77	-1,66	-1,8	-1,65	**-1,71**
b	8,3	9,91	8,4	8,78	8,13	7,96	8,36	8,27	7,57	**8,60**
HARINA										
Moisture (%)	12,99	14,88	13,95	12,71	13,42	11,78	12,41	12,45	12,42	**13,16**
Protein (%)	10,5	11,6	12,1	8,7	11,4	11,2	11,2	9,6	9,4	**10,82**
Wet Gluten (%)	24,8	30,9	31,2	20,7	29,5	28,2	28,6	21,8	22,7	**28,26**
Dry Gluten (%)	8,8	11,1	11,0	7,3	10,2	10,0	10,0	8,0	7,9	**9,91**
Index Gluten (%)	99	97	95	99	96	98	96	99	98	**97**
Falling Number (seg)	565	532	436	449	467	542	570	457	407	**428,08**
Zeleny Test (cc)										
FARINOGRAM										
Water Absorption (%)	58,4	56,2	61,2	57,9	60,1	62,9	60,4	58,8	61,5	**58,16**
Development Time (min)	7,6	9,2	8,5	2,4	5,2	22,2	8,7	10,6	6,0	**7,88**
Stability (min)	15,2	15,9	12,5	1,5	22,1	29,1	28	29,9	18,2	**15,95**
Degree pf Softening (U.F.)	35	29	36	64	14,5	38	11	15	17	**35,85**
Quality Number	178	203	183	33	277	326	323	333	211	**212**
MIXOGRAM										
Development Time (min)	5,13	5,51	4,89	6,57	5,19	4,26	5,24	7,12	5,69	**5,37**
ALVEOGRAM										
P (mm)	90	71	89	87	101	123	96	101	119	**89,22**
L (mm)	19	23,5	23	16,7	20,2	17,2	21,4	16,8	14,1	**20,04**
G	74	111	107	56	82	60	92	57	40	**87,34**
W (Joules x 10-4)	240	284	308	182	295	288	306	227	194	**265**
P/L	1,22	0,64	0,83	1,55	1,24	2,05	1,04	1,77	2,97	**1,24**
Ie %	57,3	65,7	59,1	52	60	59,5	59,4	58,4	48,6	**58,6**
W (40) (Joules x 10-4)	155	129	154	144	176	214	166	174	194	**161**
BAKING										
Absorption (%)	60,0	62,0	62,5	60,0	62,3	62,0	63,0	61,0	60,0	**61,6**
Development Time (min)	03:00	03:30	04:00	02:30	03:45	03:30	04:00	03:00	02:30	**03:24**
Fermentation Time (min)	160	160	160	160	160	160	160	160	160	**160**
Loaf Volume (cc)	475	600	565	435	560	485	550	550	450	**522**
Specific Volume (cc/gr)	3,4	5,7	4,0	3,7	4,1	3,4	3,8	3,9	3,1	**4,0**

Argentine wheat
Main Quality Parameters

Subregion NOA

Test Weight (kg/hl)	81,25

GRADE

1	2	3	O/G
0%	87,50%	12,50%	0%

Protein (13,5 Moisture) (%)	10,2
Protein (s.s.s.) (%)	11
Wet Gluten (%)	24,4
W Alveogram (Joules 10-4)	207
Farino Stability (min)	20,4

Subregion NEA

Test Weight (kg/hl)	79,20

GRADE

1	2	3	O/G
0%	0%	100%	0%

Protein (13,5 Moisture) (%)	10,6
Protein (s.s.s.) (%)	12,2
Wet Gluten (%)	23,8
W Alveogram (Joules 10-4)	218,2
Farino Stability (min)	34,9

Subregion V N

Test Weight (kg/hl)	78,00

GRADE

1	2	3	O/G
0%	63,64%	31,82%	4,55%

Protein (13,5 Moisture) (%)	10,9
Protein (s.s.s.) (%)	12,5
Wet Gluten (%)	26,2
W Alveogram (Joules 10-4)	269
Farino Stability (min)	19,7

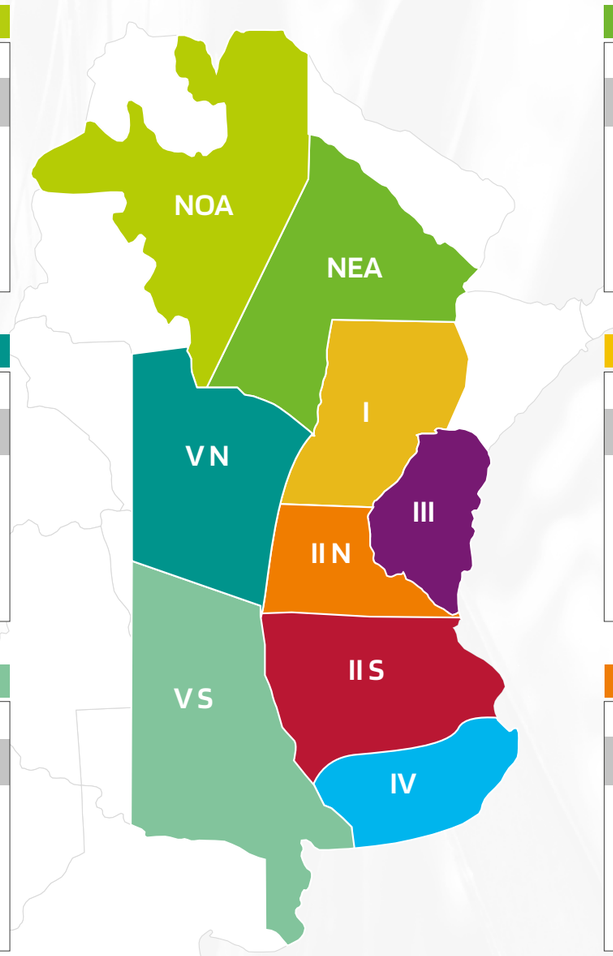
Subregion I

Test Weight (kg/hl)	80,40

GRADE

1	2	3	O/G
23,08%	73,08%	3,85%	0%

Protein (13,5 Moisture) (%)	11,3
Protein (s.s.s.) (%)	13,0
Wet Gluten (%)	26,5
W Alveogram (Joules 10-4)	194,3
Farino Stability (min)	10,9



Subregion V S

Test Weight (kg/hl)	79,20

GRADE

1	2	3	O/G
11,11%	60%	24,44%	4,44%

Protein (13,5 Moisture) (%)	11,6
Protein (s.s.s.) (%)	13,4
Wet Gluten (%)	29,3
W Alveogram (Joules 10-4)	321
Farino Stability (min)	17,7

Subregion II N

Test Weight (kg/hl)	78,42

GRADE

1	2	3	O/G
31,82%	56,82%	9,09%	2,27%

Protein (13,5 Moisture) (%)	12,7
Protein (s.s.s.) (%)	14,7
Wet Gluten (%)	30,8
W Alveograma (Joules 10-4)	292
Estabilidad Farino (min)	20,6

National

Test Weight (kg/hl)	78,89

GRADE

1	2	3	O/G
29,0%	52,0%	17,0%	0%

Protein (13,5 Moisture) (%)	11,7
Protein (s.s.s.) (%)	13,5
Wet Gluten (%)	28,3
W Alveogram (Joules 10-4)	265
Farino Stability (min)	15,9

Subregion II S

Test Weight (kg/hl)	76,30

GRADE

1	2	3	O/G
13,79%	48,83%	41,38%	0%

Protein (13,5 Moisture) (%)	12,9
Protein (s.s.s.) (%)	14,9
Wet Gluten (%)	32,9
W Alveogram (Joules 10-4)	298
Farino Stability (min)	18,1

Subregion III

Test Weight (kg/hl)	81,10

GRADE

1	2	3	O/G
83,78%	13,51%	2,70%	0%

Protein (13,5 Moisture) (%)	9,6
Protein (s.s.s.) (%)	11,1
Wet Gluten (%)	21,2
W Alveogram (Joules 10-4)	171,1
Farino Stability (min)	6,9

Subregion IV

Test Weight (kg/hl)	76,70

GRADE

1	2	3	O/G
40%	60%	0%	0%

Protein (13,5 Moisture) (%)	10,3
Protein (s.s.s.) (%)	11,9
Wet Gluten (%)	23,7
W Alveogram (Joules 10-4)	223
Farino Stability (min)	35,3

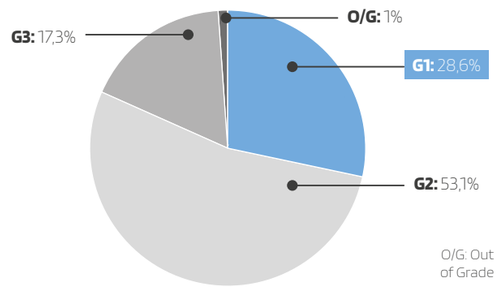
BREAD WHEAT

National averages
Weighted averages by tons produced in each region

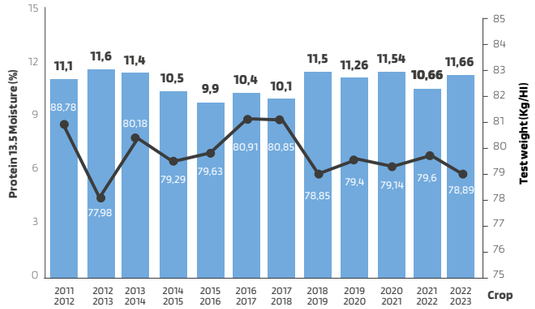
WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	76,23	81,25	78,89
Total Damaged Kernels (%)	0,16	1,01	0,52
Foreign Material (%)	0,22	0,84	0,45
Shrunken and Broken Kernels (%)	0,19	0,61	0,51
Yellow Berry Kernels (%)	0,43	6,42	3,29
Protein (13,5% Moisture) (%)	9,64	12,86	11,66
Protein (dry basis) (%)	11,15	14,87	13,47
Weight of 1000 Kernels (g.)	32,57	36,55	34,53
Ash (dry basis.) (%)	1,25	1,88	1,70

FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	21,24	32,93	28,26
Dry Gluten (%)	7,72	12,19	9,91
Falling Number (sec.)	365,75	463,75	428,08
Flour Yield (%)	60,44	71,73	67,68
Ash (dry basis) (%)	0,50	0,61	0,56
FARINOGRAM			
Water Absorption (14% H°) (%)	55,21	63,94	58,16
Development Time (min.)	3,57	9,99	7,88
Stability (min.)	6,88	20,6	15,95
Degree of Softening (12 min.)	18,49	63,67	36,85
ALVEOOGRAM			
P (mm)	59,66	126,62	89,22
L (mm)	52,73	116,51	87,34
W joules X 10 4	171,06	399,66	265
P / L	0,65	2,40	1,24

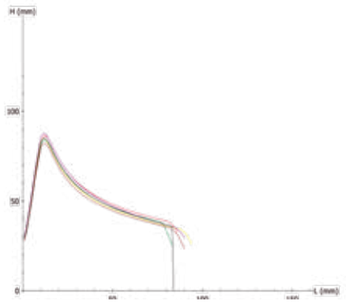
Grade distribution



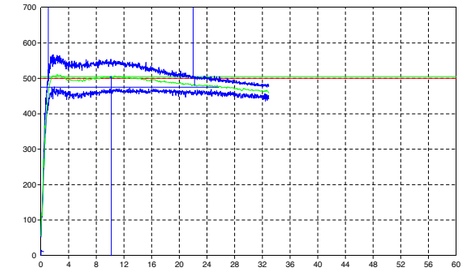
Protein 13,5% vs. Test weight



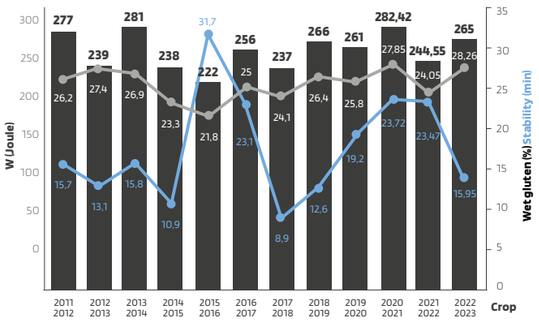
Alveogram



Farinogram



W, wet gluten y stability



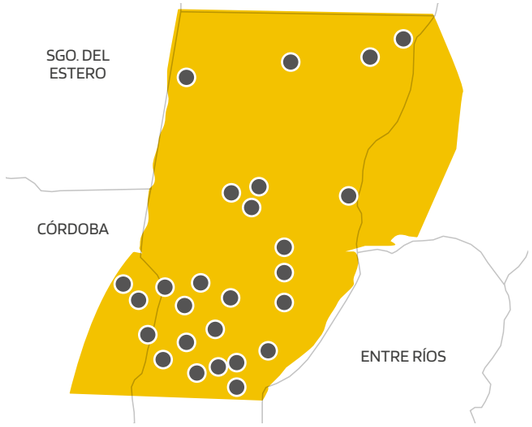
BREAD WHEAT

Subregion I. Analysis results
Weighted averages by tons of samples sets per location

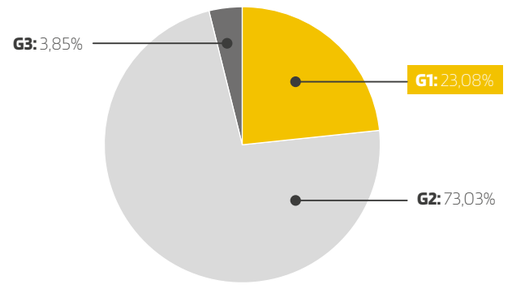
WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	77,00	84,80	80,41
Total Damaged Kernels (%)	0,12	1,88	0,71
Foreign Material (%)	0,05	1,30	0,22
Shrunken and Broken Kernels (%)	0,10	1,10	0,53
Yellow Berry Kernels (%)	0,00	22,40	6,42
Protein (13,5% Moisture) (%)	8,7	14,2	11,3
Protein (dry basis) (%)	10,1	16,4	13
Weight of 1000 Kernels (g.)	29,38	39,04	34,1
Cenizas (S.S.S.) (%)	1,396	2,167	1,784

FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	18,6	35,1	26,5
Dry Gluten (%)	6,8	12,1	9,2
Falling Number (sec.)	415	467	447
Flour Yield (%)	52,5	74,5	64,6
Ash (dry basis) (%)	0,388	0,608	0,501
FARINOGRAM			
Water Absorption (14% H°) (%)	53,4	60,8	56,5
Development Time (min.)	1,1	11,4	3,7
Stability (min.)	1,4	23,9	10,9
Degree of Softening (12 min.)	14	81	39
ALVEOOGRAM (*)			
P (mm)	45	79	60
L (mm)	55	180	101
W Joules x 10-4	120	310	194
P / L	0,31	1,41	0,68

SD: No Statistical Data
(*) There is not enough data to estimate the statistical indicator

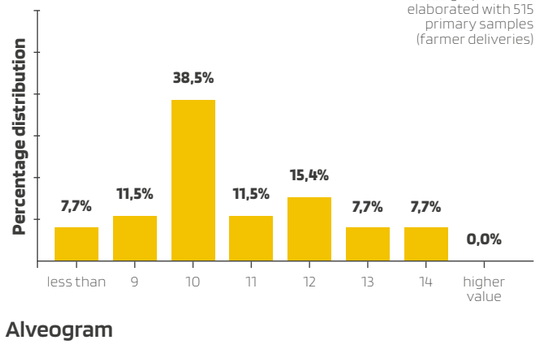


Grade distribution

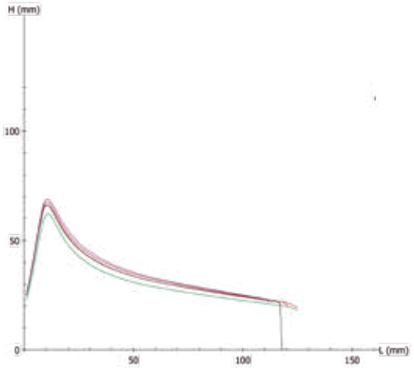


Protein (13.5% Moisture)

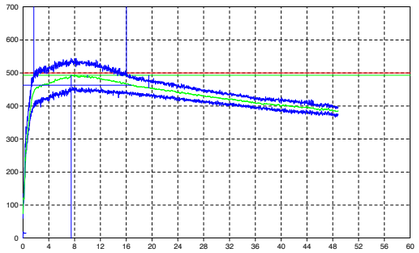
These graphic were elaborated with 515 primary samples (farmer deliveries)



Alveogram



Farinogram



BREAD WHEAT

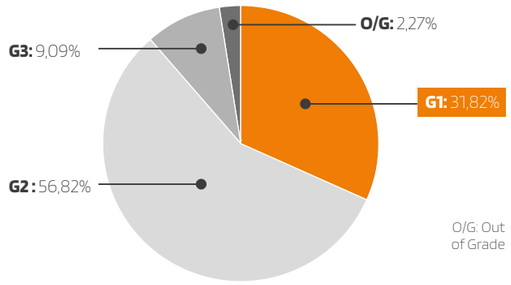
Subregion II N. Analysis results

Weighted averages by tons of samples sets per location

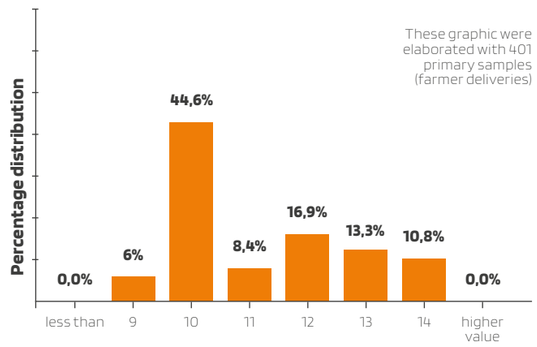
WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	70,27	83,00	78,42
Total Damaged Kernels (%)	0,10	1,30	0,40
Foreign Material (%)	0,10	1,40	0,34
Shrunken and Broken Kernels (%)	0,20	1,20	0,61
Yellow Berry Kernels (%)	0,20	6,30	1,69
Protein (13,5% Moisture) (%)	10,4	14,5	12,7
Protein (dry basis) (%)	12,0	16,8	14,7
Weight of 1000 Kernels (g.)	29,74	35,56	33,00
Cenizas (S.S.S.) (%)	1,325	2,095	1,821

FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	23,5	37,6	30,8
Dry Gluten (%)	7,6	12,9	10,6
Falling Number (sec.)	399	524	463
Flour Yield (%)	59,8	72,8	67,0
Ash (dry basis) (%)	0,435	0,615	0,507
FARINOGRAM			
Water Absorption (14% H°) (%)	52,5	58,9	56,4
Development Time (min.)	1,9	17,7	9,7
Stability (min.)	8,8	34,9	20,6
Degree of Softening (12 min.)	2	52	24
ALVEOOGRAM			
P (mm)	58	86	74
L (mm)	77	150	117
W Joules x 10-4	224	352	292
P / L	0,41	1,04	0,65

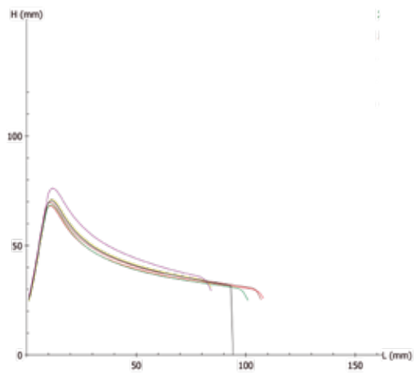
Grade distribution



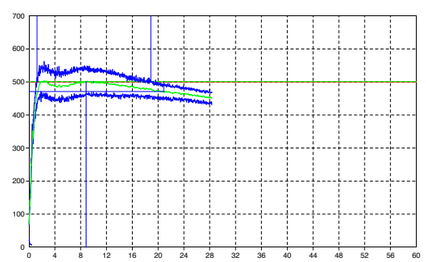
Protein (13.5% Moisture)

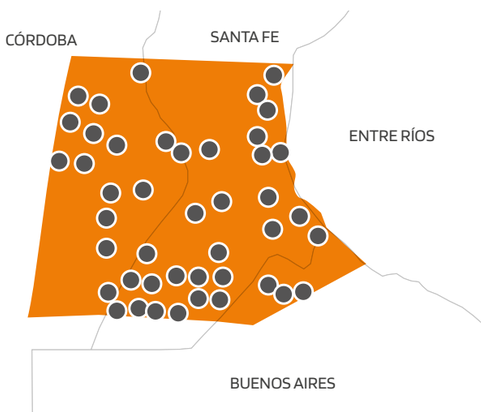


Alveogram



Farinogram





BREAD WHEAT

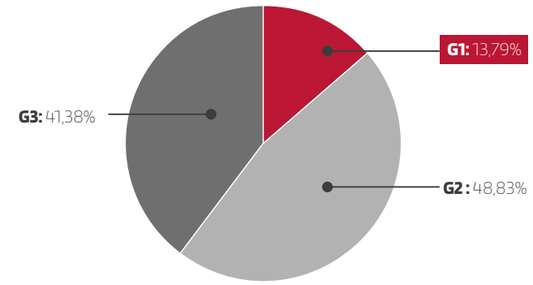
Subregion II S. Analysis results

Weighted averages by tons of samples sets per location

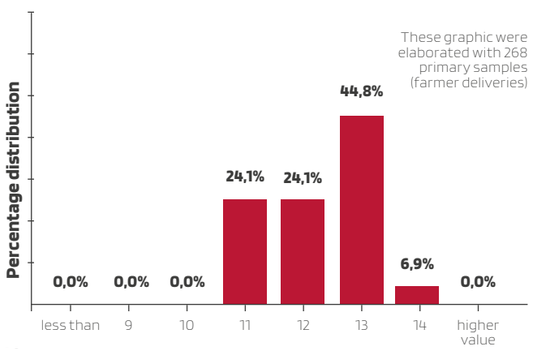
WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	73,10	79,30	76,34
Total Damaged Kernels (%)	0,00	2,73	1,01
Foreign Material (%)	0,08	1,50	0,38
Shrunken and Broken Kernels (%)	0,14	0,89	0,45
Yellow Berry Kernels (%)	0,00	7,38	1,9
Protein (13,5% Moisture) (%)	11,2	14,0	12,9
Protein (dry basis) (%)	12,9	16,2	14,9
Weight of 1000 Kernels (g.)	31,30	38,45	34,82
Cenizas (S.S.S.) (%)	1,516	1,980	1,742

FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	26,6	38,1	32,9
Dry Gluten (%)	9,9	14,1	12,2
Falling Number (sec.)	361	524	421
Flour Yield (%)	54,2	75,9	70,2
Ash (dry basis) (%)	0,412	0,729	0,575
FARINOGRAM			
Water Absorption (14% H°) (%)	55,7	62,1	59,1
Development Time (min.)	6,3	16,4	9,0
Stability (min.)	12,3	30,2	18,1
Degree of Softening (12 min.)	4	51	31
ALVEOOGRAM			
P (mm)	67	137	95
L (mm)	37	141	91
W Joules x 10-4	219	377	298
P / L	0,48	3,70	1,12

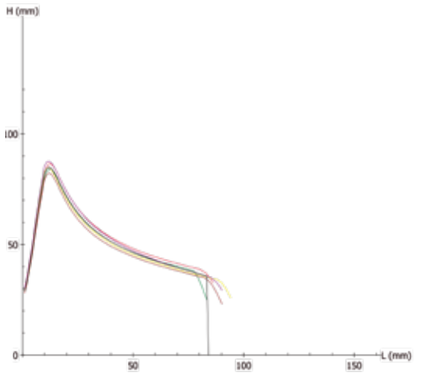
Grade distribution



Protein (13.5% Moisture)



Alveogram



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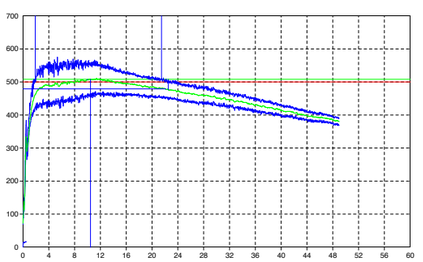
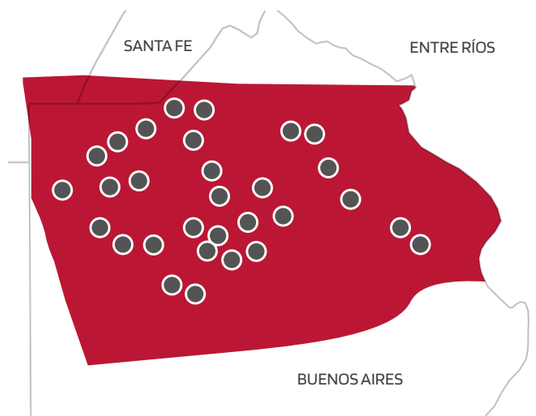




BREAD WHEAT

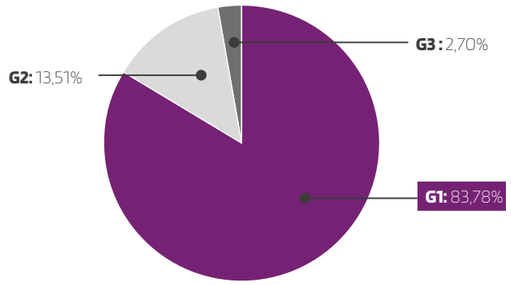
Subregion III. Analysis results

Weighted averages by tons of samples sets per location

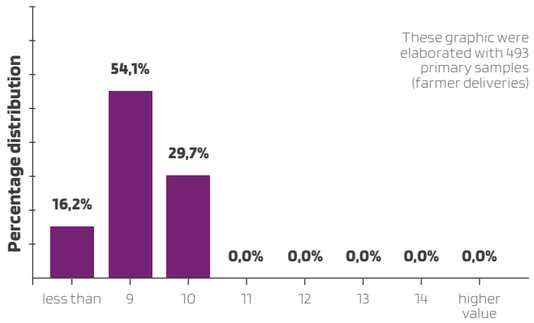
WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	79,30	83,30	81,13
Total Damaged Kernels (%)	0,00	0,82	0,30
Foreign Material (%)	0,04	1,07	0,32
Shrunken and Broken Kernels (%)	0,19	1,11	0,52
Yellow Berry Kernels (%)	0,59	9,98	3,75
Protein (13,5% Moisture) (%)	8,3	10,7	9,6
Protein (dry basis) (%)	9,6	12,4	11,1
Weight of 1000 Kernels (g.)	33,72	38,66	36,55
Cenizas (S.S.S.) (%)	0,900	1,630	1,251

FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	16,7	25,9	21,2
Dry Gluten (%)	6,2	9,5	7,7
Falling Number (sec.)	324	394	366
Flour Yield (%)	59,6	74,8	69,7
Ash (dry basis) (%)	0,490	0,708	0,588
FARINOGRAM			
Water Absorption (14% H°) (%)	50,7	63,1	57,0
Development Time (min.)	1,5	8,8	3,6
Stability (min.)	1,0	21,8	6,9
Degree of Softening (12 min.)	26	107	64
ALVEOGRAM			
P (mm)	59	127	85
L (mm)	30	82	53
W Joules x 10-4	120	217	171
P / L	0,72	4,10	1,84

Grade distribution



Protein (13.5% Moisture)



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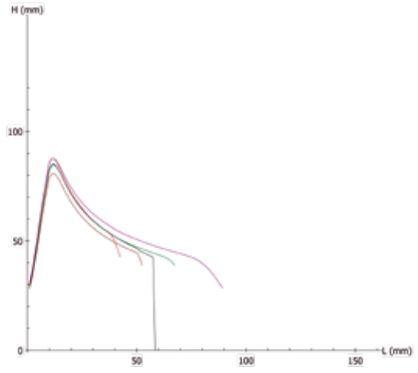

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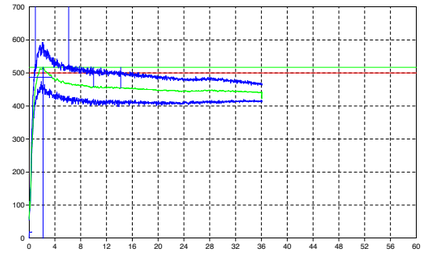
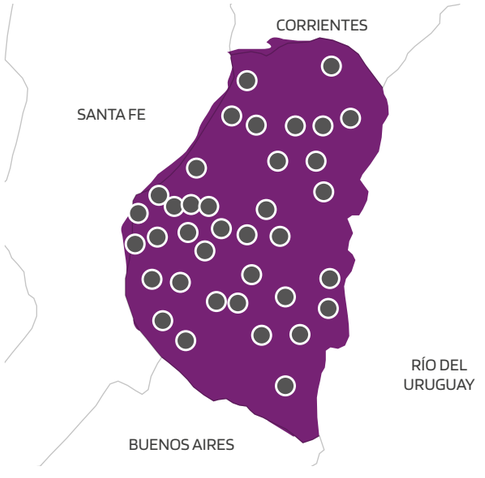




BREAD WHEAT

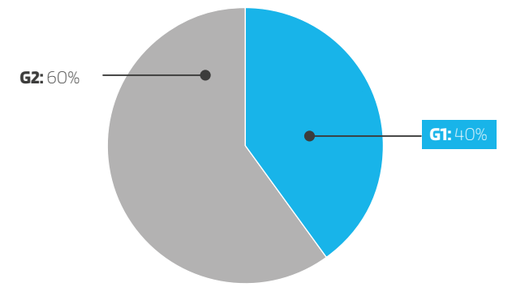
Subregion IV. Analysis results

Weighted averages by tons of samples sets per location

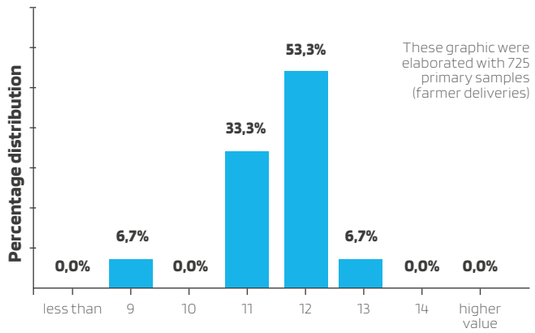
WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	74,30	79,00	76,66
Total Damaged Kernels (%)	0,00	1,13	0,62
Foreign Material (%)	0,05	0,70	0,35
Shrunken and Broken Kernels (%)	0,04	0,45	0,22
Yellow Berry Kernels (%)	0,00	10,60	0,60
Protein (13,5% Moisture) (%)	9,9	13,8	12,2
Protein (dry basis) (%)	11,4	16,0	14,1
Weight of 1000 Kernels (g.)	30,80	39,44	35,50
Cenizas (S.S.S.) (%)	1,539	1,837	1,729

FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	24,6	36,0	29,3
Dry Gluten (%)	8,0	12,0	10,0
Falling Number (sec.)	389	476	440
Flour Yield (%)	60,0	75,2	62,6
Ash (dry basis) (%)	0,496	0,726	0,589
FARINOGRAM			
Water Absorption (14% H°) (%)	54,0	67,0	56,9
Development Time (min.)	6,3	14,5	9,7
Stability (min.)	6,7	42,9	18,6
Degree of Softening (12 min.)	7	110	35
ALVEOGRAM			
P (mm)	73	147	91
L (mm)	70	105	89
W Joules x 10-4	205	490	292
P / L	0,73	1,58	1,04

Grade distribution



Protein (13.5% Moisture)



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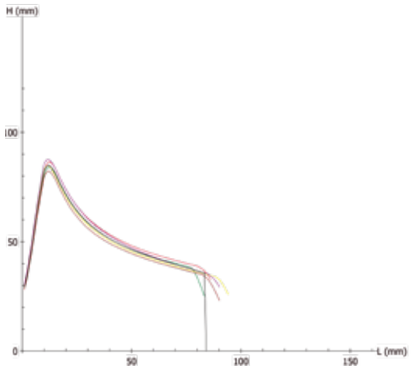

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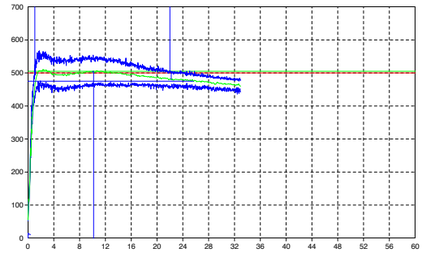


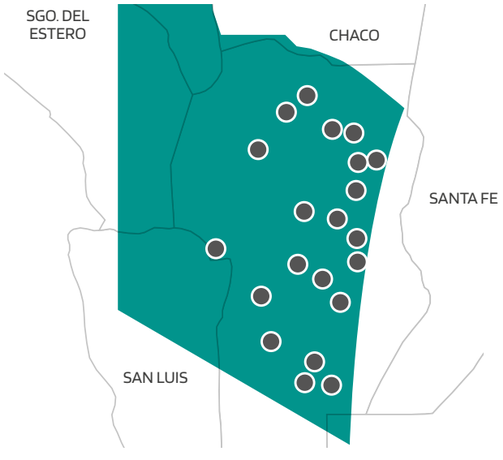
BREAD WHEAT

Subregion V N. Analysis results

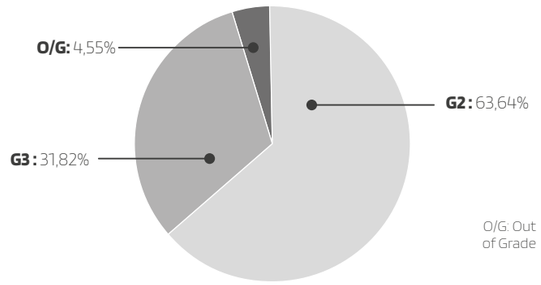
Weighted averages by tons of samples sets per location

WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	75,00	80,35	77,98
Total Damaged Kernels (%)	0,24	1,27	0,82
Foreign Material (%)	0,22	1,62	0,55
Shrunken and Broken Kernels (%)	0,22	1,59	0,57
Yellow Berry Kernels (%)	0,00	27,60	5,60
Protein (13,5% Moisture) (%)	9,3	13,8	12,1
Protein (dry basis) (%)	10,8	16,0	14,0
Weight of 1000 Kernels (g.)	29,30	36,33	32,57
Cenizas (S.S.S.) (%)	1,697	2,170	1,884

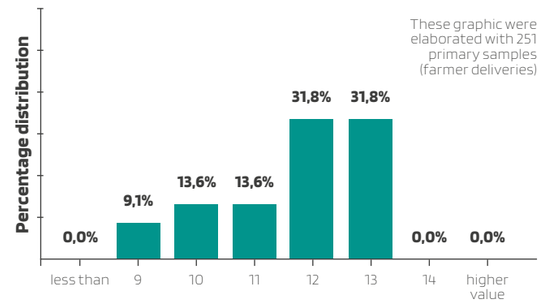
FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	20,5	34,5	29,8
Dry Gluten (%)	7,0	12,1	10,2
Falling Number (sec.)	377	531	464
Flour Yield (%)	55,3	73,5	68,0
Ash (dry basis) (%)	0,504	0,776	0,606
FARINOGRAM			
Water Absorption (14% H°) (%)	54,6	67,5	59,7
Development Time (min.)	1,8	17,4	9,9
Stability (min.)	1,4	27,8	18,7
Degree of Softening (12 min.)	22	74	36
ALVEOGRAM			
P (mm)	64	148	94
L (mm)	39	154	100
W Joules x 10-4	192	391	309
P / L	0,45	3,79	1,14



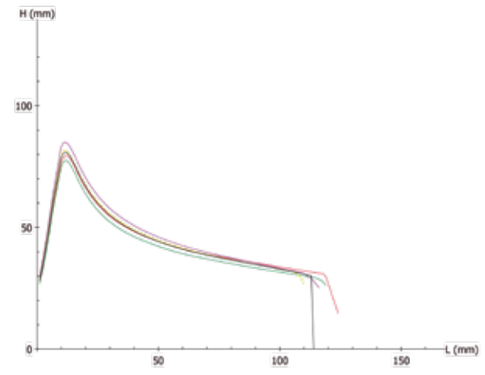
Grade distribution



Protein (13.5% Moisture)



Alveogram



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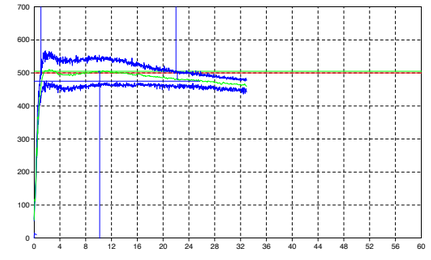


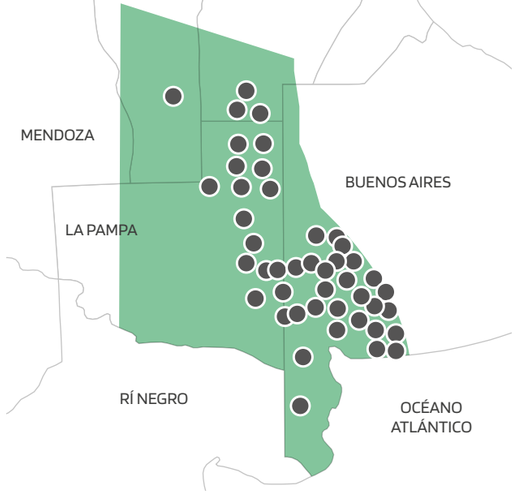
BREAD WHEAT

Subregion V S. Analysis results

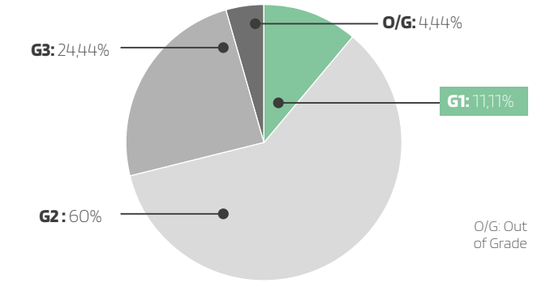
Weighted averages by tons of samples sets per location

WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	75,20	82,15	79,22
Total Damaged Kernels (%)	0,00	0,88	0,16
Foreign Material (%)	0,10	3,94	0,84
Shrunken and Broken Kernels (%)	0,20	1,74	0,59
Yellow Berry Kernels (%)	0,00	9,40	2,66
Protein (13,5% Moisture) (%)	10,1	14,7	11,6
Protein (dry basis) (%)	11,7	17,0	13,4
Weight of 1000 Kernels (g.)	25,90	42,00	34,64
Cenizas (S.S.S.) (%)	1,556	2,000	1,790

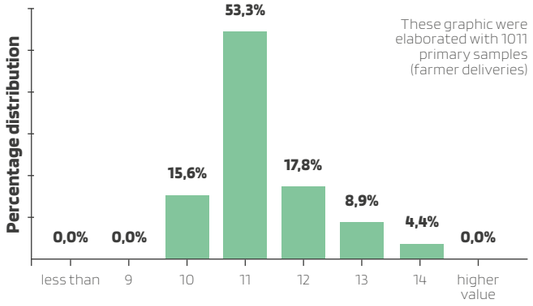
FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	24,0	37,9	29,3
Dry Gluten (%)	7,8	13,1	10,0
Falling Number (sec.)	380	478	418
Flour Yield (%)	63,2	74,7	69,9
Ash (dry basis) (%)	0,513	0,706	0,579
FARINOGRAM			
Water Absorption (14% H°) (%)	56,9	66,8	60,8
Development Time (min.)	7,0	28,7	10,0
Stability (min.)	9,7	38,1	17,7
Degree of Softening (12 min.)	1	55	33
ALVEOGRAM			
P (mm)	74	160	115
L (mm)	49	120	77
W Joules x 10-4	215	534	321
P / L	0,73	3,27	1,60



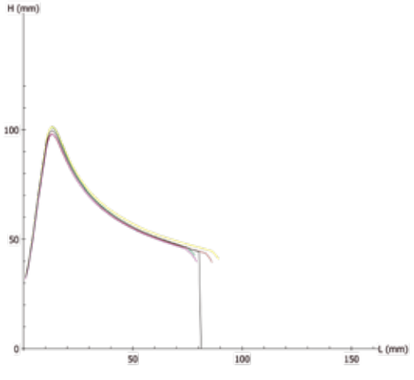
Grade distribution



Protein (13.5% Moisture)



Alveogram



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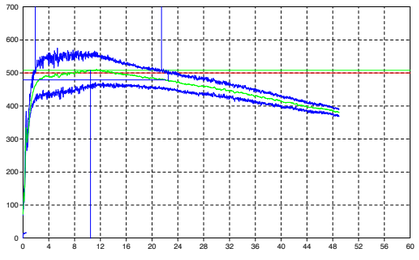


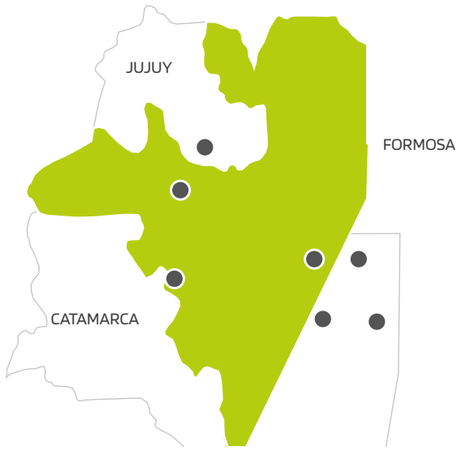
BREAD WHEAT

NOA. Analysis results

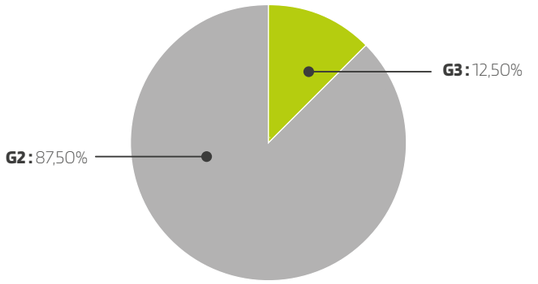
Weighted averages by tons of samples sets per location

WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	79,37	82,02	81,25
Total Damaged Kernels (%)	0,03	0,50	0,23
Foreign Material (%)	0,36	0,90	0,64
Shrunken and Broken Kernels (%)	0,16	0,36	0,24
Yellow Berry Kernels (%)	3,16	7,14	5,02
Protein (13,5% Moisture) (%)	10,1	10,3	10,2
Protein (dry basis) (%)	11,7	11,9	11,8
Weight of 1000 Kernels (g.)	35,24	37,11	36,34
Cenizas (S.S.S.) (%)	1,715	1,826	1,759

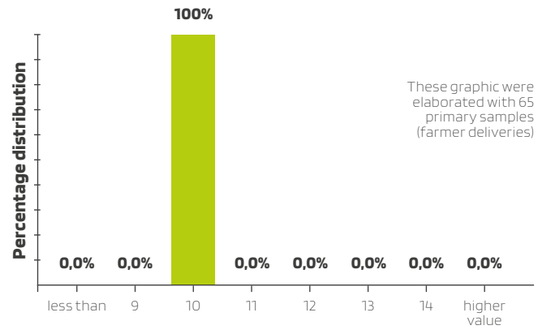
FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	23,4	26,2	24,4
Dry Gluten (%)	8,7	9,7	9,0
Falling Number (sec.)	377	464	424
Flour Yield (%)	51,6	71,1	61,4
Ash (dry basis) (%)	0,514	0,744	0,597
FARINOGRAM			
Water Absorption (14% H°) (%)	56,4	61,3	58,7
Development Time (min.)	6,1	9,1	7,7
Stability (min.)	12,5	27,3	20,4
Degree of Softening (12 min.)	4	36	18
ALVEOGRAM			
P (mm)	84	136	106
L (mm)	27	83	53
W Joules x 10-4	172	251	207
P / L	1,01	5,04	2,40



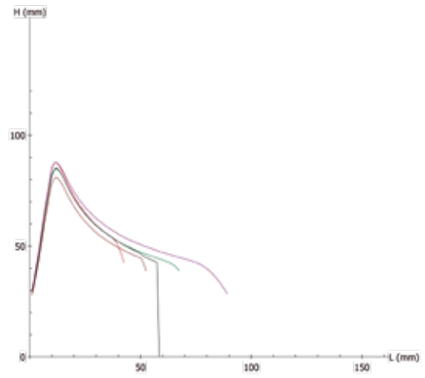
Grade distribution



Protein (13.5% Moisture)



Alveogram



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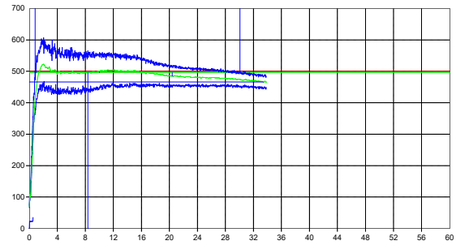


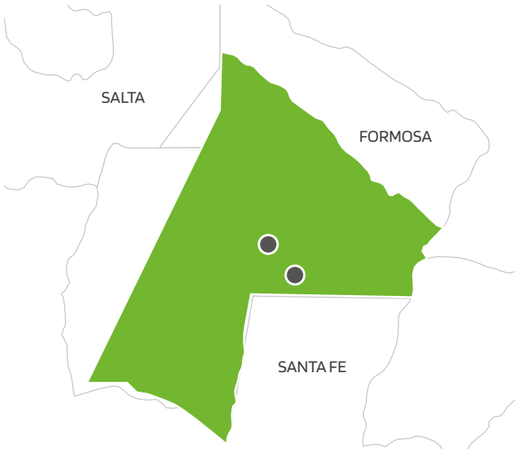
BREAD WHEAT

NEA. Analysis results

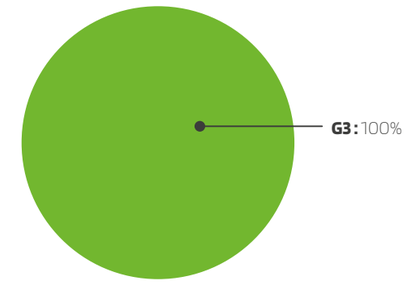
Weighted averages by tons of samples sets per location

WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	79,15	79,33	79,25
Total Damaged Kernels (%)	0,17	0,58	0,40
Foreign Material (%)	1,02	1,07	1,04
Shrunken and Broken Kernels (%)	0,34	0,35	0,35
Yellow Berry Kernels (%)	2,25	2,42	2,34
Protein (13,5% Moisture) (%)	10,5	10,6	10,6
Protein (dry basis) (%)	12,1	12,3	12,2
Weight of 1000 Kernels (g.)	35,12	35,67	35,36
Cenizas (S.S.S.) (%)	1,909	1,946	1,925

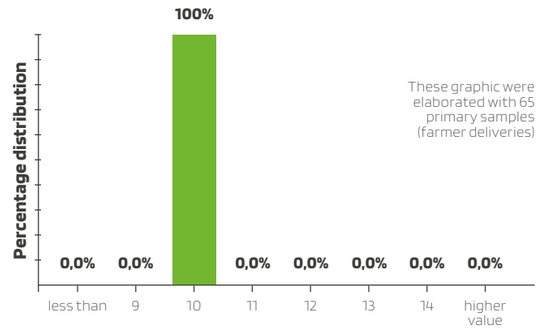
FLOUR ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
MILLING			
Wet Gluten (%)	23,6	23,9	23,8
Dry Gluten (%)	8,7	8,9	8,8
Falling Number (sec.)	407	411	409
Flour Yield (%)	61,7	66,2	63,7
Ash (dry basis) (%)	0,560	0,647	0,599
FARINOGRAM			
Water Absorption (14% H°) (%)	56,0	57,1	56,5
Development Time (min.)	11,4	12,1	11,8
Stability (min.)	33,4	36,2	34,9
Degree of Softening (12 min.)	11	12	11
ALVEOGRAM			
P (mm)	97	117	106
L (mm)	43	58	51
W Joules x 10-4	211	224	218
P / L	1,67	2,72	2,14



Grade distribution



Protein (13.5% Moisture)



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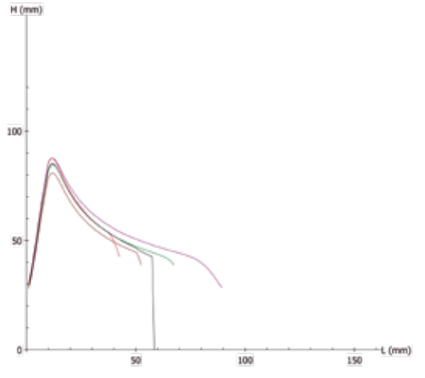

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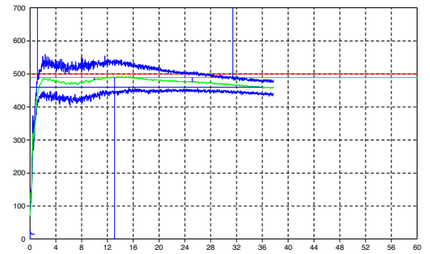


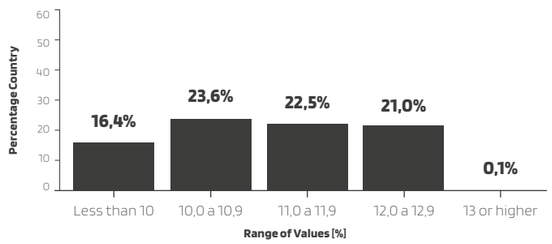
BREAD WHEAT

Analysis of variables by ranges

Tables summarize the analysis of four variables: protein in grain, wet gluten, strength determined by alveograph measurement and farinographic stability. Each variable was separated in ranges (first column). Averages were estimated for each range for each remaining variables (center column). This last column shows the percentage that corresponds to each range nationwide.

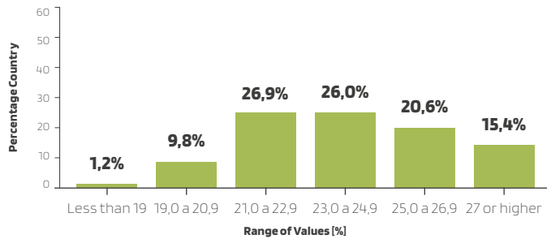
Protein

PROTEIN (13,5% MOISTURE)	WET GLUTEN W STABILITY	PERCENTAGE COUNTRY
Less than 10	20,2 | 159 | 4,6	16,4%
10,0 a 10,9	24,5 | 211 | 14,4	23,6%
11,0 a 11,9	28,4 | 279 | 19,8	22,5%
12,0 a 12,9	30,0 | 298 | 19,8	21,0%
13,0 or higher	34,6 | 335 | 17,8	0,1%



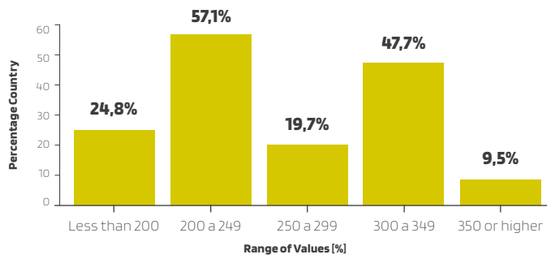
Wet Gluten

WET GLUTEN	WET GLUTEN W STABILITY	PERCENTAGE COUNTRY
Less than 19,0	9,8 | 180 | 12,8	1,2%
19,0 a 20,9	10,0 | 192 | 26,0	9,8%
21,0 a 22,9	10,2 | 220 | 22,6	26,9%
23,0 a 24,9	23,9 | 10 | 233,6	26,0%
25,0 a 26,9	10,9 | 266 | 26,2	20,6%
27.0 or higher	11,7 | 309 | 25,3	15,4%



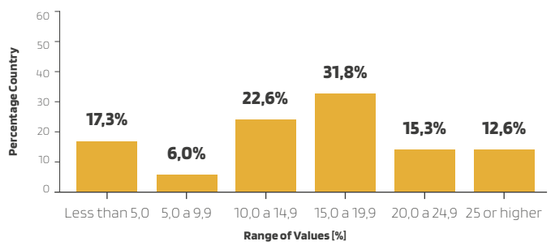
W

W	WET GLUTEN PROTEIN.STABILITY	PERCENTAGE COUNTRY
Less than 200	21,6 | 9,7 | 6,5	24,8%
200 a 249	25,3 | 10,8 | 15,6	57,1%
250 a 299	29,7 | 12,2 | 18,7	19,7%
300 a 349	31,0 | 12,5 | 20	47,7%
350 or higher	32,9 | 12,9 | 19,4	9,5%



Stability

STABILITY	WET GLUTEN PROTEIN W	PERCENTAGE COUNTRY
Less than 5,0	20,5 | 9,5 | 160	17,3%
5,0 a 9,9	26,7 | 11,3 | 211	6,0%
10,0 a 14,9	28,8 | 11,7 | 257	22,6%
15,0 a 19,9	29,7 | 12,1 | 296	31,8%
20,0 a 24,9	29,3 | 12,2 | 288	15,3%
25 or higher	28,3 | 11,8 | 302	12,6%

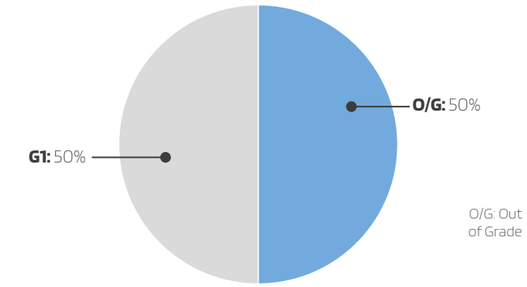


DURUM WHEAT

National averages
Analysis Results

WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Test Weight (kg/hl)	78,35	79,6	**79,14**
Total Damaged Kernels (%)	0,00	0,50	**0,19**
Foreign Material (%)	0,22	0,28	**0,26**
Shrunken and Broken Kernels (%)	0,46	0,64	**0,53**
Yellow Berry Kernels (%)	26	70	**42**
Protein (13,5% Moisture) (%)	0,20	1,62	**0,66**
Protein (dry basis) (%)	9,70	11,4	**10,6**
Weight of 1000 Kernels (g.)	11,20	13,2	**12,3**
Cenizas (S.S.S.) (%)	40,30	49,10	**44,28**
Cenizas (s.s.s.) %	1,530	1,840	**1,738**

Grade distribution



WHEAT ANALYSIS	MINIMUN	MAXIMUN	AVERAGE
Falling Number (seg.)	404	509	**461**
Colour(B)	17,1	19,9	**18,5**
Wet Gluten (%)	20,8	27,1	**24,4**
Gluten Index	77	90	**82**
FARINOGRAM			
Energy Level	29,8	33,9	**32,1**
ALVEOGRAM			
Degree Softening (%))	13	33	**25**

CROP 2022-2023	
Planted Area (ha)	94.006,00
Harvested Area (ha)	93.357,00
Average Yeld (Kq/ha)	2.451,00
Production (tn)	228.803,00

Reference: Secretaría de Agroindustria de la Nación

Trigo Argentino

INFORME DE SU CALIDAD